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THE MIGRANT

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NO. 1

BIRDS OF DECATUR COUNTY (INCLUDING THE 1978 FORAY)

CHARLES P. NICHOLSON

Decatur County is located in west Tennessee, bordered on the east by the Tennessee River, on the south by Hardin County, on the west by Henderson and Carroll Counties, and on the north by Benton County. The total land area is approximately 85,470 ha. The west half of the county is in the Gulf Coastal Plain physiographic region, and much of it is overlain with loess soil formations (Odom 1955). The eastern half of the county is in the Highland Rim section of the Interior Low Plateau province. Except for bottomland along the Tennessee River, most of the eastern area is rolling hills underlain by cherty limestone. Approximately 66 percent of the county is forested (Hedlund and Earles 1971). The southeast corner of the county is forested with yellow pine hardwoods; the remainder of the area is oak-hickory. Essentially all of the forested area is second-growth. Agricultural areas are primarily pasture, hayfields, and soybeans. The Beech River and several smaller creeks, flowing into the Tennessee River, drain the county. Prior to the impoundment of the Tennessee River to create Kentucky Lake in 1943, cypress swamps were reported along the river (Clebsch 1941). At present, limited areas of bottomland hardwood forest occur in the county, and much of the bottomland along the Tennessee River is cleared for rowcrops. Elevations range from 109 m along the Tennessee River to a maximum of 207 m. The population of Decatur County was 9500 in 1970.

This was the site of the 1978 breeding bird foray of the TOS, held 26 to 29 May. Twenty-one people participated in the foray, and daily checklists were kept by each party. Most of the fieldwork was carried out on 27 and 28 May. In addition to random birding of assigned portions of the county, 6 Breeding Bird Survey (BBS) routes were conducted. Along each 24.5 mi route, birds were recorded during a 3 min period at 50 stops, spaced one-half mi apart. Five of the routes were censused on 27 May, and the sixth on 28 May. The weather was hot and clear each day, with showers part of the afternoon of the 28th.

Following is an annotated list of Decatur County birds, presenting foray results and other available Decatur County observations. For species observed on the foray, these results are given first. The first number is the total individuals observed, excluding BBS route results; the second, presented as a fraction, is the total individuals observed on the 6 BBS routes, over the number of stops, out of 300, at which the species was observed. Observations from northern Decatur County, made on 17 November 1978 by the author, and observations from the eastern half of the county on 29 December 1978 by Morris D. Williams and the author are presented next. Following these, in parentheses, are observations from

other years. These include published observations from the Swallow Bluff area by Alfred Clebsch (1941) and A. F. Ganier, and several short notes in *The Migrant*. Unpublished records include observations by Ben Welch, Jr. from SE of Decaturville on 2-4 July, 27 and 28 August 1938; by Lula C. and Ben B. Coffey, Jr., Alice Smith and Fred Carney on 28 May 1950; by the Coffeys on 15 July 1951, 12 July 1953, 5 May 1956, 26 April 1957, 27-28 June and 28 July 1958, 15 March and 2 May 1959, 28 June 1963, 1 August 1954, 2 May 1965, 25 June 1971, and 20-21 June 1977; and by the Coffeys and Carol Bullock on 17 June 1979. Many of the observations by the Coffeys are from along Rt. 100, and their records often omitted common species, or only include Chuck-will's-widow-Whip-poor-will or Cliff Swallow observations. Complete lists of lengthier observation periods were kept in 1977 and 1979. The Busseltown unit of the Tennessee National Wildlife Refuge is abbreviated TNWR in the following annotated list.

- PIED-BILLED GREBE—1, 0/0, on 27 May near Perryville by the Smiths; 1 on 29 December.
- GREAT BLUE HERON—9 on 29 December; (1 on 17 May 1941 by Ganier and Clebsch on Tennessee River.)

GREEN HERON—18, 6/5; (2 on 17 June 1979 by Coffey *et al.*)

- YELLOW-CROWNED NIGHT HERON—1, 0/0, on 28 May at Busseltown by Campbell, Hinton and Nicholson; (3 reported by Clebsch in cypress swamp along Tennessee River on 18 May 1941.)
- CANADA GOOSE—500 at TNWR on 29 December.
- SNOW GOOSE-2 at TNWR on 29 December.

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SNOW GOOSE (Blue Morph)-1 at TNWR on 29 December.

MALLARD-2, 0/0, on 27 May by Wilkey; 1000 at TNWR on 29 December.

- BLACK DUCK—50 at TNWR on 29 December.
- AMERICAN WIGEON-200 at TNWR on 29 December.
- WOOD DUCK—11, 0/0; 4 at TNWR on 29 December.
- RING-NECKED DUCK—3 at TNWR on 29 December.
- CANVASBACK—2 at TNWR on 29 December.
- TURKEY VULTURE—16, 3/3; 1 on 17 November; 22 on 29 December; (23 on 2-4 July, 2 on 27 August and 4 on 28 August 1938 by Welch; 2 on 15 July 1951, 1 on 15 March 1951, 5 on 29 April 1971, 9 on 20-21 June 1977, and 1 on 17 June 1979 by Coffey *et al.*)
- BLACK VULTURE—7 on 29 December; no available summer records.
- COOPER'S HAWK—1 at TNWR on 29 December; (1 near Decaturville on 2-4 July 1938 by Welch.)
- RED-TAILED HAWK—4, 1/1; 3, including pair at nest on 29 December; (1 on 28 August 1938 by Welch; 1 on 21 June 1977 by Coffeys.)
- RED-SHOULDERED HAWK—2, pair at nest, contents unknown, 2 mi N of Hwy 20 along Busseltown Road, reported on 27 May by Dubke and Wilkey; (1 on 18 May 1941 by Clebsch and Ganier; 1 on 29 April 1971 by Coffeys.)
- BROAD-WINGED HAWK—2, 3/3; (3 on 20-21 June 1977 and 1 on 17 June 1979 by Coffey *et al.*)
- OSPREY—(2, described as a pair, along the Tennessee River by Clebsch and Ganier on 18 May 1941. The lateness of this date suggests the species may have formerly bred in the area.)

- AMERICAN KESTREL—0, 2/2; 2 on 17 November; 4 on 29 December; (1 on 4 December 1958 by the Coffeys.)
- BOBWHITE—108, 140/110; 1 on 29 December; (14 on 27 August and 10 on 28 August 1938 by Welch; 37 on 21 June 1977 and 22 on 17 June 1979 by Coffey *et al.*)

TURKEY—(probable former resident, stocking records [Schultz 1955] include 75 released at Decaturville in 1941, and 35 released at Brownsport Furnace in 1942; no recent records available.)

AMERICAN COOT-15 on 29 December.

SEMIPALMATED PLOVER-(1 reported on 18 May 1941 by Clebsch.)

KILLDEER—11, 7/7; 1 on 29 December.

- COMMON SNIPE-2 on 29 December.
- UPLAND SANDPIPER—1 recorded along the Tennessee River, 4 mi N of Perryville on 14 April 1944 by Cottam (1944.)
- SPOTTED SANDPIPER—2 on 28 May by Campbell, Hinton, Nicholson and the Smiths; ('a few' reported on 18 May 1941 by Clebsch.)
- SOLITARY SANDPIPER-('a few' reported on 18 May 1941 by Clebsch).
- SEMIPALMATED SANDPIPER—24 on 27 May by Huber, Whittington and Wilkey; ('a few' reported on 18 May 1941 by Clebsch.)
- RING-BILLED GULL—8 along Tennessee River on 29 December.

MOURNING DOVE—208, 190/129; nest, with adult incubating 2 eggs, observed at TNWR on 28 May by Nicholson; 201 on 29 December; (17 on 28 August 1938 by Welch; 64 on 21 June 1977 and 35 on 17 June 1979 by Coffey *et al.*)

YELLOW-BILLED CUCKOO—47, 42/40; (2 on 2-4 July, 2 on 27 August and 1 on 28 August 1938 by Welch; 2 on 28 May 1950, 2 on 15 July 1951, 5 on 12 July 1953, 7 on 28 July 1958, 20 on 21 June 1977 and 20 on 17 June 1979 by Coffey *et al.*)

BLACK-BILLED CUCKOO—0, 1/1, on 27 May (migrant?) by the Dubkes.

SCREECHOWL—1 on 26 May by Nicholson and 6 on 27 May by Wilkey and Huber; 1 red-phase road kill on 29 December.

- BARRED OWL-0, 1/1, on 27 May by Whittington.
- CHUCK-WILL'S-WIDOW—3, 8/8; (4 on 3 July 1938 by Welch; unknown number reported by Clebsch on 17-18 May 1941; 1 on 29 March 1953 by Mrs. R. L. Duck and 2 on 30 March 1953 by Mrs. Edd Davis at Parsons [Coffey 1954]; 1 on 12 July 1953 at firetower E of Parsons, and 2 on 21 June 1977 by the Coffeys) (see Chuck-Whip entry below.)
- WHIP-POOR-WILL—8, 4/2; (1 on 15 July 1951 at firetower E of Parsons by the Coffeys; 1 on 7 April 1952 at Parsons by Mrs. Edd Davis [Coffey 1954]; 2 on 2 May 1965 by the Coffeys.)
- CHUCK-WILL'S-WIDOW—Whip-poor-will roadside counts—27 May: 9 Chucks and 48 Whips on 24.5 mi rt. in SW part of county, by Huber and Wilkey; (27 June 1958: 5 Chucks at 3 stops W of Parsons, and 8 at 4 of 8 stops and 2 Whips at 2 stops E of Parsons, by the Coffeys; 20 June 1977: 7 Chucks at 5 stops and 19 Whips at 10 stops on 7.5 mi, 16 stop rt. between Hwy 20 and Busseltown, by the Coffeys; 16 June 1979: 7 Chucks at 6 stops and 30 Whips at 20 stops on 11 mi, 23 stop rt. in NE part of county, by the Coffeys and Bullock.)

COMMON NIGHTHAWK-2, 4/4; (5 on 2-4 July 1938 by Welch; observed by

Clebsch on 17-18 May 1941; 2 on 15 July 1951 and 2 on 21 June 1977 by the Coffeys.)

- CHIMNEY SWIFT—97, 123/41; 3 on 21 June 1977 and 7 on 17 June 1979 by Coffey *et al.*)
- RUBY-THROATED HUMMINGBIRD—11, 2,2; 1 on 21 June 1977 and 3 on 17 June 1979 by Coffey *et al.*)
- BELTED KINGFISHER—3, 2/2; 2 on 29 December.
- COMMON FLICKER—5, 8/8; 6 on 29 December; (1 on 15 July 1951 and 1 on 21 June 1977 by the Coffeys.)
- PILEATED WOODPECKER—7, 18/18; 1 on 17 November; 3 on 29 December; (1 on 27 August and 2 on 28 August 1938 by Welch; 1 on 15 July 1951, 0 on 12 July 1953, 2 on 28 June 1958, 0 on 21 June 1977 and 1 on 17 June 1979 by Coffey *et al.*)
- RED-BELLIED WOODPECKER—57, 110/93; nest, contents unknown, observed by Waldron on 27 May near Mile Branch in SW corner of county; 3 on 17 November; 10 on 29 December; (14 on 21 June 1977 and 21 on 17 June 1979 by Coffey *et al.*)
- RED-HEADED WOODPECKER—1 on 28 May by the Mayfields and Nicholson, and 1 on 29 May by Campbell, Hinton and Nicholson, both along the Beech River bottoms SSW of Parsons.
- YELLOW-BELLIED SAPSUCKER-1 on 29 December.
- HAIRY WOODPECKER—0, 3/2; 1 on 17 November; (1 on 12 July 1953 by the Coffeys.)
- DOWNY WOODPECKER—20, 27/24; 1 on 17 November; 3 on 29 December; (2 on 2-4 July 1938 by Welch; 1 on 12 July 1953, 4 on 28 June 1958, 5 on 21 June 1977 and 7 on 17 June 1979 by Coffey *et al.*)
- EASTERN KINGBIRD—94, 38/31; (6 on 2-4 July 1938 by Welch; 1 on 12 July 1953, 2 on 28 June 1958, 6 on 21 June 1977 and 4 on 17 June 1979 by Coffey *et al.*)
- ACADIAN FLYCATCHER—33, 20/17; (1 on 28 May 1950, 1 on 15 July 1951, 1 on 12 July 1953, 2 on 28 June 1958, 1 on 20 June and 4 on 21 June 1977, and 4 on 17 June 1979 by Coffey *et al.*)
- EASTERN WOOD PEWEE—39, 99/94; (8 on 2-4 July and 1 on 28 August 1938 by Welch; 2 on 28 May 1950, 9 on 15 July 1951, 6 on 28 June 1958, 12 on 21 June 1977 and 13 on 17 June 1979 by Coffey *et al.*)
- HORNED LARK—1 on 28 May by Campbell, Hinton and Nicholson at TNWR; 2 on 29 December at TNWR; (1 on 28 June 1958 by the Coffeys.)
- ROUGH-WINGED SWALLOW—13, 7/3; ("a few" on 17 May and 3 pairs on 18 May 1941 along Tennessee River at Swallow Bluff by Clebsch and Ganier; 3 on 15 July 1951, 2 on 28 June 1958 and 3 on 17 June 1979 by Coffey *et al.*)
- BARN SWALLOW—164, 77/37; 2 nests on 27 May, 1 by Waldron, contents unknown, and 1 by Nicholson, containing 3 eggs, and 12 nests under Hwy 69 bridge over Cub Creek on 29 May by Nicholson, 1 empty, 1 with 4 large young, others not inspected; (4 imm and 2 ad on 28 June 1958, 111 birds and 16 nests on 20-21 June 1977, and 29 birds and 24 nests at I-40 on 17 June 1979 by Coffey *et al.*)
- CLIFF SWALLOW—720, 10/1. The first published account of this interesting species in Decatur Co. was by Ganier and Weakley (1936) who published photographs showing about 90 nests on a section of bluff along the Tennessee River at

Swallow Bluff Landing. Clebsch (1941) and Ganier visited the area in 1941 and counted about 200 nests on 18 May at a colony site upstream from the landing and opposite Swallow Bluff Island. Out of 5 nests examined, 2 were empty, 1 held 1 fresh egg, 1 held 3 slightly incubated eggs, and 1 held 4 eggs incubated 5 days. They also collected a series of 7 male and 3 female specimens, now preserved in the Louisiana State Museum of Zoology. During the summer of 1943, the overhanging cliff was dynamited into the river as a navigation safety measure (Anon. 1943). The Swallow Bluff site is 1 of only 4 natural (i.e. not on man-made structures) nest sites in the Tennessee or Cumberland River drainages known to the author. The others are Nickajack Cave, active in 1978, and Grays Bluff (West 1961), current status unknown, both in Marion Co., Tennessee, and the former colony at Fort Deposit, Alabama (Howell 1924).

Following the completion of Kentucky Dam in 1944, which may have partially inundated some remaining bluff sites, Coffey (pers. comm.) reported nests on the York Bridge, Hwy 100 over Tennessee River at Perryville, in 1947 and 60 nests in 1953 (Coffey 1953). These nests were under the E end of the bridge in Perry Co. Twenty-five old nests were observed by Coffey under the W end of the bridge on 25 June 1971, and 250 old nests, with no birds present, were observed at the same place on 27 May 1978 by K. Dubke and Nicholson. Other known nest sites in Decatur Co. and number of nests present are: Hwy 100 bridge over Beech River, N of Decaturville---in use since at least 1956, max. 1385 nests on 25 June 1971 by Coffeys; county road bridge over Beech River, just S of Perryville-in use since at least 1956, max. 2500 nests on 28 June 1958 by Coffey et al., 210 nests on 27 May 1978 by Dubke and Nicholson; bridge over Whites Creek near Mt. Carmel-200 nests on 21 June by the Coffeys, 300 on 27 May 1978 by Dubke and Nicholson; Hwy 69 over Little Lick Creek near Cozette—9 nests on 20 June 1977 by the Coffeys, 13 on 29 May 1978 by Nicholson; Hwy 69 over Cub Creek—32 nests on 29 June 1977 by the Coffeys, 11 nests on 29 May 1978 by Nicholson; Hwy 69 at Stewman Creek—152 nests on 27 May 1978 by Dubke and Nicholson; Hwy 69 at Doe Creek—200 nests on 27 May 1978 by Dubke and Nicholson. Total of 986 active nests in 1978.

- PURPLE MARTIN—93, 54/18; many Martin nest structures observed; (15 on 27 August 1938 by Welch; 1 on 15 July 1951, 6 on 28 June 1958, 10 on 21 June 1977, and 2 on 17 June 1979 by Coffey *et al.*)
- BLUE JAY—95, 188/113; nest under construction at Busseltown on 28 May by Nicholson; 15 on 17 November; 97 on 29 December; (described by Welch [1938] as the sixth most common species; 46 on 21 June 1977 and 17 on 17 June 1979 by Coffey *et al.*)
- COMMON CROW—54, 82/71; 11 on 29 December; (12 on 2-4 July, 1 on 27 August and 6 on 28 August 1938 by Welch; 4 on 15 July 1951, 1 on 12 July 1953, 11 on 28 June 1977 and 6 on 17 June 1979 by Coffey *et al.*)
- CAROLINA CHICKADEE—39, 16/13; 3 on 17 November; 12 on 29 December; nest observed by Waldron on 27 May at Busseltown, contents unknown; (described by Welch [1938] as the ninth most common species, and 9 on 2-4 July, 4 on 27 August, and 1 on 28 August 1938 by Welch; 2 on 28 May 1950, 4 on 28 June 1958, 21 on 21 June 1977, and 4 on 17 June 1979 by Coffey *et al.*)
- TUFTED TITMOUSE—101, 130/111; 6 on 17 November; 14 on 29 December; (4 on 2-4 July 1938 by Welch; 2 on 28 May 1950, 3 on 15 July 1953, 17 on 28 June 1958, 34 on 21 June 1977, and 28 on 17 June 1979 by Coffey *et al.*)

- WHITE-BREASTED NUTHATCH—1, 6/7; 1 on 29 December; (2 on 15 July 1951, 2 on 12 July 1953, 3 on 28 June 1958, and 2 on 21 June 1977 by Coffey *et al.*)
- BEWICK'S WREN—0, 0/0; (2 on 28 May 1950, 2 on 15 July 1951, 2 on 12 July 1953, 4 on 28 June 1958, and 1 on 15 March 1959 by Coffey *et al.*)
- CAROLINA WREN—11, 10/10; 1 on 17 November; 1 on 29 December; (described by Welch [1938] as the most common summer bird, and 24 on 2-4 July, 8 on 27 August, and 13 on 28 August by Welch; 0 on 28 May 1950, 1 on 15 July 1951, 4 on 12 July 1953, 6 on 28 June 1958, 11 on 21 June 1977, and 9 on 17 June 1979 by Coffey *et al.*)
- MOCKINGBIRD—42, 76/61; 1 on 17 November; 3 on 29 December; (19 on 2-4 July 1938 by Welch; 19 on 28 June 1958, 39 on 21 June 1977, and 8 on 17 June 1979 by Coffey *et al.*)
- GRAY CATBIRD—13, 19/16; (5 on 2-4 July and 2 on 27 August 1938 by Welch; 5 on 15 July 1951, 2 on 21 June 1977, and 6 on 17 June 1979 by Coffey *et al.*)
- BROWN THRASHER—33, 39/33; 2 on 29 December; (2 on 2-4 July 1938 by Welch; 5 on 28 June 1958, 13 on 21 June 1977, and 14 on 17 June 1979 by Coffey *et al.*)
- AMERICAN ROBIN—25, 32/24; 35 on 29 December; (9 on 21 June 1977 and 10 on 17 June 1979 by Coffey *et al.*)
- WOOD THRUSH—50, 84/66; (6 on 2-4 July 1938 by Welch; 0 on 28 May 1950, 3 on 15 July 1951, 7 on 12 July 1953, 8 on 28 June 1958, 42 on 21 June 1977, and 20 on 17 June 1979 by Coffey *et al.*)
- HERMIT THRUSH—1 on 29 December.
- EASTERN BLUEBIRD—17, 3/2; 9 on 29 December; (2 on 2-4 July and 1 on 27 August 1938 by Welch; 2 on 28 May 1950; 1 on 17 July 1951; 3 on 12 July 1953, 2 on 28 June 1958; 1 on 21 June 1977, and 2 on 17 June 1979 by Coffey *et al.*)
- BLUE-GRAY GNATCATCHER—88, 61/45; nest observed by Waldron on 27 May, contents unknown; (12 on 28 August 1938 by Welch; 4 and imm. on 12 July 1953, 9 on 21 June 1977, and 14 on 17 June 1979 by Coffey *et al.*)

GOLDEN-CROWNED KINGLET-10 on 17 November; 1 on 29 December.

- RUBY-CROWNED KINGLET—1 on 29 December.
- CEDAR WAXWING-20 on 17 November; 26 on 29 December.
- LOGGERHEAD SHRIKE—11, 2/2; brood observed on 29 May by Campbell, Hinton and Nicholson near Hopewell Church; (7 on 2-4 July 1938 by Welch; 2 on 17 July 1943, 1 on 28 June 1958, 1 on 21 June 1977, and 1 on 17 June 1979 by Coffey *et al.*)
- STARLING—125, 64/25; 25 on 17 November; 155 on 29 December; (2 on 17 June 1979 by Coffey *et al.*)
- WHITE-EYED VIREO—95, 87/80; (described by Welch [1938] as the 5th most common summer bird, and 9 on 28 August 1938 by Welch; 78 on 20-21 June 1977, and 17 on 17 June 1979 by Coffey *et al.*)
- YELLOW-THROATED VIREO—18, 5/5; (1 on 28 May 1950, 1 on 15 July 1951, 3 on 12 July 1953, 0 on 28 June 1958, 2 on 21 June 1977, and 4 on 17 June 1979 by Coffey *et al.*)
- RED-EYED VIREO—29, 30/27; (10 on 20-21 June 1977 and 17 on 17 June 1979 by Coffey *et a*.)
- WARBLING VIREO—2 on 27 May, observed by Campbell and Hinton, and by Bullock, Daily and Ferguson, and 1/1 by Campbell and Hinton.

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- BLACK-AND-WHITE WARBLER—2, 13/13; (1 on 28 May 1950, 1 on 28 June 1958, and 2 on 17 June 1979 by Coffey *et al.*)
- PROTHONOTARY WARBLER—70, 13/10; 2 nests on 27 May, 1 at Ponderosa Dock, adults carrying food to cavity, by Campbell and Hinton, and 1 at Busseltown by Waldron, contents unknown; (1 on 28 June 1958, 2 on 21 June 1977, and 1 on 17 June 1979 by Coffey *et al.*)
- SWAINSON'S WARBLER—2 on 28 May by Mayfields and Nicholson, along Beech River near jct. with Bear Creek, and 2 at same site on 29 May by Campbell, Hinton and Nicholson.
- WORM-EATING WARBLER—1 on 28 May, and 1 on 29 May, both by Campbell, Hinton and Nicholson; (2 on 21 June 1977 and 0 on 17 June 1979 by Coffey *et al.*)
- BLUE-WINGED WARBLER—7, 15/15; almost all sightings within Highland Rim region; (1 on 2 May 1959 and 1 on 17 June 1979 by Coffey *et al.*)
- NORTHERN PARULA—14, 4/4; (2 on 21 June 1977 and 2 on 17 June 1979 by Coffey *et al.*)
- MAGNOLIA WARBLER—0, 1/1, a late migrant, on 27 May by L. Dubke.
- YELLOW-RUMPED WARBLER—15 on 17 November; 7 on 29 December.
- BLACK-THROATED GREEN WARBLER—(1 on 28 May 1950, a late migrant, by Coffey [1950] near Parsons; the date given for this in *The Migrant* is wrong.
- BLACKBURNIAN WARBLER—2, 0/0; late migrants, on 27 May by Dubkes and Bullock, Daily and Ferguson.
- YELLOW-THROATED WARBLER—9, 5/5; (2 on 17 June 1979 by Coffey et al.)
- PINE WARBLER—7, 6/6; (5 on 21 June 1977 by the Coffeys.)
- PRAIRIE WARBLER—19, 36/31; (2 on 28 May 1950, 2 on 28 June 1958, 1 on 2 May 1959, 2 on 21 June 1977 and 2 on 17 June 1979 by Coffey *et al.*)
- OVENBIRD-0, 5/5.
- LOUISIANA WATERTHRUSH—5, 7/7; (1 on 28 May 1950 and 2 on 17 June 1979 by Coffey *et al.*)
- KENTUCKY WARBLER—26, 35/33; (1 on 28 May 1950, 1 on 15 July 1951, 1 on 12 July 1953, 6 on 28 June 1958, 15 on 21 June 1977, and 10 on 17 June 1979 by Coffey *et al.*)
- COMMON YELLOWTHROAT—95, 87/72; (24 on 21 June 1977, 24 on 17 June 1979, and many on previous trips by Coffey *et al.*)
- YELLOW-BREASTED CHAT—37, 68/61; (17 on 21 June 1977, and 10 on 17 June 1979 by Coffey *et al.*)
- HOODED WARBLER—9, 6/6; (1 on 21 June 1977, and 1 on 17 June 1979 by Coffey *et al.*)
- AMERICAN REDSTART—9, 0/0; all observed along Beech River bottoms by Campbell, Hinton, Mayfields and Nicholson.
- HOUSE SPARROW-95, 118/19; 2 on 29 December.
- EASTERN MEADOWLARK—96, 138/77; 13 on 29 December; (8 on 17 June 1979 by Coffey *et al.*)
- RED-WINGED BLACKBIRD—150, 145/66; nest with 3 eggs on 29 May near Parsons by Nicholson; 150 on 29 December; (30 on 21 June 1977, and 12 on 17 June 1979 by Coffey *et al.*)
- ORCHARD ORIOLE-66, 38/35; (2 on 2-4 July 1938 by Welch; 1 on 28 May 1950, 1

on 17 July 1951, 7 on 28 June 1958, 18 on 20-21 June 1977, and 15 on 17 June 1979 by Coffey *et al.*)

- COMMON GRACKLE—134, 204/84; 30 on 29 December; (25 on 12 July 1953, 23 on 21 June 1977, and 50 on 17 June 1979 by Coffey *et al.*)
- BROWN-HEADED COWBIRD—72, 98/58; 3 on 29 December; (8 on 28 June 1958, 32 on 21 June 1977, and 12 on 17 June 1979 by Coffey *et al.*)
- SCARLET TANAGER—9, 11/11; (1 on 15 July 1951 at fire tower E of Parsons by Coffey [1951], and 5 on 20-21 June 1977 by the Coffeys.)
- SUMMER TANAGER—84, 103/83; (4 on 28 May 1950, 6 on 15 July 1951, 11 on 12 July 1953, 12 on 28 June 1958, 29 on 21 June 1977, and 24 on 17 June 1979 by Coffey *et al.*)
- CARDINAL—128, 209/158; nest on 27 May, contents unknown, by Waldron; 8 on 17 November; 78 on 29 December; (described by Welch [1938] as 10th most common summer bird, and 3 on 28 August 1938 by Welch; 65 on 21 June 1977, and 50 on 17 June 1979 by Coffey *et al.*)
- BLUE GROSBEAK—6, 10/9; (5 on 21 June 1977, and 3 on 17 June 1979 by Coffey *et al.*)
- INDIGO BUNTING—198, 185/137; empty nest on 27 May by Nicholson; (described by Welch [1938] as the 2nd most common summer bird, and 28 on 2-4 July, and 20 on 17 August 1938 by Welch; 6 on 28 May 1950, 17 on 15 July 1951, 1 on 12 July 1953, 17 on 28 June 1958, 56 on 21 June 1977, and 42 on 17 June 1979 by Coffey et al.)
- DICKCISSEL—1, 0/0, on 27 May near Bath Springs by K. Dubke and Nicholson; (3 on 28 June 1958, and 4 on 21 June 1979 by the Coffeys.)
- PURPLE FINCH—2 on 17 November; 7 on 29 December.
- AMERICAN GOLDFINCH—17, 21/13; 2 on 17 November; 10 on 29 December; (14 on 2-4 July and 1 on 27 August 1938 by Welch; 3 on 28 May 1950, 5 on 12 July 1953, 5 on 28 June 1958, and 4 on 17 June 1979 by Coffey *et al.*)
- RUFOUS-SIDED TOWHEE—59, 125/103; 6 on 17 November; 30 on 29 December; (4 on 2-4 July 1938 by Welch [Coffey 1941]; 1 on 28 May 1950, 3 on 15 July 1951, 2 on 12 July 1953, 17 on 28 June 1958, 1 on 2 May 1959, 38 on 21 June 1977, and 23 on 17 June 1979 by Coffey *et al.*)
- SAVANNAH SPARROW-25 on 29 December.
- VESPER SPARROW-1 on 29 December at TNWR.
- LARK SPARROW—5, 3/2; nest in pasture along Hwy 69, 1.3 mi S of jct. with Hwy 114, on 27 May with 5 grown young by Whittington, nest empty on 28 May.

DARK-EYED JUNCO-25 on 17 November; 60 on 29 December.

- CHIPPING SPARROW—18, 22/17; (described by Welch [1938] as the 7th most common summer bird, and 12 on 2-4 July, 4 on 27 August, and 8 on 28 August 1938 by Welch; 3 on 28 May 1950, 7 on 28 June 1958, and 5 on 17 June 1979 by Coffey *et al.*)
- FIELD SPARROW—38, 40/34; 25 on 29 December; (described by Welch [1938] as the 8th most common summer bird, and 15 on 2-4 July, 5 on 27 August, and 7 on 28 August 1938 by Welch; 6 on 28 June 1958, 16 on 21 June 1977, and 5 on 17 June 1979 by Coffey *et al.*)

WHITE-THROATED SPARROW-55 on 17 November; 110 on 29 December.

- SWAMP SPARROW—2 on 29 December.
- SONG SPARROW-5 on 17 November; 12 on 29 December.

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The preceding list discusses 127 species known to occur in Decatur County. Ninety-seven species were found during the 1978 foray, and 92 probably breed in the county. Additional birding in the fall, winter and spring would obviously add many species to this list. Breeding season studies in surrounding counties have listed species which were not recorded in Decatur County, either because they were overlooked, no longer breed in the county, or have never occurred in the county. These include the Northern (Baltimore) Oriole, found by Coffey (1944) in Henderson County, the Willow Flycatcher, Yellow Warbler, Grasshopper Sparrow and Song Sparrow found on the 1973 Benton County foray (Alsop 1976), and the Black Vulture, Cerulean Warbler and Bachman's Sparrow, previously found in both Henderson County (Coffey 1944, Williams 1976), and Benton County (Alsop 1976). There has been no summer record of a Cooper's Hawk in Decatur County since 1938. Additional fieldwork in Decatur County will help clarify the status of these and other species.

Foray participants: Carolyn Bullock, James M. Campbell, Dollyann Daily, Kenneth H. Dubke, Lillian H. Dubke, Sue Ferguson, Marjory Harper, Betty Reid Hinton, Mary Ann Huber, Ruth Luckado, George Mayfield, Jr., Mark H. Mayfield, Rad Mayfield, Charles P. Nicholson, Gerry Papachriston, Alice Smith, Arlo Smith, Noreen Smith, Martha Waldron, Richard Whittington, and R. Bruce Wilkey.

Acknowledgements: I would like to thank Lil Dubke for seeing to much of the foray planning, BBS route layout, map preparation, and other details. Ben Coffey graciously made available his observatons from Decatur County, and commented on the manuscript, as well as providing many literature references to Decatur County birdlife.

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P. O. Box 402, Norris, TN 37828. Accepted 11 Feb. 1980.

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BIRDING NATCHEZ TRACE STATE PARK AND FOREST

BEN B. COFFEY, JR., 672 N. Belvedere, Memphis 38107.



ROUND TABLE NOTE

CLIFF SWALLOWS NESTING A MILE FROM WATER—Birdsong Road passes over Interstate-40 highway at Exit 133, southeast corner of Benton County. Each spring we have often birded briefly along this side road. On 24 April 1976 we noted 15 Cliff Swallows (*Petrochelidon pyrrhonata*) at the overpass itself and counted 23 of their nests under same. In 1977 our stop wasn't until 11 July and the swallows were gone; we saw 8 nests. Following counts were: 29 April 1978, 30 birds and 25 nests; 27 April 1979 20 birds in the air and 22 nests. This exit is a mile west of the Tennessee River's western shore and we know of no other body of water as close. This is the first site I have found in the Mid-South not close to water. On 10 June 1971 we saw moderately large flocks nesting under overpasses for Interstate-25 near Colorado Springs, with no indication of streams or ponds nearby. As the Cliff Swallows increase in numbers we may expect more use of these overpasses; Barn Swallows (*Hirundo rustica*) and Rock Doves (*Columbia livia*) have been doing so.

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BOOK REVIEW

A BIRDWATCHERS GUIDE TO THE EASTERN UNITED STATES. By Alice M. Geffen. 1978. Barrons/Woodbury, New York. 346 pages, 20 drawings by Peter Hayman. \$6.95 (paper), \$15.95 (cloth). This is a good guide to birding areas in the 26 states east of the Mississippi River. It is divided into three regions: Northeast (13 states), Southeast (8 states), and North Central (5 states.) Within each region the states are alphabetically arranged. Each chapter features one state and begins with a map showing major highways and the birding areas in that state. National parks, forests, wildlife refuges, Audubon sanctuaries, and private preserves are described in detail. Each location inlcludes the full name, address, telephone number, traveling directions, hours of operation, available education programs, a general description of the terrain, common and rare species spotted, availability of checklist, and where nearby camping facilities can be found. State parks and forests (with telephone numbers) are listed at the end of each chapter and at the end of the book there is a detailed index of the birds mentioned in the text.

This birding guide nicely complements Pettingill's guide to bird-finding east of the Mississippi River and will certainly be a handy guide for the traveling birdwatcher.

GARY O. WALLACE

1980

A WEST TENNESSEE FORAY—JUNE, 1979

BEN AND LULA COFFEY

After a 6-day, 1220 mile trip making five Breeding Bird Surveys from southwest to northeast Mississippi, Lula and I made 7 night runs (1720 miles with 790 net miles) counting nightjars in the Mid-South, using Memphis as a day base. On the latter, 693 miles were in West Tennessee, with 290 net miles on the stop and go runs themselves. Then followed ten days of birding throughout West Tennessee (a 5-day trip, a 2-day trip, and three single days from Memphis) totaling 1620 miles with 451 miles net, 13 through 25 June. An emergency back-up had to be made, to do two Breeding Bird Surveys in the Reelfoot Lake area at the end of June. Finally, no more early risings!

Comments on some of the field results are made in this format rather than as a few scattered data in seasonal notes since I will emphasize negative information. Too often a record is published but we don't know if it was casual or the result of an extended search in certain habitat. Negative information is difficult to evaluate. On our June mornings birds were active until possibly 0930 hours, then less so until about noon. If we had then kept on listing, our results would have biased in favor of those species which are persistent singers or callers. Usually we birded from about sun-up until 1130 hours, then moved in the afternoon to another area, with casual observations enroute. Good coverage was given late one afternoon as we passed through Benton County. On these latter dates, nightjars usually called about 45 minutes after dusk, so, on the overnight trips we made those runs also. Admittedly, there is some additional bias in birding along roads since we depend largely on hearing the species. Also, even in June, some species may be busy feeding broods and less noticeable.

The areas covered were chiefly the higher portions—four days being chiefly along the Tennessee River Divide and occasionally to the river which was 10 to 25 miles distant. This included Henry County, north Decatur County (not on 1978 Foray routes), east central McNairy County and southwest Hardin County. We also visited east Weakley County, the Obion County bluffs, south Madison County, southeast Fayette County and extreme southwest Hardeman County, and Chickasaw S. P. No marshes, swamps, or large river bottomlands were visited. Birds are relatively more active and common in good bottomlands (subsequent comment under American Redstart applies to several other species in the Hatchie bottoms.) All areas had been birded in previous years, some often since I started looking for summering Rufous-sided Towhees (*The Migrant* 1941:51-57.)

Hawks were low in number; Red-tailed Hawk, 2; Broad-winged Hawk, 5; American Kestrel, 19 June: 1, N of Stafford's Store, S. tip of Weakley County, and 1, Skullbone, NE Gibson County. The buteos are more common than indicated but the Kestrel is uncommon here in summer. As we crossed the Obion River on US 51 Highway, we saw a Mississippi Kite. This hawk is fairly common in the Mississippi River Counties (plus the west side of Obion County) and is increasing in sites and numbers in Shelby County.

Only 4 Pileated and 2 Red-headed Woodpeckers were listed, indicating that these two species are chiefly in the bottoms. Of 15 Hairy Woodpeckers, 11 were in the Chickasaw S. P. Five Eastern Phoebes were in the Obion hills, 20 June, and one in SE Weakley County. In recent seasons in Shelby County, the species is

again becoming more uncommon. Rough-winged Swallows totalled 11; several decades ago this species lost many nesting sites when our rural roads—and highways—were widened and road banks were sloped and planted.

The White-breasted Nuthatch, often hard to find in Shelby County, was missed in most areas but 10 seen in Henry County, 18 June, were at five points, all in a narrow corridor between Tenn. 119 and the Lake. Six were in Chickasaw S. P., 25 June, while 2 were S of Pickwick S. P., 23 June; none found in Counce or Shiloh N.M.P. where we expected them to be fairly common. The only Bewick's Wren was 3½ miles SE of Finger, McNairy County, 22 June. Carolina Wrens totaled 42, escaping detection in 3 of the 10 areas,—a reduced status, agreeing with results of the last three years of Breeding Bird Surveys. Eastern Bluebirds seen were 18; missing from 3 areas. As expected Loggerhead Shrikes were down—11, in six areas.

A Swainson's Warbler was found, 22 June, on Meridian Creek S of Jackson; another on 23 June S of Hamburg, our third ever record just S of Shiloh N.M.P. The number of Black-and-white Warblers (2) was so low that it would indicate that we would do better to check their distribution in late May. By mid-July, wanderers are moving into the Lake-Shelby County tier. The lone Blue-winged Warbler does not agree with early season findings, either. The Parula Warbler was uncommon or not found in most areas, being chiefly a bottomland species here. In the Obion bluffs area we heard 13 on 20 June but none on 27 June through part of this terrain on a Breeding Bird Survey. Pine Warblers were uncommon and only in the southern half of Tennessee. The Prairie Warbler was a special objective expected in all areas worked. Numbers were low; not found in only two areas but previously at these it had been not uncommon. Habitat changes affect this species and I believe overall numbers are down in West Tennessee. Generally the species is found west to about a Dresden-Saulsbury line with a scattered few in the Obion bluffs area and to be expected casually in other Mississippi River bluff areas. No Ovenbirds were heard and only a few Hooded Warblers while the Kentucky Warbler seems to be the only uncommonly distributed warbler in our woods. The American Redstarts numbered two, both in the Obion bluffs area. We might compare this low count with a total of 108, 15 June 1974, from a 12-mile ride (BBC) and a 9-mile ride (LCC) down the Hatchie River in the N. W. R. as part of a survey organized by Jerald Ledbetter.

Only one Northern (Baltimore) Oriole was listed—22 June, at Finger. This species is fairly common along the Mississippi River but this year has been in low numbers during spring and summer. A special effort was made for the Scarlet Tanager but it was not heard at several places where formerly found—Chickasaw S. P. and SW Hardin County. Among 9 records: one, 14 June, 3½ miles E of Medon, Madison County and another, 19 June, E of Dresden. The Blue Grosbeak was well distributed but not yet in appreciable numbers. The Rufous-sided Towhee was common except in Chickasaw S. P. (8) and in the Obion hills (2).

Special efforts for the Grasshopper and the Bachman's Sparrow yielded none. Much suitable habitat in Henry and Weakley County was worked for the former, and two late evening runs made in promising areas along the southern part of the "Divide" for the latter. In this connection we note that a single Bewick's Wren and a single Bachman's Sparrow reappeared, after the 1978 absence of the species, on the Corinth, Mississippi survey, 2 June 1979. This breeding bird route runs west, 2 to 4 miles south of our McNairy County line. The Chipping and Field

Sparrows were almost uncommon, although the latter totaled ten in the Obion bluffs area. Only a few American Goldfinches were seen.

Concerning West Tennessee, a few additional comments are presented. On the 1973 Benton County Foray I would consider the following species as transients: Black-billed Cuckoo, Cedar Waxwing, and Blackpoll Warbler. Since the Willow Flycatcher arrives in mid-May, as stated, part could be late transients, although, undoubtedly we have nesters in that area. Apparently, there was no follow-up on the Song Sparrows there. On this 17 June we found the habitat destroyed at that spot. Since the species has been reported in Lake County, we may expect a few widely scattered nesters. One transient was omitted, a Solitary Vireo, 26 May 1973, in the Benton County corner of Natchez Trace State Forest; we spent quite some time taping it.

Only two Common Nighthawks were seen-near Counce the morning of 23 June. None heard on the three all-night trips or the short evening runs. On 29 July we found the species fairly common, as usual, in old downtown Memphis, but few, if any, out at long established shopping centers. On 6 June we found 6 Whip-poor-wills at 5 stops in the southeast corner of Gibson County. In Crockett County one was heard just north of Gadsen, then south, 5 at two stops within a mile. Otherwise across the south side of both counties, even Chuck-will's-widows were hard to find. On 8 June we worked the bluff area of Lauderdale County, getting our first county record of the Whip-poor-will in June—three at two stops, 3 miles W of Central or 5 miles NW of Ripley. Chuck-will's-widows totaled 44 at 27 of 73 stops, in 43 miles; this is low. A larger count was logged, 7 June, across Fayette County: 138 at 58 of 67 stops, in 38 miles (roughly Fisherville-Macon-Williston East.) Whip-poor-wills numbered 15 at 11 stops, mostly east of Williston; no appreciable increase. On the same night we worked the area of our only previous Shelby County June Whip-poor-will (South of Arlington) and found only one, about a mile west of the previous site. We had 22 Chuck-will's-widows at 12 of 16 stops.

The short evening runs were incidental and near our lodging for the night. We are indepted to Carolyn Bullock for her hospitality the first night and birding with us then and the next morning. NE Decatur County, 16 June, 11 miles, 23 stops; 7 Chuck-will's-widows at 6 stops, 30 Whip-poor-wills at 20. NE Henry County, 17 June, 10 miles, 18 stops: 8 Chuck-will's-widows at 5 stops, 17 Whip-poor-wills at 11. Only Whips along Tenn 119 and east to the lake. E Weakley County, 18 June, 10 miles, 17 stops, 8 Chuck-will's-widows at 6 stops, 14 Whip-poor-wills at 9. On 19 June, five miles along the Obion bluffs, opposite Walnut Log, nothing was heard but a single Whip-poor-will at the start. Conditions were favorable and the absence of calling appears unexplainable. On 22 June, 12 miles along the Tennessee River divide E of Selmer, 20 Chuck-will's-widows at 14 of 20 stops, 13 Whip-poor-wills at 11.

For Shiloh N.M.P. we present a comparison with previous runs along an 8-mile circuit. Respectively, for 20 June 1953, 7 June 1973, and 1 June 1979: Chuck-will's widow 25, 35, 28; Whip-poor-will 0, 6, 4. We had expected an increase in the latter species.

672 N. Belvedere, Memphis 38107. Accepted 2 Sept. 1979.

THE MIGRANT

THE SEASON

FRED J. ALSOP, III, Editor



FALL MIGRATION: 1 AUGUST-31 OCTOBER, 1979

This season followed an extremely wet summer. Many of the TVA reservoirs were at much higher than normal drawdown levels leaving little suitable habitat to attract migrating shorebirds. Good movements of shorebirds were recorded, however, especially in the Eastern Ridge and Valley, and particularly at the Kingston steam plant where birders were regular visitors. This site's list included a Red Knot in early September and a Northern Phalarope in the middle of the month. Sanderlings were observed in several areas across the region throughout most of the reporting period. Other notable aquatic species include a Red-throated Loon on Cherokee Lake and Least Terns at two locations in the Eastern Ridge and Valley. Caspian Terns were seen in late September on South Holston Lake in the East Mountain Region.

The most unusual sighting of a raptorial species is the observation of a Mississippi Kite in late August at Decature in the Ridge and Valley region. This is only the second record for the species in Tennessee more than few miles east of the Mississippi River. Golden Eagles were found at two sites in the Eastern Mountain and one suffering from a gunshot wound was recovered in the Ridge and Valley Region. Both of these regions also reported a Merlin each and both had mulitple observations of Peregrines.

A flock of 200 Cattle Egrets was recorded at Dyersburg. The Western Coastal Plain Region also reported Evening Grosbeaks, a most unusual winter visitor in West Tennessee, in mid-October. A Monk Parakeet was observed in Memphis.

House Finches are becoming more common in the State each year as winter visitors. In Johnson City, six to eight were regular visitors at a feeder after 24 October. Some efforts should be made to more carefully document the numbers and distribution of this artificially displaced western finch as it continues to consistently winter here.

WESTERN COASTAL PLAIN REGION—*Parakeet-Osprey: MONK PARAKEET:* 27 Oct (1) M (FW), only previous sighting in Memphis was Oct-Feb, 1972-1973. Cattle Egret: 3 Oct (200) D. Little Blue Heron: 3 Sep 213 herons flying up Forked Deer past Tigrett Wildlife Management Area (WGC). Mississippi Kite: 1 Aug-31 Aug (1-4) North Dyer Co. (WGC), 30 Aug (30) North Memphis (JS), 30 Aug-15 Sep several seen at various points in Memphis area, (LCC, BCC, GC), 15 Sep-22 Sep (1 immature being fed) M (SF, JF). Sharp-shinned Hawk: 13 Oct (1) PF (JGH). Rough-legged Hawk: 13 Oct (1) PF (JGH). Osprey: 13 Sep (1) HP (RM), 15 Sep (1) Everett's Lake, Dyer Co. (WGC). 16 Sep (1) Island 21, Dyer Co. (WGC).

Dowitcher-Grosbeak: Long-billed Dowitcher: 13 Oct (1) PF (JGH). Caspian Tern: 16 Sep (2) Island 21, Dyer Co. (WGC). Common Nighthawk: From 25 to 150 or more seen at various point in Memphis, 23 Aug thru 18 Oct (GC, LCC, BCC, JS, WF, JS, OI, DB, JGH, GO, PO, MW). Olive-sided Flycatcher: 25 Sep (1) D (CH). House Wren: 13 Oct (1) PF (JGH), 22 Oct (1) D (CH). CEDAR WAXWING: 27 Aug (25) OP (previous earliest date printed in The Migrant for West Tn. was 26 Sep.) Blue Grosbeak: 3 Aug (4 young) Dyer Co (WGC). EVENING GROSBEAK: 17 Oct (24-24) M (JD).

Locations: D-Dyersburg, HP-Herb Parson's Lake in west Fayette Co.; M-Memphis; OP-Overton Park, city park in mid-town Memphis; PF-Penal Farm, northeast Shelby Co.; R-Reelfoot Lake.

Observers: DB—Diane Bean; GC—Greg Charbonnet; BCC—Ben B Coffey, Jr.; LCC-Lula C. Coffey; WGC-W. G. Criswell; JD-Jon Devore; JF-Jim Ferguson; SF-Sue Ferguson; WF-William Fowler; CH- Celia Hudson; JGH-James G. Holt; OI-Oliver Irwin; RM-Robert McGowan; PO-Peggy Owen; GO-George Owen; JS-John Stokes; FW-Freeman Wright; MW-Martha Waldron.

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis 38117.

CENTRAL PLATEAU AND BASIN REGION—Double-crested Cormorant: 2 Nov Old Hickory Lake (2) CS. Green Heron: 30 Oct Radnor Lake, Nash (1) AP. Little Blue Heron: 15-23 Oct MetroCenter, Nash (1 white) DV. Great Egret: 29 Jul - 3 Sep Lewis' Lake, Gallatin (1) DPC; 25 Aug Ashland City Marsh (1) RJM; 25 Aug Hillsboro, Grundy Co. (1) ER; 8 Sep Cross Creek's Nat'l Wildlife Refuge (3) WAS; 15 Sep Rock Is, Warren Co (2) MW. Green-winged Teal: 17 Aug Lewis' Lake, Gallatin (2) DPC, DW. Ruddy Duck: 16-30 Sep Monsanto Ponds, Columbia (1) BAL. Broad-winged Hawk: 15 Sep Rock Is, Warren Co (Flocks 45, 125, 20) MW. Peregrine Falcon: 21 Sep Gallatin Steam Plant (1) DPC. Sandhill Crane: 25 Oct Barnes Hollow, Putnam Co (10-15) RWS. Semipalmated Plover: 6 Oct Gallatin Steam Plant (1) DPC. American Golden Plover: 11-14 Oct Gallatin Steam Plant (1) DPC; 2-28 Oct MetroCenter (1-5) DV, JB, EQ. Black-bellied Plover: 26 Aug Gallatin Steam Plant (1) DPC. Upland Sandpiper: 25 Aug MetroCenter (2) DV. Red Knot: 10 Oct Gallatin Steam Palnt (40) DPC. Dunlin: 22 Oct Gallatin Steam Plant (40) DPC. Stilt Sandpiper: 26 Aug-30 Sep Gallatin Steam Plant (1) DPC; 6-7 Oct Green's Lake, Gallatin (1) MLB. Western Sandpiper: 4 Nov Gallatin Steam Plant (3) DPC. Sanderling: 22 Sep Gallatin Steam Plant (1) DPC; 6-7 Oct Gallatin Steam Plant (1) DPC. American Avocet: 15 Sep Gallatin Steam Plant (8) TG; 19 Oct Cross Creeks Nat'l Wildlife Refuge (3) BW et al. Least Tern: 26 Aug Gallatin Steam Plant (1) DPC. Black Tern: 26 Aug Gallatin Steam Plant (9) DPC. Whip-poor-will: 27 Oct Basin Spring (1) KAG, Late. Yellow-bellied Flycatcher: 1 Sep Basin Spring (1 banded) KAG; 10 Sep Lewis Co (1 banded) GRM; 1 Oct Lewis Co (1 banded) GRM. Tree Swallow: 25 Sep Gallatin (500) DPC. Bank Swallow: 30 Sep Gallatin (54) DPC. Brown Creeper: 10 Sep Nashville (1) JM. Bewick's Wren: 29 Sep Gallatin (5) DPC. Ruby-crowned Kinglet: 9 Sep Nashville (1) LF. Water Pipit: 6 Oct Gallatin Steam Plant (1) TK. Golden-winged Warbler: 17 Aug Love Hill, Nash (1) JA. Magnolia Warbler: 2 Nov Love Hill, Nash (1) JA. Blackburnian Warbler: 28 Oct Pennington Bend, Nash (1) MLM. Hooded Warbler: 21 Oct Percy Warner Park, Nash (1) JB, EQ. Pine Siskin: 13 Oct Basin Spring (2) KAG, Early. Vesper Sparrow: 30 Sep MetroCenter (1) DV.

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Observers (alphabetically beginning first initial): AP—Audrey Perry; BW— Barbara Wilbur; BAL— Bedford and Anne Lockridge; DV—David Logt; DW—Diane Wilson; DPC—Dot and Paul Crawford; EQ—Elizabeth Queener; ER—Erma Rogers; GRM—George R. Mayfield; JA—Jan Alexander; JB—Jane Bridgman; JM—Jane Maynard; KAG—Katherine A. Goodpasture; LF—Lucy Finch; MLM—Margaret L. Mann; MLB—Michael L. Bierly; MW—Miriam Weinstein; RWS—Richard W. Simmers; RJM—Rocky J. Milburn; TG—Tom Gray; TK—Tony Koella; WAS—Warioto Audobon Society.

PAT STALLINGS, 406 North 17 Street, Nashville 37206.

EASTERN RIDGE AND VALLEY REGION—Rain over the region was heavier than normal. The Chattanooga National Weather Service Office recorded a total of 4.84 inches of excess precipitation during the period and other sections of the region were probably similar. As a result, TVA was able to generate a great deal of hydropower thus keeping electric rates down, but it made an ornithological disaster for the observation of wandering wading species and migrating shorebirds on Chickamauga Lake. Sightings of both groups of birds on the reservoir were probably the worst since records have been kept. At the end of the period Chickamauga Lake was still near full pool.

Observations of shorebirds were concentrated at the Kingston Steam Plant with other interesting coverage coming from Austin Springs, the Eagle Bend Fish Hatchery and the Rankin Bottoms section of Douglas Lake. A close reading of the Kingston Steam Plant observations, since the intense coverage was initiated in 1978, makes one speculate what constitutes "normal" numbers.

A television tower kill at Knoxville on the nights of 29-30 September resulted in the death of 326 birds of 33 species. A description of the kill will be written up as a separate article.

Loons-Hawks: Common Loon: 23 Oct (1), 30 Oct (19) BL (RK). RED-THROATED LOON: 22 Oct (1) Cherokee Lake in Grainger Co. (TK). Pied-billed Grebe: 13 Aug (1) KSP (KLD); 3 Oct (23) SB (LD, EK). Double-crested Cormorant: 28 Oct (1) HRA (KLD). Little Blue Heron: 2 Sep (10) RB (TK); 8 Aug-2 Oct (only 5 records of 1-11 birds) HRA, SB (KLD, RCS). Cattle Egret: 3 Oct (1) Townsend (TK); 29 Oct (5) HRA (KLD). Great Egret: 2 Sep (10), 8 Sep (25) RB (TK); 23 Oct (2), 30 Oct (1) BL (RK); 1-2 regular EB through 24 Sep (CPN, LT); 6-27 Aug (1-2) HRA (KLD). Yellow-crowned Night Heron: 6 Aug (4) HRA (KLD); 13, 20 Aug (1 imm) KSP (KLD); last seen 14 Sep (1) AS (SG). Least Bittern: 29 Sep-23 Oct (1-2) AS (GE, HF, RK). American Bittern: 16-29 Sep (1) AS (GE, HF). White Ibis: 13 Aug (1 imm) HRA (KLD). Canada Goose: first arrival of non-resident birds 26 Sep (50) CL (CPN). Snow Goose: 28 Oct (2 blue morph) HRA (TOS). Black Duck: 1-3 Sep (2-7) KSP (LD, RCS); 2 Sep (6) RB (TK). Gadwall: first 3 Sep (2) KSP (RCS, LD). Pintail: first 8 Sep (4) EB (SBS); 23 Oct (51) RB (TK). Green-winged Teal: 12 Sep (1) AS (RL, RK); 23 Oct (204) RB (TK). Blue-winged Teal: 4 Sep-23 Oct (1+) AS (RK); 18 Sep (79) SB (KLD). American Wigeon: 18 Sep (3) KSP (KLD). No. Shoveler: 5 and 6 Sep (1) SJP (RK). Wood Duck: max 21 Aug (350) HRA (KLD); 8 Sep (230) RB (TK). Ring-necked Duck: one spent the season on a pond in JC (RK, MD, SG). Lesser Scaup: one spent the period on a pond in JC (RK, MD, SG). Ruddy Duck: 29 Oct (1) Patrick Henry Lake (MD, SG). MISSISSIPPI KITE: 27 Aug (1) observed near

Decatur, details to be submitted (RCS, KLD). Cooper's Hawk: 5 Sep (1) Winfield, Scott Co. (CPN); 8 Sep (1) EB (SBS); 18 Sep (1) U. T. Plant Science Farm (SBS). *GOLDEN EAGLE:* injured bird (gunshot wound) found 28 Oct on Cherokee Lake, Hamblen Co., it was rehabilitated and released 18 Dec (John New fide CPN). Bald Eagle: one at Cherokee Dam in mid-Aug (Harry Morrefide JBO); 13 Sep (1 imm) Norris Lake (JCH). PEREGRINE FALCON: 23 Sep (1) Mt. Roosevelt and 1 ad. KSP—(same bird?) (JCH, CPN, JBO). Merlin: 15 Sep (1) KSP (CPN, JBO, SBS).

Grouse-Phalarope: Ruffed Grouse: 6 Oct (1 hit a window killing itself) Signal Mt. (RBW); 19 Oct (1) HRA on Lower River Rd. between Candies and S Mouse Creeks (KLD). Sora: 14 Sep (2) JB (RK); 12 Oct (1) AS (RK). COMMON GALLINULE: 4-14 Sep (1) AS (RK); 1 Oct (1 imm) this injured bird was found at Alcoa and brought to Knoxville for rehabilitation and release (Len Hurley fide CPN & SJS); 23 Oct (6) RB (TK). Semipalmated Plover: 2, 8 Sep (1, 3) RB (TK); 3 Sep-7 Oct (1-4 occasional) KSP (KLD, TK). American Golden Plover: 11 Sep (1) KSP (KLD, JBO); 19 Sep (1 dead on road) JC (TFL); 10-14 Sep (1) AS (RK). Black-bellied Plover: 27 Aug-2 Sep (1) KSP (KLD, REB, MaD, CPN); 7 Oct (2) KSP (TK). Ruddy Turnstone: 15 Sep (1) HCo (TFL, RAP). Common Snipe: 14 Sep (1) KSP (SJS, REB); 23 Sep (4) RB (TK). Upland Sandpiper: 2 Aug (1) EB (CPN); 23 Sep (8) RB (TK). Spotted Sandpiper: 3 Aug-14 Sep (1-5) EB (CPN, LT). Willet: 23 Aug (1) EB (LT, SJS); 1-3 Sep (1) KSP (REB, MaD, KLD, CPN, RCS). Greater Yellowlegs: 23 Sep, 23 Oct (2, 1) RB (TK); 24 Aug (1) SB (KLD); 9-31 Oct (1-11 regular) SB, HRA (KLD). Lesser Yellowlegs: 2, 23 Sep (10) RB (TK). RED KNOT: 3 Sep (1) KSP (KLD, CPN, RCS). Pectoral Sandpiper: 13 Aug-30 Oct (1-11 sporadic) SB, HRA, KSP (KLD, RCS, EK); 2-23 Sep (4-12) RB (TK). BAIRD'S SANDPIPER: 3-24 Sep (1-6) KSP (SBS, KLD, CPN, LT, MaD et al). Least Sandpiper: 13 Aug-14 Oct (1-53) SB, HRA, KSP (KLD, EK). Dunlin: 2-31 Oct (1-8) AS (ETOS); 7 Oct (7) KSP (TK); 23 Oct (45) RB (TK). Stilt Sandpiper: 12 Aug-24 Sep (1-35) EB, KSP (KLD, LT, SBS, MaD, CPN, et al). 15 Aug (1) SJP (RK); 14 Sep (1) AS (MD, SG). Semipalmated Sandpiper: 1 Aug-7 Oct (1-35) KSP (KLD, TK); 2, 8 Sep (8) RB (TK). Western Sandpiper: 12 Aug (1) EB (SJS, REB); 20 Aug-24 Sep (1-9) KSP (KLD, RCS, EK); 15-29 Aug (1-3) SJP (RK); 14, 15 Sep (5, 1) HCo (RAP, TFL). Buff-breasted Sandpiper: 8-11 Sep (3-5) KSP (KLD, JBO, LT, SBS et al). SANDERLING: 14 Sep (3) AS (SG, MD); 29 Sep (3) AS (GE, HF); 23 Sep (2) RB (TK); 11 Aug-7 Oct (1-6) KSP (SBS, KLD, RCS, CPN et al); never before has this bird ever been found in the region so consistently. American Avocet: 3 Sep (11) Louisville (MaD); 19 Oct (3) Bays Mt. Park, Kingsport (Tom Bowman, Dan M. Johnson, TFL, RAP). Wilson's Phalarope: 24 Aug-6 Sep (1-2) KSP (KLD, RCS, CPN, MaD et al). NORTHERN PHALAROPE: 15 Sep (1) KSP (CPN, JBO, SBS et al).

Gull-Sparrows: Laughing Gull: 14 Sep (1) KSP (SJS, REB); 15 Sep (2) KSP (SBS, CPN, JBO). Forster's Tern: 30 Aug (3) SB (LD); 27 Aug (1) EB (LDT). Common Tern: 26 Aug (6-9) KSP (LD, EK, MaD, LDT); 3 Sep (1) SB (KLD, RCS). *LEAST TERN:* 23 Aug (1) EB (LT); 24 Aug (1) SB (LD). Caspian Tern: 26 Aug (1) KSP (EK, LD, MaD, LDT); 6 Sep (1) KSP (SJS, MaD, REB); 14 Sep (2) KSP(SJS, REB). Black Tern: 11 Aug-3 Sep (1-30) KSP, HRA, SB (KLD, CPN, MaD, REB, Holly Overton); 25 Aug (9) AS (RK, SG). Whip-poor-will: 17 Sep (1) HRA (KLD). Common Nighthawk: 27 Aug (400) Norris (CPN), then several later reports of flocks in the hundreds; last 12 Oct (1) K (CPN). Eastern Kingbird: 27 Aug (25 counted flying south at 8:30 a.m.) SB (KLD). Tree Swallow: 14 Sep

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(300+) JB (RK). Bank Swallow: 14 Sep (200+) JB (RK). Rough-winged Swallow: 10 Oct (1) AS (RK). Barn Swallow: 23 Oct (1) JC (SG). Cliff Swallow: 14 Sep (250+) JB (RK). Purple Martin: 7 Sep (1) JC (MD, SG). Brown Creeper: 30 Sep (1) K (JMC, JCH, CPN). Long-billed Marsh Wren: 29 Sep-16 Oct (1-2) JB, AS (RK). Short-billed Marsh Wren: 7-23 Aug (1) SB (KLD); 30 Sep, 5 Oct (1) Concord (SBS, A. Boyd Sharp). Brown Thrasher: 21 Sep (50) K (JCH). Swainson's Warbler: 21 Sep (1) Campbell Co. (JCH). Worm-eating Warbler: 20 Sep (1) K (JCH). Golden-winged Warbler: 30 Sep (1) K (TK). Blue-winged Warbler: 19 Sep (1) K (JCH). Canada Warbler: 21 Oct (1) K (LT). Bobolink: 14, 29 Sep (70, 40) JB (RK); 30 Sep, 2 Oct (3, 12) AS (GE, HF). Orchard Oriole: 27 Aug (1) HRA (Ken Dubke). *HOUSE FINCH:* 6-8 regular in JC after 24 Oct (Helenhill Dove, SG). Grasshopper Sparrow: 30 Sep (1) JB (RK). White-crowned Sparrow: 9 Oct (1) AS (RK).

Locations: AS—Austin Springs; CL—Cove Lake; EB—Eagle Bend Fish Hatchery; HCo—Hawkins County; HRA—Hiwassee River Area; JB—Jonesboro; JC—Johnson City; K—Knoxville; KSP—Kingston Steam Plant; RB—Rankin Bottoms (Cocke County section of Douglas Lake); SB—Savannah Bay; SJP—St. John's Pond.

Observers: REB—Beck, Robert E.; MaD—Davis, Marsha; MD—Dillenbeck, Martha; KLD—Dubke, Kenneth H. and Lillian H.; LD—Dubke, Lillian H.; TOS-ETOS—Elizabethton Chapter; GE—Eller, Glen; HF—Farthing, Harry; SG—Goodin, Sally; JCH—Howell, Joseph C.; EK—Killian, Elena; RK— Knight, Rick; TK—Koella, Jon A. "Tony"; RL—Lewis, Richard; CPN— Nicholson, Charles P.; JBO—Owen, J. B.; RAP—Phillips, Rick A.; SJS— Stedman, Stephen J. "Steve"; SBS—Stedman, Steve and Barbara; RCS— Stringer, Randy C.; LT—Turner, Linda; LDT—Turner, Linda and Dave; RBW—Wilkey, R. Bruce.

KENNETH H. AND LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION—After a wetter than normal summer, this period's rainfall returned to more normal totals. August and Sept. had near normal temperatures. The first major frost came on 8 Oct with cooler temperatures during the rest of the month.

Accipiters and falcons were very prominent during the period with several unusual sightings being reported. A small tern movement through the area along with a good warbler movement made for interesting birding. A very poor cone crop and sparse food otherwise in the higher elevations will probably mean a nonproductive year of northern visitors. Red-breasted Nuthatches are completely missing from the high elevations, after being so numerous this past winter and during the summer months.

LOON-HAWK: Common Loon: 27 Oct (1) WatL (MD, SG) 1st fall return. Yellow-crowned Night Heron: 17 Aug (2) E (GE). *SNOW GOOSE:* (Blue Morph) 27 Oct (2) WatL (ES). Black Duck: 29 Sep (3) WibL (GW, DL) 1st fall return. Blue-winged Teal: 12 Sep (3) SV (HF) 1st fall return and 23 Oct (1) SV (GE) last seen. Sharp-shinned Hawk: 12 separate sightings during period. Cooper's Hawk: 5 separate sightings during period. Broad-winged Hawk: 14 Oct (1) GSMNP (SS) last seen. *GOLDEN EAGLE:* 9 Sep (1) GSMNP (BS) and 13 Oct (1) HS (HF). Marsh Hawk: 17 Sep (1) RM (ES). Osprey: 8 Sep (1) RM (ETOS) 1st fall return

and 20 Oct (1) WatL (GE) last seen. *PEREGRINE FALCON:* 29 Sep (1) GSMNP (SS); 6 Oct (1) SHL (RL); 7 Oct (1) Pigeon Forge (BS). *PIGEON HAWK* (*MERLIN*): 29 Sep (1) SHL (RL).

Yellowlegs-Wren: Greater Yellowlegs: 6 Oct (2) SHL (RL). Pectoral Sandpiper: 7 Oct (2) E (GE). Forster's Tern: 29 Sep (5) SHL (RL). Common Tern: 29 Sep (1) SHL (RL). *CASPIAN TERN:* 29 Sep (4) SHL (RL) and 25 Sep (3) SHL (RL). Yellow-billed Cuckoo: 30 Sep (1) SV (HF) last seen. Barn Owl: 1-8 Aug (1) SV (GW). Screech Owl: still very low populations in area. Great Horned Owl: 18-26 Sep (1) SHL (RL). *OLIVE-SIDED FLYCATCHER:* 25 Aug (1) Unaka Mtn. (ES). Tree Swallow: 10 Oct (3) SV (HF) last seen. Rough-winged Swallow: 6 Oct (2) E (GE). Black-capped Chickadee: 7, 14 Oct (2-5) GSMNP (SS, BS); 20 Oct (1) RM (DL). Red-breasted Nuthatch: no birds seen in higher elevations. House Wren: 15 Oct (1) E (HF) last seen.

Vireo-Sparrow: Solitary Vireo: 20 Oct (1) SV (HF) last seen. Warbling Vireo: 1 Sep (1) SHL (RL). Prothonotary Warbler: 8 Sep (1) RM elevation 5500' (LoH.) Blue-winged Warbler: 24 Sep (1) E (LoH) last seen. Nashville Warbler: 12 Oct (1) E (HF) last seen. Magnolia Warbler: 20 Oct (1) E (GE) last seen. Cape May Warbler: 8 Sep (250-300) RM elevation 5500' (ETOS). Pine Warbler: 21 Oct (2) WibL (GW) last seen. Palm Warbler: 31 Oct (1) E (GE). Wilson's Warbler: 22 Sep (1) E (DL) last seen. Boblink: 13 Oct (20) Pigeon Forge (BS). Rose-breasted Grosbeak: 9 Oct (1) RM (ES) last seen. Indigo Bunting: 14 Oct (2) HS (GE). Purple Finch: 30 Sep (2) GSMNP (BS). Red Crossbill: 15 Oct (15) GSMNP (Chuck Nicholson). Vesper Sparrow: 23 Sep (1) SHL (RL). White-crowned Sparrow: 23 Sep (1) SHL (RL) 1st return. White-throated Sparrow: 26 Sep (2) E (HF). *LINCOLN'S SPARROW:* 29 Sep (1) SV (GW, DL).

Locations: E—Elizabethton; GSMNP—Great Smoky Mtn National Park; HS—Hunter Swamp; RM—Roan Mountain; SHL—South Holston Lake; SV— Siam Valley; WatL—Watauga Lake; WibL—Wilbur Lake.

Observers: MD—Martha Dillenbeck; GE—Glen Eller; ETOS—Eliz. Chapter TOS; HF—Harry Farthing; SG—Sally Goodin; LoH—Lois Herndon; DL—Dick Lura; RL—Richard Lewis; BS—Barbara Stedman; ES—Ed Schell; SS—Steve Stedman; GW—Gary Wallace.

GLEN D. ELLER, Route 3, Grandview Terrace, Elizabethton 37643.

Correction: The Migrant. Vol. 50, No. 3.

p. 67 Reads: "Osprey: 14 Apr (1) LaJoie Lake, CSP (TOS, MC), courtship observed 5 Mar, R (JF, SF)."

It should read: ''Osprey: 14 Apr (1) LaJoie Lake, CSP (TOS, MC). Yellow Rail: 30 Apr (1) window kill, U. T. Martin, the first record for West Tennessee, (DP). American Woodcock: 17 Feb through 11 Mar, (1 to 10), courtship observed 5 Mar, R (JF, SF).''

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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 $8\frac{1}{2} \times 11^{"}$ 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 1978).

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.

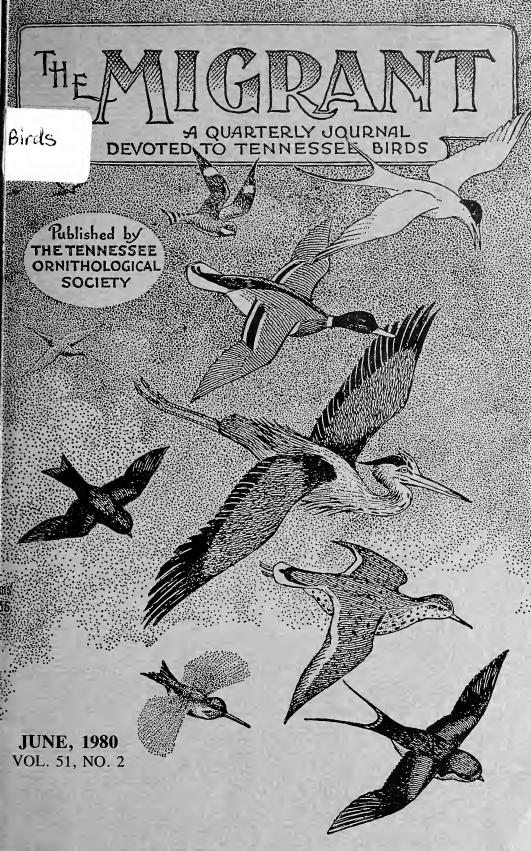
IDENTIFICATION: Rare or unusual species identification to be acceptable must be accompanied by verifying evidence. This should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic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

Books for review and articles for publication should be submitted to the editor. Seasonal reports and items should be forwarded to the appropriate departmental editor whose name and address will be found on the inside front cover.

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All TOS members receive *The Migrant* and the *TOS Newsletter*, *The Tennessee Warbler*. The *Newsletter* carries information about meetings, forays, and club activities. Items for the *Newsletter* should be sent to its Editor, Charles P. Nicholson, Box 402, Norris, TN 37828.

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VOL. 51

JUNE, 1980

NO. 2

MINUTES OF THE ANNUAL BOARD OF DIRECTORS' AND BUSINESS MEETING, 1980

BOARD OF DIRECTORS' MEETING

The 65th Annual Meeting of the Board of Directors of the Tennessee Ornithological Society was called to order at 1:45 P.M. on 3 May 1980 at Ellington Hall at Reelfoot Lake, Tennessee by the President, Nelle Moore, with more than a quorum present.

Copies of the minutes from the Board of Directors' meeting held 6 October 1979 at Gallatin, Tennessee were distributed to Directors who read and then approved the minutes of the fall meeting.

REPORTS OF OFFICERS

There was no report from the three Vice-Presidents.

The SECRETARY, Helen Dinkelspiel, reported that there will be every attempt made to have the 1980 statewide Directory ready in the fall.

The TREASURER, Martha Waldron, reported as follows:

INCOME	\$6520.90
EXPENSES	4132.67
SAVINGS (3/31/80)	
CHECKING	1275.88

The EDITOR of *The Migrant*, Gary Wallace, announced that he was still trying to get *The Migrant* on the correct printing schedule. The June 1979 issue, page 31, contains the schedule to be used.

The CURATOR, James T. Tanner, reported that back copies of *The Migrant* are now stored in Hesler Biology Building, University of Tennessee, Knoxville.

Dr. Tanner also announced that the Archives of the T.O.S. have been benefited by a donation from Ben B. Coffey, Jr. of a compete set of "Mid-South Bird Notes," which are now in the Special Collection of the University of Tennessee Library at Knoxville. Appreciation was expressed to Mr. Coffey for making his records of the birds of West Tennessee available.

DIRECTOR-AT-LARGE from East Tennessee, Jon A. Koella, stated that he had mailed letters to T.A.L. members in his area trying to get information concerning dates of affiliation with T.O.S. for the Directory to be printed.

DIRECTOR-AT-LARGE from Middle Tennessee, Michael Dinsmore, reported that interest is still high in forming a new chapter in Clarksville, Montgomery County. He is hoping for developments during the coming year. The first annual Montgom-

ery County Spring Bird count was held 18-19 April 1980 with 7 participants, resulting in 77 species including 14 warblers.

DIRECTOR-AT-LARGE from West Tennessee, Mrs. C. K. G. Sumara had no report.

REPORT OF COMMITTEES

The FINANCE committee members, William T. Whitley, Chairman, T. David Pitts, James T. Tanner and Richard G. Taylor submitted a letter, read by President Nelle Moore, stating that two members of the committee had examined the records of the treasurer for the period from 1 May 1979 through 1 March 1980 and have found them to be in order and to reflect the true financial condition of the Tennessee Ornithological Society.

In the absence of the Finance Committee Chairman the following complete report was read by Richard G. Taylor:

REPORT AND RECOMMENDATION OF THE FINANCE COMMITTEE FOR FISCAL YEAR ENDING 30 APRIL 1980

We would also like to make the following recommendations:

1. That the president appoint a committee now to determine from past records if a purpose had been declared for the use of the interest or dividends of the Endowment Fund now invested in M.I.T. stock. If none has been established, the committee should recommend to the Board of Directors a purpose or purposes for the use of these funds that would allow the greatest benefits to all the chapters of our Society and to the communities in which they serve.

2. To increase the Endowment Fund to \$10,000 or more from its present value of approximately \$8000, by using part of the interest earned by the Briley Fund. This fund now contains approximately \$8000, and is invested in InterCapital Liquid Asset Fund, Inc., and at present is earning approximately 14%. Increasing the Endowment Fund to \$10,000 will give us greater opportunity to earn more.

3. If Recommendation #2 is approved then it is further recommended to give authority to the Finance Committee (for the fiscal year ending 30 April 1981) if and when advantageous, and with the approval of the president: to change the investment of Endowment Funds now in M.I.T. stock to some other safe investment that will produce a greater return, such as high grade money market funds, Certificates of Deposit issued by large banks, Trasury notes or bills, GNMA mortgage funds, or AAA commercial bonds now discounted to produce high competitive yields. Long term security, with high yield, would be our objective.

4. To promote the Endowment Fund regularly and encourage contributions to it and, if possible, establish means by which funds can regularly flow into it.

The Finance Committee wants to commend our treasurer, Martha Waldron, for the fine work she is doing.

William T. Whitley, Chairman Finance Committee

Action taken follows.

RECOMMENDATION #1: President Nelle Moore stated that a committee had been appointed consisting of Ben B. Coffey, Jr., Katherine Goodpasture, Gary O. Wallace. This committee presented the following RESOLUTION: Whereas, the Society's endowment fund was originally set up so that money earned by it would be used solely for the publication of the Society's official quarterly, *The Migrant*, and

Whereas, minutes which so stated, have been lost in the transfer over the years, from one officer to another.

Be it resolved, that in regular business meeting assembled, we reaffirm that all revenue produced by the endowment fund, be used solely for the printing and mailing of *The Migrant*.

Dr. George Mayfield made a motion to accept the Resolution for the proceeds of the Endowment Fund to be used for publishing and mailing *The Migrant*. The motion was seconded and passed.

RECOMMENDATION #2: Lil Dubke moved acceptance. The motion was seconded and passed.

RECOMMENDATION #3: Lula Coffey moved acceptance. The motion was seconded and passed.

RECOMMENDATION #4: This recommendation was agreed to in spirit. No formal action was necessary.

CONSERVATION COMMITTEE: George Mayfield, Chairman, reported that conservation efforts across the state are suffering because of the faltering economy. Under the present chairman of the TVA board, TVA has seemingly become more environment conscious. Arlo Smith was quoted as saying it appears that the I-40 route plan through Overton Park probably won't be completed but that the undesired route is not entirely dead.

The Conservation committee submitted seven Resolutions summed up as follows:

RESOLUTION #1 stated the wholehearted support of the Tennessee Ornithological Society of the concepts and goals of the Wildlife Observation Area Program of the TWRA.

Jon A. Koella moved passage of Resolution #1. Seconded and passed.

RESOLUTION #2 strongly urged the Director of the Tennessee Wildlife Resources Agency, in cooperation with the Tennessee Valley Authority to designate Savannah Bay as a Wildlife Observation Area.

James Tanner moved acceptance of this resolution. Seconded and passed.

RESOLUTION #3 expressed support for efforts toward restoration programs for the Peregrine Falcon and the Bald Eagle as well as the Osprey as a breeding bird in the Tennessee Valley.

Michael Dinsmore moved acceptance of this resolution. Seconded and passed.

RESOLUTION #4 urged Southern Railway Co., the U.S. Army Corps of Engineers, Hamilton County Government and Chattanooga City Government to combine efforts to preserve Amnicola Marsh in Chattanooga.

Ben Coffey moved adoption of this resolution. Seconded and passed.

RESOLUTION #5 commended the Senate Energy and Natural Resource Committee and its Chairman, Senator Ray Albright, for granting the full request of \$87,000 for expanding and operating the Non-Game and Endangered Species Program of the Tennessee Wildlife Resources Agency.

Jon A. Koella moved acceptance of this resolution. Seconded and passed.

RESOLUTION #6 which dealt with trapping regulations was withdrawn by motion of Bruce Wilkey. The motion to withdraw Resolution #6 was seconded and passed.

RESOLUTION #7 opposed the extraction of coal on Tennessee state owned lands by strip mining and voiced reservations concerning deep mining.

Glenn King moved acceptance of this resolution. Seconded and passed.

NOMINATING COMMITTEE: Mrs. Ben B. Coffey, Jr., Chairman, submitted the name of Michael Lee Bierly as President Elect.

Glenn King moved acceptance, subject to approval of the main body at the Business meeting. Seconded and passed.

SPECIAL ASSIGNMENT REPORTS

Editor of the newsletter, *The Tennessee Warbler*, Charles Nicholson stated that the newsletter is still evolving and that he welcomes comments and suggestions as well as news from the chapters.

FORAY: Charles P. Nicholson, Director of the Forays, stated that he would make an announcement concerning this at the business meeting.

PATCHES, DECALS, AVIFAUNA: Lil Dubke announced income of \$150.50 from these sources.

OLD BUSINESS

There was no old business.

NEW BUSINESS

Mack Prichard had items in regard to Reelfoot Lake in which T.O.S. should be concerned. It was agreed that a committee consisting of Mack Prichard, Bruce Wilkey and Ken Dubke were to prepare a resolution to be presented at the annual business session to be held that night concerning these matters.

ANNOUNCEMENTS

Announcements concerning the 1980 annual fall meeting and an invitation for the 1982 spring meeting were to be made at the regular business meeting.

The Board of Directors meeting adjourned at 3:35 P.M.

BUSINESS MEETING

Prior to the meeting the buffet style dinner was catered by Boyette's and served at Ellington Hall. Afterwards Richard Whittington introduced the speaker, Dennis Holt, Wildlife Film producer and Audubon lecturer who showed films and spoke on the Okefenokee Swamp area.

Nelle Moore then presided at the business portion of the meeting, with about 100 present, and gave a report on the business transacted by the Board of Directors.

The NOMINATING COMMITTEE, Lula Coffey, Chairman, offered the name of Michael Lee Bierly as President-elect. There were no nominations from the floor. The nomination was approved and accepted by the body.

A Resolution prepared by Mack Prichard, Bruce Wilkey and members of the Conservation Committee was presented, stating the support of the Tennessee Ornithological Society for cooperation with various authorities concerning problems at Reelfoot Lake of pollution, siltation and losses of natural diversity. The resolution also recommended that the Walnut Log Biological Research Station be restored and operated as a monitoring station.

Ken Dubke made a motion to accept the resolution. Seconded and passed.

Foray Director, Charles Nicholson, announced that the Memorial Day weekend Foray was to be held on 23-26 May 1980 in Monroe County. He also stated that McNairy County would probably be the location of the 1981 Foray.

The FALL MEETING is to be held at Montgomery Bell State Park 17-19 October 1980 with Columbia Chapter hosting.

Ann Tarbell extended a most cordial invitation to the T.O.S. for the 1982 spring annual meeting, to be hosted by the Nashville Chapter.

Nelle Moore expressed appreciation to Richard Whittington, Vice-president from West Tennessee and to his committee, for the arrangements made for the Reelfoot meeting hosted by the Memphis Chapter.

There being no further business the meeting adjourned.

Helen Dinkelspiel, Secretary

* * * * * *

Correction: The Migrant.

Vol. 49(4):81. Line 13 should read . . . "Cades Cove Loop Road fords Sea Branch at an elevation. . . . "

Vol. 50(4):86. Data in the Little Blue Heron Table should be credited to William G. Criswell.

Vol. 50(4):86. The five Painted Buntings seen on 4 July were on President's Island and not the Penal Farm.

ROUND TABLE NOTES

RECOVERIES OF SOME RAPTORS BANDED IN TENNESSEE—Of the 19 Red-tailed Hawks, *Buteo jamaicensis*, and 58 American Kestrels, *Falco sparverius*, that I have banded in Tennessee, two of each species have been recovered.

All 19 Red-tailed Hawks were banded before they fledged. I banded #608-23390 and its sibling on 5 May 1975 four km W of Five Points, Lawrence Co., Tennessee. This bird was found dead about 95 km W of the banding site on 18 August 1975 by Mr. Robert L. Jones on his farm in the extreme SW corner of Hardin Co., Tennessee. Mr. Jones wrote in a letter received in the Bird Banding Laboratory (BBL) on 25 August 1975, that the bird, "appeared to have been shot."

Red-tailed Hawk #877-43631 and its sibling were banded on 18 April 1976 three km N of Five Points. This bird was recovered on 22 April 1977 near Ash Grove, Tippecanoe Co., Indiana which is about 615 km N of the banding site. Mr. Donald Smith, Indiana conservation Officer, investigated and reported this recovery to the BBL. Mr. Smith wrote me that due to the dried and brittle condition of the flesh remaining on the carcass, he believed the hawk was killed during the winter months. The numerous shell casings in the woodlot where the bird was found led him to believe it had been shot.

American Kestrel #1143-79303 was an adult (sex unrecorded, but probably female) banded when I captured it on its nest containing 5 eggs on 9 April 1976 at the Univ. of Tennessee Plant Science Farm in Knox Co., Tennessee. I recaptured this bird on its nest on 30 April when 4 young and 1 egg were present. I saw 2 birds flying above this nest on 6 May; presumably one of these was #1143-79303. On 25 June 1976, Mr. W. R. Yancey found this bird dead in the bottom of a filled water trough on a cattle farm at Alcoa, Blount Co., Tennessee. This farm is about 12 km S of the banding site. Craig and Powers (1976. *Condor*, 78:412) discovered the remains of 7 American Kestrels in a water tank in Idaho. They suggested that newly fledged raptors would be most vulnerable to drowning in these situations. My bird, however, was clearly an adult.

I banded American Kestrel #1143-79332 on 30 May 1976 eight km NNW of Five Points. It was the only nestling in a nest which had held 5 eggs, including a cracked one, on 9 May. In an undated letter received in the BBL on 9 May 1977, Rev. Hollis Lacey reported that this bird had appeared in the area where he lives, about 11 km W of Haleyville, Alabama. When he first saw it, the bird was too sick to fly. The next day (date not given) at noon it was dead. This recovery was about 105 km SSW of the banding site.

MORRIS D. WILLIAMS, Museum of Zoology, Louisiana State University, Baton Rouge, Louisiana 70893. Accepted 31 Jan. 1980.

NEW COLONY OF CLIFF SWALLOWS ESTABLISHED ON DOUGLAS LAKE—On the afternoon of 21 May 1979, I noticed Cliff Swallows (*Petrochelidon pyrrhomota*) swirling about my house. There were 10 to 20 Cliff Swallows including at least three immature birds. The house, newly built, had not been landscaped yet and there was bare dirt which the Cliff Swallows used to take dust baths. The house is located in Jefferson County on Douglas Lake, two kilometers from I-40 Exit 424.

On subsequent days I could count on seeing Cliff Swallows swirling around my house which is located on the highest hill in the general vicinity. On 28 May 1979, I discovered the nesting site. It was "Swan's Bridge" which is the old bridge that U.S. Hwy. 70 goes over Douglas Lake parallel to the span that carries I-40 over Douglas Lake.

On 16 July 1979, there were 110 Cliff Swallows on the power line leading to my house. Their numbers tapered off after that and by 10 August 1979, there were none.

On 30 April 1979, I spotted Cliff Swallows using their old nesting site on Cherokee Lake in Grainger County. They have been sighted there for a number of years—at least since I have been in the area (1968). So given the date that the Cherokee Lake Colony was sighted and given that I sighted flying immatures, it might be safe to assume that the new colony on Douglas Lake was in business since some time in April.

This colony might indicate that Cliff Swallows are expanding in this part of Tennessee. However, more field work is needed.

JON A. "TONY" KOELLA, Rt. 2, White Pine, TN 37890. Accepted 31 Jan. 1980.

BIRDS KILLED AT TELEVISION TOWERS IN KNOX COUNTY-On the night of 29 September 1979, a large number of migrating birds collided with the WATE-TV tower on Sharp's Ridge and the WBIR-TV tower on Zachery Ridge, Knox County, Tennessee. The following morning, a total of 327 birds of 33 species (Table 1) was collected under the two towers by Marcia Davis, J. B. Owen, and Linda Turner. Casualties of tower kill accidents are assumed to be a random sample of nocturnal migrants and the species collected in these tower kills were typical of previously recorded fall tower kills in Tennessee (Migrant 40:79, 1970; Migrant 45:29, 1974). Of the seven represented families, wood warblers (Parulidae) were the most numerous, accounting for 20 species and 65 per cent of all individuals. Vireos (Vireonidae), with five species and 19 per cent of all individuals, were also numerically important. The most numerous species collected were 62 Bay-breasted Warblers (Dendroica castanea), 50 Red-eyed Vireos (Vireo olivaceous), 48 Ovenbirds (Seiurus aurocapillus), and 34 Tennessee Warblers (Vermivora peregrina). No rare migrants were identified from the tower kill and no new early or late migration dates were established. However, five Philadelphia Vireos (Vireo philadelphicus) were of particular interest since they are infrequently recorded (possibly because of the difficulty in identification for many observers) during their migration through Knox County.

Fall tower kills are often associated with heavy fog, low visibility, sudden drops in temperature, and changes in wind direction. However, according to the Knoxville Weather Bureau, the night of 29 September 1979 was clear with a 30,000 foot ceiling and little wind. No fog or precipitation was recorded in the 24 hour period of the tower kill but heavy fog was present on the preceding night of the 28th and also on the following night of the 30th.

The 1979 Knox County Fall Count was conducted on the same date on which the tower kills were discovered. This provided a unique opportunity to compare the relative abundances of nocturnal migrants collected from the tower kills to the relative abundances of the same species based on Fall Count data. Since warblers

JUNE

TABLE I

COMPLETE LIST OF ALL BIRDS COLLECTED UNDER THE WATE AND WBIR TV TOWERS KNOX COUNTY, TENNESSEE ON 30 SEPTEMBER 1979.

Species	WATE	WBIR
House Wren	1	0
Long-billed Marsh Wren	Î	1
Unidentified Wren	î	î
Catbird	6	3
Brown Thrasher	1	0
Wood Thrush	11	2
Swainson's Thrush	9	1
White-eyed Vireo	4	0
Yellow-throated Vireo	3	0
Solitary Vireo	1	0
Red-eyed Vireo	45	5
Philadelphia Vireo	5	0
Black-and-White Warbler	10	2
Tennessee Warbler	28	6
Northern Parula	1	0
Magnolia Warbler	8	0
Cape May Warbler	1	1
Black-throated Blue Warbler	2	0
Black-throated Green Warbler	2 7	0
Blackburnian Warbler	7	2
Yellow-throated Warbler	1	0
Chestnut-sided Warbler	6	1
Bay-breasted Warbler	56	6
Prairie Warbler	1	0
Palm Warbler	6	0
Ovenbird	40	8
Common Yellowthroat	8	4
Yellow-breasted Chat	1	0
Hooded Warbler	0	1
Wilson's Warbler	1	0
Canada Warbler	1	0
American Redstart	1	2
Scarlet Tanager	6	0
Rose-breasted Grosbeak	2	0
Unidentified	3	2
GRAND TOTAL	280	47

and vireos comprised 84 per cent of the total tower kill, the relative proportions of these species were compared using tower kill and Fall Count data. Results of the comparison indicated that Bay-breasted Warblers were the most abundant warblers on this date according to both the tower kill data (22 per cent of all warblers and vireos combined) and the Fall Count records (17 per cent of all warblers and vireo sightings). Tennessee Warblers accounted for approximately 13 per cent of warblers and vireos in both tower kill and Fall Count. Differences in estimates of relative abundance were evident when comparing Red-eyed Vireos and Ovenbirds. The 50 Red-eyed Vireos collected from the tower kills accounted

for 18 per cent of the dead warblers and vireos while the 31 Red-eyed Vireos reported on the Fall Count represented only six per cent of warbler and vireo sightings. The 48 Ovenbirds from the tower kill represented 17 per cent of the dead warbler and vireos but only five live Ovenbirds (less than one per cent of all warbler and vireo sightings) were reported on the entire day-long Knox County Count. The differences in abundance in these two species may be due to large numbers of migrating birds passing through the area at night without stopping, or, particularly in the case of the Ovenbird, failure of Fall Count participants to record inconspicuous or silent birds in proportion to their true abundance.

We would like to express our appreciation to Dr. J. C. Howell who helped in identification of the birds. Specimens were contributed to the osteological collection maintained by Dr. Paul Parmalee of the University of Tennessee, Department of Anthropology, Knoxville, and to the National Museum of Natural History, Washington, D. C.

LINDA TURNER, Rt. 4, Box 541, Valley Lane, Clinton, Tn. 37716. MARCIA DAVIS, 4154 Jomandowa Lane, Knoxville, Tn. 37919. Accepted 17 May 1980.

BOOK REVIEW

BIRD FINDING IN TENNESSEE. By Michael Lee Bierly. Published by and available from: Michael Lee Bierly, 3825 Bedford Ave., Nashville, TN 37215. 255 p., numerous photographs and maps. 1980. \$8.00 postpaid. — The guide is divided into the three major birding regions of the State; West, Middle, and East. A map precedes each region generally locating the birding areas described in that region. Most birding areas have a detailed map that you can refer to as you read the written material about that area. Usually, in each section you are directed along a birding route. Along this route the most important birding areas are pointed out and the birds to be expected are listed.

One of the more valuable features of this book is a list of 342 species of birds that have occurred in Tennessee. This list discusses the status and abundance in the State for each species.

Other important features include a birders' directory for the State. The directory includes the name, address, and telephone number for 49 birders distributed across the State who are willing to assist other birders. There is also a list of chapters of the Tennessee Ornithological Society. The information about each chapter includes: a list of local birding contacts with phone numbers, chapter meeting locations and times and chapter activities.

This guide is highly recommended for both beginner and advanced birders.

GARY O. WALLACE

THE 1979 CHRISTMAS BIRD COUNT

RICHARD D. LURA

One hundred thirty-one (131) species were seen on the 18 counts run across the state. The low species count can be partly blamed on the mild weather previous to the counts. Very few northern species were driven south as is reflected in the shortage of northern finches and the low waterfowl counts. It is somewhat interesting that the absence of these northern species was not accompanied by proportional increases in retention of migrants. The passarine and shorebird totals are average to low also.

The highpoints of the count were the Surf Scoter at Nashville and the Brownheaded Nuthatches at Chattanooga.

As is the custom, the counts are tabulated from west to east across the state.

INFORMATION ON THE COUNTS

MEMPHIS—16 Dec.; 0645 to 1645; cloudy; temp. 40 to 55°F; wind NW, 3-20 mph; 32 observers in 14 parties; 125 party hours (95 on foot, 30 by car); 194 party miles (74 on foot, 120 by car).

Diane Bean, David Brown, Carolyn Bullock, Richard Caldwell, Frederick Carney, Lula Coffey (co-compiler), Ben B. Coffey, Jr. (co-compiler, 672 N. Belvedere, Memphis 38107), Mary Davant, Helen Dinkelspiel, Jack Embury, Jim Ferguson, Sue Ferguson, Wm. B. Fowler, Van Harris, James Holt, Russell Jones, Allan Larrabee, David Morris, George Owen, Jr., Peggy Owen, George Payne, Jr., Rob Peeples, William Peeples, Ernest Restivo, Alice Smith, Arlo Smith, Noreen Smith, Richard Taylor, Martha Waldron, Bobby Whittemore, Wendell Whittemore, Richard Whittington.

Of the Snow Geese, nine were of blue form. Western Meadowlark singing.

REELFOOT—23 Dec.; 1400 to 1600; mostly cloudy, intermittent rain; temp. 52 to 57°F; wind S, 5-10 mph; 7 observers in 5 parties, 34 party hours (14 on foot, 16 by car, 4 by boat +2 owling;) 182 party miles (16 on foot, 160 by car, 8 by boat).

Ben Coffey, Lula Coffey, Wendell Crews, Don Manning (co-compiler), Gina Manning (co-compiler, Box B, Bells 38006), David Pitts, Bettie Sumara.

Of the Snow Geese, 5 were of the blue form. The Golden Eagle was an immature. Of the Bald Eagles, 46 were immature.

ASHLAND CITY—15 Dec.; 1430 to 1950; clear; temp, 15 to 45°F; wind S, 5 mph; 14 observers in 5 parties; 55 party hours (34 on foot, 21 by car); 251 party miles (36 on foot, 215 by car).

Jan Alexander, Michael Bierly, Anne Collins, Craig Empson, Tom Harston, Johnny Herbert, Oliver Lang, Margaret Mann, Rocky Milburn (compiler, 1704 Stewart Place, Nashville 37203), Betty Richards, Sonny Richards, Pat Stallings, Carol Stewart, Miriam Weinstein.

The Bald Eagle was an immature.

COLUMBIA—28 Dec.; 0400 to 1800; overcast; temp. 35 to 50°F; wind NE, 0-10

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mph; 12 observers, 9 in three parties plus at feeders; 31½ party hours (17½ on foot, 13 by car, 1 by plane); 369 party miles (14 on foot, 255 by car, 100 by plane).

Elizabeth Anderson, Kenneth Anderson, Barbara Finney, Anne Lochridge, Bedford Lochridge, Mary Lyles, George Mayfield, Jr. (compiler, 999 Sunnyside Dr., Columbia 38401), Mark Mayfield, Allen Pressnell, Diane Pressnell, James Satterwhite, Charles Thomas.

Seen Count Week—Sharp-shinned Hawk, gull (sp.) Barn Owl, 2, was accidentally omitted from the chart.

NASHVILLE—29 Dec.; 1545 to 1800; partly cloudy to overcast; temp. 35 to 56°F; wind NW, 0-5 mph; 46 observers in 11 parties; 96½ party hours (58½ on foot, 38 by car) plus 6 owling; 332 party miles (33 on foot, 299 by car).

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Frances Abernathy, Jan Alexander, Linda Anderson, Mildred Ansley, Randall Barnes, Sue Bell, Michael Bierly (compiler, 3825 Bedford Avenue, Nashville 37215), Vaunez Brakebill, Ralph Cazort, Jean Cobb, Bonnie Copland, Annella Creech, Sam Dement, Milbrey Dugger, John Ellis, Charles Farrell, Clara Fentress, Bill and Lucy Finch, Ray Fleischer, Ann Fort, Ann Foster, Katherine Goodpasture, Ben Groce, Tom Guschke, Bob Hatcher, Adiene Lyon, Portia Macmillan, Margaret Mann, Jane Maynard, Joe McLaughlin, Rocky Milburn, Marge and Oscar Patrick, Audrey and Don Perry, Dick Porter, Virginia Price, Pat Stallings, Helen Sterling, Dee Thompson, Lawrence Trabue, David Vogt, Kenneth and Sara Walkup, Lewis Winfrey.

Surf Scoter present since mid-November. Seen Count Week-Ruddy Duck.

32

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	Memp	Reel	hsA	Colu	Nash	Hick	Murf	Leba	High	Cook	Chat	Knox	GSIM	Gree	King	Eliz	Bris	Roan
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Savannah Sparrow	19	:	24	m	4	8	;	;	;	:	21	24	;	:	7	-	:	1
Vesper Sparrow	1	:	:	:	-	;	:	:	1	:	1	:	:	;	;	;	;	:
Dark-eved Junco	371	117	426	88	401	100	18	72	61	18	81	59	275	32	123	157	83	71
Chipping Sparrow	;	;	;	:	:	;	;	7	;	;	;	;	:	:	:	80	-	;
Field Sparrow	126	69	116	85	302	101	۰	28	22	38	77	150	76	60	51	65	44	9
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*See information on counts.		M=1.000		X=1.000.000	8													
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HICKORY-PRIEST—31 Dec.; 1630 to 1730; overcast, light rain; temp. 39 to 41°F; wind NW, 6-10 mph; 21 observers, 17 in 7 parties plus 4 at feeders.

Frances Abernathy, Vivian Anderson, Michael Bierly, Annella Creech, Milbrey Dugger, John Ellis, Beth Evans, Katherine Goodpasture, Tom Harston, Louise Jackson, Carol Knauth, Hazel Kramer, Lee Kramer, Margaret Mann, Jane Maynard, Rocky Milburn, Marge Patrick, Pat Stallings (compiler, 406 N. 17 Street, Nashville 37206), Carol Stewart, Ann Tarbell, David Vogt.

MURFREESBOR0—29 Dec.; 0600 to 1530; clear; temp. 35 to 60°F; 14 observers, 12 in 5 parties plus 2 at feeders; 61 party hours (17 on foot, 44 by car); 140 party miles (15 on foot, 125 by car).

Glenn Birdwell (compiler, Rt. 3, Compton Road, Murfreesboro 37130), Maria Birdwell, Low Erwin, Ann Hettish, Bob Hettish, Richard Hunter, Wilma Hunter, Rebecca Jones, Pat Martin, Gene Odom, Ruth Odom, Robert Sanders.

Barn Owl, 2, was accidentally omitted from the chart.

LEBANON—15 Dec.; 0100 to 1830; mostly clear; temp. 30 to 58°F; wind NW; 12 observers, 8 in 6 parties plus 4 at feeders; 44 party hours (12 on foot, 34 by car); 89 party miles (10 on foot, 79 by car).

Earline Berry, Mildred Bouton, Fred Detlefsen, Robert Hosier, Reid McKee, Ruth McMillan, Ray Pope, John Sellars, William Senter (compiler, 313 West Hills Drive, Lebanon 37087).

HIGHLAND RIM-29 Dec.; 0700 to 1900; partly cloudy; temp. 40 to 56°F; 15 observers in 6 parties; 99½ party hours; $217\frac{1}{2}$ party miles (4½ on foot, 213 by car).

Debi Acuff, Carroll Barr, Stan Barr, Rob Bingham, Bill Boyd, Effie Boyd, Katerine Cleckly, Marjory Harper (compiler, 305 Crestwood Drive, Tullahoma 37388), Glenn King, Ruth Luckadoo, Judy Kennedy, Sanford McGee, C. V. Rogers, Erma Rogers, Lillie Willard.

COOKEVILLE—28 Dec.; 0800 to 1430; fair; temp. 40s; 5 observers in 3 parties; 20 party hours; 67 party miles (2 on foot, 65 by car).

Kathryn Coward, Sam Coward (compiler, Box 118, Algoo 35801), Amy Johnson, Roy Sullivan, Florence Williams.

CHATTANOOGA—15 Dec.; 1545 to 2030; overcast to mostly clear; temp. 29 to 45°F; wind SW, 2-12 mph; 14 observers in 7 parties, plus 5 at feeders; 58 party hours (35 on foot, 23 by car); 373 party miles (22 on foot, 351 by car).

Kathy Anderson, Ken Dubke, Lil Dubke, Gertrude Fleming, Anne Gibson, Bill Hampton, Daniel Jacobson, Al Jenkins, Barbara Kelly, Elena Killian, Joe Stone, Randy Stringer (compiler, 3535 Mtn. Creek Rd., #1203, Chattanooga 37415), Bruce Wilkey, Mary Lou Wilkey.

Excellent details on unusual species.

KNOXVILLE—16 Dec.; 0530 to 1730; overcast; temp. 32 to 48°F; wind, calm; 16 observers in 9 parties; 70 party hours (34 on foot, 36 by car) +7 owling; 358 party miles (38 on foot, 320 by car).

Betty Campbell, James Campbell, Howard Chitwood, Marcia Davis, Mary Ann Handel, Audrey Hoff, Ron Hoff, Joseph Howell, Tony Koella, Morton Massey, Charles Nicholson, Holly Overton, Paul Pardue, Boyd Sharp, James Tanner (compiler, Rt. 28, Box 155, Knoxville 37920), Linda Turner. GREAT SMOKY MOUNTAIN NATIONAL PARK—30 Dec.; 1545 to 1700; overcast with intermittent rain; temp. 27 to 47°F; wind, variable 1-5 mph; 33 observers in 16 parties plus 1 at feeder; 113 party hours (70 on foot, 43 by car, 6 at feeder); 424½ party miles (87 on foot, 337½ by car).

Fred Alsop, Winnifred Brown, Stan Canter, Howard Chitwood, Dave Cooke, Marcia Davis, Don DeFoe (compiler, Rt. 2, Box 176, Gatlinburg 37738), Dedee Eiklor, John Eiklor, Katherine Foster, Paul Hartigan, Nona Hinkle, Ross Hinkle, Joe Howell, Tony Koella, Henry Lix, Louise McElroy, Ralph McElroy, Allison McNutt, Bill McNutt, Chuck Nicholson, Holly Overton, J. B. Owens, Paul Pardue, Ethel Ritchie, Lawrence Ritchie, Boyd Sharp, Lillian Smathers, Johnetta Smith, Louis Smith, Jim Tanner, Dave Turner, Linda Turner.

Solitary Vireo seen by Linda Turner and Marcia Davis. The Orange-crowned Warbler was seen by Fred Alsop.

GREENEVILLE—30 Dec.; 0730 to 1730; cloudy with rain; temp. 35 to 42°F; wind, 0-5 mph; 11 observers in 4 parties; 15 party hours (11 on foot, 1 by car, 3 by boat); 17 party miles (3 on foot, 13 by car, 1 by boat).

King Gaut, Mrs. King Gaut, Mrs. Markley Murray, Richard Nevius (compiler, Rt. 6, Greeneville 37743), Mrs. Richard Nevius, Doug Ratledge, Ken Ripley, Royal Spees, Mrs. Royal Spees, JoAnn Swecker, Virginia Williams.

KINGSPORT—22 Dec.; overcast; temp. 39 to 52°F; wind, calm; 7 observers in 5 parties; 46½ party hours (33 on foot, 13½ by car); 130 party miles (32 on foot, 98 by car).

Devonda Eiklor, John Eiklor, Charlotte Finucane, Tom Finucane (compiler, 1434 Watauga St., Kingsport 37660), Tom Laughlin, E. E. Scott, Arthur Smith.

Seen Count Week-Loggerhead Shrike.

ELIZABETHTON—16 Dec.; clear to overcast; temp. 20 to 53°F; wind 0-10 mph; 17 observers in 7 parties; 57 party hours (25½ on foot, 31½ by car); 304½ party miles (13½ on foot, 291 by car).

Bill Bridgeforth, Martha Dillenbeck, Hellenhill Dove, Glen Eller, Harry Farthing, Sally Goodin, Lois Herndon, Rick Knight, Joy Kyle, Dick Lura, John McGettrick, Ed Schell, Glen Swofford, Gary Wallace, Barbara Walsh, Jim Walsh, Jane Whitehead.

BRISTOL—29 Dec.; temp. 25 to 50°F; 10 observers in 5 parties; $41\frac{1}{2}$ party hours (16 on foot, $23\frac{1}{2}$ by car, 2 by boat); $319\frac{1}{2}$ party miles ($11\frac{1}{2}$ on foot, 288 by car, 20 by boat).

Rockwell Bingham (compiler, 216 Melody Lane, Bristol 37629), Rosemary Bingham, Wallace Coffey, Kathy Cantrell, Brenda Hall, Joseph Jackson, Richard Lewis, Harry Sigel, Katherine Sigel, John Wright.

ROAN MOUNTAIN—27 Dec.; 1700 to 1630; clear; temp. 19 to 43°F; wind, 0-20 mph; 4 observers.

Glen Eller (compiler, Rt. 3, Grandview Terrace, Elizabethton 37643), Rick Knight, Ed Schell, Glenn Swofford.

THE SEASON

FRED J. ALSOP, III, Editor



WINTER SEASON: 15 NOVEMBER - 15 MARCH, 1979-80

The winter of 1979-80 was much milder than the two preceding ones and there generally were not large numbers of waterfowl wintering on the lake and reservoir systems within the state. Only 5 Whistling Swans were reported, one in the Central Plateau and Basin and the others in the Eastern Ridge and Valley. Scoters were found by ones and twos in all regions except the Western Coastal Plain: a Black Scoter in the Ridge and Valley, White-winged Scoters in the Eastern Mountain and the Central Plateau and Basin, and a Surf Scoter in the last region. A White Pelican was seen in late November in the Western Coastal Plain.

Large numbers of raptores were reported by all compilers except in the Central Plateau and Basin. The Tennessee Wildlife Resources Agency's midwinter eagle survey was better planned and executed this year with the resulting total of 272 Bald Eagles scored during the census within Tennessee; up from the 205 recorded last year (Table 1). Two Peregrines and 2 Merlins were the only nonresident falcons reported, both species were seen in the Eastern Ridge and Valley. The Ridge and Valley and the Eastern Mountain regions each reported a single wintering Goshawk. No Short-eared Owls could be found at the Smyrna Airport where they have been regular in recent winters and where a habitat change, the planting of soy beans, may have made the area less suitable for them. One was located in the Western Coastal Plain and constitutes the only report from the state for the season.

The November-December southward movements of Sandhill Cranes are again documented in the reports of the Central Plateau and Basin and the E. Ridge and Valley regions, as are the observations of the species spring migration. The numbers of cranes counted in the spring flights are the largest on record in the Ridge and Valley.

The more pleasant temperatures of this season may have influenced several passerine species to linger longer before moving to more southernly climes and induced others not to travel further at all. Long-billed Marsh Wrens were found in all the regions except the Eastern Mountain. Short-billed Marsh Wrens were found in the Western Coastal Plain and House Wrens were located in the Central Plateau and Basin at two different sites. Orange-crowned Warblers were found in mid-winter in the Western Coastal Plain and in Great Smoky Mountains National Park. A Palm Warbler wintered in the Ridge and Valley and Common Yellowthroats were seen in the Central Plateau and Basin.

Wintering northern songbirds and Northern Finches did not make impressive

TABLE 1 1980 BALD EAGLE MIDWINTER SURVEY SUMMARY

		Bald Eagl		Colden			
Location	Adult	Imm.	Total	Adult	Imm.	Date	Agenc
Vest Tennessee							
Ky. Lake - Stewart Co.	1	4	5	-	-	1/4/80	TVA
Ky. Lake - Remainder	2	23	25	-	1	1/2/80	FWS
Barkley Lake	1	-	1	-	-	1/4/80	TVA
Cross Creeks - NWR	1	1	2	-	-	1/11/80	FWS
latchie NWR	-	1	1	-	-	1/4/80	FWS
)yer County	-	2	2		-	1/4/80	TWRA
Reelfoot Lake	91	71	162	2		1/2/80	FWS
Totals	96	102	198	2	1		
fiddle Tennessee							
Cheatham Res	1	-	1			1/11/80	COE
)1d_Hickory	0	-	0			1/14/80	COE
ercy Priest	0	-	0			1/11/80	COE
fontgomery Co.	-	-	-	1		1/13/80	TWRA
Cordell Hull	2	2	4		1	1/14/80	COE-TWRA
enter Hill	3	3	6	1		1/10/80	COE-TOS
uburntown	-	-	-		1	1/11/80	TOS
ale Hollow	23	13	36			1/11/80	TWRA
ale Hollow*	13	8	21			1/11/80	COE
oods Reservior		1	2			1/11/80	TWRA
Totals	30	19	49	2	2		
Cast Tennessee							
ohn Sevier			0			1/12/80	TOS
oone Res.			0			1/12/80	TOS
atrick Henry			0			1/12/80	TOS
outh Holston			0			1/12/80	TOS
herokee Res.			0			1/12/80	TOS
atauga Res.			0			1/12/80	TOS
ouglas Res.			0			1/5/80	TWRA
forris Res.		2	2			1/12/80	TOS
orris Res.	5		5			1/13/80	TVA
't. Loudon	2		2			1/10/80	TVA
atts Bar	5	2	7			1/10-12/3	
hickamauga	5	3	8			1/10-12/	80 TVA-TOS
lickajack	1		1			1/10-12/	80 TVA-TOS
Totals	18	7	25				
GRAND IUTALS	144	128	272	4	3		

*Used higher TWRA count for totals.

showings this season with the possible exception of the "invasion" of Cedar Waxwings in the Nashville and Clarksville areas of Middle Tennessee. Most regions reported either no or very few Red-breasted Nuthatches. Purple Finches were recorded in lower numbers than usual and almost no Pine Siskins were seen. Evening Grosbeaks were found in all regions except the Western Coastal Plain for the first time in three years in any numbers, but only the Eastern Mountain Region had even moderate flocks. Dickcissels are not often reported from the state during the winter months but several are in this season's report from the Central Plateau and Basin.

House Finches introduced into the northeastern states continue to increase their numbers as wintering species and visitors to feeding stations in Tennessee. This report lists them from all four regions and in impressive numbers in the Nashville area and in the Ridge and Valley. It seems only a matter of time until the House

Finch is discovered as a nesting species in Tennessee. Details of these observations and many more follow. Your compilers are waiting your records for next "season" now.

WESTERN COASTAL PLAIN REGION—Winter populations of Purple Finches and American Goldfinches were low for the season even though some feeding stations reported large concentrations. There was a greater increase in the number of sightings of birds of prey than evey previously recorded.

Pelican-Eagle: WHITE PELICAN: 24 Nov (1) R (WGC). Snow Goose: 1 Jan (29, 25 Blue Morphs, 4 Snow) Island 21, Dyer Co. (WGC). Blue-winged Teal: 10 Mar (20) TWMA (WGC). Sharp-shinned Hawk: 9 Mar (2) HP (AL, RJ); several additional reports within Shelby County. Cooper's Hawk: 6 Jan (1) M (BBC); 26 Jan (1) M (MW, JaW), there were other Cooper's Hawks reported without specific dates recorded. Red-shouldered Hawk: 1 Jan (1) PF (JD), Oct-Dec (1) M (JD, JaW). Bald Eagle: 6 Dec (1 imm) TVA Steam Plant (DM); 31 Dec (1 adult) M (JD); 29 Feb (2) M (MZ).

Plover-Finch: American Golden Plover: 14 Mar (150) PF (BBC, LCC, MCTOS). Greater Yellowlegs: 4 Nov (6) H (JGH); 10 Mar (9) TWMA (WGC). Lesser Yellowlegs: 11 Mar (4) TWMA (WGC). Pectoral Sandpiper: 14 Mar (12) PF (LCC, MCTOS). Following are two old records that were not previously printed but are included here so a written record is available. *RED KNOT:* 2 Sep 1974 (2) PP (MLB, JGH), this is the *5th State record. MARBLED GODWIT:* 28 Aug 1977 (1) PP (Mlb, TNH). *SHORT-EARED OWL:* 10 Mar (1) D (WGC). Tree-Swallow: 11 Mar (1) TWMA (WGC). Long-billed Marsh Wren: 22 Jan (1) R (DJ, KD, DC, PC). Short-billed Marsh Wren: 2 Feb (1) HP (JF, SF, MW); 9 Mar (1) HP (AL, RJ). Eastern Bluebird: 13 Jan (31) Lauderdale Co. Tenn 87 (JW). Orange-crowned Warbler: 22 Jan (1) R (DJ, KD, DC, PC). Indigo Bunting: 23 Feb (1) R (JS). *HOUSE FINCH:* 4 Dec - 24 Jan (1) H (SH, *fide* GM).

Locations: D—Dyersburg; H—Hopefield, TN west of downtown Memphis; PF—Penal Farm, Shelby Co.; R—Reelfoot, Lake Co.; TWMA—Tigrett Wildlife Management Area, Dyer Co.; TVA—TVA Steam Plant, Southwest Shelby Co.

Observers: MLB—Michael L. Bierly; BBC—Ben B. Coffey, Jr.; DC—Dot Crawford; LCC—Lula C. Coffey; PC—Paul Crawford; WGC—William G. Criswell; KD—Kathy Davidson; JD—Jon Devore; JF—Jim Ferguson; SF—Sue Ferguson; JGH—James G. Holt; SH—Sarah Hayes; TNH—Thomas N. Harston; RJ—Rusty Jones; AL—Al Larrabee; DM—Don Melton; GM—Gina Manning; MCTOS—Memphis Chapter of TOS; JS—John Stokes; MW—Martha Waldron; JaW—James Waldron; JW—Jeff Wilson; MZ—Margie Zeman.

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis 38117.

CENTRAL PLATEAU AND BASIN REGION—After three consecutive record or near record cold, snowy winters, the winter of 1979-80 was near normal. The numbers of birds in the field and at feeders generally were thought to be down.

Loon-Hawk: Common Loon: 12 Nov (350—exceptional number) Woods Reservoir (KLD, EK); as usual, a few wintered in the region with the most reported 26 Jan (6) Woods Reservoir (RL, MH). Double-crested Cormorant: 3 Nov (2) and 17 Nov (1) Old Hickory L (CS, ADP). Green Heron: 15 Mar (1) Percy Priest L (ADP). Cattle Egret: 14 Nov (1) Monroe Community, Overton Co (JDH). Black-

crowned Night Heron: 31 Dec (1) Metro Center, Nash (DV); 6 Mar (2 ads) Old Hickory L Dam (DPC). Yellow-crowned Night Heron: 24 Feb (1) Seven Mile Creek, Nash (JB fide ADP). WHISTLING SWAN: 11 Dec - 9 Mar (1) Hillsboro (ER). Redhead: 12 Nov (1,500) Woods Reservoir (KLD, EK); 10-15 Mar (350) Gallatin Steam Plant (DPC). Ring-necked Duck: 12 Nov (150) Woods Res (KLD, EK); 10 Mar (808), 15 Mar (1,300) Gallatin Steam Plant (DPC); 4 Nov (350), 25 Nov (700) Gallatin Steam Plant (DPC). Canvasback: 12 Nov (500) Woods Res (KLD, EK). Ruddy Duck: 12 Nov (250) Woods Res (KLD, EK). Hooded Merganser: 12 Nov (160) Woods Res (KLD, EK). Red-breasted Merganser: 12 Nov (500) Woods Res (KLD, EK). WHITE-WINGED SCOTER: 10 Mar (2) Normandy L (RTL). SURF SCOTER: 18 Nov - 5 Jan (1) Radnor L (MLB). Sharp-shinned Hawk: reports from (1) western Pickett Co (1) Hillsboro (1) Nashville (shot), (1) Gallatin. Cooper's Hawk: reported from (1) Hillsboro (2) Nashville. Several additional unidentified accipiters were seen at feeding stations during the winter in Nashville. Rough-legged Hawk: decidedly fewer than the past several years, possibly due to the milder winter. 11 Nov - 2 Mar a minimum of 6 individuals from Maury Co (1), Overton Co (1), Rutherford Co (1), Smith Co (1), and Sumner Co (2) (RH, KLD, RBN, CPN, DPC, KA).

Grouse-Gull: Ruffed Grouse: 21 Feb (1) Barr's home on Woods Reservoir rare west of the Cumberland Plateau (CSB). Sandhill Crane: southward migration flights mainly observed in Dec; 11 Nov (40) Savage Gulf (KR); 12 Nov (40) Richman, Overton Co (RZ*fide* RH); 3 Dec (87), 8 Dec (80) Byrdstown (DRH); 9 Dec (42) Brotherton Mt, Putnam Co (RS). Two flights of cranes were recorded during their spring migration; 8 Mar (unknown number heard) Byrdstown (JDH); 16 Mar (30) Byrdstown (RH). Virginia Rail: wintered Monsanto Ponds, Columbia (MLB). Sora: wintered Monsanto Ponds, Columbia (MLB). American Golden Plover: 19 Nov (1) Metro Center, Nash (DV). American Woodcock: all singing birds; 29 Dec (4) Nashville (Xmas Count); 31 Dec (3) Hickory-Priest (Xmas Count); 15 Dec (2) Ashland City (Xmas Count). These widespread observations were probably due to the mild temperatures and mark the first time the species has been recorded on all 3 counts during the same Christmas count period. Western Sandpiper: 4 Nov (3) Gallatin Steam Plant (DPC). Bonaparte's Gull: were few during the winter with a slight increase recorded in February.

Owl-Waxwing: SHORT-EARED OWL: After several consecutive years of observations no Short-eared Owls were reported this winter. The fields at Smyrna Airport have been planted in soybeans but the adjacent Percy Priest Wildlife Management Area could provide the necessary wintering habitat. Chimney Swift: 3-4 Nov (1) Radnor L (KAG, MLB). Horned Lark: no large flocks were reported and the small winter flock at the beach area on Old Hickory L, seen for a number of years, did not materialize-there were no extended periods of snow cover. Barn Swallow: 15 Mar-earliest (1) Hillsboro (ER). Red-breasted Nuthatch: almost nonexistent throughout the winter. HOUSE WREN: 31 Dec (1) Old Hickory L-2nd winter record Nash area (MLB, OL); all winter to 4 Feb (1) Cookeville (RS). Long-billed Marsh Wren: 15 Dec (2) Pardue's Pond, Dickson Co (MLB, OL). Gray Catbird: 22 Dec (1) Love Circle, Nash (JLA). Eastern Bluebird: 12 Jan (45) Pickett Co (DRH). Cedar Waxwing: 12 Jan (172) western Pickett Co (DRH). Beginning in mid-February to late March a massive movement in Middle Tenn described by Nashville and Clarksville birders as the most waxwings ever observed in their areas. Many flocks of 100 were seen with reports into the thousands. Examples: 1-9 Mar (1000-500) Brentwood (VP); late Feb - Mar (500) Franklin Rd,

Nash (AN); 10 Mar (200) Manchester (VA); 13 Mar (1000) Crieve Hall, Nash (LJ); 15 Mar (2000) Madison (RR); The normal number of 20-30 seen in Gallatin (DPC).

Warbler-Sparrow: Tennessee Warbler: 3 Nov (1) Nash (JM). Magnolia Warbler: 2 Nov (1) Nash (JCA). Black-throated Green Warbler: 10 Nov (1) Craggie Hope (NTOS); 12 Nov (1) Nash (FA, BW). Bay-breasted Warbler: 2 Nov (1) Nash (MLM). Pine Warbler: 15 Dec (2) Cheatham L Dam (RJM, TNH). Common Yellowthroat: 15 Dec (1) Cheatham L (MLB, OL); 29 Dec (4) 2 locations, Nash (MLB, DV, RC, RJM, DT). NORTHERN (BALTIMORE) ORIOLE: 29 Dec to end of period (1) feeder, Nash, special foods were placed out for it which the bird guarded against intruders including a mockingbird (JH, VB). DICKCISSEL: 17-23 Nov (1) Bellevue (VB); 5 Dec to end of period (2) Gallatin (DPC); 20-23 Feb (1-2) Nash (VB); 3 Mar to end of period (2) Nash (LM)—possibly same birds as 20-23 Feb observation as sites are 1 mile apart. There are limited winter records for Dickcissels in Middle Tennessee. Evening Grosbeak: 30 Nov - 2 Dec (1) Gallatin (BH); 5 Dec (2) Nash (AN); late Dec to end of period (up to 30) Loretto, Lawrence Co (DS); 9 Feb (1) Smithville (HA); 18 Feb to end of period (8-10) South Harpeth Valley (NEW). Purple Finch: this winter was considered by Nashville birders as the lightest one could remember for the species. A number of feeders attracted none and most had only 20-30 birds. In late Feb and early Mar a few more birds moved in. Other winter observations: (up to 60) Cookeville (Simmers); (up to 75) Columbia (Pressnells); (max of 200) Woods Reservoir (Barrs)-all at feeders. HOUSE FINCH: Biggest surprise of the winter was the invasion of this species. In Nashville a few birds appeared beginning 15 Nov, and by early Dec individuals were scattered all around the city. Dot and Paul Crawford fed up to 30 regularly in Gallatin. Katherine Goodpasture banded 13 at her home and birds with shiny bands were seen as far away as 1.6 miles. 7 Feb (3) Manchester (VA); 9-11 Feb (1) Tullahoma (RL). Pine Siskin: no reports. Vesper Sparrow: 5 Dec (1) Hillsboro (ER); 29 Dec (1) Bell's Bend, Nash (RJM, DT).

Observers: FA—Frances Abernathy; JCA—Jan C Alexander; KA—Kenneth Anderson; VA—Virginia Angstadt; HA—Harry Avery; CSB—Carroll and Stan Barr; MLB—Michael L Bierly; JB—Jessie Bilbrey; VB—Barnez Brakebill; RC—Ralph Cazort; DPC—Dot and Paul Crawford; KLD—Ken and Lil Dubke; KAG—Katherine A Goodpasture; BH—Bessie Hagan; MH—Marjory Harper; TNH—Thomas N Harston; DRH—Dave and Robbie Hassler; JDH— J D Hassler; RH—Robbie Hassler; JH—Judy Hay; LJ—Louise Jackson; EK—Elena Killian; OL—Oliver Lang; RL—Ruth Luckado; RTL—Ruth and Tom Luckado: MLM—Margaret L Mann; LM—Loys Marsden; JM—Jane Maynard; RJM— Rocky J Milburn; AN—Ann Nichols; CPN—Charles P Nicholson; ADP—Audrey and Don Perry; VP—Virginia Price; RR—Richard Rimmer; KR—Kathy Robertson; ER—Erma Rogers; DS—Don Simbeck; RS—Richard Simmers; NTOS—Nashville Chapter Tennessee Ornithological Society; CS—Carol Stewart; DT—Dee Thompson; DV—David Vogt; RBW—R Bruce Wilkey; BW—Betty Wise; NEW—N E Witthauer; RZ—Rex Zimmerman.

MICHAEL LEE BIERLY, 3825 Bedford Avenue, Nashville 37215.

EASTERN RIDGE AND VALLEY REGION—Glen Eller in his comments from the Elizabethton-Johnson City area described their season as "very dull." Nicholson from the Knoxville region mentioned the mildest winter in several years and that Winter Wrens, Carolina Wrens, Hermit Thrushes and Brown Thrashers were present in good numbers. On the other hand, Steve Stedman from the same area stressed there were no Winter Wrens and the House Finch was increasing dramatically. In the Chattanooga section the mild weather apparently encouraged several species to linger. Some of these included Green Heron, Greater Yellowlegs, Long-billed Marsh Wren and winter Palm Warblers.

Overall waterfowl populations seemed to be lower except for the newly filled (late November) Tellico Lake. The lake had spectacular numbers of ducks due to the acres of corn stubble, weed fields, etc. submerged by the shallow waters. Unfortunately, these high populations will not last for long as the vegetation rots and the areas become mudflats. All time high counts for both Pintail and Greenwinged Teal were recorded for the Hiwassee River Area.

The number of observations for birds of prey is very encouraging.

A very close reading of the report will reveal a little of what we know and a great deal of what we don't know. In our opinion, as we evaluate the records, it has been a most rewarding period. Keep those observations coming!

Loon-Merganser: a few scattered numbers during the period; max 11 Nov (28) NL (KLD); 13-14 Nov (45) BL (RK). Horned Grebe: reported from several areas; max 10 Dec (15) ChL (KLD, RBW). Pied-billed Grebe: only comments were small numbers (max 23) ChL (mob). Double-crested Cormorant: 1-3 irregular HRA (KLD); 13-14 Nov (2) BL (RK). Great Blue Heron: regular, max 17 Dec (140) HRA (KLD); 12-15 all period BL (ETOS); lesser numbers (max 38) on DL than previous two years, probably because the lake was full till Dec (TK). Green Heron: 4 Nov (1) HRA (EK, Guy Killiam); 3 Jan (1) JC (MD). WHISTLING SWAN: 13 Nov (1) FLL (fide Sam Venable); 6 Dec - 8 Mar (1) TL (DH, WKJ, CPN); 2-17 Feb (1 ad, 1 imm) MHL (WKJ et al). Canada Goose: 25 Jan (275) Kpt (FJA); Canada Goose: up to 1000 HRA with few noted elsewhere (mob). Snow Goose: 4-8 Nov (7 white, 8 blue) MHL (Georgia Flynn fide JBO); 18 Dec (1 blue) Cove Lake (WKJ); 14, 15 Mar (4 white, 2 blue) EBFH (DH, WKJ). Mallard: 21 Jan (500) HRA (KLD); 19 Jan (300) DL (TK); 8 Mar (1200) TL (DH, CPN). Black Duck: 8 Mar (150) TL (DH, CPN); max 75 HRA (KLD). Gadwall: 11 Nov (335) NL (KLD). Pintail: 8 Mar (200) TL (DH, CPN); peaked at 165 first three weeks of Jan HRA (KLD); 25 Jan (30) Kpt (FJA). Green-winged Teal: numbers peaked at 200 during first three weeks of Jan. This is the largest number ever observed HRA (KLD); 25 Nov (30) DL (TK). Blue-winged Teal: 23 Nov (5) HRA (LD); 4 Mar (3) SB (KLD). Am. Wigeon: regular, max 27 Nov (200) HRA (KLD); 26 Feb (200) JCo (TK). No. Shoveler: 13 Nov (1) BL (RK); 16 Feb (2) Lou (SBS). Redhead: 8 Mar (1000) TL (DH, CPN); this is the largest number recorded in the region since 1960; 1-90 scattered ChL (KLD); 10 Feb (10) DL (TK). Ring-necked Duck: max 18 Feb (250) ChL (KLD); 8 Mar (400) TL (DH, CPN); 26 Feb (140) JCo (TK). Canvasback: 16 Feb (5) Lou (SBS). Greater Scaup: regular ChL, max 375 (KLD); 24 Feb (4) KSP (BHS). Lesser Scaup: 15 Jan (200) ChL (KLD). Common Goldeneye: 27 Jan (40) ChL (LD, EK); 27 Jan (20+) Concord (BHS). Bufflehead: max 11 Nov (70) NL (KLD). Oldsquaw: 26 Jan (2) KSP (SBS, REB). BLACK SCOTER: 9 Nov (1) ChL (RCS). Ruddy Duck: 26 Jan - 24 Feb (1-15) KSP (SBS, REB); 1-4 scattered ChL (KLD); 5, 13 Nov (1) JC (RK). Hooded Merganser: 27 Nov (20) SB (KLD); 1 Dec (20) JCo (TK). Red-breasted Merganser: 27 Jan (8) ChL (LD, EK).

Vulture-Plover: Turkey Vulture: a migratory movement of 205 were noted on 6 Nov drifting south near S. Mouse Creek along the Hiwassee River (KLD). Black

Vulture: 26 Nov (25+) KSP (SBS, REB); all period (40+) Kpt (FJA); Goshawk: 19 Feb (1 ad) SCo (RAP, TP). Sharp-shinned Hawk: 6 observations Eliz - JC region (ETOS); often noted each trip afield CH (KLD, DRJ et al); 3 records SCo (RAP). Cooper's Hawk: 9 sightings Eliz - JC area (ETOS); 3 records CH (KLD et al); 3 Feb (1) SCo (RAP). Red-tailed Hawk: in Knoxville area seemed to be in lower numbers than previous winters (CPN et al). Red-shouldered Hawk: usually noted in proper habitat CH (KLD); 3 Feb (1) HCo (RAP). Broad-winged Hawk: 7 Mar SCo (RAP, TP). Rough-legged Hawk: 18 Feb (1) Morristown (PP). Bald Eagle: many scattered reports; 10-11 Nov (1 imm) Morristown (FJA); a total of 25 were reported from our region on the 1980 Midwinter Eagle Inventory. The highest number counted on a reservoir was 8 on ChL followed by 7 on Watts Bar Lake. Marsh Hawk: 12 Jan - 19 Feb (1) AS (RL, RK); one through season Eastern State Farm, K (PH); 8 Mar (1) HCo (RAP); 28 29 Jan (7) TL (WKJ). Osprey: 3 Nov (2) K (PP); 1-28 Jan (1) ChL (DRJ). PEREGRINE FALCON: 8 Jan (1 imm) SB (KHD); 3 Feb (1 ad) Ooltewah (fide Benton Basham). MERLIN: 15 Dec, 14 Jan (1) CH (KLD, RCS, AJ, DRJ); 30 Dec (1) K (SBS). Bobwhite: very low numbers during the season Eliz - JC (ETOS). Sandhill Crane: Fall: 29 Nov - 8 Dec (231); the 6 reports from Norris, Knoxville, HRA, SB and Reflection Riding were all from the regular migration corridor. Spring: This flight from 23 Feb to 15 Mar was the largest ever recorded for the season. A total of 994 were counted from Red Clay State Historic Park, SB, HRA, RR, Signal Mt., Westel, Rockford and S. Knox Co. (RCS, KLD, PP, SBS, BHS et al). Am. Coot: regular max 11 Nov (10,000) NL (KLD); 17 Jan (151) Alcoa Pond, Blount Co. (TK). Killdeer: 3 Dec (100) HRA (KLD). Am. Golden Plover: 1, 2 Dec (1) SB (LD, EK).

Woodcock-Nighthawk: Am. Woodcock: 2 Jan (2 in courtship flight) AM (DRJ); 4 Jan - 15 Mar (1-4) K (PH). Common Snipe: regular SB, max 14 Jan (103) (KLD). Greater Yellowlegs: 1-7 regular to 27 Nov SB, HRA (KLD), then one on 1, 3 Jan HRA (LD, DRJ et al). The Jan record seems to be the first since 1958 when J. C. Howell reported one on Norris Lake (Audubon Field Notes 12(3):280, June, 1958). Lesser Yellowlegs: 4 Nov (2) HRA (KLD, EK); 9 Nov (1) AS (RK, MD). Pectoral Sandpiper: 2, 4 Nov (1) SB (LD, EK); 23 Nov (1) HRA (LD). Least Sandpiper: 1-7 occasional SB (KLD). Dunlin: regular SB, max 80 (KLD); 25 Nov (80), 19 Jan (150) DL (TK); 26 Jan - 9 Feb (1-3) KSP (SBS, REB). AM. AVOCET: 5, 6 Nov (1) AS (RK). Herring Gull: 1-2 occasional ChL (KLD et al). Ring-billed Gull: 1-220 scattered ChL (KLD); 19 Jan (600) DL (TK). Bonaparte's Gull: 11 Nov (3) ChL (KLD); 3 Feb (1) KCo (PP); 13 Feb (1) BL (RK); 27 Jan (35) KCo (BHS). Barn Owl: two permanent residents, White Pine, JCo (TK). Great Horned Owl: 11-16 Nov (pair singing nightly) Church Hill (FJA); 27 Jan pair perched together on bluff overlooking Riverport Rd. SCo (RAP). Common Nighthawk: late 11 Nov (1) CH (KLD).

Woodpecker-Warbler: Red-headed Woodpecker: 4 reported in K (KTOS); 17 Jan (1 imm) N (CPN); 15 Jan (1) CCo (CPN); this is an increase in reports for the Knoxville area over the last few winters (CPN *et al*). Horned Lark: 26 Jan (30) JB (RK); about 40 permanent residents around home and farm JCo (TK). Tree Swallow: 5 Nov (2) AS (RK); 9 Nov (1) SB (LD). Barn Swallow: 3 Nov (1) SB (LD, RCS, JP). Purple Martin: 23 Feb (1) Morristown (Mrs. Frank Seagle, *fide* JBO); also one on 24 Feb at New Market, one on 25 Feb at Madisonville (*fide* JBO); these were the first arrivals; following these, a cold snap on 25-26 Feb hit the area and delayed further arrivals. Red-breasted Nuthatch: Conspicuous by its absence, no reports! *LONG-BILLED MARSH WREN:* 1 Jan (1) HRA (DRJ). Gray

Catbird: 15 Dec (1) AM (RCM). Hermit Thrush: 7 Nov, 2 Jan (1) BL (ETOS). Water Pipit: 28 Jan - 26 Feb (15-150 regular) SB (KLD); 14 Dec - 26 Jan (2-3 flocks of 40-60 each) JB (ETOS). Cedar Waxwing: more numerous this season than expected in Eliz-JC (ETOS). White-eyed Vireo: 13 Nov (1) JC (MD). Yellow-rumped Warbler: abundant throughout the winter, more so than in last few years (KTOS); 1-8 usually found each trip afield CH (KLD). Pine Warbler: 1-3 regular at CH feeder (JP); 10 Feb (1) Solway (PH). Palm Warbler: last fall sighting for the upper area of the region 5 Nov (1) AS (RK); found wintering in the lower area; 12 Jan - 26 Feb (1-3) HRA (RCM, AJ, KLD, RCS).

Blackbird-Sparrow: Rusty Blackbird: 15 Jan (12) Tri-Cities Airport (RK). BREWER'S BLACKBIRD: 14 Feb (1) JB (RK). Evening Grosbeak: a few scattered reports of 1-40 from all sections of the region (mob). Purple Finch: reported in varying numbers from all areas (mob). House Finch: a few first appeared on the Chattanooga Christmas Count 15 Dec (RCS), then counts soared to at least 150 individuals (RCS, LD, DRJ et al). These are the first reports from Chattanooga. In Knoxville it was the biggest winter ever. The birds were mainly north and west of Knoxville from Nov to the end of the period. SJB banded 130 at home of Otie Cottrell in north Knoxville from 17 Dec to 14 Mar; yet Cottrells estimate that less than 5% of the birds they observed had bands. Probably over 2000 have been frequent in their area. The invaders are also in Oak Ridge, but none in Norris (CPN). In the Johnson City area 3-5 flocks of 15-20 birds each have been sighted (ETOS). At Kingsport RAP reports they are becoming increasingly noticeable with a maximum of 23 being counted. Pine Siskin: 6 Nov (5-6) SCo (Glenn Swofford); 18 Nov (1) K (BHS). Vesper Sparrow: 3 Nov (2); 18 Dec (1), 4 Mar (2) near JC (RK, RL). Tree Sparrow: 12 Feb (3) Morristown (PP); 12 Feb (1) CCo (Dale Fowler). Chipping Sparrow: 29 Dec (2) near S. Holston Lake (RL).

Locations: AM—Amnicola Marsh: AS—Austin Springs; BL—Boone Lake; CCo—Campbell County; CH—Chattanooga; ChL—Chickamauga Lake; DL— Douglas Lake; EBFH—Eagle Bend Fish Hatchery; Eliz-JC—Elizabethton-Johnson City Area; FLL—Fort Loudoun Lake; HCo—Hawkins County; HRA— Hiwassee River Area; JB—Jonesboro; JC—Johnson City; JCo—Jefferson County; K—Knoxville; Kpt—Kingsport; Lou—Louisville; MHL—Melton Hill Lake; NL—Nickajack Lake; SB—Savannah Bay; SCo—Sullivan County; TL— Tellico Lake.

Observers: AJ—Al Jenkins; BHS—Barbara H. Stedman; CPN—Charles P. Nicholson; DH—Dave Hankins; DRJ—Daniel R. Jacobson; EK—Elena Killian; ETOS—Elizabethton Chapter, TOS; FJA—Fred Alsop; JBO—J. B. Owen; JP—Janet Phillips; KHD—Kenneth H. Dubke; KLD—Ken and Lil Dubke; KTOS—Knoxville Chapter, TOS; LD—Lil Dubke; mob—many observers; MD—Martha Dillenbeck; PH—Paul Hartigan; PP—Paul Pardue; RAP—Rick A. Phillips; RBW—R. Bruce Wilkey; RCM—Robert C. Mitchell; RCS—Randy C. Stringer; REB—Robert E. Beck; RK—Rick Knight; RL—Richard Lewis; SBS—Stephen and Barbara Stedman; SJS—Stephen J. Stedman; TP—Tommy Phillips; TK—Jon A. "Tony" Koella; WKJ—Wesley K. James.

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EASTERN MOUNTAIN REGION—Rainfall in November was almost two inches above normal continuing the wettest yearly rainfall totals in our area in 8 to 10 years. November temperatures remained mild through the month, but De-

cember started out cold with little or no precipitation recorded. There was no snowfall reported in Nov. or Dec. January was very mild until the last two days when winter really set in and continued through February and mid-March. Very cold temperatures were recorded along with a total of 22 inches of snow through the end of the period.

Birding during the entire period could be considered "dullsville," with very little waterfowl movement and practically no northern finches until late January. A White-winged Scoter and a Goshawk seen in early March were the only unusual birds of the period.

Loon-Osprey: Common Loon: 25-29 Nov (1) WagIs (GE); 13-22 Jan (1) SHL (RL). Horned Grebe: 3 Jan (2) WatL (RK) only reports. Pintail: 25 Nov (2) WibL (GE, HF). Bufflehead: late arriving 6 Nov (3) WibL (RK). Ruddy Duck: 15 Dec (1) WagIs (GE, HF). Hooded Merganser: 15 Mar (3) WagIs (GE, HF) only Merganser reported all period. WHITE-WINGED SCOTER: 13 Mar (1) WatL (GW, DL). Both resident accipitors were reported more numerously than usual. GOSHAWK: 2 Mar (1) SHL (RL). Red-shouldered Hawk: 2 Feb (1) HS (GW). Marsh Hawk: 15 Dec (1) Walnut Mtn (ES, GS). Osprey: 9 Mar (5) migrating over GSMNP (SBS).

Snipe-Warbler: Common Snipe: abundant from early Jan thru end of period. Bonaparte's Gull: 11 Jan (4) WatL (GW, DL); 29 Jan (1) WagIs (SG, MD). Great Horned Owl: 21 Feb (2) SHL (RL); 23 Feb (1 on nest) WibL (RK). Eastern Phoebe: about normal winter populations. Purple Martin: 1st return 14 Mar (2) E (GE). Red-breasted Nuthatch: NO birds reported from higher elevations all period. Gray Catbird: last fall sighting 4 Nov (1) E (Lois H) late. Hermit Thrush: 15, 23 Dec (1) E (GE, RK); 7 Jan (1) Erwin (GS); 2 Feb (1) HS (GW). Cedar Waxwing: very plentiful again this winter. Yellow-rumped Warbler: higher than normal reports all period. Pine Warbler: 9 Mar (3) GSMNP (SBS). Orange-crowned Warbler: 30 Dec (1) GSMNP (FJA).

Blackbird-Sparrow: Rusty Blackbird: 1 Mar (12) WatR (GW). Evening Grosbeak: 1st reported 29 Nov (4) E (HF) a few small flocks at feeders until mid Feb when they finally arrived in numbers; 30 Dec (45+) Gatlinburg (FJA). Purple Finch: 1st seen 1 Dec (3) E (GE, HF) very numerous thereafter. *HOUSE FINCH:* 6 Jan (2) E (Katherine Thomas); 12 Feb (2) SV (GW). Red Crossbill: 6 Jan (2) WatL (GE, RK, BS). Chipping Sparrow: 15 Dec (8) SV (GE, HF) late. Fox Sparrow; 1st seen 9 Jan (1) E (HF) 1 to 3 in area till end of period.

Locations: E—Elizabethton; GSMNP—Great Smoky Mtn National Park; HS—Hunter Swamp; SHL—South Holston Lake; SV—Siam Valley; WagIs— Wagners Island; WatL—Watauga Lake; WatR—Watauga River; WibL—Wilbur Lake.

Observers: FJA—Fred Alsop; MD—Martha Dillenbeck; GE—Glen Eller; HF—Harry Farthing; SG—Sally Goodin; LoisH—Lois Herndon; RK—Rick Knight; DL—Dick Lura; RL—Richard Lewis; ES—Ed Schell; GS—Glenn Swafford; SBS—Steve and Barbara Stedman; GW–Gary Wallace.

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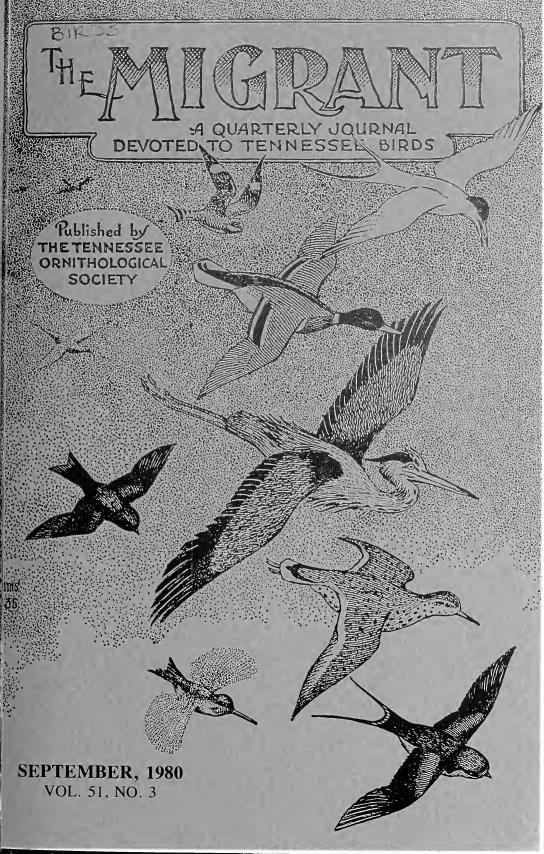
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STATUS OF THE SANDHILL CRANE IN TENNESSEE

JON E. DEVORE

INTRODUCTION

For several years the writer has gathered records of the Sandhill Crane (*Grus canadensis*) in Tennessee. A preliminary listing of records as well as consideration of certain findings emerging from the data has been presented earlier (DeVore, 1972). Since that time the number of records has grown sufficiently to allow a more complete presentation and analysis, which is presented herein. This seems especially desirous considering the high interest nationwide which has been evident in the status of all subspecies of the Sandhill Crane over the last ten to fifteen years (Committee on Rare and Endangered Fish and Wildlife in the United States, 1966; Miller, 1974; Drewien, et. al., 1975).

DATA SOURCES

Published records were obtained primarily from *The Migrant*, the journal of the Tennessee Ornithological Society. Other published records were obtained from the *Journal of The Tennessee Academy of Science, Audubon Field Notes*, and non-journal publications such as newspapers, etc.

Unpublished records, as well as clarification of a small number of records printed incorrectly in the journals, were provided by field observers and researchers working both in and out of the state of Tennessee. These particular contributions have been most helpful and, along with that provided by all persons who have published records of the Sandhill Crane in Tennessee over the years, are here gratefully acknowledged.

DISCUSSION

Table 1 is a listing of all Sandhill Crane records for Tennessee, through spring migration 1978. This represents a total of 141 records, 5,383 cranes actually seen, as well as an unknown number of cranes "heard" or recorded as "small group" or "large flocks." There are crane records for ten of the twelve months, representing all months from September through April as well as June and August. There are no records for the months of May and July. Approximately 99% of the records are of cranes observed during early morning to evening hours; approximately 90% of the records are of cranes observed on the ground standing, walking, feeding, or apparently going to or leaving roosting areas. There is one record of a banded crane being captured, a spring migrant (4 March 1968, Cumberland Co.) of the subspecies *G. c. tabida*,

THE MIGRANT

TABLE 1

TENNESSEE SANDHILL CRANE RECORDS

Sept. 29, 1975	Blount Co (5)
Oct. 17, 1970 Oct. 17, 1975 Oct. 18, 1962	Meigs Co., Hiwassee Island (40) Morgan Co., Wartburg (24) Putnam Co., Cookeville (3) Hamilton Co., Chattanooga (1) Anderson Co., Norris Lake (4)
Oct. 21, 1968 Oct. 21, 1968	Hamilton Co., Byrdstown
Oct. 23, 1968	Blount Co., Maryville (41) Sevier Co., G.S.M.N.P. (27) Meigs Co., Hiwassee River Area (6)
Oct. 27, 1969 Oct. 29, 1976	Pickett Co., Byrdstown
Nov. 3, 1970	Knox Co., Farragut High School
Nov. 7, 1973	Rutherford Co., Murfreesboro (3) Meigs Co., Hiwassee RIVER Area (25) Plount Co., Marrillo (25)
Nov. 8, 1971	Blount Co., Maryville(23)Cumberland Co., Crossville(12)Hamilton Co., Hixson(276)
Nov. 9, 1971 Nov. 9, 1971	Meigs Co., Hiwassee Island(2) Hamilton Co., Savannah Bay(17)
Nov. 10, 1956 Nov. 10, 1968 Nov. 13, 1959 to	Union Co., Hurricane(4)Hamilton Co., Sanannah Bay(3)
Feb. 28, 1960 Nov. 13, 1967	Knox Co., Andrew Jackson Lake Area
Nov. 13, 1977	Anderson Co., Norris (35) Knox Co. (3)
Nov. 15, 1964	Pickett Co., Byrdstown (45) Knox Co., U.T. Biology Bldg. (13) Pickett Co., Byrdstown (66)
Nov. 15, 1968 Nov. 15, 1974	Knox Co., U.T. Plant Science Farm (1) Fentress Co. (40)
Nov. 16, 1974	Pickett Co., Byrdstown (42) Union Co., Norris Lake (saw 23, heard 2) Meigs Co., Hiwassee River Area (225)
Nov. 19, 1968	Meigs Co., Hiwassee Island (20) Franklin Co. (25)
Nov. 23, 1972	
Nov. 23-24, 1977	Cannon Co., Woodbury
Nov. 24, 1977 Nov. 24, 1977	Davidson Co., Nashville (90) Clay Co. (150)
Nov. 26, 1974	Union Co., Norris Lake (3) Sequatchie Co., Daus (75) Hamilton Co., Savannah Bay (1)
Nov. 29, 1967 Nov. 29, 1972	Putnam Co., Cookeville
Dec. 2, 1969	Putnam Co., Monterey(24)Meigs Co., Hiwassee Island(38)
	Pickett Co., Byrdstown (heard) Sequatchie Co., Daus (4)

	Putnam Co., Cookeville
Dec. 6, 1968	Union Co., Norris Lake
	Wilson-Sumner Co. line
	Montgomery Co., Red River
	Blount Co., Hwy. 73 at G.S.M.N.P. (13)
	Humphreys Co., Duck River bottoms
	Franklin Co., Woods Reservoir
Dec. 9, 1975	Rutherford Co., Murfreesboro
	Meigs Co., Hiwassee River Area
	Rhea Co., Dayton
Dec. 18-21, 1971	Meigs Co., Hiwassee Island
Dec. 20, 1975 to	
Jan. 3, 1976	Wilson Co., Lebanon (18)
	Davidson Co., Percy Priest Lake
	Meigs Co., Hiwassee Island
	Bledsoe Co., Fall Creek Falls S.P (1)
	Meigs Co., Hiwassee Island(1)
	Meigs Co., Hiwassee Island (2)
Dec. 30, 1972	Davidson Co., Harpeth River(1)
Dec. 31, 19/1	Rhea Co., Yellow Creek
Jan. 1, 1978	Meigs Co., Hiwassee River Area
Jan. 9 to	
	Sullivan Co., Kingsport (1)
E-1 1 1052	Shaller Can Manaaki
Feb. 1, 1955	Shelby Co., Memphis(2)Meigs Co., Hiwassee River Area(40+)
Feb 23 25 1975	Pickett Co., Byrdstown
Feb 25 1950	Anderson Co., Oak Ridge Nat. Lab. (4)
	Union Co., Norris Lake
1001 20, 1977 111111111111111	
	Cumberland Co., Crossville
	Rhea Co., Yellow Creek
March 2, 1970	Meigs Co., Hiwassee Island
March 2, 1970 March 2, 1971	Meigs Co., Hiwassee Island
March 2, 1970 March 2, 1971 March 2, 1974	Meigs Co., Hiwassee Island (50) Meigs Co., Hiwassee Island (7) Meigs Co., Hiwassee River Area (25)
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March 15, 1960 Hamilton Co., Savannah Bay (47) March 15, 1965 Overton Co., Livingston (40-53) March 15, 1971 Pickett Co., Byrdstown (35) March 15, 1976 Hamilton Co., Collegedale (18) March 16-22, 1969 Meigs Co., Hiwassee Island (4 flocks, appx. 100 birds each) March 17, 1976 Hamilton Co., Savannah Bay (4) March 20, 1968 Knox Co., Knoxville (11) March 21, 1971 Pickett Co., Byrdstown (30) March 21, 1976 Monroe Co., Sweetwater (1) March 25, 1954 Knox Co., Knoxville (4) March 28, 1968 Knox Co., Tecoa (1)
April 1, 1958 Knox Co., U.T. Plant Science Farm (mail group) April 11, 1976 Hamilton Co., Signal Mtn. (6) April 16, 1958 Anderson Co., Clinton (4)
June 1, 1935
August, 1936Bedford Co., Shelbyville(4)August 1, 1965Hamilton Co., Savannah Bay(1)

the Greater Sandhill Crane. All of this is in sharp contrast to the situation of ten to fifteen or more years past, when there were relatively few records of the Sandhill Crane for Tennessee, the cranes were suspected of migrating through the state mainly at night, at high altitudes, and only rarely being recorded on the ground (Walkinshaw, 1960a; Lewis, 1965).

Grouping the records by months for total number of sightings, total number of cranes seen, and mean number of cranes per sighting (Table 2) presents a clearer picture of the movements of cranes through the state. The fall migratory movement is of approximately eight- to ten-weeks duration, beginning in mid-October, peaking in November, and tapering down through December. The spring migra-

TABLE 2

TENNESSEE SANDHILL CRANE RECORDS— SUMMARY OF DATA BY MONTHS

MONTH	TOTAL NUMBER OF SIGHTINGS*	TOTAL NUMBER OF CRANES*	MEAN NUMBER OF CRANES PER SIGHTING**
September	1	5	5
October	13	334	26
November	38	2175	57
December	23	499	22
January	2	2	1
February	5	94	19
March	49	2258	46
April	2	10	5
June	1	1	1
August	2	5	3

*Where cranes were actually seen and a count obtained, omitting such records as ''unknown,'' ''heard,'' ''large flocks.''

**Rounded to the nearest whole number.

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tory movement is of four- to five-weeks duration, beginning in very late February and progressing steadily through to the end of March, with the greatest number of spring records for March alone. This data coincides well with fall arrival and spring departure dates noted for cranes on the northern Florida wintering areas (Williams, 1970; Williams and Phillips, 1972) and for cranes wintering at Okefenokee Swamp (Cypert, 1957). Interestingly, though involving different wintering crane populations, the Tennessee peak migratory periods coincide well with those observed for cranes moving through Oklahoma, a state of similar latitude to Tennessee (Sutton, 1967; Lewis, 1975).

Comparing the fall movement months of October, November, and December with the spring movement months of February, March, and including the three April records, it is observed there are eighteen more sightings in the three fall months and 646 more cranes seen. Additionally, the mean number of cranes seen per sighting in the peak fall movement month of November (57) is approximately 25% greater than the mean number of cranes seen per sighting in the peak spring movement month of March (46).

Both the number of sightings and the mean number of cranes seen per sighting decline considerably during the month of January through to almost the end of February. The only two records of "wintering" birds are of one crane that stayed in the Andrew Jackson Lake vicinity of Knox County from about 13 November 1959 to 28 February 1960 and one crane that stayed from 9 January to 15 March 1976 in the vicinity of Kingsport, Sullivan County.

A group of cranes numbering no more than fifty stayed in the vicinity of the Hiwassee Island Waterfowl Refuge, located in Meigs County, from 18-31 December 1971. Another group of cranes numbering eighteen lingered north of Lebanon, Tennessee near Old Hickory Lake from 9 December 1975 to 3 January 1976. These records appear to represent late migrant rather than "wintering" cranes.

It has always been puzzling to me that we have not had more winter crane records, for there are several factors which would appear conducive to holding cranes in the state during the winter months. The section of the state over which the main crane flight occurs (see discussion below) has numerous lakes, rivers, and streams with moderate to extensive shallow water and mudflat areas exposed during the winter months. Much of the land area is devoted to agricultural use, the human population density is relatively small, and economic and recreational use is at a minimum from late fall to early spring. The climate, generally, is moderate.

There are crane records for 32 of the 95 counties in Tennessee (Figure 1). The line of flight across the state is slightly diagonal, being centered approximately on Pickett and Clay counties on the Kentucky border and running south-southeast toward Bradley and Monroe counties on the southern border of the state. Davidson County and Knox and Sevier counties delineate, respectively, the approximate western and eastern boundaries. The exact number of records for the various counties is as follows: Anderson—4, Bedford—1, Bledsoe—1, Blount—4, Bradley—1, Cannon—1, Clay—1, Cumberland—6, Davidson—3, Fentress—2, Franklin—2, Hamilton—18, Humphreys—1, Knox—12, Marion—2, Meigs—27, Monroe—1, Montgomery—2, Morgan—1, Overton—1, Pickett—18, Putnam—7, Rhea—4, Rutherford—2, Sequatchie—5, Sevier—2, Shelby—1, Shelby-Tipton county line—1, Sullivan—1, Union—6, Wilson-Sumner county line—1. The flight path appears to be relatively stable. For example, west of

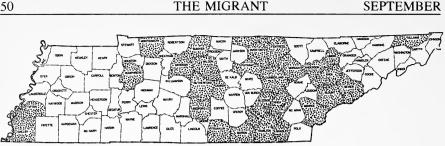


Figure 1. Tennessee Sandhill Crane records — location by counties

Davidson County there are only five separate records (one of which, the 1820 record from the Shelby-Tipton county line, is only of historical interest, Deaderick, 1940) involving 235 cranes, which is approximately 4% of the total number of cranes seen in Tennessee. East of Knox and Sevier counties there is only one record involving one crane. By far the greatest number of records is for the center of the flight path, with Pickett County (18 records), Meigs County (27 records), and Hamilton County (18 records) together accounting for approximately 45% of all Tennessee records. If Knox County (12 records) is included. these four counties together account for 53% of all records. While excellent field coverage has undoubtedly played a significant role in the number of records in the aforementioned counties, equally as sufficient coverage, in some cases going back as far as forty to fifty years, has failed to produce a like number of records in counties on the edge of or beyond the flight path.

Several interesting findings emerge from the data when the records are arranged by years (Figure 2). Approximately 97% of the crane records have occurred since 1950. A noticeable increase in records occur beginning in 1968. For the period 1820 through 1967, there are 27 crane records spread over nineteen separate years, yielding a mean of 1.42 records per year. From 1968 through spring migration 1978 there are 114 crane records spread over the eleven years, yielding a mean of 10.36 records per year. No gradual buildup in the number of records through the 1950s and 1960s is observed, just the sudden increase beginning in 1968. At least three factors are suspected to have jointly contributed to this increase. First is an increase in the number of cranes migrating through the state. There is evidence (Williams and Phillips, 1972) to indicate that beginning in the late 1960s the number of cranes on the northern Florida wintering areas began to increase. Secondly is an increase in the total pool of observers. A check of Tennessee Ornithological Society membership levels indicates that in the late 1960s and early 1970s Society membership increased from the mid-500s to the low-700s. Approximately 50 to 55% of the crane records are by persons who have reported two or less sightings. Third, coverage of important areas in some of the counties located near the center of the flight path (i.e., Pickett, Meigs, Hamilton) has continued to increase over the last ten to fifteen years.

The one June and two August crane records are of interest and worthy of consideration due to their occurrence in Tennessee at times well outside the usual migratory periods. All three records, in my opinion, represent migrants of G. c. tabida, the Greater Sandhill Crane. I base this on the following. I have examined the specimen reported to be that collected from the flock of four cranes seen in August, 1936 (Edney, 1940) and feel that it is an example of *tabida* based on comparison with measurements given in Walkinshaw, 1949). Both Butts (1936)

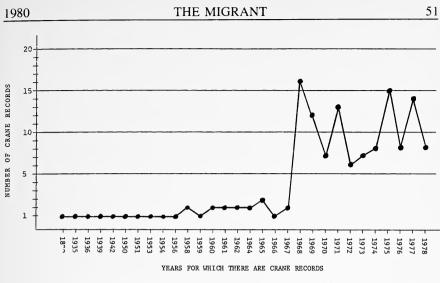


Figure 2. Tennessee Sandhill Crane records — grouped by years

and Ganier (1936) felt the crane seen and subsequently captured on 1 June 1935 was of the Florida subspecies, G. c. pratensis. Though a skin was prepared, no morphologic data was offered in substantiation. I attempted to locate the specimen several years ago, but was told by Dr. Butts that it had been destroyed. It seems probable that this crane was a migrant that had been wounded or had become ill. This is borne out in part by Butts' comments that the crane had been caught by hand and "appeared to be exhausted or ill." From my own contact with the colony of Sandhill Cranes resident in southern Mississippi (formerly thought to be of the Florida subspecies but now given separate subspecific designation, G. c. pulla, Aldrich, 1972) as well as review of both historical and recent published records of other southern breeding cranes (Baynard, 1913; Bent, 1926; Howell, 1932; McIlhenny, 1938; Oberholser, 1938; Newman, 1958; Lowery, 1960; Walkin-shaw, 1960a and 1960b; Imhof, 1962; Sprunt and Chamberlain, 1970; Valentine and Noble, 1970; Aldrich, 1972) it seems improbable that either the sighting of 1 June 1935 or 1 August 1965 (DeVore, 1966) were of cranes of the pulla or *pratensis* subspecies. It is generally agreed that these subspecies, even during the period forty to forty-five years past, were restricted in range to small isolated colonies along the coast from Louisiana to Florida, interior areas of Florida, and the Okefenokee Swamp in southeastern Georgia. Movements outside these restricted ranges was and remains unusual. A small number of early- to late-summer records of cranes presumed to be of the *tabida* subspecies, however, are known outside the northern breeding range (Walkinshaw, 1960a).

In summary, the data justify classification of the Sandhill Crane as a fairly common fall and spring migrant across a section of the state extending from middle to east Tennessee, as well as classification as a very rare winter resident and summer migratory straggler.

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3499 GRACELAND DRIVE, MEMPHIS, TN 38116. Accepted 16 April 1979.

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CORRECTIONS TO THE 1974 GRUNDY CO. FORAY REPORT

While searching through the original field notes submitted to K. H. and I. H. Dubke for preparation of "The 1974 Foray: Grundy County" (*Migrant* 48:81-85, 1977), I discovered some discrepancies, which, in view of the significance of the ornithological records, merit correction and clarification. Page 82, par. 8, line 1, should read "Trip D — Jacobson and Shafer." Trip D included observations made on 25 May from 2 separate areas, one of which, Area #2, was about 1.6 km E of Oak Grove in Marion County, not Grundy County. No distinction between the counties, and the birds seen in each, was made in the bird list for Trip D. The following observations should therefore be listed as from Marion County: Cooper's Hawk, 2 birds, also stick nest of unknown identity (Table 1, col. D, and p. 84, par. 3); Am. Kestrel, 1 bird (Table 1, col. D); Great Horned Owl, 2 birds (Table 1, col. D); Brewster's Warbler, 1 bird (Table 1, col. D, and p. 85, par. 2). The Mourning Dove nest at Oak Grove (Table 2) was also in Marion County.

CHARLES P. NICHOLSON, P. O. Box 402, Norris, TN 37828.

1980 SPRING FIELD DAYS

RICHARD D. LURA

This years Spring Field Days made up in quality what they lacked in quantity. Only eleven counts reported. These counts recorded a total of 211 species including an Eared Grebe at Reelfoot Lake during the Spring TOS Meeting; a pair of nesting Monk Parakeets at Nashville; a Scissor-tailed Flycatcher at Murfreesboro; and an immature male Lark Bunting at Elizabethton. Presumably most of these observation will be elaborated on in Round Table Notes. As is the custom the counts are tabulated from west to east across the state.

INFORMATION ON THE COUNTS

MEMPHIS—27 April; Meeman-Shelby Forest S.P. in A.M., Penal Farm in P.M.; partly cloudy; temp. 52 to 68°F; wind, SW, 18 mph. Ben Coffey (compiler—672 N. Belvedere, Memphis), Lula Coffey, Noreen Smith, Alice Smith, Martha Waldron, Dick Whittington (group leaders).

REELFOOT LAKE—2, 3, 4 May (TOS Spring Meeting); fair; temp. 55 to 70°F. Ben Coffey (compiler—672 N. Belvedere, Memphis).

Eared Grebe seen by many observers.

HATCHIE RIVER—21 June; cloudy to fair. Ben Coffey (compiler—672 N. Belvedere, Memphis), Lula Coffey, Chuck Cook, Joe Guinn, Tom Higgs, Martha Waldron.

MONTGOMERY COUNTY—18, 19 May; sunny; temp. 48 to 81°F; wind N, 0-12 mph. Joe Allen, Michael Dinsmore (compiler—Jarman Hollow, Palmyra 37142), Annie Heilman, Nita Heilman, Mev Jackson, Arlene Jester, Ed Johnson, Rosemary Mayor, John Quick, Mary Ann Stephens, Ellen Walker, John Wheatley.

COLUMBIA—30 April, 1 May; clear; temp. 40 to 70°F. Anne Lochridge, Bedford Lochridge, Daniel Gray, Gaither Gray, Allen Pressnell, Diane Pressnell, Barbara Finney, Mitzi Lemons, George Mayfield, Jr. (compiler—Maury County Hospital, Columbia 38401).

NASHVILLE—10, 11 May; mostly cloudy; temp. 40 to 80°F; wind S to SW, 0-21 mph. Jan Alexander, Clyde (compiler—1214 McGavock Pike, Nashville 37216) and Vivian Anderson, Mildred Ansley, Sue Bell, Ruth Castles, Jean Cobb, Anne Collins, Jim Conrad, Dot and Paul Crawford, Annella Creech, Sam Dement, Milbrey Dugger, Adele and Nelson Elam, Pam Elam, Evelyn and John Ellis, Clara Fentress, John Filley, George Freeman, Katherine Goodpasture, Ben Groce, Bessie Hagan, Tom Harston, Johnny and Martha Herbert, Ann Houk, Louise Jackson, Hazel and Lee Kramer, Carol Lewis, Adine Lyon, Portia Macmillan, Jane Maynard, Joe McLaughlin, John McLaughlin, Rocky Milburn, Pauline Miller, Anne Nichols, Alberta Oliver, David Oliver, Audrey and Don Perry, Dick Porter, Virginia Price, Margaret Puryear, Steve Rannel, Pat Stallings, Helen Sterling, Carol Stewart, Ellen Stringer, Ann Tarbell, Kenneth and Sara Walkup, Miriam Weinstein.

Good details on all unusual sightings. Monk Parakeets were nesting. Dowitchers were separated by call by Crawfords.

1980 SPRING COUNT

	Mana	D1	11-4-	Maurt	Gal	Nh	Marine	Taba	V	C.m	17] i -
Common Loon Eared Grebe Horned Grebe Pied-billed Grebe Dbl-cr. Cormorant	Memp 	Reel 4 1* 2 10	Hate 	Mont 	Colu 14 	Nash _4 	Murf 5 	Leba 1 2	Knox 4 	Gree 5 	Eliz 4 21
Great Blue Heron Green Heron Little Blue Heron Cattle Egret Great Egret	3 2 1 39	50 12 7 15	 	1 	4 11 	3 34 1	17 1 	12 	4 12 	$\frac{1}{9}$ $\frac{-}{-3}$ 3	1 30
Snowy Egret Blkcr. Night Heron Yelcr. Night Heron American Bittern Canada Goose	1 3 	 20 2		 1	 97	26 127	 6 	 82	1 		 3 2 5
White-fr. Goose Mallard Gadwall Blue-winged Teal American Wigeon	3 32	12 50 1		2	14 57 1	27 19	7	14 	1 	16 3 41	1* 34 157
Northern Shoveler Wood Duck Radhead Ring-necked Duck Lesser Scaup	21 	40 56 		9	$\frac{1}{12}$	4 20 1 2	13	2	19 	23 	7 76 1
Bufflehead Ruddy Duck Hooded Merganser Red-br. Merganser Turkey Vulture	5 	20 1 8		 	 10	 1 62	 24	 24	 13	 9	10 26 32
Black Vulture Mississippi Kite Sharp-sh. Hawk Cooper's Hawk Red-talled Hawk	2 2 1 	2 4 1 4		$\frac{1}{\frac{1}{2}}$	$\frac{2}{}$	$\frac{29}{\frac{2}{30}}$	$\frac{31}{1}$ $\frac{1}{19}$	16 12	 1 8	3 3	3 1 1 3
Red-shld. Hawk Broad-winged Hawk Marsh Hawk Osprey Peregrine Falcon	3 4 	6 2 3	2	1 6 	2 1 	6 8 1	1	1 	3 1 5	1	1 7
Merlin American Kestrel Ruffed Grouse Bobwhite Turkey	1 	2 7 2		 11	$\frac{-}{6}$ $\frac{-}{27}$ 4	1* 20 117 50	52 65	21 31	2 38	1 3	 5 3 29
Virginia Rail Sora Black Rail American Coot Semipalmated Plover	 5 5	 300 45			3 12 67	 	 		1 1* 9 1	 16	1 12
Killdeer American-gld. Plover American Woodcock Common Snipe Spotted Sandpiper	9 25 2 1	24 2300 9		5 1 1	21 2 1 6	53 6 1 20	$\frac{33}{-3}$	$\frac{24}{-3}$ 1 4	58 2 8 9	6 1 4	51 1 100 29
Solitary Sandpipor Willet Greater Yellowlegs Lesser Yellowlegs Pectoral Sandpiper	$\frac{2}{2}$ $\frac{2}{26}$ 15	21 13 8 73 190			9 6 2	$\frac{7}{7}$ 2 52	12 	30 1	$ \begin{array}{c} 13 \\ 1* \\ 2 \\ \\ 2 \end{array} $		82 3 53 4
White-rumped Sandpiper Baird's Sandpiper Least Sandpiper Short-bil. Dowitcher Long-bil. Dowitcher	6	39			1	 936 10* 16*	20* 2 		2		 11
Semipalmated Sandpiper Western Sandpiper Ring-billed Gull Bonaparte's Gull Forster's Tern	153 —	$\frac{\frac{2}{30}}{\frac{3}{3}}$				267 2 2 1 5			49 9		 149 29 6

SEPTEMBER

	Memp	Reel	Hatc	Mont	Colu	Nash	Murf	Leba	Knox	Gree	Eliz
Common Tern Rock Dove Mourning Dove Monk Parakeet Yellow-billed Cuckoo	1 9 	1 19 	 11	5 16	$\frac{32}{50}$	2 8 216 2* 105	6 215 	32 46 	183 271 	3 56	3 28 149 1
Black-billed Cuckoo Barn Owl Screech Owl Great Horned Owl Barred Owl	 3	 1 1 7			1 1 2 7	7 2 10 11	1 1 4	 2 8 1 3	$\frac{2}{11}$		 1
Chuck-will's widow Whip-poor-will Common Nighthawk Chimmey Swift Ruby-thro. Hummingbird	 12 10	 5 18 30	 15 3	10	2 25 1 40 6	4 29 18 445 27	8 2 16 371 2	10 2 11 175 7	9 407 4	1 26	3 243 4
Belted Kingfisher Common Flicker Pileated Woodpecker Red-Del. Woodpecker Red-hd. Woodpecker	10 6 31 34	2 5 11 30 51	$\frac{2}{6}$ 10 6	1 13 6 13 2	2 4 19 25 10	16 28 33 90 6	13 39 4 41 9	2 7 2 26 6	10 45 13 31 3	4 11 11 1 2	19 40 17 14 4
Yelbel. Sapsucker Hairy Woodpecker Downy Woodpecker Scissor-tailed Flycatcher Eastern Kingbird	$\frac{-}{4}$ $\frac{13}{-}$ 36	5 22 15	1 13 	4 1 9 	$\frac{-6}{43}$	$\frac{10}{43}$	2 8 15 1* 77	2 3 8 40	$\frac{2}{20}$ $\frac{20}{25}$	1 14 	$\frac{\frac{1}{4}}{\frac{42}{22}}$
Great Cr. Flycatcher Eastern Phoebe Acadian Flycatcher Least Flycatcher Eastern Wood Pewee	21 2 5	24 2 15 9 15	$\frac{4}{\frac{39}{6}}$	$\frac{3}{1}$	$\frac{10}{8}$ $\frac{2}{4}$	81 26 30 74	14 7 2 15	31 15 12	$ \begin{array}{r} 16\\ 18\\ -4\\ -3 \end{array} $	 1	12 28 5
Olive-sd. Flycatcher Horned Lark Tree Swallow Bank Swallow Rough-winged Swallow	$\frac{\frac{2}{31}}{\frac{7}{7}}$	64 7 25			 55 4 56	1 8 4 25	 1 2 17	 9 22	 40 21 76	$\frac{12}{}$	4 8
Barn Swallow Cliff Swallow Purple Martin Blue Jay Common Crow	42 42 17 1	60 25 22 30	42 1 8	8 23 39 10	89 34 37 39	284 500 63 238 141	191 77 141 79	150 50 137 58	462 16 238 412 269	19 4 46 76	246 7 135 130 174
Fish Crow Carolina Chickadee Tufted Titmouse White-br. Nuthatch Red-br. Nuthatch	7 33 60 4	6 33 40 10	27 17 6	11 24 5	52 39 9	171 149 21 1	75 38	21 30 	153 70 6	23 32 1	103 92 7
Brown Creeper House Wren Winter Wren Bewick's Wren Carolina Wren	 35	2 15	1 22	 2	$\frac{1}{2}$	19 2 94	$\frac{1}{2}$ $\frac{2}{7}$	 9 7	13 1 94	1 15	12 50
Long—bl. Marsh Wren Short-bl. Marsh Wren Mockingbird Gray Catbird Brown Thrasher	 11 7 3	 12 10 8	 1 1	 18 1 15	 34 33 28	1 144 69 111	128 39 96	$ \begin{array}{r}1\\-\\48\\22\\52\end{array} $	161 17 73	 30 23	3 76 13 46
American Robin Wood Thrush Hermit Thrush Swainson's Thrush Gray—cheeked Thrush	$ \begin{array}{r} 31 \\ 34 \\ \\ 70 \\ 3 \end{array} $	$ \begin{array}{r} 14 \\ 17 \\ \\ 23 \\ 3 \end{array} $	32	29 8 1	49 25 5 10	445 74 181 10	248 12 6 	61 14 2 3	422 60 1 12 1	85 3 	340 80 2
Veery Eastern Bluebird Blue-gray Gnatcatcher Ruby-cr. Kinglet Wattr Pipit	3 3 68 6	1 70 1 2	 22 	$2 \\ 3 \\ 18 \\ 2 \\$	3 32 51 9	15 69 70 1 2	7 33 10 	3 17 12 	47 118 84	7 13 2	1 42 71 36 75
Codar Waxwing Loggerhead Shrike Starline White-cyed Vireo Yellow-thro. Vireo	5 1 31 45 15	11 8 80 48 13	 30 6	7 4 20 15 4	6 4 205 59 6	87 21 565 91 10	41 25 1.6M 13 1	14 287 14 2	55 918 91 22	$\frac{3}{51}$	573 455 41 12

Solitary Vireo Red-eyed Vireo	Memp 43	Reel 1 28	Hatc 15	Mont 1	Colu 1 26	Nash 1 86	Murf 1 61	Leba 2 11	Knox 7 125	Gree	Eliz 27 62
Philadelphia Vireo Warbling Vireo Bland-Wh. Warbler	5 4	1 20 6		2 1	3 12	2 10 18	1 18	1 1 1	1 1 37		 7 78
Frethonotary Warbler Swairson's Warbler Worm-reating Warbler Golden-Wg, Warbler Blue-wg, Warbler	47 10 2	60 6 3 6 3	43 7 	$\frac{4}{1}$	$ \begin{array}{c} 20\\\\ 12\\ 1\\ 22 \end{array} $	$\frac{30}{}$ 12 22	6 2 	11 1 5 1	$\frac{4}{16}$ $\frac{2}{13}$ *		 23 2 5
Tennessee Warbler Orange-cr. Warbler Nashville Warbler No. Parula Warbler Yellow Warbler	56 1 6 45 1	50 20 26 10	23	1 3 1	39 1 14 9 48	$112 \\ 2 \\ 10 \\ 11 \\ 32$	$\frac{6}{1}$ 10	$\frac{\frac{2}{3}}{\frac{1}{10}}$	16 1 9 5 23	 5	$ \begin{array}{c} 1 \\ \\ 23 \\ 59 \end{array} $
Magnolia Warbler Cape May Warbler Blthro. Blue Warbler Yellow-mp. Warbler Blthre. Green Warbler	$\frac{1}{\frac{38}{6}}$	4 5 55 12		 17 1	 144 14	16 5 1 34 9	5 1 15	$ \begin{array}{r}3\\3\\-\\32\\3\end{array} $	4 2 440 40	1 11 	4 20 261 23
Cerulean Warbler Blackburnian Warbler Yellow-thro. Warbler Chestnut-sd. Warbler Bay-breasted Warbler	27 6 	15 2 10 1 1		6	17 5 8 	10 2 10 7 14	1 1 1 1	 3 6 1	$ \begin{array}{c} 16 \\ 11 \\ 2 \\ 4 \\ 4 \\ 4 \end{array} $	 	2 4 7 6
Blackpoll Warbler Pine Warbler Prairie Warbler Palm Warbler Ovenbird	 2 3	20 16 2	 	1 15 	3 1 29 21 15	65 3 50 14 13		3 1 29 5 3	5 11 43 25 32	 	1 4 4 7 65
Northern Waterthrush Louisiana Waterthrush Kentucky Warbler Common: Yellowthroat Yellow breasted Chat	2 10 45 10 4	6 2 13 47 16	3 7 4 2		1 11 21 66 28	8 14 32 148 105	$\frac{1}{\frac{2}{48}}$	1 2 33 15	$1 \\ 2 \\ 6 \\ 111 \\ 18$	 1 1	$3 \\ 11 \\ 9 \\ 24 \\ 18$
Hooded Warbler Wilson's Warbler Canada Warbler American Redstart House Sparrow	6 5 3	3 1 6 34	 53	1 15	7 7 55	6 3 2 16 92	2 2 642	1 66	66 9 93	3 1 13	74 2 7 109
Bobolink Eastern Meadowlark Redwg. Bleckbird Orchard Oriole Northern Oriole	22 76 26 9	86 17 35 30 52	 	20 26	48 87 250 13 4	285 383 64 22	213 272 58 3	101 134 42 9	4 300 303 10 5	36 27	180 517 12 4
Common Grackle Brown-hd. Cowbird Scarlet Tanager Summer Tanager Cardinal	91 27 9 36 67	555 151 7 16 55	$\frac{10}{6}$ $\frac{11}{41}$	40 33 3 3 56	200 32 18 10 75	796 239 41 75 332	1.1M 86 3 9 162	259 78 11 15 121	810 174 38 12 324	146 1 3 58	858 88 41 2 143
Rose-br. Grosbeak Blue Grosbeak Indigo Bunting Dickcissel Evening Grosbeak	9 8 55 	23 7 103 45 	 17 	 1 	15 3 28 4	63 22 379 9	5 3 116 2 	$\frac{5}{61}$	$\frac{42}{\frac{32}{5}}$		10 2 9
Purple Finch American Goldfinch Rufous-sd. Towhee Savannah Sparrow Grasshopper Sparrow	25 13 8	37 5 3	 	11 10 16	59 33 3 3	101 168 3 3	26 73	$\frac{1}{26}$ $\frac{47}{-3}$	5 351 279 52 5	11 33 26	31 610 136 41 5
Lark Sparrow Dark-eyed Junco Chipping Sparrow Field Sparrow Lark Bunting		12 12		2 15	26 28	50 133	2 39 73	2 21 78	 77 143	8 2]	30 114 66 1*
White-cr. Sparrow White-thro. Sparrow Fox Sparrow Lincoln's Sparrow Swamp Sparrow	126 1 1	$\frac{6}{24}$ 		33	17 40 	6 34 1	6 23 	$ \frac{3}{40} {2} $	20 420 14	22 38 	2 224 16
Song Sparrow	1	3				5		2	297	20	234
Total Species Grand Total - 211 M = 1000 *See information	124	155	42	85	139	167	122	126	143	77	149

M = 1000 *See information on counts.

MURFREESBORO—10, 11 May; clear; temp. 52 to 78°F. Glenn Birdwell (compiler—Rt. 3, Compton Road, Murfreesboro) Maria Birdwell, Lou Erwin,

Edith Haynes, Ann Hettish, Bob Hettish, Margaret Hibbett, Richard Hunter, Wilma Hunter, Wrenn Jones, Jenny Justice, Pat Martin, Larry McFarlin, Mary McFarlin, Ruth McMillan, Gene Odom, Ruth Odom, Deane Quesenberry, John Sellars, Alberta Spence.

Scissor-tailed Flycatcher present for third year.

LEBANON—3, 4 May. Earline Berry, Jeff Reed, Lou Overman, John Sellars, Ray Pope, Carol Pope, Anne Hettish, Grace Speck, Bessie Walker, Ruth McMillan (compiler—Rt. 2, Box 141, Lascassas 37085), Mac McMillan, W. Reid McKee, Robert Hosier, Fred Dettefson.

KNOXVILLE—27 April; cloudy and rain; temp. 55 to 64°F; wind, 10-15 mph. Jim Campbell, Betty Reid Campbell, Marcia Davis, Paul Hartigan, Mary Jo Hoover, J. C. Howell, Helle Juul, Tony Koella, Beth Lacy, Morton Massey, Dick Minuet, Gene Minuet, Terry McGown, Allison McNutt, Bill McNutt, Holly Overton, J. B. Owen (compiler—2930 North Hills Blvd., Knoxville 37917), Paul Pardue, Ethel Ritchie, Lawrence Ritchie, Polly Ruder, Boyd Sharp, James T. Tanner, Dave Turner, Linda Turner, Ralph Zaenglein.

Good details on unusual sightings.

GREENEVILLE—20 April; clear; temp. 45 to 74°F; wind, 0-5 mph. Connie Bryant, David Bryant, Margaret Gaut, King Gaut, Richard Nevius (compiler—Rt. 8, Greeneville), Willie Ruth Nevius, Velma Presley, Doug Ratledge, Ken Ripley, Helen Spees, Royal Spees.

ELIZABETHTON—26 April; overcast. Glenn Eller (compiler—Rt. 3, Grandview Terrace, Elizabethton 37643).

Good details on unusual species. Lark Bunting was photographed.

102 Terrace Court GB, Johnson City, TN 37601.

THE SEASON

DR. FRED J. ALSOP, III, Editor



SPRING MIGRATION: 16 MARCH - 15 MAY, 1980

The following report is incomplete as the data for the Central Plateau and Basin Region was unavailable after an extended deadline at the time this material was called for by the editor of *The Migrant*.

This season's report is highlighted by several exciting records. The most outstanding being the observation of a *Lark Bunting* in late April in Elizabethton. This constitutes only the *second* sighting of the species in Tennessee. Tony Koella flushed a *Black Rail* from a hayfield in Jefferson County in early May. There are only *three* previous records from Tennessee, and all are from nearby Cocke and Greene counties. In early April Ben and Lula Coffey located the *first nests* of the *Fish Crow* to be documented in Tennessee finding a total of 4 in the Memphis area. Rick Phillips and Tom Laughlin found the first evidence that our wintering *House Finches* may now be *nesting* here when they observed a pair of adult birds feeding a short-tailed fledgling in Oak Hill Cemetery in Kingsport in early May.

There were several records of species listed as threatened in Tennessee by the Tenn. Wildlife Resources Agency. Sharp-shinned and Cooper's Hawks were seen in both the Eastern Mountain and Eastern Ridge and Valley Regions. Single Bewick's Wrens were found in the Eastern Ridge and Valley and Western Coastal Plain regions and Grasshopper Sparrows were located at 2 different sites in the last region. Marsh Hawks were also seen in the Western Coastal Plain.

Species listed as endangered by the above agency and counted during the period included Ospreys in the Eastern Mountain and Eastern Ridge and Valley regions. Birders in the last region also had a Bald Eagle, a Peregrine Falcon, and at least 2 Bachman's Sparrows. The nest of a Common Raven was seen in early May in Great Smoky Mountains National Park. Mississippi Kites begin returning to their breeding areas in the Western Coastal Plain in the first week of May. Ken Dubke identified a Mississippi Kite near Savannah Bay in the Eastern Plateau and Basin in mid-April. This is the easternmost record for the bird in the State and only the fourth record off the Gulf Coastal Plain.

Two nests of the Great Horned Owl were discovered in the Eastern Mountain Region and one active nest was located in the Eastern Ridge and Valley. The Ridge and Valley also produced a nest record for the Red-tailed Hawk and 6 active nest sites of Red-shouldered Hawks. The largest spring flight of Sandhill Cranes recorded to date was observed in the Eastern Ridge and Valley with 1,270 birds counted. Good numbers of shorebirds were found at the Kingston Steam Plant in the Eastern Ridge and Valley and Upland Sandpipers were seen in the Eastern

Mountain Region where they are rarely recorded.

Olive-sided Flycatchers were observed in the two easternmost regions and a Yellow-bellied Flycatcher was identified in Hardeman County in the western end of the State. Both hybrids of the Golden-winged/Blue-winged Warbler complex were spotted the same weekend in late April with a Brewster's Warbler in Knox County and a male Lawrence's Warbler, which sang a Golden-wing song, was seen just to the south in Great Smoky Mountains National Park. House Finches remained well into May in East Tennessee and Painted Buntings were found once more at Covington in the Western Coastal Plain. These outstanding records in more detail and numerous others follow. Please send *your* birding records to your regional compiler today.

WESTERN COASTAL PLAIN REGION—The spring migration was generally slow and late. We had an unusually mild winter and practically no spring temperatures of any great variance. The spring migrants arrived in late April with many making their appearance at birdbaths in early May.

Heron-Tern: Little Blue Heron: 24 Apr (12) M (JD, ND). Mississippi Kite: 6 May (3) Frayser (JS), 7 May (2) OP (JS), 8 May (1) Obion Co., Big Lake, Gooch WMA (CN), 11-13 May (1) Ra (JF, SF), 15 May (2) OP (NS, MW). Marsh Hawk: 26 Apr (1) M (JD), 12 May (1) Hooker's Bend Area, Dickey Landing, Hardin Co. (CN). Virginia Rail: 10 Apr (1) M (JS). Pectoral Sandpiper: 4 May (175) Phillipy Pits, Lake Co. (CN). Forester's Tern: 10 May (2) Coro Lake, SW Memphis (BBC, CN).

Swift-Waxwing: Chimney Swift: 2 Apr (950) M (JD, ND). Eastern Kingbird: 2 Apr (1) Dyer Co. (WGC). Yellow-bellied Flycatcher: 11 May (1) Hardeman Co., Hwy 57 at Muddy Creek (CN). Eastern Phoebe: 23 Apr (1) FPSP, (1) Cold Creek (AS). FISH CROW: 2 Apr (1 nest). This is the first nest for Overton Park (BBC), 5 Apr (3 nests) Riverside Park (BBC, LCC). BEWICK'S WREN: 2 Apr (1) C (AS). Short-billed Marsh Wren: 5 May (1) D (WGC), 7 May (1) Hooper Marsh, Dyer Co. (WGC). Swainson's Thrush: This spring the Swainson's Thrush count was unusually low as compared to previous years. Water Pipit: 5 May (2) Air Park Inn, Lake Co. (PC, DC, DJ, CN). Cedar Waxwing: 20-21 Mar (800) M (JD).

Warbler-Sparrow: Swainson's Warbler: Chuck Nicholson taped the Swainson's in the following counties during the week of May 4-11: Henry (1), Weakley (3), Obion (1), Lake (1), Shelby (4), Fayette (1), Hardeman (1). Tennessee Warbler: This warbler was late and only common this season M (BBC). Bluewinged Warbler: fairly common from 13 Apr to 5 May M (BBC). Yellow Warbler: 9 May (1) Dyer Co. Tiger Tail (CN). Cape May Warbler: 12 May (1) M (BB). Palm Warbler: 14 Apr (1) Dyer Co. (WGC). Mourning Warbler: 13 May (1) M (CB). Bobolink: 9 May (220) Dyer Co., 5 mi. N. of Tiger Tail (CN). Blue Grosbeak: 15 Apr (1) M (VH, MR). *PAINTED BUNTING:* 11 May (1) C (AS). Note: this species was not at this location in 1977 or 1979; it was first found in 1975. Grasshopper Sparrow: 9 May (3) Dyer Co. 5 mi. N. of Tiger Tail (1) 4 mi. S.W. of Newbern (CN). White-throated Sparrow: 17 May (1) M (BBC, LCC), 20 May (1) M (CB), 21 May (1) M (DD).

Observers: BB—Bob Browne; CB—Carolyn Bullock; BBC—Ben B. Coffey; DC—Dot Crawford; LCC—Lula C. Coffey; PC—Paul Crawford; WGC— William G. Criswell; DD—Dollyann Daily; JD—Jon DeVore; ND—Nancy De-Vore; JF—Jim Ferguson; SF—Sue Ferguson; VH—Van Harris; DJ—Daniel

Jacobson; CN—Chuck Nicholson; MR—Martha Roark; AS—Alice Smith; JS—John Stokes; NS—Noreen Smith; MW—Martha Waldron.

Locations: C—Covington; Cold Creek—West Lauderdale Co.; FPSP—Fort Pillow State Park, West Lauderdale Co.; Frayser—NW Memphis; M—Memphis; OP—Overton Park—city park in Memphis; Ra—Raleigh; Riverside Park—city park in Memphis.

MARTHA WALDRON, 1626 Yorkshire Dr., Memphis 38119.

EASTERN RIDGE AND VALLEY REGION—Probably the most spectacular event of the season was the continuous number of Sandhill Crane reports received. When the movement was over the grand total of 1,270 cranes were tallied by various observers.

On 5 May Tony Koella flushed a secretive and seldom reported *Black Rail* from an overgrown dry hayfield on his farm in Jefferson County. It would be very interesting to know whether it was a migrant or, even better, a local nester. Details will appear as a "Round Table Note."

This season Steve and Barbara Stedman have been most persistent and faithful in monitoring the shorebird movement at the Kingston Steam Plant. On 26 April they counted an impressive 220 Lesser Yellowlegs there.

Finally, Ken Dubke identified a *Mississippi Kite* near Savannah Bay on 17 April and Dick Lura found a very large number of Vesper Sparrows at Austin Springs on 15 April.

Loon-Merganser: Common Loon: 13 Apr (raft of 12) SB (KLD); 19 Apr (10) BL (SG, MD); 1 May (1) BL (RK); 19 May (1) NL (Terry Chitcoat, Ralph Jordan fide CPN). Horned Grebe: 23 Mar (14) ChL (EK); 20 Apr (1) KSP (SBS, RAH); 28 Apr (1) BL (RK). Pied-billed Grebe: 29 Apr (2) SB (KLD). Double-crested Cormorant: 30 Apr (7) AS (SG, MD, RK); 6 May (5) HRA (KLD). Little Blue Heron: 26 Apr (1) RR (KD). Cattle Egret: 15 Apr (1) Huntsville (Ed Beddow, Jim Pentecost); 16 Apr (1) Sullivan Co. (Gary Wallace); 21 Apr - 8 May (3-7) DL (TK); 13 May (4) NoL, Grainger Co. (JCH). Great Egret: 13 Apr (4) CL (JCH, LT); 15 Apr (1) AM (RBW); 16 Apr (1) MHL (WKJ); 17 Apr (1) EB (LT); 15-25 Apr (1-2) AS (RK, DL). Black-crowned Night Heron: 25, 26 Apr (1) AS (RK). Yellow-crowned Night Heron: 17, 24 Apr (1) AlM (BHS, MLD). American Bittern: 27 Mar - 26 Apr (1-3) AS (ETOS); 19 Apr (1) K (PH). Snow Goose: 14-20 Mar (6) EB (WKJ). Gadwall: 28 Apr (1) AS (RK). Northern Shoveler: 28 Apr (2) AS (RK). Redhead: 18 Mar (105) ChL (KLD). Scaup spp. 18 Mar (1200) ChL (KLD). Lesser Scaup: 11 May (1) JC (MD). Bufflehead: 20 Apr (2) KSP (SBS, RAH). Oldsquaw: 22-23 Mar (6-2) ChL (DRJ, EK, LD). Ruddy Duck: 18 Mar (12) ChL (EK); 16 Apr (2) AS (RK). Hooded Merganser: 13 Apr (8) SB (LD, EK). Common Merganser: 19 Apr (2) BL (SG, MD). Red-breasted Merganser: 17 Apr (7) EB (LT); 6 May (4) AS (RK).

Kite-Plover: MISSISSIPPI KITE: 17 Apr (1) SB (KD). Sharp-shinned Hawk: 22 Mar (1, killed a Red-headed Woodpecker) NoL (JCH); "normal" number Eliz-JC (ETOS); Cooper's Hawk: 19 Apr (1) K (PH); "normal" during period Eliz-JC (ETOS). Red-tailed Hawk: one active nest site HRA (KLD); "common" near home and farm JCo (TK). Red-shouldered Hawk: of nine new and previously known nesting territories six appeared to be active in the Chattanooga area (KLD, RBW, RBM *et al*). Broad-winged Hawk: 20 Apr (81 migrating) Mt. Roosevelt

(KTOS). Bald Eagle: 26 Mar (1) NL (James K. Pettyjohn *fide* KD). Marsh Hawk: 31 Mar (1) House Mt. KCo (BHS); 7 Apr (1) JCo (TK). Osprey: reported from along most large waterways. *PEREGRINE FALCON:* 26 Apr (1) BL (MD, JK). American Kestrel: "common" near home and farm JCo (TK). Sandhill Crane: 16-25 Mar (276) K, SB, CH, SM (Dave Etnier, KLD, Maxine Crownover and Howard Yarbrough); this and the past report represent the largest spring flight ever recorded in the region. A total of 1,270 cranes were observed and reported. Virginia Rail: 26 Mar (1) AlM (Dan Eagar, CPN); 17 Apr (3), 24 Apr (3) AlM (MLA, SBS). Sora: 17 Apr (1) AlM (BHS); 26 Apr (1) AS (GDE). *BLACK RAIL:* 5 May (1) JCo (TK). Semipalmated Plover: 10 May (1) NL (DRJ, JTP); 12 May (1) AS (RK).

Sandpiper-Woodpecker: Common Snipe: 23 Apr (6) AM (DRJ). Spotted Sandpiper: max 7 May (8) KSP (SBS). Willet: 27 Apr (20) KSP (RAH, SBS). Lesser Yellowlegs: max 26 Apr (220) KSP (SBS). Pectoral Sandpiper: 26 Apr (4) AS and BL (GDE, MD, JK); 7 May (24) KSP (SBS). Least Sandpiper: 11 May (11) NL (DRJ, LMJ). Dowitcher *spp.*: 26 Apr (18) KSP (SBS). Western Sandpiper: 6 May (1) AS (SG, MD). Herring Gull: 26 Apr (1) RR (KD). Ring-billed Gull: 10 May (20) NL (DRJ, JTP). Bonaparte's Gull: impressive spring migration reported 11-29 Apr from NoL, KSP and FLL (JCH, WKJ, SBS); max 18 Apr (150) FLL (WKJ): 19-26 Apr (9-18) BL (SG, MD, JK); 10 May (1) NL (DRJ). Forster's Tern: 26 Apr (1) KSP (SJS); 26 Apr (6) AS (GDE); 6 May (17) HRA (KLD); 10 May (1) NL (DRJ, JTP). Common Tern: 26 Apr (3) BL (MD, JK). Caspian Tern: 22 Apr (1) NL (DRJ). Barn Owl: resident pair White Pine, JCo (TK). Great Horned Owl: one active nest HRA (KLD). Red-headed Woodpecker: 5 Apr (8) recorded on a Sequatchie R. float trip between Dunlap and Whitwell, a good count for this area (DRJ *et al*).

Flycatcher-Waxwing: Willow Flycatcher: 10 May (1) AM (DRJ); 12 May (1) AS (RK). Least Flycatcher: 14 May (1) Claiborne Co. (CPN). Olive-sided Flycatcher: 7 May (1) Cross Mt, CCo (REB, JCH). Horned Lark: common resident at home and farm JCO (TK). Tree Swallow: 23 Mar (12) SB (LD); 29 Apr (150) NL (DRJ). Bank Swallow: 11 May (4) NL (DRJ, LMJ). Bewick's Wren: 11 May (1) Marion Co. (DRJ, LMJ). Long-billed Marsh Wren: 26 Apr (2) JB (RK); 7 May (1) SB (KLD); 7 May (1) CCo (JCH, REB). Short-billed Marsh Wren: 23 Apr (2) AM (DRJ). Water Pipit: 26-28 Apr (3-75) JB (RK); 7 May (1) KSP (RAH, SBS). Cedar Waxwing: 13 May (15) SB (KLD).

Vireo-Warblers: Philadelphia Vireo: 10 May (1) TRG (DRJ, JTP). Warbler migration: Nicholson stated it best as not particularly impressive, no large waves reported and arrivals/departures pretty much on schedule. Prothonotary Warbler: 6 May (1) along Watauga R. (RK). Swainson's Warbler: 10-12 May (1) at residence in CH (JP). *BREWSTER'S WARBLER:* 27 Apr (1) KCo (Bill and Allison McNutt). Orange-crowned Warbler: 25, 26 Apr (1) K (JCH); 27 Apr (1) Mt Roosevelt (RAH, SBS). 8 May (1) K (JCH).

Bobolink-Sparrows: Bobolink: 26 Apr - 15 May (25-50) at home and farm JCo (TK). Rose-breasted Grosbeak: 13 Apr (1) CCo (JCH, LT). Evening Grosbeak: a few scattered numbers of up to 25 reported to 26 Apr from CH and SM (Ann Gibson, RBW, JP); a few reports to 20 Apr (2) K (PH) and 6-12 to 6 May in JC (MD) and the last report 7 May (1) JC (SG). *HOUSE FINCH:* 11 May (2 adults feeding one short-tailed fledgling) Kingsport (Rick A. Phillips, Tom Laughlin); at least 2 till end of period K (Jim and Betty Mason *fide* SBS); last seen 7 May (1) JB (RK). Savannah Sparrow: "common" at home and farm JCo (TK) with the last

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observation there 5 May. Vesper Sparrow: 25 Mar (1) SB (KLD); 19 Apr (1) Soddy-Daisy (DRJ); 15 Apr (75+) AS (DL). Lark Sparrow: 22 Mar (1) K (SBS). *BACHMAN'S SPARROW:* 22 Mar (1) Westel (BHS); 4 May (2) Westel (TK). Dark-eyed Junco: 22 Apr (1) Point Park (KD). White-crowned Sparrow: 20-30 at four locations JCo (TK) with the last sighting on 5 May; 26 Apr (1) JC (SG, Glenn Swofford); 9 May (1) K (PH). White-throated Sparrow: 9 May (1) K (PH); 13 May (1) JC (RK). Fox Sparrow: 21 Mar (3) K (SBS). Lincoln's Sparrow: 13 May (1) JC (RK).

Locations: AM—Amnicola Marsh; AS—Austin Springs; AlM—Alcoa Marsh; BL—Boone Lake; CCo—Campbell County; CL—Cove Lake; ChL— Chickamauga Lake; DL—Douglas Lake; EB—Eagle Bend Fish Hatchery, Clinton; Eliz-JC—Elizabethton-Johnson City Area; FLL—Fort Loudoun Lake; HRA—Hiwassee River Area; JB—Jonesboro; JC—Johnson City; JCo—Jefferson County; K—Knoxville; KCo—Knox County; KSP—Kingston Steam Plant; MHL—Melton Hill Lake; NL—Nickajack Lake; NoL—Norris Lake; RR— Reflection Riding; SB—Savannah Bay; SM-—Signal Mt.; TRG—Tennessee River Gorge.

Observers: BHS—Barbara H. Stedman; CPN—Charles P. Nicholson; DL— Dick Lura; DRJ—Daniel R. Jacobson; EK—Elena Killian; ETOS—Elizabethton Chapter, TOS; GDE—Glen D. Eller; JCH—Joseph C. Howell; JK—Joy Kyle; JP—Janet Phillips; JTP—Johnny T. Parks; KD—Ken Dubke; KLD—Kenneth H. & Lillian H. Dubke; KTOS—Knoxville Chapter, TOS; LD—Lil Dubke; LMJ— Lemuel M. Jacobson; LT—Linda Turner; MLA—Mark & Laurie Armstrong; PH—Paul Hartigan; RAH—Ron & Audrey Hoff; REB—Robert E. Beck; RK— Rick Knight; RBM—Robert B. Mitchell; SBS—Stephen J. & Barbara H. Stedman; SG—Sally Goodin; SJS—Stephen J. "Steve" Stedman; TK—Jon A. "Tony" Koella; WKJ—Wesley K. James; MD—Martha Dillenbeck.

KENNETH H. AND LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION—This particular count period's starting date of 16 March was also the beginning of warm weather for the area, as the last week of the month saw warmer temperatures and wet weather. March had a total of over 7 inches of precipitation. April was warm and relatively dry as were the first two weeks in May.

Birding activity increased in April after the dull winter period. Several notable species were observed, but probably the best bird seen was a *Lark Bunting* found on the Elizabethton Spring Count with several good photographs being taken. This was only the second state record and this area's first. The Yellow-crowned Night Herons nested in Elizabethton again for the second year in a row occupying the same nest sites as last year.

Loon-Sandpiper: Common Loon: 25 Apr (7) over Newfound Gap, GSMNP (FJA); 11 May (1) WatL (HF). Horned Grebe: last seen 26 Apr (4) RC (JM and Lois H). Green Heron: 1st returned 10 Apr (1) HS (GE). Yellow-crowned Night Heron: 23 Mar (1) Gap Creek (JM) 1st sighting; 2 pairs found on *nest* in HS on 29 Mar (GE, RL) using same two nests as last year. White-fronted Goose: 26 Apr (1) RC (JM, Lois H). Pintail: 21-29 Mar (1) WatR (GE, HF). Green-winged Teal: 21-29 Mar (1) WatR (GE, HF). Northern Shoveler: 10-13 Apr (1) GSMNP (SBS). Red-breasted Merganser: 26 Apr (1) RC (JM and Lois H) last seen. Common Merganser: 16 Mar (22) RC (RK). Sharp-shinned Hawk: 21 Apr (1) Erwin (GS);

26 Apr (1) E (HF); 12 May (2) WatL (ES). Cooper's Hawk: 2 May (1) WatL (GE); 9 May (1) Erwin (GS). Red-shouldered Hawk: 16 Mar (1) GSMNP (SBS); 20 Apr (1) E (GE, HF); 10 May (1) RM (SG). Osprey: 1st returned 1 Apr (1) WatR (RK) and last seen 3 May (1) E (HF). American Woodcock: 27 Apr (6) CF (GE, RK). *UPLAND SANDPIPER:* 27 Apr (3) CF (GW, DL, RK) uncommon local spring migrant.

Cuckoo-Waxwing: Black-billed Cuckoo: 1 May (1) E (GW) 1st spring sighting. Barn Owl: 14 Apr (1) SV (GW). Great Horned Owl: 17 Mar (1 bird on *nest*) WibL (RK); 20 Apr (1 *nest*) SHL (RL). Barred Owl: 26 Apr (1) RCP (SG, GS); 3 May (1) WibL (GS, MD). Yellow-bellied Sapsucker: 22 Apr (1) E (Lois H) last seen. Least Flycatcher: 9 May (1) RM (SG, MD) 1st spring sighting. *OLIVE-SIDED FLYCATCHER:* 10 May (1) GSMNP (Knox TOS); 14 May (1) Erwin (RK, SG, MD). Tree Swallow: 29 Mar (3) SV (GE, HF) 1st returned. Common Raven: 10 May (1 young on *nest*) GSMNP (Knox TOS). Water Pipit: 25 Apr (1) Gatlinburg (FJA). Red-breasted Nuthatch: 2, 16 Apr (2) Laurels (SG, MD) no birds seen in higher elevations. House Wren: 17 Apr (1st returned) SV (MD). Long-billed Marsh Wren: 26 Apr (1) CF (GW, DL). Hermit Thrush: 23 Mar (last seen) Erwin (GS). Veery: 26 Apr (1st returned) E (HF). Cedar Waxwing: very plentiful during entire period.

Vireo-Sparrow: Solitary Vireo: 23 Mar (1st returned) Laurels (RK). Warbling Vireo: 18 Apr (1st returned) SHL (RL). Swainson's Warbler: 8 May (1st returned) RCP (RK, GS, SG). Worm-eating Warbler: 20 Apr (1st returned) WatL (GE). *Lawrence's Warbler:* 26 Apr (1 male) Maloney Overlook, GSMNP (FJA and class). Yellow-rumped Warbler: 13 May (last seen) E (HF). Black-throated Green Warbler: 4 Apr (1st returned) SHL (RL). Pine Warbler: 22 Mar (1st returned) SHL (RL). Louisiana Waterthrush: 1 Apr (1st returned) WibL (RK). Bobolink: 24 Apr (1) Erwin (DL). Evening Grosbeak: 8 May (last seen) E (GE). Purple Finch: 4 May (last seen) E (HF). *LARK BUNTING:* 26 Apr (1) CF (GW, DL) area's 1st record; second state record. White-crowned Sparrow: 26 Apr (last seen) CF (GW, DL). White-throated Sparrow: 12 May (last seen) E (GE). Fox Sparrow: 16 Mar (last seen) E (HF).

Locations: CF—County Farm near Eliz.; E—Eliz. Area; GSMNP—Great Smoky Mtn. National Park; HS—Hunter Swamp; RC—Roans Creek; RCP— Rock Creek Park near Erwin; RM—Roan Mtn.; SHL—South Holston Lake; SV—Siam Valley; WatL—Watauga Lake; WatR—Watauga River; WibL— Wilbur Lake.

Observers: FJA—Fred Alsop; MD—Martha Dillenbeck; GE—Glen Eller; HF—Harry Farthing; SG—Sally Goodin; Lois H—Lois Herndon; JM—John Martin; RK—Rick Knight; DL—Dick Lura; RL—Richard Lewis; ES—Ed Schell; GS—Glenn Swofford; SBS—Steve and Barbara Stedman; GW—Gary Wallace.

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Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB Crawford, Mrs. Elizabeth, 227 Parkes St., Lawrenceburg, TN 38464 BR Crawford, Mr. and Mrs. Paul, Rt. 4, Callatin, TN 37066 NAS Creech, Miss Annella, 2825 Kenway Rd., Nashville, TN 37215 NAS Creiswell, William G., Rt. 4, Dyersburg, TN 38024 TAL Croît, Joseph E., Ravenscroft, Rt. 2, Box 242-G, Scottsville, VA 24590 COR Crowder, Bessie, Rt. 5, Box 114, Lawrenceburg, TN 38464 BR Cummins, Dr. and Mrs. Eugene, 1006 Darling Ave., Waycross, GA 31501 COR Daily, Mrs. Bollynann, 701 Stevens, Memphis, TN 39116 MEM D'Apolito, Mrs. Thomas, 3205 Masonwood Dr., Nashville, TN 37207 NAS Darden, Mr. & G., Box 2237, Hohenvald, TN 38462 TAL Darlington, Dr. Julian T., 3112 Clanfinnan Rd., Memphis, TN 38128 MEM Davant, Miss Mary, 861 N. McLean Bluvd. Memphis, TN 37415 CHA Davis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 38464 BR "Bavis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 38464 BR "Bavis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 384128 MEM Davis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 3748 KN DeFoe, Mr. Donald H., Great Smokey Mtn. National Park, Rt. 2, Box 322, Gatlinburg, TN 37738 KN Delashnit, Elaine, P. 0. Box 124, Lawrenceburg, TN 37617 TAL Delashnit, Elaine, P. 0. Box 71432, Memphis, TN 38117 MEM Dement, Samuel H., 2097 Graybar Lane D-2, Nashville, TN 37087 LEB Deents, Dr. Kichard, 20 North Larchmont St., Memphis, N 38111 MEM	1979 1972 1967 1958 1977 1956 1972 1961 1945 1970 1960 1962 1965 1929 1980 1972 1978 1964 1980 1978 1980 1978
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB Crawford, Mrs. Elizabeth, 227 Parkes St., Lawrenceburg, TN 38464 BR Crawford, Mr. and Mrs. Paul, Rt. 4, Callatin, TN 37066 NAS Creech, Miss Annella, 2825 Kenway Rd., Nashville, TN 37215 NAS Creiswell, William G., Rt. 4, Dyersburg, TN 38024 TAL Croît, Joseph E., Ravenscroft, Rt. 2, Box 242-G, Scottsville, VA 24590 COR Crowder, Bessie, Rt. 5, Box 114, Lawrenceburg, TN 38464 BR Cummins, Dr. and Mrs. Eugene, 1006 Darling Ave., Waycross, GA 31501 COR Daily, Mrs. Bollynann, 701 Stevens, Memphis, TN 39116 MEM D'Apolito, Mrs. Thomas, 3205 Masonwood Dr., Nashville, TN 37207 NAS Darden, Mr. & G., Box 2237, Hohenvald, TN 38462 TAL Darlington, Dr. Julian T., 3112 Clanfinnan Rd., Memphis, TN 38128 MEM Davant, Miss Mary, 861 N. McLean Bluvd. Memphis, TN 37415 CHA Davis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 38464 BR "Bavis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 38464 BR "Bavis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 384128 MEM Davis, Billy and Delphia, P. 0. Box 24, Lawrenceburg, TN 3748 KN DeFoe, Mr. Donald H., Great Smokey Mtn. National Park, Rt. 2, Box 322, Gatlinburg, TN 37738 KN Delashnit, Elaine, P. 0. Box 124, Lawrenceburg, TN 37617 TAL Delashnit, Elaine, P. 0. Box 71432, Memphis, TN 38117 MEM Dement, Samuel H., 2097 Graybar Lane D-2, Nashville, TN 37087 LEB Deents, Dr. Kichard, 20 North Larchmont St., Memphis, N 38111 MEM	1979 1972 1967 1958 1977 1958 1977 1961 1945 1977 1980 1962 1977 1980 1962 1978 1964 1980 1978 1964 1980 1978 1980 1979 1980 1979 1980
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1972 1961 1945 1977 1980 1965 1929 1980 1972 1978 1978 1980 1978 1980 1979 1980 1979 1980
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1972 1961 1945 1977 1980 1962 1965 1929 1980 1972 1980 1972 1980 1978 1980 1978 1980 1970 1970 1960 1974
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1972 1961 1945 1977 1980 1965 1929 1980 1972 1978 1978 1980 1978 1980 1979 1980 1979 1980
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1972 1965 1972 1965 1972 1965 1929 1980 1972 1978 1980 1978 1980 1979 1980 1966 1974 1980
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1976 1956 1972 1961 1945 1977 1980 1962 1964 1978 1980 1978 1980 1978 1980 1978 1980 1978 1980 1978 1980 1978 1980 1975
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1972 1965 1972 1965 1972 1965 1929 1980 1972 1978 1980 1978 1980 1979 1980 1966 1974 1980
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1972 1961 1945 1977 1980 1962 1975 1929 1980 1972 1978 1978 1978 1978 1978 1978 1978 1978
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1967 1967 1958 1977 1956 1972 1961 1945 1972 1965 1929 1965 1929 1965 1929 1964 1978 1980 1978 1980 1978 1980 1979 1980 1979 1980 1975 1966 1974 1957
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1977 1956 1977 1980 1962 1978 1980 1965 1929 1980 1972 1978 1980 1972 1978 1980 1979 1980 1979 1980 1979 1980 1979 1980 1977 1970 1980 1977 1970 1970 1977 1970 1970 1970 197
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1967 1967 1958 1977 1956 1972 1961 1945 1972 1965 1929 1965 1929 1965 1929 1964 1978 1980 1978 1980 1978 1980 1979 1980 1979 1980 1975 1966 1974 1957
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB. Crawford, Mrs. Elizabeth, 227 Parkes St., Lawrenceburg, TN 38464 BR. Crawford, Mr. and Mrs. Paul, Rt. 4, Gallatin, TN 37066 NAS Creech, Miss Annella, 2825 Kenway Rd., Nashville, TN 37215 NAS Creiswell, William G., Rt. 4, Dyersburg, TN 38024 TAL Croîft, Joseph E., Ravenscroft, Rt. 2, Box 242-G, Scottsville, VA 24590 00R Crowder, Bessie, Rt. 5, Box Dil4, Lawrenceburg, TN 38464 BR Cummins, Dr. and Mrs. J. 0., 342 Cherry, Cookeville, TN 38501 UC Crowder, Bessie, Rt. 5, Box Dil4, Lawrenceburg, TN 38464 RA Cummins, Dr. and Mrs. J. 0., 342 Cherry, Cookeville, TN 38501 UC Crowder, Bessie, Rt. 5, Box 237, Hohenvald, TN 38402 TAL Daily, Mrs. Dollynan, 701 Stevens, Memphis, TN 38116 MEM 	1979 1972 1952 1957 1956 1977 1956 1977 1960 1961 1945 1960 1970 1960 1970 1980 1970 1980 1978 1980 1978 1980 1978 1980 1978 1980 1978 1978 1978 1978 1978 1978 1978 1978
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1977 1956 1972 1961 1962 1965 1929 1965 1920 1976 1960 1972 1978 1980 1979 1974 1980 1974 1980 1974 1980 1975 1974 1980 1975 1973 1973 1973
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1952 1957 1956 1977 1956 1977 1980 1972 1962 1965 1973 1980 1978 1980 1978 1980 1978 1980 1978 1980 1979 1980 1974 1980 1974 1980 1974 1980
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1977 1956 1972 1961 1962 1965 1929 1965 1920 1976 1960 1972 1978 1980 1979 1974 1980 1974 1980 1974 1980 1975 1974 1980 1975 1973 1973 1973
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1977 1950 1972 1972 1972 1972 1972 1972 1977 1980 1975 1980 1975 1964 1980 1975 1966 1975 1966 1975 1957 1957 1957
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1967 1958 1977 1956 1977 1956 1977 1980 1965 1922 1978 1960 1972 1978 1980 1972 1978 1980 1972 1978 1980 1979 1978 1980 1979 1964 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1977 1980 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1977
Crawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB	1979 1972 1952 1957 1956 1977 1956 1977 1960 1961 1945 1962 1965 1965 1970 1980 1970 1980 1970 1980 1978 1980 1978 1980 1978 1980 1975 1964 1977 1975 1966 1977 1975 1975 1975
<pre>Grawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB</pre>	1979 1972 1967 1958 1977 1956 1977 1956 1977 1980 1965 1922 1978 1960 1972 1978 1980 1972 1978 1980 1972 1978 1980 1979 1978 1980 1979 1964 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1980 1977 1977 1980 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1972 1977 1977
<pre>Grawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB</pre>	1979 1972 1967 1958 1977 1956 1977 1956 1977 1980 1962 1977 1980 1965 1929 1978 1980 1972 1978 1980 1979 1974 1980 1974 1980 1977 1973 1973 1973 1975 1957 1957 1957 1957 1957 1957 1957
<pre>Grawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB</pre>	1979 1972 1956 1957 1956 1977 1956 1977 1961 1945 1962 1962 1965 1929 1960 1978 1980 1978 1980 1978 1980 1978 1980 1978 1980 1979 1980 1975 1973 1973 1973 1973 1973 1977 1973 1977 1973 1977 1973 1977 1973 1977 1973 1977 1978 1977 1978 1979 1970 1970 1970 1970 1970 1970 1970
<pre>Crawford, Mrs. Covan, Rt. 9, Box 307, Lebanon, TN 37087 LEB</pre>	1979 1972 1967 1958 1977 1956 1977 1950 1972 1961 1942 1961 1942 1965 1922 1976 1970 1960 1977 1980 1978 1980 1978 1980 1974 1980 1957 1957 1957 1957 1957 1957 1958 1957 1957 1958 1957 1958 1957 1957 1958 1957 1958 1957 1958 1957 1957 1958 1957 1958 1957 1957 1958 1959 1957 1958 1959 1957 1958 1959 1959 1957 1958 1959 1959 1957 1958 1959 1957 1958 1959 1957 1958 1959 1957 1958 1958 1959 1957 1958 1957 1958 1957 1958 1957 1958 1957 1958 1957 1958 1957 1958 1957 1957 1958 1957 1957 1958 1957 1958 1957 1957 1957 1957 1957 1957 1957 1957
<pre>Grawford, Mrs. Cowan, Rt. 9, Box 307, Lebanon, TN 37087 LEB</pre>	1979 1972 1956 1957 1956 1977 1956 1977 1961 1945 1962 1962 1965 1929 1960 1978 1980 1978 1980 1978 1980 1978 1980 1978 1980 1979 1980 1975 1973 1973 1973 1973 1973 1977 1973 1977 1973 1977 1973 1977 1973 1977 1973 1977 1978 1977 1978 1979 1970 1970 1970 1970 1970 1970 1970

Dugger, Mrs. Milbrey, 2825 Kenway Rd., Nashville, TN 37215 NAS		
Duncan, Mr. and Mrs. Hickman, 5406 Hill Road Circle, Nashville, TN 37220		1958
		1978
Earhart, Mrs. Joseph S., Rt. 2 Mill Rd., Hermitage, TN 37076 NAS		1978
Early, Mr. and Mrs. William, Hidden Lake Estates, Columbia, TN 38401 COL		1980
Earnest, Mrs. Charles, 101 Old Indian Hill Trail, Greeneville, TN 37743 GRE		1973
Eastes, Mrs. Alyne, 517 Castle Heights Ave., Lebanon, TN 37087 LEB		1968
Eastin, Todd, Rt. 1, Shady Valley, TN 37688 TAL		1976
Egley, Mr. and Mrs. Bill, Route 3, Lawrenceburg, TN 38464 BR		1972
Eiklor, Mr. and Mrs. John, Rt. 10, Box 191, Jonesboro, TN 37659 KIN		1976
Eller, Mr. Glen, Grandview Terrace, Elizabethton, TN 37643 ELI		1956
Ellis, Mr. and Mrs. John 0., 4004 Overbrook Drive, Nashville, TN 37204 NAS		1960
Ellis, Mrs. Paul J., 2724 Wortham Dr., Nashville, TN 37215 LEB		1970
Elmore, Mr. Jackie B., 209 Brookhaven Dr., Somerset, KY 42501 COR		1976
Elson, Mrs. Elizabeth S., 300 Hermitage Rd., Knoxville, TN 37920 KNO	• • •	1963
Embury, Mr. and Mrs. John H., 212 North McLean Blvd., Memphis, TN 38112 MEM	 .1929- 	1961
Epperson, Mrs. H. C., 519 Maryland Ave., Bristol, TN 37620 BRI		1952
Epps, Mrs. Ruth, 211 Haven Circle, Columbia, TN 38401 COL		1980
Erwin, Mr. and Mrs. Billy, Route 7, Box 317, Murfreesboro, TN 37130 MUR		1973
Evans, Dr. and Mrs. H. F., 421 Menees Lane, Madison, TN 37115 NAS	1980-	
Evans, Mrs. John W., Rt. 1, Harbor Hill, Hermitage Harbor, Old Hickory, TN 37138 NAS		1976
Farrell, Dr. and Mrs. Charles E., 109 S. Bellevue Dr., Nashville, TN 37205 NAS		1954
Farris, Mrs. Carter M., Rome Pike, Rt. 2, Lebanon, TN 37087 LEB		1964
Farilis, Mis Calter M; Rome Like, RC 2, Lebanon, R. 51061 LED		
Farthing, Mr. and Mrs. Harry H., 100 Sherwood Heights, Elizabethton, TN 37643 ELI		1956
Feldman, Mr. and Mrs. Jesse, 3303 Southern Ave., #11, Memphis, TN 38111 MEM		1976
Felts, Dr. and Mrs. Stephen, Rt.1, Bakers Grove Rd., Hermitage, TN 37076 NAS		1976
Fenn, Mrs. Edith, 959 Gateway Ave., Towers #2, Apt. 1331, Chattanooga, TN 37402 CHA		1958
Fentress, Mrs. William E., 1400 Old Hickory Blvd., Brentwood, TN 37027 NAS		1952
Ferguson, Mr. and Mrs. James A., 3090 Joslyn St., Memphis, TN 38128 MEM		1975
Filson, Michael D., 1671 Paradise Hill Rd., Clarksville, TN 37040 TAL		1977
Finch, Dr. and Mrs. William C., 6024 Sherwood Dr., Nashville, TN 37215 NAS		1967
Finney, Mr. and Mrs. James I., Jr., Hidden Lake Estate, Columbia, TN 38401 COL		1974
Fintel, Mr. and Mrs. William A., 49 Rue Entringer, Howald, Grand Duchy of Luxembourg, NAS		1972
**Finuce, Mr. Tom W., 1434 Watauga St., Kingsport, TN 37660, KIN		1945
		1977
Fishel, Mrs. Frances W., 908 Imperial House, Nashville, TN 37205 NAS		
*Fisher, Mr. and Mrs. Frank, Box 1201, Morristown, TN 37814 KNO		1971
Fleischer, Raymond J., 708 Newberry Rd., Nashville, TN 37205 NAS		1976
Fleming, Mrs. Gertrude L., P. O. Box 613, Collegedale, TN 37315 CHA		1972
Flippen, Mrs. Roe T., Rt. 1, Box 166 Rome Pike, Lebanon, TN 37087 LEB	• • •	1974
Ford, Dr. Floyd M., Dept. of Biology, Austin Peay State Univ., Clarksville, TN 37040 TAL		1980
Fort, Mr. and Mrs. Combs and Mr. Lawson Fort, 1040 Parkwood Terrace, Nashville, TN 37220 NAS	• • •	1970
Fort, Dr. Garth E., 1900 Old Hickory Blvd., Brentwood, TN 37027 NAS		1960
Foster, Mr. and Mrs. J. P., 5817 Fredericksburg Drive, Nashville, TN 37215 NAS		1966
Foster, Katherine H., Rt. 28, Smallman Rd., Knoxville, TN 37920 KNO		1976
Fowler, Mr. and Mrs. William B., Jr., 4564 Willow Rd., Memphis, TN 38117 MEM		1978
Frank, Miss Harriette, 3767 Highland Park Place, Memphis, TN 38111 MEM		1974
Freeman, Mr. George, 2814 Oakland Ave., Nashville, TN 37212 TAL		1975
Freeman, Dr. and Mrs. John R., 3116 North Lockwood Drive, Chattanooga, TN 37415 CHA		1974
French, Mrs. J. B. and Dr. Elizabeth, 3108 Ocoee Trail N.E., Knoxville, TN 37917 KNO		
Frings, Dr. and Mrs. Hubert, 34 Flm St., Machiae, MF 04654 COR	• • •	1954
Frings, Dr. and Mrs. Hubert, 34 Elm St., Machias, ME 04654 COR	•••	1970
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · ·	1970 1976
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · · ·	1970 1976 1978
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Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gaddis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM	· · · · · · · · · · · · · · · · · · ·	1970 1976 1978 1962 1977 1979
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gaddis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM Camble, Clyde and Sue, Route L, Five Points, TN 38457 BR	· · · · · · · · · · · · · · · · · · ·	1970 1976 1978 1962 1977 1979 1980
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Funuk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Gaidis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM Gamble, Clyde and Sue, Route 1, Five Points, TN 38457 BR Gant, Mrs. Norwood J., 884 Robertson Academy Rd., Nashville, TN 37220 LEB	· · · · · · ·	1970 1976 1978 1962 1977 1979 1980 1965
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gaddis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Cwynne Rd., Memphis, TN 38117 MEM Gamble, Clyde and Sue, Route 1, Five Points, TN 38457 BR Garrett, Mrs. Robert, 1625 Highland Avee, Columbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Avee, Columbia, TN 38401 COL		1970 1976 1978 1962 1977 1979 1980 1965 1974
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Funuk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Gaidis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM Gamble, Clyde and Sue, Route 1, Five Points, TN 38457 BR Gant, Mrs. Norwood J., 884 Robertson Academy Rd., Nashville, TN 37220 LEB		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO. Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO. Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gaddis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM Gamble, Clyde and Sue, Route L, Five Points, TN 38457 BR Gant, Mrs. Norwood J., 884 Robertson Academy Rd., Nashville, TN 37220 LEB Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 38401 COL Garvey, Mrs. Ruth, 5025 Hillsboro Rd., #17-A, Nashville, TN 37215 NAS Gaston, Mrs. Joe, 2011 Altura Dr., Signal Mtn., TN 37377 CHA Gates, Miss Virginia, 3089 Waynoka Ave., Apt. 3, Memphis, TN 38111 MEM		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978 1977
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978 1977
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Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978 1977 1962 1980 1944
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Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978 1977 1962 1980 1944 1973 1979 1952 1978 1978
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1957 1974 1980 1957 1978 1977 1962 1978 1973 1979 1952 1978 1978 1978
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1978 1977 1962 1978 1978 1979 1979 1972 1978 1978
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1957 1974 1957 1962 1977 1962 1978 1977 1952 1978 1979 1952 1978 1979 1952 1978
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Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978 1977 1952 1978 1973 1979 1952 1978 1979 1973 1979 1973 1978 1979
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1965 1974 1980 1957 1978 1980 1957 1978 1977 1962 1980 1944 1973 1978 1978 1978 1973 1973 1973 1966 1966
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1980 1965 1977 1980 1974 1980 1977 1962 1978 1977 1962 1978 1979 1973 1976 1979 1973 1966 1966 1961 1975
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1979 1980 1957 1978 1974 1970 1977 1975 1978 1977 1972 1978 1973 1973 1979 1973 1979 1973 1979 1973 1979 1973 1979 1975 1980
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO		1970 1976 1978 1962 1977 1980 1965 1977 1980 1957 1974 1978 1977 1962 1978 1977 1978 1979 1973 1978 1973 1978 1973 1976 1973 1966 1941 1975
 Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO. Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO. Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gaddis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM Ganble, Clyde and Sue, Route 1, Five Points, TN 38457 BR Gant, Mrs. Norwood J., 844 Robertson Academy Rd., Nashville, TN 37220 LEB Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 38401 COL Garvey, Mrs. Ruth, 5025 Hillsboro Rd., #17-A, Nashville, TN 37215 NAS Gaston, Mrs. Emmet L., Jr., 109 Oak Hill Circle, Lebanon, TN 37087 CEB Gaston, Mrs. and Mrs. Joe, 2011 Altura Dr., Signal Mtn., TN 37377 CEB Gatt, Mrs. and Mrs. King, Rt. #8, Box 362, Greeneville, TN 37743 GRE Gerard, Ann C., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37919 KNO Geren, Miss Generive, 220 N. McLean #1, Memphis, TN 38112 MEM Gibson, Mrs. and Mrs. Carl, 280 North Crest Rd., Chattanocga, TN 3744 CHA Gibson, Mr. and Mrs. Carl, 280 North Crest Rd., Chattanocga, TN 3744 CHA Gibson, Mr. and Mrs. Boy 270 Piluf View Rd., Knoxville, TN 37919 KNO Gilmer, Mr. Him, S412 Heritage Lane, Kingsport, TN 3764 KIN Gilmer, Mr. and Mrs. Robert D., Jr., 2900 Garden Lane, Memphis, TN 38111 MEM Goodh, Mrs. Iohn, 1300 Virginia, Johnson City, TN 37601 ELI ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS ***Goodpasture, Mr. Henry, 3800 Whit		1970 1976 1978 1978 1972 1979 1980 1977 1980 1974 1980 1974 1980 1974 1980 1974 1980 1974 1978 1978 1978 1978 1978 1978 1978 1978
 Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO. Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gaddis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO Gaither, Mrs. Gail, 5230 Cwynne Rd., Memphis, TN 38117 MEM Gamble, Clyde and Sue, Route l, Five Points, TN 38457 BR Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Ave., Schumbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Ave., Schumbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Ave., Schumbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Hillsboro Rd., #17-A, Nashville, TN 37215 NAS Gaston, Mrs. Emmet L., Jr., 109 Oak Hill Circle, Lebanon, TN 37087 LB Gaston, Mrs. and Mrs. Joe, 2011 Altura Dr., Signal Mtn., TN 37087 LB Gaston, Mr. and Mrs. King, Rt. #8, Box 362, Greeneville, TN 37743 GRE Gerard, Ann C., 8400 Middlebrook Pike, Apt. J. Amphis, TN 38111 MEM Gibson, Mr. and Mrs. Carl, 280 North Crest Rd., Chattanooga, TN 37404 CHA Gibson, Miss Ethel, 5902 Pine Lawn Dr., Chattanooga, TN 37404 CHA Gibson, Mr. and Mrs. James B., 513 Belleair Lane, Bristol, VA 24201 BRI Goodin, Mrs. James B., 513 Belleair Lane, Bristol, VA 24201 BRI Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS "*Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Jr. Katherine, 3407 Hopkins Lane, Ashville, TN 3	· · · · · · · · · · · ·	1970 1976 1978 1978 1979 1979 1980 1965 1974 1980 1974 1957 1978 1977 1952 1980 1944 1973 1978 1978 1978 1978 1978 1978 1978 1978
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · · · · · · · · · · · · · · ·	1970 1978 1978 1978 1979 1970 1979 1980 1977 1979 1980 1977 1980 1974 1980 1977 1980 1977 1978 1977 1978 1978 1978 1978 1978
 Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO. Funk, John F., 7216 Afton Dr., Knoxville, TN 37918 KNO. Fuqua, Dr. and Mrs. W. G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL Gadidis, Mrs. Elenora, 209 W. Vanderbilt Dr., Oak Ridge, TN 37830 KNO. Gaither, Mrs. Gail, 5230 Gwynne Rd., Memphis, TN 38117 MEM Ganth, Mrs. Norwood J., 884 Robertson Academy Rd., Nashville, TN 37220 LEB Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 38401 COL Garrett, Mrs. Robert, 1625 Highland Ave., Columbia, TN 37087 LEB Gaston, Mrs. Emmet L., Jr., 109 Oak Hill Circle, Lebanon, TN 37087 LEB Gaston, Mrs. and Mrs. Joe, 2011 Altura Dr., Signal Mtn., TN 37377 CHA Gates, Miss Virginia, 3089 Waynoka Ave., Apt. 3, Memphis, TN 38111 MEM Gatt, Mr. and Mrs. King, Rt. #8, Box 362, Greeneville, TN 37743 GRE Geren, Miss Generive, 200 N. McLean H], Memphis, TN 38112 MEM Gibson, Mr. and Mrs. Carl, 280 North Crest Rd., Chattanooga, TN 37404 CHA Gibson, Miss Ethel, 5902 Pine Lawn Dr., Chattanooga, TN 37421 CHA Gibson, Miss Bethel, Sp02 Pine Lawn Dr., Chattanooga, TN 37421 CHA Gibson, Mr. and Mrs. James B., 513 Belleair Lane, Bristol, VA 24201 BRI Goodin, Mrs. John 1300 Virginia, Johnson City, TN 37601 ELI ***Goodpasture, Mr. Henry, 3800 Whitland Ave., Nashville, TN 37205 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave., Nashville, TN 37215 NAS Goodpasture, Dr. Katherine, 3407 Hopkins Lane, Nashville, TN 37215 NAS Goodpasture, Dr. Katherine, 3407 Hopkins Lane, Nashville, TN 37215 NAS Goodpasture, Dr. Katherine, 3407 Hopkins Lane, Nashville, TN 37215 NAS Goodpasture, Dr. Katherine, 3407 Hopkins Lane, Nashville, TN 37215 NAS Goodpasture, Mrs. Henry, 3800 Whitland Ave.,	· · · · · · · · · · · · · · · · · · ·	1970 1976 1978 1978 1978 1979 1980 1957 1970 1980 1955 1974 1980 1957 1978 1977 1978 1978 1978 1978 1978 197
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · · · · · · · · · · · · · · ·	1970 1978 1978 1978 1979 1970 1979 1980 1980 1980 1957 1978 1977 1962 1978 1977 1962 1978 1979 1979 1973 1979 1979 1979 1962 1979 1979 1966
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · · · · · · · · · · · · · · ·	1970 1978 1978 1978 1978 1978 1978 1977 1979 1980 1965 1977 1979 1980 1965 1977 1978 1977 1978 1978 1978 1978 1978
Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · · · · · · · · · · · · · · ·	1970 1976 1978 1977 1979 1962 1977 1979 1980 1980 1980 1980 1987 1977 1980 1977 1980 1977 1980 1978 1978 1978 1978 1979 1966 1941 1979 1962 1979 1962 1979 1962 1979 1962 1979 1962 1979
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Froste, Christine L., 2700 Boright, Knoxville, TN 37917 KNO	· · · · · · · · · · · · · · · · · · ·	1970 1976 1978 1977 1979 1962 1977 1979 1980 1980 1980 1980 1987 1977 1980 1977 1980 1977 1980 1978 1978 1978 1978 1979 1966 1941 1979 1962 1979 1962 1979 1962 1979 1962 1979 1962 1979

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Grimes, Samuel A., 4627 Peachtree Circle E., Jacksonville, FL 32207 COR	•	•	$1962 \\ 1967$
Gross, Dorothy S., 4446 Barfield Rd., Memobis, TM 38117 MEM	:	:	1980
Gross, Dorothy S., 4446 Barfield Rd., Memphis, TM 38117 MEM	•		1975
Guschke, Mr. and Mrs. Thomas E., Jr., 113 Taggart Ave., Nashville, TN 37205 NAS	•		1978
Gutridge, Mrs. W. A., 233 University Ave., Lebanon, TN 37087 LEB			1979
*Haag, Mrs. Joyce, 7829 Celeste, Hixson, TN 37343 CHA	٠	•	1980
Hale, Mrs. Bert, Route 1, Bluff City, TN 37618 TAL	•	•	1977
Hale, Mr. Kenneth, Route 1, Bluff City, TN 37618 TAL	٠	·	1972
Hall, Dr. George A., Dept. of Chemistry, West Virginia Univ., Morgantown, WV 26506 COR	•	•	1962
Hall, Gordon E., Box 285, Norris, TN 37828 TAL	τn	•	1979
naiverstaut, Mr. and Mrs. Jim, Arden Flace condominitians #211, 440 behavit fark felt, 37215 NAS .			1980
*Hampton, Dr. and Mrs. J. C., 200 Healing Bluff, Lookout Mtn., TN 37419 CHA			1975
Hancock, Mr. James W., Rt. 1, Box 49, Princeton Rd., Madisonville, KY 42431 COR			1946
Handle, Mrs. Mary Ann, 1520 Meeting House Rd., Knoxville, TN 37921 KNO			1978
Hanebrink, Dr. Earl L., Box 67, Arkansas State Univ., State University, AR 72467 COR		•	1968
** Hannabas, Mr. H. Hayden, 1733 Orchard Court, Kingsport, TN 37660 TAL	•	•	1976
Hanson, Mr. Newton, 1301 Highland Dr., Newport, AR 72112 COR	•	•	1941
Hardison, Miss Louise, 1801 Highland Ave., Columbia, TN 38401 COL.	•	•	1974
*Hardman, Mrs. Joel S., 1129 Glendale Lane, Nashville, TN 37204 NAS	•	•	1966
Harmon, Clarence, 123 Mahr Ave., Lawrenceburg, TN 38464 BR	•	•	$1972 \\ 1979$
Harper, James Marvin, 305 Crestwood Dr., Tullahoma, TN 37388 HR	•	•	1973
Harris, Barbara, 2225 Pinewood Rd., Nashville, TN 37216 NAS		:	1978
Harris, John L., 1230 Ford Place, Knoxville, TN 37920 KNO			1980
Harris, Dr. and Mrs. Robert W. III, 3811 Taliluna Ave., Knoxville, TN 37919 KNO			1977
Harris, Mr. Van, 435 N. McNeil, Memphis, TN 38112 MEM			1974
Harston, Thomas N., 3214 Holbrook Dr., Nashville, TN 37211 NAS	•	•	1977
Hartigan, Paul D., 200 Hermitage Rd., Knoxville, TN 37920 KNO	•	•	1978
Hartman, Mr. Gary S., 432 Guess Circle, Chattanooga, TN 37415 CHA	•	•	1980
Hassler, Mr. and Mrs. John D., Box 1, Byrdstown, TN 38549 TAL	•	•	1967
*Hayes, Mrs. J. Mitchell, Rt. 6, Box 219, Dickson, TN 37055 NAS	•	•	$1979 \\ 1963$
Hayes, Susan B., 6214 Forest Park Dr., Signal Mtn., TN 37377 CHA	:	:	1979
Haynes, Mr. and Mrs. W. D., 1014 N. Maple St., Murfreesboro, TN 37130 MUR			1970
Heiser, Dr. Don R., 3912 Woodhill Place, Knoxville, TN 37919 KNO			1976
Hendricks, Ms. Sheila Y., 2830 Azalea Place, Nashville, TN 37204 NAS		•	1979
Henry, Mrs. Earl 0., Jr., 2011 Richard Jones Rd., Apt. C-1, Nashville, TN 37215 NAS	•	•	1967
Herbert, Mr. and Mrs. Joe, 1429 Stratford Rd., Kingsport, TN 37660 KIN	•	•	1979
Herbert, Mr. and Mrs. John S., Rt. 5, Rabbitt Hill, Ashland City, TN 37015 NAS	•	•	1960
Herbert, Mrs. Robert D., III, 303 Jackson Blvd., Nashville, TN 37205 NAS		•	1979
Herndon, Mrs. Lee R., 673 Golf Course Dr., Elizabethton, TN 37643 ELI		•	1944
Hettish, Mr. and Mrs. J. Robert, 1018 Lawndale Dr., Murfreesboro, TN 37130 MUR	•	•	1967
Hetzler, Mr. and Mrs. Fred, 4600 Wilson Rd., Signal Mtn., TN 37377 CHA	•	•	1975 1969
Higgs Dr. Janes G., 91 Channing Way, Jackson, TN 38301 MEM.	•	•	1909
*Higgs, Dr. and Mrs. T. E., 5495 N. Angela Rd., Memphis, TN 38117 MEM		:	1977
Highbaugh, David B., 1810 Mac Alice Dr., Knoxville, TN 37918 KNO			1980
Hilton, Miss Esther A., 322 Park St., Bristol, VA 24201 BRI	•		1950
Hinkle, Mr. and Mrs. Ross, Rt. 17, Box 188, Knoxville, TN 37921 KNO	•	•	1977
Hite, Mrs. Violet W., Box 114, Woodbury, TN 37190 NAS	•	•	1978
Hixon, Mr. and Mrs. Frank, 303 Amhurst Ave., Chattanooga, TN 37411 CHA	•	•	1980
Hoff, Mr. and Mrs. Ron, 2725 Nickle Rd., Knoxville, TN 37921 KNO	•	•	1980
Holt, Lt. James G., DC USNR, 8555 L Tidewater Dr., Norfolk, VA 23503 MEM	•	•	$1966 \\ 1979$
Hoover, Mary Jo, 6901 Woodland Ln., Knoxville, TN 37919 KNO.		:	1980
Hosier, Mr. and Mrs. Robert, 712 W. Spring St., Lebanon, TN 37087 LEB			1976
*Hotchkiss, Olin W., 8 Overlook Dr., Bridgenort, W. VA 26330 COL			1975
Houk, Mrs. Ann M., 2815 22nd Ave. S., Nashville, TN 37215 NAS	•	•	1976
Howard, Mrs. M. S., 224 South Tarver Ave., Lebanon, TN 37087 LEB	•	•	1968
Howell, Dr. and Mrs. Joseph C., 5000 Oak Ridge Hwy., Apt. 1401, Knoxville, TN 37921 KNO	•	•	1947
Hoyle, Susan, 7923 Cortland Dr., Knoxville, TN 37919 KNO Analysis and Mrs. Anastacio, Jr., 3505 Rainbow Pl., Nashville, TN 37204 NAS	•	•	1966
Hudson, Mr. and Mrs. Jack, 310 Lattawoods, Dyersburg, TN 38024 TAL	•	·	$1977 \\ 1966$
Hudson, Russell A., 310 Lattawoods, Dyersburg, TN 38024 TAL	:	:	1977
Hughes, Mr. and Mrs. O. M., New Shackle Island Rd., Henderschville, TN 37075 NAS		:	1966
Hunter, Mr. and Mrs. Richard E., Rt. 6, Box 67, Murfreesboro, TN 37130 MUR			1970
Hurley, Mr. Len, 484 Cherokee Blvd., Knoxville, TN 37919 KNO			1968
Imhof, Mr. Thomas A., 1036 Pike Road, Birmingham, AL 35218 COR	•		1949
Argacesson, Dr. Jerome A., Dept. of 20010gy, Mississippi State Univ., P.O. Drawer Z, Mississippi			
State, MS 39762 COR Jackson, Miss Louise, 5037 Montclair Dr., Nashville, TN 37211 NAS			1972
	•	·	1964
Jackson, Mrs. Mary E., 35 Sherwood Dr., Clarksville, TN 37040 NAS. **Jacobson, Daniel R., Rt. 1, Box 224-A, Wildwood, GA 30757 CHA Jacobson, Lemuel, Rt. 1, Box 224-A, Wildwood, GA 30757 CHA Jabo P. Johond P. U. 612, Lease Black Sized States The second	•		1978 1970
Incoheren Toward Dr. 1 Dr. 004 (1971) and output office of the second state of the sec	:	:	1973
Jacobson, Lemuer, Rt. i, Box 224-A, Wildwood, GA 30757 CHA			1980
Jami, Alchard F., JF., OLS James BLVU., Signal Mth., IN S/S// UHA			1956
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN 38122 MEM		•	1975
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN 38122 MEM. James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN 38122 MEM.	•	•	1976
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN 38122 MEM James, Wesley K., 30 Outer Dr., Oak Ridge, TN 37830 KNO Jenkins, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN 37343 CHA			1980
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN. 38122 MEM. James, Wesley K., 30 Outer Dr., Oak Ridge, TN. 37830 KNO. Jenkins, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN. 37343 CHA.	•		3050
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN. 38122 MEM. James, Wesley K., 30 Outer Dr., Oak Ridge, TN. 37830 KNO. Jenkins, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN. 37343 CHA.	:	·	1958
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN. 38122 MEM. James, Wesley K., 30 Outer Dr., Oak Ridge, TN. 37830 KNO. Jenkins, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN. 37343 CHA.	•	:	1980
James, Mrs. C. E., 475 N. Highland, Apt. 7-H. Memphis, TN 38122 MEM. James, Wesley K., 30 Outer Dr., Oak Ridge, TN 37830 KNO. Jenkins, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN 37343 CHA. Jernigan, Dr. and Mrs. William, 108 Gallion Dr., Columbia, TN 38401 COL Johnson, Mrs. Amy, 318 E. Sixth St., Cookeville, TN 38501 UC Johnson, Mr. and Mrs. David L., Rt. #1, Box 126, Manchester, TN 37355 HR Johnson, Mrs. Cat. A., 806 Hiltrise Blvd., Johnson City, TN 37601 ELI.	•		1980 1973
James, Mrs. C. E., 475 N. Highland, Apt. 7-H, Memphis, TN. 38122 MEM. James, Wesley K., 30 Outer Dr., Oak Ridge, TN. 37830 KNO. Jenkins, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN. 37343 CHA.	•	:	1980

Iones, Mr. and Mrs. Russell A., 4135 Robert Everett Cove, Memphis, TN 38111 MEM	.974
	975
Jones, Mr. William J., 1006 West Melrose, Cookeville, TN 38501 UC	1966
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Joshi M. and M.S. W. K., JI., OOL ASIC COVE NATCECC, M. SOLO- MALL COVERS AND A COV	1980
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Kelly, Ms. Barbara, 3524 Pinellas Lane, Chattanooga, TN 37412 CHA	L978
Kennedy, James S. and Judith, 943 McKeller Dr., Tullahoma, TN 37388 HR	1978
	1961
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Kisner, Mr. and Mrs. James B., 9 Mary Ann Dr., Memphis, TN 38117 MEM	1977
Kishel, M. and Mis, Janes D., J har y Rin Dit, rempils, in Joint High	
	1980
Knauth, Mrs. Herman G., 4321 Brush Hill Rd., Nashville, TN 37216 NAS	1955
	1977
	1953
Kolb, Mr. and Mrs. John L., 419 Fairfield Circle, Memphis, TN 38117 MEM	1975
Kramer, Dr. and Mrs. Lee F., 321 Shephard Hills Dr., Madison, TN 37115 NAS	1966
Kuvkendall, Dr. and Mrs. Sam I., Rt. 6 Mooresville Pike, Columbia, TN 38401 NAS	1976
	1974
Lacy, Miss Betch, 3129 McClure Lare S.E., Knoxville, TN 37920 KN0	1955
	1965
	1973
	1976
	1978
Laughlin, Mr. Tom, Route 1, Arcadia, Kingsport, TN 37660 KIN	1976
*Lavely, Mrs. Horace T., Jr., 5928 Sedberry Rd., Nashville, TN 37205 NAS	1979
Lavely, Dr. Phil, 200 Todd St., Martin, TN 38237 TAL	1980
	1968
Lee, Mr. and Mrs. James C., 6 Frontier Bluff Rd., Lookout Mtn., TN 37350 CHA	1980
	1967
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	1980
Lewis, Mr. and Mrs. Hodge, 408 Booth Rd., Chattanooga, TN 37411 CHA	1973
	1974
Lewis, Mr. and Mrs. Richard, Rt. 3, Box 5, Bristol, TN 37620 ELI	1980
	1980
Little, Dock and Johnnie, 306 West Third St., Livingston, TN 38570 UC	1976
	1974
	1980
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS	1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS	1974 1973
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1973 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR Lura, Richard, 102 Terrace St., Johnson City, TN 37601 ELI Lyles, Mr. and Mrs. Henry, Route 6, Columbia, TN 38401 COL Lynn, Mrs. R. E. 5690 Sherry Lane, Coltewah, TN 37365 CHA	1974 1973 1970 1973 1974 1951
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1973 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977 1970
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977 1970 1980
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977 1970 1980 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977 1970 1980 1974 1980
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1977 1970 1980 1974 1980 1972
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977 1970 1980 1974 1980 1972 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1951 1950 1965 1965 1966 1966 1977 1966 1977 1970 1980 1974 1980 1974 1972 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1966 1977 1970 1980 1974 1980 1972 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1951 1950 1965 1980 1961 1966 1966 1977 1970 1970 1974 1972 1971 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1975 1980 1961 1980 1961 1980 1977 1970 1974 1974 1974 1970
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1976 1970 1970 1970 1974 1974 1970 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1965 1980 1961 1970 1970 1970 1971 1974 1971 1971 1971 1971 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1966 1977 1970 1970 1974 1974 1974 1974 1974 1970 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1965 1980 1966 1977 1970 1970 1970 1974 1974 1974 1974 1974 1974 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1965 1980 1965 1970 1970 1971 1970 1971 1971 1971 1970 1971 1970 1971 1980 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1975 1980 1965 1980 1961 1980 1977 1970 1980 1977 1970 1974 1974 1974 1974 1974 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1975 1980 1961 1960 1970 1980 1970 1970 1970 1971 1974 1970 1971 1974 1970 1971 1974 1970 1971 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1951 1955 1980 1965 1980 1961 1977 1970 1970 1970 1974 1974 1974 1974 1974 1974 1974 1974
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA Luckado, Mr. and Mrs. Tom, 937 McKellar Dr., Tullahoma, TN 37388 HR	1974 1973 1970 1973 1974 1951 1951 1955 1980 1965 1980 1966 1977 1970 1970 1974 1980 1974 1980 1974 1980 1971 1974 1970 1971 1974 1970 1971 1974
Lorance, Mr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37076 NAS Luckado, Mr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1955 1980 1965 1980 1965 1980 1966 1977 1970 1970 1970 1971 1974 1971 1971 1971 1971 1970 1971 1971 1970 1971 1970 1971 1975
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1951 1955 1980 1965 1980 1965 1980 1961 1970 1970 1970 1970 1970 1970 1971 1970 1974 1974 1974 1974 1974 1979 1931 1979 1931 1979 1931 1979 1937
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1951 1951 1950 1950 1960 1960 1970 1970 1970 1970 1970 1970 1971 1970 1971 1970 1971 1970 1971 1970 1971 1970 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1951 1955 1980 1965 1980 1965 1980 1961 1970 1970 1970 1970 1970 1970 1971 1970 1974 1974 1974 1974 1974 1979 1931 1979 1931 1979 1931 1979 1937
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Luckado, Mr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1951 1951 1950 1950 1960 1960 1970 1970 1970 1970 1970 1970 1971 1970 1971 1970 1971 1970 1971 1970 1971 1970 1971
Lorance, Mr. and Mrs. J.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Luckado, Mr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TN 37350 CHA	1974 1973 1970 1973 1974 1975 1980 1951 1955 1980 1965 1980 1965 1980 1961 1970 1980 1972 1970 1970 1970 1974 1974 1974 1974 1974 1974 1979 1931 1980 1979 1931
Lorance, Mr. and Mrs. Jo.C., 13 McKendree Circle, Hermitage, TM 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rd., Lookout Mtn., TM 37350 CHA	1974 1973 1970 1973 1974 1951 1974 1951 1975 1980 1960 1980 1980 1980 1980 1977 1970 1974 1970 1971 1970 1971 1970 1971 1970 1971 1970 1971 1980 1979 1937 1980 1979 1978
Lorance, Mr. and Mrs. Joh. 13 McKendree Circle, Hermitage, TN 37076 NAS	1974 1973 1970 1973 1974 1951 1974 1951 1980 1965 1980 1965 1980 1970 1970 1970 1970 1970 1971 1974 1970 1971 1974 1970 1971 1974 1970 1971 1974 1970 1971 1975 1980 1979 1931 1980 1978 1978 1978
Lorance, Mr. and Mrs. Joh. 13 McKendree Circle, Hermitage, TN 37076 NAS Lothers, Dr. and Mrs. John E., Jr., 201 Hardy Rdt, Lookout Wrn., TN 37350 CHA	1974 1973 1970 1973 1974 1951 1974 1951 1975 1980 1960 1980 1980 1980 1980 1977 1970 1974 1970 1971 1970 1971 1970 1971 1970 1971 1970 1971 1980 1979 1937 1980 1979 1978

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McKee, Mr. and Mrs. Reed, 1727 Cherokee Drive, Lebanon, TN 37087 LEB		 1972
McKinney, George, Rt. 2, Box 384, LaFollette, TN 37766 KNO		 1976
McLaughlin, Dr. and Mrs. Joe, 3201 New Towne Rd., Antioch, TN 37013 NAS		. 1978
McLaughling bit and mist gees out her worked in the sector in Store has a sector in the sector in th	•••	
McLaughlin, John M., 2107 Acklen Ave., Nashville, TN 37212 NAS	• • •	· 1978
McLeroy, Mr. and Mrs. Ralph, 3724 Keowee Ave., Knoxville, TN 37919 KNO	•••	• 1965
McMillan, Mrs. Melville, Rt. 2, Lascassas, TN 37085 LEB	•••	. 1970
McNees, Mary Lee, 3873 Central, Memphis, TN 38111 MEM		• 1980
McNeil, Mrs. Guy, 712 Piedmont Ave., Bristol, VA 24201 BRI		 1959
McNutt, Mr. and Mrs. William P., Jr., 2935 Valley View Rd., Knoxville, TN 37917 KNO		• 1974
McPherson, Mr. Charles, Rt. 1, Box 522, Brighton, TN 38011 MEM		. 1951
McWhorter, Mrs. J. H., Route 2, Box 183, Ravenden, AR 72459 MEM		. 1946
Meadors, Mr. and Mrs. Howard, 109 Cleveland Rd., Rossville, GA 30741 CHA		. 1958
Meadows, Mr. and Mrs. William, 2006 Barton Ave., Nashville, TN 37212 NAS	•••	. 1979
meadows, mr. and mrs. william, 2000 barton Ave., Nashville, in 57212 NAS		
Meeks, Mr. and Mrs. Gregory, 2236 Mangum Rd., Memphis, TN 38134 MEM	•••	 1978
*Mengel, Mr. and Mrs. J. T., 113 Carroll Woods, Chapel Hill NC 27514 KNO		• 1955
Menuet, Mr. and Mrs. Richard J., 8917 Fox Lonas Rd., Knoxville, TN 37919 KNO		 1979
Merritt, Mrs. Dixon, Batavia Nursing Home, Batavia, NY 14020 LEB		. 1950
Miller, Mr. and Mrs. George, Rt. 2, Box 198-E-10, Fairview, TN 37062 NAS		. 1969
Miller, Mr. and Mrs. Herbert, 801 Piedmont St., Bristol, VA 24201 BRI		. 1958
Miller, Mr. and Mrs. Thomas A., 3102 Rising Sun, Memphis, TN 38134 MEM	•••	. 1979
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Mills, Mr. and Mrs. Hubert C., 6304 Freedom Dr., Nashville, TN 37209 NAS	• • •	• 1979
Mitchell, Mr. and Mrs. R. C., 314 Gardner, Chattanooga, TN 37411 CHA		• 1980
Money, Mr. Pete, % Memphis Museum, 3050 Central Ave., Memphis, TN 38111 MEM		. 1978
*Monk, Mr. Harry, Sunny View Health Care Center, Box 23116, Nashville, TN 37212 TAL		. 1919
Monroe, Dr. Burt L., Jr., P.O. Box 23447, Anchorage, KY 40223 COR		. 1969
Moore, Mrs. Clarence E., % Mrs. Ray Orban, 4 Estate Dr., Quincy, IL 62301 MEM		
Moore, Miss Julia I., 106 Darwin Lane, Oak Ridge, TN 37930 KNO.		1949
Moore, Mrs. Myriam P., 101 Columbia Ave., Lynchburg, VA 24503 COR		• 1964
Moore, Miss Nelle, 275 Palisade St., Memphis, TN 38111 MEM		• 1944
Moose, Mr. and Mrs. Foster, 300 Leonora, Memphis, TN 38117 MEM		. 1978
Morehead, Dr. Maurice, 77 Davis Ave., Cookeville, TN 38501 UC		
Morgan, Ms. Erika, 400 Gallery Lane, C-3, Hixson, TN 37343 CHA		. 1980
**Morrell, Miss Elise, 801 Vanosdale Rd., #116, Knoxville, TN 37919 KNO		. 1939
Weiner Mar and Mar A (2) Im 201 H (2) And And A (2) IM (2) AND	•••	1979
Morris, Mr. and Mrs. A. C., Jr., 891 W. Outer Dr., Oak Ridge, TN 37830 KNO		
**Mudge, Mr. E. W., Jr., 3414 Republic Bank Tower, Dallas, TX 75201 COR		. 1967
Mullins, Ms. Mary Kate, 1455 Rosemary Lane, Memphis, TN 38104 MEM		 1978
Murphy, Mrs. Charles B., Rt. 2, Brentwood, TN 37027 NAS		• 1964
*Mynatt, Mrs. Elery, 304 East Brow Rd., Lookout Mtn., TN 37350 CHA		. 1978
Neidert, Edward and Mary, Box 133, Loretto, TN 38469 BR		. 1980
Nelson, Mrs. H. C., 4107 Anderson Pike, Signal Mtn., TN 37377 CHA		. 1966
		1945-1937
Nevius, Mr. and Mrs. Richard, Rt. 6, Box 348, Greeneville, TN 37743 GRE	•••	
Newnam, Mr. Calvin, % Memphis Pink Palace Museum, 3050 Central Ave., Memphis, TN 38111 MEM	• • •	• 1976
		. 1979
Newton, Mr. and Mrs. Edward, 2366 Strathmore Circle N., Memphis, TN 38112 MEM		
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS		. 1967
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS		
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS	· · ·	· 1967 · 1971
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS	· · ·	 1967 1971 1970
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS	· · ·	 1967 1971 1970
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS	· · · ·	 1967 1971 1970 1953 1965
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. HMNicholson, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37828 KNO HMNolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR	· · · ·	 1967 1971 1970 1953 1965 1955
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS	· · · ·	 1967 1971 1970 1953 1965 1955 1950
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. #WNicholson, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37828 KNO #WNolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR		 1967 1971 1970 1953 1965 1955 1950 1970
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. #WNicholson, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37828 KNO #WNolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR		 1967 1971 1970 1953 1965 1955 1950 1970
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. H=Nicholson, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37220 NAS. H=Norman, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37100 MUR Nodom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL	· · · ·	 1967 1971 1970 1953 1965 1955 1950 1970 1974
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nicholson, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37828 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 3764 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS	· · · · · · · · · · · · · · · · · · ·	 1967 1971 1970 1953 1965 1955 1950 1970 1974 1980
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37215 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37644 TAL 01iver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS 0'Neil, Dr. A. W., P.O. Box 586, Faifurrias, TX 78355 COR	· · · · · · · · · · · · · · · · · · ·	 1967 1970 1970 1953 1965 1955 1950 1970 1974 1980 1961
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nicholson, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37628 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI *Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37206 NAS O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37206 KNO	· · · · · · · · · · · · · · · · · · ·	 1967 1971 1970 1953 1965 1955 1950 1970 1974 1980 1961 1949
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Gharles, 86 Pine Rd., Box 402, Norris, TN 37828 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MMR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 3764 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS 'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37020 KNO Osborne, Mrs. Joe, 1525 Robin Hood Lane, Johnson City, TN 37601 ELI.		. 1967 . 1971 . 1970 . 1953 . 1965 . 1955 . 1955 . 1950 . 1970 . 1974 . 1980 . 1961 . 1949 . 1973
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL		1967 1971 1970 1953 1955 1955 1955 1950 1970 1970 1970 1970 1970 1970 1970 1970 1970 1970 1970 1970 1970 1961 1973 1966
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Rarales, 86 Pine Rd., Box 402, Norris, TN 37232 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37601 ELI Otton, Mrs. Elen E., 204 Sunnybrook Tr.al, Signal Mtn., TN 37377 CHA		. 1967 1971 1970 1953 1965 1955 1955 1950 1970 1970 1974 1980 1961 1949 1973 1966 1950
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MVR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 3764 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37205 NAS *Ole, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37205 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37601 ELI. Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 BRI Otten, Mrs. Joe, J., Jr., 136 Fairways Drive, Hendersonville, TN 37075 LEB Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37075 LEB		 1967 1971 1970 1953 1965 1955 1950 1970 1974 1980 1961 1949 1973 1966 1980 1977
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37628 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL Odom, Mr. Tom, 3911 Drwod Dr., Kingsport, TN 37664 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37205 KNS O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37206 KNO Osborne, Mrs. Joe, 1525 Robin Hood Lane, Johnson City, TN 37610 ELI Otto, Ms. Ellen E., 204 Sumybrook Trall, Signal Mtn., TN 37377 CHA Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO 		 1967 1971 1970 1973 1965 1955 1955 1950 1970 1974 1980 1961 1949 1973 1966 1980 1977 1947
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Garares, 86 Pine Rd., Box 402, Norris, TN 37828 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MMR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS 'Noreil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37601 ELI Otto, Ms. Ellen E., 204 Sunnybrook Tr.ail, Signal Mtn., TN 37377 CHA Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37020 KNO Overton, Mrs. George, Jr., 1827 York, Menyhis, TN 38104 MEM		 1967 1971 1970 1973 1965 1955 1955 1950 1970 1974 1980 1961 1949 1973 1966 1980 1977 1947
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Garares, 86 Pine Rd., Box 402, Norris, TN 37828 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MMR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS 'Noreil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37601 ELI Otto, Ms. Ellen E., 204 Sunnybrook Tr.ail, Signal Mtn., TN 37377 CHA Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37020 KNO Overton, Mrs. George, Jr., 1827 York, Menyhis, TN 38104 MEM		 1967 1971 1970 1973 1965 1955 1955 1950 1970 1974 1980 1961 1949 1973 1966 1980 1977 1947
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MMR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 3764 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37205 NAS *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 3764 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS O'Neil, Dr. A. W., P. O. Box 556, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37601 ELI. Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 BRI Otto, Ms. Ellen E., 204 Sunnybrook Trail, Signal Mtn., TN 37075 LEB Overton, Mrs. E. F., 316 Fairways Drive, Hendersonville, TN 37075 LEB Overton, Mrs. E. F., 316 Fairways Drive, Hendersonville, TN 37920 KNO Owen, Mr. and Mrs. C. J., 187. 1867 Fairways Drive, Hendersonville, TN 37075 LEB Overton, Mrs. E. F., 3316 Bunker Hill Drive, Knoxville, TN 37920 KNO Owen, Mr. and Mrs. J. Br., 1827 York, Memphis, TN 38104 MEM Overma, Mrs. W. J., Jr., 1867 Fairways Drive, Hendersonville, TN 37075 LEB Overton, Mr. and Mrs. J. Br., 2030 North Hills Blvd, Knoxville, TN 37917 KNO		 1967 1971 1970 1953 1965 1955 1950 1970 1974 1980 1961 1949 1973 1966 1980 1977 1947 1947 1947
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Charles, 86 Pine Rd., Box 402, Norris, TN 37228 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Rute 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37205 NAS O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37501 ELI Otten for, Mrs. He., 204 Sunybrook Trail, Signal Mtn., TN 37377 CHA Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO Overman, Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. J. B., 2930 North Hills Blvd., Knoxville, TN 37917 KNO Papachristou, Dr. Gerald C., P.O. Box 275, University, MS 38677 MEM 		 1967 1971 1970 1953 1965 1955 1950 1970 1970 1970 1970 1970 1970 1971 1966 1980 1973 1966 1980 1977 1947 1947 1947 1947 1945
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Garae, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS. *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR. Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI. *Odom, Dr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI. *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 3764 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS. *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37635 COR. Oliveil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37202 KNO Osborne, Mrs. Joe, 1525 Robin Hood Lane, Johnson City, TN 37630 ELI. Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 BRI. Overton, Mrs. E. E., 3316 Bunker Hill Drive, Knoxville, TN 37377 CHA. Overnon, Mrs. B., 2930 North Hills Blvd., Knoxville, TN 37917 KNO Papachristou, Dr. Gerald C., P.O. Box 275, University, MS 3047 MEM. **Pardue, Paul S., Box 93-A Beechwood Road, Rt. 23, Knoxville, TN 37920 KNO 		. 1967 1971 1970 1953 1965 1955 1955 1950 1970 1970 1974 1980 1961 1949 1973 1966 1980 1977 1977 1947 1947 1975 1953
Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS		. 1967 1971 1970 1953 1965 1955 1955 1950 1970 1974 1980 1961 1949 1963 1966 1980 1973 1966 1980 1977 1947 1978 1947 1975 1953 1976
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Charles, 86 Pine Rd., Box 402, Norris, TN 37232 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI. Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. form, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS o'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37601 ELI. Otton, Ms. Ellen E., 204 Sunnybrook Tr.al, Signal Mtn., TN 37377 CHA. Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37020 KNO Overn, Mrs. Ber, George, Jr., 1827 York, Menphis, TN 37610 KEI Overn, Mr. and Mrs. J. B., 2930 North Hills Blvd., Knoxville, TN 37917 KNO Oven, Mr. and Mrs. J. B., 2930 North Hills Blvd., Knoxville, TN 37917 KNO Papachristou, Dr. Gerald C., P.O. Box 275, University, MS 36677 MEM. **Pardue, Paul S., Box 93-A Beechwood Road, Rt. 23, Knoxville, TN 3790 KNO Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Monteagle, TN 37404 CHA. 		. 1967 1971 1970 1953 1965 1955 1955 1955 1950 1970 1970 1970 1973 1949 1973 1966 1980 1977 1977 1977 1947 1947 1947 1949 1949
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 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Gharles, 86 Pine Rd., Box 402, Norris, TN 37228 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. form, 3911 Inwood Dr., Kingsport, TN 37664 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37205 NAS O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37206 KNO Osborne, Mrs. Joe, 1525 Robin Hood Lane, Johnson City, TN 37601 ELI Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37377 CHA Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO Owen, Mr. and Mrs. Je. B., 2930 North Hills Blvd., Knoxville, TN 37920 KNO Owen, Mr. and Mrs. J. Br., 2930 North Hills Blvd., Knoxville, TN 37920 KNO Owen, Mr. and Mrs. J. Elen, 2043 University, MS 38677 MEM *Pardue, Paul S., Box 93-A Beechwood Road, Rt. 23, Knoxville, TN 37326 KNO Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Monvteagle, TN 37326 KNO Parker, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37326 KNO Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Monvtalle, TN 37326 KNO Parker, Miss Anna Mary, 200 Seyent St., Chattanooga, TN 3740 CHA Parker, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37205 NAS Parker, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37205 NAS 		. 1967 1971 1970 1953 1965 1955 1955 1955 1950 1970 1970 1970 1973 1949 1973 1966 1980 1977 1977 1977 1947 1947 1947 1949 1949
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 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37228 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Rute 3, Bluff City, TN 37616 BRI Odom, Dr. and Mrs. H. W., Rute 3, Bluff City, TN 37616 BRI Odom, Dr. and Mrs. H. W., Rute 3, Bluff City, TN 37616 BRI Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37205 NAS O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37920 KNO Osborne, Mrs. joe, 1525 Robin Hood Lane, Johnson City, TN 37601 ELI Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 ERI Otten, Mrs. E. E., 3316 Bunker Hill Drive, Knoxville, TN 37920 KNO Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37917 KNO Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 CM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 37920 KNO Owen, Mr. and Mrs. George, Jagel Cilf Rd., Monxville, TN 37920 KNO Parker, Miss Anna Mary, 201 Eagle Cilf Rd., Monteagle, TN 37356 HR Parker, Miss Anna Mary, 201 Eagle Cilf Rd., Monxville, TN 37205 NAS Parker, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37205 NAS Paramer, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37205 NAS Paramer, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37205 NAS Parker, Mr. and Mrs. Henry E., 3800 Richand Ave., Nashville, TN 37205		. 1967 1971 1970 1953 1965 1955 1955 1950 1970 1970 1970 1970 1970 1973 1966 1980 1973 1966 1980 1977 1947 1975 1975 1955–1963 1980 1977 1970 1970 1970 1970 1977 1977 1978 1970 1970 1977 1978 1979 1970 1970 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979
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 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mrs. Charles, 86 Pine Rd., Box 402, Norris, TN 37232 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR *Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37220 KNO Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37206 KNO O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37920 KNO Osborne, Mrs. Joe, 1525 Robin Hood Lane, Johnson City, TN 37601 ELI Otton, Ms. Ellen E., 204 Sumybrook Trail, Signal Mtn., TN 37377 CHA Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. Je B., 2930 North Hills Blvd., Knoxville, TN 37920 KNO Owen, Mr. and Mrs. Jo Eagle Cliff Rd., Monxteagle, TN 37326 HR **Parkue, Paul S., Box 93-A Beechwood Road, Rt. 23, Knoxville, TN 37205 NAS *Parker, Mis Anna Mary, 201 Eagle Cliff Rd., Monxteagle, TN 37404 CHA Parker, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37230 KNO **Parker, Mr. Johnny T., 1610 East 17th St., Chattanooga, TN 37404 CHA Parker, Mr. and Mrs. Henry E., 3800 Richland Ave., Nashville, TN 37210 NAS Partick, Mr. and Mrs. Renry E., 3800 Richland Ave., Nashville, TN 37210 MAS Parker, Mr. and Mrs. Benry E.,		$\begin{array}{c} . & 1967 \\ . & 1971 \\ . & 1970 \\ . & 1953 \\ . & 1965 \\ . & 1955 \\ . & 1950 \\ . & 1970 \\ . & 1970 \\ . & 1950 \\ . & 1970 \\ . & 1970 \\ . & 1970 \\ . & 1973 \\ . & 1966 \\ . & 1980 \\ . & 1977 \\ . & 1975 \\ . & 1975 \\ . & 1977 \\ . & 1976 \\ . & 1977 \\ . & 1976 \\ . & 1979 \\ . & 1970 \\ . & 1960 \\ . & 1979 \\ . & 1977 \\ . & 1978 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1965 \\ . & 1980 \\ \end{array}$
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37628 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwoed, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Rute 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. H. W., Rute 3, Bluff City, TN 376161 BRI Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37205 KNO Osborne, Mrs. Joe, h525 Robin Hood Lane, Johnson City, TN 37601 ELI Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37737 CHA. Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 37920 KNO Papachristou, Dr. Gerald C., P.O. Box 275, University, MS 38607 MEM Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Nonvtille, TN 37920 KNO Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Nonvtalle, TN 37404 CHA Parame, Mr. George, Jr., 6643 Monmouth Dr., Menphis, TN 36138 MEM Parken, Mr. Gloff, 909 W. Seventh St., Clantanooga, TN 37404 CHA Parken, Mr. Suders, F., 4641 Villa Green Drive, Nashville, TN 37215 NAS Parken, Mr. George, Jr., 6643 Monmouth Dr., Memphis, TN 36138 MEM Peeke, Mr. Suder H., O. Box 26, Clinch Valley College, Wise, VA 24293 OOR Peeters, Mrs. Suevelyn N., 761 Elysian Fields Rd., Nashville, TN 37204 NAS Peterson, Dr. Clell T., Box 2364, University Station, Murray, KY		. 1967 1971 1970 1953 1965 1955 1955 1950 1970 1974 1980 1974 1980 1974 1973 1966 1980 1977 1947 1978 1947 1975 1955 1955 1955 1970 1970 1970 1979 1979 1979 1979 1979 1979 1977 1978 1978
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nolan, Mr. Charles, 86 Pine Rd., Box 402, Norris, TN 37628 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, 0K 74401 COR. Norris, Dr. and Mrs. Raymond, 4021 Sunnybrook Dr., Nashville, TN 37205 NAS *Norwoed, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR Nunley, Mr. and Mrs. H. W., Rute 3, Bluff City, TN 37618 BRI Odom, Dr. and Mrs. H. W., Rute 3, Bluff City, TN 376161 BRI Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Orleans, Mrs. S. P., 1218 Ford Place, Knoxville, TN 37205 KNO Osborne, Mrs. Joe, h525 Robin Hood Lane, Johnson City, TN 37601 ELI Ottenfeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37737 CHA. Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37920 KNO Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 38104 MEM Owen, Mr. and Mrs. George, Jr., 1827 York, Memphis, TN 37920 KNO Papachristou, Dr. Gerald C., P.O. Box 275, University, MS 38607 MEM Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Nonvtille, TN 37920 KNO Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Nonvtalle, TN 37404 CHA Parame, Mr. George, Jr., 6643 Monmouth Dr., Menphis, TN 36138 MEM Parken, Mr. Gloff, 909 W. Seventh St., Clantanooga, TN 37404 CHA Parken, Mr. Suders, F., 4641 Villa Green Drive, Nashville, TN 37215 NAS Parken, Mr. George, Jr., 6643 Monmouth Dr., Memphis, TN 36138 MEM Peeke, Mr. Suder H., O. Box 26, Clinch Valley College, Wise, VA 24293 OOR Peeters, Mrs. Suevelyn N., 761 Elysian Fields Rd., Nashville, TN 37204 NAS Peterson, Dr. Clell T., Box 2364, University Station, Murray, KY		$\begin{array}{c} . & 1967 \\ . & 1971 \\ . & 1970 \\ . & 1953 \\ . & 1965 \\ . & 1955 \\ . & 1950 \\ . & 1970 \\ . & 1970 \\ . & 1950 \\ . & 1970 \\ . & 1970 \\ . & 1970 \\ . & 1973 \\ . & 1966 \\ . & 1980 \\ . & 1977 \\ . & 1975 \\ . & 1975 \\ . & 1977 \\ . & 1975 \\ . & 1976 \\ . & 1979 \\ . & 1970 \\ . & 1960 \\ . & 1979 \\ . & 1970 \\ . & 1964 \\ . & 1977 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1978 \\ . & 1977 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1978 \\ . & 1965 \\ . & 1980 \\ \end{array}$
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. ***Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. ***Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. **Norris, Dr. and Mrs. Raymod, 4021 Sumpbrook Dr., Nashville, TN 37220 NAS **Norvood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR. *Nunley, Mr. and Mrs. H. W., Ncute 3, Bluff City, TN 37618 BRI. Odom, Dr. and Mrs. H. W., Ncute 3, Bluff City, TN 37614 BRI. Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR. *Odom, Mr. Tom, 3911 Invood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS o'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 ENI. Otton fdeld, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 ENI. Otto, Ms. Ellen E., 204 Sunnybrook Trail, Signal Mtn., TN 37377 CHA. Owerton, Mrs. E. E., 3316 Bunker Hill Drive, Knoxville, TN 37927 KMO. Owen, Mr. and Mrs. J. B., 2930 North Hills Blvd., Knoxville, TN 37917 KMO. Paaker, Miss Anna Mary, 201 Eagle Cliff Rd., Monteagle, TN 37404 CHA. Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Monteagle, TN 37404 CHA. Parker, Mr. Johnny T., 1610 East 17th St., Chattanooga, TN 37404 CHA. Parker, Mr. Johny N., Socar F., 4641 Villa Green Drive, Nashville, TN 37205 NAS Parker, Mr. and Mrs. Gearge, Jr., 6643 Monmouth Dr., Memphis, TN 38138 MFM. Peeples, Mr. and Mrs. Wistwillime, P., and Rob, 150 Bendel Circle, Memohis, TN 38117 MEM		. 1967 1971 1970 1953 1965 1955 1950 1970 1970 1970 1970 1970 1970 1970 1970 1973 1966 1980 1977 1947 1975 1955–1963 1970 1975 1970 1979 1979 1979 1979 1977 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1977 1978 1979 1979 1977 1978 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1979 1977 1978 1979 1979 1979 1977 1978 1977 1978 1977 1978 1977 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978 1977 1978
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. **Nicholson, Mr. Charles, 86 Fine Rd., Box 402, Norris, TN 37628 KNO **Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. Norman, Mr. James L., 502 N. 14th St., Muskogee, OK 74401 COR. Norris, Dr. and Mrs. Raymod, 4021 Sumpbrook Dr., Nashville, TN 37220 NAS *Norwood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR. Nunley, Mr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI. Odom, Dr. and Mrs. H. W., Route 3, Bluff City, TN 37618 BRI. Odom, Mr. Tom, 3911 Inwood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 566, Falfurrias, TX 78355 COR. O'Nein, Mrs. J. E., 21316 Bunker Hill Drive, Knovyille, TN 37075 LEB Otto, Ms. Ellen E., 204 Sunnybrook Trail, Signal Mtn., TN 37377 CHA. Overman, Mrs. W. J., Jr., 136 Fairways Drive, Hendersonville, TN 37075 LEB Overno, Mrs. and Mrs. J. B., 2930 North Hills Blvd., Knoxville, TN 37200 KNO Owen, Mr. and Mrs. George, Jr., 1427 Vork, Memphis, TN 38104 MEM. Aven, Mr. and Mrs. Hence, P., 3800 Kichland Ave., Nashville, TN 37200 KNO Paachristou, Dr. Gerald C., P.O. Box 275, University, MS 3667 MEM. **Pardue, Paul S., Box 93-A Beechwood Road, Rt. 23, Knoxville, TN 37200 KNO Parmer, Mr. and Mrs. Henry F., 3800 Kichland Ave., Nashville, TN		$\begin{array}{c} . 1967 \\ . 1971 \\ . 1970 \\ . 1953 \\ . 1965 \\ . 1955 \\ . 1950 \\ . 1950 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1971 \\ . 1980 \\ . 1960 \\ . 1980 \\ . 1997 \\ . 1947 \\ . 1947 \\ . 1947 \\ . 1947 \\ . 1975 \\ . 1953 \\ . 1976 \\ . 1976 \\ . 1976 \\ . 1977 \\ . 1977 \\ . 1977 \\ . 1978 \\ . 1960 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1977 \\ . 1978 \\ . 1977 \\ . 1977 \\ . 1977 \\ . 1978 \\ . 1977 \\ . 1977 \\ . 1978 \\ . 1977 \\ . 197$
 Nichols, Mrs. Robert C., 4621 Franklin Rd., Nashville, TN 37220 NAS. ***Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. ***Nolan, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NAS. **Norris, Dr. and Mrs. Raymod, 4021 Sumpbrook Dr., Nashville, TN 37220 NAS **Norvood, Mr. Joseph R., 1329 Goodwin Ave., Charlotte, NC 28205 COR. *Nunley, Mr. and Mrs. H. W., Ncute 3, Bluff City, TN 37618 BRI. Odom, Dr. and Mrs. H. W., Ncute 3, Bluff City, TN 37614 BRI. Odom, Dr. and Mrs. E. P., 1700 E. Main St., Murfreesboro, TN 37130 MUR. *Odom, Mr. Tom, 3911 Invood Dr., Kingsport, TN 37664 TAL. Oliver, Miss Alberta, 4514 Graycroft Ave., Nashville, TN 37216 NAS o'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Dr. A. W., P.O. Box 586, Falfurrias, TX 78355 COR. O'Neil, Mr. and Mrs. C. T., 417 Brookwood Dr., Bristol, TN 37620 ENI. Otton feld, Mr. and Mrs. C. T., 412 Brookwood Dr., Bristol, TN 37620 ENI. Otto, Ms. Ellen E., 204 Sunnybrook Trail, Signal Mtn., TN 37377 CHA. Owerton, Mrs. E. E., 3316 Bunker Hill Drive, Knoxville, TN 37920 KNO. Owen, Mr. and Mrs. J. B., 2930 North Hills Blvd., Knoxville, TN 37917 KNO. Papachristou, Dr. Gerald C., P.O. Box 275, University, MS 38677 MEM. **Pardue, Paul S., Box 93-A Beechwood Road, Rt. 23, Knoxville, TN 37205 KNO. Parker, Miss Anna Mary, 201 Eagle Cliff Rd., Monteagle, TN 37404 CHA. Parker, Mr. Johnny T., 1610 East 17th St., Chattanooga, TN 37404 CHA. Parker, Mr. Johnny T., 1610 East 17th St., Chattanooga, TN 37404 CHA. Parker, Mr. Socar F., 4641 Villa Green Drive, Nashville, TN 37205 NAS Parker, Mr. and		$\begin{array}{c} . 1967 \\ . 1971 \\ . 1970 \\ . 1953 \\ . 1965 \\ . 1955 \\ . 1950 \\ . 1950 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1971 \\ . 1980 \\ . 1960 \\ . 1980 \\ . 1997 \\ . 1947 \\ . 1947 \\ . 1947 \\ . 1947 \\ . 1975 \\ . 1953 \\ . 1976 \\ . 1976 \\ . 1976 \\ . 1977 \\ . 1977 \\ . 1977 \\ . 1978 \\ . 1960 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1970 \\ . 1977 \\ . 1978 \\ . 1977 \\ . 1977 \\ . 1977 \\ . 1978 \\ . 1977 \\ . 1977 \\ . 1978 \\ . 1977 \\ . 197$

Powell, Mr. Albert L., Jr., Route #1, Maceo, KY 42355 COR Pressnell, Allen and Diane, Route #3, Columbia, TN 38401 COL				• •			1934
Pressnell, Allen and Diane, Route #3, Columbia, TN 38401 COL							1976
Pressnell, Mrs. Polly, 2718 Gray Circle, Columbia, TN 38401 COL							1980
Drian Mar De id Lin 1054 Old Vielen Dive Distribution The 27007 MAC	•	•••	•••	• •	•••		1970
Price, Mrs. David, Jr., 1954 Old Hickory Blvd., Brentwood, TN 37027 NAS	•	• • •	• •	•	• •		
*Price, Dr. Edwin F., P.O. Box 5033, Jonesboro, AR 72401 COR **Prichard, Mack, 3101 West End Ave., Apt. 306, Nashville, TN 37203 NAS	•	• • •	• •	• •	• •		1979
***Prichard, Mack, 3101 West End Ave., Apt. 306, Nashville, TN 37203 NAS	•		• •	•			1967
Priest, Miss Gladys, P.O. Box 663, Collegedale, TN 37315 CHA	•			•		•	1980
Purnell, Mrs. Jim, 120 Oak Hill Circle, Lebanon, TN 37087 LEB				•			1974
Puryear, Mr. and Mrs. W.A., 4215 Harding Rd., #910, Nashville, TN 37205 NAS							1958
Quanta Flighth M Sil Brock Hollow Nachville TN 37205 NAS	•		•••	•	•••		1978
Queener, Elizabeth M., 611 Brook Hollow, Nashville, TN 37205 NAS Quesemberry, Larry and Deanna, Rt. 0, Box 56-A, Murfreesboro, TN 37130 MUR	•	• • •	• •	• •	•••		
Quesemberry, Larry and Deanna, Rt. 6, Box 36-A, Murireesboro, IN 37130 MUR	•	• • •	• •	•	• •		1980
Quick, John Jay, 1715 Valley Rd., Clarksville, TN 37040 TAL	•	• • •	•••	•	• •		1980
Quinn, Mr. Yancey, 4451 Sequoia Rd., Memphis, TN 38117 MEM	•			•		•	1972
Ragland, Miss Ella H., 920 N. Lafayette, Brownsville, TN 38012 MEM							1945
Ramey, Patricia, 114 Chisolm Dr., Starkville, MS 39759 COR							1977
Ramm, Ruth and Heinrich, 606 Larrymore St., Manchester, TN 37355 HR	•	•••	•••	•	•••	•	
							1974
Ratledge, Mr. and Mrs. Dcug, 1506 Sun Valley Drive, Greeneville, TN 37743 GRE .	•	• • •	• •	•	• •	•	1977
Raye, Mr. and Mrs. Larry D., 4008 Dorcas Dr., Nashville, TN 37215 NAS	•				•	1976-	1980
Reed, Mr. Jeffrey, 212 Piedmont Dr., Lebanon, TN 37087 LEB							1979
Reeves, Mark, Botany Dept., Univ. of Tennessee, Knoxville, TN 37916 KNO							1980
							1972
Reid, Robert R., Jr., 2616 Mountain Brook Parkway, Mountain Brook, AL 35223 COR							
Rentschler, Mr. and Mrs. George H., Jr., 8300 Sawyer Brown Rd., K-304, Nashville	, Т	N 372	21 1	NAS	•		1980
Restivo, Mr. and Mrs. Ernest J., 1248 E. Crestwood Dr., Memphis, TN 38117 MEM .	•		• •	•		. •	1968
Reynolds, Mr. and Mrs. A. E., 807 Maple, Bristol, TN 37620 BRI						· •	1958
Rich, Mrs. C. W., 304 Edgeview Dr., Nashville, TN 37211 NAS							1977
Riddle, Mr. and Mrs. Henry, E. Main St., Lorreto, TN 38469 BR			• •		• •	•	1972
Riggins, Mr. and Mrs. John, 746 Harpeth Parkway West, Nashville, TN 37221 TAL .							1969
Rimpley, Edwin C. and Marsha, 521 Wanda Lane, Tullahoma, TN 37388 HR	•			•			1978
Ring, Mr. and Mrs. Ralph, 1815 N. Locust Ave., Lawrenceburg, TN 38464 BR							1972
Ripley, Mr. and Mrs. Kenneth L., P.O. Box 54, Afton, TN 37616 GRE							1978
Ritchie, Dr. and Mrs. Lawrence, Rt. 28 Foster Lane, Knoxville, TN 37920 KNO	•				•••		1978
Ritchie, bi. and Mis. Lawrence, Rt. 25 Foster Lane, Rhoxville, IN 37520 RNO	•	• • •	•••	•	•••		
Roach, Mr. and Mrs. Robert E., 1823 Clayton Dr., Chattanooga, TN 37421 CHA	•	• • •	• •	•	• •	•	1980
Roark, Mrs. Martha L., 23 Sevier, Memphis, TN 38111 MEM	•			•	• •	•	1973
Robb, Jim, Old Stone Fort State Park, Manchester, TN 37355 HR							1980
**Robbins, Mr. Chandler S., 7900 Brooklyn Bridge Road, Laurel, MD 20810 COR							1955
Roberts, Herbert W., Fall Creek Falls State Park, Rt. 3, Pikeville, TN 37367 TA							1976
Roberts, neibert W., fall Greek falls State fark, Rt. 5, Fikeville, IN 57507 TA	L	•••	• •	•	• •		
Robertson, Mr. and Mrs. James, 523 Wanda Drive, Nashville, TN 37210 NAS	•	•••	•••	•	•	1977-	1974
Robertson, Mr. and Mrs. Jerry, 917 Ridgeway Dr., Signal Mtn., TN 37377 CHA	•		• •	•		•	1979
Rogers, David P., 7123 Riverwood, Germantown, TN 38138 MEM	•			•			1980
Rogers, Mrs. Erma, Rt. 1, Box 192, Hillsboro, TN 37342 HR							1976
Rollins, Mr. and Mrs. Charles, 3120 Beechrun, Memphis, TN 38128 MEM							1975
Refilling, Mills and Mills Charles, 5120 Becching, Ne 17927 COD	•	•••	•••	•	• •		1933
Ross, Hollis T., 81 Fairmont Dr., Lewisburg, PA 17837 COR	•	• • •	•••	•	• •		
Ryder, Mr. and Mrs. Sterling C., 129-E Tennessee Ave., Oak Ridge, TN 37830 KNO	•	• • •	•••	•	•••	• •	1969
Sabyer, Mrs. Nancy, Box 116 Liberty Chapel Rd., Mt. Juliet, TN 37122 LEB	•		• •	•			1980
Sanders, Mr. and Mrs. Kenneth B., Rt. 28 Sevierville Pike, Box 203, Knoxville, Th	N	37920	KNO				1955
Sands, Mrs. Lada, 1101 Woodview Ave., Memphis, TN 38117 MEM							1975
Sands, his Lada, it in nodview Aver, hempits, in Soit hem to the term	•		•••	•	•••		1974
Satterwhite, Mr. and Mrs. John, Route #7, Columbia, TN 38401 COL	•	• • •	• •	•	•••	•	
Sawyer, Mrs. Marguerite, 604 Estes Ave., Nashville, TN 37215 NAS	•	• • •	• •	•	•••		1962
Schell, Mr. Edward H., 2514 Brown's Mill Rd., Johnson City, TN 37601 ELI	•		• •	•		•	1975
Schiller, Mrs. Henry A., 3572 Allandale Rd., Memphis, TN 38111 MEM							1956
Schippers, Mrs. Adair and Sean, 4884 Marlin Cove, Memphis, TN 38117 MEM							1979
**Schreiber, Mr. Dan, Jr., % Duane H. Reeder, 5409 W. Sanna Dr., Glendale, AZ 853							1960
Schreiber, Mr. and Mrs. E. D., Sr., 3518 Pleasant Valley Rd., Nashville, TN 3720							1963
Scott, Mr. Frederic R., 115 Kennondale Lane, Richmond, VA 23226 COR	•	• • •	• •	•	• •		1955
Scott, Mrs. Leland G., Hickory Harbor, Gallatin, TN 37066 NAS	•			•		•	1973
Scurlock, William H., 3722 Richland Ave., Nashville, TN 37205 NAS							1975
Seahorn, Mr. and Mrs. Charles, Jr., 3027 Curtis, Memphis, TN 38118 MEM							1980
Sellars, Bill, 122 Greenlawn Dr., Lebanon, TN 37087 LEB							1979
					•••		
Sellars, Mr. and Mrs. John, 122 Greenlawn Dr., Lebanon, TN 37087 LEB					•••		1969
Selvidge, Kath een, Rt. 1, Box 187, Birchwood, TN 37308 CHA					• •		1979
Senn, Mr. and Mrs. J. R., 225 Longview Dr., Rossville, GA 30741 CHA	•			•		•	1975
Senter, The Rev. and Mrs. William, 313 W. Hill Drive, Lebanon, TN 37087 LEB							1968
Sexton, Mr. John W., Rt. 1, Box 82-A, Dover, TN 37058 TAL							1971
Seymour, Dr. Edward T., 5055 Lakeview Dr., Nashville, TN 37220 NAS							1971
					• •		1977
Shaffer, Mr. and Mrs. David, P. O. Box 368, Crossville, TN 38555 NAS	•	• • •	• •	•	• •		
Shapiro, Mr. and Mrs. J. B., Jr., Rt. 2, Columbia, TN 38401 COL Sharp, Mr. and Mrs. A. Boyd, 245 Peters Rd., Knoxville, TN 37919 KNO	•	•••	•••	•	• •		1977
Sharp, Mr. and Mrs. A. Boyd, 245 Peters Rd., Knoxville, TN 37919 KNO			• •	•	• •		1970
Sharp, Mr. and Mrs. R. K., 505 Chesterfield Ave., Nashville, TN 37212 NAS	•					•	1963
Sharp, Mr. Vernon, Rt. 5, Wilson Pike, Franklin, TN 37064 NAS	•		• •	•			1921
	•		• •	:			
Sharp, Mrs. Walter, Rt. 2. Beech Creek Rd., Brentwood, TN 37027 NAS	:	: : :	::	•	•••		
Sharp, Mrs. Walter, Rt. 2, Beech Creek Rd., Brentwood, TN 37027 NAS	:	· · · · · ·	· · · ·	:			1952
Sharp, Mrs. Walter, Rt. 2, Beech Creek Rd., Brentwood, TN 37027 NAS Sharpless, Miss Dorothy E., 201 Bogart Drive, Apt. 14, Sevierville, TN 37862 KN		· · · ·	· · · · ·	:	: :	•••	1952 1957
Sharp, Mrs. Walter, Rt. 2, Beech Creek Rd., Brentwood, TN 37027 NAS Sharpless, Miss Dorothy E., 201 Bogart Drive, Apt. 14, Sevierville, TN 37862 KN(Shaver, Mr. and Mrs. David C., 472 Swan Ridge Circle, Memphis, TN 38122 MEM	•	· · · ·	· · · · ·	:	•		1952 1957 1979
Sharp, Mrs. Walter, Rt. 2, Beech Creek Rd., Brentwood, TN 37027 NAS Sharpless, Miss Dorothy E., 201 Bogart Drive, Apt. 14, Sevierville, TN 37862 KNG Shaver, Mr. and Mrs. David C., 472 Swan Ridge Circle, Memphis, TN 38122 MEM Shay, Sheila, 3101 West End Ave., Apt. 308, Nashville, TN 37203 NAS	。 。		· · · · ·	:	•	· ·	1952 1957 1979 1978
Sharp, Mrs. Walter, Rt. 2, Beech Creek Rd., Brentwood, TN 37027 NAS Sharpless, Miss Dorothy E., 201 Bogart Drive, Apt. 14, Sevierville, TN 37652 KN. Shaver, Mr. and Mrs. David C., 472 Swan Ridge Circle, Memphis, TN 38122 MEM Shay, Sheila, 3101 West End Ave., Apt. 308, Nashville, TN 37203 NAS Sheiton, Mr. and Mrs. H. Clary, 4858 Shady Grove Rd., Memphis, TN 38117 MEM	。 。	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	:	•	· ·	1952 1957 1979 1978 1978
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Smith, Dr. Arlo I., 3724 Oakley Ave., Memphis, TN 38111 MEM Smith, Mrs. Arlo I., 3724 Oakley Ave., Memphis, TN 38111 MEM	1960
Smith, br. Alto 1., 5724 baktey Aver, Hemphils, IN Solit, Half	
Smith, Mrs. Avio 1., 3724 Uakiey Ave., Memphis, TN 3811 MEM	1953
Smith, Mrs. Arthur S., 100 Otari Drive, Rt. 14, Kingsport, TN 37664 TAL	1960
*Smith, Dr. Charles, Laboratory of Ornithology, Cornell Univ., Ithaca, NY 14850 COR	1963
Smith, Mr. and Mrs. Luois F., 3809 Riverview Rd., Knoxville, TN 37914 KNO	1954
Smith, Lucile Choate, 4035 Skyland Dr., Kingsport, TN 37664 TAL	1952
Smith, Dr. Ralford, 135 Park Circle, Murfreesbore, TN 37130 MIR	1964
Guith Chenhau II 000 Milli Caul Ch. Manubia IV 20110 MCM	
Smith, Dr. Ralford, 136 Park Circle, Murfreesbore, TN 37130 MUR	1979
Sowell, Miss Maude, 207 W. Sixth St., Columbia, TN 38401 COL	1980
Speck, Mrs. H. H., 228 East Spring St., Lebanon, TN 37087 LEB	1974
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spees, br. and Mrs. Royal, Box 550, Greeneville, IN 57745 GRE	1962
Spence, Alberta, 1915 Eagle St., Murfreesboro, TN 37130 MUR	1980
Spence, Mrs. C.C., 3610 Cowden, Memphis, TN 38111 MEM	1978
Severalling Mice Bot 406 North 17th St Nachrillo TN 37206 NAS	
Stallings, Miss Pat, 400 North 17th St., Nashvijie, IN 57200 NAS	1970
Stamm, Mrs. F. W., 9101 Spokane Way, Louisville, KY 40222 COR	1946
Stanford, Mrs. H. B. Taylorsville Rd., Rt. 2, Box 300, Lebanon, TN 37087 LEB	1974
Stedman, Mr. and Mrs. Stephen J., 2223 Tomassee Dr., Knoxville, TN 37920 KNO	
Steaman, Mr. and Mrs. Stephen J., 2225 Tomassee Dr., Knoxville, IN 37920 KMO	1978
*Steele, Allen M., Life and Casualty Ins. Co., Life & Casualty Tower, Nashville, TN 37219 NAS Steinberg, Roger, Rt. 5, Belt Rd., Knoxville, TN 37920 KNO	1977
Steinberg, Reger, Rt. 3, Belt Rd., Knoxville, TN 37920 KNO	198)
Stainbaug Mus David V 2126 Courden Memphis TN 29111 MEM	1980
Steinhaus, Mrs. David W., 3136 Cowden, Memphis, TN 38111 MEM	
Stephens, Miss Ella, Box 35, Farner, TN 37333 TAL	1965
Stephens, Mr. and Mrs. Joseph P., 1262 Hillwood Drive, Clarksville, TN 37040 NAS	1974
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Sterling, Helen W., 418 Page Rd., Nashville, TN 37205 NAS	1978
Stewart, Mr. Alva W., 5133 Kitty Lee Lane, Memphis, TN 38118 MEM	2.979
Stewart, Mrs. David, 106 Green Vallcy Blvd., Franklin, TN 37064 NAS	1978
Stidolph, Sister Margarita, 4792 Walnut Grove Rd., Memphis, TN 38117 MEM	1978
Stokes, John L., 574 Burdette Ave., Memphis, TN 38127 MEM	1979
**Stone, Joe, 4128 Caine Lane, Chattanooga, TN 3742] CHA	1976
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Stoner, Mr. and Mrs. Floyd F., 192 Williford, Memphis, TN 38112 MEM	1961
*Street, Mr. Thomas E., 411 No. Spring St., Greensboro, NC 27401 COR	1954
Streete, Lt. Col. and Mrs. Alcc, Rt. 1, Box 529, Oakland, TN 38060 MEM	1973
Stringer, Mrs. Kirby, 1833 Primrose Ave., Nashville, TN 37212 NAS	1947
Stringer, Mr. Randy C., 758 Emory Drive, Chattanooga, TN 37415 CHA	1979
Stuart, Mr. and Mrs. Gordon, 132 Oakview Dr., Bristol, VA 24201 BRI	1970
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Stupka, Mr. and Mrs. Arthur, Rt. 3, Gatlinburg, TN 37738 KNO	1935
Styke, Mr. and Mrs. Q.N., Jr., 1101 Summer St., Manchester, TN 37355 HR	1975
Sulser, Miss Anna L., 1796 Poplar Ave., Apt. 5, Memphis, TN 38104 MEM	1973
Surser, Miss and D., 1750 Toplat Aver, Apr. 5) Aemphilis, IN 30104 Mart 1111 1111 1111	
Sumara, Mrs. C.K.G., 1011 Church St., Tiptonville, TN 38079 TAL	1965
Swafford, Carl, 3997 Nile Terrace, Ooltewah, TN 37363 CHA	1968
Swindell, Mr. and Mrs. Thomas, 404 Clay St., Alexander City, AL 35010 ELI	1948
Swofford, Mr. and Mrs. Glen, 550 Valley Street, Erwin, TN 37650 ELI	1976
Talbot, Mr. and Mrs. Joe H., 6117 Bresslyn Rd., Nashville, TN 37205 NAS	1976
Tanner, Mr. and Mrs. Edward F., 402 Colgate Ave., Lebanor, TN 37087 LEB	1969
**Tanner, Dr. James T., Route 28, Box 155, Knoxville, TN 37920 KNO	1940
Tanner, Dr. and Mrs. James T., Route 28, Box 155, Knoxville, TN 37920 KNO	1940
Tanzer, Mr. and Mrs. Frank, 8510 Mysen Cove, Cordova, TN 38018 MEM	1980
	1968
Tarbell, Dr. and Mrs. D. Stanley, 6033 Sherwood Drive, Nashville, TN 37215 NAS	
*Taylor, Mr. Joseph William, 20 Parrish Rd., Honeoye Falls, NY 14472 COR	1959
Taylor, Richard G., 846 Thistledown #4, Memphis, TN 38117 MEM	1975
Thomas, Mr. and Mrs. Charles S., Jr., 1005 Hillcrest Ave., Columbia, TN 38401 COL	1979
Homas, MI. and MIS. Charles S., JT., 1005 Hillerest Aver, Columbia, IN 50401 Col.	
Thomas, Luttrell, 2l25 Belcourt Ave., Nashville, TN 372l2 NAS	1978
Thompson, Doris M., P.O. Box 90944, Nashville, TN 37209 NAS	1979
Thomson, Mrs. Robert P., 3505 Lancaster Lane, Montgomery, AL 36106 NAS	1976
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Toline, Mr. and Mrs. F.R., Rt. 8, Box 232, Cockeville, TN 38501 UC	1965
Trabue, Mr. and Mrs. Lawrence 0., 3819 Harding Place, Nashville, TN 37215 NAS	1960
Trice, Mrs. Lillard, 817 Cedar Bluff Rd., Knoxville, TN 37923 KNO	1979
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Tucker, Mr. and Mrs. John, 3912 Broadway, Bartlett, TN 38134 MEM	
Tunsberg, Mr. and Mrs. Douglas L., 1314 South Seminole Dr., Chattanooga, TN 37412 CHA	1980
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*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL	$1956 \\ 1979$
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*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37919 KNO Van Cleve, Mr. G. Bernard, 304 S. Winebiddle St., Apt. 2, Pittsburgh, FA 15224 COR Van Gelder, Mr. Ennc, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Oma N., 4013 borcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37366 HR Wakeland, Vielette, Box 953, Monteagle, TN 37356 HR **Walurca, Mrs. Martha, 1626 Vorkchire Drive, Memphis, TN 38104 MEM Walker, Mr. Sue, 320 S.W. 12th St., Gainesville, FL 32631 COR *Walker, Mrs. Sue, 320 S.W. 12th St., Gainesville, FL 32631 COR *Wallace, Dr. Gary O., Route 7, Box 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Mrs. Gary O., Route 7, Box 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Mrs. Gary O., Route 7, Box 338, Sunrise Drive, Flizabethton, TN 37643 ELI Wallace, Miss Margar, Rt. 4, Box C-2-A, Elizabethton, TN 37643 ELI **Wallace, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS	1956 1979 1968 1961 1961 1971 1976 1973 1974 1975 1935 1971 1967 1971 1979 1952 1972
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*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underwoed, Sandra S., 8400 Middlebrook Pike, Apt. 1, Memphis, TN 38111 MEM Underwoed, Sandra S., 8400 Middlebrook Pike, Apt. 2, Pittsburgh, FA 15224 COR Van Gelder, Mr. Enno, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Oma N., 4013 Dorcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vade, Miss Mary Ann, 1644 Gooldar Ave., Memphis, TN 38104 MEM Wakeland, Violette, Box 953, Monteagle, TN 37356 HR Wakeland, Violette, Box 953, Monteagle, TN 37356 HR Wakeland, Violette, J., 1024 Sunset Dr., Clarksville, TN 370470 NAS *Walker, Mrs. Sue, 320 S.W. 12th St., Gainesville, FL 32601 COR *Walkup, Mr. and Mrs. Kenneth A., 309 Leopole Rd., Nashville, TN 37211 NAS *Wallace, Dr. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wailace, Mrs. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI *Wallace, Mrs. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wailace, Mrs. Gary O., Route 7, Bex 38, Sunrise Drive, Elizabethton, TN 37643 ELI *Warden, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warden, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warden, Miss Margaret L., 2025 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Co	1956 1979 1968 1961 1961 1961 1971 1976 1978 1973 1974 1975 1971 1979 1955 1971 1979 1956 1979 1956 1979
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underwoed, Sandra S., 8400 Middlebrook Pike, Apt. 1, Memphis, TN 38111 MEM Underwoed, Sandra S., 8400 Middlebrook Pike, Apt. 2, Pittsburgh, FA 15224 COR Van Gelder, Mr. Ennc, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Oma N., 4013 Dorcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vade, Miss Mary Ann, 1644 Gooldar Ave., Memphis, TN 38104 MEM Wakeland, Violette, Box 953, Monteagle, TN 37356 HR Wakeland, Violette, Box 953, Monteagle, TN 37356 HR Wakeland, Violette, J., 1024 Sunset Dr., Clarksville, TN 370470 NAS *Walker, Mrs. Sue, 320 S.W. 12th St., Gainesville, FL 32601 COR *Walkup, Mr. and Mrs. Kenneth A., 309 Leopole Rd., Nashville, TN 37211 NAS *Wallace, Dr. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wailace, Mrs. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI *Wallace, Mrs. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wailace, Mrs. Gary O., Route 7, Bex 38, Sunrise Drive, Elizabethton, TN 37643 ELI *Warden, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warden, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warden, Miss Margaret L., 2025 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Corinth, MS 38834 COR *Warciner, Mrs. R.S., Jr., 205 Linden St., Co	1956 1979 1968 1960 1961 1961 1971 1976 1973 1974 1975 1985 1971 1985 1971 1967 1971 1975 1972 1926 1973
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxrille, TN 37919 KNO Van Cleve, Mr. G. Bernard, 304 S. Winebiddle St., Apt. 2, Pittsburgh, FA 15224 OOR Van Gelder, Mr. Enne, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Mufreesboro, TN 37130 MUR Vaughan, Mrs. Frances J., Rt. 6, Box 66, Mufreesboro, TN 37130 MUR Vaughan, Mrs. Ona N., 4013 Dorcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Wade, Miss Mary Ann, 1644 Goolbar Ave., Memphis, TN 38104 MEM Wakeland, Violette, Box 953, Monteagle, TN 37356 HR Walker, Mrs. Ellen J., 1024 Sunset Dr., Clarksville, TN 37047 NAS Walker, Mrs. Bartha, 1626 Vorkshire Drive, Memphis, TN 38117 MEM Walker, Mrs. Bartha, 1626 Vorkshire Drive, Memphis, TN 37407 NAS Walker, Mrs. Bartha, 1626 Vorkshire Drive, Memphis, TN 37211 NAS Walker, Mrs. Garg O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Dr. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Walace, Marcaaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warled, Mrs. Mararet L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warled, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS Wartick, Mrs. Horv, Rt. 7, Lebanon, TK 37087 LEB Wartick, Miss. Henry, Rt. 7, Lebanon, TK 37087 LEB Wartick, Miss. H	1956 1979 1968 1980 1961 1961 1971 1973 1973 1973 1975 1971 1967 1971 1971 1971 1971 1972 1972 1975
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37919 KNO Van Cleve, Mr. G. Bernard, 304 S. Winebiddle St., Apt. 2, Pittsburgh, FA 15224 COR Van Gelder, Mr. Ennc, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Oran N., 4013 Dorcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vakeland, Viclette, Box 953, Monteagle, TN 37356 HR *Walker, Mrs. Stellen J., 1024 Sunset Dr., Clarksville, TN 37040 NAS *Walker, Mr. Ellen J., 1024 Sunset Dr., Clarksville, TN 37040 NAS *Walker, Mrs. Sue, 320 S.W. 12th St., Gainesville, FL 32601 COR *Walker, Mrs. Kennet A., 309 Leopole Rd., Nashville, TN 37211 NAS *Walker, Mrs. Sue, 320 S.W. 12th St., Gainesville, FL 32601 COR *Walkup Mr. and Mrs. Kennet A., 309 Leopole Rd., Nashville, TN 37211 NAS *Walkup Mr. and Mrs. Kennet A., 309 Leopole Rd., Nashville, TN 37211 NAS *Walkard, James and Barbara, Rt. 4, Box C-2-A, Elizabethton, TN 37643 ELI Waist, James and Barbara, Rt. 4, Box C-2-A, Elizabethton, TN 37643 ELI *Warrield, Mr. and Hrs. Charles H., 4208 Estes Rd., Nashville, TN 37212 NAS *Warrield, Mr. and Mrs. Charles H., 3087 LEB *Warrield, Mr. and Mrs. Charles H., 3087 LEB *Wartield, Mr. and Mrs. Charles H., 3087 LEB Waters, Mrs. Henry, Rt. 7, Lebanon, TN 37087 LEB Waters, Mrs. Henry, Rt. 7, Lebanon, TN 37	1956 1979 1968 1961 1961 1971 1976 1978 1974 1975 1974 1975 1971 1975 1971 1975 1975 1975 1975
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underwoed, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxrille, TN 37919 KNO Van Cleve, Mr. G. Bernard, 304 S. Winebiddle St., Apt. 2, Pittsburgh, FA 15224 OOR Van Gelder, Mr. Ennc, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Mufreesboro, TN 37130 MUR Vaughan, Mrs. Frances J., Rt. 6, Box 66, Mufreesboro, TN 37130 MUR Vaughan, Mrs. Ona N., 4013 Dorcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Wade, Miss Mary Ann, 1644 Goodbar Ave., Memphis, TN 38104 MEM Wakeland, Violette, Box 953, Monteagle, TN 37366 HR *Walkor, Mrs. Hartha, 1626 Yorkshire Drive, Memphis, TN 38117 MEM Wakeland, Violette, Box 953, Monteagle, TN 37366 HR *Walkor, Mrs. Bartha, 1626 Yorkshire Drive, Gairesville, TN 372407 NAS *Walkup, Mrs. and Mrs. Kenneth A., 309 Leopole Rd., Nashville, TN 37211 NAS *Walkup, Mr. and Mrs. Kenneth A., 309 Leopole Rd., Nashville, TN 37211 NAS *Wallace, Dr. Gary O., Route 7, Box 338, Sunrise Drive, Elizabethton, TN 37643 ELI *Warden, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37212 NAS *Warden, Miss Margaret L., 1806 East Belmont Circle, Nashville, TN 37215 NAS *Wardie, Mrs. R.8., Jr., 205 Linden St., Corinth, MS 38834 COR Warriner, Mrs. R.8., Jr., 205 Linden St., Corinth, MS 38834 COR Waters, Mrs. Henry, Rt. 7, Lebanon, TN 37087 LEB Waters, Mrs. Henry, Rt. 7, Lebanon, TN 37087 KEB Waters, Mase Velot Jane, 2845	1956 1979 1968 1980 1961 1961 1971 1976 1973 1974 1973 1974 1975 1971 1967 1971 1967 1975 1975 1955 1955 1955 1955 1955
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37919 KNO Van Celder, Mr. Enco, 416 Hilltop Rd., Bristol, TN 37620 BRI. Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesbor, TN 37130 MUR Vaughn, Mrs. Oma N., 4013 Doreas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vakeland, Viclette, Box 953, Monteagle, TN 37356 HR Wakeland, Viclette, Box 953, Monteagle, TN 37356 HR Walker, Mr. Ellen J., 1024 Sunset Dr., Clarksville, TN 37040 NAS Walker, Mr. Sue, 320 S.W. 12th St., Gainesville, TN 37040 NAS Walker, Mrs. Guro C, Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Dr. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Mrs. Margaret L., 1806 East Belmont Circle, Nashville, TN 37215 NAS. *Warrield, Mr. and Barbara, Rt. 4, Box C-2-A, Elizabethten, TN 37643 ELI Warrield, Mr. and Mrs. Kennet Relmont Circle, Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 0506 Isten St., Ocrinth, MS 38834 COR Waters, Mr. Bot, Rd. 205 Linden St., Corinth, MS 38844 COR Waters, Mr. Bot, Rd. 205 Linden St., Ocrinth, MS 37215 NAS. Waters, Mr. Horz, Rt 7, Lebanon, TN 37087 LEE Waters, Mr. Jot, RFD J., Box 233, Rutledge, TN 37261 KNO Weessner, Mr. and Mrs. Ceorge, 4204 Sneed Ave., Nashville, TN 37215 NAS. Waters, Mr. Bot, Rd.,	$\begin{array}{c} 1956 \\ 1979 \\ 1968 \\ 1960 \\ 1961 \\ 1961 \\ 1971 \\ 1976 \\ 1973 \\ 1974 \\ 1977 \\ 1975 \\ 1975 \\ 1975 \\ 1971 \\ 1972 \\ 1952 \\ 1975 \\ 1971 \\ 1975 \\ 1971 \\ 1971 \end{array}$
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37919 KNO Van Celder, Mr. Enco, 416 Hilltop Rd., Bristol, TN 37620 BRI. Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesbor, TN 37130 MUR Vaughn, Mrs. Oma N., 4013 Doreas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vakeland, Viclette, Box 953, Monteagle, TN 37356 HR Wakeland, Viclette, Box 953, Monteagle, TN 37356 HR Walker, Mr. Ellen J., 1024 Sunset Dr., Clarksville, TN 37040 NAS Walker, Mr. Sue, 320 S.W. 12th St., Gainesville, TN 37040 NAS Walker, Mrs. Guro C, Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Dr. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Mrs. Margaret L., 1806 East Belmont Circle, Nashville, TN 37215 NAS. *Warrield, Mr. and Barbara, Rt. 4, Box C-2-A, Elizabethten, TN 37643 ELI Warrield, Mr. and Mrs. Kennet Relmont Circle, Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 0506 Isten St., Ocrinth, MS 38834 COR Waters, Mr. Bot, Rd. 205 Linden St., Corinth, MS 38844 COR Waters, Mr. Bot, Rd. 205 Linden St., Ocrinth, MS 37215 NAS. Waters, Mr. Horz, Rt 7, Lebanon, TN 37087 LEE Waters, Mr. Jot, RFD J., Box 233, Rutledge, TN 37261 KNO Weessner, Mr. and Mrs. Ceorge, 4204 Sneed Ave., Nashville, TN 37215 NAS. Waters, Mr. Bot, Rd.,	$\begin{array}{c} 1956 \\ 1979 \\ 1968 \\ 1960 \\ 1961 \\ 1961 \\ 1971 \\ 1976 \\ 1973 \\ 1974 \\ 1977 \\ 1975 \\ 1975 \\ 1975 \\ 1971 \\ 1972 \\ 1952 \\ 1975 \\ 1971 \\ 1975 \\ 1971 \\ 1971 \end{array}$
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37019 KNO Van Gelder, Mr. Enno, 416 Hilltop Rd., Bristol, TN 37620 BRI Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesboro, TN 37130 MUR Vaughan, Mrs. Oma N., 4013 Dorcas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37235 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37360 HEM Wakeland, Viclette, Box 953, Monteagle, TN 37366 HR **Waluren, Mrs. Martha, 1626 Yorkshire Drive, Memphis, TN 38117 MEM Wakeland, Viclette, Box 953, Monteagle, TN 37356 HR **Waluren, Mrs. Martha, 1626 Yorkshire Drive, Memphis, TN 378117 MEM Walker, Mrs. Sue, 320 S.W. 12th St., Gainesville, FL 32601 COR *Walkup Mr. and Mrs. Kenneth A., 300 Leopole Rd., Nashville, TN 37211 NAS *Wallace, Dr. Gary O., Route 7, Box 338, Sunrise Drive, Elizabethton, TN 37643 ELI **Wallace, Mrs. Gary O., Route 7, Box 338, Sunrise Drive, Elizabethton, TN 37643 ELI **Wardi, Frank C., 334i-B Fine Word Ave., Chattanooga, TN 37411 CHA **Warfield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS *Warfield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS **Warfield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS **Warfield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS **Warfield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS **Warfield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS **Warfield, Mr. and Mrs. Charles H., Mashville, TN 37215 NAS **Warfield, Mr. and Mrs. Cha	$\begin{array}{c} 1956 \\ 1979 \\ 1968 \\ 1960 \\ 1961 \\ 1961 \\ 1971 \\ 1976 \\ 1973 \\ 1974 \\ 1975 \\ 1974 \\ 1975 \\ 1971 \\ 1967 \\ 1971 \\ 1979 \\ 1952 \\ 1972 \\ 1952 \\ 1973 \\ 1952 \\ 1974 \\ 1976 \\ 1974 \\ 1974 \end{array}$
*Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 TAL Turner, Mr. and Mrs. David A., Rt. 4, Box 541 Valley Lane, Clinton, TN 37716 KNO Turner, Miss Helen, 3005 Walnut Grove Rd., Apt. 1, Memphis, TN 38111 MEM Underword, Sandra S., 8400 Middlebrook Pike, Apt. L-34, Knoxville, TN 37919 KNO Van Celder, Mr. Enco, 416 Hilltop Rd., Bristol, TN 37620 BRI. Vaughan, Mrs. Frances J., Rt. 6, Box 66, Murfreesbor, TN 37130 MUR Vaughn, Mrs. Oma N., 4013 Doreas Dr., Nashville, TN 37215 NAS Vogt, David, 205 Mayfair Rd., Nashville, TN 37205 NAS Vakeland, Viclette, Box 953, Monteagle, TN 37356 HR Wakeland, Viclette, Box 953, Monteagle, TN 37356 HR Walker, Mr. Ellen J., 1024 Sunset Dr., Clarksville, TN 37040 NAS Walker, Mr. Sue, 320 S.W. 12th St., Gainesville, TN 37040 NAS Walker, Mrs. Guro C, Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Dr. Gary O., Route 7, Bex 338, Sunrise Drive, Elizabethton, TN 37643 ELI Wallace, Mrs. Margaret L., 1806 East Belmont Circle, Nashville, TN 37215 NAS. *Warrield, Mr. and Barbara, Rt. 4, Box C-2-A, Elizabethten, TN 37643 ELI Warrield, Mr. and Mrs. Kennet Relmont Circle, Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Charles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 4208 Estes Rd., Nashville, TN 37215 NAS. *Warrield, Mr. and Mrs. Caneles H., 0506 Isten St., Ocrinth, MS 38834 COR Waters, Mr. Bot, Rd. 205 Linden St., Corinth, MS 38844 COR Waters, Mr. Bot, Rd. 205 Linden St., Ocrinth, MS 37215 NAS. Waters, Mr. Horz, Rt 7, Lebanon, TN 37087 LEE Waters, Mr. Jot, RFD J., Box 233, Rutledge, TN 37261 KNO Weessner, Mr. and Mrs. Ceorge, 4204 Sneed Ave., Nashville, TN 37215 NAS. Waters, Mr. Bot, Rd.,	$\begin{array}{c} 1956 \\ 1979 \\ 1968 \\ 1960 \\ 1961 \\ 1961 \\ 1971 \\ 1976 \\ 1973 \\ 1974 \\ 1977 \\ 1975 \\ 1975 \\ 1975 \\ 1971 \\ 1972 \\ 1952 \\ 1975 \\ 1971 \\ 1975 \\ 1971 \\ 1971 \end{array}$

Wellford, Mrs. John, 488 Goodlet St., Memphis, TN 38117 MEM	7
Welltord, Mrs. William, 115 Castle Heights Ave., Lebanon, TN 37087 LEB	
Wendt, Miss Grissa, 825 N. Drive, Cookeville, TN 38501 UC	
Wenger, Mr. Jerry, Dept. Natural Sci., Covenant College, Lookout Mtn., TN 37350 CHA 197	
Werner, Miss Diana, 819 Manchester Dr., Chattanooga, TN 37415 CHA	э –
Wessels, Mrs. Anna M., 2550 Union Ave., Memphis, TN 38112 MEM	7
**West, Mrs. Eugene M., Box 1662 Fairfield Glade, TN 38555 CHA 194	8
Westmoreland, Mr. and Mrs. L. P., 1213 Worthington St., Chattanooga, TN 37405 CHA 197	
White, Miss Marie, 909 Milford Ave., Cookeville, TN 38501 UC	
Whitehead, Dan M., 1201 Lenore Lane, Maryville, TN 37801 KNO 198	
Whitehead, Mrs. T.W., Rt. 8, Johnson City, TN 37601 ELI	
Whitley, Mr. and Mrs. William T., 400 Colonial Rd., Memphis, TN 38117 MEM	2
***Whittemore, Dr. Wendell L., 176 Cherry Rd., Memphis, TN 38117 MEM	5
*Whittington, Richard L., 4778 Eagle Crest #4, Memphis, TN 38117 MEM	4
Wilbur, Mrs. Richard, 230 Ussery Rd., Clartsville, TN 37040 NAS	
Wilcoxon, Mr. and Mrs. Hardy C., 4410 Alcott Dr., Nashville, TN 37215 NAS	
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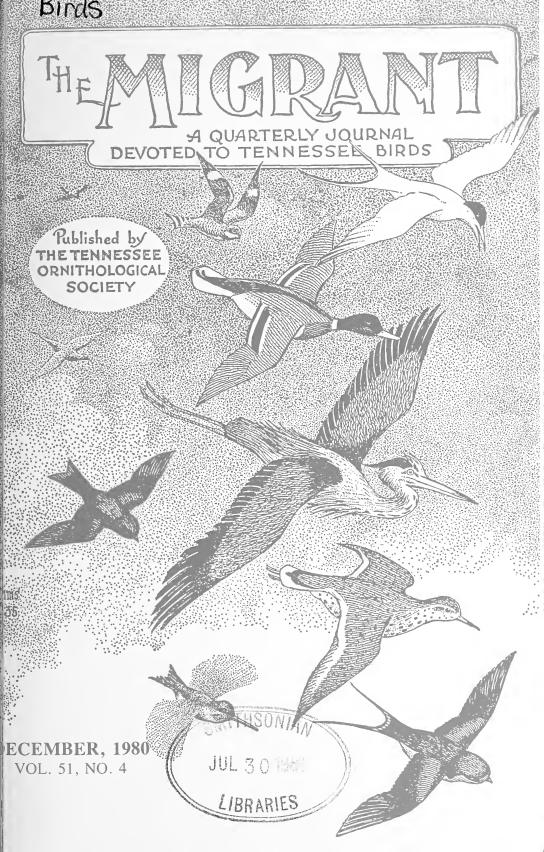
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NOTES ON THE BREEDING BIOLOGY AND BEHAVIOR OF THE RAVENS OF PEREGRINE RIDGE, GREAT SMOKY MOUNTAINS NATIONAL PARK, TENNESSEE

MORRIS D. WILLIAMS

Peregrine Ridge is a rugged rock outcropping named after the Peregrine Falcon, *Falco peregrinus*, which formerly nested there. Currently, it is the only known nesting site of the Common Raven, *Corvus corax*, in Tennessee. The ridge is in Sevier Co. at coordinates 35°38'10"N; 83°26'45"W (Mt. Le Conte Quadrangle, USGS 1964). The elevation along the crest is 1463 m. A distinctive feature of this ridge is a natural hole, about 1.5 m in diameter, that passes completely through the ridge near the crest.

Ganier (1931) was the first to discover the falcon eyrie in 1925. Stupka (1963) believed that falcons continued to nest on this ridge through 1942. It is not known when ravens began to nest there, but Koch (Stupka 1963) heard young ravens crying for food in the vicinity of the nearby Alum Cave Bluffs on 21 May 1944. Again, it was Ganier (1962) who reported the first nest of ravens on this ridge. He saw at least three well-feathered young in a nest on 4 May 1960. I have found no reference to the nesting of ravens at this site during the decade following Ganier's discovery.

I saw four ravens flying around the ridge on 9 June 1971; two of them perched together on the crest for a while. I did not notice any nests. I did not visit this site again until 26 April 1973, when, from the Alum Cave Bluffs, I saw a nest on a ledge about 8 m below the crest of the ridge (Fig. 1A, #1). Later, as I made my way along the crest of the ridge to a point above the nest, a raven flushed from the cliff. Since the ridge leaned sharply to the east (Fig. 1B), the nest was not visible to me. Several times, while I was on the ridge, a raven flew over and croaked. When I left, a bird returned to the cliff face. I returned eight days later and secured my climbing rope through the natural hole and descended over the edge to the nest. The bulky, empty nest was composed of large branches of laurel (*Kalmia* and/or *Rhododendron*). It was not able to determine whether the nest was plashed with white excrement. I was not able to determine whether the nest had recently held young. A raven was in the vicinity while I was at the nest. The next day, I saw a raven carrying what I assumed was food near the Alum Cave Bluffs.

On 9 March 1974, I found the ravens occupying a nest (Fig. 1A, #2) about 6 m below Nest 1. I lowered myself to this nest and found seven eggs (Fig. 1C). I saw that Nest 1 had been rebuilt and relined, but it was empty. Twice on this visit, I watched a bird return to the nest using a maneuver that is apparently an adaptation

for distracting the attention of potential predators from the nest. Each time, one bird flew along the crest of the ridge and called while the other bird silently flew below the crest, and near the face of the cliff, to the nest. Once, a bird left the cliff face and called when a Red-tailed Hawk, *Buteo jamaicensis*, flew overhead. Later, both ravens chased and attacked the hawk by diving upon it while it circled in the valley between Peregrine Ridge and the Alum Cave Bluffs. One raven struck the hawk and knocked one secondary feather out and loosened another. I did not see whether the raven hit the hawk with its foot or its beak. A raven was sitting on the nest when I last viewed it from the trail below the Alum Cave Bluffs.

The next year on 25 March, I returned to the cliff with Fae P. Andrews and Charles P. Nicholson. From the Alum Cave Bluffs, we saw a raven sitting on a nest that I assumed was the same structure that had been active in 1974. Since we were looking through a spotting scope, we could not see the whole cliff face at once. I descended to the old Nest 2 and found it empty. It was freshly lined and appeared ready for use. Nest 1 had been flattened again; it did not appear to contain any new nesting material. A pair of agitated ravens remained nearby during our presence. After we had left the ridge and returned to the Alum Cave Bluffs, we discovered that the nest to which I had descended was not the active nest. There was a new nest about 20 m below the crest (Fig. 1A, #3). This experience led me to wonder if I had not also failed to see the active nest on my first descent in 1973.

Eleven days later, the three of us returned. Although spring had come to the lowlands, icicles still hung from the ledges on Peregrine Ridge. We watched from the Alum Cave Bluffs as a raven flew to the cliff and relieved the bird that was on the nest. A short time later, this raven was relieved by what was presumably the original bird. One of these birds carried something to the nest in its beak. We then went to the ridge where I anchored my rope to rocks on the west side of the ridge and descended to the west (Fig. 1D). One young, weighing an estimated 450-500 g was in the nest (Fig. 1E). Its eyes were closed and, except for small movements, it remained in the same position while I was there.

While we were on the ridge, two ravens soared overhead and uttered bell-like notes. Twice we saw them sail in precision flight, one directly over the other. At times, it appeared that they may have touched each other. When soaring alone, these birds sometimes turned a somersault in mid-air.

In 1976, Andrews, Alan B. Smith, and I hiked to the Alum Cave Bluffs on 11 April. We found that Nest 3 was active again. During our 35-minute observation period, we watched through a spotting scope as the adults visited the nest five times and fed the young. On the third visit, one of the birds brooded for a short while. I believe there were at least two young. We could see their heads raised above the rim of the nest when they begged for food. When I returned to the Alum Cave Bluffs on 16 May, this nest appeared empty. I saw one raven perched in a conifer; later it soared over the bluff. Once it uttered the series of notes that always sounds, to me, like a hiker jostling an empty canteen along a rough trail.

Ganier's photograph (1931: Fig. 1) shows that the Peregrine Falcon nest was in about the same position on the cliff as Nest 1 in my Figure 1A, however, his description of the ledge does not fit any of the ledges to which I descended or saw. This shale cliff could have eroded considerably in the nearly 50 years since Ganier made his descent. None of the raven nests was on ledges large enough to support anything other than the nest; therefore, I had to remain suspended entirely by a rope each time I visited a nest. Ganier's (1962) description of the 1960 raven nest site, "About half-way up the 150' sheer cliff . . ." fits my Nest 3 site quite well.

This nest site, on the southern edge of the specie's range in eastern North America, should prove important for future investigations since it is protected and

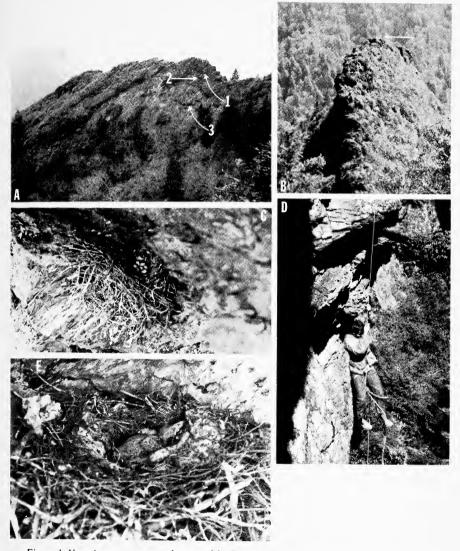


Figure 1. Nest site, nest, eggs, and young of the Common Raven, Corvus corax on Peregrine Ridge, Great Smoky Mountains National Park. A) Looking west from the Alum Cave Bluffs Trail; the three nest sites are labelled. B) Looking south from the Mt. Le Conte Trail; for scale, note the person (arrow) standing on the ridge. C), D), and E) see text for explanation. (Photo "D" by C. P. Nicholson; remainder by M. D. Williams.)

easily observed. The nesting ledges are completely visible from points several hundred meters away along the trail before it reaches the Alum Cave Bluffs, which are about an hour's hike from U.S. Highway 441. The ravens apparently are not disturbed by hikers along this trail. Since overhanging rocks cast dark shadows upon the nesting ledges later in the day, early morning is the best time to observe the nests. No one should attempt to reach the nest ledges except for legitimate research approved by the Park Superintendent. Only experienced and well-equipped climbers should consider such a project.

I am grateful to the individuals mentioned in this paper for their assistance in the field. C. P. Nicholson, H. D. Pratt, J. P. O'Neill, and J. V. Remsen, Jr. provided helpful comments on early drafts on this paper.

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Museum of Zoology, Louisiana State University, Baton Rouge, Louisiana 70893. Accepted 18 March 1980.

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BOOK REVIEW

A FIELD GUIDE TO WESTERN BIRDS' NESTS. Hal H. Harrison. 1979. Houghton Mifflin Co., 2 Park St., Boston, Mass. 02107. 256 color photographs, 161 black-and-white photographs. Indexed, hardbound. \$11.95. This unit of the Peterson Field Guide Series includes 520 species found breeding west of the Mississippi River. The text covers breeding range, habitat, nest construction and eggs. The author does emphasize distinctive features that may help in identification. This book involves a tremendous effort on the part of the author and will be useful to anyone attempting to identify nest of Western birds.

GARY O. WALLACE

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ANNUAL AUTUMN HAWK COUNT, 1979

THOMAS W. FINUCANE

In 1979 the fall hawk flights through Tennessee were recorded at eleven stations, extending 150 miles WSW from the Mendota Fire Tower in southwest Virginia to Signal Point, just north of the border with Georiga. Nearly all species were recorded in numbers higher than their average counts over the preceding ten years, although hours of observation were at a ten-year low.

The Broad-winged Hawk count was 16,205, about the same as in 1975 but significantly higher than in 1976. In 1978 the count fell below 12,000, lowest since 1969, and in 1977 our flights of Broad-winged Hawks were far greater than in any other year. In that year record numbers were established also at nearly all major observation stations in eastern North America. The 109 Sharp-shinned Hawk total was evidently part of a downward trend in the population of that species. In the T.O.S. reports the yearly numbers of Sharp-shinned Hawks, have been 62-158-168-427-208-109. Similar rises and falls in the Sharp-shinned Hawk counts over the same period of years have been observed in other parts of the migration routes of this species.

The 129 total for Red-tailed Hawks in our 1979 data is four more than the old fall-migration record for observation of Red-tailed Hawks in east and middle Tennessee. In west Tennessee, however, Oliver Irwin saw 142 Red-tailed Hawks flying over Memphis, in 1961, to make the total for that year 163. "Observation from a roof-top in the center of Memphis daily during noon hours, 9/25 to 11/19" (*The Migrant* 1961 v. 32, No. 4). The flights reported by Randy Stringer in the fall of 1979 were on 13-14 November. We have always had Red-tailed Hawks migrations in September, but never in large numbers. Nearly all Broad-winged Hawks winter south of the United States, but Red-tailed Hawks are seen in the north in winter, in western New York State, for example.

Only 13 Northern Harriers were listed in our reports for the fall of 1979. In 1978 the count was 26. Totals for Ospreys and Kestrels were 30 and 20, about what we have had in other years. A Golden Eagle was recorded, 9 Sept., with the following comment: "Well seen with a 25x scope at 1/4 mi. to 1/2 mi. for about 10 minutes; white base on undertail and white under primaries suggested a 2-3 yr.-old bird. Observer (BHS) has seen many Golden Eagles in the American West, including immatures like this one." Only one other eagle was reported, unidentified, 15 Sept., Signal Mountain.

We had three Peregrine Falcons in the 1979 T.O.S. hawk count: a distant bird seen from Look Rock, 29 Sept., a male passing close to watchers there on 10 Oct., and one near Chickamauga Dam 13 Nov. Only one was recorded in the T.O.S. program in 1978, one in 1977, and none in 1976. Peregrines formerly nested throughout Tennessee, but egg-collecting and saturation of the land with insecticides distributed by aircraft destroyed the nesting populations in eastern North America, and Peregrines seen in fall migration in the east, mainly down the Atlantic coast, were considered to be western birds. But in recent years Peregrines have been hatched, raised, and released by the Cornell Laboratory of Ornithology and better methods for insect control have been developed.

In 1979 the T.O.S fall hawk-migration program was in its 40th year. After two years of unfruitful efforts to find migrating hawks success came first in 1950 when

TOS HAWK MIGRATION DATA, 1979

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27	22		S&B	Look Rock	-	3SW	6	20	-		-	-	_3	-	-	-	-		3	-
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Joe Howell, Fred Behrend, Steve Russell, Richard Nevius, Gene and Adele West, Jim Tanner, and William Johnson reported seeing migrating hawks in a dozen different places. Of the people in this list only the Wests are still watching. Mrs. W. F. Bell started hawk-watching in 1953 at Bon Air and still goes there for the fall hawk count.

KEY TO REPORTERS

Adele: Adele West, Fairfield Glade; AS: Arthur Smith, Kingsport; C & T, Charlotte and Tom Finucane, Kingsport; Cofe: John Wallace Coffey, Bristol; Dvis: Marcia Davis; EES: Eugene Scott, Nickelsville, Va.; Gene: Gene West, Fairfield Glade; Hart: Paul Hartigan, Knoxville; Kath: Kathleen Selvidger, Birchwood; Ken: Ken Dubke, Ooltewah; Lil: Lil Dubke, Ooltewah; Paul: Paul Pardue, Knoxville; Rndy: Randy Stringer, Ooltewah; S&B: Mr. & Mrs. Steve Stedman, Knoxville; Sue: Sue Bell, Nashville; TomF: Tom Finucane, Kingsport; TomH: Tom Haggerty, Boone, N.C.; Wlky: Bruce Wilkey, Ooltewah.

WIND AND SKY CODES

Wind data are presented in the Beauford Scale, stronger winds with higher numbers. Sky conditions range from clear (0) to heavy clouds or rain (5).

1434 Watauga St., Kingsport 37664.

BOOK REVIEWS

A FIELD GUIDE TO THE NESTS, EGGS AND NESTLINGS OF NORTH AMERICAN BIRDS. Colin Harrison. Wm. Collins Publishers, Inc., 208 W. 117th St., Cleveland, Ohio 44111. 416 pp. 64 color plates, many line drawings. \$11.95. This is a good comprehensive guide describing and illustrating the nests, eggs and identifiable nestings of North American birds. A short discussion is given on egg types, hatching, nest habitats, nest sites, breeding season, incubation, nestlings and nestling period and manner of feeding nestlings. The author provides three keys: to nests, to eggs, and to young nestlings and chicks. These keys are cross-referenced.

No range maps or descriptions of adult birds are given so this book is not a substitute for the normal field guide. It should be useful to banders who band nestlings and to anyone that attempts to identify young birds and eggs. The hard cover is impregnated with plastic so the book should be able to take the normal field abuse. It is bound in field guide size. The book includes warnings against egg collecting and hopefully readers will use caution around nests and nestlings.

GARY O. WALLACE

BIRD WATCHER'S DIGEST. P. O. Box 110, Marietta, Ohio 45750. \$7.50 per year. A new bimonthly journal which was started in the fall of 1978. It contains articles written more for the general reader and also reprints articles from newspapers and general natural history magazines.

GARY O. WALLACE

MINUTES OF THE 1980 SYMPOSIUM AND FALL MEETING

The Board of Directors' meeting of the Tennessee Ornithological Society was held 18 October 1980 at Montgomery Bell State Park with a quorum present. President Nelle Moore called the meeting to order at 12:30 P.M.

The minutes of the Board of Directors' meeting held 3 May 1980 were approved as printed in the June 1980 issue of *The Migrant*.

REPORTS OF OFFICERS

There were no reports from the Vice-presidents Rick Knight of East Tennessee, Dot Crawford, Middle Tennessee or Richard L. Whittington, West Tennessee.

The SECRETARY, Helen Dinkelspiel, reported that the membership list of the organization had been sent to the Editor in mid-July and hopefully would be available with the September 1980 issue of *The Migrant*.

The TREASURER, Martha Waldron, reported that the newsletter, *The Tennessee Warbler*, should cost less for the year 1980 than for 1979. The report of the Society's finances, covering 1 January 1980–9 October 1980 listed:

Income	\$5481	.87
Expenses		.86
Savings (10/6/80)		
Checking		.19

Copy of complete report is attached to the minutes.

The CURATOR, Dr. James Tanner, reported sales of back copies of *The Migrant* were \$218.29 covering the period May to October 1980. Expenses totalled \$179.75. Dr. Tanner made a motion to accept the following rates for sale of back copies, including mailing costs (as stated in his attached report):

Volume 1	\$2.00
Photocopies issues	2.00 (per issue)
Issues still in print	1.00 (per issue)
Species Index to The Migrant	2.00

Dr. Tanner's motion was seconded and passed.

DIRECTORS-AT-LARGE

Jon A. Koella, representing East Tennessee, stated that he hoped to get a chapter started at Madisonville.

Michael Dinsmore, Middle Tennessee, said that there was deterioration in plans for a Montgomery County chapter as he cannot pursue the idea because of uncertainty concerning his personal plans.

Mrs. C. K. G. Sumara, West Tennessee, had no report.

REPORTS OF COMMITTEES

FINANCE: In the absence of the Finance Committee Chairman, William T. Whitley, the report was read by Martha Waldron. The committee recommended that all the accumulated interest in the Briley Fund be transferred to the Endow-

ment Fund. The recommendation was accepted and approved by the Board of Directors. Complete report attached to minutes.

CONSERVATION: The committee report was given by Ken Dubke, who stated that the Resolution passed at the spring meeting had brought good results. This Resolution dealt with a plea for preservation of Amnicola Marsh in Chattanooga. As a result \$400,000 was voted for an impact study.

NOMINATING COMMITTEE: President Nelle Moore thanked outgoing Chairman Lula Coffey and her committee of Michael Bierly and Daniel Jacobson for serving in that capacity.

Miss Moore selected the members of the Nominating Committee to serve through the Spring meeting of 1982. They are Chairman Tom Guschke of Middle Tennessee, Sally Goodin, East Tennessee, Joe Guinn, West Tennessee.

SPECIAL ASSIGNMENT REPORTS

Charles Nicholson, Editor of the newsletter, *The Tennessee Warbler*, explained that the last issue was late due to a printer's mixup.

Charles Nicholson, Foray Director, stated that the 1981 Foray would be held in McNairy County. Mr. Nicholson agreed to continue as Foray Director for one year.

PATCHES, DECALS: Lil Dubke announced sales of patches and decals in the amount of \$65.60.

OLD BUSINESS

There was no old business.

NEW BUSINESS

Michael Bierly proposed submitting a Resolution to TWRA supporting their proposed proclamation to prohibit importation and holding of the Black-hooded Parakeet and the Monk Parakeet. A similar Resolution was to be sent to the U.S. Fish and Wildlife Service, but the resolution to them was also to request that these two birds be put on the Injurious Animal List.

Ben Coffey made a motion to accept the resolutions. Motion was seconded and carried.

A committee consisting of George Mayfield, Chairman, Michael Bierly and Ken Dubke was appointed to (1) make plans for the 1981 Fall meeting and (2) to make recommendations for the mechanics of planning future fall meetings.

Michael Bierly made a motion that T.O.S. provide an Honorary Life Membership to Harry Monk in appreciation for his dedication and contributions to ornithology.

Motion seconded and passed unanimously.

The President expressed thanks to the Columbia Chapter for handling of arrangements and for hosting of this fall meeting, with particular thanks to Allen Pressnell and Ann Lochridge.

The Knoxville Chapter extended an invitation to T.O.S. to hold its 1981 spring meeting at Norris Dam State Park 1-3 May with Knoxville serving as host chapter.

The meeting adjourned at 1:50 P.M.

HELEN DINKELSPIEL, Secretary

ROUND TABLE NOTES

ANHINGA NESTING AT BIG HILL POND, McNAIRY CO.—Jim Harrison and Jesse Taylor, Park Rangers at Big Hill Pond State Park, observed twelve Anhinga (*Anhinga anhinga*) in the Park area during the third week in March and a nesting pair in early June. Big Hill Pond State Park is located in southwest McNairy Co. on Highway 57, just north of the Mississippi State line near the confluence of Cypress Creek and the Tuscumbia Rivers which drain into the Hatchie State Scenic River.

A pair of Anhinga were observed building a nest 8 June in a stand of dead trees in the lake. There was no observation of young although the adults were seen carrying food. No one approached the nest by boat therefore all observations were made from shore. Observations were stopped for three weeks because the presence of people on the shore seemed to disturb them. The nest was approximately 4.5 m (15 ft.) above the water and about 45 m (150 ft.) from the shore.

The Anhingas were last seen on 9 July 1980 by Dan Eagar, Staff Zoologist, with the Tennessee Heritage Program.

Prior nestings in West Tennessee were 40 nests at Reelfoot in 1939 (*Migrant*, 10:27, 1979) and five nests at the Duck River Heronry on Grassy Lake at Kentucky Lake in 1953 (*Migrant*, 26:9, 1955).

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119. Accepted 1 Dec. 1980.

RAPTOR BANDING PROGRAM IN THE GREATER MEMPHIS AREA—The Tennessee Wildlife Resources Agency initiated a research and recovery program in 1977 whereby injured and orphaned raptors are cared for and released. This bander secured the required permit to help in the rehabilitation process. As a consequence of becoming involved in the TWRA recovery program, an interest in the program's success and the raptor population within the Mississippi Flyway was generated. This interest led to an initial effort of banding birds of prey which began in August, 1978, both in the wild and of birds being rehabilitated prior to release. The following objectives for banding birds of prey have been submitted to the Department of Interior, Bird Banding Laboratory and the TWRA:

- 1. To determine if raptors follow the Mississippi Flyway or cross flyways.
- 2. To more accurately determine the wintering area of birds of prey in the greater Memphis area.
- 3. To more accurately determine the breeding area of wintering birds of prey in the greater Memphis area, and
- 4. To secure a more accurate count of birds of prey in the greater Memphis area.

Both agencies accepted the objectives and endorsed the work. Banding permits have been secured from Mississippi and Arkansas. It was felt that since Memphis was geographically close to these states it would be necessary to band the birds and either transport and/or release birds in the adjacent areas as well as to band young on the nest.

The Memphis Zoological Gardens has acquired a large number of raptors through private donations. Many of these raptors are orphaned young or injured

THE MIGRANT

adults. Once the birds have received necessary medical attention and rehabilitated, or in the case of orphaned young properly hacked out, release times and locations are selected by zoo personnel. Prior to release, the birds are banded. In addition to banding rehabilitated birds, active nests were observed this past nesting season and the young were banded on the nest. The birds listed in Table 1 have been banded and either released, hacked out, or replaced in the nest.

TABLE 1

SPECIES	DATE	DISPOSITION/RELEASE LOCATION
Red-tailed (Buteo jamaicensis)	03-10-79	(R) Lookout Mtn., TN (Note 1)
	10-02-79	(R) Chimney Tops, Smoky Mtn. National Park, TN
	01-27-80	(T) Memphis, TN (Note 2)
	02-16-80	(R) Penal Farm, Memphis, TN
	03-22-80	(R) Penal Farm, Memphis, TN
	05-18-80	(N) Olive Branch, MS (Note 3)
	05-18-80	(N) Olive Branch, MS
	05-27-80	(N) Memphis, TN
	05-27-80	(N) Memphis, TN
Bald Eagle (Haliaeetus leucocephalus)	03-30-79	(R) Reelfoot Lake State Park,
		Reelfoot, TN
American Kestrel (Falco sparverius)	05-25-79	(R) Southwest, Memphis, TN
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
	05-17-80	(N) Olive Branch, MS
Barn Owl (Tyto alba)	02-16-80	(R) SFSP, Memphis, TN (Note 4)
	02-16-80	(R) SFSP, Memphis, TN
Screech Owl (Otus asio)	08-17-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	08-31-78	(R) SFSP, Memphis, TN
	05-31-80	(H) Overton Park, Memphis, TN
		(Note 5)
	05-31-80	(H) Overton Park, Memphis, TN
	05-31-80	(H) Overton Park, Memphis, TN
	05-31-80	(H) SFSP, Memphis, TN
	05-31-80	(H) SFSP, Memphis, TN
Great Horned Owl (Bubo virginianus)	07-25-79	(R) SFSP, Memphis, TN

Note 1 (R) Rehabilitated.

Note 2 (T) Trapped in the wild.

Note 3 (N) Banded on the nest.

Note 4 SFSP, Shelby Forest State Park, northwest Shelby Co.

Note 5 (H) Hacked, birds set free but fed daily from a roosting box or platform.

The banding program has had a good beginning. Further projects have been planned for this fall and winter. Appreciation is given to John Stokes, Assistant

Curator of Birds, Memphis Zoological Gardens, for his assistance in banding rehabilitated birds and banding birds on the nest, and to Dave Vance, Memphis falconer, who located active nests of birds of prey and who has given much encouragement and time to the project.

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119. Accepted 30 July 1980.

PEREGRINE AT ASHWOOD—On 1 June 1980, when leaving Hamilton Place near Ashwood, my sister, Mrs. J. L. Whiteside, pointed out a hawk flying about 100 feet above us on the highway. It was about twice the size of a Kestrel, had long pointed wings, a streaked breast, a dark brown back, and black mustaches. It was obviously an immature Peregrine Falcon (*Falco peregrinus*). It swiftly flew over a hill that we call the knob. I was reminded of Dan R. Gray's report of a Duck Hawk flying over Ashwood on 21 October 1935 (*The Migrant* 6:92).

HARRY C. YEATMAN, Biology Department, University of the South, Sewanee 37375. Accepted 2 July 1980.

RECENT RECORDS AND STATUS OF THE WHIMBREL IN TENNESSEE—During the late afternoon of 27 May 1979 I was censusing shorebirds at the Kingston Steam Plant, Roane County, with Robert E. Beck, doctoral student in ornithology at the University of Tennessee (Knoxville), when we noted a flock of 18 large shorebirds perched about 100 meters away on the mudflats of the settling ponds associated with the facility. Inspection with a 25x 'scope revealed that all the birds possessed a prominently decurved bill as well as distinctive striping on the head, leading us to believe that they were Whimbrels (Numenius phaeopus). As we observed the flock we used the Birds of North America by Robbins et al (1966, New York, Golden Press) for confirmation; later the birds circled over the pond and we were able to note that they did not possess the rufous underwings characteristic of Long-billed Curlews (Numenius americanus). I have considerable experience with each of these species from field work done in Florida and Texas from 1971-1977, though I have never noted a Whimbrel flock of this size in either state. Ben Coffey (pers. comm.) also noted that he had no previous experience with a Whimbrel flock of these proportions.

This observation constitutes the seventh record for Tennessee; it is also only the second spring sighting on record, and it appears to be the second sighting in the Eastern Ridge and Valley Region of the state. More importantly, this observation is the only one where more than one or two birds is concerned. At the same location on 24 May 1980 J. B. Owen, Pat Stalling, and Albert Jenkins also observed a Whimbrel, the eighth sighting in the state.

The previously published observations of Whimbrels in Tennessee (*The Migrant*, 5:40. 43:82-93. 47:18. 48:104, 105) and the two records herein noted show the extreme dates of Spring occurrence to be 24 May - 4 June, while the autumn migration dates fall into two clusters: 8-24 July and 20-26 September. Both A. C. Bent's *Life Histories of North American Shore Birds, Part II*. (1929, New York, Dover Publications, Inc.) and R. S. Palmer's *The Shorebirds of North America* (1967, G. D. Stout, Ed., New York, Viking Press) note a characteristic late May northward flight of this species as well as two clearly articulated southward migration waves, the first comprised of adults in July and the second made up of

young birds in August and September. The above noted extreme dates correlate well with each of these authorities.

STEPHEN J. STEDMAN, 2223 Tomassee Drive, Knoxville, TN 37920. Accepted 3 Sept. 1980.

RED-COCKADED WOODPECKER COLONY IN CAMPBELL COUNTY, TENNESSEE—On 12 December 1978, J. C. Howell, Gary Muffly, and I located two Red-cockaded Woodpecker (*Picoides borealis*) cavity trees on Pine Mountain, Campbell County, Tennessee. During subsequent visits, three additional cavity trees were found. This is the first known colony site in Campbell County. The colony was on a west slope above a ravine, approximately 3.4 km NE of the junction of I-75 and Stinking Creek Road. The area is mixed pine and oak-hickory forest, with a dense understory of mountain laurel (*Kalmia latifolia*) and other ericaceous shrubs. Red-cockaded Woodpeckers have been sighted within 2 to 3 km of the colony site several times since 1971 (Nicholson, *Migrant* 48:53-62, 1977). Howell and Muffly observed a single bird 0.8 km SSE of the colony site on 18 October 1978 (Dubke and Dubke, *Migrant* 50:23, 1979), and this observation prompted our search which eventually resulted in the discovery of the colony site.

All of the five cavities were in shortleaf pine (*Pinus echinata*), and the trees were within about 350 m of each other. Two of the cavities were in trees killed by southern pine beetles (*Dendroctonus frontalis*), and the other three in live trees. One of the cavities in a live pine was inactive, and another showed a small amount of fresh resin flow in April and October 1979. The remaining cavity had a copious flow of resin on 12 December 1978, and the plate surrounding the cavity entrance was enlarged during the spring and summer of 1979. This tree, approximately 58 cm d.b.h., was located on the edge of a 30-m bluff, and was the largest nest tree I have observed in the State. The cavity was somewhat unusual for a Red-cockaded Woodpecker, as several large, live branches originated below the nest opening. However, this may have been one of the only suitable trees in the area, as many other large pines were beetle-killed or logged a few years before.

Single Red-cockaded Woodpeckers were observed in the colony area on 15 April 1979, by Tom Phillips and Rich Laughlin (pers. comm.), and on 30 October 1979, by Craig Watson and the author. Further visits to the colony site during the April to June breeding season are needed to determine if this is a viable, reproducing colony. The nearest known active sites are 63 km SW in Morgan County, Tennessee (Nicholson, op. cit.), and 62 km N in Laurel County, Kentucky (Jackson et al., *Kentucky Warbler* 52:75-80, 1976).

CHARLES P. NICHOLSON, TVA Regional Natural Heritage Project, Office of Natural Resources, Tennessee Valley Authority, Norris, Tennessee 37828. Accepted 8 March 1980.

THE SEASON

DR. FRED J. ALSOP, III, Editor



NESTING SEASON: 16 MAY - 31 JULY, 1980

The Tennessee Wildlife Resources Agency lists 14 species of birds as either *endangered* or *threatened* species in Tennessee. To highlight records of these species for researchers using *The Migrant*, as well as for the general birder, those species so designated will be *italicized* in this and in future "Season" reports. Unfortunately the following report is once again incomplete as the data for the Central Plateau and Basin Region was unavailable after an extended deadline at the time this material was called for by the editor of *The Migrant*.

Probably the most unexpected record for this reporting period is that of two *Anhingas* observed for more than a month in McNairy County. This species was once a breeding bird along the Mississippi River, at Reelfoot Lake, and in Humphreys County, but has been unrecorded in the State for 18 years. Many other birds associated with aquatic habitats were recorded including numerous species of herons, especially in the Eastern Ridge and Valley Region, where a new *Blackcrowned Night Heron* nesting colony was discovered. Snowy Egrets were found in both the Eastern Ridge and Valley and the Eastern Mountain regions. All three reporting regions had White Ibis; most seen were immature, and they were most common in the Western Coastal Plain where a roost at Dyersburg built to a peak of over 100 individuals in early August.

Mike Bierly found almost 200 Least Terns at the colony in the Mississippi River and banded more than 40 young birds. Birders visiting the Kingston Steam Plant west of Knoxville on a regular basis are finding lots of shorebirds and some lingering ducks of several species not normally seen here in summer. Their report (see E. Ridge and Valley) includes a Whimbrel, 8 Northern Phalaropes at one time which may be the largest single sighting in the State, and a breeding plumaged Laughing Gull; the last a species for which there are few, if any, records at this season here. *Bald Eagles*, in both adult and subadult plumages, were seen in the Eastern Ridge and Valley at several locations. *Ospreys* were reported from a new location in the Western Coastal Plain where two birds spent almost 3 months at Big Hill Pond State Park in McNairy County. Don Hammer reports there were 3 nesting pairs on Watts Barr and 6 young were fledged from 2 nests there.

In this nesting season there are records in the pages that follow of the attempted and successful breeding of many avian species. Some of the nests discovered merit special notice because of the rarity of the species in Tennessee. The nests of the *Sharp-shinned Hawk* were located in south Knoxville and in Hoss Cove south of Johnson City. *Cooper's Hawks* nests were found in two locations on Bays Mountain in Kingsport. A pair of *Red-cockaded Woodpeckers* with one young bird were located on Skunk Ridge in Great Smoky Mountains National Park by Chuck Nicholson in the area where Rick Phillips, Tom Laughlin, and Bill Kappa discovered an adult in 1979. Nicholson also found a single bird at the Sinking Creek site in Campbell County. Bank Swallows were located in a large active colony on the Mississippi River banks and a small colony in a gravel pit at Austin Springs near Johnson City was destroyed by the operation of pit. One young bird was produced in the *Common Raven* nest in Great Smoky Mountains National Park that was reported in the previous issue's "Season." The successful nesting of Goldencrowned Kinglets on Roan Mountain may be the first reported observation of an active nest of the species in Tennessee even though it must have been doing so in the Spruce-fir forests here for thousands of years.

A Scissor-tailed Flycatcher was observed in the Eastern Ridge and Valley. Alder Flycatchers were found in several areas on and near Roan Mountain and at least 6 males appeared to be territorial in the alder thickets above 5,000 feet. Olive-sided Flycatchers were located in both the eastern regions. A Brown Creeper was discovered in the Western Coastal Plain on 21 June. Grasshopper Sparrows were reported in all three reporting regions but the compiler for the Eastern Mountain found fewer in the Elizabethton area this year than last. In the Eastern Ridge and Valley Region a Bachman's Sparrow was seen at Newport and in the same region House Finches were observed in Knox County throughout the reporting period. In June and July they were seen feeding fledged young who still had downy feathers on their heads. The compiler for the region believes that at least two broods of House Finches were produced in Knox County this summer and it looks as if the species continues to expand its range in the eastern states.

Details of these observations and many, many more in the pages that follow. Send your field notes to your regional compiler today.

WESTERN COASTAL PLAIN REGION—The western part of the state experienced the record hot days rivalled only by days without any precipitation.

Anhinga-Sandpiper: ANHINGA: 1 Jun - 9 Jul (2) BHP (DE, JH, JT). Yellowcrowned Night Heron: 11 nests were observed at the McCorkle site as compared to 8 nests last year. There was an average of 4 young per nest. Two young were found on the ground at two different locations, they were banded and released (JS). WHITE IBIS: 16 Jul (1) R (DM, GM); 27 Jul (1 imm) NE Shelby Co. (AP, DP); 28 Jul (1) NE Shelby Co. (LCC, HD, CB), last seen at this location 4 Aug (1) (AP). The following is a compilation of birds observed by W. G. Criswell at the Dyersburg's roost:

	Little Blue Heron	Cattle Egret	Yellow-crowned Night Heron	White Ibis
24 Jul	1229	462	9	25
25 Jul	nc*	nc*	nc*	26
28 Jul	1204	687	2	11
30 Jul	nc*	nc*	nc*	75
7 Aug	1206	1065	2	103
14 Aug	616	1426	0	44

*nc = not counted

The heronry was not used in 1979.

Least Bittern: 18 May, completed nest, no eggs; 27 May (4 eggs in nest), WM (WGC). Mississippi Kite: 15 May (2) OP (JS, NS, MW), 25 May (4) FPSP (MCTOS), 31 May thru 1 Aug (1 to 3) D (WGC). Broad-winged Hawk: 15 May (1) OP (NS, MW). *Osprey:* 5 Apr thru 25 Jun (2) BHP (JH, JT). Semipalmated Plover: 28 Jul (1) CP (WGC). American Woodcock: 19 Jul (1) M (DAD). Spotted Sandpiper: 8 Jul thru 12 Jul (2) Island 21 (WGC). Least Sandpiper: 8 Jul thru 12 Jul (4-6) Island 21 (WGC). *Least Tern:* 21 Jun (194) 790 mile to 824 mile on MS River, count made by air survey (MLB), 19 Jul (140 adults, 42 young banded) 790 mile marker MS River (DAD, JG, MW).

Whip-poor-will-Swallow: Whip-poor-will: 24 Apr (21 WPW at 9 stops) Mt. Comfort to I 240 4.6 mi. Carrol Co.; (37 WPW at 15 stops; 3 CWC, two at beginning of run and one near Wildersville) I-40 to Wildersville 10.5 mi. Henderson Co.; 22 Jun (36 WPW at 20 of 21 stops; 13 CWC at 11 of 21 stops) Lick Creek Rd. 9.4 mi. to Granny's Creek Resort, Benton Co. (BBC, LCC). Chimney Swift: 28 May (nest with 3 eggs); 1 Jun (same nest with 5 eggs) D (WGC). Eastern Phoebe: 19 Jun (nest with 4 eggs) FPSP; (nest with one young about 6 days old) OL (BBC, LCC). Tree Swallow: 3 Jun (1) R (BP, RP). Bank Swallow: 9 Jul (174 holes, some completed, some incomplete) MS River bank at Island 21. Barn Swallow: 19 Jun (63 nests) I 55 and Delaware St. Bridge, M (BBC); 6 Jun (60 nests) I 40 and overpass at Exit 133 (BCC); Other nests on Interstate bridges at Tennessee, Buffalo and Duck Rivers (BBC). Rough-winged Swallow, Tree Swallow, and Bank Swallow (approximately 1500) were observed on the east end of an island at the 790 mile marker in the MS river on 19 Jul. The swallows were observed from a boat so an accurate number of each species was very difficult. The birds were resting, preening and bathing (JG, DAD, MW).

Creeper-Sparrow: BROWN CREEPER 21 Jun (1) HNWR (LCC, MW). House Wren: 19 Jun (1) FPSP (BBC, LCC). Bewick's Wren: 21 Jul (nest, 4 well fledged young); 23 Jul (1 young photographed) D (WGC); the nest was in a corrugated cardboard box in a cluttered shed. Warbling Viero: 25 May (2) FPSP (MCTOS); (2) one each at two different locations in Memphis; 31 May (2) one each at two different locations in SFSP; (6) MI & (2) EB (BBC, LCC). Parula Warbler: 13 Jun (2 to 4) MI (BBC, LCC). *MAGNOLIA WARBLER:* 4 Jun (1) OP (BBC), latest by four days of an other previous records. Blue Grosbeak: 9 Jun (nest with 3 eggs) D (WGC). Grasshopper Sparrow: 4 May (3) Tiger Tail (CN); 9 Jun (evidence of feeding young) D (WGC); 21 Jun (1) D (WGC); 19 Jun (2) FPSP (BBC, LCC). Chipping Sparrow: 17 May (1 observed building a nest) AP (JS); 31 May (nest with 3 eggs) AP (JS, MW).

Locations: AP—Audubon Park, city park in southeast Memphis; BHP—Big Hill Pond, State park in southwest McNairy Co.; CP—Cottonwood Point, near Heloise, TN; D—Dyserburg, TN; EB—Ensley Bottoms, south west Shelby Co.; FPSP—Fort Pillow State Park, Lauderdale Co.; HNWR—Hatchie National Wildlife Refuge; HM—Hooper Marsh, Dyer Co.; Island 21—Mississippi River, Dyer Co.; McCorkle—city street in Memphis; M—Memphis; MI—Mud Island, northwest Memphis; OL—Opem Lake, Dyer Co.; OP—Overton Park, city park in Memphis; R—Reelfoot Lake TN; Tiger Tail, Dyer Co.

Observers: CB—Carolyn Bullock; MLB—Michael L. Bierly; BCC—Ben B. Coffey, Jr.; LCC—Lula C. Coffey; WGC—William G. Criswell; DAD—Dolly Ann Daily; HD—Helen Dinkelspiel; JG—Joe Guinn; DE—Dan Eagar; JH—Jim Harrison; MCTOS—Memphis Chapter, TOS; DM—Don Manning; GM—Gina

Manning; CN—Chuck Nicholson; AP—Allen Phillips; BP—Bill Peeples; DP— David Phillips; RP—Rob Peeples; NS—Noreen Smith; JS—John Stokes; JT—Jim Taylor; MW—Martha Waldron.

MARTHA WALDRON, 1962 Yorkshire Drive, Memphis, TN 38119.

EASTERN RIDGE AND VALLEY REGION—Observations continued on a consistent basis at the Kingston Steam Plant. The regular species were identified and the now-to-be-expected rarities were searched for and duly recorded in the basic data being compiled.

The reports of the number of accipiter hawks being received is most gratifying. With the first reported nesting of a Sharp-shinned Hawk in Knox County and the probable nesting of a pair in Hoss Cove the breeding situation is looking better than in many years. Two active nests of Cooper's Hawks were located in Kingsport.

From the virtual lack of any comments being made on the many Breeding Bird Surveys run it must appear that passerine species being monitored are stable. House Wrens have again been reported in the Chattanooga area, but still there is no documentation of their nesting. House Finch have been reported with young for the first time in Knoxville and observations on Grasshopper Sparrows continue to be reported.

Loon-Duck: Common Loon: 19 May (1) NL (Terry Chilcoat, Ralph Jordn *fide* CPN). Pied-billed Grebe: 17 May (1) AM (DRJ, JTP). Green Heron: 14 Jul (50) EB (PP). Little Blue Heron: 21 Jun (1) CH (RCM); 1 Jul (2) Bean Station (PP); 5 Jul (1) K (PP); 11 Jul (2) SB (LD); 14-31 Jul (max 8) EB (PP, DH, CPN, LT); 20 and 26 Jul (25-26) RB (TK); 28 Jul (5) HRS (WKJ, GR); all the reports were of immature birds except two. Cattle Egret: 28 Jul (15) HRS (WKJ, GR). Great Egret: 14-31 Jul (1) EB (DH, CPN, LT); 20 and 26 Jul (6) RB (TK): 29 Jul (1) KSP (SBS). Snowy Egret: 16 Jul (1) SB (LD). Black-crowned Night Heron: *new heronry* at Vonore, approx 25 nests (Bob Nichols). *WHITE IBIS:* 16-31 Jul (1) KSP (PP, SJS *et al*); 22-31 Jul (1) EB (DH, CPN, LT); 20 Jul (1) RB (TK); 28 Jul (5) HRS SKJ, GR). Gadwall: 26 May (1) KSP (DRJ, KLD); Blue-winged Teal: 26 May (2) KSP (MaD, LT). Ring-necked Duck: 1-3 all period KSP (SBS, CPN *et al*). Lesser Scaup: 26 Jun (1) JC (RK); 1-2 thru period KSP (CPN *et al*). Ruddy Duck: 17 May (1) KSP (LD, DRJ *et al*); 4 Jun (1) NL (DRJ, LD).

Hawk-Phalarope: Sharp-shinned Hawk: 27 May (1) (JC, MD, SG); "On 26 July at my study area in Hoss Cove, I observed 2 adult sharp-shins attending to two recently fledged immatures. The adults were present all summer." (Richard Lewis); 1 Jun (1) JBBS (DRJ); 5 Jul (1) Tiftonia (DRJ); 22 Jul (1) SB (KD); *nest* south K, 1 young fledged in early Jul (James T. Tanner); 10 Jun (1 carrying food) north KCo (JCH). Cooper's Hawk: 18 Jun (1) JB (RK); 9 Jun (1) McFarland Breeding Bird Survey, PCo (KD); 1 present during Jul, K (A. Boyd Sharp). 21 Jun (nest w/1 two-week old Y) Pretty Ridge, Bays Mt, Kingsport (RAP, TL); 10 Jul (nest w/5 young w/fight feathers) Holly Trail, Bays Mt, Kingsport (RAP, TL). Accipiter *spp:* 23 Jun (1) NE KCo (CPN); 28 Jun (1) W KCo (MaD); 12 Jul (1) Clinton (CPN); 23 Jul (1) Union Co (JCH). Accipiters: many reports came from the Knoxville area, those identified to species were Sharp-shinned, except for 1 Cooper's report. Historically, the Cooper's was more common in the Knoxville area. Are Sharp-shins occupying this vacant Accipiter niche? (CPN). *BALD EAGLE:* one adult thru season Norris L. (JCH); 17 Jul (1) Sevierville (PP); 28 Jul

(1 ad and 1 imm) Cherokee L. (WKJ, GR). Osprey: 3 nesting pairs Watts Bar L. that fledged 6 young from 2 nests (Don Hammer).

Coot-Owl: American Coot: 25 May (1) AS (SG); 28 May (1) SB (KLD); 20 Jul (1) RB (TK). Semipalmated Plover: 17 May (35) KSP (SBS et al); 17 May (4) Har (DRJ); 26 May (13) KSP (DRJ, KLD); 20 Jul (1) RB (TK). Black-bellied Plover: 17 May (19) KSP (LD, JWS, DRJ et al); 23 May (3) KSP (PP); 26 May (13) KSP (KLD, DRJ); 31 May (1) EB (SBS, Ron and Audrey Hoff). Ruddy Turnstone: 24 May (1) KSP (JBO). Am. Woodcock: 19 Jul (1) JCo (TK). WHIMBREL: 24 May (1) KSP (JBO). Spotted Sandpiper: 26 May (5) KSP (KLD, DRJ); 20 and 26 Jul (10 and 4) RB (TK). Solitary Sandpiper: 26 May (1) AS (RK). Willet: 17 May (3) KSP (LD, DRJ, JWS et al); 26 Jul (1) RB (TK). Greater Yellowlegs: 16 Jul (1) KSP (SBS). Lesser Yellowlegs: 16 Jul (1) KSP (SBS); 20 and 26 Jul (20 and 8) RB (TK). Pectoral Sandpiper: 17 May (1) KSP (LD, JWS, DRJ); 17 Jul (7) KSP (DRJ, CH, JWS); 20 and 26 Jul (100 and 80) RB (TK). White-rumped Sandpiper: 17 May (25) KSP (LD, JWS, DRJ); 23, 25 May (1-2) KSP (PP); 26 May (12) KSP (KLD, DRJ); 17 Jul (3) KSP (CH, JWS, DRJ). Least Sandpiper: 17 May (150) KSP (LD, JWS, DRJ); 26 May (2) KSP (KLD, DRJ); 17 Jul (30) KSP (CH, JWS, DRJ); 21 Jul (1) HRA (KLD); 20 and 26 Jul (30 and 10) RB (TK). Dunlin: 17 May (50) KSP (SBS, LD, JWS, DRJ); 25 May (4) KSP (PP); 26 May (15) KSP (KLD, DRJ). Dowitcher *spp*: 22 Jul (1); 23 Jul (4) EB (DH, CPN, LT); 20 and 26 Jul (1-4) RB (TK). Semipalmated Sandpiper: 17 May (100) Har (DRJ, JTP); max 17 May (600) KSP (LD, JWS, DRJ et al); 26 May (40) KSP (KLD, DRJ); 20 and 26 Jul (40-60) RB (TK). Western Sandpiper: 17 May (10) KSP (LD, JWS, DRJ). Sanderling: 22 Jul (1) EB (DH, CPN); 27 Jul (1) KSP (LT). NORTHERN PHALAROPE: 17 May (8) KSP (LD, JWS, DRJ); 21 May (2) KSP (PP). Ring-billed Gull: 17 May (2) KSP (LD, JWS, DRJ). LAUGHING GULL: 24 Jun (1, breeding plumage) KSP (BHS, REB); 27 Jun (1) KSP (CH). Common Tern: 18 Jul (2) ChL (RCM). Caspian Tern: 18 May (5) KSP (SJS, Paul Hartigan, Bill and Allison McNutt); 27 May (1) K (PP). Black Tern: 17 May (14) SB (LD); 4 Jun (20) ChL (E. O. Grundset); 15 Jul (1) SB (LD); 22-23 Jul (1) EB (DH, CPN, LT). Barn Owl: 12 Jun (1) JC (RK); nest with 3 young, Speedwell (Hugh and Pearl Bowman fide JBO); 6 at one time near nest tree that has been occupied for at least 20 years at White Pine, JCo (TK).

Woodpecker-Wren: Red-headed Woodpecker: only report from Carter-Washington Counties was of one pair in Jonesboro (RK). *RED-COCKADED WOODPECKER:* 3 Jun (1) at Stinking Creek colony site, Campbell Co. (CPN). *SCISSOR-TAILED FLYCATCHER:* 18 May (1, details to be submitted) JCo (TK). Willow Flycatcher: 2 singing males AS, down from usual 4-6 (GBE *et al*); 27 May - 7 Jun (1) SB (KLD); 4 Jun (2) AM (DRJ). Eastern Wood Pewee: approx. 30% decrease on BBS routes (CPN). Olive-sided Flycatcher: 16-25 May (1) Hoss Cove (RK, MD, SG). Horned Lark: max 40, permanent resident at farm JCo (TK). Bank Swallow: 17 May (2) SB (DRJ, JTP); 25 May 5 nest holes discovered AS, then *destroyed*; last 2 birds 26 Jun (RK); 26 Jul (50) JCo (TK). Cliff Swallow: 15 Jun (2) JB (RK). House Wren: in the Chattanooga area at least 3 different individuals were reporting singing on territory and carrying nesting material—still no confirmed nesting for the area (Ann Gibson, KLD); they seem to be fairly common in suburbs of towns such as Maryville, Newport and White Pine (TK).

Waxwing-Sparrow: Cedar Waxwing: 31 May (4) RR (KD); ''plentiful during the entire period'' Eliz-JC (GDE *et al*). Solitary Vireo: 1 Jun (1) Collegedale (CH). Golden-winged Warbler: 1 Jun (2) JBBS (DRJ). Bobolink: 14 Jun (1 male) JCo

(TK). Northern Oriole: 15 Jun (1) Grainger Co. (TK). Rose-breasted Grosbeak: 7 Jun (1) RR (DRJ, KD). Blue Grosbeak: 3 singing males Eliz-JC (RK *et al*). Dickcissel: 1-3 during May and June JCo (TK). *HOUSE FINCH:* young noted in Knoxville for apparently the second year; up to 8 birds all season with a male seen feeding a young bird in July and a bird with downy feathers on head seen in early June, so probably at least one pair brought off two broods this summer (Jim and Betty Mason, SJS). Grasshopper Sparrow: only 5 singing males found this year Eliz-JC compared to 8-10 normally (GDE *et al*); at least 3 additional localities found in KCo (KTOS); 10 Jun (1) Wetmore, PCo (CPN); Tony Koella checked 18 suitable sites and reported 26 singing individuals in Grainger, Greene, Hamblen, Jefferson and Knox counties. *BACHMAN'S SPARROW:* 9 Jun (1) Newport, JCo (TK). Song Sparrow: 1 Jun (41) JBBS (DRJ).

Locations: AM—Amnicola Marsh: AS—Austin Springs; CH—Chattanooga; ChL—Chickamauga Lake; EB—Eagle Bend Fish Hatchery; Eliz-JC— Elizabethton-Johnson City Area; Har—Harrison; HRA—Hiwassee River Area; HRS—Holston River at Surgoinsville; JB—Jonesboro; JBBS—Jasper Breeding Bird Survey; JC—Johnson City; JCo—Jefferson County; K—Knoxville; KCo— Knox County; NL—Nickajack Lake; PCo—Polk County; RB—Rankin Bottoms (Cocke County section of Douglas Lake); RR—Reflection Riding; SB—Savannah Bay.

Observers: BHS—Barbara H. Stedman; CPN—Charles P. Nicholson; DRJ—Daniel R. Jacobson; DH—Dave Hankins; GDE—Glen D. Eller; GR— Greg Reed; JBO—J. B. Owen; JCH—Joseph C. Howell; JTP—Johnny T. Parks; KD—Ken Dubke; KLD—Ken and Lil Dubke; KTOS—Knoxville Chapter, TOS; LD—Lil Dubke; LT—Linda Turner; DL—Dick Lura; MaD—Marsha Davis; MD—Martha Dillenbeck; PP—Paul Pardue; RCM—Robert C. Mitchell; REB—Robert E. Beck; RK—Rick Knight; RAP—Rick Phillips; SBS—Stephen and Barbara Stedman; SG—Sally Goodin; SJS—Stephen J. "Steve" Stedman; TK—Jon A. "Tony" Koella; TL—Tom Laughlin; WKJ—Wesley K. James.

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EASTERN MOUNTAIN REGION—Hotter than normal temperatures and drier than usual conditions existed from the end of May thru the end of July. However, nesting did not seem to be adversely affected as all species seemed to enjoy a very successful breeding season. Yellow-crowned Night Herons nested successfully for the second consecutive year near Elizabethton. Alder Flycatchers were successful again this season on Roan Mountain. In a most notable find, a pair of Red-cockaded Woodpeckers fledged one young in Great Smoky Mts. Nat'l Park, the first time since 1965 that a young bird has been recorded there (per Chuck Nicholson).

Several unusual water bird sightings were made on Watauga Lake during July including White Ibis, Snowy Egret and as many as seven immature Little Blue Herons, making for some interesting birding during this normally "slow" time of the birding season.

Loon-Turkey: Common Loon: 1 Jun (1 bird in breeding plumage) WatL (GE). Little Blue Heron: 6 Jul (4) and 4 to 7 irregularly thru end of period on WatL (GE, ETOS). *SNOWY EGRET:* 18-22 Jul (1) WatL (GE, SG, MD). Yellow-crowned Night Heron: 5 to 7 young fledged and seen thru end of period near E (GE, GW, *et al*). *WHITE IBIS:* 20 Jul (1), 23, 27 Jul (1) and 29 Jul (3) all imm. WatL (GE, RK,

SG, MD). Blue-winged Teal: 26 May (3) E (HF) last spring sighting. Bufflehead: 15-22 Jun (1 imm male) WibL (GE). Sharp-shinned Hawk: 24 May (1) SHL (RL); 28 May (1) Erw (GS); 1 Jun (1) SHL (RL); 23 Jun (1) Hpt (RK); 13 Jul (2) WatL (GE). Cooper's Hawk: 12 Jun (1) IrMtn (GS); 2 Jul (1) RC (GE). Wild Turkey: 24 Jun (1 hen, 5 young) HolMtn (RK); 22 Jul (5) ShV (RK).

Woodcock-Flycatcher: American Woodcock: 16 Jun (1) Tabcat Creek, GSMNP (CN). Spotted Sandpiper: 1st late summer sighting 23 Jul (1) WatL (RK). Solitary Sandpiper: 25 May (1) E (HF) last spring sighting. Ring-billed Gull: 7 Jun (2) WatL (GE) last spring sighting. Barn Owl: 15-31 Jul (1) SV (GW, *et al*). Great Horned Owl: 1-2 birds regular thru-out period SHL (RL). Whip-poor-will: annual Eliz count on HolMtn on 20 Jun found 48 birds (ETOS). *RED-COCKADED WOODPECKER:* 27 May thru 23 Jul (*1 pair + young*) Skunk Ridge, GSMNP (CN). Cliff Swallow: 19 Jun (10) Tabcat Creek, GSMNP (CN). Willow Flycatcher: only 1 pair in Eliz area during period. *ALDER FLYCATCHER:* 15 Jun first seen and at least 6 singing males seen thru end of period above 5000' on RM (ETOS). Olive-sided Flycatcher: 16 May (3) GSMNP (DJ, PDC, KD).

Raven-Sparrow: Common Raven: 16 May (1 young in nest) GSMNP (DJ, PDC, KD). Black-capped Chickadee: 16 May (12) GSMNP (DJ, PDC, KD). Red-breasted Nuthatch: 11 Jul (1) RM (RL) only sighting reported all season in high elevation. Golden-crowned Kinglet: 21 Jun (3 males) RCP (GW) possible low elevation nesting? 17 Jun (2 adults carrying food to nest) Carver's Gap, RM (FJA); 20 Jun (7 young fledged) above nest, Carver's Gap, RM (FJA). Cedar Waxwing: very numerous thru-out period. Warbling Vireo: 21 Jul (1) RC (MD, SG). Swainson's Warbler: 2nd consecutive year located singing male at WibL (GW). Cerulean Warbler: 19 Jun (2) Deals Creek, GSMNP (CN). Prairie Warbler: 26 Jun (2) RC (RK). Wilson's Warbler: 25 May (1) RM (SG) last spring sighting. Blue Grosbeak: 1 Jun (1 singing male) Cades Cove, GSMNP (Fred Alsop) very few records from the Park. Red Crossbill: 7 Jun (4) GSMNP (Debbie and Tommy Harston). Grasshopper Sparrow: 2 pairs nested near Eliz during period (GW). Vesper Sparrow: 1 Jul (1) RM above 5000' (MD, SG).

Locations: E—Eliz. area; Erw—Erwin; GSMNP—Great Smoky Mtn. National Park; HolMtn—Holston Mtn.; Hpt—Hampton; IrMtn—Iron Mtn.; RC— Roans Creek; RCP—Rock Creek Park near Erwin; RM—Roan Mtn.; SHL— South Holston Lake; ShV—Shady Valley; SV—Siam Valley; WatL—Watauga Lake; WibL—Wilbur Lake.

Observers: FJA—Fred J. Alsop, III; PDC—Paul and Dot Crawford; KD— Kathy Davidson; MD—Martha Dillenbeck; ETOS—Eliz. Chapter of T.O.S.; GE—Glen Eller; HF—Harry Farthing; SG—Sally Goodin; DJ—Daniel Jacobson; RK—Rick Knight; RL—Richard Lewis; CN—Chuck Nicholson; GS—Glenn Swofford; GW—Gary Wallace.

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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.

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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.

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NO. 1

THE CLIFF SWALLOW (Petrochelidon pyrrhonota) IN TENNESSEE

FRED J. ALSOP, III

Since Ben B. Coffey, Jr. reported a 14 August 1932 sighting of one Cliff Swallow in Memphis (Coffey, 1933) more than 160 citations for this species have appeared in the pages of *The Migrant*. Today, more than 45 years later, we still know very little about the movements of this bird through, and its breeding activities in, Tennessee.* The purpose of this paper is to consolidate most of what has been published about the bird in the State in an effort to better understand its present status and its history as a breeding bird. Hopefully it will raise questions that birders across Tennessee can seek to answer as they look for evidence of nesting colonies in their home birding areas during the summer seasons to come.

Cliff Swallows in Tennessee occur either as transients passing through the State (most of the nesting range of the species is north of Tennessee) or as summer residents nesting in Tennessee. Records of transients in *The Migrant* for the southernly Fall migration come mostly from "The Season." Those for the northward passage are recorded principally in the "Spring Field Days."

Because the species is a regular transient through the State records of its dates of occurrence are few, i.e., it is a familiar bird and few observations get reported, especially for the Fall migration (records of Fall migrants are outnumbered by those of Spring transients by more than 3 to 1). Extreme dates for the bird in Tennessee are 6 March as the earliest and 24 October as the latest. Because most of the records for Spring migrants were produced by birders taking part in "Spring Field Days" peak movements for migrants at this season are unknown as the date listed is that of the local count which may have little correlation with migratory movements of the species. Median dates of occurrence for the Spring in the four regions used in "The Season" are: Western Coastal Plain, 5 May; Central Plateau and Basin, 27 April; Eastern Ridge and Valley, 30 April; and Eastern Mountain, 2 May. It appears that most of the transients move through the State between 20 April and 10 May in their flights to breeding areas to the north. Median dates for the Fall migration in the above regions are: Western Coastal Plain, 5 September;

*Some care should be taken when using only the data recorded in *The Migrant*. Ben Coffey pointed out some literature problems when he reviewed this paper by stating, "When someone expands a regional distribution phenomena into a state-wide study . . . he has to consider the status of "Season" notes as published in the past. There was a period when there was no Season published; then, later it was kept short. At that time, to save space, I left out many, many swallow notes . . . in order to have room for other data. Then, Cliff Swallow colonies became commonplace, so, they were, generally not mentioned."

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Central Plateau and Basin, 16 September; Eastern Ridge and Valley, 21 August; and Eastern Mountain, 4 September. The major movements appear to be between 1 August and 20 September with the largest flocks, hundreds to thousands of birds, being reported in the second two weeks of August. By the end of the second week of August most of the birds in Tennessee's breeding colonies are usually gone from the colony site.

The natural nesting site for the Cliff Swallow must have been the walls of rocky bluffs and outcroppings as the common and scientific names suggest. The race which breeds in the State is Petrochelidon pyrrhonota pyrrhonota (Vieillot). Petrochelidon is Greek for "rock swallow" from petros, "rock," and chelidon, "swallow" (pyrrhonota is in reference to one of the bird's field marks and is Greek for "russet-backed," from pyrrhos, "russet," and noton, "back"). The earliest published nesting site is by Albert Ganier and S. A. Weakley in 1936 (Ganier and Weakley, 1936) of a colony on a man-made structure, Lock D, on the Cumberland River near Dover in Stewart County. No information is available as to how long this colony had been in existence, only that the lock keepers stated the birds had been there for a number of years (the locks were constructed in 1916). Earlier nesting of the species was at least suspected as Mr. Ganier (Ganier, 1933) in his A Distributional List of the Birds of Tennessee gives the swallow the status of a "fairly common transient" in all regions, and "very rare summer resident" in East Tennessee. Perhaps the oldest nesting location for the species was in Decatur County in a natural situation on island bluffs in the Tennessee River 13 miles downstream from Savannah. This colony on Swallow Bluff Island had been "in existence for many years" when Ganier and his party visited it in 1936 (Ganier and Weakley, 1936) and contained about 90 nests. Alfred Clebsch (Clebsch, 1941) visited the site on 17 May 1941 and found the location abandoned with the colony relocated upstream because the locals were punching down nests to use the young for fish bait. At this time there were about 200 nests and Clebsch states, ". . . (there was) good evidence that swallows have been nesting at these riverbluffs since early times." There was an additional nesting site (Ganier and Weakley, 1936) nearby on the Decatur County shore on some low limestone bluffs where steamboats tied up called Swallow Bluff Landing. In 1943 (14:62) Swallow Bluff was blasted into the river as it was ". . . regarded as a menace to navigation upon the coming raising of the Kentucky Dam pool. . . . '' . Weakley (1945) two years later found the Swallow Bluff colony had moved 25 miles downstream to Marvin's Bluff in Perry County.

S. A. Weakley (1936) located a colony with 107 nests, 24 July 1936, on Lock B on the Cumberland River in Montgomery County 14 miles above Clarksville. This lock was also constructed in 1916 and his inquiries of the local lock keepers established that the birds began nesting there in 1917. He located a second Cliff Swallow population nesting on Lock C, 18 miles west of Clarksville, with about 20 nests. In 1937 a new nesting site was found to be under the bridge approach, and the bridge itself, at Dover near the original colony at Lock D.

In July, 1942, Ben Coffey found the easternmost colony to that date when he saw Cliff Swallows in flight about the Market Street bridge within the city of Chattanooga. A short search disclosed 5 or 6 nests of the bird under the bridge. A 35 year old fisherman Coffey questioned said they had been nesting there all his life "... most certainly for the last 10 to 12 years ..." (Coffey, 1942).

One of the most common nesting sites for the swallow in its breeding areas north of Tennessee has been the walls of buildings with the mud nests usually being placed close up under the eaves. Barns have been especially favored for this activity. On 4 June 1947 William Sutherland and Lee Herndon (Herndon, 1947) found 15 occupied nests of the Cliff Swallow in the hall-way of a barn along the Watauga River in the Siam community in Carter County. A second barn with 14 active nests in its hall-way was located nearby at the Siam bridge. The owner of the latter structure said the birds had been there every summer since 1941. It was not until 17 April 1972 that another nest of the species would be reported from the walls of a building. In that year Martha Dillenbeck and Peter Range (1972) found 2-8 nesting in a barn at Austin Springs in adjacent Washington County. These are the only observations of the species nesting in barns (buildings) I am aware of for the State, and, though separated by a period of 25 years, the locations are less than 15 miles apart. The Carter County locality remains the most eastern published nesting site for the bird in Tennessee.

During the 1950's new colonies were found in Perry, Hardin, Marion, Hamilton, and Humphreys counties. All were situated on man-made structures in, on, or over the Tennessee River. In the 1960's many new populations were found nesting in the Chattanooga area (West, 1961). Birders in the Nashville area located several colonies west of the city along the River Road in Davidson and Cheatham counties and on the road between Ashland City and Clarksville. Additional nesting birds were reported from Rhea, Hickman, and Perry counties. Ben Coffey (1964) found Cliff Swallows nesting under both approaches of the bridge spanning Kentucky Lake at Paris Landing in Henry and Stewart counties.

The 1970's are showing either a northeastward breeding extension of Cliff Swallows in the State or the location of overlooked colonies which may have been in existence for many years. However, the long residence of established, reliable birders in the Knoxville area and in the Tri-cities region indicates a recent movement of the swallow into the area and the establishment, probably within this decade of several new breeding colonies in the Upper East Tennessee counties along the headwaters and major tributaries of the Tennessee River. In 1970 two small colonies were found in Knox County and an additional one south of Knoxville on the Knox County-Blount County line (Alsop, 1970). Knoxville has had an active chapter of the T.O.S. for many years and its breeding birds and their status are as well known as those of any county in the State. It seems most unlikely that a species that nests in such conspicuous situations as does the Cliff Swallow would be overlooked for long. In the same year Gary Wallace (Wallace, 1970) located 6 colonies under concrete bridges in Grainger County and two nests to the south in neighboring Jefferson County. In 1972 Dillenbeck and Range located a small nesting population in a barn in Washington County near Johnson City. In the 1977 nesting season the author and Rick Phillips found the following colonies under concrete highway bridges on U.S. 11-W in Hawkins County on 24 May: 18 active nests plus several nests from past seasons under the west end of the James Leftwich Rogers Memorial Bridge over the Poor Valley Creek embayment of Cherokee Lake; 20 active nests plus several "old" nests under the bridge over Clouds Creek embayment of Cherokee Lake; 4 old and abandoned nests under the Caney Creek embayment bridge over Cherokee Lake; and 59 active nests under the north approach of the Hugh B. Day bridge over the Holston River just south of Rogersville. On 25 May 1977 Rich Phillips and Tom Laughlin found 22 active nests on the concrete pylons supporting the bridge over Boone Lake near Muddy Creek in Sullivan County southeast of Tri-cities Airport. Some nests in this colony were still under construction, some had incubating birds, and 3 were occupied by House Sparrows (*Passer domesticus*). It is believed that the Sullivan County site is

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more than a year old and the Hawkins County sites have been occupied since about 1971 (based on the old nests still present and on conversations with local residents and fishermen).

Little has been published in the State's literature on the actual nesting activities of the birds at the colony sites. From the available information it is known that nest construction has been observed as early as 13 April (Weakley, 1938) and as late as 9 July (Goodpasture, 1960). Some birds have been seen to add new mud to the shells of nests from the previous season and some apparently to occupy intact nests from the preceding year (Clebsch, 1941) presumedly after adding some new lining materials. Birds have been seen incubating eggs from 18 May (Clebsch, 1941) to 4 June (West, 1961). Observations of young being fed in the nest surely have been made but no reliable dates have been published.

Almost all of the reported nesting sites of the Cliff Swallow in Tennessee are located on two major river systems within the State. All the known sites (known to the author) on the Cumberland River are downstream from Nashville from just west of the city to Dover. Most of the colonies in the State, however, are located on the Tennessee River and its tributaries including the Holston River and the Watauga River in Upper East Tennessee (see Figure 1 and Tables 1-4). One would suspect that searches in the summer along these waterways in Meigs, Roane, Loudon, and Hamblen counties in East Tennessee and Houston County in western Middle Tennessee would produce evidence of nesting in those places as well. With regard to the presence of this species in the Memphis and Reelfoot Lake areas and at other locations along the Mississippi River over a period of at least 45 years it is somewhat surprising that more have not been discovered to be nesting in West Tennessee. The Coffeys and others have looked for the mud nests of this swallow around Memphis for many years without much success. On 29 April 1973, Jerald Ledbetter and members of the Memphis T.O.S. located 2 birds and a nest at Shelby Forest State Park. On 24 May, Lula and Ben Coffey observed the 2 birds and the nest under a gabled roof of an open shed for fishing skiffs with 52 Barn Swallow (Hirundo rustica) nests (American Birds, 27 (5):881). Coffey noted that it was 99 miles to the nearest nest northwest and the first known in the lower Mississippi Valley. The next year the Coffeys saw two Cliff Swallows carrying nesting materials to the same shed on 28 April. Later they learned that all the swallow nests had been destroyed by park personnel because of excretement on the boats. Some Barn Swallows remained in the vicinity, but no Cliff Swallows have been seen there since (Ben Coffey, pers. comm.). On 19 June, 1977, Ben Coffey found two birds and a nest on the Spring Creek bridge, 6 miles east of Hickory Valley, Hardeman County.

With the exception of the very early nesting sites on limestone bluffs in Decatur and Perry counties and Gray Cliff and Nickajack Cave (West, 1961) in the Chattanooga area, all the reported nests have been located on man-made structures. These have included barns, culverts, bridges (principally concrete) and locks and dams. The shifting status of the Cliff Swallow from that of a rather uncommon migrant, i.e., "Even as transients, these birds are not frequently recorded in our State though occasionally, in the mixed flocks of swallows that congregate in migration over lakes and ponds, one can pick out a number of these conspicuously marked birds" (Ganier, 1936), to a fairly widely distributed, not uncommon breeding bird seems to be contributed to no small degree to its ability to adapt to the artificial nesting sites provided by Tennessee's department of highways and the U.S. Army Corps of Engineers. Nesting sites that seem to be

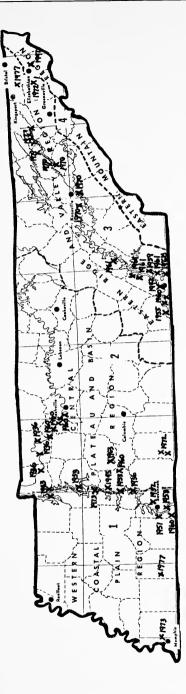


FIGURE 1. Cliff Swallow Nesting Locations. Dates are those of the first published record in *The Migrant*.

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TABLE 1.

NESTING SITES OF THE CLIFF SWALLOW IN THE WESTERN COASTAL PLAIN REGION

LOCATION AND AUTHORITY	YEAR	DATE	REMARKS
Swallow Bluff Island, Decatur Co.*			
Ganier and Weakley Clebsch	1936 1941	May May 18	90 nests: eggs & construction 200 nests: eggs & construction
Swallow Bluff Landing, Decatur Co.			
Weakley Weakley	1936 1941	Jul 25 May 18	150 nests 25-35 nests each in two sites abandoned
1 mile upstream (Weakley) 1¾ mile upstream (Weakley)	1936 1936	Jul 25 Jul 25	50 nests 218 nests
Tenn. River, Savannah. Hardin Co.			
Coffey DeBerry Coffey 1952-1957, 196	1947 1952 0 -1975	Jul 4 May 21	92 nests colony active colony active
Coffey	1976	Jun 22	300 nests
Counce, McNairy Co. Coffey	1960	Jun 18	nesting
Snake Creek, nw Shiloh. Hardin Co.			
Coffey	1950	May 12	nesting (60 birds plus)
Coffey Coffey	1953 1960	May 9 Apr 2	300 nests (and 21 June) 300 nests
Coffey	1900	Jul 3	300 nests
Pickwick Dam, Hardin Co. Coffey	1953	Jun 21	60 nests, office end
Coffey	1960	Jun 19	original site at office end abandoned, 230 nests on dam**
Patterson	1966		500-1.000 nests
Patterson	1967	Apr 15	50 nests under construction
Coffey	1967	May 14	330 nests
Shelby Forest St. Pk., Shelby Co.			
Ledbetter, Coffey	1973	Apr 29	1 nest & 2 birds
Coffey	1974	Apr 28	1 nest under construction
Spring Creek, Hardeman Co. Coffey	1977	Jun 19	1 nest & 2 birds
Beech River, Decatur Co. Coffey	1956	May 6	700 nests
Coffey	1964	1 05	colony still active
Coffey	1971	Jun 25	1,385 nests
Birdsong Creek, Benton Co. Coffey Alsop	1971 1973	Apr 29 May 26	65 nests 140 nests

*flooded in 1943

**Pickwick, House Sparrows at original site, under walk to office; swallows moved to turbine bays.

preferred, both for the establishment and maintenance of a breeding population, are those on vertical rock or concrete faces with some overhanging protection from rain. The site is over water, at least during the early phases of nest construction and egg laying. The entrances-exits to the colony are not screened by overhanging and/or blocking vegetation and there are adjacent broad expanses of open water, fields, grasslands, etc. over which the birds of the colony can feed.

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TABLE 2

NESTING SITES OF THE CLIFF SWALLOW IN THE CENTRAL PLATEAU AND BASIN REGION

LOCATION AND AUTHORITY	YEAR	DATE	REMARKS
Lock D, Dover, Stewart Co.* Ganier & Weakley Weakley	1936 1938	May 24 Apr 13	310 nests; eggs & construction construction
Lock B, Montgomery Co. Weakley* Weakley	1936 1938	Jul 24 Apr 13	107 nests construction
Lock C, Montgomery Co. Weakley*	1936	Jul 24	20 nests
Dover, Stewart Co. Weakley Ganier & Clebsch	1937 1942	May 16 Jun 21	280 birds 6 birds
Marvin's Bluff, Perry Co. Weakley	1945		nesting (1,800 in 1950, Coffey)
Perryville, Perry Co. Coffey Coffey Coffey 19 Coffey 19	1947 1953 956-1970 1971	May 10 Jul 12 Jun 25	500 nests largest colony; 1,910 nests smaller 255 nests
Johnsonville, Humphreys Co. Coffey C. L. Barker Coffey	1953 1955 1971	May 10 June Jun 26	50 nests 600 nests from boat 350 nests US 70; 110 nests railroad
Alsop	1973	May 26	210 nests
River Road w of Nashville, Davidson and Cheatham Co. Parmer Coffey Parmer Parmer Parmer Parmer Parmer	1960 1964 1966 1967 1968 1970	May 14 Jun 24 May 5 Apr 27	175 nests at three sites 2 sites, fewer birds than in 1960, 3rd site abandoned as many as usual nesting nesting normal nesting
Riggins	1970	Jul 4	84 nests at three sites
Ashland City-Clarksville Rd. Goodpasture	1960	Jul 9	35-40 nests under construction
Paris Landing. Henry & Stewart Co. Coffey Coffey	1963 1971	Apr 28 Apr 29	180 nests 150 nests
Pleasantville, Hickman Co. Coffey	1963	Jun 28	45 birds
Coon Creek, Perry Co. (Tenn 100) Coffey	1971	Jun 25	30 birds
West Point, Lawrence Co. Alsop Alsop	1972 1972	May 27 Jul 30	1 nest & 2 birds 1 nest, different site from above
Linden, Perry Co. Coffey Coffey	1958 1971	Jun 28 Jun 25	100 nests 100 nests

*Locks D, B, and C were destroyed around 1966.

TABLE 3.

NESTING SITES OF THE CLIFF SWALLOW IN THE EASTERN RIDGE AND VALLEY REGION

LOCATION AND AUTHORITY	YEAR	DATE	REMARKS
Market St. Bridge, Chattanooga. Coffey Coffey West West	1942 1951 1959 1961	Jul 21 Jun 17	5-6 nests 110 nests nesting 612 nests
Hales Bar Dam, Chattanooga. West West	1955 1961	May 2 May	386 nests none — abandoned
Nickajack Cave, Chattanooga. West	1960		12 nests
Gray Cliff, Chattanooga. West West	1960 1961		140 nests 225 nests
N. Chickamauga Ck., Chattanooga. West	1957	Apr 14	nesting
S. Chickamauga Ck., Chattanooga. West West	1959 1960	May 15	200 nests — later destroyed
Dayton, Rhea Co. West	1961	Jun 10	nesting at 3 sites
Soddy embayment, Hamilton Co. West	1961	Jun 10	nesting
1 mile from above. West	1961	Jun 10	100 nests
Nickajack Culvert, Chattanooga. West West	1961 1964	Jun 1 Jun 8	522 nests; eggs Jun 4 550 nests
Shallowford Bridge, Chattanooga. West West	1960 1961		200 nests 200 nests
Shallowford Bridge (new I-40)	1964	Jun 8	30 nests under construction
Knox County, Turkey Cr. Alsop Alsop	1970 1971	May 16 May 8	14 nests, const. (comp'd. 18-20 May) 4 nests under construction
Knox CoBlount Co. line (Tanner)	1970	May 23	2 nests under bridge
W. P. Harrell Bridge, Grainger Co. Wallace	1970	Jun 5	25 nests; 67 nests Jun 7
Bean Station, Hwy. 11-W, Grainger Co. Wallace	1970	Jun 7	30 nests; bridge at Briar Forks Ck.
J. K. Shields Bridge, Grainger Co. Wallace	1970	Jun 7	9 nests; 20 on Jun 20
Bridge 2 miles east of above. Wallace	1970	Jun 7	39 nests
Bridge 4 miles east of J. K. Shields bridge. Wallace	1970	Jun 7	47 nests
South end of J. K. Shields, Jefferson Co. Wallace	1970	Jun 7	2 nests
Austin Springs, Washington Co. Dillenbeck & Range	1972	Apr 17	2-8 birds nesting in barn
Poor Valley Creek embayment bridge, 11-W Hawkins Co. Alsop & Phillips	1977	May 24	18 nests
Clouds Creek embayment bridge, 11-W Hawkins Co. Alsop & Phillips	1977	May 24	20 nests
Caney Creek embayment bridge, 11-W Hawkins Co. Alsop & Phillips	1977	May 24	4 old nests
Hugh B. Day Bridge, Rogersville, Hawkins Alsop & Phillips	1977	May 24	59 nests
Muddy Creek bridge over Boone Lake, Sullivan Co. Phillips & Laughlin	1977	May 25	22 nests

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TABLE 4.

NESTING SITES OF THE CLIFF SWALLOW IN THE EASTERN MOUNTAIN REGION

LOCATION AND AUTHORITY	YEAR	DATE	REMARKS
Siam, Carter County. Herndon	1947	Jun 4	15 nests in barn
Siam near bridge over Watauga River, Carter Co. Herndon	1947	Jun 4	14 nests in second barn

Nesting Cliff Swallows in Tennessee have few reported natural enemies. Ganier (1962) reported seeing a small dark colored snake protruding about one foot of its body from the nest of one of the swallows as he and Weakley explored the colony at Swallow Bluff in Decatur County in 1936. Ganier was impressed at the snake's ability to reach the nests on the flat limestone rock face and one should believe this predator would have a most difficult, if not impossible, time of it trying to reach nests situated on vertical concrete structures. House Sparrows have established a symbiotic relationship with this swallow that, while not acting as a predator, is a parasitic role which may influence the nesting success of individual Cliff Swallows. This sparrow has often been observed nesting in the established colonies of the swallow. In this situation the House Sparrow uses the nest constructed by Cliff Swallows to lay its own eggs and raise its young. David Patterson (1966) noted a cyclical interaction of Cliff Swallow and House Sparrow populations at Pickwick Dam over a 10 year period and suggested that increasing sparrow populations, which are dependent on Cliff Swallows for nest sites, caused decreases in the swallow's density to the point of actual failure of the colony. He believes that alternative nesting locations are necessary to maintain stable populations of Cliff Swallows in an area. Patterson also found similar, but not simultaneous, cycles for these two species at other sites. For some swallows natural catastrophes have brought disaster to nesting attempts. Rapidly rising flood waters have been known to destroy the mud nests when they have been placed in locations close to the water's surface, and driving rain may so weaken the nests that they fall.

Man has been an obvious agent in the radiation of nesting colonies of the Cliff Swallow in the State. He is also the greatest single agent in the destruction of the nests and their contents. Swallow Bluffs were dynamited into the Tennessee River in 1943 and then submerged by the filling of Kentucky Lake. Fishermen in the area destroyed many nests to use the young for fish bait (Clebsch, 1941). A former nesting site at Hales Bar Dam was not used in 1961 when TVA moored a barge adjacent to it (West, 1961). At the North Chickamauga Creek bridge near Chattanooga, TVA workers scraped the nests off to paint the bridge during the nesting season (West, 1961), a practice that apparently occurred approximately every two years. Shooting of adult birds and the destruction of nests with shotguns has been reported by West (1961) and others. Ben Coffey (1964) found nests of the species in the Nashville area which had been destroyed by humans.

The Cliff Swallow seems to be increasing as a breeding species in Tennessee. Most of this bird's breeding range extension in the State appears to have occurred in the last 45 years and may be to a large degree correlated with the construction of structures that provide suitable conditions for the nesting requirements of the species. The Tennessee River system and the Cumberland River downstream from Nashville are the principal locations for the bird's nesting activities in Tennessee. The most recently established colonies indicate a continued movement of the swallow as a breeding bird into the upper reaches of the Tennessee River system into the Holston River system and the increased presence of the bird in the counties of Upper East Tennessee. New colonies should be searched for in these areas and along the Mississippi River, especially in the Memphis region. Birders across the state are encouraged to check the sites of known colonies and to record the present status of the Cliff Swallow.

SUMMARY

This paper is an attempt to consolidate most of the published observations of Cliff Swallows in Tennessee. The species occurs both as a transient and a summer resident being recorded between 6 March and 24 October. Little is known of the actual migratory movements of the species in the State, but major migration activity seems to take place between 20 April - 10 May and 1 August - 20 September.

The species is documented as having nested in Tennessee since at least the 1930's and most probably was present as a breeding species for many years prior to these writings. The natural nesting sites are thought to be cliffs and other vertical rock faces over or near water. The species has demonstrated both an extension of its breeding range eastward in the state and a major increase in its population in the past 45 years. These changes can be correlated with the establishment of manmade structures, i.e., bridges, dams, locks, etc. that provide suitable nest sites along the Tennessee and Cumberland river drainages. Man not only is an important agent in the change in status of Cliff Swallow populations in Tennessee, he is one of the principal forces in the destruction of the species' nests, the loss of young, and general disturbances to nesting colonies.

USE OF THE TABLES

Tables 1 through 4 document in chronological order the Cliff Swallow records published in *The Migrant* and some additional ones from the unpublished field notes of Ben B. Coffey, Jr. The geographical areas represented by each is based on the four regions used in the current "The Season" reports. The boundaries are, therefore, quite arbitrary and are not boundaries recognized by birds or most birders. It is therefore, recommended that readers seriously interested in documenting the presence of nesting colonies listed in the tables consider those along the Tennessee River where it marks the boundary between the Western Coastal Plain and the Central Plateau and Basin regions as belonging to the same nesting populations or of populations of one nesting area. Otherwise, nests on the west end of a bridge spanning the river will be considered as distinct from the nests of the same colony on the east end of the same bridge because the former are listed from the Western Coastal Plain (WCP) and the latter from the Central Plateau and Basin (CP&B). For practical interpretation purposes, locations bordering the Tennessee River in the following counties should be considered as one: Hardin (WCP) and Wayne (CP&B), Decatur (WCP) and Perry (CP&B), Benton (WCP) and Humphreys (CP&B), and Henry (WCP) and Stewart (CP&B).

ACKNOWLEDGMENT

I wish to extend my deepest appreciation to Ben B. Coffey, Jr., for his critical reading of this paper, for his many helpful suggestions for improving the manuscript, and for the additional important data he so generously provided from his own field records.

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Dept. Biological Sciences, East Tennessee State University, Kingsport University Center, University Blvd., Kingsport 37660. Submitted August, 1977.

THE 1980 CHRISTMAS BIRD COUNT

RICHARD D. LURA

This year's sixteen (16) counts recorded a total of 135 species. It is regrettable that the number of counts continues to drop. These sixteen represent a very low Christmas Count. The efforts of those who continue to participate are greatly appreciated.

The high number of Brown-headed Nuthatches at Chattanooga is notable. Several counts recorded their first House Finches, which continue to increase in numbers. Pine Siskins were more numerous and widespread than on recent Christmas Counts, as were Evening Grosbeaks and Red-breasted Nuthatches. As is the custom the counts are tabulated from west to east across the state.

INFORMATION ON THE COUNTS

MEMPHIS: 21 Dec.; 0645 to 1700; clear; temp. 15 to 34°F; wind NE, 3-10 mph; 37 observers in 13 parties; 126 party hours (96 on foot, 30 by car); 194 party miles (75 on foot, 119 by car).

Diane and William Bean, Carolyn Bullock, Dick Caldwell, Fred T. Carney, Tina Carpenter, Lula and Ben B. Coffey, Jr. (compilers, 672 N. Belvedere 38107), Dollyann Daily, Julian Darlington, Mary Davant, Helen Dinkelspiel, Fred L. Dickson, Jr., Jack and Katherine Embury, Jim and Sue Ferguson, Wm. B. Fowler, Jr., Joe Guinn, Van Harris, Russell Jones, Allan Larrabee, Gerald Papachristou, George Payne, Jr., Rob and Bill Peoples, Ernest Restivo, Marshall Sklar, Arlo I. and Noreen Smith, Richard Taylor, Howard H. Vogel, Martha Waldron, Ann Webb, Bobby and Wendell L. Whittemore, and Jeff Wilson.

LeConte's Sparrow seen by Wendell Whittemore.

REELFOOT LAKE: 20 Dec.; 0530 to 1600; temp. 12 to 20°F; wind NE, 12-20 mph; 13 observers in 5 parties; 36 party hours (16 on foot, 16 by car, 4 by boat); 200 party miles (18 on foot, 174 by car, 8 by boat).

Joel Bonnell, Ben Coffey, Lula Coffey, Wendell Crews, Dollyann Daily, Scott Jones, Kenneth Leggett, Brant Manning, Don Manning (co-compiler), Gina Manning (co-compiler—P. O. Box B, Bells 38006), Arlo Smith, Noreen Smith, Martha Waldron.

Six of the Snow Geese were of the blue form. The Golden Eagle was an immature. Forty-six of the Bald Eagles were immatures. Seen count week: Bobwhite and Woodcock.

BUFFALO RIVER CHAPTER: 27 Dec.; 0530 to 1730; mostly clear, temp. 22 to 40°F; wind light and variable; 10 observers in 4 parties; 40 party hours (5 on foot, 35 by car); 241 party miles (15 on foot, 226 by car).

Andy Augustine, Helen Clayton, Lloyd Clayton (compiler—Rt. 4, Lawrenceburg 38464), Susan Gamble, David Ihrie, Mary Ihrie, Mark Reeves, Damien Simbeck, Dawn Simbeck, Don Simbeck.

The Snow Goose was of the blue form.

THE 1980 CHRISTMAS BIRD COUNTS

	Memp Reel	Buff Colu	Nash Hick M	furf Leba Cook	High Chat GS	1N Knox King Eliz Roan
Common Loon Western Grebe Horned Grebe Pied-billed Grebe Dblcr. Cormorant			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	 4 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Great Blue Heron Green Heron Blkcr. Night Heron Mute Swan Canada Goose	2 7 1 15M	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- 1*
Snow Goose Mallard Black Duck Gadwall Pintail	8* 71 230M 2 4M 5 1.5M 80	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	19 1020 1261 436 115	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Green-wg. Teal Blue-wg. Teal American Wigeon Northern Shoveler Wood Duck	200 4 20 2 850 3 650 4 250	$\begin{array}{ccc} & \\ & 1 \\ 2 & 23 \\ & \\ & 7 \end{array}$	$\begin{array}{c} & 1 \\ 277 & \\ & \\ 2 & 1 \end{array}$	1 167 1		
Redhead Ring-nkd. Duck Canvasback Greater Scaup Lesser Scaup	$\begin{array}{ccc} - & 30 \\ 4 & 850 \\ 1 & 15 \\ - & - \\ 22 & - \end{array}$	$\begin{array}{ccc} - & 1 \\ 63 & 53 \\ 3 & 6 \\ - & - \\ - & 3 \end{array}$	51 2 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 9 115 54 47	10
Scaup sp. Common Goldeneye Bufflehead Surf Scoter Ruddy Duck	125 15 25 1 3.8M		4 120 65 35 1*	375 	1 48 7 31 	- 6 83
Hooded Merganser Common Merganser Red-br. Merganser Turkey Vulture Black Vulture	30 8 2 1 30 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	75 4 1 31	ì
Sharp-sh. Hawk Cooper's Hawk Red-tailed Hawk Red-shld. Hawk Rough-legged Hawk	$\begin{array}{cccc} 3 & 1 \\ 1 & \\ 67 & 24 \\ & 15 \\ & \end{array}$	$\begin{array}{c} & 1 \\ & 7 \\ 6 & 42 \\ 1 & \\ & 2 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	6 37	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Golden Eagle Bald Eagle Marsh Hawk Osprey American Kestrel	1* 108* 12 3 16 14	$\begin{array}{c} & \\ & \\ 4 & 13 \\ & 1^{*} \\ 17 & 34 \end{array}$	$\begin{array}{cccc} & \\ & \\ 3 & 2 \\ & \\ 45 & 53 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2
Ruffed Grouse Bobwhite Turkey Sandhill Crane Virginia Rail	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		87 119 	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 50 1 	7 37 26 14
Sora American Coot Killdeer American Woodcock Common Snipe	84 12M 57 21 1		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	10 183 14	1 1.1M 45 4 89 64 24 2 1 25 8
Spotted Sandpiper Lesser Yellowlegs Least Sandpiper Herring Gull Ring-billed Gull	1 39 150 5	1 1	15 8 607	2 	 80 20 55 89	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Bonaparte's Gull Rock Dove Mourning Dove Barn Owl Screech Owl	33 1 14 360 24 	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} & 19\\ 207 & 157\\ 303 & 248\\ &\\ 6 & 6 \end{array} $	6 88 58 97 151 30 2 14	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 275 535 205 1
Great Horned Owl Barred Owl Belted Kingfisher Common Flicker Pileated Woodpecker	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccc} 6 & 5 \\ 4 & 3 \\ 26 & 28 \\ 74 & 58 \\ 30 & 12 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 14 10 11

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Red-bellied Woodpecker	Memp 128	Reel 96	Buff 24	Colu 59	Nash 112	Hick 38	Murf 27	Leba 29	Cook 5	High 6	Chat 35	GSMN 3	Knox 29	King 18	Eliz 7	Roan
Red-hd. Woodpecker Yellow-bel. Sapsucker Hairy Woodpecker Downy Woodpecker	10 32 16 76	28 24 7 51	6 2 5 19	6 28 10 80	2 25 28 147	3 19 12 53	10 8 24	1 6 6 16		1 1 1 8	2 13 4 41	2 5 29	9 8 31	 3 29	3 3 29	1 3 6
Eastern Phoebe Eastern Wood Pewee Horned Lark Blue Jay Common Raven	2 263 265	3 562 76	5 15 101 	2 3 78	$\begin{array}{c}1\\-\\33\\259\\-\end{array}$	1 152	17	1* 87 	9	 43	2 55 183	6 	1 273	1 120	1 175 7	1 11 6
Common Crow Blkcp. Chickadee Carolina Chickadee Tufted Titmouse White-br. Nuthatch	57 199 96	190 99 29 2	227 56 96 8	288 168 114 6	361 435 291 63	199 197 94 2	152 76 31	97 74 51 2	12 25 18 9	510 15 52 20	469 269 146 38	241 306 * 53 36	834 260 86 12	338 108 75 21	725 136 58 24	27 2* 26 8 6
Red-br. Nuthatch Brown-hd. Nuthatch Brown Creeper Winter Wren Bewick's Wren	8 10 13	10 	2 	2 9 3 1	3 19 5 1	20 2 1	 1 	$\frac{1}{\frac{2}{3}}$	 1 3		33 17* 5 4 	24 6 10	61 10 1	3 	8 	
Carolina Wren Mockingbird Gray Catbird Brown Thrasher American Robin	98 154 1.0M	$ \frac{19}{27} \frac{4}{151} $	5 68 4 167	43 28 5 15.8M	93 168 6 1.8M	56 163 12 6M	7 77 10 1.2M	4 51 1 4 423	8 	$\begin{array}{r} 3\\12\\\\1\\333\end{array}$	73 137 5 512	36 24 1 2 17	81 162 6 411	36 35 4 87	44 53 1 341	$\frac{10}{1}$
Hermit Thrush Eastern Bluebird Golden-cr. Kinglet Ruby-cr. Kinglet Water Pipit	35 	25 3 10 25	3 68 15 11 	23 57 14 13 1	1 71 6 11	3 17 15 18	4	3 24 1 2	27	2 24 	5 166 42 32 38	7 2 107 14 	$ \begin{array}{r} 2 \\ 61 \\ 52 \\ 4 \\ \end{array} $	6 30 1	5 57 20 5 	10 2
Cedar Waxwing Loggerhead Shrike Starling Yellow-rmp. Warbler	46 18 2.1M 299	15 11 3.5M 181	24 18 508	2 11 130M 13	16 25 5.3M 38	9 7 209M 31	23 5 7.5M 2	 6 2.7M 7	 5	2 312	40	4 1 251 1	11 1 3.1M 40	58 1.7M 44	40 1 1.5M 47	49
Pine Warbler	2										11*					
Pine Warbler Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow Eastern Meadowlark	2 443 251		 150 135	1* 55 75	218 130	 275 74	 467 78	 57 56	 29 9	 84 66	11** 212 138	 12 35	 121 76	 113 75	 158 70	88
Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow	 443	273 75	150 135 142	55 75 125M 40M 3	218 130 2.1M 22 7.6M	275 74 501M 166	467 78 11 6	 57	29	 84 66	1* 212	 12	121	113		
Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow Eastern Meadowlark Red-winged Blackbird Rusty Blackbird Brewer's Blackbird Common Grackle	443 251 7.9M 103 33 4M	273 75 9.5M 2 900	150 135 142 185	55 75 125M 40M 3 120M	218 130 2.1M 22 7.6M	275 74 501M 166 1.2X	467 78 11 6 1.4M	 57 56 14 6 	29	84 66	1* 	12 35	121 76 534 14 251	$113 \\ 75 \\ 62 \\ 1 \\ \\ 35 \\ 35$	70	88
Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow Eastern Meadowlark Red-winged Blackbird Rusty Blackbird Drewer's Blackbird Common Grackle Brown-headed Cowbird Cardinal Evening Grosbeak Purple Finch House Finch	443 251 7.9M 103 33 4M 835 583 198	273 75 9.5M 2 900 500 272 27 33 	150 135 142 	55 75 125M 40M 3 120M 80M 359 3 232 2	218 130 2.1M 22 7.6M 608 500 11 163 12	275 74 501M 166 1.2X 100M 373 	467 78 11 6 1.4M 133 162 	$ \begin{array}{r} \\ 57 \\ 56 \\ 14 \\ 6 \\ \\ $	29 9 	84 66 5M 3 36 26	1* 212 138 1.1M 24 797 2 255 102 147 22	 12 35 102 72 20 	$ \begin{array}{r} 121 \\ 76 \\ 534 \\ 14 \\ \\ 251 \\ 50 \\ 263 \\ \\ 132 \\ 50 \\ \end{array} $	113 75 62 1 35 39 191 	70 147 153 58 	88
Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow Eastern Meadowlark Red-winged Blackbird Rusty Blackbird Drewer's Blackbird Common Grackle Brown-headed Cowbird Cardinal Evening Grosbeak Purple Finch House Finch Pine Siskin American Goldfinch Red Grossbill Rufous-sided Towhee Savannah Sparrow	 443 251 7.9M 103 33 4M 835 583 198 11 198 11 167 68 78	273 75 9.5M 2 900 500 272 27 33 101 -3	150 135 142 	55 75 125M 40M 3120M 359 3 232 2 1 99 51	218 130 2.1M 22 7.6M 608 500 11 163 12 75 468 89	275 74 501M 166 1.2X 100M 373 120 35 245 70	467 78 11 6 1.4M 133 162 326 38 13 153 	$ \begin{array}{r} \\ 57 \\ 56 \\ 14 \\ 6 \\ \\ 144 \\ 163 \\ 400 \\ \\ 57 \\ 7 \\ 2 \\ 186 \\ \\ 51 \end{array} $	29 9 34 76 1 52	84 66 5 3 36 26 26 18 6	1* 212 138 1.1M 24 797 2 255 102 147 22 9 306 82	 12 35 102 72 20 20 36 1 12	$ \begin{array}{r} $	$ \begin{array}{c} $	70 147 153 58 45	88
Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow Eastern Meadowlark Red-winged Blackbird Brewer's Blackbird Common Grackle Brown-headed Cowbird Cardinal Evening Grosbeak Purple Finch House Finch Pine Siskin American Goldfinch Red Grossbill Rufous-sided Towhee Savannah Sparrow LeConte's Sparrow		273 75 9.5M 2 900 900 272 27 33 	150 135 142 	55 75 125M 40M 3 120M 80M 359 3 232 2 1 1 3 232 2 1 99 9- 51 2 113 67	218 130 2.1M 22 	275 74 501M 166 1.2X 100M 373 120 35 245 70 10 142 121	467 78 11 6 	$ \begin{array}{c} - \\ 57 \\ 56 \\ 14 \\ 6 \\ - \\ 144 \\ 163 \\ 400 \\ 57 \\ 7 \\ 2 \\ 186 \\ - \\ 51 \\ - \\ 241 \\ 1 \\ 34 \\ \end{array} $	29 9 	84 66 5 5 3 3 6 2 6 1 8 6 5 2 10	1* 212 138 1.1M 24 797 2 255 102 147 22 9 306 82 21 347 -2 307		$\begin{array}{c}$	11.3 75 62 1 35 39 191 129 40 29 3 	70 147 153 58 45 11 323 	88
Palm Warbler Northern Waterthrush Common Yellowthroat House Sparrow Eastern Meadowlark Red-winged Blackbird Rusty Blackbird Drewer's Blackbird Common Grackle Brown-headed Cowbird Cardinal Evrening Grosbeak Purple Finch House Finch Pine Siskin American Goldfinch Red Grossbill Rufous-sided Towhee Savannah Sparrow LeConte's Sparrow Chipping Sparrow Field Sparrow White-thr, Sparrow Fox Sparrow Song Sparrow		$\begin{array}{c}$	150 135 142 	55 75 125M 40M 3 120M 80M 359 3 232 2 1 1 99 	218 130 2.1M 22 2 7.6M 608 500 11 163 12 75 468 89 11 	275 74 501M 166 1.2X 100M 373 120 35 245 10 122 121 29 328 4 64	467 78 11 6 1.4M 133 162 326 38 13 153 34 	$\begin{array}{c}\\ 57\\ 56\\ 14\\ 6\\\\ 144\\ 163\\ 400\\ 57\\ 7\\ 2\\ 186\\\\\\\\ 186\\ 51\\\\\\\\ 241\\ 1\\\\ 33\\ 3\\ 97\\ 4\\ 2\end{array}$	29 9 	84 66 5M 3 36 26 	1* 212 212 138 1.1M 24 2 255 102 147 306 82 21 307 2 307 2 593 21 44		$\begin{array}{c}\\ 121\\ 76\\ 534\\ 14\\\\ 251\\ 50\\ 6\\ 132\\ 50\\ 6\\ 132\\ 50\\ 6\\ 132\\ 50\\ 6\\ 132\\ 132\\ 132\\ 13\\ 132\\ 13\\ 132\\ 13\\ 127\\ 127\\ 127\\ 127\\ 127\\ 127\\ 127\\ 127$	$\begin{array}{c}$	70 	88

COLUMBIA: 27 Dec.; 0400 to 2000; clear; temp. 27 to 42°F; 24 observers.

George Mayfield, Jr. (compiler-Maury County Hospital, Columbia 38401).

Details on unusual species not available. Seen Count Week: Turkey and Common Goldeneye.

NASHVILLE: 27 Dec.; 0530 to 1700; cloudy; temp. 28 to 38°F; wind NW, 0-10 mph; 56 observers in 12 parties and 18 feeders; 96 party hours (42.5 by foot, 50.5 by car, 3 by boat); 265 party miles (27 on foot, 233 by car, 5 by boat).

Frances Abernathy, Jan Alexander, Mildred Ansley, John and Willa Bates, Michael Bierly (compiler—3825 Bedford Avenue, Nashville 37215), Jane Bridgman, Jean Cobb, Bonnie Coplin, Annella Creech, Sam Dement, Milbrey Dugger, Clifton Dunn, John Ellis, Charles Farrell, Clara Fentress, Bill and Lucy Finch, Ann Fort, Ann Foster, Twinkle Gibbons, Katherine Goodpasture, Sarah Greene, Mary Ann and Tom Guschke, Tom Harston, Bob Hatcher, Betty Herbert, Debbie Hill, Oliver Lang, Adiene Lyon, Portia Macmillan, Margaret Mann, Loys Marsden, Jane Maynard, Joe McLaughlin, Jim McLaughlin, Jimmy Parrish, Marge and Oscar Patrick, Audrey and Don Perry, Dick Porter, Virginia Price, Elizabeth Queener, Pat Stallings, Helen Sterling, Carol Stewart, Dee Thompson, Lawrence Trabue, David Vogt, Kenneth and Sarah Walkup, Hallie Waller, Harriet Waller, Virginia Workman.

HICKORY PRIEST: 3 Jan.; 1500 to 1730; variable cloudiness; temp. 40 to 58°F; wind W, 8-16 mph; 33 observers, 31 in 16 parties, 2 at feeders.

Frances Abernathy, Jan Alexander, Linda Anderson, Michael Bierly, Ralph Cazort, Dwight Cooley, Annella Creech, Gail D'Apolito, Clifton Dunn, Beth Evans, John Filley, Ray Fleischer, Carol Knauth, Lee Kramer, Louise Jackson, Tom Harston, Margaret Mann, Rocky Milburn, Richard Newton, Alberta Oliver, David Oliver, Marge and Oscar Patrick, Audrey and Don Perry, Betty Richards, Kathy Robertson, Pat Stallings (compiler—406 North 17th St., Nashville 37206), Carol Stewart, Ann Tarbell, Dee Thompson, David Vogt, Miriam Weinstein.

Seen Count Week: Evening Grosbeak.

MURFREESBORO: 3 Jan.; 0600 to 1830; clear; temp. 30 to 56°F; 8 observers in 4 parties, plus 18 at feeders; 48 party hours (8 on foot, 40 by car); 210 party miles (10 on foot, 200 by car).

Glenn Birdwell (compiler—Rt. 3, Compton Road, Murfreesboro 37130), Fred Detlefson, Lou Erwin, C. E. Greever, Edith Haynes, Ann Hettish, Bob Hettish, Wilma Hunter, Rebecca Jones, Larry McFarlin, Maryedith McFarlin, Don Magee, Linda Magee, Ruth Odum, Deanna Quesenberry, John Sellars, Alberta Spence, Frances Vaughan.

Sandhill Crane present since March.

LEBANON: 20 Dec.; mostly clear; wind NE, 5-10 mph; 11 observers, 9 in 4 parties, plus 2 at feeders, 26.5 party hours (3 on foot, 23.5 by car); 229 party miles (8 on foot, 221 by car).

Earline Berry, Melissa Canon, Fred Detlefson, Robert Hosier, Reid McKee, Ruth McMillan, Ray Pope, Jeff Reed, Alice Savage, John Sellars, William Senter (compiler-313 West Hills Drive, Lebanon 37087).

Poor details on the Eastern Wood Pewee. Seen Count Week: Brown Creeper and American Woodcock.

COOKEVILLE: 27 Dec.; 0630-1630; clear; temp. 27 to 36°F; 4 observers in 2 parties; 12 party hours; 22 party miles (2 on foot, 20 by car).

Sam Coward (compiler—Box 118, Algood 38501), Joseph Fields, Jim Simek, Richard Simmers.

HIGHLAND RIM: 3 Jan.; fair; temp. 34 to 50°F; 18 observers in 9 parties; 28 party hours; 378.5 party miles.

Glenn King, Stanley Barr, Carroll Barr, Ruth Luckadoo, Tom Luckadoo, Marjory Harper, Roberta Woods, Lee Woods, Quincy Styke, Dan Styke, Marsha Rimpley, Ed Rimpley, Craig Rimpley, Lillie Willard, Wanda Winnett, Niki Medley, Mary Cay McKelvey, Erma Rogers (compiler—Rt. 1, Hillsboro 37342).

CHATTANOOGA: 20 Dec.; 0230 to 1630; mostly clear; temp. 24 to 32°F; wind N to NW, 10-25 mph; 37 observers, 24 in 8 parties, plus 13 at feeders; 85 party hours (27.5 on foot, 50.5 by car); 512.5 party miles (30.5 on foot, 482 by car).

Benton Basham, Jeff Basham, Peggy Basham, Nelson Bennett, Ken Dubke, Lil Dubke, Chris Haney, Gary Hartman, Jim Herman, Bill Humeniuk, Daniel Jacobson, Al Jenkins, Elena Killian, Keith Krause, Chris McKee, Dave Mathewson, Bob Mitchell, Johnny Parks, Joe Stone, Randy Stringer (compiler—758 Emory Drive, Chattanooga 37415), Carl Swafford, Bruce Wilkey, Mary Anne Wilkey, Kathy Davidson.

Excellent details on all unusual sightings.

GREAT SMOKY MOUNTAINS NATIONAL PARK: 4 Jan.; 0545 to 1700; clear; temp. 9 to 45°F; wind variable; 31 observers in 14 parties; 99.5 party hours (71 on foot, 28.5 by car); 284 party miles (91.5 on foot, 192.5 by car).

Winnifred Brown, Howard Chitwood, Marcia Davis, Don DeFoe (compiler—Rt. 2, Box 176, Gatlinburg 37738), Bob Floyd, Katherine Foster, Louise Fuller, Paul Hartigan, Audrey and Ron Hoff, Paula Howley, Tony Koella, Henry Lix, Alison and Bill McNutt, Chuck Nicholson, Holly Overton, J. B. Owen, Paul Pardue, Truett Patterson, Ethel and Lawrence Ritchie, Kenneth and Mabel Sanders, Boyd Sharp, Lillian Smathers, Johneta and Louis Smith, Jim Tanner, Dave and Linda Turner. Knoxville Chapter, Tennessee Ornithological Society.

The chickadees are a mixture of Carolina and Black-capped.

KNOXVILLE: 21 Dec.; 0400 to 1800; clear; temp. 17 to 33°F; wind NE, 0-10 mph; 16 observers in 11 parties; 81 party hours (40 on foot, 41 by car); 461 party miles (42 on foot, 419 by car).

Gary Carlson, Marcia Davis, William Foster, Paul Hartigan, Audrey Hoff, Ron Hoff, Tony Koella, Charles Nicholson, Holly Overton, Paul Pardue, Kenneth Sanders, Mabel Sanders, Boyd Sharp, James Tanner (compiler—Rt. 28, Box 155, Knoxville 37920), Carroll Thrift, Linda Turner. KINGSPORT: 20 December; 17 observers.

Fred Alsop, Tom Bowman, Allen Cook, John Paul Dillow, Charlotte Finucane, Tom Finucane, Tom Gannaway, Jim Gilland, Richard Hampton, Catherine Hughes, Elmo Lewis, Sandy Lewis, Bill Maden, Pat Maden, Arthur Smith (compiler—100 Otari Dr., Rt. 14, Kingsport 37664), E. E. Scott, Randy Vanover.

An Orange-crowned Warbler was deleted due to lack of details of observation.

ELIZABETHTON (LEE R. HERNDON CHAPTER): 3 Jan.; 0700 to 1715; overcast; temp. 25 to 42°F; 15 observers in 6 parties; 49.5 party hours (21.5 on foot, 28 by car); 315 party miles (22 on foot, 293 by car).

Martha Dillenbeck, Helenhill Dove, Glen Eller (compiler—Rt. 3, Grandview Terrace, Elizabethton 37643), Harry Farthing, Sally Goodin, Rick Knight, Joy Kyle, Richard Lewis, Dick Lura, Paul Porter, Ed Schell, Glenn Swafford, Barbara Walsh, Jim Walsh, Jane Whitehead.

ROAN MOUNTAIN: 29 Dec.; 0730 to 1630; temp. 25 to 44°F; wind calm; 8 observers in 3 parties; 22 party hours (13 on foot, 9 by car); 103 party miles (12 on foot, 91 by car).

Helenhill Dove, Sally Goodin, Rick Knight, Richard Lewis, Vickie Lewis, Paul Porter, Ed Schell, Glenn Swafford.

Good details on the Black-capped Chickadees.

* * * * * *

EDITOR'S NOTE—A Long-billed Marsh Wren was seen on the Kingsport count by Fred Alsop and a party of four. Details of the observation were recorded with the editor of *The Migrant*.

Correction: The Migrant. Vol. 51, No. 2.

p. 32. The nine Brown Nuthatches listed on the Knoxville Chapter Christmas Count should be changed to nine Brown Creepers.

ROUND TABLE NOTES

PRAIRIE FALCON AT MEMPHIS—On 5 October 1958 while banding Chimney Swifts (*Chaetura pelagica*) on the roof of 1433 Union Avenue, Memphis, Tennessee, we noticed a hawk with falcon-like wings and tail. Occasionally we have had an American Kestrel (*Falco sparverius*) present at similar banding sites but this falcon was about the size of a Cooper's Hawk (*Accipiter cooperii*) and of a somewhat sandy appearance. We were able to see the diagnostic black axillars, at times, during the four or five minutes that the Prairie Falcon (*Falco mexicanus*) was around and as close as forty m. While apparently attracted by the Chimney Swifts that were being released, we did not see it take one. Assisting Lula and me were Henry and Helen Dinkelspiel and others. This is evidently the first record of this species in Tennessee.

On 12 October 1980, at a Memphis Chapter hike on the Penal Farm, east of town, George Owen pointed out a hawk low overhead to Mrs. Coffey. Lula had time to see the shape, size, color and the black axillars, as the Prairie Falcon moved away. David Vance, Jr., a local falconer, advises that there have been no escapes of this species in this region and that there were two sightings, this Fall, near Thayer, Missouri (Arkansas). In past years we have seen Prairie Falcons west of Laramie, Wyoming, and Loveland, Colorado. In mid-August, 1980, we also saw a number over the Pawnee National Grasslands, near Greeley, Colorado.

BEN B. COFFEY, JR., 672 N. Belvedere, Memphis 38107. Accepted 17 Feb. 1981.

YELLOW RAIL SPECIMEN FROM WEST TENNESSEE—On 30 April 1979, a student brought me a Yellow Rail (*Coturnicops noveboracensis*) that had been found dead on the University of Tennessee at Martin campus. The location of the bird, at the base of a greenhouse wall, and the fresh condition of the bird indicate it died by colliding with a glass wall of the greenhouse on the night of 29 April 1979. Preparation of the specimen showed it to be a very fat male. It is now in the University of Tennessee at Martin skin collection as UTMB 377.

This is the only Yellow Rail in the University of Tennessee at Martin collection. Other Tennessee specimens include the first two Tennessee records dating 15 October 1953 (Ganier 1954, *Migrant* 25:13), and 29 September 1957 (Laskey 1957, *Migrant* 28:54-57); these were prepared by Mr. A. F. Ganier (AFG skin numbers 1649 and 1683, respectively) and are, presumably, now in the Louisiana State University Museum of Zoology.

Most of the Tennessee records of Yellow Rails are from fall migration television tower casualties in middle Tennessee. Howell and Monroe (1958, *Migrant* 29:17-27) reported one fall record for Knox County. I am not aware of previous records from west Tennessee; neither can I find records of any observations during spring migration for the state as a whole.

T. DAVID PITTS, Biology Department, The University of Tennessee at Martin, Martin 38238. Accepted 1 Dec. 1980.

WHIP-POOR-WILL FORAY—On the evening of 20 June 1980, six members of the Elizabethton Chapter TOS conducted a Whip-Poor-Will (*Caprimulgus vociferus*) foray on the north slope of Holston Mountain. The route and foray method were the same as those used in previous years (Herndon, Lee R. 1959*The Migrant* 30:31).

The foray began near the Big Creek section of South Holston Lake in Sullivan County, followed graveled U.S. Forest Service roads (Big Creek Rd. onto Old Flatwoods Rd.) toward Elizabethton, and stopped at the Cherokee National Forest Boundary near Keenburg Community in Carter County. The route covered 22.4 km with stops made every 0.8 km. The foray began at 2100 EDT and ended at 2330 EDT. The sky was clear, with the moon in the last quarter. The temperature was 17C with winds light and variable.

The foray produced 48 calling Whip-Poor-Wills (2.1 per km) with one other sighted on the road. This number compares favorably with the only other foray conducted this late (45 on 21 June 1967—Dillenbeck, 1967. *The Migrant* 38:41). No owls were heard.

Participants: Glen and Helen Swofford, Jane Whitehead, Helenhill Dove, Martha Dillenbeck, and Rick Knight.

RICK KNIGHT, 804 North Hills Drive, Johnson City 37601. Accepted 3 Sept. 1980.

PROBABLE FIRST NESTING OF THE HOUSE FINCH IN TENNESSEE—At 1415 on 11 May 1980 in Sullivan County, Tennessee the song of a House Finch (Carpodacus mexicanus) was heard at Oak Hill Cemetery in Kingsport. Investigation of a neraby American Elm (Ulmus americana) yielded an adult male and female House Finch feeding a recently fledged House Finch approximately 9 m above the ground. The bird being fed was judged to be a recently fledged individual because it was being fed by a pair of adult birds; it vocalized and gestured characteristically of a fledgling begging for food; and most importantly because of down-like plumage observed on the head of the bird. A. C. Bent (Life Histories of North American Cardinals, Grosebeaks, Buntings, Towhees, Finches, Sparrows, and Allies, Vol. 1, New York: Dover Publications Inc.; 1968.) says of the House Finch: "The filoplumes persist until all feathers are fully grown, and the filaments standing erect among the feathers of the crown furnish the last identification mark by which the more recently fledged individuals can be distinguished."

Oak Hill Cemetery is a 21 ha area of park-like habitat, vegetated chiefly by various ornamental and native species of trees and shrubs, including many conifers. The area is surrounded by the city of Kingsport and its suburbs and is 3.6 km from the Tennessee-Virginia border.

THOMAS F. LAUGHLIN, Route 1, Kingsport 37660.

RICK A. PHILLIPS, 1332 Tranbarger Dr., Kingsport 37660. Accepted 25 Feb. 1981.

COMPTON CROOK

Friends of Compton Crook, a former member of the Tennessee Ornithological Society, are sorry to hear of his death 15 January 1981 at Towson, Maryland.

Compton was active in the Nashville Chapter of TOS from 1927 through 1932 when he moved to Kentucky. In 1940 he was a corresponding member of TOS living in Towson, Maryland. He taught at State Teacher's College (later University) in Towson until his recent retirement.

Compton Crook took part in Nashville Christmas counts when he lived in Nashville. To cite only two, he published articles in *The Migrant* on the Black Vulture and the Killdeer. He served as secretary and later as treasurer of the Nashville Chapter of TOS in the early 1930's.

He was a student and teacher of biology all of his life.

KATHERINE GOODPASTURE

REQUEST FOR INFORMATION

I am continuing a study on the Screech Owl that was begun in 1976 as part of a Master's study at the University of Tennessee. The Screech Owl is commonly found dead on Tennessee roadways primarily in the months of October through February. Much information can be obtained by examining these birds (food habits, sexual size dimorphism, color phase ratios, etc.). If you should find a road kill Screech Owl, please freeze the specimen along with the date and location of the collection and write or call me at: Rt. 4, Box 541, Valley Ln., Clinton, TN 37716 (945-3034) or Division of Land and Forest Resources, Tennessee Valley Authority, Norris, TN 37828 (632-6450, ext. 2354). I will arrange to pick up the bird. Thank you. Linda J. Turner.

THE SEASON

FRED J. ALSOP, III, Editor



FALL MIGRATION: 1 AUGUST - 31 OCTOBER 1980

Allow me to begin this report on a personal note. As those of you within the T.O.S. know, the editorship of *The Migrant* will change hands at the spring State meeting of the organization with the resignation of Dr. Gary O. Wallace after ten years as editor. In order that the new editor may put together his own staff I am also resigning my position as editor of "The Season." I should like to express my appreciation to Gary Wallace for his assistance and cooperation during this decade of our work together and to congratulate him on his many successes with this journal and the birders, both amateur and professional, it serves. My gratitude is extended to all the regional compilers for all the hours they have given to the contributors in their regions and to the readers of this publication.

It is with regret that this, my final report, is once again incomplete. The data from the Central Plateau and Basin Region was unavailable after an extended deadline at the time the editor of *The Migrant* called for the materials. This is the third issue in which this regional report has been unavailable.

Good numbers and varieties of migrants were reported from the three regions which follow. One of the most outstanding birds observed the season was the sighting of a *Prairie Falcon* by Lula and Ben Coffey and members of the Memphis TOS in October. Another raptor of note was a Merlin (Pigeon Hawk) seen in late September on Roan Mountain at the opposite end of the state. The Eastern Ridge and Valley Region had four Peregrine Falcon reports. Another outstanding bird observed during this season was the first Yellow Rail record for the Chattanooga Area. Shorebirds were in especially good numbers in the Western Coastal Plain and Eastern Ridge and Valley Regions with many species being recorded including Red Knot, Baird's, Western, Buff-breasted Sandpipers and Sanderling. The Eastern Ridge and Valley Region reported Northern Phalaropes and a very large Pectoral Sandpiper migration. The Western Coastal Plain Region reported a large roost of Eastern Kingbirds estimated at numbering a thousand. A Yellow-bellied Flycatcher was trapped and banded in the Eastern Mountain Region where many species of warblers and vireos were also recorded. All reporting regions had records of Philadelphia Vireos, a species that is reported only sparingly in spring and fall migration across the state. Details of these and many other good records follow.

WESTERN COASTAL PLAIN REGION—*Cormorant-Falcon:* Doublecrested Cormorant: 30 Aug (1) DRU (MLB, others); 6 Sep (1) DRU (MCTOS). Great Blue Heron: 30-31 Aug (50) DRU (MLB, others); (1) PP (MLB, others). Green Heron: 30-31 Aug (20) DRU (MLB, others); (3) PP (MLB, others). Little Blue Heron: 30-31 Aug (15) DRU (MLB, others). Black-crowned Night Heron: 30

	Little Blue Heron	Great Egret	Cattle Egret	Imm. White Ibis
19 Aug	833+		NC	49+
28 Aug	NC	_	1189 +	31+
9 Sep	521+	_	NC	25+
10 Sep	176+		391+	5+
30 Sep	0	1	0	0

SOUTH DYERSBURG HERON ROOST

NC — not counted

W. G. Criswell

Aug (2) DRU (MLB, others). Least Bittern: 30 Aug (1) DRU (MLB, others). Canada Goose: 6 Sep (8) BSU (MLB, others). Snow Goose (Blue Morph): 25 Oct (35) C (MCTOS). Gadwall: 25 Oct (40) C (MCTOS). Green-winged Teal: 25 Oct (1) C (MCTOS). Blue-winged Teal: 30-31 Aug (10) DRU (MLB, others); (9) PP (MLB, others); 25 Oct (4) C (MCTOS). Northern Shoveler: 25 Oct (10) C (MCTOS). Ring-necked Duck: 25 Oct (1) C (JW). Lesser Scaup: 25 Oct (250) C (JW). Ruddy Duck: 25 Oct (2) C (JW). Mississippi Kite: 11 May thru 13 Aug (2-3) R (JF, SF); 15 may (2) OP (NS, MW); 25 May (4) FPSP (MCTOS); 4 Aug (4) M (JS); 14 Aug (18) M (JS); 15 Aug (3) Drummond, TN, Southwest Tipton County (AIS, NS); 19-20 Aug (2/8) M (JS); 3 Sep (18) M (JS); 4 Sep (6 mature, 2 imm) OP (JS). Sharp-shinned Hawk: 1 Oct (2) OP (JS); 25 Oct (1) C (MCTOS); 26 Oct (1) M (JW); 31 Oct (1) M (DV); 10 Nov (1) M (DV); 15 Nov (1) M (DV). Cooper's Hawk: 19 Oct (1) OP (JS); 1 Nov (1) M (JW); 15 Nov (1) M (DV). Broad-winged Hawk: 13-15 Aug (1) OP (JeF); 30 Aug (1) DRU (MLB, others). Bald Eagle: no specified date, letter received from DRU dated 12 Aug (4; two adults, two imm) (VLC). Osprey: 20-21 Sep (1) Upper Pickwick Lake (JG); 1 Oct (1) OP (JS). PRAIRIE FALCON: 12 Oct (1) M (LCC, BBC, MCTOS).

Plover-Tern: Semipalmated Plover: 30-31 Aug (12) PP (MLB, others); 6 Sep (2) PP (MLB, others). American Golden Plover: 12 Oct (1) Island 21, Dyer Co. (WGC). Piping Plover: 30-31 Aug (1) PP (MLB, others). Ruddy Turnstone: 31 Aug (1) BF (MLB, others); 21 Sep (2) M (BBC, LCC). This is the first sighting for Shelby County. American Woodcock: 19 Jul (1) M (DD). Common Snipe: 13 Aug (2) M (RP, MW). Spotted Sandpiper: 30-31 Aug (10) PP (MLB, others); (1) PP (MLB, others); 6 Sep (4) PP (MLB, others). Solitary Sandpiper: 25 Oct (2) C (JW). WILLET: 30 Aug (1) PP (MLB, others). Greater Yellowlegs: 25 Oct (6) C (JW). Lesser Yellowlegs: 25 Oct (4) C (JW). Pectoral Sandpiper: 30-31 Aug (40/3) PP (MLB, others); 6 Sep (20) PP (MLB, others), 25 Oct (24) C (JW). Baird's Sandpiper: 30 Aug (1) PP (MLB, others). Least Sandpiper: 30-31 Aug (8) DRU (MLB, others); 6 Sep (2) PP (MLB, others); 25 Oct (10) C (JW). Short-billed Dowitcher: 30 Aug (1) PP (MLB, others); 25 Oct (4) C (JW). Semipalmated Sandpiper: 30-31 Aug (12/8) PP (MLB, others). Western Sandpiper: 30-31 Aug (4) PP (MLB, others). 6 Sep (3) PP (MLB, others). Buff-breasted Sandpiper: 31 Aug (11) BF (MLB, others); 6 Sep (5) PP (MLB, others). Sanderling: 24 Sep (1) M (CB, HBD). Herring Gull: 6 Sep (1) PP (MLB, others); 25 Oct (42) C (MCTOS). Ring-billed Gull: 25 Oct (40) C (MCTOS). Bonaparte's Gull: 25 Oct (40) M (MCTOS). Common Tern: 6 Sep (1) PP (MLB, others). Caspian Tern: 31 Aug (2) PP (MLB, others); 6 Sep (8) BSU (MLB, others); 29 Sep (1) Island 21, Dyer Co. (WGC). Black Tern: 30-31 Aug (3/1) PP (MLB, others); 6 Sep (10) PP (MLB, others).

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Owl-Warbler: Great Horned Owl: 21 Sep (1) M (JW). Common Nighthawk: 24 Sep (250) M (WB). Red-headed Woodpecker: 2 Nov (81) SFSP (MCTOS). Eastern Kingbird: 28 Aug (1,000 in roost) M (JS). Tree Swallow: 12 Nov (1) FPSP (CB, HBD, NM, AS, NS). Red-breasted Nuthatch: 7 Oct (2) FSP (BBC, LCC); this species has been very common this season in other locations in the Memphis area. House Wren: 26 Sep (1) R (SF), 27-29 Sep (1) M (JW), 20 Oct (1) M (JW). Philadelphia Vireo: 30 Sep (1) SFSP (CB, HBD, SF, SL). Black-and-white-Warbler: 11 Sep (1) M (HBD). Magnolia Warbler: 21 Oct (1) M (DD). Wilson's Warbler: 5 Sep (1) M (HBD).

Locations: BF—Britton Ford; BSU—Big Sandy Unit, Tenn. Nat. Wildlife Refuge; C—Chucalissa, Southwest Memphis: DRU—Duck River Unit of the Tennessee National Wildlife Refuge; FPSP—Fort Pillow State Park; FSP—Fuller State Park; M—Memphis; OP—Overton Park; PP—Pace Point; R—Raleigh, northeast Shelby County; SFSP—Shelby Forest State Park.

Observers: WB—William Bean; MLB—Michael L. Bierly; CB—Carolyn Bullock; WGC—William G. Criswell; BBC—Ben B. Coffey, Jr.; LCC—Lula C. Coffey; DD—Dolly Ann Daily; HBD—Helen B. Dinkelspiel; JeF—Jesse Feldman; JF—Jim Ferguson; SF—Sue Ferguson; JG—Joe Guinn; SL—Selma Lewis; NM—Nelle Moore; MCTOS—Memphis Chapter, TOS; RP—Rob Peeples; AIS—Arlo Smith; NS—Noreen Smith; JS—John Stokes; DV—Dave Vance; MW—Martha Waldron; JW—Jeff Wilson.

MARTHA WALDRON, 1626 Yorkshire Dr., Memphis 38119.

EASTERN RIDGE AND VALLEY REGION—The regular and sustained efforts to monitor the wading and shorebirds in the prime habitats continued. The largest number of Great Blue Herons ever recorded during this season were observed on Douglas Lake by Tony Koella. The "white" herons were widely reported and for the fourth consecutive year immature White Ibis were at scattered locations.

During this period TVA continued their policy of near full pool of Chickamauga Lake which resulted in very limited habitat for migrating shorebirds. As a result coverage concentrated on four basic locations: the Kingston Steam Plant, Douglas Lake, Eagle Bend Fish Hatchery and the Austin Springs' section of Boone Lake. As is now considered usual, impressive numbers and varieties of birds were identified at the Kingston Steam Plant. Similar results were obtained by Koella at Douglas Lake, especially the tremendous numbers of Pectoral Sandpipers. His count was unprecedented.

A first local record of the secretive Yellow Rail was secured for the Chattanooga area when one apparently hit a building downtown and was turned over to the Nature Center. The significance that can be ascribed to the sightings of Common Ravens near Austin Springs is difficult to interpret when one considers the distance it is from their normal territory.

In our region, it appears little effort is expended in observing and reporting on the obscure passerine migration. Nicholson did comment that in banding at Norris he recorded a ratio of one Philadelphia to four Red-eyed Vireos.

There is much rich additional detail in the body of the report and it should be closely read.

Loon-Merganser: Common Loon: 18 Oct (1); 29 Oct (72) BL (RK). Piedbilled Grebe: 20 Oct (10) HRA (KLD). Double-crested Cormorant: 28 Sep (1) K (KTOS); 28 Oct (2) HRA (KLD); 30, 31 Oct (2) AS (MD, SG, JW). Great Blue Heron: max 4 Oct (120) DL (TK). Little Blue Heron: 1-14 scattered at HRA and SB (KLD); max 8 white plumaged birds EB through 22 Aug (CPN, DH, LT); 3 Aug (23), 9 Aug (6) DL (TK); 8 Sep (1) SB (KLD). Cattle Egret: 5 Aug (1) LaF (GM). Great Egret: 1-10 regular HRA, KSP and SB (KLD, CH); 3 Aug - 26 Oct (3-6) DL (TK); last 30 Oct (8) MHL (WKJ). Black-crowned Night Heron: none found after 31 Jul DL (TK); 29 Aug (3) HRA (EK); 1 Sep (1) KSP (KLD); last seen AS 24 Sep (RK); 26 Oct (2) SB (KD). Yellow-crowned Night Heron: 21 Oct (1 ad) AM (KD). White Ibis: one regular KSP till 11 Aug (KLD et al); 1 Aug (1) Holston R. at Surgoinsville (WKJ); 2 Aug (1) SB (KLD); 21-29 Aug (5-7) HRA (EK). Snow Goose: 3 Oct (1 "blue") KSP (ABS, SJS); 26, 28 Oct (11 "blue" and 1 "snow") HRA (KLD). Mallard: regular at KSP w/max 16 Sep (120) (KLD). Black Duck: 8 Sep (1) KSP (KLD). Gadwall: 22 Sep (4) KSP (KLD); 31 Oct (25) AS (MD, HD, SG). Pintail: 14 Sep (2) KSP (KLD). Green-winged Teal: 14 Sep (2) KSP (KLD); 22 Oct (1) AS (RK). Blue-winged Teal: regular KSP (max 106) with few noted elsewhere (KLD). Am. Wigeon: 5 Sep (1) KSP (KLD); 27 Sep (1) BL (MD, JK). No. Shoveler: 18 Aug (4) AS (RK); 5, 7 Sep (1) KSP (KLD); 2 Oct (3) AS (RK); 10 Oct (7) HRA (KLD). Ring-necked Duck: first 25 Aug (4) KSP (KLD). Lesser Scaup: it now appears one spent the entire summer on a small pond in JC (LHTOS); 30 Oct (200) BL (MD, SG, JW, HD). OLDSOUAW: 30 Oct (4) BL (MD, SG, JW, HD). Ruddy Duck: 30 Oct (2) BL (MD, SG, JW, HD). Hooded Merganser: 3 Oct (1) KSP (ABS, SJS); 29 Oct (1) AS (MD, JW, SG).

Hawk-Coot: Sharp-shinned Hawk: only 3 noted Eliz-JC with some observations coming from other sections (mob). Cooper's Hawk: nine sightings during period Eliz-JC (LHTOS) with encouraging sightings from other areas (mob). Red-shouldered Hawk: 3 Oct (1) AS (MD, SG). Bald Eagle: 29 Jul, 5 Aug (1 ad) NoL (JCH). Marsh Hawk: 5, 8 Oct (1) AS (RK) and widely scattered reports from the lower section of the region (mob). Osprey: scattered reports from most areas (mob). *PEREGRINE FALCON:* 16 Sep (1) KSP (KLD); 25 Sep (1 ad carrying a shorebird) NoL (JCH); 5 Oct (1 imm) KSP (DLT); 5 Oct (1) N (CPN). Due to the distance and times of observation it is felt these last two sightings were different birds. *YELLOW RAIL:* 13 Oct (1—first local record, details will appear in Round Table Notes) downtown Chattanooga (KLD, RBW). *COMMON GALLINULE:* 31 Oct (2) Surgoinsville (WKJ). Am. Coot: 12 Aug (4) Chickamauga Dam (KD).

Plover-Phalarope: Semipalmated Plover: regular w/max 5 Sep (25) KSP (KLD); 19 Aug - 22 Sep (1-2) EB (DH, CPN, LT); 31 Aug - 9 Sep (20 regular) DL (TK) w/last 13 Sep (4) (TK); 14, 20 Sep (1) AS (RK); last report for the region 22 Oct (2) KSP (ARS, SJS). Killdeer: regular with max of 110 at KSP on 22 Oct (ABS, SJS). Am. Golden Plover: 7-14 Sep (1-2) KSP (DLT *et al*); 14 Oct (3) KSP (KLD); 20 Oct (1) HRA (KLD). Black-bellied Plover: 7, 13 Sep (10) DL (TK); 17 Sep (1) KSP (SBS); 18-20 Sep (1-2) NoL (JCH); 21 Sep (1) DL (TK). Ruddy Turnstone: 15 Aug (1) SB (LD); 5-30 Sep (1) KSP (KLD, SBS *et al*). Common Snipe: 14, 15 Aug (1) SB (LD, CH), then no further reports till 13 Sep (2) DL (TK). Spotted Sandpiper: usually 1-7 KSP (mob) with last 3 Oct (1) KSP (SBS); 9 Aug - 7 Sep (1) DL (TK). Solitary Sandpiper: 4-18 Aug (1-3) HRA (KLD); 9-23 Aug (1-6) DL (TK); 26 Oct (1) DL (TK). Willet: 14 Aug (3) SB (KLD); 17 Aug (1) DL (TK). Greater Yellowlegs: regular w/max 31 Aug (50) KSP (KLD); 15-31 Aug (1-5) DL (TK); 26 Oct (14) DL (TK). Lesser Yellowlegs: regular w/max 8 Sep (30)

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KSP (KLD et al); 3 Aug - 13 Sep (4-30) DL (TK). RED KNOT: 6-22 Sep (2-4) KSP (SBS, RAH, et al); first found by SBS and RAH. Pectoral Sandpiper: regular w/max 18 Aug (43) KSP (KLD); largest numbers ever recorded in the region w/max 7 Sep (400) DL (TK); 29 Oct (15) AS (RK). White-rumped Sandpiper: 17 Aug - 7 Sep (1-10) DL (TK). BAIRD'S SANDPIPER: 16-24 Sep (1-4) KSP (KLD, SBS): 8-17 Sep (1-2) EB (DH, LT, CPN): 22 Oct (1) KSP (SBS). Least Sandpiper: regular w/max 8 Sep (50) KSP (KLD); 3 Aug - 26 Oct (1-20) DL (TK). Dunlin: 20 Oct (2) HRA (KLD); 22 Oct (20) KSP (ABS, SBS); 26 Oct (35) DL (TK). Dowitcher (Species ?): 18 Aug - 22 Sep (1-12 HRA, SB (KLD); 31 Aug (10) DL (TK). Stilt Sandpiper: 15, 18 Aug (1) SB (KLD); 18 Aug - 26 Sep (1-11) KSP (SBS et al); 31 Aug (1); 13 Sep (10) DL (TK); 29 Sep (1) HRA (RCS); 4 Oct (2) DL (TK). Semipalmated Sandpiper: regular w/max 1 Sep (150) KSP (KLD); 31 Aug (400) DL (TK); last 26 Oct (5) DL (TK). Western Sandpiper: 9 Aug - 21 Sep (1-4) DL (TK); 18 Aug - 14 Sep (2-35) KSP (KLD); 1 Sep (2) St. John's Pond (MD, SG). Buff-breasted Sandpiper: 7 Sep (6) KSP (KLD); 8-17 Sep (1-2) EB (DH, CPN, LT); 17 Sep (2); 22 Oct (1) KSP (SBS). Am. Avocet: 7 Sep (8) KSP (DLT et al). Sanderling: 15 Aug (3) SB (LD); 12-30 Sep (3-11) KSP (DLT, SBS et al); 13-21 Sep (20-25) DL (TK); 20 Sep (2) AS (RK); 6 Oct (4) NoL (JCH). Wilson's Phalarope: 30 Aug - 8 Sep (2-3) KSP (KLD, SBS, et al); 26 Oct (1) DL (TK). NORTHERN PHALAROPE: 6 Sep. 4 Oct (1) DL (TK): 12-16 Sep (1) KSP (SBS et al).

Gull-Raven: Herring Gull: 30 Sep (2) KSP (SBS). Ring-billed Gull: 26 Sep (1) KSP (SBS). Laughing Gull: 17 Sep (1) KSP (CH et al). Bonaparte's Gull: 31 Oct (1) BL (MD, HD). Forster's Tern: 1 Sep (1) KSP (KLD); 13 Sep (S) DL (TK); 28 Sep (11) K (James T. Tanner); 29 Sep (10) HRA (RCS). Common Tern: 29 Sep (35) HRA (RCS); 29 Oct (1) AS (RK). Caspian Tern: 30-31 Aug (2) KSP (BHS, KLD); 6 Sep (4) DL (TK). Black Tern: 4 Aug (1) EB (DH, CPN, LT); 18, 19 Aug (2) SB (KLD); 19 Aug (1) AS (SG, MD); 23 Aug (13) DL (TK); 30 Aug (1) KSP (BHS); 1 Sep (3) KSP (DH, CPN); 13 Sep (1) DL (TK). Yellow-billed Cuckoo: 10 Oct (1) HRA (KLD). Whip-poor-will: 21, 22 Sep (1 calling) KCo (SBS). Yellow-bellied Sapsucker: 27 Sep (10 observed migrating) N (DH, CPN, LT). Yellow-bellied Flycatcher: 13, 21 Sep (1*) N (CPN). Traill's Flycatcher: 16 (1*); 18 (2*) Sep N (CPN). Least Flycatcher: 11 Sep - 1 Oct (5*) N (CPN). Olive-sided Flycatcher: 11 Sep (1) JB (RK); 28 Sep (1) KCo (KTOS). Tree Swallow: 9-16 Sep (750) DL (TK); 29 Sep (250) HRA (RCS); 7 Oct (40) JC (RK). Bank Swallow: 9-16 Sep (2250) DL (TK); 29 Sep (1) HRA (RCS). Rough-winged Swallow: 29 Sep (2) HRA (RCS). Barn Swallow: last 10 Oct (1) HRA (KLD). Cliff Swallow: 9-16 Sep (20) DL (TK); 29 Sep (4) HRA (RCS). Purple Martin: max 11 Aug (2500) HRA (KLD) and last on 8 Sep (4) HRA (KLD). COMMON RAVEN: a couple of sightings have been made at very low elevation near Austin Springs (LHTOS).

Nuthatch-Sparrow: Red-breasted Nuthatch: first dates then followed by many other widely scattered sightings; 10 Sep (1) KCo (JCH); 23 Sep (1) SM (RBW). House Wren: 6 Oct (1) JC (MD). Winter Wren: 28 Sep (1) KCo (KTOS). Long-billed Marsh Wren: 27 Sep (1) AS (Glen Eller, Harry Farthing); 28 Sep (6) KCo (KTOS); 30 Sep (1) KSP (SBS); 7 Oct (1) JB (RK). Short-billed Marsh Wren: 18 Aug (1) AS (RK). Hermit Thrush: 20 Oct (6) KCo (JCH)—a high early count. Ruby-crowned Kinglet: 27 Sep (1*) N (CPN); 28 Sep (12) KCo (KTOS). Water Pipit: 3 Oct (3) KSP (ABS, SJS); 20 Oct (1) HRA (KLD). Loggerhead Shrike: 4 Aug (2 ad w/2 dependent young) HRA (KLD); 11 Sep - 15 Oct (2) JB (RK *et al*). Philadelphia Vireo: 4 Oct (1) JC (SG); Knoxville Fall Count recorded 4 on 28 Sep

and 13 were banded at Norris with a ratio of 1 Philadelphia to 4 Red-eyes (CPN). Tennessee Warbler: very numerous Eliz-Jc (LHTOS); Orange-crowned Warbler: 4, 18 Oct (1) JC (SG). Cape May Warbler: very numerous Eliz-JC (LHTOS). Bay-breasted Warbler: 25 Oct (1) K (JC). Bobolink: 22 Aug - 24 Sep (1-3) AS (RK); 27 Aug (1) SB (KD). Rose-breasted Grosbeak: the Eliz-JC area recorded the largest numbers for a fall migration in many years with the last one noted 24 Oct (LHTOS); they were very abundant at Knoxville; on their fall count 28 Sep 437 were sighted while the average for the past 5 years has been 72 (CPN). Purple Finch: first date 1 Oct (1*) AS (RK). House Finch: First fall sighting in JC on 3 Oct (HD) with 1-5 since. Two all fall in K, apparently carry overs from summer breeders; male singing on 26 Sep. Two on 31 Oct in north Knoxville where Stedman banded 130 last winter, so these were probably first fall arrivals. They have many other reports (SJS). Pine Siskin: 20 Oct (10) K (JCH); 26 Oct (20) SM (RBW). Savannah Sparrow: 6 Sep (1) KSP (RAH, SBS). Vesper Sparrow: 17 Oct (1) JB (RK). White-crowned Sparrow: 3 Oct (1) AS (RK); 26 Oct (6) JCo (TK). White-throated Sparrow: 2 Oct (1*) AS (RK). Fox Sparrow: 31 Oct (1) KCo (SBS). Lincoln's Sparrow: 13 Sep - 22 Oct (1-3 w/several banded) AS (RK).

Select Abbreviations: ad—adult: et al—and others; imm—immature; max—maximum; mob—many observers; *—banded.

Locations: AM—Amnicola Marsh; AS—Austin Springs; BL—Boone Lake; ChL—Chickamauga Lake; DL—Douglas Lake; EB—Eagle Bend Fish Hatchery, Clinton; Eliz-JC—Elizabethton-Johnson City Area; HRA—Hiwassee River Area; JB—Jonesboro; JC—Johnson City; K—Knoxville; KCo—Knox County; KSP—Kingston Steam Plant; LaF—LaFollette; MHL—Melton Hill Lake; N—Norris; NoL—Norris Lake; SM—Signal Mountain.

Observers: ABS—A. Boyd Sharp; BHS—Barbara H. Stedman; CH—Chris Haney; CPN—Charles P. Nicholson; DH—Dave Hankins; DLT—Dave and Linda Turner; EK—Elena Killian; GM—George McKinney; HD—Helenhill Dove; JCH—Joseph C. Howell; JK—Joy Kyle; JW—Jane Whitehead; KLD— Ken and Lil Dubke; KTOS—Knoxville Chapter, TOS; LD—Lil Dubke; LHTOS—Lee R. Herndon Chapter, TOS (formerly the Elizabethton Chapter, TOS); LT—Linda Turner; RAH—Ron and Audrey Hoff; MD—Martha Dillenbeck; RCS—Randy C. Stringer; RK—Rick Knight; SBS—Steve and Barbara Stedman; SG—Sally Goodin; SJS—Stephen J. "Steve" Stedman; TK—Jon A. "Tony" Koella; WKJ—Wesley K. James

KENNETH H. AND LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION—Hot temperatures from the summer period continued thru-out the month of September. Rainfall was average for the period. The first killing frost came on 7 October; about the same date as the past three years.

Waterfowl moved into the area near mid October and several large rafts were seen near the end of the month. Little shorebird movement, but very good fall warbler, vireo and flycatcher migrations were noted. Rose-breasted Grosbeaks were "everywhere" as they staged their largest fall flight in recent years. Early House Finch sightings may indicate another "big" year for this ever expanding species.

This region needs more sightings reported from our TOS members, especially

from the southern range of the mountain region. Did you report your observations this past period??? Send them in no matter how insignificant you might think they are. They are important.

Heron-Hawk: Green heron: last seen 31 Oct (1) SHL (RL). Little Blue Heron: last seen 11 Aug (2) WatL (GE, RK). Yellow-crowned Night Heron: last seen 18 Sep (2) E (GE); last birds from successful nesting season. Black Duck: 1st fall sighting 26 Sep (2) SHL (RL). American Wigeon/Ring-neck Duck: 1st fall sighting on 24 Oct from WibL (RK, GW). Bufflehead: 1st fall sighting 19 Oct (2) WibL (GW). Common Merganser: 24 Aug (1 female apparently injured) WatL (GE). Sharp-shinned Hawk: 8 separate sightings during the period (Elizabethton area) LHTOS. Cooper's Hawk: 7 separate sightings during period (Elizabethton area) LHTOS. Red-shouldered Hawk: 27 Sep (1) HM (DL, GW). Broad-winged Hawk: last seen 2 Oct (1) E (HF). Osprey: seen from 7 Sep thru 6 Oct in area (LHTOS). *PIGEON HAWK* (Merlin): 20 Sep (1) RM (ES).

Sandpiper-Veery: Spotted Sandpiper/Solitary Sandpiper: last seen 27 Sep (2 ea) RC (JM). Greater Yellowlegs: 27 Sep (2) RC (JM). Pectoral Sandpiper: 11 Aug (9) RC (RK). Dowitcher (*species?*): 7 Sep (1) SHL (RL). Sanderling: 27 Sep (3) RC (JM). Black Tern: 19 Sep (3) SHL (RL). Common Nighthawk: 24 Aug (150-200) migrating thru Eliz area; last seen 17 Oct (1) E (GE). Red-headed Woodpecker: 27 Sep (4) E (GE, HF) apparently migrating thru, was feeding on acorns. Yellow-bellied Sapsucker: 1st fall sighting 27 Sep (1) RC (JM). *YELLOW-BELLIED FLYCATCHER:* 20 Sep (1 banded) SHL (RL). Least Flycatcher: last seen 21 Sep (1) RM (ES). Olive-sided Flycatcher: 27 Sep (1) E (GE, HF). Tree Swallow: 6 Oct (25-30) E (RK). Purple Martin: last seen 23 Aug (2) E (HF). Common Raven: two *low elevation* reports (1500 to 2000') on 27 Sep and 31 Oct. Red-breasted Nuthatch: 5 Sep our 1st high elevation reports for the year, mid Oct produced several low elevation reports also. Wood Thrush: last seen 8 Oct (1) E (HF). Hermit Thrush: 1st fall sighting 27 Sep (1) RC (JM). Veery: last seen 22 Sep (1) RM (ES).

Pipit-Sparrow: Water Pipit: 29 Sep (4) RM (ES); 2 Oct (1) RM (GW). Loggerhead Shrike: 28 Sep (1) SHL (RL). Solitary Vireo: last seen 24 Oct (1) E (GE, HF). Philadelphia Vireo: 21 Oct (2) E (HF). Orange-crowned Warbler: 24 Oct (1) WibL (RK). Cape May Warbler: last seen 18 Oct in E (HF) after a heavy fall migration. Yellow-rumped (Myrtle) Warbler: 1st fall sighting 27 Sep (1) E (DL, GW). Cerulean Warbler: 8 Aug (4 birds, apparently young being fed by adults) RM area (SG, MD, HD). Blackpoll Warbler: 27 Sep (1) RM (ES). Palm Warbler: last seen 25 Oct (1) E (GE). Wilson's Warbler: 13 Sep (1 banded) SHL (RL). Rose-breasted Grosbeak: very heavy concentrations all period with last seen on 24 Oct (2) E (LHTOS). Blue Grosbeak: several banded SHL (RL), last seen on 9 Oct. Indigo Bunting: last seen 18 Oct (1) E (GE). *HOUSE FINCH:* 1st seen 18 Oct (2) SHL (RL) up to 8 by end of period. Vesper Sparrow: 4 Oct (1 banded) SHL (RL). White-throated Sparrow: 1st fall sighting 3 Oct (1) E (HF). Fox Sparrow: 1st fall sighting 24 Oct (1) RM (RK). Lincoln's Sparrow: 12 Oct (1 banded) SHL (RL). *HENSLOW'S SPARROW:* 23 Oct (1) Roan Mt. State Park (FJA).

Locations: E—Eliz. area; HM—Holston Mtn.; RC—Roans Creek; RM— Roan Mtn.; SHL—South Holston Lake area; WatL—Watauga Lake; WibL— Wilbur Lake.

Observers: FJA—Fred Alsop; HD—Helenhill Dove; MD—Martha Dillenbeck; GE—Glen Eller; HF—Harry Farthing; SG—Sally Goodin; RK—Rick

Knight; LHTOS—Lee Herndon Chapter TOS; DL—Dick Lura; RL—Richard Lewis; JM—John Martin; ES—Ed Schell; GW—Gary Wallace.

GLEN D. ELLER, Route #3, Grandview Terrace, Elizabethton 37643.

Correction: The Migrant, Vol. 51, No. 4.

p. 95 reads: "Red-cockaded Woodpeckers fledged one young in"

It should read: "Red-cockaded Woodpeckers observed feeding young in nest in"

* * * * * * *

EDITOR'S MESSAGE

As I put together this issue of *The Migrant* (my last one), I look back upon 10 years during which I served as your Editor. Thank you for the privilege and honor of serving. The editorship involves much work but the effort has many rewards and has been very gratifying. I would like to thank the membership for their excellent cooperation and I would especially like to thank the various individuals who served on the editorial staff during the past 10 years. From the many individuals that deserve special recognition I would at least like to say thanks to Fred Alsop who served as the "Season Editor" for my entire tenure as Editor.

The TOS has drawn its strength through a conservative approach to a single goal: to record and encourage the study of birds in Tennessee. It is important for any organization to periodically step back from the sometimes slow pace of routine activities and reflect on the growth and progress that occurs over the long run. This change in editorship is one mechanism to accomplish this. Charles P. Nicholson, the new Editor will inherit a vigorous organization that is 66 years old, involving 14 chapters and about 750 members. Chuck will bring a new approach and new ideas to the editorship of *The Migrant*. Many people have contributed time and energy in the past in building the TOS into a viable organization. I am sure that the current membership stands solidly behind the new Editor, ready to support him and to contribute to the future of the Tennessee Ornithological Society.

GARY O. WALLACE

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 $8\frac{1}{2} \times 11^{\prime\prime}$ 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 1978).

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.

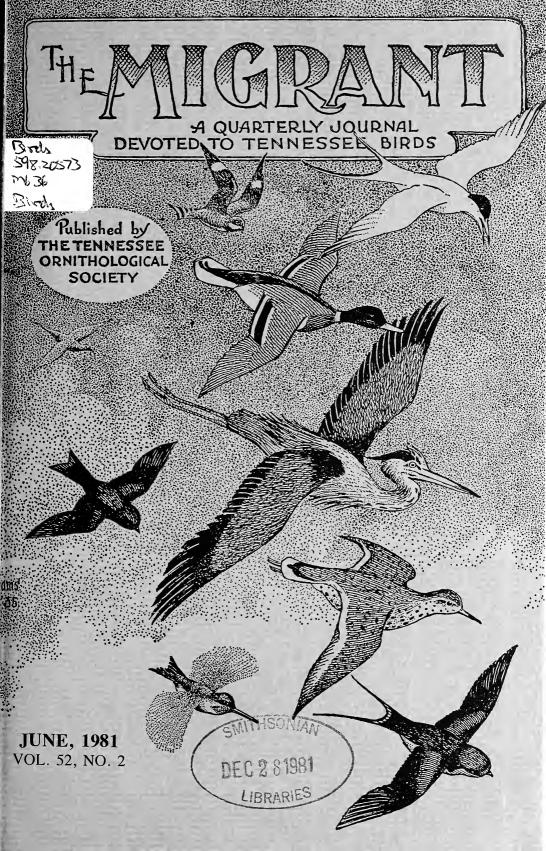
IDENTIFICATION: Rare or unusual species identification to be acceptable must be accompanied by verifying evidence. This should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic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

Books for review and articles for publication should be submitted to the editor. Seasonal reports and items should be forwarded to the appropriate departmental editor whose name and address will be found on the inside front cover.

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EASTERN BLUEBIRD POPULATION FLUCTUATIONS IN TENNESSEE DURING 1970-1979

T. DAVID PITTS

Eastern Bluebirds (*Sialia sialis*) have long been noted for their drastic population changes (e.g., Cooke 1913, Forbush 1905). James (1960) used the term "disaster species" to describe bluebirds on the basis of their population declines following severe winters. The purposes of this paper are to describe bluebird population changes that occurred during the years 1970-1979 in Tennessee, to consider the type of winter weather with which higher than normal bluebird mortality was associated, and to estimate the size of the breeding population of bluebirds in Tennessee.

POPULATION CHANGES INDICATED BY BREEDING BIRD SURVEYS AND NEST BOX DATA

Breeding Bird Survey (BBS) data provide the best statewide evidence of population changes. Forty-two BBS routes are normally run in Tennessee, although in some years one or more of these routes are not run. Each route consists of 50 stops, one-half mile apart, at which an observer records the numbers of each bird species seen or heard within 0.25 mile. BBS's are designed to serve as an index to populations, so that increases or decreases can be detected by comparing results from different years. Since the same number of routes is not run each year, it would not be valid to compare the total number of bluebirds seen in different years; a more accurate comparison can be made by considering the average number of bluebirds seen per route. This calculation is made by adding the number of bluebirds seen on all routes for a particular year and dividing this sum by the number of routes run that year. Table 1 summarizes BBS data for each year. Figure 1 graphically illustrates the changes in the average number of bluebirds per route during the 1970's.

Bluebird population changes are also made apparent by comparing data obtained over several years from groups of nest boxes. I chose for comparison three nest box trails that are located at approximately the same latitude, are monitored on a regular basis, and have been established for several years. The nest box trail of Gordon Hall is located on the Norris Dam reservation in Anderson County. This trail was established in 1973 and normally has 33 to 35 nest boxes. The nest box trail of Mrs. Martha Herbert is located in the Neptune community in Cheatham County. This trail was established in the 1960's and normally has about 70 nest boxes. The third trail used for comparisons is my trail of 40 boxes in Obion County. This trail was established in the late 1960's, although some boxes were present as early as 1958.

Year	Total No. Counted on all BBS's	No. BBS routes run	Avg. No. Bluebirds/ BBS route	Estimated June* population
1970	201	41	4.9	105,531
1971	298	42	7.1	152,729
1972	354	42	8.4	181,430
1973	268	42	6.4	137,354
1974	247	42	5.9	126,591
1975	298	42	7.1	152,729
1976	306	42	7.3	156,829
1977	205	42	4.9	105,065
1978	.76	40	1.9	40,899
1979	101	40	2.5	54,352

TABLE 1. Comparison of Tennessee Breeding Bird Survey data and estimated June populations for Eastern Bluebirds during 1970-1979.

*Approximately 50% of the June population are probably juveniles from first nesting attempts.

These trails can be compared in several ways. Probably the most accurate method of making comparisons would be to consider the number of pairs of bluebirds present each year on each trail. However, this information is difficult to obtain, especially on the trails that have a high density of bluebirds, and is not available for all three trails. The next best method of comparison is to consider the number of nesting attempts each year. A nesting attempt is defined as a nest in which at least one egg is observed. While it is true that the number of nesting attempts is influenced by such things as the rates of nest predation and desertion, this comparison more accurately reflects the number of pairs present than would the total number of eggs laid or the number of young banded. Figure 2 shows the number of nesting attempts on each of the trails during 1970-1979.

RELATION BETWEEN MORTALITY AND WINTER WEATHER

Many factors can influence bluebird populations. While factors such as nest site availability, predators, diseases, parasites, pesticides, and land use patterns can influence bluebird numbers, there is no available evidence to indicate that the influence of any of these factors changed during the 1970's. A possible exception is the land use pattern involving conversion of pasture land into soybean production. This trend is especially noticeable in many areas of west and middle Tennessee (U.S. Department of Agriculture 1975, 1979), and, if continued, will result in reduced bluebird populations as suitable habitat, such as pasture land, declines. In view of the data presented in Figures 1 and 2 and data from other publications (e.g., James 1960, 1961, 1962), it seems that severity of winter weather is the major factor influencing nonmigratory bluebird populations in areas where suitable habitat is available. This certainly seems to be the case in Tennessee, where BBS data indicate a sharp decline followed the severe winters of 1976-1977 and 1977-1978. Data from two of the nest box routes (Obion County and Cheatham County) also indicate very drastic declines in 1977 and/or 1978.

Since winter weather is the most strongly implicated factor influencing bluebird populations in Tennessee, and since little information on other possible

influencing factors is available on a state-wide basis, emphasis will be placed on the role of weather in causing the population declines of 1977 and 1978. It should be noted, however, that winter weather patterns will probably not explain all noted population changes. For example, population fluctuations during the early 1970's appear to have been independent of weather changes.

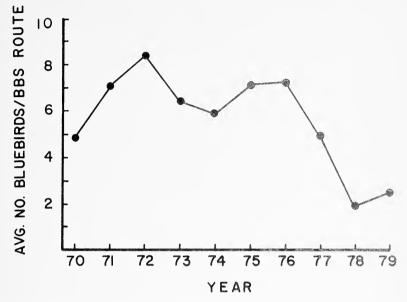


FIGURE 1. Variation in the average number of bluebirds recorded per Tennessee Breeding Bird Survey route during 1970-1979.

James (1962) found a good correlation in the mid-south states between the number of bluebirds on Christmas Bird Counts and the amount of freezing weather during the previous winter. The effects of the intervening breeding season complicated efforts to more specifically implicate a particular type of weather. The current study compares winter related mortality on the three previously described nest box trails in an effort to determine what type of weather resulted in deaths of bluebirds. The comparisons concentrated on the following observations: (1) during the winter of 1976-1977 mortality was high in Obion County, but normal in Cheatham County and Anderson County; and (2) during the winter of 1977-1978 mortality was again high in Obion County and also in Cheatham County, but not in Anderson County.

Evidence suggests that the European Robin (*Erithacus rubecula*), which has feeding habits similar to those of bluebirds, must consume some animal food on a daily basis in order to maintain normal weight (Berthold 1976). The primary animal foods of bluebirds during the winter are arthropods such as spiders (Beal 1915) which perched bluebirds detect as the arthropods move in short vegetation (Pinkowski 1977). Environmental conditions that restrict the availability of arthropods, either by restricting movement (temperatures below freezing) or concealment (snow cover), could influence bluebird survival. Environmental conditions, such as very low temperatures, that add additional stress would likely cause higher mortality.

	Obion County		Cheathar	n County	Anderson County		
	1977*	1978*	1977	1978*	1977	1978	
Degree days	2149	2939	1976	2190	1967	2071	
Snowfall (inches)	13.4	33.3	18.5	22.4	6.0	18.0	
Subfreezing days	20	32	12	19	9	7	

TABLE 2. Summary of January and February weather data from different regions of Tennessee.

*Mortality of Eastern Bluebirds was much higher than in other years.

Numerous specific weather factors possibly affect bluebird survival; I chose three criteria for comparisons between the areas. These criteria were chosen because of their likely influence on bluebirds and the availability of information from weather stations. The criteria used were: (1) number of degree days (which measures the coldness of days by the difference between the average daily temperature and 65 degrees F); (2) amount of snowfall; and (3) the number of days of subfreezing temperatures (days on which the maximum temperature did not rise above freezing). Table 2 presents those comparisons; all weather data were taken from U.S. Weather Bureau annual summaries (1977, 1978). Most bluebird winter mortality in Tennessee occurs during January and February (Pitts 1978), but most investigators do not check their boxes on a regular basis during the winter, so it is not possible to distinguish between mortality occurring in January from mortality occurring in February. Consequently, weather data are not separated by month but are reported as combined totals for January and February of each year.

The total amount of snowfall was the poorest indicator of mortality; for example, mortality was high in Obion County in 1977 when only 13.4 inches fell, while Cheatham County had normal mortality in 1977 with 18.5 inches and Anderson County had normal mortality in 1978 with 18.0 inches.

The number of degree days was correlated with winter mortality; sites with high mortality had more than 2100 degree days. While degree day totals are a predictor of normal and high mortality for the years considered here, it should be noted that only 78 degree days separated years of high mortality (Obion County in 1977) and normal mortality (Anderson County in 1978). This relatively small difference causes me to doubt the validity of this criterion as a reliable predictor of mortality in other years. These doubts are increased by the fact that a particular period of time with a smaller number of degree days. For example, a 10 day period with an average temperature of 25 degrees F would have 400 degree days; another 10 day period might have 5 days with an average temperature of 40 degrees F and 5 days with an average temperature of 15 degrees F for a total of 375 degree days. Even though the second period has a lower total of due to the extremely low temperatures.

The number of days with subfreezing maximum temperatures was strongly correlated with bluebird mortality. Table 2 shows that high mortality occurred in areas with 19 or more days of subfreezing temperatures, while normal mortality was associated with areas having 12 or fewer days of subfreezing temperatures.

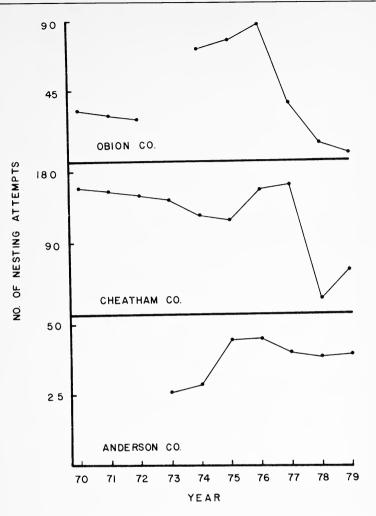


FIGURE 2. Comparison for 1970-1979 of the number of annual nesting attempts on three bluebird trails, one in West Tennessee (Obion County), one in Middle Tennessee (Cheatham County), and one in East Tennessee (Anderson County).

Consequently, I have chosen 15 as the minimum number of subfreezing days necessary for a high rate of bluebird winter mortality. While this is a useful predictor it is an unrefined criterion; a more detailed analysis of weather characteristics and patterns would likely result in better prediction of mortality. For example, the number of consecutive subfreezing days may be more important than the total number.

A comparison of BBS data with the number of subfreezing days supports the use of 15 days of subfreezing temperatures as a reliable predictor of bluebird mortality. Figure 3 (A and B) shows the portion of Tennessee subjected to 15 or more subfreezing days in 1977 and 1978. Figure 3C shows the location of BBS routes that had normal numbers of bluebirds in 1977 and 1978. This was deter-

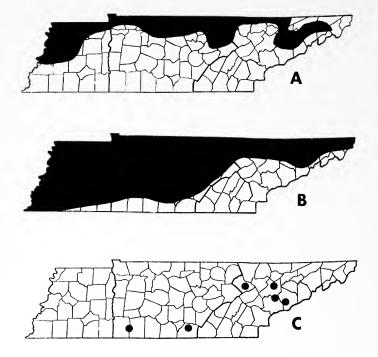


FIGURE 3. A. Darkened area represents portion of state having 15 or more subfreezing days during January and February of 1977. B. Darkened area represents portion of state having 15 or more subfreezing days during January and February of 1978. C. Location of Breeding Bird Survey routes having normal numbers of bluebirds in both 1977 and 1978.

mined by calculating the average number of bluebirds counted on each route in 1977 and 1978 and comparing this with the average number counted during the years 1966 through 1976. If the average of the 1977 and 1978 counts was 50 per cent or more of the 11 year average then the counts were considered to be normal. Only routes with an 11 year average of 3.0 or more bluebirds per year were considered; this eliminated 16 routes. Many of the remaining routes still had such low numbers that calculation of a two year mean and comparing this to an 11 year mean was statistically unreliable. However, the use of the 50 per cent reduction criterion helped to more accurately detect areas that had real population declines. Note in Figure 3C that the BBS routes that had an 11 year mean of 3.0 or more bluebirds per year and that still reported normal numbers in 1977 and 1978 were in the part of the state not having 15 days of subfreezing weather in 1977 or 1978. Generalizations of this type are rarely without exceptions; it is very likely that small areas within the portion of the state having 15 or more subfreezing days did have better bluebird survival than surrounding areas. Casual observations indicate the Tennessee portion of Land-Between-the-Lakes may have been one such area with a higher than predicted bluebird survival rate.

USE OF BREEDING BIRD SURVEYS AND AN INDEX OF CONSPICUOUSNESS TO ESTIMATE JUNE POPULATIONS

The conversion of BBS data into actual population estimates must be done cautiously and with the realization that a high degree of error may exist since BBS's were not designed to give population estimates. In spite of these limitations the use of BBS data to estimate population size seems justified since no other comparable data exist.

An assumption that must be made in order to convert BBS data into population estimates is that observers detect a known percentage of the bluebirds present on the routes. Howell (1951) made one of the earliest attempts to measure conspicuousness by comparing roadside census data with known populations for 26 species of woodland and farmland birds. He calculated an index of conspicuousness for each species by dividing the number of individuals of a species detected on a roadside census by the number of individuals of the species known to be present. These indices ranged from 1 to 28 per cent; indices were greater for species living in farmland. Since Howell's techniques for censusing were not the same as used for BBS's, his results should not be directly compared with BBS's. However, his censuses were apparently more intensive, and therefore, likely to lead to indices larger than for comparable work with BBSs.

Wallace (1970) determined an index of conspicuousness for 18 species living in woodland or at the edge of woodland. He used standard BBS procedures. The indices of conspicuousness he calculated ranged from 4.1 to 12.2 per cent, with an average of 8.1 per cent. Since bluebirds are generally found in somewhat more open habitat, they would presumably be more easily detected, as Howell found for farmland birds. Also, the presence of young bluebirds would probably increase detectability. Therefore I believe an index of conspicuousness for bluebirds would be greater than the 8.1 per cent average obtained by Wallace or the 11.4 per cent obtained by Howell, but it is probably less than the 28 per cent maximum observed by Howell. Therefore, I have arbitrarily chosen 20 per cent as the index of conspicuousness for bluebirds in Tennessee.

Each BBS route covers an area of 9.8125 square miles. If all 42 routes are run, a total of 412.125 square miles are censused. The actual number of bluebirds on each route can be calculated by dividing the observed number by the index of conspicuousness (0.20). For example, in 1976 306 bluebirds were reported from 42 routes; since this is estimated to represent 20 per cent of the bluebirds present, 1530 bluebirds were estimated to be present on an area of 412.125 square miles. A simple proportion may then be set up where:

total number of bluebirds	=	total number of bluebirds
on BBS's (1530)		in Tennessee
412.125		42,244 (area of Tn.)

The resulting calculation shows 156,829 bluebirds were present in the state. As many as 50 per cent of these may have been juveniles, since most pairs had produced first broods by the time of the BBS's (Pitts 1976:107-128). This leaves approximately 75,000 adults or 37,500 pairs of bluebirds in Tennessee during the 1976 breeding season. One possible check on the validity of these numbers, even though it is very crude, is to consider the density if 37,500 pairs were present. Approximately 5.8 million acress of suitable habitat were available to bluebirds in Tennessee (U.S. Department of Agriculture 1978); if bluebirds occupied the available habitat uniformly the density would be one pair per approximately 155 acres. Since each pair normally utilizes less than 20 acres (Krieg 1971:73), this density could exist. Whether or not such a density did exist cannot be verified with the existing data.

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SUMMARY

1. Breeding Bird Survey data indicate the largest declines in Tennessee bluebird populations during the 1970's were in 1977 and 1978.

2. Nest box data indicate high mortality in West Tennessee during the winters of 1976-1977 and 1977-1978, and in Middle Tennessee during the winter of 1977-1978.

3. Comparison of BBS and nest box data with weather records indicates areas having 15 or more subfreezing days (days when the maximum temperature was below 32 degrees F) had high bluebird mortality.

4. Assuming that BBS's detect 20 per cent of the bluebirds present, and that 50 per cent of the population consists of juveniles at the time of the BBS's, it is estimated that approximately 45,000 pairs of adult bluebirds were present in Tennessee during the peak year of 1972; approximately 10,000 pairs were present in 1978, the smallest number for any year of the decade.

ACKNOWLEDGMENTS

I wish to thank all of the persons who have participated in Breeding Bird Surveys; their contributions have built the most valuable and reliable source of information on breeding birds in Tennessee. In addition I would like to offer special thanks to Martha Herbert and Gordon Hall for allowing me to use unpublished data they gathered. As is appropriate for any publication on Tennessee bluebirds, I wish to pay tribute to the late Amelia Laskey for her uncountable contributions.

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Biology Department, University of Tennessee at Martin, Martin, TN 38238. Accepted 1 December 1980.

Correction: The Migrant. Vol. 51, No. 4.

p. 78, par. 3 reads: "and descended to the west." It should read: "and descended to the nest."

p. 79, par. 2 reads: "edge of the specie's range." It should read: "edge of the species' range."

NOTES ON THE RAPTOR MIGRATION AT CHILHOWEE MOUNTAIN

BARBARA H. STEDMAN AND STEPHEN J. STEDMAN

One of the more productive raptor migration lookouts in Tennessee for the past three years has been on and near Chilhowee Mountain in Blount and Sevier Counties, including the Chilhowee Dam area at the southwestern end of the mountain. In the autumns of 1978, 1979, and 1980, as well as the spring of 1980, we, as well as other cooperating observers recorded raptors of 13 species passing along this migration corridor. High numbers of Broad-winged Hawks (*Buteo platypterus*) and notable records of uncommon species such as Golden Eagle (*Aquila chrysaetos*) and Peregrine Falcon (*Falco peregrinus*) were also taken. Additionally, the first sight record of Swainson's Hawk (*Buteo swainsoni*) in Tennessee appears to have occurred recently at Chilhowee Mountain.

Chilhowee Mountain is a long ridge running along the northern boundary of Great Smoky Mountain National Park for about 50 km from near Chilhowee Dam in the southwest to near the Slate Top Mountains in the northeast. Its altitude averages about 900 m, and on its northwestern side it juts up sharply from the adjacent lowlands which rise up from nearby the Tennessee River Valley. Its almost unbroken ridgeline and great length make it an ideal site for observing migrating raptors almost anywhere along its length, but especially southwest of the intersection of Foothills Parkway and Route 73. Since the ridge is largely owned by the Department of the Interior which maintains Foothills Parkway, it is both easily accessible and very little disturbed. The ridge is also part of the long chain of Appalachian ridges leading northeasterly to the Mendota Fire Tower in Virginia and eventually to Hawk Mountain in Pennsylvania.

As is the case at both of those two hawk lookouts, Broad-winged Hawks are the most numerous species sighted along Chilhowee Mountain in the fall (Table 1). High numbers of Broad-wings for 1978, 1979, and 1980 were 441 (on 23 Sep), 3726 (on 29 Sep), and 1679 (on 20 Sep), respectively. Though these totals have been exceeded elsewhere in the state on several occasions, notably at Elder mountain (Finucane 1961), Gate City (Finucane 1969), and Fall Creek Falls State Park (Finucane 1971), the consistently high numbers of Broad-winged Hawks which occur along Chilhowee Mountain make it an area worthy of coverage during every fall migration.

As if the Broad-wing spectacle were not enough enticement to observe hawks at Chilhowee Mountain, the attractiveness of the area is increased by the regular occurrence of uncommon, endangered, or very rare raptors (Table 1). During the early fall of 1979 a Golden Eagle was sighted by Barbara Stedman near Look Rock, one of the few reports of the species migrating through Tennessee that year. Furthermore, in the fall of 1978 and 1979 Peregrine Falcons were sighted near Look Rock; it is encouraging to know that this endangered species uses the Great Smoky Mountain National Park area as a migratory pathway and might once again recolonize it with nesting pairs. Finally, persistent hawk-watching along the Ridge has resulted in the addition of at least one species to the list of birds sighted in Tennessee.

On 27 September 1980, at 1215 Marc and Laurie Armstrong and Barbara Stedman, who have all previously seen Swainson's Hawk in the western United States, observed a larger *Buteo* break away from a group of migrating Broad-

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TABLE 1.

RAPTOR SIGHTINGS AT CHILHOWEE MOUNTAIN AREA, 1978-80

	Fall 1978	Fall 1979	Spring 1980	Fall 1980
Days of Coverage	1	10	4	11
Hours of Coverage	5	34	9	35
Species				
Unidentified Vulture				4
Turkey Vulture	6	75	32	145
Black Vulture	1	15	14	36
Unidentified Accipiter	_	27	4	18
Sharp-shinned Hawk	1	25	1	31
Cooper's Hawk	_	2	1	3
Unidentified Buteo	11	100	5	522
Red-tailed Hawk	5	11	11	19
Red-shouldered Hawk	_	_	1	2
Broad-winged Hawk	441	5077	_	2054
Swainson's Hawk	_	_	_	1
Golden Eagle	_	1	_	
Marsh Hawk	_	3	_	10
Osprey	1	9	5	4
Unidentified Falcon	_	4	1	2
Peregrine Falcon	1	1	_	
American Kestrel	_	5	1	3
Unidentified Raptor	_	24	1	16
Total Raptors for Season	467	5379	77	2870
Raptors per Hour of Coverage	93	158	8	82

winged Hawks over Chilhowee Mountain. The bird was first observed about 400 m away in good light. It then flew to within about 200 m, slowly circling and giving the observers a good view of its field marks. Marc and Laurie Armstrong were using 8.5 x 44 binoculars as they perused the bird, while Barbara Stedman used 8 x 40 Leitz binoculars and a Balscope with a 25x eyepiece. These observers watched the hawk for about five minutes before it glided southwest down the ridge. They had earlier seen several Red-tailed Hawks (Buteo jamaicensis), but the appearance of the bird in question was so different that they knew immediately that it was not a Red-tail. The Swainson's Hawk flew more like a Marsh Hawk (Circus cyaneus) than like a Red-tail, and the dark breast patch stood out against a clear white belly. The dark bands on the tail, especially the heavy subterminal band, were well seen as the bird flared its tail several times. The wing linings were light with dark on the flight feathers, and a dark area behind the "wrist" was noted. All three observers agreed the bird could be no other species except a Swainson's Hawk.

While Tennessee seems to have had no previous record of this species, there is no shortage of nearby sightings. The species breeds as close as Illinois (Bent 1961). Migration records in the East are not uncommon. For instance, a bird of this species was banded in Virginia on 20 October 1979 (Scott 1980). Also, Cape May, New Jersey, hawk-watchers have recorded Swainson's Hawk almost every

year in recent times. Further, nine were reported in Louisiana in the fall of 1979 (Purrington 1980), while there were at least nine records in Alabama prior to 1976 (Imhof 1976), all of which were sight records only. One of these was quite close to the Tennessee line. A winter population of Swainson's Hawk has been known to occur for some years in South Florida (Stevenson 1976). It is worth mentioning also that in Central America Swainson's Hawks are frequently seen migrating over mountainous areas, often with large groups of Broad-wings (Heintzelman 1975).

Chilhowee Mountain is an easily accessible area which offers hawk-watchers considerable variety and numbers of migrating raptors, as well as a chance to view some species not otherwise easily observed in Tennessee. It deserves continued coverage every autumn season in the future.

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738 Greymont Drive, Nashville, TN 37217. Accepted 26 Jan. 1981.

EDITOR'S NOTE—Swainson's Hawks were reported from several states east of their normal range during the fall of 1980 (Hall, Amer. Birds 35:150-156, 1981). In addition to occurring in several midwestern states, Swainson's Hawks were recorded at Hawk Cliff, Ontario on 15 Sept., at Cape May on 23 and 29 Sept., and at Seabrook Island, South Carolina on 9 Nov. Observations from Look Rock have appeared in previous "Autumn Hawk Count" and "Season" reports.

MINUTES OF THE ANNUAL BOARD OF DIRECTORS' AND BUSINESS MEETING, 1981

Editor's Note: An unabridged copy of the minutes is available from the Editor or the Curator. Please send a legal-sized self-addressed stamped envelope.

BOARD OF DIRECTORS' MEETING

The 66th Annual Meeting of the Board of Directors of the Tennessee Ornithological Society was called to order by President Nelle Moore at 1430 on 2 May 1981 at Norris Dam State Park. Copies of the minutes of the Board of Directors' meeting held 18 October 1980 were distributed and approved as written.

REPORTS OF OFFICERS

There were no reports from the 3 Vice Presidents, Directors-at-Large, or the Secretary.

The TREASURER, Martha Waldron, recommended an increase in foreign and library dues be considered at the fall meeting, and reported as follows:

Income	6736.17
Expenses	5488.42
Savings (4/17/81)	5101.33
Checking (4/17/81)	1152.04

The EDITOR of *The Migrant*, Gary Wallace, announced he was declining renomination after serving as Editor for 10 years, and suggested the formation of a search committee to facilitate selection of future Editors.

The Season Editor, Fred J. Alsop III, thanked the Society for the opportunity of working with Gary Wallace.

The CURATOR, James T. Tanner, reported income of \$462.19 from sales of back issues of *The Migrant* and the "Index," and expenses of \$184.52, mostly for photocopying out-of-print issues.

REPORTS OF COMMITTEES

FINANCE: The records of the Treasurer were approved. The committee recommended authorizing the transfer of funds now held in the bank savings account to the InterCapital Liquid Asset Fund, Inc., through Dean Witter Reynolds, and that the Endowment Fund be increased in the next 5 years to \$50,000. Both recommendations were approved.

CONSERVATION: Issues reported included a farmer assistance program for soil erosion control in West Tennessee; funding for toxic waste controls; oil companies obtaining drilling options; a proposed Wolf River Greenbelt in Shelby County; a decline in the Purple Martin population in the Chattanooga area; the termination of TWRA's Raptor Rehabilitation Program; and the need to write congressmen protesting easing of strip mining and forest timber cutting regulations.

Resolutions presented and passed were to commend the TVA Office of Natural Resources for their decision to establish a Wildlife Observation Area at Savannah Bay near Ooltewah; and to petition Alexander Haig, U.S. Secretary of State, to initiate programs in cooperation with Latin American countries to slow depletion of tropical rainforests. NOMINATING: Chairman Tom Guschke reported the following nominations for officers:

President: Michael L. Bierly Vice Presidents: East Tennessee — Richard L. Knight Middle Tennessee — Dan Gray West Tennessee — Robert L. Browne Directors at Large: East Tennessee — Mrs. Howard Young Middle Tennessee — Robbie Hassler West Tennessee — David Pitts Secretary: Pat Stallings

Treasurer: George Payne, Jr. Editor of *The Migrant:* Charles P. Nicholson Curator: James T. Tanner

James T. Tanner asked for elucidation from the nominating committee as to their method of selecting the Editor, and the chairman and President described telephone communications between committee members, and requests for recommendations from people familiar with the duties of the Editor.

Fred J. Alsop, III, was nominated from the floor for the position of Editor of *The Migrant*. The committee's nominations, as well as the nomination from the floor, were accepted and action was delayed until the evening annual business meeting.

SPECIAL ASSIGNMENT REPORTS

There was no report from the newsletter editor, and the report of the Foray Director was postponed until the business meeting. Lil Dubke reported \$133.25 from sale of patches, decals, and Avifaunas.

OLD BUSINESS

Ken Dubke reported plans for the fall meeting had not been finalized, and would be reported in *The Tennessee Warbler*.

NEW BUSINESS

Jon Koella volunteered to arrange special life insurance policies to benefit the TOS Endowment Fund, and to donate his commission to this fund.

ANNOUNCEMENTS

Announcements concerned the 1982 Spring Meeting to be held in Nashville, and recognition of Arlo Smith's efforts in preserving Overton Park.

The Board of Director's meeting adjourned at 1630.

BUSINESS MEETING

Following a buffet-style dinner at Norris Dam State Park, Knoxville Chapter President Linda Turner called the group to order, made announcements, and introduced Nelle Moore, State President, who opened the business meeting at 1940 with over 100 present.

President Moore reported on business transacted by the Board of Directors, and expressed appreciation to the current officers, and to the Knoxville Chapter for hosting the meeting. The group then stood for a moment of silence in memory of John Sellers of Lebanon, who passed away this year. Recognition was given to Gary Wallace for 10 years service as Editor of *The Migrant*, and to Martha Waldron for serving as Treasurer. The report of the Nominating Committee and the nomination from the floor of the Directors' meeting were announced. All candidates to uncontested positions were then elected.

A motion was then made to authorize the President to appoint an Editor's Committee to review the responsibilities of *The Migrant* editorship, report on qualifications of editor candidates at the 1981 Fall Meeting, and empower the Board of Directors to elect an editor at the 1981 Fall Meeting. After discussion, the motion was amended to elect Gary Wallace as Editor pro tem for six months. A standing vote was taken and the motion failed.

Gary Wallace was nominated for Editor of *The Migrant*. A vote on editor candidates Alsop, Nicholson and Wallace was taken by secret ballot, and the election of Charles P. Nicholson was announced following the program.

The evening program was introduced by Marcia Davis, Program Chairman. Ben and Lula Coffey discussed experiences in recording bird songs in North and South America, and illustrated their talk with tapes of bird songs.

Nelle Moore then presented the gavel to incoming President Bierly. Announcements were made concerning the 1982 Spring Meeting in Nashville, with probable dates of 7-9 May 1982, and the 1981 Foray, 22-25 May, in McNairy County. The meeting was then adjourned.

CAROLYN H. BULLOCK, Acting Secretary

ROUND TABLE NOTES

A PAST GREEN HERONRY COLONY IN MEMPHIS—Nesting colonies of the Green Heron (*Butorides striatus*) have been reported in these pages as of special interest. In this area I haven't seen any in the last 45 years, therefore, I should put on record, our one and only colony. This was near "East Junction" in south Memphis, a wet place with a few trees and about 67 m from the railroad junction. The nests were originally 1 to 2 m above ground, in buttonbushes (*Cephalanthus occidentalis*), in 1933. Subsequently the WPA worked through the spot, ditching for draining, and the nests were then built 4 to 5 m above the ground in oaks. For the last decade, Interstate 55 has crossed through the site.

In 1933 we found two nestfuls ready for banding on 17 May; on 20 May a third nestful. On 25 May we banded at two more nests and found four other nests of young not ready for banding. No birds remained on our next visit, 17 June. Of 25 young at five of the nine nests, 23 were banded, two being too small.

On 3 June 1934 we banded 4 at each of two nests (about 8 and 12 days old); too young to band at a third nest and about six to eight nests with eggs. All were in oak trees, not easy to check closely. Three nestfuls were banded 10 June; four, 7 days old; four and three, 12 days old. On 16 June, four, 12 days old, and four, 14 days old, were banded. A nest with two eggs hatched that day; the young were banded 27 June. Two nest with eggs were found on 16 June and checked again on 27 June. The two eggs at one nest were gone; one nest with two eggs now had three, but these latter were still there 11 July, and evidently no good. A total of 29 young were banded at eight nests; 5 eggs in two nests produced no young.

In 1935 it was harder still to check the nests, and we tried for minimum disturbance. On 22 May, two nests had no eggs, one had 5 and one had 2 eggs. On 12 June we checked ten nests—two of which had no eggs yet, two with the young gone (heavy ''whitewash'' at one), one with 5 eggs, two with 4 eggs each, and one with a single egg. Four young (12 days old) and two young (over 15 days old) were banded. On 22 June, I found five nests with 5 eggs each, two with 5 young each; these were 2 to 5 days old, not banded. One of these was banded 29 June, the only one. Nests on latter date were four with 5 eggs each, one with 2 eggs, and two with young only 2-4 days old. On 8 July one nest had 2 young (banded) and another with 2 young only a few days old and an older one dead on the ground below. One unused nest and several used and abandoned nests remained. Only 9 were banded. The eight nests checked, eventually had 31 eggs.

It would seem that in 1933 eggs were laid about 10 April to 30 April and the last young left the nest about 7 June. In 1934, eggs were laid approximately 30 April to 17 June, and most young were gone by 1 July. In 1935 eggs were apparently laid from 11 May to 17 June and the last young should have left by 18 July.

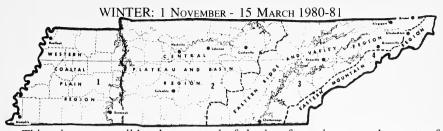
Elsewhere we have banded 27 in 1935 and 1936 in the Yazoo-Mississippi Delta, all in low, single nests at the edge of large heronries occupied by other species of herons. One nest contained 7 young. On 3 July 1949, two, 2 weeks old, were banded at the former Boy Scout Camp, Hardy, Arkansas. This nest was 4 m up, in a post oak (*Quercus stellata*) among red cedars (*Juniperus virginiana*).

No reports were ever received from any of the ninety Green Herons banded.

BEN B. COFFEY, JR., 672 North Belvedere, Memphis 38107. Accepted 17 Feb. 1981.

THE MIGRANT

THE SEASON



This winter was milder than several of the last few winters, and reports of lingering birds such as Common Nighthawk, Yellow-billed Cuckoo, House Wren, Gray Catbird, Common Yellowthroat, and Indigo Bunting were received. Among the notable observations this season were the fourth state record on an Eared Grebe at Radnor Lake in November, and the fifth record, on Fort Loudon Lake in January. Two Western Grebes were found on Chickamauga Lake during the Chattanooga Christmas Bird Count, and one was observed there in mid-January. Oldsquaws were recorded both from the Central Plateau and Basin and the Eastern Ridge and Valley Regions. Scoter reports included 2 Surf Scoter reports from Nashville, and White-winged Scoters from the central, Eastern Ridge and Valley, and the Mountain regions. A Franklin's Gull was reported from the Hiwassee River area. The results of the statewide mid-winter eagle survey are shown in Table 1.

Several interesting fringillids were reported, including Dickcissels in the western and central regions, a wintering Snow Bunting near Nashville, and Lapland Longspurs in the Eastern Ridge and Valley Region. House Finches were widespread except in the Eastern Mountain Region. Pine Siskins staged one of their largest invasions in the Memphis area, and were present in smaller numbers in the rest of the state. Evening Grosbeaks were reported in modest numbers from all regions.

In this and future "Season" reports, the lists of observers from the four regions are consolidated into a single listing, which follows the Eastern Mountain Region report.

WESTERN COASTAL PLAIN REGION—The winter months were unseasonally mild and dry. Pine Siskin and Evening Grosbeak were seen in unusually high numbers throughout West Tennessee. Many feeding stations recorded from 20 to 1,000 Pine Siskins; although the number of Evening Grosbeaks was lower, their daily attendance was common.

Ruddy Duck: 26 Jan (1800) Robco Lake, Southwest Shelby Co. (BBC, LCC). Common Egret: 20 Nov (1) BHP (JH). Great Blue Heron: 20 Nov (8) BHP (JH). Cooper's Hawk: 15 Dec (1) OP (JS), 8 Jan (1) M (DV), 14 Feb (1) OP (JS). Sharp-shinned Hawk: reported disturbing birds at three feeding stations in Memphis area. Osprey: 20-27 Nov (1) BHP (JH). Least Sandpiper: 12 Jan (1) Mississippi River near Heloise (WGC). Western Sandpiper: 12 Jan (1) Mississippi River near Heloise (WGC). Red-headed Woodpecker: 2 Nov (81) SFSP (MTOS). House Wren: 3 Jan (1) Mud Island (JG, JW). Winter Wren: 26 Nov (1) M (DAD). Common Yellowthroat: 3 Jan (1) Mud Island (JG, JW). Dickcissel: 6 Jan (1) M, stayed several days (CB, JL). Evening Grosbeak: 19 Nov (1 female) M (JM), 3 Dec (26) M (WB), 2 Feb (3-20) M (DB, WJB), 2-10 Jan (1-39) Somerville (JS),

TABLE 1. 1981 MIDWINTER EAGLE SURVEY

		Bald Eagle					
Location	Ad	Imm	Unk	Total	Eagle	Date	Obs
West Tennessee							
Reelfoot Lake area, including Lake							
Isom, Missicsippi River in Lake Co. Lauderdale Co Open Lake,	97	66	l	164		9 Jan	FWS
Chisholm Lake	2	4		6		12 Jan	TWRA
Kentucky Lake, Stewart Co.	2	3		5		9 Jan	TVA
Tennessee NWR - Henry, Benton				- 1		0 -	
Decatur Cos. Pickwick Lake	2 2	12		14 2		8 Jan 8 Jan	FWS
FICKWICK Lake				2		ojan	TWRA
Totals	105	85	1	191	-		
Middle Tennessee							
Dale Hollow Lake	18	16		34	l ad	9 Jan	COE
Cordell Hull Lake	1			1	l imm	9 Jan	COE
Center Hill Lake	2	2		4		8 Jan	COE
Cheatham Lake Barkley Lake, Stewart Co.	1 1	2		3 1		9 Jan 9 Jan	COE TVA
Cross Creeks NWR	3	4		7		9 Jan 9 Jan	
Tennessee NWR - Stewart, Humphreys Cos		17		17	l ad	8 Jan	
Totals	26	41	-	67	3		
East Tennessee							
Holston Army Ammunition Plant	1			ı		10 Jan	TWRA
Cherokee Lake	1	1		2		10 Jan	TOS-TWRA
Jefferson City	1			1		10 Jan	
Douglas Lake	1	~		1		15 Jan	TWRA
Norris Lake Melton Hill Lake	8	2		10 1		9 Jan	
Watts Bar Lake	1	1		10		9 Jan 9 Jan	
Chickamauga Lake	9 8	2		10		9 Jan	
Nickajack Lake	4	2		6		9 Jan	
Guntersville Lake	1			1		9 Jan	TVA
Totals	35	8	-	43	-		
GRAND TOTALS	166	134	l	301	3		

Abbreviations: Ad - adult; Imm - immature; Unk - unknown age; Obs - observing agency FWS - U.S. Fish & Wildlife Service; TWRA - Tennessee Wildlife Resources Agency; TVA -Tennessee Valley Authority; COE - U.S. Army Corps of Engineers.

28 Feb (28) LaGrange (JF), (3-4) Roadside between LaGrange and Somerville (JF), 3-23 Mar (max 30) Stanton (BA), Jan - Feb common at Henderson (TC). House Finch: 5 Jan - 13 Mar (1 female), 20 Jan (1 male) M (CAW). Pine Siskin: reported at most feeding stations ranging in numbers from 20 to 1,000. Tree Sparrow: 7 Feb (1) AI (JC). Chipping Sparrow: 15 Nov (3) M (RP). Harris's Sparrow: 14 Jan (1) PI (CB, HBD, NS). Lincoln's Sparrow: 27 Nov (1) PF (HBD).

Locations: AI—Airpark Inn Reelfoot, TN Lake Co.; BHP—Big Hill Pond State Park, McNairy Co.; M—Memphis; OP—Overton Park, Memphis; PF— Penal Farm, northeast Shelby Co.; PI—west Shelby Co.; SFSP—Shelby Forest State Park, northwest Shelby Co.

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

CENTRAL PLATEAU AND BASIN REGION—The winter of 1980-81 was about average with less rain and snow than usual. Winter finches were present though not in large numbers, and the Pine Siskin was the most widespread.

Loon-Merganser: Common Loon: 2, 14 Nov (52, 57) Woods Res (DTC, JPC), denotes migration. Horned Grebe: fewer winter than usual Nash area (NTOS). *EARED GREBE:* 1-21 Nov (1) Radnor L (MLB, *et al.*), fourth Tenn and third Nash record. Great Egret: 11-20 Nov Gallatin (DTC, JPC, MPS). American Bittern: 9 Nov (1) Percy Priest L (ADP). *WHISTLING SWAN:* 7 Dec - 22 Feb (3) Franklin Res, Williamson Co (CHS, HMW), seventh Nash area record. Ringnecked Duck: 9 Nov (700) Gallatin Steam Plant (DTC, JPC), peak fall migration; 7 Feb (300) Gallatin Steam Plant (DTC, JPC), peak winter. Common Goldeneye: 5 Nov (1) Radnor L (MLB), earliest Nash five days. *OLDSQUAW:* 31 Dec - 12 Jan (1) Radnor L (MLB, *et al.*), first Nash record in five years. *WHITE-WINGED SCOTER:* 9-10 Jan (1) Radnor L (AKJ, CHS); *SURF SCOTER:* 26 Nov - 10 Dec (1) Radnor L (MLB, *et al.*); 3 Jan (1) Percy Priest L (RDP, ADP, TNH). Common Merganser: 31 Dec - 6 Jan (2) Radnor L (MLB); 3 Jan (6) Old Hickory L (MLB, CDC, DFV). Denotes a light movement into area.

Vultures-Dunlin: Vultures: During winter, roost 275 Black, 25 Turkey Gallatin Steam Plant (DTC, JPC). Sharp-shinned Hawk: scattered reports Nash all winter, encouraging (NTOS). Cooper's Hawk: several reports Nash during winter; one individual flew into and shattered plate glass window at school, bird stunned, released unharmed (VLP). Rough-legged Hawk: 27 Dec (1 dk ph) Nash area (MRD, ANC); 11-12 Jan (2 lt ph) Franklin (MLB, JCM, VLP); 13 Jan (1 dk ph) near White House (DTC, JPC). Annual Nash since 1974. Bald Eagle: 9 Nov (3 ad, 1 im) Cordell Hull L (JDP); 16 Nov (2 ad) Normandy L (JDP); two adults wintered Cheatham L, Ashland City. MERLIN: 1 Mar (1) Bledsoe Creek St Pk (DTC, JPC), only occasionally seen. Sandhill Crane fall migration reports: 1 (90), 2 (12, 85, 17), 4 (heard, 10 PM), 22 (45, 98, flock heard) Nov Byrdstown (JDH, RH); 2 Nov (7) Cookeville (RWS); 22 (three groups heard), 25 (flock heard) Nov Pickett State Forest (DAH). No spring reports. American Golden Plover: 9 Nov (1) beach, Old Hickory L (MLB, et al.), few Nov dates locally. American Woodcock: decline in singing territories Nash area (NTOS). Dunlin: 9 Nov (5) Gallatin (DTC, JPC); 7 Dec (1) Percy Priest L (DTC, JPC, et al.), few winter dates locally.

Nighthawk-Snow Bunting: Common Nighthawk: 8 Nov (1) Nash (DFV), limited Nov records Nash. Red-breasted Nuthatch: a small invasion in Middle Tennessee (TOS). Gray Catbird: 22 Nov (1) Nash (JCA, MDA), few dates this late for area. Indigo Bunting: 9 Nov (1) Nash (JCA). Dickcissel: 22 Oct - 8 Nov (1) Gallatin (DTC, JPC); 20 Dec (1) Ashland City (CE); 3 Mar (1) Nash (HR, JNR). Evening Grosbeak: small flocks at scattered locations most of winter Middle Tennessee. Some observable movement into area late Feb and early Mar. Purple Finch: small numbers during winter Nash area. Peak of 100 at Gallatin mid-Feb (DTC, JPC). House Finch: up to 30 at feeders all winter at Nash (MLB, DFV, DH, JRB); 12-15 at Gallatin (DTC, JPC); several reported at Clarksville (AHH, EJW), Woodbury (FB) and Murfreesboro (ALH). Pine Siskin: a good invasion over much of Middle Tennessee with birds at most feeders, some up to 40 birds (TOS). *SNOW BUNTING:* 6 Dec - 16 Feb (1) Percy Priest L (RVM, MRM), fourth Nash area record and second time to completely winter.

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EASTERN RIDGE AND VALLEY REGION-Waterfowl numbers for the

period hinted at nothing out of the ordinary. On Douglas Lake, 24 January, Tony Koella observed 4000 puddle ducks in very poor light. Most of the birds appeared to be Mallards, Black Ducks and Green-winged Teal. The wintering of up to 50 Common Mergansers on Norris Lake, as reported by J. C. Howell, is unusual.

The wintering Dunlin on Douglas Lake, as reported by Tony Koella, are worthy of comment. He first reported them last year, and this season he counted from 230 to 260 individuals. In contrast, Steve Stedman reported no shorebirds from the Kingston area.

It appears that Brown Thrashers are wintering more commonly in the Elizabethton-Johnson City area with as many as 4 or 5 being observed.

The reports received on wintering northern finches varied from one locality to another. In our opinion, it would not be considered a "heavy invasion" year.

Unusual out-of-range birds included Eared and Western Grebes, Franklin's Gull and a Lapland Longspur.

Loon-Bittern: Com. Loon: thru 26 Jan (1-4) BL (RLK); unusual numbers of 1-17 ChL (KHD, LHD, JWS). Horned Grebe: low numbers to 4 Feb BL (LHTOS); (2-42) ChL (KLD). *EARED GREBE:* 9 & 10 Jan (1) Concord, KCo (found by MWA, then observed by AH, RDH, BHS, SJS). *WESTERN GREBE:* 19 Jan (1) ChL (LHD & RCS). Pied-billed Grebe: usual numbers of 12-80 ChL (KHD, LHD). Double-crested Cormorant: 21 Dec (1) KNC (PDH); 1 Nov - 3 Feb (1-8) HRA (KHD, LHD). Great Blue Heron: Regular with max counts: 21 Dec (67) Knox CBS (KTOS); 9 Nov (205) DL (JAK); 1 Dec (110) HRA (KHD, LHD). Green Heron: 21 Dec (1) KCo (ABS). Great Egret: 1 Nov (1) HRA (TOS); 2 Nov (3) DL (JAK); 21 Nov (1) Yellow Cr., Rhea Co. (WKJ). American Bittern: 3 Nov (1) SB (KHD, LHD, RCS).

Swan-Merganser: Whistling Swan: 21 Dec (1 imm) MHL, in same location as the 2 swans reported last year (CPN). Canada Goose: (max 350) HRA (TOS); 4-9 regular Erwin (GS). Snow Goose: 9 & 22 Feb (1) HRA (KHD, LHD); 2 Nov & 8 Mar (1) DL (JAK). Mallard: (max 2000) HRA (KHD, LHD). Black Duck: (Max 70) KSP (CPN); (max 150) HRA (KHD, LHD); 2 Nov (120) DL (JAK). Gadwall: (max 220) ChL (KHD, LHD); 24-40 all period JCo (JAK). Pintail: (max 125) ChL (KHD, LHD & RCS); 2-4 all season DL (JAK). Green-winged Teal: (max 150) HRA (KHD, LHD, & RCS); consistent thru season 2 Nov (50) DL (JAK). American Wigeon: (max 100) HRA (KHD, LHD); 35-45 all period DL (JAK). Northern Shoveler: 22 Nov (1) DL (JAK); 19 Jan (1) MHL (CPN); seven scattered records ChL & HRA of 1-7 birds (KLD, LHD). Wood Duck: 2 Nov (10) DL (JAK). Redhead: small numbers, max 18 Nov (25) ChL (KHD, LHD); 9 Nov (2) & 8 Mar (4) DL (JAK). Ring-necked Duck: max 19 Jan (65) ChL (KHD, LHD, RCS). Canvasback: six reports (1-6) ChL & HRA (KHD, LHD); 9 Nov (2) & 5 Dec (5) DL (JAK); 12 Jan Knox (Robert Lowe & J. B. Owen); 21 Jan (10) OR (WKJ); 28 Feb (1) OR (BHS, AH). Greater Scaup: usual regular numbers ChL of 150-230 (KHD, LHD). Lesser Scaup: 18 Nov (175) ChL (KHD, LHD); then 6 others records of up to 91 individuals ChL (KHD, LHD). Common Goldeneye: very few sightings, 28 Dec (65) ChL (KHD, LHD). Bufflehead: small numbers to 20 ChL (KHD, LHD). Oldsquaw: 3 Jan (6) Nickajack Lake (Gary Hartman). White-winged Scoter: 22 Nov (1) KSP (ABS, BHS); 24 Jan (1) ChL (JWS). Ruddy Duck: 1-12 thru period ChL (KHD, LHD); 13 on pond JEC all season (JAK). Hooded Merganser: 9 Nov (6) DL (JAK); low numbers with max 8 Dec (130) HRA (KHD, LHD, RCS). Common Merganser: regular all winter on Norris Lake with max 15 Jan (50) (Joseph C. Howell).

Hawk-Gull: Marsh Hawk: 6 Nov (2) Tellico Lake (WKJ); 26, 30 Dec (1) SB (KHD, LHD); 18 Jan (6) Rogersville (Dave Turner); 2 Feb (2) SB (KHD, LHD); 4 Feb (1) KNC (PDH); 6 reports Eliz-JC (LHTOS); 3 usually present JEC (JAK). Peregrine Falcon: 3 Jan (1) DL (Dave Etnier). Sandhill Crane: lower than average fall total of 465 birds. Included only 43 from HRA (KHD, LHD et al.). Other reports: 1 Nov (31, 45, 85 landing), 2 Nov (9) Tellico Lake near Citico (CH); 2 Nov (100) Dayton (Jeff Lavender); 5 Nov (15) Glendale, Loudon Co. (WKJ); 11 Nov (110) (CH), 20 Nov (4 on ground) Watts Bar Lake, Roane Co. (Greg Reed); 28 Nov (23 on ground) Tellico Lake near Rose Island (Sam Venable). For the spring movement a total of 1281 were counted between 2 and 10 March at Soddy, Chatt, SB, HRA & Col (Gene Ryther, KHD, LHD, RBW, Carl Campbell, Gertrude Fleming). Common Gallinule: 1 Nov (1 imm) HRA (RCS et al.). American Coot: regular with max 6 Jan (1200) ChL (KHD, LHD). Killdeer: regular with max 1 Dec (330) HRA (KHD, LHD). Black-bellied Plover: 1 Nov (3) HRA (KHD, LHD, RCS). American Woodcock: 19 Feb (1 in courtship flight) SB (KHD, LHD). Common Snipe: regular with max 3 Nov (200) HRA (KHD, LHD, RCS); "very abundant" after 1 Jan Eliz-JC (LHTOS); regular with max 8 Mar (50) DL (JAK). Greater Yellowlegs: 1 Nov (5) HRA (KHD, LHD, RCS); 2 Nov (3) DL (JAK). Lesser Yellowlegs: 2 & 9 Nov (1) DL (JAK); 9 Mar (1) HRA (KHD, LHD, RCS); 11 Mar (1) JB (RLK). Pectoral Sandpiper: 3 Nov (2) HRA (KHD, LHD, RCS); 9 Mar (26) HRA (KHD, LHD, RCS); 13 Mar (50) SB (KHD, LHD); 14 Mar (2) JB (RLK). Least Sandpiper: 2 Nov (20) DL (JAK). Dunlin: 50-100 regular SB (KHD, LHD); 3 Nov (177) HRA (KHD, LHD, RCS); regular DL with varying numbers, max on 30 Nov (260), 4 Jan (230) (JAK). The Douglas Lake birds are an all time high winter count as well as the farthest north wintering populations found within the state. Semipalmated Sandpiper: 9 Nov (1) DL (JAK). Wilson's Phalarope: 2 & 9 Nov (1) DL (JAK). Herring Gull: 1-6 regular ChL (CTOS). Ring-billed Gull: regular with max 8 Mar (1600) DL (JAK); 20-600 regular ChL (CTOS). FRANKLIN'S GULL: 1 Nov (1 imm) HRA (KHD, LHD, RCS). Bonaparte's Gull: 5 records of 1-58 birds ChL (CRH et al.); 28 Nov (1) BL (RLK).

Cuckoo-Shirke: Yellow-billed Cuckoo: 5 Nov (1) AS (RLK). SHORT-EARED OWL: 15 & 22 Feb (1) NV (JAK). Red-headed Woodpecker: 1-2 all period Johnson City (KB); 24 Jan (1) only report from KNC (PDH). Horned Lark: two flocks of 50-75 all period JB (RL, et al.); 20+ all period JEC (JAK); 80 all period NV (JAK). Red-breasted Nuthatch: common throughout Knox area (KTOS); widely scattered but not as common at Chat as some years (CTOS). Winter Wren: common KNC with higher numbers than previous winters (KTOS). Long-billed Marsh Wren: 1 Nov (1) HRA (ABS). Short-billed Marsh Wren: 9 Dec (1) Eastern State Wildlife Management Area KNC (found by MWA, then seen by LNA, BHS, SJS). Brown Thrasher: apparently 4 or 5 individuals wintered Eliz-JC; this is more than ever recorded for this period in this area (LHTOS); 8 Feb (1) JEC (JAK). Hermit Thrush: 5 Jan (6) Hoss Cove (RLK). Golden-crowned Kinglet: abundant Knox area (CPN). Water Pipit: 2-9 Nov (20) NV (JAK); 10 Nov (25) AS (RLK); 20 Dec (60+) JB (RLK); 8 Feb (1) NV (JAK); 28 Feb (30+) JB (RLK); 1-82 scattered SB & HRA (KHD, LHD). Cedar Waxwing: abundant Eliz-JC after Dec (LHTOS); uncommon JEC (JAK); low numbers in Dec & Jan and increasing in Feb Knox area (KTOS); few reports Chat (KHD, LHD). Loggerhead Shrike: more normal sightings this winter Eliz-JC after low counts last several years (LHTOS); only two reports KNC, 27 Nov (CPN), 10 Jan (PDH).

Warbler-Longspur: Yellow-rumped Warbler: "abundant" thru mid-Feb Eliz-JC (LHTOS). Pine Warbler: 16 & 17 Dec (1) KNC (SJS, BHS); up to 6 all period coming to a feeder in Harrison (Elena Killian) and 5 at another feeder in

Chatt (JP). Palm Warbler: 17 Dec (1) Chester Frost Park (CRH). Rusty Blackbird: 20 Feb (75+) JB (RLK). Evening Grosbeak: several small flocks Eliz-JC after first report 15 Nov (SG); scattered small flocks Knox area (KTOS); 13 Feb (20) Maryville (JAK); few scattered reports Chat (CTOS). House Finch: increasing in Washington Co. with 3-4 flocks of 15-25 all period (LHTOS); 20 Dec (15) CPC, Norris CBC (DAH, CPN, LJT); first CPC report; seem to be about as common in KNC this winter as last with a total of 210 banded (BHS, SJS); one banded bird moved 6.5 miles between 10 Jan and 26 Mar (BHS, SJS). Pine Siskin: 10 Nov (8) AS (RLK); 1-13 Jan (25) JB (RLK); 15 Feb (1) Johnson City (KB); "fair numbers" KNC with 200 banded (BHS, SJS); regular at a feeder in Col after 12 Jan with 96 banded (REL); 17-20 regular at a feeder in Chat after 1 Feb (JP). American Goldfinch: good numbers at feeders KNC with about 150 banded including one that moved 8.5 miles between 26 Feb and 21 Mar (BHS, SJS). Savannah Sparrow: reduced numbers this winter JEC (JAK); a similar report from SB (KHD, LHD). HENSLOW'S SPARROW: 2 Nov (1) NV (JAK). Vesper Sparrow: 7 Nov (1) AS (RLK); noteable winter records: 20 Dec (3) CPC, Norris CBC (DAH, CPN, LJT); 6, 19 Jan (5, 6) HRA (KHD, LHD, RCS); 20 Feb (1) HRA (KHD, LHD). Chipping Sparrow: 3 Nov (1) SB (KHD, LHD); 2 Dec to end of period (2-6) Col (REL); 6 Feb (1) Kingsport (MD). White-crowned Sparrow: very common NV (JAK); present 3 locations JEC (JAK). Fox Sparrow: several reports Eliz-JC (LHTOS). LAPLAND LONGSPUR: 9 Nov (4), 31 Jan (1) NV (JAK).

Locations: AS—Austin Springs; BL—Boone Lake; Chat—Chattanooga; CPC—Campbell Co.; Col—Collegedale; DL—Douglas Lake; Eliz-JC— Elizabethton-Johnson City Area; HRA—Hiwassee River Area; JB—Jonesboro; JEC—Jefferson Co.; KNC—Knox Co.; Knox—Knoxville; MHL—Melton Hill Lake; NV—Nolichucky Valley, Greene Co.; OR—Oak Ridge; SB—Savannah Bay; TL—Tellico Lake.

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EASTERN MOUNTAIN REGION—The pleasant fall weather lasted until the last week of November when winter cold prevailed. December, January and February had below normal temperatures and precipitation. The heaviest snowfall of the winter fell on 30 January. Warmer weather arrived during last week of February. Waterfowl reports were below average for the period. Northern finch reports were only slightly below normal, but House Finch reports for the adjoining areas are numerous compared to practically no sightings in our region. Several sightings of Common Raven at low elevations of 1500-1800 feet were reported throughout the area during the period. Carolina Wren and Eastern Bluebird populations are above normal in our winter observations.

Few reports were received from the southern portion of the Eastern Mountain Region, and the observations here reflect the status of birds from Greeneville northward.

Loon-Owl: Common Loon: 1st, 1 Nov (1) WatL (GDE). Gadwall & Redhead Duck were more numerous this year than previously but Wigeon & Ringneck Ducks were less numerous (LHTOS). Wood Duck: 1st, 8 Mar (2) SV (HF). Greater Scaup: 4 Feb (2) WatR (RLK). WHITE-WINGED SCOTER: 3 Jan (1) WatR (GDE). Sharp-shinned Hawk: 5 sightings thru-out the period (LHTOS). Cooper's Hawk: 6 sightings during period (LHTOS). Marsh Hawk: 7 Nov (1) RM (EHS), 18 Nov (1) E (GDE). Bobwhite: below average totals during period (LHTOS). Great Horned Owl: 2 active nest sites, 1 near WibL (RLK *et al.*) and 1 near SHL (RL). Barred Owl: 19 Nov (1) Greeneville (RN), 9 Jan (1) E (GDE), 21 Feb (2) RM (RLK).

Raven-Thrush: Common Raven: regular thru-out period on RM & IM with several low elevation reports thru-out the area (LHTOS). *BLACK-CAPPED CHICKADEE:* 29 Dec (2 carefully identified) RM (RL, VL, GS). Red-breasted Nuthatch: no reports from high elevations near E, 15 Nov (3) Greeneville (RN). *GRAY CATBIRD:* 29 Dec (1) RM at elevation 2500' on CBC (SG & HD). Brown Thrasher: 2-3 birds wintered in the area (LHTOS). Carolina Wren, Eastern Bluebird: above normal all winter (LHTOS). Hermit Thrush: 3 Jan (2) WatL (RLK & DL) and 15 Jan (1) E (GDE).

Pipit-Sparrow: Water Pipit: 2 Nov (11) Yellow Mtn (EHS) and 9 Nov (10) RM (EHS). Loggerhead Shrike: 4 separate sightings during period (LHTOS). Myrtle Warbler: abundant during Jan & Feb (LHTOS). Evening Grosbeak: 1st, 8 Nov (5) E (GDE) several small flocks in area, smaller flocks seen in Greeneville by Marion & Elizabeth Edens. Purple Finch: abundant throughout the period (LHTOS). Pine Siskin: 1 sighting, 14 Nov (2) WatL (SG & MD). Red Crossbill: 10 Jan (16) WatL (RLK). Fox Sparrow: 31 Dec (1) RMSP (GDE) and 23 Jan (1) RC (SG). Swamp Sparrow: 29 Dec (1) RM at elevation of 4000' on RM CBC (RLK & EHS).

Locations: E—Eliz. area; IM—Iron Mtn.; RC—Roans Creek; RM—Roan Mtn.; RMSP—Roan Mtn. State Park; SHL—South Holston Lake; SV—Siam Valley; WatL—Watauga Lake; WatR—Watauga River; WibL—Wilbur Lake.

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ADDENDA TO "BIRDS OF DECATUR COUNTY"

Two species were left out of the annotated list in "Birds of Decatur County, including the 1978 foray" (Migrant 51:1-10, 1978). On p. 4, after the account for Eastern Kingbird, should be the following:

GREAT CRESTED FLYCATCHER—46, 47/42; (5 on 21 July 1977 by the Coffeys.)

EASTERN PHOEBE-6, 9/8; 1 on 29 December; (1 on 21 June 1977 by the Coffeys.)

More recent information is here presented for the following:

CLIFF SWALLOW—Additional nest sites observed since 1978: I-40 overpass at mi.
122 — 2 birds and 1 nest over old Barn Swallow nest on 4 May 1981 by the Coffeys; TN 69 overpass at I-40, mi. 126 — no birds present, 10 nests on 4 May 1981 by the Coffeys. Sites with changes in number of nests since 1978; TN 69 over Cub Creek — 60 birds, 115 nests on 9 June 1981 by the Coffeys; TN 69 over Doe Creek, Decatur Co. (east) side — 30 nests, traces of 300 old nests, Hardin Co. (west) side — 80 birds, 95 nests on 9 June 1981 by the Coffeys; TN 100 over Beech River, N of Decaturville (N side only) — 40 nests, traces of 300 old nests on 16 July 1981 by Nicholson.

The Acknowledgements should read: "and Morris Williams commented on the manuscript. . . ."

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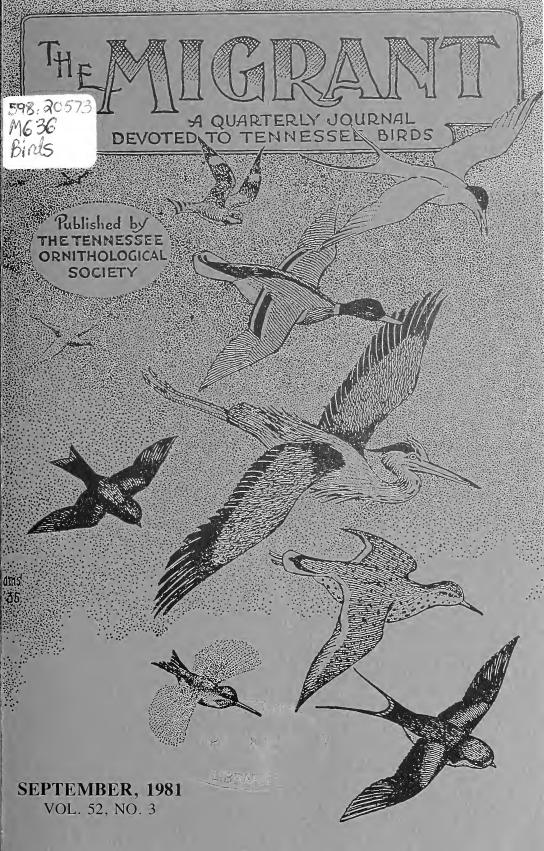
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BIRDS OF FENTRESS COUNTY, TENNESSEE

INCLUDING THE 1979 FORAY

CHARLES P. NICHOLSON

Fentress County (Figure 1), on the western edge of the Cumberland Plateau in Tennessee, was the site of the 1979 Tennessee Ornithological Society breeding bird foray.¹ The majority of the land area of 129,260 ha is within the Cumberland Plateau physiographic region, and the remainder, on the western edge of the county, is in the Highland Rim province of the Interior Low Plateau. Relief varies from 198 m on Dale Hollow Lake to 567 m on the Cumberland Plateau (hereinafter 'plateau'') near Clarkrange. Approximately 77 percent of the county is forested, and oak-hickory forest types are found on 59 percent of the forest area (Hedlund and Earles 1971). Other major forest types are oak-pine and shortleaf and Virginia pine, and the pine forest types are more common on the plateau than on the Highland Rim area. The relatively flat upland area of the plateau is dissected by gorges formed by tributaries of the Big South Fork of the Cumberland River on the east, and tributaries of the Obey River on the west. Beech, sugar maple, white pine and hemlock, along with a thick rhododendron understory, occur in the cool, moist gorges. Most of the forest is second growth, although old growth stands occur in some of the gorges. Major agricultural crops are cattle and corn. Much of the plateau area is underlain by coal seams, and coal has been mined for many years, both in deep mines and surface mines. Many recent surface mines are vegetated with grasses and forbs, and often pastured, while many older mines have a partial cover of trees and shrubs. The 1970 population was 12,593.

The ornithological history of Fentress County dates back to 1895, when Samuel N. Rhoads, of the Academy of Natural Sciences of Philadelphia, observed and collected at several stations across Tennessee (Rhoads 1895). Rhoads made a bicycle trip from Sunbright, in Morgan County, northwest to Allardt, and then east to Rugby Road (=Elgin), in Scott County. Rhoads was in the area from 5 to 8 June. The next published account of Fentress County birds was that of Albert F. Ganier (1937), who appended his account of a Pickett Forest foray with observations from the Jamestown area. From 1937 to the present, there have been only scattered observations published in *The Migrant*.

During the 1979 foray, 22 birders from across the state worked the county from 1 to 4 June. Most of the fieldwork was on 2 and 3 June, and consisted of random birding of assigned portions of the county, as well as conducting 1 complete and 2

¹Pickett County was also covered during the 1979 foray. Results from Pickett County will be published in a later issue of *The Migrant*.

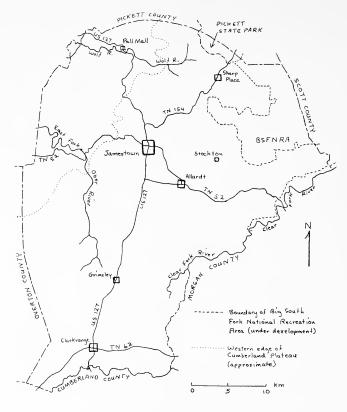


Figure 1. Fentress County, Tennessee.

partial Breeding Bird Survey (BBS) routes. The weather during the foray was clear and mild, except for heavy showers on 3 June.

The following annotated list of Fentress County birds includes 1979 foray results and other available Fentress County observations. For species observed on the foray, these results are given first. The first number is the total individuals observed, excluding BBS route results; the second, presented as a fraction, is the total individuals observed on the BBS routes, over the number of stops, out of 94, at which the species was observed. BBS route results are presented for 32 stops of a 50 stop route in NE Fentress County (rest of route was in Pickett County), censused by Nicholson and King on 2 June; a 50 stop route in the south central portion of the county, censused by Mayfield on 3 June; and a 12 stop route near Helena, aborted because of rain, censused by Bierly and Vogt on 3 June. All BBS routes were on the plateau. Following the foray results are records from Rhoads (1895) and The Migrant, and unpublished records made available to the author. These include observations by Williams on 8 September 1976; by Bierly and the Hasslers on 24 September 1978 at York Mill; by the Hasslers and Nicholson on 27-28 April 1979; by Hartigan, Robbie Hassler, and Nicholson on 12 February 1980; by Nicholson on 28-29 June 1980; and by Nicholson on 29 November 1980. These, records by Rhoads (1895), and records from The Migrant are presented in a seasonal order, spring through winter.

- PIED-BILLED GREBE 1 at York Mill on 24 September 1978; 1 near Stockton on 29 November 1980. 1980.
- GREEN HERON 9, 0/0; 2 birds and old nest on 28 April 1979; 2 on 28 June 1980.
- BLUE-WINGED TEAL 4 on 28 April 1979.
- WOOD DUCK 7, 0/0; 4 on 28 April 1979.
- TURKEY VULTURE 99, 7/2; 1 on 27 April and 14 on 28 April 1979; 1 on 8 September 1976; 19 on 29 November 1980; 4 on 18 February 1980.
- BLACK VULTURE 2, 0/0, both on 2 June; 16 on 29 November 1980.
- SHARP-SHINNED HAWK 1 on 29 November 1980.
- RED-TAILED HAWK 1, 0/0, on 1 June by TL, RP, TP, bird carrying food; 3 on 28 April 1979; 3 on 29 November 1980; 4 on 18 February 1980.
- RED-SHOULDERED HAWK 3, 0/0; 1 on 29 November 1980; 8 on 18 February 1980; 1 on 3 March 1979 by PP, BS; 2 on 5 March 1979 by PP.
- BROAD-WINGED HAWK 13, 0/0; 1 on 28 April 1979.
- ROUGH-LEGGED HAWK 2 on 18 February 1980; 1 on 3 March 1979 by PP, BS; all on plateau.
- GOLDEN EAGLE possible former nesting species Ganier (1931, 1937) gives the following observations: February 1927, 2 on 27 and 31 May 1927 in Buffalo Cove, and 3 on 31 May or 1 June 1930 in Gwinn Cove. He mentions finding an old nest, occupied by Great Horned Owls in 1928. Despite these observations, no eagles were ever observed at a nest and there is no substantiated nest record.
- BALD EAGLE 1 adult on 19 February 1977 at Clarkrange by Bill Jones (Pitts 1977).
- MARSH HAWK 1 on 8 September 1976; 2 on 3 March 1979 by PP, BS, on plateau; 1 on 7 March 1980, 10 km W of Jamestown, by D&RH.
- PEREGRINE FALCON former resident nested at Rockcastle Cove from 1926 to at least 1932 (Ganier 1934). Ganier observed a pair at this nest on 29 May 1927 (Ganier 1937).
- AM. KESTREL 4, 0/0; 1 on 28 April 1979; 3 on 29 November 1980; 3 on 18 February 1980; 3 on 3 March 1979 by PP, BS.
- RUFFED GROUSE 2, 0/0, observed on 2 June; observed by Rhoads (1895) at Allardt; present during 1935-36 season (Caldwell 1936); abundant during 1941 (Caldwell 1941).
- BOBWHITE 54, 24/12; 2 on 28 April 1979; 8 on 29 November 1980.
- TURKEY recorded by Rhoads (1895); 25 stocked at Gernt in 1941 (Schultz 1955); possibly present in 1962 (Lewis 1962).
- SANDHILL CRANE 40 on 15 November 1974, fide D&RH; 6 on 6 March 1975 (Williams 1975).
- SORA 1 road-killed bird collected on 8 September 1976.
- KILLDEER 5, 0/0; 4 on 28 April 1979; listed by Ganier (1937) at Jamestown; 1 on 29 June 1980; 12 on 8 September 1976; 3 on 29 November 1980; 6 on 18 February 1980.

- AM. WOODCOCK 1, 0/0, along Clear Fork, on 2 June by the Mayfields, and 1 road-killed bird observed on 1 June by TL, RP, TP.
- COMMON SNIPE 1 on 18 February 1980 at Pall Mall; 5 on 3 March 1979 by PP, BS.
- SPOTTED SANDPIPER 4, 0/0, 3 on Clear Fork on 1 June by the Mayfields, and 1 by PP at Whispering Winds Lake; 1 on 28 April 1979; 1 on 24 September 1976.

SOLITARY SANDPIPER — 3 on 28 April 1979.

- LESSER YELLOWLEGS 5 on 28 April 1979 near Stockton.
- DUNLIN 1 on 28 April near Stockton.
- ROCK DOVE 41, 0/0; 6 on 27 April and 2 on 28 April 1979; 1 on 8 September 1976; 15 on 29 November 1980; 34 on 18 February 1980.
- MOURNING DOVE 200, 52/26; 3 on 27 April and 40 on 28 April 1979; 6 on 28 June and 9 on 29 June 1980; 30 on 8 September 1976; 28 on 18 February 1980.
- YELLOW-BILLED CUCKOO 36, 15/13.
- BLACK-BILLED CUCKOO 1, 0/0, reported by PP.
- SCREECH OWL 1, 0/0, reported by PP.
- GREAT HORNED OWL 4, 0/0, 3 on 1 June and 1 on 2 June along Clear Fork by the Mayfields; nest with 2 small young reported by Ganier (1937) on 25 March 1928 at Gwinn Cove.
- CHUCK-WILL'S-WIDOW 1 reported at Pall Mall on 14 June 1937 by Ganier (1937).
- WHIP-POOR-WILL 20, 1/1; recorded by Rhoads (1895), and 'calling in numbers' on plateau on 14 June 1937 by Ganier (1937).
- CHIMNEY SWIFT 220, 3/2; 7 on 28 April 1979; 5 on 28 June 1980.
- RUBY-THROATED HUMMINGBIRD 9, 3/3; reported by Rhoads (1895); 1 on 8 September 1976.
- BELTED KINGFISHER 1, 0/0, observed on 2 June by J&BRC; 1 on 8 September 1976; 1 on 29 November 1980 at Peters Bridge, Clear Fork; 1 at York Park on 18 February 1980.
- COMMON (YELLOW-SHAFTED) FLICKER 49, 4/4, adults at nest cavity near Sharp Place on 2 June by GK, CPN; 1 on 28 April 1979; 1 on 29 June 1980; 1 on 29 November 1980; 2 on 18 February 1980.
- PILEATED WOODPECKER 19, 5/5; recorded by Rhoads (1895); 1 on 8 September 1976; 2 on 29 November 1980; 1 on 18 February 1980.

RED-BELLIED WOODPECKER — 15, 1/1.

- RED-HEADED WOODPECKER 4, 0/0, nest with adults feeding young in dead pine at York Institute on 2 June by FJA, TL, RP, TP; 1 on 28 April 1979; recorded by Rhoads (1895).
- HAIRY WOODPECKER 2, 2/2; 3 on 18 February 1980.
- DOWNY WOODPECKER 9, 5/4; 1 on 28 April 1979; 1 on 8 September 1976; 3 on 29 November 1980; 3 on 18 February 1980.

- RED-COCKADED WOODPECKER former resident Rhoads (1895) reported young in a nest at Allardt on 8 June, and Ganier (1937, 1962) reported 1 bird in the pine grove at York Institute. There are no recent records, although the Alsop party spent many hours unsuccessfully searching for the species in 1979, and reports suitable habitat is present.
- E. KINGBIRD 58, 0/0, nest with 4 eggs observed by GK and CPN in pine on Co. rt. 2451, 10 km SE of Sharp Place; 5 on 28 April 1979; reported by Rhoads (1895); 3 on 28 June and 3 on 29 June 1980.
- GREAT CRESTED FLYCATCHER 19, 4/4; reported by Rhoads (1895).
- E. PHOEBE 30, 6/6; recorded by Rhoads (1895); 1 on 8 September 1976; 1 on 18 February 1980; 2 on 3 March 1979 by PP, BS.
- ACADIAN FLYCATCHER 110, 1/1; recorded by Rhoads (1895).
- WILLOW FLYCATCHER 1, 0/0, observed along Wolf River E. of US 127 by J&BRC, CPN on 2 and 3 June; 1 at same locality on 29 June 1980.
- LEAST FLYCATCHER 2, 0/0, 1 observed by GK, CPN along Co. rt. 2451, 10 km SE of Sharp Place on 2 June, singing in open pine-hardwoods; same site checked on 3 and 4 June by HO, PR, without success; however, on 4 June they heard 1 singing along TN 154 at jct. with rt. 2451 at Sharp Place. These are very late dates for migrating birds, and they may have been on territory, as the species nests as close as 43 km E in the Cumberland Mountains in Campbell County, as low as 469 m (Campbell and Howell 1970). Mengel (1965) lists no substantiated breeding records from the plateau in Kentucky.
- EMPIDONAX SPP. 1 on 8 September 1976.
- E. WOOD PEWEE 49, 7/6; recorded by Rhoads (1895).
- HORNED LARK 13, 0/0; 3 on 29 November 1980; 1 on 18 February 1980; 3 on 3 March 1979 by PP, BS; all on plateau.
- TREE SWALLOW 10 on 28 April 1979; 5 on 8 September 1976.
- BANK SWALLOW 15 on 28 April 1979.
- ROUGH-WINGED SWALLOW 34, 6/4, nest with adults feeding young observed by MLB, CPN, DV in rock dam at York Mill; 30 on 28 April 1979; listed by Rhoads (1895) as abundant; 35 on 29 June 1980.
- BARN SWALLOW 589, 63/19; 15 on 27 April and 150 on 28 April 1979; 48 on 28 June and 60 on 29 June 1980; 6 on 8 September 1976.
- CLIFF SWALLOW 20 on 8 September 1976.
- PURPLE MARTIN 250, 16/6, numerous colonies observed on foray and on 27-28 April 1979; 'some' reported by Rhoads (1895); 10 on 28 June and 3 on 29 June 1980.
- BLUE JAY 91, 21/16; 1 on 27 April and 5 on 28 April 1979; reported by Rhoads (1895); 1 on 29 June 1980; 4 on 8 September 1976; 21 on 18 February 1980.
- COMMON RAVEN of hypothetical occurrence reported to Ganier (1973) by local residents to be nesting on Yellow Bluff, along Rock Creek, in the 1920's; was not reported by Rhoads (1895).

COMMON CROW --- 145, 65/36; 15 on 27 April and 5 on 28 April 1979; observed by

Rhoads (1895); 3 on 28 June and 8 on 29 June 1980; 4 on 8 September 1976; 330 on 29 November 1980; 115 on 18 February 1980.

- CAROLINA CHICKADEE 60, 5/3; 5 on 28 April 1979; reported by Rhoads (1895); 6 on 8 September 1976; 20 on 29 November 1980; 6 on 18 February 1980.
- TUFTED TITMOUSE 57, 20/19; 5 on 28 April 1979; reported by Rhoads (1895); 1 on 8 September 1976; 11 on 29 November 1980; 8 on 18 February 1980.

WHITE-BREASTED NUTHATCH — 10, 0/0; reported by Rhoads (1895).

RED-BRÉASTED NUTHATCH — 3 on 29 November 1980.

- BROWN CREEPER 1 on 18 February 1980.
- HOUSE WREN 6, 0/0, observed on 2 June in Jamestown area.
- BEWICK'S WREN described by Rhoads (1895) as 'local'; no other county records.
- CAROLINA WREN 9, 2/2; 1 on 28 April 1979; 'abundant' according to Rhoads (1895); 1 on 8 September 1976; 3 on 29 November 1980.
- MOCKINGBIRD 65, 2/1, nest with 1 egg on 2 June by FJA, TL, RP, TP; 3 on 28 April 1979; 4 on 8 September 1976; 1 on 29 November 1980; 1 on 18 February 1980.
- GRAY CATBIRD 61, 8/8, empty nest and nest with 3 eggs on 3 June by CPN at Stockton; 1 on 28 April 1979; recorded by Rhoads (1895); 6 on 29 June 1980; 1 on 8 September 1976.
- BROWN THRASHER 54, 10/10, nest with 4 young, 4 days old, on 2 June by FJA, TL, RP, TP; 2 on 28 April 1979; recorded by Rhoads (1895); 1 on 28 June 1980.
- AM. ROBIN 208, 31/16, nest with 3 young on 2 June at Jamestown by SC; 2 on 27
 April and 15 on 28 April 1979; 4 on 28 June and 10 on 29 June 1980; 15 on 8
 September 1976; 3 on 29 November 1980; 55 on 18 February 1980.

wood thrush — 80, 39/25.

HERMIT THRUSH — 1 on 29 November 1980; 2 on 18 February 1980; all on plateau.

- E. BLUEBIRD 64, 11/7, new empty nest in fencepost on 2 June, 2 km SW of Jamestown by FJA; 4 on 27 April and 20 on 28 April 1979; reported by Rhoads (1895); 1 on 28 June and 2 on 29 June 1980; 20 on 8 September 1976; 9 on 29 November 1980; 17 on 18 February 1980.
- BLUE-GRAY GNATCATCHER 54, 19/15; 2 on 27 April and 10 on 28 April 1979; reported by Rhoads (1895); 1 on 8 September 1976.

GOLDEN-CROWNED KINGLET - 8 on 29 November 1980; 2 on 18 February 1980.

- CEDAR WAXWING 48, 6/2; reported by Rhoads (1895).
- LOGGERHEAD SHRIKE 2, 0/0, observed on 2 June, 1 by FJA, TL, RP, TP, and 1 by J&BRC; 1 on 8 September 1976; 2 on 3 March 1979 by PP, BS.
- STARLING 222, 39/13; 7 on 27 April and 20 on 28 April 1979; reported by Ganier (1937) in Jamestown area; 30 on 28 June, 6 on 29 June 1980; 17 on 29 November 1980; 195 on 18 February 1980.
- WHITE-EYED VIREO 81, 13/12; 8 on 28 April 1980; 'abundant' according to Rhoads (1895); 1 on 8 September 1976.

- YELLOW-THROATED VIREO 53, 9/9; 1 on 28 April 1979; recorded by Rhoads (1895).
- RED-EYED VIREO 238, 69/44; 8 on 28 April 1979; described by Rhoads (1895) as 'abundant'; 1 on 8 September 1976.
- WARBLING VIREO recorded by Rhoads (1895); no recent records.
- BLACK-AND-WHITE WARBLER 78, 18/15; 1 on 28 April 1979; 'abundant' according to Rhoads (1895); 1 in June 1937 by Ganier (1937); 1 on 8 September 1976; 1 on 24 September 1978.
- SWAINSON'S WARBLER 4, 0/0, 2 on 1 June and 2 on 2 June, along Clear Fork between Peters Bridge and Scott Co. line by the Mayfields.
- WORM-EATING WARBLER 57, 5/4; 1 on 28 April 1979.
- GOLDEN-WINGED WARBLER 4, 1/1, all on plateau; recorded by Rhoads (1895).
- BLUE-WINGED WARBLER reported in Jamestown area by Ganier (1937), who, curiously, did not record Golden-winged Warblers.
- TENNESSEE WARBLER 2 on 24 September 1978.
- NORTHERN PARULA 76, 1/1; 'abundant' according to Rhoads (1895).
- YELLOW WARBLER 60, 6/5; 1 bird recorded by Rhoads (1895); reported by Ganier (1937).
- MAGNOLIA WARBLER 1 on 8 September 1976; 3 on 24 September 1978.

CAPE MAY WARBLER — 3 on 24 September 1978.

- YELLOW-RUMPED (MYRTLE) WARBLER 1 on 28 April 1979; 5 on 18 February 1980 at York Mill.
- BLACK-THROATED GREEN WARBLER 8, 1/1, found on plateau only; recorded by Rhoads (1895).
- CERULEAN WARBLER 25, 1/1, found on both plateau and Highland Rim; 1 on 28 April 1979.
- BLACKBURNIAN WARBLER 1 on 28 April 1979.
- YELLOW-THROATED WARBLER 87, 3/3; 1 on 28 April 1979; recorded by Rhoads (1895); 1 on 24 September 1978.
- CHESTNUT-SIDED WARBLER 1, 0/0, on plateau, by PP; 1 on 24 September 1978.

BAY-BREASTED WARBLER — 3 on 24 September 1978.

- PINE WARBLER 28, 15/10, most common on plateau; recorded by Rhoads (1895); 1 on 8 September 1976; 2 singing on 18 February 1980.
- PRAIRIE WARBLER 49, 6/5; 5 on 28 April 1979; 'numerous' according to Rhoads (1895).
- OVENBIRD 93, 47/25; 2 on 28 April 1979; recorded by Rhoads (1895).
- LOUISIANA WATERTHRUSH 30, 2/2; 'numerous' according to Rhoads (1895).
- KENTUCKY WARBLER 54, 12/10; 'numerous' according to Rhoads (1895).
- COMMON YELLOWTHROAT 107, 25/21; 2 on 28 April 1979; 'abundant' according to Rhoads (1895); 1 on 28 June and 3 on 29 June 1980; 1 on 8 September 1976.

YELLOW-BREASTED CHAT — 68, 19/17; 'abundant' according to Rhoads (1895).

- HOODED WARBLER 52, 10/8; 7 on 28 April 1979; recorded by Rhoads (1895); 1 road kill on 8 September 1976.
- AM. REDSTART --- 13, 2/2, observed along Clear Fork and on escarpment; recorded by Rhoads (1895).
- HOUSE SPARROW 100, 13/6; 18 on 28 June 1980; 12 on 8 September 1976; 17 on 18 February 1980.
- BOBOLINK 0, 1/1, male observed by GK, CPN on 2 June, along Co. rt. 2451, SE of Sharp Place, perched on power line, did not sing; not observed on later visit to site.
- E. MEADOWLARK 161, 47/23; 10 on 27 April and 50 on 28 April 1979; 'abundant' according to Rhoads (1895); 2 on 28 June and 10 on 29 June 1980; 5 on 8 September 1976; 33 on 29 November 1980; 56 on 18 February 1980.
- RED-WINGED BLACKBIRD 282, 43/18, and 14 nests, 6 empty, 3 with shell fragments, 2 with 2 eggs, 1 with 3 eggs, 2 with 4 eggs, and flightless young at Stockton on 3 June by CPN, and nest with adult on eggs on 2 June near Jamestown by TP; 20 on 27 April and 80 on 28 April 1979; recorded by Rhoads (1895); 3 on 28 June and 11 on 29 June 1980; 100 on 8 September 1976; 29 on 29 November 1980; 1 on 18 February 1980.
- ORCHARD ORIOLE 101, 13/11; 'abundant' according to Rhoads (1895); recorded in Jamestown area by Ganier (1937); 1 on 29 June 1980.
- NORTHERN (BALTIMORE) ORIOLE 1, 0/0, on 1 June near Jamestown by TL, RP, TP; 'abundant' according to Rhoads (1895); recorded in the Jamestown area by Ganier (1937); this species has obviously greatly declined in numbers as a breeding bird in Fentress Co.
- RUSTY BLACKBIRD 1 near Jamestown on 18 February 1980.
- COMMON GRACKLE 322, 109/22, nest with 3 dead young near Sharp Place on 2 June by GK, CPN; 5 on 27 April and 130 on 28 April 1979; not mentioned by Rhoads (1895), but Ganier (1937) comments 'not yet regular summer residents on plateau but several pairs in village of Jamestown'; 70 on 28 June and 6 on 29 June 1980.
- BROWN-HEADED COWBIRD 124, 12/9; 6 on 27 April and 12 on 28 April 1979; this species was not mentioned by Rhoads (1895) or Ganier (1937), and has evidently become established since then; 16 on 28 June and 10 on 29 June 1980.
- SCARLET TANAGER 63, 14/12; 2 on 28 April 1979; 2 on 8 September 1976.
- SUMMER TANAGER 62, 8/8; recorded by Rhoads (1895).
- CARDINAL 77, 21/16; 3 on 27 April and 15 on 28 April 1979; 'very abundant' according to Rhoads (1895); 2 on 28 June 1980; 5 on 8 September 1976; 5 on 29 November 1980; 15 on 18 February 1980.
- BLUE GROSBEAK 15, 3/3, recorded both on plateau and Highland Rim; 1 on 28 April 1979; 1 on 29 June 1980; 1 on 8 September 1980; this species has evidently recently established itself in Fentress Co., and was not reported by Rhoads (1895) or Ganier (1937).
- INDIGO BUNTING 321, 113/62, nest with 1 egg and 3 young, 5 days old, on 3 June at Whispering Winds Lake by CPN; 1 on 27 April 1979; 'very abundant' according to Rhoads (1895); 7 on 28 June and 10 on 29 June 1980.

PURPLE FINCH -- 2 on 29 November 1980; 1 on 18 February 1980.

- AM. GOLDFINCH 60, 27/8; 55 on 28 April 1979; recorded by Rhoads (1895); 2 on 29 June 1980; 10 on 8 September 1976; 52 on 29 November 1980; 16 on 18 February 1980.
- RUFOUS-SIDED TOWHEE 59, 19/17; 8 on 28 April 1979; recorded by Rhoads (1895); 1 on 29 November 1980; 6 on 18 February 1980.
- SAVANNAH SPARROW 2 on 28 April 1979; 2 near Allardt on 18 February 1980.
- GRASSHOPPER SPARROW reported by Ganier (1937) from the Jamestown area.
- VESPER SPARROW 2 near Allardt on 18 February 1980.
- BACHMAN'S SPARROW 'numerous' according to Rhoads (1895), who collected 3 specimens at Allardt; no recent records.
- DARK-EYED (SLATE-COLORED) JUNCO 33 on 29 November 1980; 18 on 18 February 1980.
- CHIPPING SPARROW 132, 37/25, nest with 4 young, 3 days old, on 2 June near Jamestown by FJA, TL, RP, TP; 20 on 28 April 1979; recorded by Rhoads (1895); 1 on 28 June 1980; 6 on 8 September 1976.
- FIELD SPARROW 61, 21/16; recorded by Rhoads (1895); 13 on 29 November 1980; 5 on 18 February 1980.
- WHITE-THROATED SPARROW 4 on 28 April 1979; 18 on 29 November 1980; 60 on 18 February 1980.
- SWAMP SPARROW 5 on 28 April 1979; 4 on 29 November 1980; 5 on 18 February 1980; all records from on plateau.
- SONG SPARROW 57, 9/6; recorded both on plateau and Highland Rim; 3 on 28 April 1979; 1 on 29 June 1980; 11 on 29 November 1980; 22 on 18 February 1980; has established itself as a breeding bird since 1937, as was not recorded by Ganier (1937) or Rhoads (1895); based on the spread of the species on the plateau in Kentucky (Mengel 1965), it may have been established by 1950.

DISCUSSION

The preceding list discusses 140 species recorded in Fentress County and 1 additional hypothetical species. Eighty-four species were recorded during the foray in June 1979. All of these 84 species probably breed in the area, with the possible exception of the Spotted Sandpiper, Black-billed Cuckoo, Least Flycatcher, Cedar Waxwing and Bobolink. Species recorded during the breeding season by Rhoads (1895) or Ganier (1937), but for which there are no recent records, include the Golden Eagle, Peregrine Falcon, Turkey, Red-cockaded Woodpecker, Bewick's Wren, Warbling Vireo, Grasshopper Sparrow and Bachman's Sparrow. Suitable habitat still exists for all of these species, and, with the exception of the eagle and falcon, they may still occur in Fentress County. The Baltimore Oriole has evidently declined in recent years, while the Starling, Common Grackle, and Brown-headed Cowbird are probably more abundant than in the 1930's. The Blue Grosbeak and Song Sparrow have become established breeding species in Fentress County since the 1930's. Additional fieldwork, especially during the spring and fall, should increase this species list, although the number of shorebirds and waterfowl will remain low due to the limited wetland habitat.

Foray Participants — Fred J. Alsop, III, Michael L. Bierly, James M. and Betty Reid Campbell, Sam and Kathryn Coward, Dave and Robbie Hassler, Glen King, Thomas Laughlin, Doc and Johnnie Little, George, Mark and Rad Mayfield, Charles P. Nicholson, Holly Overton, Paul Pardue, Rick Phillips, Thomas Phillips, Polly Ryder, and David Vogt.

Suppliers of Unpublished Records — Michael L. Bierly, Paul Hartigan, Dave and Robbie Hassler, Charles P. Nicholson, Paul Pardue, Boyd Sharp, and Morris D. Williams.

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1981 SPRING FIELD DAYS

RICHARD D. LURA

The eleven counts reported a total of 217 species. The fact that all thirty-six species of warblers expected in the state were seen is of interest. Orange-crowned and Connecticut Warblers were in significantly higher numbers than previous years.

The count was highlighted by such species as Black-headed Grosbeak and Henslow's Sparrow. Dowitchers were seen on five separate counts.

As is the custom the counts are tabulated from west to east across the state.

INFORMATION ON THE COUNTS

MEMPHIS: 26 April; Meeman-Shelby S. P. in A.M. Ben B. Coffey, Jr. (compiler—672 N. Belvedere 38107); group leaders: William Bean, Lula Coffey, Helen Dinkelspiel, Noreen Smith, Martha Waldron, and Dick Whittington. P.M. coverage: south along Miss. R. to Robco Lake; a second party to the Penal Farm.

The Baird's and Buff-breasted Sandpipers were seen by Ben and Lula Coffey.

COLUMBIA: 9 May; temp, 58° to 78° F; 12 observers. Barbara Finney, Jim Finney, Wm. Fugar, Dan Gray, Wm. Jernigan, Anne Lochridge, Bedford Lochridge, George Mayfield (compiler—Maury Co. Hospital, Columbia 38401), Mark Mayfield, Allen Pressnell, Diane Pressnell.

No details were submitted on the Yellow-bellied Flycatcher.

MONTGOMERY COUNTY: 2, 3 May; clear, temp, 45° to 82° F. Joe Allen, Michael Dinsmore (compiler—Jarman Hollow, Palmyra 37142), Floyd Ford, Juanita Harris, Anne Heilman, Ellen Hutchinson, Tony Mahoney, John Quick, Dave Snyder, Ellen Walker, Priscilla Weathersby, John Wheatley.

NASHVILLE: 9, 10 May; temp, 61° to 77° F; wind, SE to SW, 5-20 mph; 60 observers. Frances Abernathy, Jan Alexander, Clyde (compiler—1214 McGavock Pike, Nashville 37216) and Vivian Anderson, Linda Anderson, Mildred Ansley, John Bates, Sue Bell, Michael Bierly, Ruth Castles, Jean Cobb, Dwight Cooley, Annella Creech, Sam Dement, Milbrey Dugger, Clifton Dunn, Evelyn and John Ellis, Charles Farrell, Clara Fentress, John and Karen Filley, Ray Fleischer, Ann Fort, George Freeman, Katherine Goodpasture, Sarah Greene, Ben Groce, Mary Ann and Tom Guschke, John and Martha Herbert, Ann Houk, Louise Jackson, Carol Knauth, Hazel and Lee Kramer, Oliver Lang, Carol Lewis, Adiene Lyon, Portia Macmillan, Jane Maynard, Joe McLaughlin, Marge and Oscar Patrick, Audrey and Don Perry, Virginia Price, Betty Richards, Polly Roddy, Helen Sterling, Carol Stewart, Ellen Stringer, Ann Tarbell, Luttrell Thomas, David Vogt, Kenneth and Sara Walkup, Betty Wise, Virginia Workman.

The dowitcher was reported as a Short-billed Dowitcher.

MURFREESBORO: 25, 26 April, clear; temp, 50° to 75° F; 22 obserers. Glenn Birdwell (compiler, Rt. 11, Compton Road, Murfreesboro 37130), Maria Birdwell, Martha Crutchfield, Lou Erwin, C. E. Greever, Helen Greever, Edith Haynes, Ann Hettish, Bob Hettish, Margaret Hibbett, Richard Hunter, Wilma Hunter, Rebecca Jones, Pat Martin, Larry McFarlin, Mary Edith McFarlin, Linda

		1901	SIK	INO	000	141					
	Memp	Mont	Colu	Nash	Murf	Wils	High	Chat	Knox	Gree	Eliz
	TIOME		0020		11000						
Common Loon				1				4			5
Horned Grebe								1			
Fied-billed Grebe	2		1	3		1	1	1			2
Double-cr. Cormorant Great Blue Heron			2	11		4	1	1 5		1	1
Great Bide Heron		2	2	11	2	4	1)		1	Ŧ
Green Heron	2	3	11	32	10	12		12	20		15
Little Blue Heron		ĭ									
Cattle Egret	35			6	2			1			
Great Egret	6			1							1
Snowy Egret								1*			
Black-cr. Night Heron				134					l		
Yellow-cr. Night Heron				3	l			4			2
American Bittern							1	1			
Canada Goose		7	17	256	5	122	7	17	111	15	5
Mallard	7		9	46	4	11	5	30	8		35
									-		-
Black Duck					2				5		1
Gadwall American Wigeon								1			
Green-winged Teal									2		
Blue-winged Teal	12	5	3	5	2	12	3	20	22	7	51
Northern Shoveler				3					1	-,-	
Wood Duck	12	5	16	28	4	13	2	23	41	4	32
Ring-necked Duck									2		
Lesser Scaup Bufflehead											12
Darriencaa											±4.
Ruddy Duck	12							8			
Hooded Merganser								1			3
Red-breasted Merganser								7			3
Turkey Vulture		9	15	92	23	33	12	23	18	7	32
Black Vulture		4	5	46	5	46		13		1	
Sharp-shinned Hawk			l	3		1		2			4
Cooper's Hawk			1	2	1		2	ĩ	13		2
Red-tailed Hawk	1	4	6	25	9	4	1	8	7	1	6
Red-shouldered Hawk		1	3	11				5			1
Broad-winged Hawk		2	3	24	l			15	1	2	17
									2		
Marsh Hawk				 4	2	1		1 4	1		7
Osprey Merlin						1			3		1*
American Kestrel		1	7	30	16	8		4	4	l	13
Ruffed Grouse											3
Bobwhite	17	19	29	115	38	40	8	16	43	8	15
Turkey	l			50							
Virginia Rail Sora	 1		1	1							
American Coot	3		2	4			1	382	4		2
This round over	5		-				-	5			-
Semipalmated Plover				9				2			
Killdeer	10	6	9	54	21	38	7	29	40	1	24
Black-bellied Plover				1*							
American Woodcock	 2			2				4	1		1414
Common Snipe	2			2		Т		5	9		-1-4
Spotted Sandpiper	3	1	13	43	1	2	1	8	10		15
Solitary Sandpiper	7	3	2	9	10	29	2	46	30	3	19
Greater Yellowlegs	1	4		3		2		2			20
Lesser Yellowlegs	16	1	1	11		5	1	14	5		22
Pectoral Sandpiper	6		3	5				8	3		6
White-rumped Sandpiper					1						
Baird's Sandpiper	3*			1							
Least Sandpiper	23		4	79				20	2		8
Dunlin				5							
Dowitcher sp.				1*	1*	2*		l*			1*
					-						
Stilt Sandpiper					2						
Semipalmated Sandpiper Buff-breasted Sandpiper	 1*			20		1					
Herring Gull											1
Ring-billed Gull				51		13		134	2		12
						5					
Bonaparte's Gull				3 6				2			5
Common Tern								1			15
Caspian Tern Rock Dove		 56	9	3 165	 87	 86	 7	1 56	102		116
Mourning Dove	87	50 54	26	308	112	95	67	117	481	63	141
THE WIND DOLO	01	74	20	500		7)	~ I		101	00	

1981 SPRING COUNT

	Memp	Mont	Colu	Nash	Murf	Wils	High	Chat	Knox	Gree	Eliz
Yellow-billed Cuckoo Black-billed Cuckoo	1	11	12	51	45	12 1		1	4	1	
Barn Owl Screech Owl		2 1	2 1	 3	 2	29		2	3		 2
Great Horned Owl		ĩ	3	4	2	ź		2	4		1
Barred Owl Chuck-will's Widow	3	2	3 1	8 1	3	12 2		1 7	7 37		1 1
Whip-poor-will Common Nighthawk		3	36	1 34	1 18	3 16	1	i 4	4 2		3
Chimney Swift	26	69	37	487	49	182	34	75	268	49	444
Ruby-throated Hummingbird Belted Kingfisher	7	1 2	3	22 17	3	4 6		7 8	1 17		2 20
Common Flicker	8	6	4	53	19	9	10	21	32	16	42
Pileated Woodpecker Red-bellied Woodpecker	13 30	9 36	11 33	30 103	13	2 18	10 5	10 23	32 47	4 9	12 17
Red-headed Woodpecker	27	2	10	10	2	5	7	8			2
Yellow-bellied Sapsucker Hairy Woodpecker	1 1		5	 15	3 3			1 4	1 12	2	4
Downy Woodpecker Eastern Kingbird	8 9	15 9	21 18	76 71	9 29	4 67	3 9	14 58	11 30	9 2	14 20
Great-crested Flycatcher	19	18	10	61	5	34	5	17	16	2	4
Eastern Phoebe Yellow-bellied Flycatcher	2	6	10 1*	18	3	18		9	20		35
Acadian Flycatcher	21		21	39		2		6	3		
Willow Flycatcher Alder Flycatcher				3				 1*			
Least Flycatcher		3		6							
Eastern Wood Pewee Olive-sided Flycatcher	11	10	15 	89 3*	1 	12	4 	14 	5	2	
Horned Lark	4								14		2
Tree Swallow Bank Swallow			5 12	5 68		26	14 	4 6	11 3	2	56 4
Rough-winged Swallow Barn Swallow	2 45	2 17	58 59	64 295	 121	22 229	3 44	17 56	42 144	5 36	241 384
Cliff Swallow	2	2	4	164				175	4		1
Purple Martin Blue Jay	21 21	30 44	22 37	61 198	65 79	63 140	7 45	133 250	163 360	27 59	46 134
Common Raven Fish Crow											1
Common Crow	2	32	55	156	102	250	18	104	275	51	218
Carolina Chickadee Tufted Titmouse	28 33	32 44	29 46	174 165	31 23	54 59	5 1	58 28	145 86	17 30	88 65
White-breasted Nuthatch	3	3	2	20			2	2	2	1	6
Red-breasted Nuthatch Brown-headed Nuthatch								1 3*	9		1
House Wren		8	1	18	3	5		1	4	12	
Bewick's Wren Carolina Wren	 38	10	1 13	2 114	1 2	3 7		38	111	15	 41
Long-billed Marsh Wren Short-billed Marsh Wren		1		3							1
Mockingbird	24	25	45	119	156	108	29	101	137	56	109
Gray Catbird Brown Thrasher	2 4	7 12	12 24	70 86	7 19	30 107	2 15	9 28	4 50	2 12	4 25
American Robin Wood Thrush	37 19	51 18	45 20	443 108	271 1	356 19	55 2	121 48	245 64	94 2	399 20
Hermit Thrush	1										
Swainson's Thrush Gray-cheeked Thrush	32 5	2	22	150 6		1 2		3	3		
Veery Eastern Bluebird	5	3 5	1 17	18 44		1 44	 14	 75	 34	 19	 35
Blue-gray Gnatcatcher	70	41	24	114	13	53	1.5	44	105	11	34
Golden-crowned Kinglet Ruby-crowned Kinglet				2				2	22	1	3
Water Pipit								·	15		
Cedar Waxwing	12		103 4	102	 6	6 25		24	254	39	41
Loggerhead Shrike Starling	2 41	2 95	155	14 965	1.1M	25 451	1 65	218 218	3 657	*	1 892
White-eyed Vireo Yellow-throated Vireo	44 10	17 1	39 6	105 15	8 	7 8	1	16 4	70 13	7	11 3
Solitary Vireo	1					1	1		2	11	12

THE MIGRANT

	Memp	Mont	Colu	Nash	Murf	Wils	High	Chat	Knox	Gree	Eliz
Red-eyed Vireo Philadelphia Vireo Warbling Vireo Black-and-White Warbler Prothonotary Warbler	30 3 1 31	7 4 13	31 1 3 11 23	106 25 30 46	16 2 2	9 2 3 2 9	29 1	55 1 9 3	153 16 2	2 1	19 25
Swainson's Warbler Worm-eating Warbler Golden-winged Warbler Blue-winged Warbler Tennessee Warbler	6 2 51	 2 23	 13 1 3 98	19 1 21 110	 7	2 3 2 18	 4 1	1 4 11 35	13 5 5 23	 	 6 2 1
Orange-crowned Warbler Nashville Warbler Northern Parula Warbler Yellow Warbler Magnolia Warbler	9 31 7	2 3 5 1	 5 6 37 4	1 5 12 66 12	 10	4 3 18 2	 3	6* 6 4 17 2	1* 10 10 15 2	 4	16 29
Cape May Warbler Black-thr, Blue Warbler Yellow-rumped Warbler Black-thr, Green Warbler Cerulean Warbler	 2 3 6	 8 5 	 1 5 17	8 41 20 13	 5 	3 1 30 2 2	 56 	10 173 6 8	3 211 40 24	1 15 	10 31 26 2
Blackburnian Warbler Yellow-throated Warbler Chestnut-sided Warbler Bay-breasted Warbler Blackpoll Warbler	2 3 1 1 1	20 5	6 7 1 9 15	14 12 17 18 42	2 1 1	1 15 2 2	 	3 13 5 3	17 2 11 1	 	1 5 7 1
Pine Warbler Prairie Warbler Palm Warbler Ovenbird Northern Waterthrush	 1 1	1 9 4 	1 21 6 15 1	4 39 16 7 14	4 18 1 2 1	23 7 10 1	2 8 	11 9 36 2 1	5 33 2 20	1 2 	1 2 32 1
Louisiana Waterthrush Kentucky Warbler Connecticut Warbler Mourning Warbler Common Yellowthroat	6 36 18	2 2 32	10 21 57	16 51 2* 1* 182	3 16	2 10 64	14 10	14 17 1* 39	3 12 1* 52	1 3 12	8 7
Yellow-breasted Chat Hooded Warbler Wilson's Warbler Canada Warbler American Redstart	2 10 23	15 1	24 5 2 16	111 15 1 5 14	4 	19 2	3	17 8 25	12 17 1 2 13	7 	1 16 1
House Sparrow Bobolink Eastern Meadowlark Red-winged Blackbird Orchard Oriole	25 2 28 61 24	30 4 42 78 8	67 28 127 155 59	181 110 319 417 95	294 231 112 17	186 3 176 173 42	90 37 100+ 5	81 90 150 38	108 1 259 416 21	43 80 * 6	160 3 348 631 8
Northern Oriole Rusty Blackbird Common Grackle Brown-headed Cowbird Scarlet Tanager	26 56 63 5	9 82 50 3	13 165 42 13	13 776 237 54	1 740 67 1	6 468 70 2	1 50 10 1	1 412 60 15	5 455 78 30	 * *	 961 168 6
Summer Tanager Cardinal Rose-breasted Grosbeak Black-headed Grosbeak Blue Grosbeak	33 70 5 	5 82 1 2	17 61 16 3	71 366 71 30	12 131 2 2	24 160 11 	8 40 1	15 116 15 1* 9	9 278 32 1	4 98 2 1	2 159 2 2
Indigo Bunting Painted Bunting Dickcissel Evening Grosbeak Purple Finch	57 1 9 	52 	126 3 	433 5 	17 	187 1	 1 2	57 81 1	89 44	3 31 19	5 113 60
House Finch Pine Siskin American Goldfinch Rufous-sided Towhee Savannah Sparrow	 5 11 25	 37 35	 41 44	 64 169 20	 18 44	 27 64	 2 13 21 1	36 85 69 36	17 107 105 20	 23 18	1 420 87 11
Grasshopper Sparrow Henslow's Sparrow Vesper Sparrow Lark Sparrow Dark-eyed Junco	1 	 	 	4 	 2	2 1 8 2	 	2 1* 	4 	 	4 17

	Memp	Mont	Colu	Nash	Murf	Wils	High	Chat	Knox	Gree	Eliz	
Chipping Sparrow Field Sparrow White-crowned Sparrow White-throated Sparrow Lincoln's Sparrow	3 1 3 36 	12 5 4 24	20 42 4	45 186 13 29 4	13 42 20 48	33 47 10 51	20 32 17 30	44 28 3 92 1	64 128 6 303	9 28 25 42	59 44 68	
Swamp Sparrow Song Sparrow	2 1	 1	 2	5 38	 3	 1	1 6	10 87	8 197	 37	3 368	
Species, Total Species, Grand Total * See Information on Counts	124 217 M	111 = 1000	131	167	104	133	84	163	141	78	145	

McGee, Elsie McKnight, Ruth McMillan, Ruth Odum, Alberta Spence, Frances Vaughn.

The dowitcher was reported as dowitcher species.

WILSON COUNTY: 2, 3 May; clear; temp, 44° to 72° F; 15 observers. Earline Berry, Vernon Berry, Corinne Bain, Mary Agnes Crawford, Cecile Detlefsen, Fred Detlefsen, Robert Hosier, Mac McMillan, Ruth McMillan (compiler, Rt. 2, Box 141, Lascassas 37085), Carol Pope, Ray Pope, Jeff Reed, Frances Sellars, Bill Senter, Tressa Waters.

The dowitchers were reported as dowitcher species. No details on Vesper Sparrow.

HIGHLAND RIM: 25 April; clear; temp, 40° to 75° F; 9 observers. Ruth Luckadoo, Marjory Harper, Lillie Willar, Wanda Winnett, Evelyn Wilson, Anna Parker, Cholee Peebles, Kay Cleckley, Erma Rogers (compiler, Rt. 1, Hillsboro 37342).

CHATTANOOGA: 25, 26 April; temp, 40° to 83° F; 22 observers. Chuch Arlano, Benton Basham, Del Blum, Edith Bromley, Ken and Lil Dubke, Chris Haney, Daniel Jacobson (compiler, 1507 Hickory Valley Rd., Apt. H-62, Chattanooga 37421), Al Jenkins, Cynthia Koliadko, Dave Mathewson, Jeanne and Dick Menuet, John Parks, Janet Phillips, Keith Ratliff, Gene Ryther, Joe Stone, Randy Stringer, Carl Swafford, Jim Tucker, Mary Tunsburg.

Excellent details on all unusual observations. Alder Flycatcher, Black-headed Grosbeak, and Henslow's Sparrow were first area records.

KNOXVILLE: 26 April; partly cloudy; temp., 46° to 80° F; wind, 0-10 mph; 22 observers. Jim Campbell, Betty Reid Campbell, Howard Chitwood, Bob Ford, Louise Fuller, Paul Hartigan, J. C. Howell, Tony Koella, Beth Lacy, Ken McClain, Terry McGown, Chuck Nicholson, Holly Overton, J. B. Owen (compiler, 2930 North Hills Blvd., Knoxville 37917), Paul Pardue, Truitt Patterson, Polly Ryder, Boyd Sharp, J. T. Tanner, Nancy Tanner, Linda Turner, Ralph Zanglein.

Details submitted on unusual species.

GREENEVILLE: 26 April; clear; temp., 42° to 78° F; wind, 0-5 mph; 7 observers. King Gaut, Margaret Gaut, Richard Nevius, Willie Ruth Nevius, Doug Ratledge, Helen Spees (compiler, P. O. Box 356, Greeneville 37743), Royal Spees.

Large numbers of "blackbirds" left from winter roost.

ELIZABETHTON: 25 April; temp., 34° to 66° F. Glen Eller (compiler, Rt. 3, Grandview Terrace, Elizabethton 37643). Good details on Merlin. The dowitcher was reported as a Short-billed Dowitcher.

ROUND TABLE NOTES

FIRST NESTING OF BANK SWALLOW IN SHELBY COUNTY, TENNESSEE—On 31 May 1981, Jeff Wilson and other members of the Memphis Chapter of the TOS observed a nesting colony of Bank Swallows (*Riparia riparia*) on the south bank of the Wolf River at its junction with the Mississippi River at Memphis, Shelby County, Tennessee. The Bank Swallows were first observed feeding over the Mississippi River. Continued observations resulted in seeing several swallows entering burrows. Eighty-four apparently completed burrows and 15 incomplete burrows were counted. The burrows were approximately 9 m above the water and within 4 m of the top of the 20 m long sand bank. Elsewhere in West Tennessee, Bank Swallows have been observed in Lake (Pitts, *Migrant* 43:48, 1972), Dyer, and Lauderdale Counties (Waldron, *Migrant* 49:91, 1978). All of these colonies have been along the Mississippi River.

MARTHA WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119. Accepted 9 Sept. 1981.

BLACK RAIL IN JEFFERSON COUNTY, TENNESSEE—In the midafternoon on 5 May 1980 I was walking through an overgrown dry hayfield on my farm when a sparrow-sized rail flushed up. It flew very weakly and fluttered with slow wingbeats down into a wooded depression. I followed the flight, noticing some light small white spots in the otherwise all black appearance. The size of the bird was much smaller than a Sora (*Porzana carolina*) and I concluded that I had seen a Black Rail (*Laterallus jamaicensis*). I was unable to observe the bird again.

The above observation raises the question whether this bird was a migrant or a local nester. Nearby in Greene County, Richard Nevius (*Migrant* 35(3):59-60, 1964), observed a single bird and later recorded the only Tennessee nesting of the species. Of further interest is the specimen secured by Mr. N. F. Stokely (*Migrant*, 6(3):49, 1935) from a wheat field near Del Rio in Cocke County. His bird was collected between 10 and 20 June 1915.

Close observation may reveal a small breeding population in this section of the state. This is apparently the fourth Tennessee record of a Black Rail.

JON A. KOELLA, Rt. 2, White Pine, TN 37890. Accepted 31 Oct. 1981.

EUROPEAN WIGEON AT REELFOOT LAKE, TENNESSEE IN THE EARLY 1950's—The only Tennessee record of the European Wigeon (*Anas penelope*) given in *The Migrant*, to my knowledge, is that of Witt(*Migrant* 15:14, 1944). Another record published in *The Migrant* (38:53, 1963) is of a bird seen in Virginia. C. K. Rawls (1957, Reelfoot Lake Waterfowl Research, Tn. Game and Fish Commission Report) identified a European Wigeon killed by a hunter on Reelfoot Lake. The exact date of identification is not given but is listed as "killed during hunting seasons 1950-54." While Rawl's record could technically be considered to have been previously published, it occurs in a publication that, like many agency publications, is not widely distributed, at least among Tennessee ornithologists, and is difficult to locate. Consequently, I feel it is desirable to note such records in an indexed and abstracted journal.

T. DAVID PITTS, Biology Dept., Univ. of Tn. at Martin, Martin TN 38238. Accepted 3 Dec. 1981. FIRST TENNESSEE FALL RECORD OF HUDSONIAN GODWIT—On 5 September 1981 at 1500 hours Joe Stone observed a large shorebird at the South Mouse Creek embayment of the Hiwassee River about 4 km NW of Charleston, Bradley County, Tennessee. He identified the shorebird as a godwit but was uncertain as to species because the bird did not fly.

At about 1630 hours the same day Joe, Chuck Arellano, and I returned to the area and immediately spotted the bird feeding in a wet mud and grass area 60 m away. We noted a long, slender, very slightly upturned bill, gray legs, and gray plumage with irregular light brown areas on the back, breast, and belly. The bird's right wing drooped slightly and a small white patch was noticed on the leading edge. When a Lesser Yellowlegs (*Tringa flavipes*) landed next to it, the bird jumped into the air as if startled and we noticed a white upper tail with a broad black terminal band. The rump area above the tail was blackish and the wings had a distinct white stripe. We then identified it as a transition-plumaged Hudsonian Godwit (*Limosa haemastica*). The bird fed actively in a "picking" fashion the remainder of our visit and occasionally came as close as 15 m.

Observations were made under clear skies, no wind, temperature about 85° F and with 7X35 binoculars and 15-60 power Swift spotting scope. Joe had previously seen the species in Tennessee and I am familiar with them from coastal North Carolina.

On 6 September, the bird was still present and was photographed by Joe Stone. Starr Klein, Dale Taylor, Cory Davidson, and Andy Oscinski also observed the bird. It was last seen by Ken and Lil Dubke on 7 September. This constitutes the fourth state record of a Hudsonian Godwit in Tennessee and the first fall record.

J. CHRISTOPHER HANEY, Department of Zoology, The University of Georgia, Athens, GA 30602. Accepted 3 Dec. 1981.

EDITOR'S MESSAGE

This is the second issue of *The Migrant* I have edited, and I feel that it is time for me to make a statement about my editorial policies. However, before I do this, I wish to express my gratitude, and the gratitude of the rest of the Tennessee Ornithological Society, to the retiring editor, Dr. Gary O. Wallace. Gary served as the sixth editor of *The Migrant* from 1971 to 1981. This length of service to the society has been exceeded by only one previous editor, Dr. Lee R. Herndon. I have had the opportunity to work with Gary on *The Migrant* during the past year. This has made the editorial transition smoother, and I am grateful for it.

The purpose of *The Migrant*, "A Quarterly Journal Devoted to Tennessee Birds," is to provide a permanent record of Tennessee birdlife. The majority of the society's expenditures are devoted to accomplishing this. The end product should be a high quality scientific journal, of interest to professional ornithologists as well as lay TOS members. I am taking several steps toward this goal. Readers who closely studied the June, 1981 issue probably noticed a few changes, and more are being considered for future issues.

Some of these changes are in *The Season* report. The regional listings of observers have been combined into one listing, which appears at the end of the regional reports. The compilers and I are attempting to standardize abbreviations of observer's names, to insure uniformity between regions and from issue to issue. Effective with the fall, 1981 *Season* report, dates of the reporting periods and the boundary between the Central Plateau and Basin and Eastern Ridge and Valley regions will be changed. The new reporting periods, which are the same as those used by *American Birds*, are as follows:

SPRING:	1 March - 31 May
SUMMER:	1 June - 31 July
FALL:	1 August - 30 November
WINTER:	1 December - 28 February

The compilers have a 30-day deadline for submitting reports. Please help them meet this by promptly sending in your observations. The redrawn boundary between the CP&B and ER&V regions follows the western edge of the Cumberland Plateau. This will place all of the plateau in the ER&V region, and not split this physiographic province between two regions as in the past.

To continue producing *The Migrant*, I need manuscripts. At present, I have few lead articles other than foray reports, and few Round Table Notes awaiting publication. For the immediate future, authors can expect to have notes published in one or two issues following their acceptance. Many TOS members have rare bird sightings, local annotated lists, and other topics worthy of publication. Please write these up and submit them! Examples of special projects which should be researched in the near future include the westward expansion of the Song Sparrow; population dynamics of Blue-winged and Golden-winged Warblers; wintering eagle population trends; and analyses of Breeding Bird Survey results. I realize writing skills vary widely among members, and many members fear their manuscripts may not pass muster. The editorial staff will help authors prepare manuscripts in a style suitable for publication. Also consult the suggestions for "Preparation of Copy for Publication" on the inside back cover.

I welcome comments on current editorial policies and suggestions for future changes.—CHARLES P. NICHOLSON.

THE MIGRANT

THE SEASON



SPRING MIGRATION: 16 MARCH - 15 MAY 1981

The warm weather at the end of the previous winter season continued into this period with above average temperatures in late March and early April. As a probable result, early arrivals of many passerines were reported from across the state. The remainder of the passerine migration was perhaps no better than average, as strong weather fronts failed to form and no large waves of birds were reported.

Most notable this season were reports of BLACK-NECKED STILTS, up to 4 birds, in 2 locations near Memphis in late March. These are the first Tennessee records of this species, and details will soon be published here.

Other notable observations were of Peregrine Falcons in mid-March at Look Rock, in the foothills of the Great Smokies, and in mid-May at Memphis. A Merlin was reported near Elizabethton in late April and a Common Gallinule was observed near Morristown in May. Baird's and Semipalmated Sandpipers were found in record numbers at Memphis, and a Surf Scoter lingered into May at Kingston Steam Plant.

House Finches were present through the end of the period in the 2 eastern regions. Although fledglings were reported last year, the first documented House Finch nests in Tennessee were reported this spring, at Jonesboro in March and at Kingsport in May.

WESTERN COASTAL PLAIN REGION—The arrival of Spring was early as West Tennessee experienced a mild winter. Precipitation was slightly above normal while the temperature in April was 7.7° F above normal.

Heron-Sandpiper: Yellow-crowned Night Heron: 11 nests completed, 3 under construction, 26 adults, McCorkle site (JS). Mississippi Kite: 9 May (3) RP (MTOS), 13 May (1) President's Island (2) ASP (CB, SF, SL, NS). *PEREGRINE FALCON:* 14 May (1) PF (CB). Sora Rail: 20 Apr thru 24 Apr (3) PF (CB), 26 Apr (1) PF (MW). *BLACK-NECKED STILT:* 21 Mar (2), 25 Mar (3) 3 mi SE of Millington (DP), 31 Mar (4) SE Shelby Co. (RP). The second location is about 32 km south of the first site. The following birds were observed 13 May at Allen Steam Plant, southwest Shelby Co. by (CB, SF, SL, NS): Semipalmated Plover (5); Spotted Sandpiper (4); Lesser Yellowlegs (3); *BAIRD'S SANDPIPER* (10) first for Shelby Co. and highest number observed in West Tennessee; Dunlin (5); Stilt Sandpiper (1); Semipalmated Sandpiper (1,000) largest number observed in West Tennessee.

Warbler-Sparrow: Swainson's Warbler: 4 May (1) west of Cozette (CB, BBC,

LCC), 12 May (1) FSP (BBC, LCC), 15 May (1) north of Moscow (BBC, LCC), (1) Shaw Creek, SW Fayette Cty (BBC, LCC). Cape May Warbler: 12 May (1) RP (BBC). Northern Waterthrush: individual singing each day 6 May thru 13 May, M (Coffey Grounds) (BBC, LCC). Mourning Warbler: 25 May (1) M (Coffey Grounds) (BBC, LCC). Evening Grosbeak: 12 Apr (10-12) M (LB). Pine Siskin: 15 Apr (200), 4 May (18), 15 May (10), 22 May (3) M (LB). White-crowned Sparrow: 11 May (1) M (MW).

Addenda to Winter 1980-1981 report: Canada Goose: 5 Feb $(2000\pm)$ BF $(2000\pm)$ RL (MLB, et al.). Black Duck: 5 Feb (50) BF, (10) Union City, (10) RL (MLB, et al.). Canvasback: 5 Feb (3000) BF (MLB, et al.). Ruddy Duck: 6 Feb (1200) RL (MLB, et al.). SANDHILL CRANE: 16 Jan - 22 Feb (1) 1 mi S of Union City (Steve Rannels). Western Meadowlark: 5 Feb (1 singing) BF (MLB, et al.).

Locations: BF—Britton Ford; Coffey Grounds—residence of Ben and Lula Coffey; Cozette—northeast Decatur Co.; M—Memphis; McCorkle site—City street in Memphis; PF—Penal Farm, northeast Shelby Co.; PI—President's Island, west Shelby Co.; RL—Reelfoot Lake; RP—Riverside Park, southwest Shelby Co.

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CENTRAL PLATEAU AND BASIN REGION—Above seasonal temperatures the last week of March and the first five days of April in Nashville were probably influential in some of the early arrivals, most notably the warblers. Five warbler species in Nashville were earliest ever and several others were close to their earliest date.

Bittern-Tern: American Bittern: 13 Apr (1), 28 Apr (3) Metro Center, Nash (DFV). Rough-legged Hawk: 26 Mar (1 dk ph) Metro Center (DFV), last for winter. Virginia Rail: 9 May (1) Metro Center (DFV, CDC, MLB). Sora: 13 Apr - 18 May (1-3) Metro Center (DFV). Black-bellied Plover: 9 May (1) Gallatin (DFV), annual May in Gallatin since 1976. Forster's Tern: 27 Apr (14) Tenn 109 and LaGuardo, SUC (DTC, JPC); 3 May (1) Old Hickory L (MPS). Caspian Tern: 19 Apr (1) Gallatin (DTC, JPC, ADP, RDP).

Flycatcher-Vireo: Willow Flycatcher: 9 May (3 singing) Metro Center (MLB, CDC, DFV), regular breeding sight. Tree Swallow: 19 Mar (1) Radnor L, Nash (KWS), first for spring. Bewick's Wren: 29-30 Apr (2) Johntown, TRC and (1) Dixon Springs, SMC (CPN); Pair bred May home Crawfords, Gallatin (NTOS). Cedar Waxwing: Spring migration was small Nash, no large flocks observed (NTOS). White-eyed Vireo: 1 Apr (1) Nash (JCM).

Warbler-Sparrow: Black-and-White Warbler: 25 Mar (1) Nash (MLJ). Prothonotary Warbler: 1 Apr (1) Radnor L (MLB), early. Tennessee Warbler: 9 Apr (1) Nash (KAG), earliest Nash three days. Orange-crowned Warbler: 6 May (1) Shelby Bottoms, Nash (MPS), getting late. Nashville Warbler: 11 Apr (1) Shelby Bottoms (MPS), early. Magnolia Warbler: 15 Apr (1) Radnor L (MPS), early; Black-throated Blue Warbler: 11 Apr (1) Nash (MPS), earliest Nash ten days. Myrtle Warbler: There was not a spring build up at Radnor L as usual (NTOS). Black-throated Green Warbler: 25 Mar (3) Radnor L (JCM). Blackburnian Warbler: 12 Apr (1) Nash (DFV), four days earliest locally. Chestnut-sided Warbler: 2 Apr (1) Radnor L (ADP), earliest fourteen days Nash. Connecticut Warbler: 18 Apr (1) Nash (JCM), earliest Nash by one day. Dickcissel: 27 Mar (1)

Gallatin (DTC, JPC). Evening Grosbeak: 18 Apr (1) Nash (JCA, NTOS), last for winter. Purple Finch: 18 Apr (1) Nash (NTOS), last for winter. Grasshopper Sparrow: 30 Apr (2) Johntown, TRC (CPN). Lark Sparrow: 20 Apr (1) Gallatin (DTC, JPC), possibly only third SUC record.

Locations: SMC-Smith Co.; SUC-Sumner Co.; TRC-Trousdale Co.

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EASTERN RIDGE AND VALLEY REGION—It appears from the limited amount of detailed reports submitted there was less active field work this season. Observations to be of use for this population distribution report should include the following basic information: (1) date; (2) geographical location where the sightings were made; (3) number of birds recorded; (4) who made the sightings and (5) any other pertinent information that would be helpful with interpreting all of the above for the readers.

Some observations of interest for this season included a Common Gallinule near Morristown; a rarely heard singing Hermit Thrush at Knoxville; House Finch nests at Jonesboro and Kingsport, and 18 Red Crossbills at Norris Dam State Park during the TOS State Meeting.

Loon-Merganser: Common Loon: 17 Mar (5) CHL (KHD, LHD); 16 Apr (6) FLL (PSP); 10 May (1) BOL (HHD); 20 May (1) KSP (MWA). Horned Grebe: 17 Mar (6) CHL (KHD, LHD). Pied-billed Grebe: 17 Mar (3) HRA (KHD, LHD). Double-crested Cormorant: 17 Mar (2) HRA (KHD, LHD); present thru period in KNC, max 8 Apr (13) FLL (PSP); 21 Apr (1) MHL (WKJ). Great Egret: 20 Apr (3) COL (George McKinney); 21 Apr (1) MHL (WKJ); 25 Apr (1) AUS (RLK). Yellow-crowned Night Heron: 11 Apr (2 active nest sites) AMM area (KHD, LHD). Least Bittern: 1 found injured and brought to the Knoxville Zoo, 26 Apr (MWA). American Bittern: 30 Mar - 3 Apr (1) AUS (SG, RLK); 21 Apr (1) Coalfield, Morgan Co. (PDH); 2 May (1) COL (TOS). Snow Goose: 21 Apr (1) MHL (WKJ). Mallard: 17 Mar (120) SAB (KHD, LHD). Black Duck: 17 Mar (3) SAB (KHD, LHD). Blue-winged Teal: 17 Mar (17) SAB (KHD, LHD). American Wigeion: 17 Mar (90) SAB (KHD, LHD). Northern Shoveler: 9 Apr (10) SAB (KHD, LHD); 2 May (3) EBF (SJS, BHS). Redhead: 17 Mar (42) CHL (KHD, LHD); 17 Apr (2) KSP (SJS, BHS). Ring-necked Duck: 17 Mar (2) HRA (KHD, LHD). Greater Scaup: 17 Mar (180) CHL (KHD, LHD). Lesser Scaup: 2 during period JNC (LHTOS). Bufflehead: 17 Mar (8) CHL (KHD, LHD); 4 Apr (27) KSP (PDH); 2 May (1) KSP (SJS, BHS), SURF SCOTER: 2 May (1 male) KSP (SJS, BHS). Ruddy Duck: 17 Mar (10) CHL (KHD, LHD). Hooded Merganser: 17 Mar (1) CHL (KHD, LHD). Red-breasted Merganser: 17 Mar (5) HRA (KHD, LHD).

Hawk-Tern: Sharp-shinned Hawk: 12, 19 Apr (1) JNB (RLK); 6 May (1) KNC (BHS). Red-shouldered Hawk: 25 Apr (1) AUS (RLK). Bald Eagle: 4 Apr (1 ad) HRA (KHD, LHD). Osprey: 4 Apr (1) HRA (KHD, LHD). Sandhill Crane: 26 Mar (11) over downtown Chattanooga (RCS); 28 Mar (5) KNC (A. Boyd Sharp). King Rail: present ALM 21 Apr to end of period (SJS, BHS, *et al.*). Virginia Rail: 3 May (2) ALM (LNA, MWA); 1 dead on road, KNC (Jane Orleans). Sora: 10-25 Apr (1-3) AUS (RLK, GS); 2 May (1) U.T. Plant Science Farm (TOS); 8 May (1) Seymour, KNC (*fide* JBO); 9 May (1) ALM (SJS, BHS). *COMMON GAL-LINULE:* 3 May (1) Fish Hatchery, near Morristown (HS). Semipalmated Plover: 1-13 May (1-6) AUS (LHTOS). Common Snipe: 17 Mar (69)

SAB (KHD, LHD). Upland Sandpiper: 17-19 Apr (1) AMM area (JWS). Willet: 17 Apr (1) KSP (SBS). Greater Yellowlegs: 9 Apr (20) SAB (KHD, LHD); 17 Apr (10) EBF (SJS, BHS). Lesser Yellowlegs: 17 Mar (1) HRA (KHD, LHD); 5 Apr (30) Oak Ridge (BHS, ARH). Pectoral Sandpiper: 17 Mar (65) SAB (KHD, LHD); 2 May (1) EBF (SJS, BHS). White-rumped Sandpiper: 28 Apr - 13 May (1-4) AUS (LHTOS). Least Sandpiper: 17 Mar (5) SAB (KHD, LHD). Dunlin: 17 Mar (90) SAB (KHD, LHD); 2 May (1) EBF (SJS, BHS). White-rumped Sandpiper: 28 Apr - 13 May (1-4) AUS (LHTOS). Least Sandpiper: 17 Mar (5) SAB (KHD, LHD). Dunlin: 17 Mar (90) SAB (KHD, LHD); 2 May (1) EBF (SJS, BHS); 9 May (1) KSP (Bill & Allison McNutt). Dowitcher sp? 25 Apr (1) AUS (LHTOS). Stilt Sandpiper: 25 Apr - 1 May (1) AUS (LHTOS). Western Sandpiper: 12 May (1) St. John's Pond (MD, SG). Herring Gull: 17 Mar (6) CHL (KHD, LHD); 17 Apr (6) KSP (SJS, BHS). Ring-billed Gull: 16 Mar (8) on ground at Baileyton School, Greene Co. (W. Ruth Nevius); 17 Mar (30) CHL (KHD, LHD); 3 May (8) KSP (KHD, LHD). Bonaparte's Gull: 25 Apr (2) AUS (RLK). Caspian Tern: 3 May (5) KSP (KHD, LHD).

Owl-Wren: Barn Owl: 4 Apr (1) AMM (KHD, LHD); 1 regular near JNB (RLK). Great Horned Owl: 1 new nest site near JNB (RLK); 27 Mar (5, 2 ad, 3 y) KNC (PSP). Chimney Swift: 3 Apr (2) KNX (PDH)—a little earlier than normal at this location. Red-headed Woodpecker: 25 Apr (1) only report for the Knoxville area (PDH). Willow Flycatcher: 12 May (1) AUS (RLK). Olive-sided Flycatcher: 1 May (1) KNX (PDH). Tree Swallow: 17 Mar (6) SAB (Johnny T. Parks); 9 Apr (1) AUS (RLK). Bank Swallow: 25 Apr - 11 May (4-50) AUS (RLK). Cliff Swallow: 3-25 Apr (1-3) AUS (RLK). Blue Jay: 25 Apr (40) flying north along side Lookout Mt. over Reflection Riding (KHD). Red-breasted Nuthatch: 7 Apr (1) Harrison (Elena Killian); 19 Apr (1) SIP (KHD); abundant through early May in Knoxville area (KTOS). House Wren: arrived 14 Apr & nested GRE (HS); 14 Apr (first noted & breeding) north Knoxville (LNA, MWA). Long-billed Marsh Wren: 8 May (1) ALM (LNA, MWA). Hermit Thrush: 12-14 May (1 singing) KNX (Jim & Betty Mason).

Pipit-Sparrow: Water Pipit: 8 Apr (3) SAB (KHD, LHD); 3 May (4) JNB (RLK). Prothonotary Warbler: 18 Apr (1) Kingsport (GOW). Tennessee Warbler: 11 Apr (1) TRG (LHD). Orange-crowned Warbler: 11 Apr (1) TRG (RCS); 12 Apr (1) KNX (James M. Campbell); 15 May (1) JHC (SG). Nashville Warbler: 11 Apr (1) TRG (RCS). Connecticut Warbler: 2 May (1) KNX (LHD *et al.*). Bobolink: 25 Apr - 13 May (3-20) AUS (LHTOS). Evening Grosbeak: last reports 18 Apr (20) NOR (CPN); 25 Apr (1) SIP (KHD); 30 Apr (1) GRE (Eric Farr); 15 May (1) JHC (SG). Purple Finch: 27 Apr (1) JHC (HHD). HOUSE FINCH: First nests in Tennessee found at Jonesboro, 1 nest with 3 eggs on 31 Mar, later destroyed by cat (RLK et al.), and at Kingsport, 4 nests found 14-16 May (Rick Phillips). Details to be published. Elsewhere, present to end of period at KNX (ARH, Jim & Betty Mason). Pine Siskin: 6 Apr (1) JHC (KB); 16 Mar - 16 Apr (29 banded) Collegedale (Mrs. R. E. Lynn); 25 Apr (3) SIP (KHD). Red Crossbill: 3 May (18) Norris Dam State Park (CPN, PSP); 11 May (4) JHC (HHD). Savannah Sparrow: 9 May (1) KNX (PDH). Vesper Sparrow: 17 Apr (12) EBF (SJS, BHS). Bachman's Sparrow: 24 Mar (1) Newport (Jon A. "Tony" Koella); Chipping Sparrow: 5 Apr (3) GRE (HS). White-throated Sparrow: 14 May (1) NOR (CPN).

Locations: ALM—Alcoa Marsh; AMM—Amnicola Marsh; AUS—Austin Springs; BOL—Boone Lake; CHL—Chickamauga Lake; COL—Cove Lake; EBF—Eagle Bend Fish Hatchery; FLL—Fort Loudoun Lake; GRE—Greeneville; HRA—Hiwassee River Area; JNC—Johnson City; JNB—Jonesboro; KNC— Knox County; KNX—Knoxville; KSP—Kingston Steam Plant; MHL—Melton Hill Lake; NOR—Norris; SAB—Savannah Bay; SIP—Signal Point; TRG— Tennessee River Gorge.

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EASTERN MOUNTAIN REGION—The weather for our area can be summarized as follows: the week of March 16 through 21 was winter's last fling with low temperatures and snowfall on the 19th and 20th. Warm weather began the last week in March and continued on through the end of the period. Rainfall was about normal during April, but was very low during the fist two weeks of May.

Spring migration was considered above average and was heaviest in mid-April with many species seen in above average numbers. A heavy spring hawk migration through the Smokies, along with sightings of Peregrine Falcon and Merlin was reported. Several good nesting reports included those of Red-cockaded Woodpecker, Swainson's Warbler, House Finch and possible low elevation nesting of the Raven. Where have all the Purple Martins gone?

All these observations are included in the following paragraphs, so you ought to really pay close attention to the information below. If your sightings were equally as interesting and are not listed, all you have to do to get them published is turn them in to your regional editor.

LOON-HAWK: Common Loon: 11 Apr (25) flying N over Look Rock in GSMNP (SJS, BHS, ARH); 11 Apr (2 in spring plumage) SHL (RL). Horned Grebe: 5 Apr (1 in spring plumage) WibL (GOW). Yellow-crowned Night Heron: 5 Apr (1 pair on same nest as previous years) E (GDE). Canada Goose: 17 Apr (4) SHL (RL); 10 May (2) SHV (CPN, GOW). Blue-winged Teal: first spring sighting on 18 Mar & last seen 15 May in SV (HLF). Ring-neck Duck: overall populations down during period, 1 seen thru end of period at Townsend (BHS, SJS). Bufflehead: last seen 25 Apr (2) WibL (RDL, GOW). Sharp-shinned Hawk: 31 Mar thru 22 Apr (8) seen migrating over Look Rock (BHS, SJS). Coopers Hawk: 11 Apr (1) Look Rock (BHS, SJS). 25 Apr (1) RM (GDE, HLF). Red-shouldered Hawk: 9 May (4 imm) Look Rock (BHS, SJS). Broad-winged Hawk: 11 Apr (2) E (GLS); 18 Apr (442) migrating over Look Rock (ARH, BHS, SJS). Osprey: first spring sighting 5 Apr (1) E (GDE). *PEREGRINE FALCON:* 15 Mar (2) Look Rock (BHS). *MERLIN:* 25 Apr (1) RC (JLM, LH).

RAIL-SAPSUCKER: Sora Rail: 25 Apr (1) CF (RDL, GOW). Common Snipe: last seen 28 Apr (3) E (GDE, HLF). Spotted & Solitary Sandpiper: both species first spring sightings on 9 Apr in E (GDE, HLF). Pectoral Sandpiper: first seen 28 Mar (2) SV (GOW). Bonaparte's Gull: 5 & 6 Apr (7-12) WatL (GDE, GOW), 25 Apr (3) RC (JLM, LH). *COMMONTERN*: 25 Apr (15) RC (JLM, LH). Black-billed Cuckoo: first spring sighting 29 Apr (1) E (GDE); more birds seen than in many previous years. Screech Owl: overall populations back to normal. Great Horned Owl: 2 active nests this season, 1 at SHL (RL), 1 near WibL (RLK). *SAW-WHET-OWL:* 16 May (3 calling) Clingman's Dome Road (Jim & Betty Ried Campbell). Yellow-bellied Sapsucker: last seen 14 Apr (1) E (HLF).

WOODPECKER-VIREO: Hairy Woodpecker: sightings are below normal? *RED-COCKADED WOODPECKER:* 12 May (1 pair feeding young in nest) Skunk Ridge, GSMNP (Mike Homoya). Willow Flycatcher: first seen 15 May (1) CF (RLK). Least Flycatcher: first seen 13 May (1) RM (RLK). Barn Swallow: first seen 25 Mar (3) SV (HLF). Purple Martin: first seen 25 Mar (*late*) E (GDE); overall

populations alarmingly down. Common Raven: possible low elevation nesting near Look Rock (BHS, SJS). Red-breasted Nuthatch: scattered reports from low elevations only during period. Long-billed Marsh Wren: 25 Apr (1) SV (GOW, RDL). Veery: first seen 13 May (1) RM (RLK). Cedar Waxwing: very abundant after mid-April. Warbling Vireo: first seen 25 Apr (2) SV (GOW, RDL).

WARBLER-SPARROW: Prothonotary Warbler: 29 Apr (1) WatR (RDL). SWAINSONS WARBLER: 8 May (1) RCP (GLS); 9 May (1) WibL (CPN, GOW); 10 May (SEVEN SEEN) Beaverdam Cr., NE of SHV (CPN, GOW). Goldenwinged Warbler: first seen 30 Apr (2) SHL (RL). Blue-winged Warbler: first seen 17 Apr (1) E (GOW), good numbers thru end of period. ORANGE-CROWNED WARBLER: 12 Apr (3) SV (GOW). Cerulean Warbler: first seen 25 Apr (1) RC (JLM, LH). Blackpoll Warbler: first seen 25 Apr (1) E (HLF). Pine Warbler: first seen 28 Mar (2) SHL (RL). Canada Warbler: first seen 10 May (1) RM (RLK). Northern Oriole: first seen 26 Apr (1) SHL (RL). Rose-breasted Grosbeak: first seen 25 Apr (3) HM (RDL, GOW). Blue Grosbeak: first seen 25 Apr (1) E (GDE). Evening Grosbeak: last seen 15 May (2) E (GDE). Purple Finch: last seen 27 Apr (1) E (HLF). HOUSE FINCH: 3 to 7 birds thru end of period at SHL (RL), possibly nesting. Grasshopper Sparrow: first seen 25 Apr (2) SV (RDL, GOW). Whitecrowned Sparrow: last seen 28 Apr (3) E (HLF). White-throated Sparrow: last seen 12 May (1) E (GDE). Fox Sparrow: last seen 29 Mar (1) E (HLF).

Locations: CF—County Farm near Eliz.; E—Elizabethton area; GSMNP—Great Smoky Mtns. National Park; HM—Holston Mtn.; RC—Roans Creek; RCP—Rock Creek Park near Erwin; RM—Roan Mtn.; SHL—South Holston Lake area; SHV—Shady Valley; SV—Siam Valley near Eliz.; WatL—Watauga Lake; WatR—Watauga River; WibL—Wilbur Lake.

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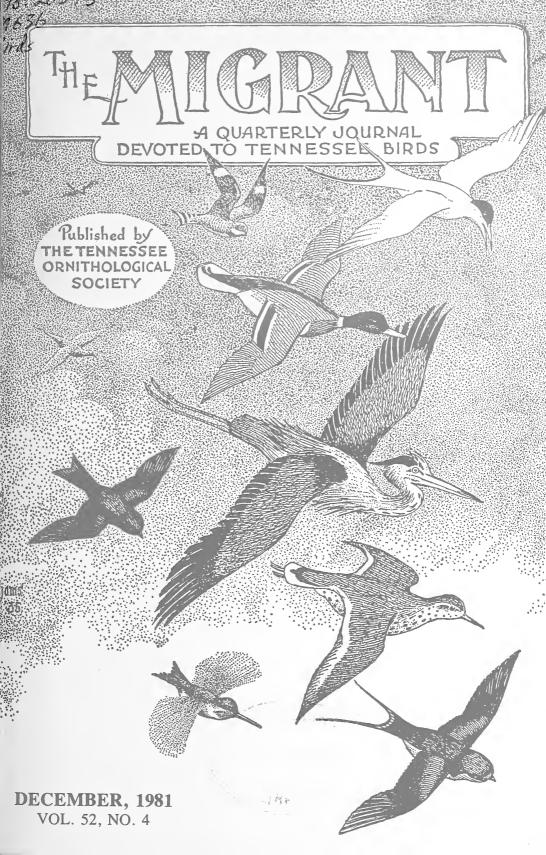
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THE DISTRIBUTION AND LIFE HISTORY OF THE BROWN-HEADED NUTHATCH (Sitta pusilla) IN TENNESSEE

J. CHRISTOPHER HANEY

The Brown-headed Nuthatch (*Sitta pusilla*) is a social species characteristic of the open pinelands of the southeastern United States and Grand Bahama Island. Among the three eastern U.S. nuthatches, the Brown-headed is often called the most atypical in terms of vocalizations and feeding habits.

In Tennessee the Brown-headed Nuthatch occupies a very restricted range and, while occurring more or less regularly in the state since late 1968, its status still remains largely unknown. I conducted field work involving this species from December 1979 through September 1981. This paper summarizes the limited published data relating to the species in Tennessee and presents new information on its range, reproduction, and behavior in the state.

DISTRIBUTION

The first reference to the Brown-headed Nuthatch in Tennessee was by Glenn H. Marchbanks who reported them on a Christmas Count near Knoxville in 1914 and in a census along the Ocoee River between Copperhill, Tennessee and Blue Ridge, Georgia in 1915 (Trabue 1965). Little is known about Marchbanks and I consider the records suspect.

The first verified record of the species occurred on 14 December 1968 when Nat Halverson and his son Mike observed first one and later two individuals at their suet feeder in southeastern Hamilton County, northeast of Collegedale near the Bradley County line (Basham 1969). Dr. C. F. Dean photographed these birds and they were observed regularly through the remainder of that winter. The Halverson residence continued to be the only location where the Brown-headed Nuthatch could regularly be found in Tennessee until late 1979.

Brown-headed Nuthatches have been recorded from additional locations in Hamilton (Figure 1), Van Buren and apparently Wayne Counties. Descriptions of these areas, with pertinent information on the status of this species in each location follow:

1. McDonald Road-Tallant Road, Hamilton Co. — This, probably the widest area over which Brown-headed Nuthatches occur, is the site of the original record

(Location 1 on Figure 1). Open woodlands of large (greater than 25 cm dbh) loblolly pine (*Pinus taeda*) and shortleaf pine (*P. echinata*) with grass understories

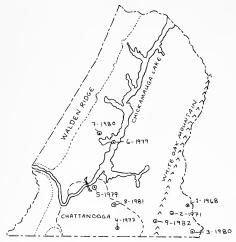


Figure 1. Distribution of the Brown-headed Nuthatch in Hamilton County, Tennessee. See text for descriptions of numbered locations. Years refer to first observation at a location.

extend 0.5 km south, 3.0 km north, 0.7 km west (including Sherry Lane), and 2.0 km east of the intersection of the two roads. Most of the land is residential or pasture. Several areas contain nearly pure stands of pines. The elevation is between 250 and 300 meters.

Between 22 January 1978 and 23 January 1980, Mrs. R. E. Lynn banded seven Brown-headed Nuthatches at her residence on Sherry Lane. All were banded between October and February and were not present in summer (Mrs. R. E. Lynn pers. comm.). Two individuals were recaptured, each within seventeen days of the initial capture date. I observed three birds on 8 March 1980 at the Lynn residence.

Brown-headed Nuthatches have remained regular at the Halverson residence (Devore 1969, Smith 1969, Alsop 1976a, Alsop 1976b). They are also seen in small numbers along other McDonald and Tallant Road sites near pine groves (Nat Halverson pers. comm.). I saw two birds 0.4 km south of the intersection of the two roads on 22 June 1980 in a stand of large pines that were later harvested.

2. Collegedale, Hamilton Co. — Brown-headed Nuthatches were present in the Pierson Drive (elevation ca. 300 m) area from at least the spring of 1971 until sometime in 1974 when they suddenly disappeared (Loc. 2 on Figure 1). This is a residential area with a few open groves of Virginia pine (*P. virginiana*).

Brent Barrow (pers. comm.) stated that a maximum of three or four birds frequented feeders at his home and probably nested close by. Fred Alsop (1971) and others saw a Brown-headed Nuthatch excavating a cavity in a dead scrub pine on 14 March 1971 in the Barrow's yard. One bird was seen 29 April 1972 (Alsop 1972). I saw two individuals on 15 October 1972 and again on 22 November 1973.

Brown-headed Nuthatches were rediscovered in northern Collegedale on Penney Lane at the Basham residence during the spring of 1981. Several visited the Basham's feeders and two were later banded (Benton Basham (pers. comm.). This area is a lightly wooded subdivision with many small (less than 25 cm dbh) loblolly pines.

3. Apison, Hamilton Co. — I found Brown-headed Nuthatches to be fairly common in loblolly pine groves along Bill Jones Road south of Apison (elevation ca. 250 m) during February, March, and April 1980 (Loc. 3 on Figure 1). Dave Matthewson (pers. comm.) observed several pairs here during the summer of 1980. On 17 June 1981 I saw five birds feeding in a few solitary loblolly pines along Shortcut Road. Mrs. Gertrude Fleming (pers. comm.) has had the species regularly at her feeders on Apison Pike 1.5 km east of Apison since 1980.

4. East Brainerd, Hamilton Co. — Lying between I-75 to the west, Gunbarrel Road to the east, Igou Gap Road to the north, and East Brainerd Road to the south is a large residential area (elevation ca. 220 m) with extensive groves of loblolly and shortleaf pines (Loc. 4 on Figure 1).

Robert Roach (pers. comm.) has had two to four Brown-headed Nuthatches since 1977 at his home on Clayton Road. Mr. Roach observed the birds during the summer of 1978 with young. I found from six to eight birds regularly in this area during June 1980. The birds nested in the Roach's yard during April and May 1981 (Figure 2).

There are extensive areas of suitable habitat to the east and south of this area that probably harbor additional Brown-headed Nuthatches. They have been seen at the Graysville Elementary School 1.8 km south of the Georgia-Tennessee line (Halverson pers. comm.). Large areas of loblolly pine occur between this school and the East Brainerd area.

5. Chickamauga Dam, Hamilton Co. — Randy Stringer first found Brownheaded Nuthatches in a picnic area at Chickamauga Dam (elevation ca. 230 m) in November 1979 (Loc. 5 on Figure 1). Daniel Jacobson (pers. comm.) saw two on 2 January 1980 and two individuals were present regularly until the summer of 1980. On 22 August 1980 Jacobson saw four individuals. I noted from four to six present during September 1980. These additional birds possibly included offspring from the original pair.

The birds usually frequent a picnic area west of Chickamauga Boat Harbor on top of the hill. This grove is made up almost entirely of loblolly pines. I have occasionally seen them on the east side of the harbor where there are fewer pines.

6. Chester Frost Park, Hamilton Co. — Brown-headed Nuthatches were first seen here during March 1979 by Johnny Parks (pers. comm.) (Loc. 6 on Figure 1). He observed two birds excavating a cavity in a dead vertical limb of a shortleaf pine on Dallas Island (elevation ca. 220 m). They remained until late summer and apparently raised young. On 14 March 1980 I located eight individuals on Dallas Island. They have been resident in the park since then and during both the 1980 and 1981 breeding season, three pairs of Brown-headed Nuthatches nested on the Dallas Island section of the Park.

Chester Frost Park (formerly Hamilton County Park) differs from the other localities in certain respects. It contains more Virginia pine, the stands are younger, and there is a greater proportion of deciduous trees. It is similar to the others in being open and devoid of undergrowth.

I found another group of nuthatches about 2.0 km west of Chester Frost Park in the Lakeside Circle subdivision near Dallas Bay (Loc. 7 on Figure 1). I found four birds here on 25 October 1980 and three birds during the 1980 Chattanooga Christmas Bird Count.

7. Other Hamilton Co. locations — Two additional locations were reported to me during late 1981 and early 1982. I did not personally visit these sites. At the first of these (Loc. 8 on Figure 1), 6863 Longview Road, Chattanooga, Joe Stone observed 1 to 2 birds between 18 October and 26 November 1981. At the second site (Loc. 9 on Figure 1) Carl Swafford observed 1 or 2 birds at 3997 Nile Terrace during January 1982.

8. Fall Creek Falls State Park, Van Buren Co. - Tony Koella and Don Pfitzer

recorded five Brown-headed Nuthatches from the park on 29 July 1974 (Alsop 1974). Koella (pers. comm.) found them in group camp number 1 or 2 (elevation ca. 550 m) where "the growth is mostly pine."

Lee Shafer and Daniel Jacobson (Jacobson pers. comm.) searched the park later in 1974 and failed to find them. In July 1980 I also searched unsuccessfully for the birds in both group camps and other sites in the park. In my opinion, the park is no longer suitable for the nuthatches. There is a great deal of undergrowth in the group camp areas and hardwoods have generally overgrown the pines.

9. Natchez Trace Parkway, Wayne Co. - Mike Bierly (1980) states that the Brown-headed Nuthatch has been recorded "near the Tennessee-Alabama line on the Natchez Trace Parkway." This refers to an, as yet, unverified sight record about 20 km north-east of the state line (Bierly pers. comm.).

REPRODUCTION

The Brown-headed Nuthatch usually excavates a nest hole each year but may occasionally select an existing one (Imhof 1976). In Tennessee instances of each type have been recorded (Table 1). Pearson et al. (1942) state that this species may start and later abandon several cavities until one to their liking is found. I observed this near Chickamauga Dam on 14 April 1980 when a bird spent several minutes excavating a nearly complete cavity in a redbud (Cercis canadensis). The cavity was situated about 2.5 m up in a dead vertical limb. The bird did not use the cavity that summer, and presumably nested elsewhere.

NEST #	CAVITY HT, M	CAVITY TYPE	NUMBER OF EGGS	DATE	LOCATION
1.	1.2	Р	6	5/10/77	bluebird box
2.	1.1	Ē	4	4/17/81	hardwood stump
3.	7.5	E		4/14/81	loblolly pine
4.	0.3*	Р	4	5/2/80	fence post
5.	5.5	Е	а	4/29/80	white oak
6.	3.2	Р		4/17/81	telephone pole
7.	2.5	E		4/17/81	shortleaf pine

TABLE 1

CHARACTERISTICS OF NESTS

Note: P-preformed cavity, not excavated by nuthatches; E-excavated by nuthatches; *--nest was in post in 1 m of water at Chickamauga Lake; a-undetermined number of eggs destroyed by a predator, Nest 1 at Halverson residence, Nest 2 at Roach residence, Nest 3 at Chickamauga Dam picnic area, and Nests 4-7 at Chester Frost Park.

While digging, the Brown-headed Nuthatch approaches the cavity somewhat from the side and with the tail at a slight angle below the horizontal. The bird alternates five to ten second drilling sessions with intervals of scrutinizing the surroundings, presumably for predators. The wood chips are taken from the cavity in the bill and released with a rapid shaking of the head. Individuals I watched seldom spent more than ten minutes excavating before resuming feeding. Occasionally a bird's mate would replace it at the cavity and also work at drilling.

In Alabama, Brown-headed Nuthatches have been recorded excavating cavities between 15 February and 22 April (Imhof 1976). I have recorded cavity excavation between 21 February and 14 April. Most excavation probably occurs

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Figure 2. Brown-headed Nuthatch at nest cavity on 12 April 1981, at Roach residence, Hamilton County, Tennessee.



Figure 3. Nest of Brown-headed Nuthatch at Halverson residence on 10 May 1977 in Hamilton County, Tennessee. Photo by Daniel Jacobson.

from mid-March to mid-April in Tennessee.

The Brown-headed Nuthatch has an egg-laying period from 4 March to 20 July (Bent 1948). Only three complete sets of eggs have been recorded in Tennessee. A nest located in a bluebird house at the Halverson residence had six eggs 10 May 1977 (Alsop 1977) (Figure 3). I found a nest 2 May 1981 with four eggs in a fence post in one meter of water at Chester Frost Park. Roach (pers. comm.) noted four eggs in late April 1981 at his residence on Clayton Drive. Clutch size for the Brown-headed Nuthatch is usually four or five, rarely six or seven (Skutch 1976).

In Tennessee, egg-laying likely occurs during the last half of April or very early in May. Brown-headed Nuthatches raise only one brood (Sprunt 1949). If the first brood fails, the adults do not attempt to nest again (Skutch 1976). A pair I observed at Chester Frost Park made no additional nesting attempts after a predator, feathers found indicated the Blue Jay (Cyanocitta cristata), destroyed the nest and an undetermined number of eggs on or before 29 April 1980. A non-nesting pair may act as helpers to other breeding pairs (Norris 1958), but I did not observe this.

The incubation period for Brown-headed Nuthatches is fourteen days (Skutch 1976). During this period the male often interrupts feeding to take food or additional nest-lining material to the incubating female. During April 1980, two males at Chester Frost Park regularly took pine seeds and other small objects to their cavities. The females would then join the males for a period of courtship feeding. As the male approached her, she would respond with "wing-quivering" and a begging note like that of many young passerines. At no time did I see both birds act in the same manner. This display probably functions as a pair-maintenance bond during incubation.

The nestlings remain in the nest from seventeen to nineteen days after hatching (Skutch 1976). Little is known about this segment of the reproductive cycle for Tennessee birds. Roach (pers. comm.) noted that the pair and young at his residence left by 19 May. Most nestlings are probably fledged by at least mid-June.

BEHAVIOR

Burleigh (1958) found that Brown-headed Nuthatches occur throughout much of the year in small flocks that break up temporarily at the onset of the breeding season. These flocks may number from six to over two dozen individuals (Bent 1948). The largest flock I have recorded varied from five to eight individuals at Chester Frost Park during the winter of 1980-1981.

Brown-headed Nuthatches may also join mixed-species flocks during the non-breeding season. Downy Woodpeckers (*Picoides pubescens*), Carolina Chickadees (*Parus carolinensis*), Brown Creepers (*Certhia familiaris*), Goldencrowned Kinglets (*Regulus satrapa*), and Pine Warblers (*Dendroica pinus*) associated with Brown-headed Nuthatches in loose, roving flocks at Chester Frost Park and Chickamauga Dam from October to late February or early March. On 4 October 1981 at Chester Frost Park, Joe Stone, Al Jenkins, and I observed several Brown-headed Nuthatches in a large mixed-species flock consisting of several warbler species, Carolina Chickadee, Red-breasted Nuthatch (*Sitta canadensis*), and White-breasted Nuthatch (*Sitta carolinensis*).

While nesting, however, Brown-headed Nuthatches can be highly aggressive toward other species that approach the nest site or even a favored feeding area. I saw nuthatches chase Chipping Sparrows (*Spizella passerina*) and Carolina Chickadees from pine trees that both species were feeding in and mob Starlings (*Sturnus vulgaris*) that perched on limbs close to the nest cavity. The nuthatch dove at the Starlings without actually striking them and continued to complain vocally until they left. On 20 April 1981, a Starling entered the nuthatch's nest cavity at Chickamauga Dam while the female was incubating. I did not find the nuthatches at this location in May, and interference by the Starlings could have been responsible for the desertion.

Often the best indications of the presence of Brown-headed Nuthatches is their unique vocalizations. The loudest and most distinctive is a rapid, complaining, nasal "chnee-nee-nee" or "jnee-nee-nee" varying from three to six syllables and occasionally accelerating into a rapid trill. The call is often given when the birds are agitated or are moving from one feeding area to another. It is very unlike either of the other eastern nuthatches and slightly resembles some chickadee calls. Mockingbirds (*Mimus polyglottos*) imitate this call frequently in the Collegedale and East Brainerd areas.

Other vocalizations include a soft "pip" or "pit," heard singly or in a short series, that is given while the birds feed close together. On 14 April 1980, I heard a nuthatch give a very soft goldfinch-like warbling while it remained quite still. Another call is given by the female during courtship feeding and resembles notes given by young passerines begging for food.

Brown-headed Nuthatches are very active feeders. Individuals I observed at Chickamauga Dam during March and April 1980 spent an average of 40 seconds (range 5-90 seconds, n = 67) feeding in one tree before moving to another. When feeding in pine trees, they prefer the smaller branches, pine cones, or terminal needle clusters. Brown-headed Nuthatches use the branches and trunk less often than the other two eastern nuthatches (pers. obs.).

Although most feeding occurred in pines, Brown-headed Nuthatches also fed in sweetgum (Liquidamber styraciflua), hackberry (Celtis spp.), hickory (Carya spp.), and other deciduous trees at Chester Frost Park and Chickamauga Dam during the spring and summer. They particularly favored newly-emergent leaf clusters of white-oak (Quercus alba) in spring, perhaps due to a local abundance of insects in the new foliage.

Brown-headed Nuthatches eat pine seeds, grasshoppers, moths, beetles, ants, and spiders (Wetmore 1964). They frequently visit feeders in Tennessee for suet and sunflower seeds, mostly during the winter months.

On 21 June 1980, I saw a Brown-headed Nuthatch carefully conceal a round object, probably a pine seed, under loose bark of a Virginia pine after trying several other locations. I could find no references to food concealment by this species.

DISCUSSION

It now seems certain that at least a small population of the Brown-headed Nuthatch is well established in southeastern Tennessee. I estimate that population to number from 50-70 individuals based on the maximum number of individuals found in the various Hamilton County locales. This figure does not account for any individuals that may be present in other parts of the state.

The northern and western limits of the Brown-headed Nuthatch's geographical range (Peterson 1980, A.O.U. 1957) coincide very closely to the northern and western limits of Kuchler's (1978) oak-hickory-pine forest. The species' range coincides even closer to the U.S. Forest Service's mapping of loblolly-shortleaf pine forest in the southeastern states (Anon. 1969). In this ''major forest-type'' classification scheme, loblolly-shortleaf pine forest is defined as a forest in which 50 percent or more of the stand is loblolly pine, shortleaf pine, and other southern pines, singly or in combination. Common associates include oak (*Quercus*), hickory (*Carya*), and gum (*Nyssa*).

In Tennessee, this loblolly-shortleaf pine forest is found in parts of Hamilton, Bradley, Polk, McMinn, and Monroe counties and is isolated somewhat from similar forest to the south and east, i.e., it is surrounded by different forest types containing more hardwoods. I think it is significant that presently known breeding populations of Brown-headed Nuthatches in Tennessee are limited to this region. The loblolly-shortleaf pine forest also extends northward from Mississippi into Hardeman and McNairy Counties, Tennessee. The Brown-headed Nuthatch has been found in Benton, Alcorn, and Tishomingo Counties, as far north as Corinth and Iuka, Mississippi, but never in southwest Tennessee, less than 16 km to the north (A.O.U. 1957; B. B. Coffey, Jr., pers. comm.). The Red-cockaded Woodpecker (*Picoides borealis*), often sympatric with the nuthatch (Bent 1948), formerly occurred in this portion of southwest Tennessee (Nicholson 1977).

The Brown-headed Nuthatch has extended its range elsewhere in the southeast within the past twelve years. They have increased in numbers at Dalton, Georgia (Hall 1972, 1973) and have occurred west of the Blue Ridge in Virginia near Waynesboro and Harrisonburg (Hall 1981a, 1981b). In North Carolina, Brown-headed Nuthatches have nested as far west as Lenoir in Caldwell County (LeGrand 1974), and have been recorded in Buncombe County near Asheville (Hall 1973, 1981a, Simpson 1972).

The Buncombe County records are restricted to pine or pine-hardwood forests along the French Broad River and its tributaries at elevations below 700 meters. The first records of Brown-headed Nuthatches from this region are those of John S. Cairns, who observed and collected the birds near Weaverville in the late 1800's

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(Simpson 1969). Cairns observed Brown-headed Nuthatches during late autumn and winter of 1893-1894, and obtained a nest with eggs during the summer of 1894. Cairns died in 1895 and the birds were not recorded in Buncombe County until 1970. Parts of Buncombe County also lie within the boundaries of an isolated segment of the loblolly-shortleaf pine forest-type (Anon. 1969).

Why the Brown-headed Nuthatch has extended its range is not clear. Bird ranges are seldom static and usually in a constant state of flux. The Cardinal (Cardinalis cardinalis), Tufted Titmouse (Parus bicolor) and Carolina Wren (Thryothorus ludovicianus), partly in response to winter feeding stations, have extended their ranges northward in recent decades, while the Robin (Turdus migratorius), Song Sparrow (Melospiza melodia) and House Wren (Troglodytes aedon) have extended their breeding ranges southward. All of these species show a marked attraction to disturbed areas following the removal of forests. Apparently climate was less a limiting factor than were suitable feeding and nesting habitats (Pettingill 1970, Kricher 1981).

Populations of species that are permanent residents may, on occasion, show mass movement (invasion or irruption) after failure of their food supply. If the species find suitable breeding areas, they may become established (Pettingill 1970). Simpson (1972) noted that winter invasions of Brown-headed Nuthatches in western North Carolina may have been a response to population pressure and inadequate food supply in the piedmont, but hard evidence of this is lacking.

The range of the Brown-headed Nuthatch has historically been close to Tennessee, especially in Mississippi (discussed above), Alabama and Georgia. Prior to 1968, the range of the species came to within 30 km of Tennessee in several locations. It is a permanent resident in Alabama north to at least southern Lawrence, Marshall and Dekalb counties (Imhof 1976). Frank Hixon has reported the species from Scottsboro, Jackson County, Alabama (Jacobson pers. comm.). In Georgia, the Brown-headed Nuthatch is resident north to Toccoa in Stephens County and in western Georgia to Rome in Floyd County (Burleigh 1958). More recent sightings, however, indicate that the species is well established further north. They have been recorded at Chickamauga National Military Park (Comstock 1963) and considered regular at Rock Spring and Ringgold, Georgia (Alsop 1973).

The absence of pine woodlands will likely limit the Brown-headed Nuthatch's range extension in Tennessee. Sprunt (1949) recorded the species only in open pinelands, occurring in "no other place." Brown-headed Nuthatches either disappear or greatly decrease after logging operations remove the pine timber in a given locality (Burleigh 1958).

Woodlands in Hamilton County where Brown-headed Nuthatches occur vary somewhat in their composition. The species of pines, the age of the stands, and the proportion of hardwoods are not uniform throughout. All, however, have been kept from complete succession to hardwood forest by periodic mowing or cattle grazing.

In many parts of the Brown-headed Nuthatch's range, regular burning maintains the open character of these pine woodlands. Prescribed burning, as currently practiced in timber management, is economically desirable since it results in stimulating pine growth and eliminating hardwood competition (Lewis 1974). Thinning pine stands also results in larger, though not taller trees (Iyer and Dosen 1974). Brown-headed Nuthatches did not frequent an unthinned and unmanaged pine plantation adjacent to the Halverson residence (Halverson pers. comm.). The nuthatches seem to prefer older, thinned pine stands with an abundance of cones. Searches for additional Brown-headed Nuthatch populations in the state are thus most likely to be fruitful in areas containing old and open loblolly-shortleaf pine forests at elevations below 700 meters, especially in the southeastern counties of Bradley, Polk, McMinn and Monroe.

Johnston and Odum (1956) noted that the Brown-headed Nuthatch, Pine Warbler and Red-cockaded Woodpecker are the only breeding species entirely restricted to southern pines. In the summer of 1981 several private land holdings in Hamilton County containing large pines were clear cut for pulpwood. Since the Brown-headed Nuthatch is endemic to pines and at least two of the areas clear cut formerly contained Brown-headed Nuthatches, continued investigation of this species' status in Tennessee is warranted.

SUMMARY

The Brown-headed Nuthatch is a very local permanent resident of Tennessee, only extending its range into the state since 1968. Known breeding populations are restricted to central and southeast Hamilton County with additional sight records from Wayne and Van Buren County. The species favors open loblolly-shortleaf pine woodlands for feeding and nesting. Eggs are laid in late April or early May. Range extension in Tennessee has been concurrent with range extension elsewhere in the southeast.

ACKNOWLEDGMENTS

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1980 AUTUMN HAWK COUNT

Linda J. Turner

A total of 11,026 hawks of 10 different species was reported from 10 lookout stations in Tennessee during the fall 1980 season. Between 8 September and 26 October, a total of 187¹/₄ hours of observation was accumulated. Hawk records from the Mendota, Virginia firetower, which have been previously included in the Tennessee compilation, have been omitted from this year's totals. However, a summary of the Mendota data is included in Table 1 and a daily report for the 1980 season will be published in *The Raven* by the Virginia Ornithological Society as part of their state's autumn hawk flight compilation. Daily hawk records from the Chilhowee Mountain area were not available for this report, but a summary was obtained from *Migrant* 52:38-40, 1981 and is included in this year's totals.

Following a large early flight of 1500 Broad-winged Hawks on 13 September observed by Adele West at Fairfield Glade, the main flight of Broad-wings was observed between 20 and 24 September. On 20 September, 974 birds were reported from Bon Air and 736 birds at Ooltewah lookout tower. High peaks in Broad-wings were reported on 23 and 24 September when 1500 and 1403 birds passed over Fairfield Glade and Ooltewah lookout tower, respectively. The Broad-wing total for 1980 was 9,989 birds (18,522 birds when combined with Mendota data). Although it is impossible to accurately compare Broad-wing numbers from year to year because of variation in total number of observation hours, number of lookout stations manned, and various other factors, Broad-wing numbers seemed to be comparable to previous years. For example, in 1979, 8,820 Broad-wings were counted in 204.3 hours of observation in Tennessee (16,674 birds when combined with Mendota).

A total of 140 *Accipiters* (80 Sharp-shinned Hawks, 17 Cooper's Hawks, and 43 unidentified) was recorded in the 1980 season with Sharp-shins outnumbering Cooper's by a ratio of 7:1. Numbers of Sharp-shins, Cooper's, and total *Accipiters* seem to be comparable to those reported in 1975-1977 and 1979 (data unavailable for 1978): 127-36-211; 83-26-152; 141-23-176; and 77-17-128.

Only three Osprey were reported from Tennessee lookouts in 1980. This number is much lower than numbers reported in previous years (e.g., 25 Osprey were reported in 1979). However, reports of Ospreys on area reservoirs were numerous during the fall 1980 season.

A total of 12 Marsh Hawks that were reported during the 1980 season seemed comparable to numbers reported in 1975-77 and 1979 (30-26-6, 13). Although this raptor is not very commonly observed from Tennessee lookouts, miscellaneous reports were available during the migration period. Only one Peregrine Falcon was reported from a Tennessee lookout station in 1980. Chuck Nicholson recorded one adult bird at his Norris banding station October 5. On the same day, Linda Turner saw an immature bird at the Kingston Steam Plant. Numbers of Peregrines reported from Tennessee lookouts in 1975-79 were 0-0-1-1-3.

KEY TO ABBREVIATIONS IN TABLE

REPORTERS: — SB— Susan Bell, KHD — Kenneth H. Dubke, LHD — Lillian H. Dubke, CPN — Charles P. Nicholson, TO — Tom Odom, MP — Marvin Patton, SS — Barbara and Steve Stedman, RCS — Randy C. Stringer, LJT — Linda J. Turner, AW — Adele West, and EMW — Eugene M. West.

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1980 AUTUMN HAWK COUNT

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teport	ter(Number of	Reporter(Number of observers)																

SPECIES: TV — Turkey Vulture, BV — Black Vulture, SS — Sharp-shinned Hawk, CH — Cooper's Hawk, RT — Red-tailed Hawk, BW — Broad-winged Hawk, SH — Swainson's Hawk, MH — Marsh Hawk, OS — Osprey, AK — American Kestrel, BE — Bald Eagle, a — unidentified *Accipiter*, b — unidentified *Buteo*, f — unidentified falcon.

LOOKOUT STATIONS: Bon Air (BNA) — Reports from this station, which is located 7.5 mi ENE of Sparta in the community of Bon Air, White County, have been received since 1941. At an elevation of approximately 1800 ft. (35°56'35"N, 85°20'25"W, De Rossett, Tenn. 7.5 Quad. USGS), hawks can be seen migrating along the western edge of the Cumberland Plateau.

Brushy Mountain (BRM) — Located in the Cumberland Mountains of Campbell County (36°19'30"N, 84°18'30"W, Block, Tenn. 7.5 Quad. USGS) at an elevation of 3000 ft., BRM offers an excellent view of hawks migrating along the eastern edge of the Cumberlands.

Chilhowee Mountain (CHM) — The Chilhowee Mountains form a long ridge that runs along the northern boundary of the Great Smoky Mountains National Park for about 32 mi. from Chilhowee Dam in the SW to near the Slate Top Mountains in the NE. The elevation averages approximately 2950 ft. A lookout tower located at Look Rock (35°37'57"N, 83°56'79"W, Blockhouse, Tenn. 7.5 Quad. USGS), Blount County, probably offers the best view of hawks migrating along this ridge.

Dowler Heights (DOH) — DOH is located on Walden's Ridge, approximately 5 mi. NW of the town of Red Bank in Hamilton County (35°12'05"N, 85°20'45"W, Fairmount, Tenn. 7.5 USGS Quad. USGS) at an elevation of 2000 ft. In earlier reports, this lookout has been referred to as Mountain Creek.

Fairfield Glade (FFG) — FFG is situated on the Cumberland Plateau, 14 mi. NE of Crossville (36°00'30"N, 84°53'30"W, Fox Creek, Tenn. 7.5 Quad. USGS) at an elevation of 1600 ft. in Cumberland County.

Kyles Ford Firetower (KFF) — Located at an elevation of 2401 ft. in Hawkins County, 7 mi. N of Rogersville (36°35'00"N, 83°01'10"W, Kyles Ford, Tenn.-Va. 7.5 Quad. USGS), this firetower is excellent for viewing raptors migrating along the Clinch Mountains.

Mendota Firetower (MEF) — This firetower is located at an elevation of 3018 ft. on Clinch Mountain on the border of Russell and Washington Counties, Virginia (36°43'50"N, 82°18'02"W, Mendota, Va. 7.5 Quad. USGS). Both the TOS and VOS have monitored this station since the 1950's. However, since the VOS is compiling and publishing the hawk flights from this lookout, only a summary of this data will be published in future *Migrant* autumn hawk flights.

Mount Roosevelt Firetower (MRF) — In past autumn hawk flights, this lookout has been referred to as Rockwood Firetower. This firetower is located approximately 2 mi. W of the town of Rockwood in Mount Roosevelt State Forest in Roane County. At an elevation of 2036 ft. (35°51'59"N, 84°28'52"W, Rockwood, Tenn. 7.5 Quad. USGS), hawks can be seen migrating along the eastern escarpment of Walden's Ridge.

Norris Banding Station (NOR) — Located 1.2. mi. SE of Norris Dam in Anderson County at an elevation of 920 ft. (36°21′55″N, 84°04′28″W, Norris, Tenn. 7.5 Quad. USGS), occasional hawks, migrating near the western edge of the

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Ridge and Valley are seen at the site of Chuck Nicholson's passerine banding station.

Signal Point (SIP) — SIP is located on Signal Mountain approximately 2 mi. N of the town of Lookout Mountain (35°01′20″N, 85°20′30″W, Chattanooga, Tenn. 7.5 Quad. USGS) at an elevation of 1972 ft. in Hamilton County. This station is manned by Ken Dubke during the entire fall migration season from an interpretative center on the point which is part of the Chickamauga and Chattanooga National Park.

Ooltewah Lookout Tower (OLT) — Located on White Oak Mountain at an elevation of 1495 ft. on the border of Hamilton and Bradley Counties (35°08'57"N, 85°01'27"W, Snow Hill, Tenn. 7.5 Quad USGS), hawks can be seen on their migration through the Ridge and Valley region.

WIND CODES: 0 Less than 1 mph; smoke rises vertically.

- 1 1-3 mph; smoke drift shows wind direction.
 - 2 4-7 mph; leaves rustle, wind is felt on face.
- 3 8-12 mph; leaves, small twigs in constant motion; light flag extended.
- 4 13-18 mph; raises dust, leaves, loose paper; small branches in motion.
- 5 19-24 mph; small trees in leaf sway.

SKY CODES: 0 Clear; 0-15% cloud cover.

- 1 Partly cloudy; 16-50% cover.
- 2 Mostly cloudy; 51-75% cover.
- 3 Overcast; 76-100% cover.
- 5 Fog or haze.
- 7 Rain.
- 9 Thunderstorm with or without precipitation.

Rt. 4, Box 541, Valley Lane, Clinton, TN 37716. Accepted 1 Feb. 1982.

ROUND TABLE NOTES

WHIMBRELS ON BIG BALD MOUNTAIN, TENNESSEE—On 30 August 1980, while banding songbirds on Big Bald Mountain, I observed 2 Whimbrels (*Numenius phaeopus*). The Whimbrels were first seen walking and feeding in the open road and grassy meadow on the peak of the mountain, which is along the North Carolina state line in Unicoi County, Tennessee, at an elevation of 5500 ft. The birds were also seen by Mark Mayfield, Anne and Bedford Lochridge, and Barbara and James Finney. The Whimbrels were observed again on 31 August, but were not seen on 1 September. During this period, the birds were carefully studied at close range, and the striped crown, length of the bill, and pale underparts were noted by all observers.

The status of the Whimbrel in Tennessee has been recently summarized by Stedman (*Migrant* 51:88-89, 1980), and this is apparently the ninth state record. All of the previous observations have been at low elevations in association with water. During the fall migration, Whimbrels are often found in grassy fields, heaths and blueberry barrens in Maine and Maritime Canada (Palmer, R. S., 1949, Maine Birds, Bull. Mus. Comp. Zool. Vol. 102; Godfrey, W. E., 1979, The Birds of Canada, Ottawa, 428pp.; C. P. Nicholson, pers. comm.). The grassy meadow on Big Bald Mountain was probably selected by the Whimbrels because of its resemblance to the habitat used in northeastern North America.

GEORGE R. MAYFIELD, JR. Sunnyside Drive, Columbia, TN 38401. Accepted 1 March 1982.

GOSHAWK FROM GREAT SMOKY MOUNTAINS NATIONAL PARK -On 11 April 1981 at 0730 hours, Loren Rieseburg, Cheryl Wierzbic, Del Blum and I (J. Christopher Haney) were hiking along the Appalachian Trail near the Sevier Co., Tennessee-Swain Co., North Carolina border, approximately one-half mile east of the Newfound Gap parking area. Our attention was drawn to a bird flying from the southwest after we realized all bird song in the vicinity had abruptly ceased. We observed a hawk with relatively short, rounded wings, very long tail, and flap and glide method of flight. We identified it as an accipiter but were at first uncertain as to species. It was larger than a Common Crow (Corvus brachyrhynchos) and seen the length of a Northern Raven (Corvus corax), both of which we had seen earlier in the area. The bird altered its flight and flew directly over our heads, 3 meters above the trees. We then saw an indistinctly striped tail, fine gray barring on the underparts, and white fluffy undertail coverts. We identified it then as an adult Goshawk (Accipiter gentilis) after consulting Robbins' et al; Birds of North America. The observation was made under mostly cloudy skies with light winds, temperature about 55° F. The location was in spruce-fir forest at 5500 feet elevation. Viewing was done with 7X35 Bushnell binoculars. Del Blum had previously seen a Goshawk in Tennessee.

This marks the third or fourth record of the Goshawk in GSMNP. The first was seen by Douglas Pratt at Heintooga Overlook on 15 June 1970 (*Chat* 35:2, 1971). On 18 June 1971, G. Ronald Austing saw a Goshawk at Indian Gap on the Tennessee-North Carolina boundary (*Migrant* 42:67, 1971). There is also an unpublished June (1976?) record on file at Park Headquarters at the Sugarlands.

J. CHRISTOPHER HANEY, Department of Zoology, The University of Georgia, Athens, Georgia 30602. Accepted 3 December 1981.

MINUTES OF THE 1981 FALL MEETING AND SYMPOSIUM

The 1981 Fall Meeting and Symposium, consisting of a Board of Director's meeting, paper session, and field trips, was held 13-15 November 1981 at Paris Landing State Park.

BOARD OF DIRECTORS' MEETING

The Fall Meeting of the Board of Directors was called to order at 1725 on 14 November. President Michael L. Bierly presided with Secretary Pat Stallings recording the minutes.

The minutes of the 2 May 1981 meeting were read. After noting a discrepancy between the May 1981 minutes and the October 1980 minutes in that David Pitts was listed on the Fall Meeting Arrangements Committee in the Spring minutes, having replaced George Mayfield who was appointed at the Fall 1980 meeting, the minutes were approved as amended.

In response to a call for statements from any officer, George Payne, Jr., Treasurer, gave a report covering 1 May 1981 through 31 October 1981 showing Assets of \$24,704.65, estimated Liabilities for the coming year of \$4,500.00, Income of \$6,575.81, Expenses of \$2,894.65, and Capital Reserve of \$20,204.65. He listed operating expense per member per year as \$6.54 and suggested that an increase in membership dues be considered at the Spring meeting.

Tom Guschke questioned the Season records for the Central Basin region being missing from the past three issues of THE MIGRANT. The Editor, Chuck Nicholson, responded that he had received the current Season report from the Central Basin and that the missing reports would be published later if he received them. Lula Coffey stated that it was the responsibility of the reporters to meet the deadlines set forth. Chuck stated that the June issue of THE MIGRANT was at the printer now. He hopes to have it published at Knoxville in the future and to have it mailed from Norris where he lives. He made a plea for manuscripts and count results. Effective with this Fall season, THE MIGRANT will use the same reporting dates for each season as those used by AMERICAN BIRDS. The Summer Season will replace the season currently known as the Nesting Season.

The President stated that the newsletter was mailed on 7 October, but delivery had been very slow with some members not receiving theirs until in November. THE MIGRANT was mailed 14 October with most of them being received within a week; however, in the past, some members had experienced problems in receiving their publications. The staff hopes to have the Spring newsletter mailed by 15 February to counteract the slow delivery problem.

The President read a proposal submitted by the Fall Meeting Arrangements Committee for a procedure to set up Fall State Meetings:

"That the President appoint for a two-year term a person to be responsible for the organization of the Fall Meeting. That person will present potential Fall Meeting sites at least one year in advance for the approval of the Board of Directors."

George Payne moved that the Board adopt the proposal as submitted; Chuck Nicholson seconded and the motion carried unanimously.

In order to comply with the motion just passed, the President stated that it was necessary to determine a site for the Fall 1982 meeting. Sally Goodin moved that the meeting be held near Woods Reservoir the second weekend of November. The motion was seconded and passed.

Tom Guschke announced that the Spring Meeting would be held 7-9 May 1982 at Brentwood at the Baptist Convention Center with rooms being reserved at the Holiday Inn at the Franklin exit on I-65 south of Nashville. Other accommodations will be available also. Field trips will focus on specific birds during the peak migration period in the Nashville area. David Pitts pointed out a conflict with the Wilson Ornithological Society meeting on the same dates; however, when this conflict was noticed, it was too late to change the arrangements already made.

There being no further business, the meeting adjourned at 5:45 p.m.

SYMPOSIUM

The afternoon paper session, chaired by T. David Pitts, began at 1300 on 14 November 1981. Papers presented were as follows:

CHARLES P. NICHOLSON — The 1981 McNairy County Foray and suggestions for future forays.

JOHN L. STOKES — Raptor rehabilitation at Memphis.

J. CHRISTOPHER HANEY ---- Brown-headed Nuthatch studies in southeast Tennessee.

TOM SMITH AND DARYL DURHAM — Plant classification and wildlife habitat evaluation of the Highland Rim — a study proposal.

MARK GUDLIN --- Ruffed Grouse restoration in Tennessee.

ANN TARBELL — Tufted Titmouse studies in Tennessee.

CHARLES P. NICHOLSON — A proposal for state bird list criteria and formation of a certification committee.

The evening program, "The Reelfoot Lake Bald Eagle hacking project," by Arlo and Noreen Smith, was presented by Robert M. Hatcher.

Pat Stallings, Secretary

BOOK REVIEWS

Birds of the Carolinas. — Eloise F. Potter, James F. Parnell, and Robert P. Teulings. 1980. University of North Carolina Press, Chapel Hill. 408 pp. \$14.95 from Univ. of N. Carolina Press, Box 2288, Chapel Hill, NC 27514.

This is a compact, attractive hardbound work describing the birdlife of both North and South Carolina. Although not a comprehensive state bird book, it does include information on 415 species, which is much updated over that available in "Birds of North Carolina" by Pearson *et al.*, and "South Carolina Bird Life" by Sprunt *et al.*

Introductory chapters include information on bird identification, migration, annual cycle, avian habitats in the Carolinas, and conservation. Following this are the species accounts, which comprise the bulk of the book. The accounts include descriptions of the species' range in the Carolinas, nesting habits, feeding habits, and a description of the bird. The amount of information given in the "nesting habits" section varies, and is very detailed for a few species which the authors have studied in detail. In the Black-capped Chickadee account, the lack of a nest record for North Carolina (*Chat* 44:1-4, 1980) is not mentioned, and the nesting information is presumably from nearby states. Maps on the end papers show major towns, cities, lakes, parks and refuges in the Carolinas. Many of the range descriptions, however, refer to counties and physiographic regions, and the maps would have been more useful if these were included. The bird descriptions provide little information not found in field guides, and very little information on vocalizations is given.

Also included with the species accounts are color photographs of about two-thirds of the species. These are one of the strong points of the book. The photographs, mostly taken by amateurs, are of high quality, well reproduced, and mostly of birds in the wild. Because of the substantive (although non-technical) text, beautiful photographs, and very reasonable price, I strongly recommend this book.

A Dichotomous Key to the Shorebirds of North America. — Richard Mellon. 1981. Mellon Biological Services, Morrisville, PA 24 pp. \$2.95 from Mellon Biol. Serv., P. O. Box 63, Morrisville, PA 19067.

This key is divided into two sections, one for identifying shorebirds regularly occurring in North America, and one for identifying rare or accidental Eurasian species. Many of the couplets are based on relative head-bill length. On free, actively feeding shorebirds, making decisions on this ratio, as well as choosing among many of the other couplets, will be difficult. The section on "peeps" provides little of value that is not in standard field guides, and, for regularly occurring species, the key is not a substitute for field guides. Inclusion of a species index would have made it easier to key backwards a bird whose identification is known or suspected. Perhaps the most useful feature of the book is the section on rare or accidental shorebirds. Much of this information is not included in standard North American guides. This will be useful for visitors to Alaska and other hotspots for vagrant shorebirds, and a familiarity with these species will help the serious shorebird watcher in Tennessee.

---Charles P. Nicholson

THE MIGRANT

THE SEASON



NESTING SEASON: 16 May - 31 July 1981

Three of the four regional compilers commented on the weather during this season, and, as their comments differed, it is difficult to draw conclusions from them. Among the highlights of the season were Common Loons at Kingston Steam Plant and at Old Hickory Dam, Ruddy Ducks at Memphis, and White-throated Sparrows at two locations in the Western Coastal Plain during June. The Song Sparrow continued to spread in Middle Tennessee, and was recorded at new locations near Hartsville, Dixon Springs, and Livingston. On the negative side, observers in the two eastern regions reported low Purple Martin numbers.

WESTERN COASTAL PLAIN REGION — The western section of the state experienced a mild summer and moderate rainfall.

Heron-Tern: W. G. Criswell reported a new heron roost west of Dyersburg. He was unable to determine the exact location. The old roost, located within the city limits, was abandoned this year. He made the following observations:

	2 Jul	3 Jul	9 Jul	12 Jul	19 Jul	22 Jul	5 Aug
Little Blue Heron							Ť
Ad	194	170	208	265	489	248	513
Pied	-	6	7	9	5	3	3
Imm	*0000070	-	23	50	125	78	115
Cattle Egret	1	1	1	1	6+	5	50
Yellow-crowned Night Heron							
Ad		6+	-	-	6+		
Imm	4	-	7	6			
White Ibis Imm	1	1	4	4			3

Yellow-crowned Night Heron: 8 nests observed at McCorkle site, MEM (JLS). Least Bittern: 15 Jun (3 ad; nest with 4 eggs) HM (WGC). Ruddy Duck: 18 Jun (6) ROL (BBC, LCC); 3 Jul (3) ROL (CWB); 15 Jul (0) ROL (CWB). Hooded Merganser: 10 Jun (2) WL (WPP, WRP). Mississippi Kite: present at 4 locations in N Dyer Co. (WGC); 4 Jun - 24 Aug (2-13) within city limits of Memphis (JLS). Bald Eagle: 2 young hacked from nest platform, RL (AIS, NMS, TWRA). Osprey: 24 Jul (3) Lost Pond, RL (DP); 3 active nests, RL (TWRA); 2 immatures near Eagle hacking project RL (AIS, NMS). American Kestrel: 31 May (1) MI (MCTOS), 2 Aug (1) MI (BF). Spotted Sandpiper: 14-22 Jun (2) TN 79, Lake Co. (WGC). Greater Yellowlegs: 12 Jul (2) TN 79, near Powell's Ferry (WGC). Lesser Yellowlegs: 15 Jul (2) 2 mi SE of Millington (DP). Pectoral Sandpiper: 14 Jul (3), 23 Jul (3) 2 mi SE of Millington (DP). Least Tern: 31 May (5), 14 Jun (20), 26 Jul (10+) TN 79, Lake Co, (WGC). Black Tern: 24 Jul (17) RL (DP).

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Whip-poor-will - Wren: Chuck-will's-widow: 8 Jun (17 at 12 of 20 stops) Lick Creek Rd. 9.6 mi S of Henry Co. in Benton Co. (BBC, LCC). Whip-poor-will: 8 Jun (27 at 16 of 20 stops) Lick Creek Rd. 9.6 mi S of Henry Co. in Benton Co. Willow Flycatcher: (3 territorial males, no nests found) CB (TDP). Tree Swallow: 7 Jun (1 flushed from nest cavity) CB (TDP); 9 Jun (8) central RL (TDP); 9 Jun (10 birds, 2 ads feeding y) CL (BBC, LCC); 18 Jun (5) NL (BBC, LCC). Bank Swallow: 31 May (21 burrows in sand ridge) TN 79, Lake Co., 14 Jun (1) same area (WGC). Cliff Swallow: 1 May (20 birds, 68 nests, 16 almost complete) I-40 mile 133; 4 May (60 birds, 50 nests) TN 69, White Oak Creek; (no birds, 75 nests from last year, traces of 180 nests in years past) TN 142, Owl Creek (BBC, LCC). House Wren: 29 Jun (2) FPSP, W side of old channel (BBC, DP). Bewick's Wren: 9 Jun (1) HB (BBC, LCC).

Warbler-Sparrow: Worm-eating Warbler: 7 Jun (1) SFSP (BBC). Yellow Warbler: 9 Jun (1, fewer than previous years) CL (BBC, LCC). Prairie Warbler: 8 Jun (6) on ridge at head of Rutherford Fork of Obion River, east of US 70 (BBC, LCC); 13 Jun (1) TN 76, (3) H (CDR, MGW); 25 Jun (1) H (LCC). Scarlet Tanager: 13 Jun, 25 Jun, 13 Jul (6) at 9 locations in bottoms of HNWR (MCTOS, BCC, LCC). Painted Bunting: 31 May (8) PI (MCTOS), (2) PI Causeway (MCTOS). Grasshopper Sparrow: 9 Jun (2) TN 69, SW Decatur Co., 13 Jun (1) Henry-Weakley Co line, south of Middle Fork of Obion River (DM, GM); 12 Aug (2 ad, 5 imm) PF (CHB, HBD, NMS, WRP). Bachman's Sparrow: 27 Jun (1) 3 mi N of Toone (RJ, ARL). White-throated Sparrow: 11 Jun (1) 2 mi NE of Samburg (WPP, WRP); 29 Jun - 2 Jul (1) MEM (BW, WLW).

Locations: CB—Crockett Bottoms, Gooch WMA, Obion Co.; HB—Hooker's Bend, Hardin Co.; H—Hillville, Hatchie National Wildlife Refuge, Haywood Co.; CL—Camden Landing, Benton Co.; MI—Mud Island, Shelby Co.; NL— North Lake, Shelby Co.; RL—Reelfoot Lake; ROL—Robco Lake, SW Shelby Co.; WL—Walnut Log, Reelfoot Lake, Obion Co.; MEM—Memphis; HM— Hooper Marsh, Dyer Co.; Powell's Ferry—Lake Co.; PI—President's Island, west Shelby Co.; FPSP—Fort Pillow State Park; SFSP—Shelby Forest State Park.

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

CENTRAL PLATEAU AND BASIN REGION—In Nashville, the last half of May was cool, June was wet and July normal.

Loon-Hawk: Common Loon: 30 Jul - 6 Aug (1, breeding plumage) Old Hickory Dam (MPS, VMS), (Jul/Aug records in 1975, 1977, 1979 in Nash area). Black-crowned Night Heron: at least 75 active nests Bordeaux Heronry, Nash, seemed successful (NTOS); colony on Mill Creek, Nash did not breed (MLB, FJM, ADP). Least Bittern: 6 Jun (3) Goose Pond, GYC (FJM, DRJ); 6 Jul (1) and 4 Sept (1) Metro Center, Nash (DFV), not found between these dates, possibly 2 birds. American Bittern: 6 Jun (1) Goose Pond, GYC (FJM, DRJ). Blue-winged Teal: 31 May (2, pair) Metro Center (DFV). Cooper's Hawk: 17 Jun (1) I-40, mi 276, PUC (CPN). Broad-winged Hawk: 1 Jul (2 y in nest), 5 Jul (2 y perched in nest tree) BS (KAG, DFV), nest successful.

Gallinule-Flycatcher: Common Gallinule: 17-18 May (1) Metro Center (LDR), 14th Nash record (8th spring). American Woodcock: 9-17 May (1-2 singing) Metro Center (MLB). Common Snipe: 18 May (1) Metro Center (DFV). Spotted Sandpiper: 17 Jun (1 y + 2 ads) Metro Center (DFV), nested here 1977, 1979, 1980. Ring-billed Gull: 30-31 Jul (1 imm) beach, Old Hickory L (MPS), limited summer records Nash area. Forster's Tern: 6 Jul (1) Metro Center (DFV),

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6th Jul record Nash. Black Tern: 6 Jul (1) Metro Center (DFV). Willow Flycatcher: 3 males singing on territory during summer Metro Center (DFV).

Warbler-Sparrow: Kentucky Warbler: 31 Jul (1 found dead) Vanderbilt, Nash (MAG), denotes definite movement. Connecticut Warbler: 29 May (1) Shelby Bottoms, Nash (MPS). Mourning Warbler: 22 May (1) Love Circle, Nash (JCA). Song Sparrow: 16 May (1) Livingston, OVC (CPN) and (2 singing) Gallatin Steam Plant (DFV); 16-17 Jun (9) Hartsville, (3) at 1980 location near Johntown, TRC and (1) 2.5 mi S Dixon Springs, SMC (CPN); second consecutive summer one singing near 100 Oaks Shopping Center, Nash (MLJ); in Nashville, Metro Center breeding population seemed to be going strong (DFV).

Locations: GYC—Grundy Co.; OVC—Overton Co.; PUC—Putnam Co.; SMC—Smith Co.; TRC—Trousdale Co.

MICHAEL LEE BIERLY, 3825 Bedford Avenue, Nashville 37215.

EASTERN RIDGE AND VALLEY REGION—Once again Steve and Barbara Stedman were the vanguard in monitoring the spring shorebird movement at the Kingston Steam Plant. Their efforts extended from 28 February to 27 May. There were 89-305 unidentified "peeps" recorded between 16 and 27 May. Other birders noted the first southward migration at the site on 6 July.

Good news can be reported on nesting Sharp-shinned Hawks and Ospreys. Two nestings of Sharp-shinneds were reported and 4 nests of Ospreys were followed on Watts Bar Lake.

Ann Gibson has been closely monitoring the summering House Wrens in Chattanooga and has yet to fully document their successful reproduction in the area. Among other notes of interest, Chuck Nicholson recorded an all-time high state Breeding Bird Survey count of 83 Song Sparrows on his Lovell route.

Loon-Osprey: Common Loon: 20 May (1) KSP (MWA); 20 Jun - 28 Jul (1) KSP (KHD, LHD, et al.). Double-crested Cormorant: 20 May (1) Fort Loudoun Lake (PSP). Little Blue Heron: 29 May (1) Dandridge (PSP); 18 Jun (2) Reflection Riding (KHD, LHD); 3 Jul (2) KNX (PSP). Cattle Egret: 27 May (1) KSP (SJS, BHS, ARH, MWA); 28 May (2) SAB (KHD, LHD); 8, 26 Jul (2-1) HRA (fide J. W. Knott). Great Egret: 27 Jul (1) SAB (KHD, LHD). Black-crowned Night Heron: 30-40% increase in numbers at colonies in KNX area (Burline Pullin). Least Bittern: through period Surgoinsville (WKJ). American Bittern: 30 May (1) MAC (RBW). Redhead: 27 May (1) KSP (BHS, SJS). Lesser Scaup: one during period JNC (RLK). Ruddy Duck: 22 May (1) KSP (BHS, SJS). Sharp-shinned Hawk: active nest OKR (FJA); ad, 2 y Jefferson City (Howard Chitwood, Nelson Ross). Cooper's Hawk: 22 May (1) AUS (HHD); 20 Jun (1) Huntsville (CPN). Red-shouldered Hawk: active nest OKR (FJA). Broad-winged Hawk: 22 Jun (nest w/2 y) Orebank, Sullivan Co. (Thomas F. Laughlin). Bald Eagle: 22 May (1 imm) KSP (MWA, BHS, SJS); 25 May (1) Baileyton, GNC (Michael McGrew); 24 Jun (1 ad) Norris Lake (JCH); 30 Jul (1 ad) Holston R. at Rogersville (WKJ). Osprey: at their usual locations on Watts Bar Lake with 4 nesting attempts; 3 nests fledged a total of 4 young with one nest destroyed in a storm (T. Edward Beddow).

Rail-Owl: Virginia Rail: 18 May (1) CHA (JCH). Sora: 20 May (1) CHA (JWS). American Coot: 18, 27 Jul (2) KSP (KHD, LHD). Semipalmated Plover: 16-27 May (1-18) KSP (LNA, MWA, BHS, SJS, ARH). Ruddy Turnstone: 19 May (4) KSP (BHS, SJS). American Woodcock: 31 May (2), 6 Jun (1) MAC

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(RBW). Willet: 6 Jul (2) KSP (KHD, LHD). Greater Yellowlegs: 19 May (1) KSP (BHS, SJS); 14-31 Jul (1) KSP (KHD, LHD). Lesser Yellowlegs: 6-31 Jul (1-12) KSP (KHD, LHD). Pectoral Sandpiper: 16 May (4) KSP (BHS, ARH); 14-31 Jul (4-20) KSP (KHD, LHD). White-rumped Sandpiper: 16-27 May (1-20) KSP (ARH, LNA, MWA, BHS, SJS); 18 Jul (1) KSP (KHD, LHD). Baird's Sandpiper: 13-14 Jul (1) KSP (KHD, LHD); 19 Jul (1) KSP (CPN). Least Sandpiper: 19 May (25) KSP (BHS, SJS); 6-31 Jul (3-34) KSP (KHD, LHD). Dowitcher spp. 20-28 Jul (1-2) KSP (KHD, LHD). Marbled Godwit: 16-17 Jul (1) KSP (LNA, MWA, BHS, SJS). Stilt Sandpiper: 16-31 Jul (1) KSP (MWA, LNA, BHS, SJS). Semipalmated Sandpiper: 16 May (1) KSP (ARH, BHS); 6-31 Jul (4-40) KSP (KHD, LHD). Western Sandpiper: 16 May (1) KSP (ARH, BHS); 18 Jul (3) KSP (KHD, LHD). Sanderling: 19 May (1) KSP (BHS, SJS); 18 Jul (1) KSP (KHD, LHD). American Avocet: 20 Jul (3) KSP (KHD, LHD). Ring-billed Gull: 22 May (22) Cherokee Dam (JAK). Laughing Gull: 2 Jun (1 ad) Nickajack Lake (KHD, LHD). Caspian Tern: 19 May (1) KSP (BHS, SJS). Black Tern: 19 May (6) KSP (BHS, SJS); 20 May (4) KSP (MWA, ARH); 20-21 Jul (1-2) KSP (KHD, LHD). Barn Owl: 16 May (nest with 7 y) Ottway, GNC (fide HS); at least 2 pairs near JNB (RLK); present usual site White Pine (JAK). Great Horned Owl: one nest site near Horse Cove (MD, SG).

Woodpecker-Shrike: Red-headed Woodpecker: 5 Jul (1) Alcoa (Marcia L. Davis). Red-cockaded Woodpecker: 25 May (2) Catoosa WMA (JWS, DRJ, Kathy Davidson). Willow Flycatcher: 16 May (2) Alcoa Marsh (ARH, BHS); 2 pairs AUS thru 15 Jul (RLK); 14, 18 Jul (1 singing) KSP (KHD, LHD). Horned Lark: usually 10-15 singing during May around farm JEC, then at end of period up to 40 (JAK). Cliff Swallow: during July, 12 nests located on 2 barns near Boone Lake (RLK). Purple Martin: low numbers present at many colonies; 21 Jul (2000) HRA (KHD, LHD). House Wren: 8 July pair at birdhouse, CHA; one individual was present until 17 July at another site in CHA — still no proof of nesting in CHA (Ann Gibson). Swainson's Thrush: 26 May (1) JHC (SG). Cedar Waxwing: 21 Jun (10) MCI (RBW). Loggerhead Shrike: active nest Eastern State WMA, KNC (Paul D. Hartigan); pair through season near LaFollette (JCH).

Warbler-Sparrow: Swainson's Warbler: 5 singing birds during June & July in Horse Cove (RL). Blue-winged Warbler: one on Oliver Springs BBS for 4th year (James M. Campbell). Cape May Warbler: 30 May (1) JHC (MD). Blackpoll Warbler: 18 May (1) JHC (SG). Wilson's Warbler: 16 May (1) JHC (SG). Blue Grosbeak: 3-5 pair regular JNB (RLK); 4 singing around farm JEC (JAK). Dickcissel: pair regular JEC (JAK). House Finch: 1 Jul (1) Greeneville (HS); 2-4 birds regular near JNB (RLK); immature birds present at KNX (ARH, RDH, Jim & Betty Mason). Pine Siskin: 30 May (1) KNC (ARH, BHS). Savannah Sparrow: 20 May (2) CHA (JWS). Grasshopper Sparrow: 3-5 singing regular near JNB (RLK). Bachman's Sparrow: 5 May (1) Newport (JAK) — a later check did not reveal the bird. Song Sparrow: continued population increase KNX area, all-time high BBS total for the state was 83 on 14 Jun Lovell BBS (CPN).

Locations: AUS—Austin Springs; CHA—Chattanooga; FLL—Fort Loudon Lake; GNC—Greene Co.; HRA—Hiwassee River Area; JEC—Jefferson Co.; JNB—Jonesboro; JNC—Johnson City; KNC—Knox Co.; KSP—Kingston Steam Plant; KNX—Knoxville; MCI—MaClelland Island; OKR—Oak Ridge; SAB— Savannah Bay.

KENNETH H. DUBKE AND LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION—Overall, normal rainfall and above average temperatures prevailed throughout the period. During the last week of May, the first week of June and the first 7 days of July this region received 90% of its summer rainfall.

Our region had nesting reports of Yellow-crowned Night Herons again in Elizabethton, Wild Turkeys on Holston Mountain, Alder Flycatchers again on Roan Mountain, along with Cedar Waxwings. Red Crossbills started showing up in the Smokies in early July. One of the more puzzling situations is the very low Purple Martin population.

Heron-Sandpiper: Great Blue Heron: last spring sighting 26 May (2) RC (RLK). Yellow-crowned Night Heron: only 1 pair nested this year, last seen 17 July (4) ELI (GDE et al.). Canada Goose: 23 May (2), 20 Jun (3) SHL (RL). Ring-necked Duck: last seen 23 May (1) Townsend (SJS, BHS, ARH). Sharp-shinned Hawk: no reports. Cooper's Hawk: 19 July (1) WatL, 24 July (1) ELI (GDE). Osprey: last spring sighting 16 May (1) WatL (GDE). *WILD TURKEY:* 3 or 4 broods on Holston Mtn. (*fide* U.S. Forest Service). Semipalmated Plover: 31 July (1) RC (RLK). Amer. Woodcock: 18 May (1) ELI (GDE). Spotted Sandpiper: early fall sighting 17 July (1) RC (RLK). Solitary Sandpiper: 1st fall sighting 31 July (2) RC (RLK).

Dove-Wren: RINGED-TURTLE DOVE: most likely an escaped bird, 29 May (1) Bristol (RL). Black-billed Cuckoo: 16 Jun (1) IMG (SG). Great Horned Owl: 1 to 2 birds regular at SHL (RL et al.). Hairy Woodpecker: no reports. Alder Flycatcher: 1 June thru 9 July (max. 3 males) RM (RLK et al.). Olive-sided Flycatcher: 1 Jun (2 calling) GSMNP, Alum Cave Trail (MWA). Purple Martin: *VERY LOW* numbers, last seen 15 July in ELI (GDE). Common Raven: several imm seen on RM, IM (LHTOS). Red-breasted Nuthatch: returned to higher elevations of RM on Jun 1 after complete absence during past winter and spring (*fide* RLK, EHS). Winter Wren: abundant on RM above 3500' during Jun, Jul (*fide* RLK).

Kinglet-Sparrow: Golden-crowned Kinglet: abundant during entire period on RM above 4000' (*fide* RLK, EHS). Cedar Waxwing: abundant throughout period with one nest located on RM on 7 Jul (RLK). Warbling Vireo: 17 May thru end of period (2 pairs nested) WatR (LHTOS). Golden-winged Warbler: 4 to 6 pairs nested at RMSP during period (RLK et al.). Black-throated Blue Warbler: 8 Jul (1 bird at 5800' elevation) RM (EHS). Cerulean Warbler: 22 May (2) IMG (SG, HD). Pine Siskin: 30 May (1) GSMNP, Indian Gap (SJS, BHS, ARH). Red Crossbill: 5 July (8) GSMNP, Indian Gap (CPN, ABS). Grasshopper Sparrow: 2 to 3 pairs present near Bluff City (RL et al.).

Locations: ELI—Elizabethton; GSMNP—Great Smoky Mtn. National Park; IMG—Iron Mtn. Gap; RC—Roan Creek; RM—Roan Mtn.; RMSP—Roan Mtn. State Park; SHL—South Holston Lake; WatL—Watauga Lake; WatR—Watauga River (near Eliz).

GLEN D. ELLER, Route #3, Grandview Terrace, Elizabethton 37643.

1981

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OTHER ABBREVIATIONS: WMA—Wildlife Management Area; BBS— Breeding Bird Survey.

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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.

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

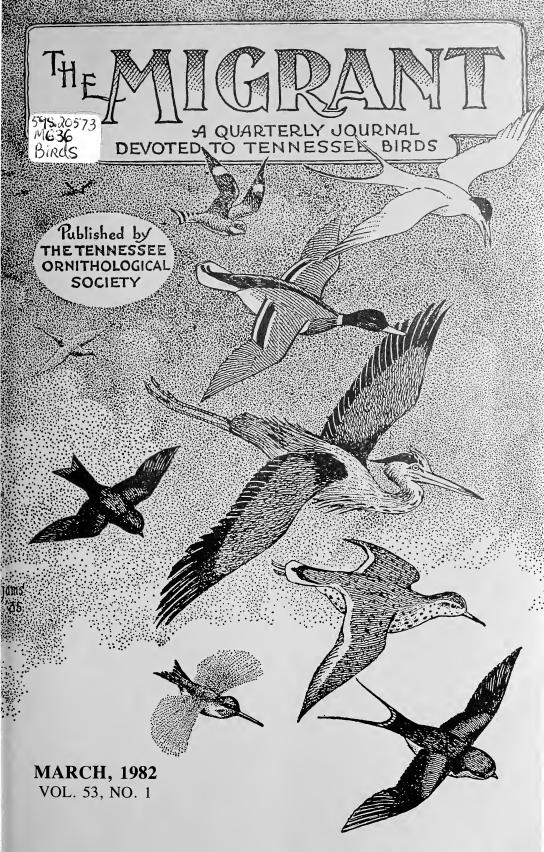
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NO. 1

FIRST RECORD OF OCCURRENCE AND POSSIBLE NESTING OF BLACK-BELLIED WHISTLING-DUCK IN TENNESSEE

T. DAVID PITTS

During late summer and fall 1978, a pair of Black-bellied Whistling-Ducks (*Dendrocygna autumnalis*) nested at Reelfoot Lake in northwestern Tennessee. I first observed the pair on 30 August 1978, in Broad Slough which is at the boundary of Obion and Lake Counties. Prior to this I had received several reports of "odd" ducks near the Kiwanis Park on the southeastern shore of Lower Blue Basin of Reelfoot; I dismissed these reports as being observations of molting domestic or semi-domestic ducks commonly seen along this area. Comments by W. L. Smith of the UTM Biology Department convinced me to investigate these reports. Initial observations of 2 long-legged ducks with contrasting black and white wings, black abdomens, red bills, and pink legs and feet established the identity.

Apparently the pair had been at Reelfoot since at least 1 August 1978; possibly they arrived during July. Numerous TOS members saw the pair in August and September, usually in the area between the Spillway and the Kiwanis Park. The disappearance of one bird in September led to speculation about its death or departure. This speculation ended with the appearance of both adults and 8 young on 7 and 8 October 1978. All sightings of the young were in the same area where the adults were previously seen. No documentation of the presence of the young birds is known. W. L. Smith and I searched the area repeatedly on 9 October in an effort to locate and photograph the young; we did not see adults or young. I talked (on 9 October) with a pair of Illinois fishermen who were in the area on 8 October. They accurately described the adults and the young; they also confirmed earlier reports of 8 young. Several local residents, who by now were very familiar with the adults, reported observing 8 young. Neither adults nor young were observed again. Almost certainly the young did not survive. The nest site was not identified.

The adults gave no indication of being domestic or escapees from captivity. While they would tolerate quiet human approach by boat to within approximately 75 yards, they rarely allowed closer views. Photographs by W. L. Smith, Paul Crawford, P. Bond (Figure 1), and the *Lake County Banner* are known to exist.

Black-bellied Whistling-Ducks typically nest along southern coastal Texas through coastal Mexico and Central America into Argentina (Bellrose 1976:80-

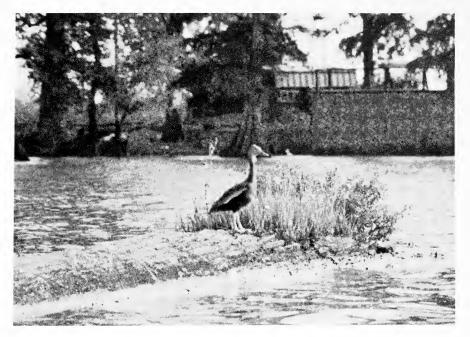


FIGURE 1. Black-bellied Whistling-Duck at Reelfoot Lake, Tennessee. Photograph by Pete Bond, Union City, Tennessee.

81). While most Black-bellied Whistling-Duck clutches are laid in April and May in lower Texas, some clutches were begun in August (Bolen 1967). Normally cavities, such as nest boxes are used, although ground nests have been found (Bellrose 1976:83). Clutch size averages 13.4 with an incubation period of 28-30 days (Bolen 1967). If the assumptions are made that the Reelfoot pair had 8 eggs which were incubated approximately 28 days and that hatching occurred on 6 October, the first egg was laid on approximately 1 September.

The United States range of Black-bellied Whistling-Ducks is mainly limited to southern Texas, but sightings have been made as far east as Jekyll Island, Georgia (Teulings 1977), as far west as California (McCaskie 1977), and as far north as Iowa (Barratt 1977). The nesting at Reelfoot may be the northernmost reported to date for the species. The occurrence and nesting of Black-bellied Whistling-Ducks at Reelfoot are more plausible when we consider that Black-bellied Whistling-Ducks have been sighted in other areas much further from Texas, that the species has a long nesting season, that some pairs renest after successful nests, and that the species can adapt to a variety of nesting sites.

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Department of Biological Sciences, The University of Tennessee at Martin, Martin, Tennessee 38238. Accepted 1 May 1982.

BOOK REVIEW

A GUIDE TO BIRD FINDING WEST OF THE MISSISSIPPI, 2nd Ed. By Olin Sewall Pettingill, Jr., illus. by George Miksch Sutton. 1981. New York, Oxford University Press. 783 pp. \$25.00. Pettingill's original eastern bird-finding guide, published in 1951, was the first such work to cover a large geographic area. Two years later, the first edition of the western guide was published. And now we have a revised second edition of the western guide. The years between the two editions have seen changes in the population of both humans and birds, construction of the interstate highway system, immense growth of birding as a pastime, and the publication of many bird-finding guides covering states or smaller areas.

For each western state (except Hawaii and Alaska), Pettingill gives a description of the major physiographic regions and vegetation types, as well as typical birds of the different habitats. Some state accounts were written by residents or other familiar with the state. The remainder were authored by Pettingill, and local authorities are acknowledged from most states. Within each state, individual birding areas are listed under headings of cities or towns. A good road atlas is an essential companion to this book, which contains no maps.

Many of the site descriptions are not as detailed as those found in other bird-finding guides, which are often cited in the state accounts. On a recent trip to Albuquerque, I found the accounts more than adequate, however. With its broad area coverage and species lists, this book will be of great value to Tennessee birders planning trips west, even if no further than Blytheville or Horseshoe Lake, Arkansas.

CHARLES P. NICHOLSON

THE 1981 CHRISTMAS BIRD COUNT

RICHARD D. LURA

This year 136 species were recorded on the 20 counts submitted for publication. This was an increase in the number of counts over the last few years, but below the number published in the mid-1970's. The species total has been exceeded on only 3 previous counts.

After a bitterly cold first weekend, weather during the count was mild, and only one count reported rain. Many songbirds were reported in lower than average numbers, perhaps because abundant crops of wild food failed to concentrate birds at feeders. Purple Finches were in low numbers and were outnumbered by House Finches on some East Tennessee counts. Fourteen species of sparrows were recorded. The "Caribbean Coot" at Chattanooga appeared on a Tennessee Christmas count for the first time.

INFORMATION ON THE COUNTS

MEMPHIS — 20 Dec.; 0645 to 1700; clear, A.M., cloudy, P.M.; temp. 17 to 36° F; wind NW, 5-10 mph; 34 observers in 13 parties; 128 party hours (97 on foot, 31 by car); 196 party miles (76 on foot, 120 by car).

Diane and William Bean, Rob Browne, Carolyn Bullock, Fred T. Carney, Tina Carpenter, Robert Casey, Lula C. and Ben B. Coffey, Jr. (compilers, 672 N. Belvedere 38107), Dollyann Daily, Dr. Julian Darlington, Helen B. Dinkelspiel, Jack and Katherine Embury, Jim and Sue Ferguson, Bob Ford, Wm. B. Fowler, Jr., Joe B. Guinn, Gerald Papachristou, George R. Payne, Jr., Rob and Wm. P. Peeples, David Phillips, Ernest Restivo, Richard G. Taylor, Julia Thompson, Dr. Howard H. Vogel, Jr., Steve J. Wagner, Martha Waldron, Bobby and Dr. Wendell L. Whittemore, Jeff Wilson, and Patricia Wood.

REELFOOT LAKE — 19 Dec.; 0515 to 1630; temp. 13 to 31° F; wind, NW, 0-3 mph; 13 observers in 5 parties; 43 party hours (13 on foot, 30 by car); 336 party miles (18 on foot, 318 by car).

Joel Bonnell, Ben Coffey, Lula Coffey, Wendell Crews, Bill Fowler, Van Harris, Ken Leggett, Don Manning (co-compiler), Gina Manning (co-compiler — Box B, Bells 38006), Tom Miller, Latta Richards, Michel Todd, Jeff Wilson.

Seven of the Snow Geese were of the blue form. Sixty-eight of the Bald Eagles were adults. Seen count week: Common Snipe, Turkey Vulture, Black Vulture.

BUFFALO RIVER — 28 Dec.; 0615 to 1830; temp. 44 to 55° F; wind, light; 11 observers in 5 parties; 47 party hours (14 on foot, 33 by car); 215 party miles (21 on foot, 194 by car).

Andy Augustine, David Beckman, Helen Clayton, Lloyd Clayton (compiler — Rt. 4, Box 175A, Lawrenceburg 38464), Jane Egley, Chester McConnell, Dot McConnell, Royce Neidert, Mark Reeves, Damien Simbeck, Don Simbeck.

Good details were submitted on the Short-eared Owl. Seen count week: Great Horned Owl.

ASHLAND CITY — 19 Dec.; 0500 to 1730; temp. 8 to 28° F; wind, W-NW, 5-8 mph; 18 observers in 7 parties.

Jan Alexander, John Bates, Michael Bierly, John Ellis, Craig Empson, Bill Finch, Lucy Finch, Mary Ann Guschke, Tom Guschke, Tom Harston, Kathy Lee, Rocky Milburn, Jim Snapper, Pat Stallings (compiler — 406 N. 17 Street, Nashville 37206), Carol Stewart, Dee Thompson, Lawrence Trabue, Sara Jo White.

Good details on all unusual species. One Bald Eagle was an adult.

COLUMBIA — 26 Dec.; 0500 to 1700; temp. 30 to 47° F; wind, SE, 0-15 mph; 15 observers, 9 in 4 parties plus 6 at feeders; 34 party hours (19 on foot, 15 by car); 220 party miles (10 on foot, 210 by car).

Elizabeth Anderson, Kenneth Anderson, Sarah Early, Barbara Finney, Jim Finney, William Fuqua, Daniel Gray, William Jernigan, Anne Lochridge, Bedford Lochridge, Cleo Mayfield, George Mayfield (compiler — 999 Sunnyside Drive, Columbia 38401), Allen Pressnell, Nancy Thomas, Mitzi Thornell.

Seen count week: Peregrine Falcon, Bewick's Wren.

NASHVILLE — 26 Dec.; 0530 to 1800; A.M. mostly cloudy, P.M. overcast; temp. 36 to 48° F; wind, S, 0-15 mph; 48 observers in 8 parties and 13 feeders; 80 party-hours (52.5 on foot, 27.5 by car) plus 13 at feeders, 3.5 owling; 258 party-miles (27 on foot, 233 by car).

Jan Alexander, Mildred Ansley, John Bates, Willa Bates, Michael Bierly (compiler — 3825 Bedford Avenue, Nashville 37215), Vaunez Brakebill, Jane Bridgman, Jean Cobb, Annella Creech, Milbrey Dugger, Clifton Dunn, John Ellis, Charles Farrell, Clara Fentress, Anne Fort, Bettye Brown Fort, Combs Fort, John Fort, George Freeman, Katherine Goodpasture, Sarah Greene, Mary Anne Guschke, Tom Guschke, Tom Harston, Galen Lenhert, Adiene Lyon, Portia Macmillan, Jane Maynard, Jim McLaughlin, Joe McLaughlin, John McLaughlin, Dick Porter, Virginia Price, Elizabeth Queener, Bob Sharp, Lillian Sharp, William Sharp, Jim Snapper, Pat Stallings, Helen Sterling, Dee Thompson, Lawrence Trabue, David Vogt, Kenneth Walkup, Sarah Walkup, Cliff Whiteside, Hardy Wilcoxon, Virginia Workman.

Good details on unusual species.

HICKORY-PRIEST — 2 Jan.; 0530 to 1630; temp. 27 to 61° F; wind, S-SE, 2-32 mph; 33 observers, 30 in 7 parties plus 3 at feeders.

Frances Abernathy, Jan Alexander, Vivian Anderson, Linda Anderson, John Bates, Michael Bierly, Annella Creech, Clifton Dunn, Beth and H. F. Evans, Katherine Goodpasture, Tom Harston, Carol Knauth, Carol and Hazel Kramer, Kathy Lee, Joe McLaughlin, Rocky Milburn, P. J. New, Marge and Oscar Patrick, Betty Richards, Steve Rannels, Pat Stallings, compiler, Carol Stewart, Ray Stiles, Ann Tarbell, Dale and Janet Townsend, David Vogt.

Good details on all unusual species.

CLARKSVILLE — 2 Jan.; 0630 to 1530; temp. 30 to 58° F; wind, variable, 0-5 mph; 29 observers, 11 in 5 parties plus 18 at feeders; 42¼ party hours (18 on

foot, 24¼ by car); 292 party miles (18¾ on foot, 274¼ by car).

Joe Allen, Adney Cross, Melinda Filson, Mike Filson, Floyd Ford, Scott Gunn, Phila Hach, Annie Heilman, Nita Heilman, William Hudson, Nancy Hughes, Ellen Hutchinson, Mary Jackson, David Joiner, Edna Lyle, Thurston

Roan 1 ~ I 1 ~ 1 1 1 1 1 11 11 11 1 1 1 1 1 11111 1111 111-1 Bris 117 3 51015 12 1 3 1121 0 ł ł. 11 L Eliz 26 1***** N H Q 111 m 11140 115 54 Μļ 1 11 King 1212 35 61 ㅋ니영ㅣ휝 11211 51111 11135 리카 [급 ÷ 1 Gree 1 mm 1111 12 | 1A 116 51010 | | | |∾ 1112 1 | | NIMSE ||||||18111 | | | - | ыI 11 ł 1 11 11 1 | | 111 1 1 Knox 1 121 9 13118 181 ЧS 115 œ 111-31 1 ႕ကဟင္ ł 10 1 Hiwa - 24 - 5 5 | ⁰ ^r | 11918 2 681 ł ន្លីភ្និស្តី I 50 117 1 1 114 1 23 1 - 1 16.08 17.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 16.08 17.08 16.08 16.08 17.08 161318 **~ i 1111 6654 9 4 5 4 8 1 58 പപ 1 1 8 ł Cook || ~ | -| | | | | | | | | | |1 1 1 1 1 1111 | - | | -1114 11.gh 577 120 8111 ł 36 1 | | | | | | | | | furf 11419 11110 |||||||191 | | |11 11 11 ||||11 1 | 1 76 | 33 338 76 - ~ I 33 51310 臣士 5-11 1-112 11 1 lash ън 1811 mle 31151 81118 117 1118 1 7 3 Colu 1808 പ്രപ 11113 151 °21 ∽ 285 년 1 ⁸ 1 년 11445 11 1 | | | | | lds | 8 | 8 | 8 335 110 ¦∞ 부 l - l - j 1 °%22 fe | 8 | 5 | | | | | |82111 Lawr ||∞ 14118 11116 ١٣ -21127 | **−** | |∞ 11 ł 1 | 5 1 1 11 Clar 11012 1112 | | 7 7 | 11189 1 11 11 ł Reel ¦∄∽ç‱ 23M 23M 220 220 220 5888988 7988 I I M 20 11 24 1114 19 52 11 ł di II I S | 8 10118 7 S Luna 5 1 39 1 20 8111 5 1 1 1 L ł - 1 1111 Blk.-cr. Night Heron White-winged Scoter Surf Scoter Dol.-cr. Cormorant Pied-billed Grebe American Wigeon Northern Shoveler Red-br. Merganser Great Blue Heron Ring-necked Duck Common Goldeneye Hooded Merganser Common Merganser White-fr. Goose Accipiter sp. Red-tailed Hawk Teal Turkey Vulture Sharp-sh. Hawk Green-wg. Teal Blue-wg. Teal Greater Scaup Cooper's Hawk Black Vulture Lesser Scaup Connon Loon Horned Grebe Canada Goose Show Goose Mallard Black Duck Gadwall Canvasback Bufflehead Ruddy Duck Vood Duck Scaup sp. oldsquaw Pintail Redhead Joshawk

THE 1981 CHRISTMAS BIRD COUNT

6

Lee, Evelyn Nixon, James Nixon, Bill Milliken, Gloria Milliken, Cathy Petty, Mrs. John Rubel, Besse Sharp, David Snyder (compiler — Rt. 1, Box 6B, Palmyra 37142), Ellen Walker, Woodrow Walker, Priscilla Weathersby, John Wheatley, Barbara Wilbur.

No details of the Rough-legged Hawk were submitted.

Red-shld. Hawk Revogt-legged Hawk Bald Eagle Marreh Hawk Osprey	American Kestrel Ruffed Grouse Bobwhite Turkey Virginia Rail	Sora American Coot Carribean Coot Killdeer American Woodcock	Common Snipe Spotted Sandpiper Least Sandpiper Peep sp. Dunlin	Herring Gull Ring-billed Gull Bonaparte's Gull Gull sp. Rock Dove	Mourning Dove Barn Owl Screech Owl Great Horned Owl Barred Owl	Short-eared Owl Belted Kingfisher Common Flicker Pileated Woodpecker Red-bel, Woodpecker	Red-hd. Woodpecker Yelbel. Sapsucker Hairy Woodpecker Dowry Woodpecker Eastern Phoebe	Horned Lark Blue Jay Common Raven Common Crow Carolina Chickadee
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MURFREESBORO — 19 Dec.; temp. 12 to 20° F; 9 observers, 8 in 3 parties plus 1 at feeders; 137 party miles.

Lou Erwin, Anne Hettish (compiler — 1018 Lawndale Dr., Murfreesboro 37130), Edith Haynes, Larry McFarlin, Gene Odom, Ruth Odom, John Patten, Wilma Hunter, Francis Vaughan.

Tufted Titmouse Mutte-br. Muthatch Red-br. Muthatch Brown-bd. Nuthatch Brown Creeper	House Wren Winter Wren Bewick's Wren Carolina Wren Short-b. Marsh Wren	Mockdngbird Gray Catbird Brown Thrasher American Robin Hermit Thrush	Eastern Bluebird Blue-gray Gnatcatcher Golden-cr. Kinglet Ruby-cr. Kinglet Water Pipit	Cedar Waxwing Loggerhead Shrike Starling Yellow-rp, Warbler Pine Warbler	Palm Warbler Common Yellowthroat House Sparrow Eastern Meadowlark Red-wg. Blackbird	Rusty Blackbird Common Grackle Brown-hd. Cowbird Cardinal Evening Grosbeak	House Finch Purple Finch Pine Siskin American Goldfinch Red Crossbill	Rufous-sd. Towhee Savarnah Sparrow Grasshopper Sparrow LeConte's Sparrow Vesper Sparrow
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Compiler commented on the high Eastern Bluebird number.

HIGHLAND RIM — 19 Dec.; temp. 13-28° F; 16 observers in 7 parties; 20.5 party hours; 201.5 party miles (1.5 on foot, 199 by car).

Carroll Barr, Stanley Barr, Dean Butler, Laura Butler, Marjory Harper, Betty King, Glenn King, Ruth Luckado, Niki Medley, Phil Medley, Erma Rogers

Luckado, Niki Medley, Phil Medley, Erma Rogers (compiler — Route #1, Hillsboro 37342), Lillie Willard, Evelyn Wilson, Wanda Winnett, Lee Wood, Robert Wood.

COOKEVILLE — 26 Dec.; 40° F; 7 observers.

Kathryn Coward, Sam Coward (compiler — Box 49465, Algood 38501), Amy Johnson, Mildred Lassiter, Carrol Warren, Richard Simmers, Chrissa Wendt.

HIWASSEE — 1 Jan.; 0615 to 1915; temp. 40 to 55° F; wind, calm; 10 observers in 6 parties; 60 party hours (35 on foot, 22 by car, 3 by boat); 344 party miles (21½ on foot, $317\frac{1}{2}$ by car, 5 by boat).

Angela Davis, Ken Dubke, Lil Dubke, Billy Johnson, Starr Klein, Tony Koella, Dave Matthewson, Chuck Nicholson, Johnny Parks, Boyd Sharp, Randy Stringer (compiler — 554 McCallie Ave., Chattanooga 37402).

One of the Bald Eagles was an adult. Details submitted on all unusual species.

CHATTANOOGA — 19 Dec.; 0300 to 1830; temp. 12 to 31° F; wind, NE, 5-10 mph; 26 observers, 22 in 6 parties plus 4 at feeders; 72½ party hours (51½ on foot, 21 by car); 597 party miles (38 on foot, 559 by car).

Carl Adams, Judy Boyles, Katherine Boyles, Edith Bromley, Kathy Davidson, Ken Dubke, Lil Dubke, Chris Haney, Daniel Jacobson, Al Jenkins, Billy Johnson, Starr Klein, Barbara McMahon, Mike McMahon, Dave Matthewson, Johnny Parks, Kent Pennington, Peter Robinson, Joe Stone, Randy Stringer (compiler — 758 Emory Dr., Chattanooga 37415), Dale Taylor, Bruce Wilkey.

Good details submitted on unusual species. Seen count week: Turkey, Palm Warbler.

KNOXVILLE — 20 Dec.; 0530 to 1715; temp. 10 to 34° F; wind, calm; 29 observers in 12 parties; 95 party hours (47 on foot, 48 by car); 452 party miles (38 on foot, 414 by car).

Frank Bills, Sharon Bostick, John Burkhart, Dean Chaney, Marcia Davis, Barbara Finney, Ron Foresta, Margie Funk, Chris Hamilton, Paul Hartigan, David Highbaugh, Audrey Hoff, Ron Hoff, Fred Houser, J. C. Howell, Tony Koella, Gregg Lagerberg, Ken McClean, Sally Mirick, Charles Nicholson, Holly Overton, J. B. Owen, Paul Pardue, Mabel Sanders, Boyd Sharp, James Tanner (compiler — Rt. 28, Box 155, Knoxville 37920), Mary Trice, Linda Turner.

Seen count week: Barred Owl, Pine Warbler.

GREAT SMOKY MOUNTAINS NATIONAL PARK — 3 Jan.; 0530 to 1715; overcast, moderate to heavy rain throughout day; temp. 29 to 66° F; wind, variable, gusts to 30 mph; up to 10 in. snow cover, high elevations; 24 observers in 15 parties; 94.5 party hours (60 on foot, 34.5 by car); 346 party miles (82 on foot; 264 by car).

Alya Dean Brown, Winnifred Brown, Jim and Betty Reid Campbell, Howard Chitwood, Marcia Davis, Don DeFoe (compiler — Great Smoky Mountains National Park, Gatlinburg 37738), Katherine Foster, Jim and Brenda Graves, David Highbaugh, Joe Howell, Tony Koella, Alison and Bill McNutt, Chuck Nicholson, Holly Overton, J. B. Owen, Paul Pardue, Boyd Sharp, Johneta and Louis Smith, Jim Tanner, Linda Turner.

GREENEVILLE — 30 Dec.; 0700 to 1730; temp. 20 to 40° F; wind, light; 19 observers; 25½ party hours (18 on foot, 2 by car, 5½ by canoe); 43 party miles (6 on foot, 37 by car, 2 by canoe).

KINGSPORT — 2 Jan.; 8 observers.

Didi Eiklor, John Eiklor, Fred Alsop, Lois Alsop, Tom Finucane, E. E. Scott, Arthur Smith, Ann Switzer.

ELIZABETHTON (Lee R. Herndon Chapter) — 26 Dec.; 0645 to 1700; temp. 29 to 45° F; 14 observers; 48 party hours (18½ on foot, 29½ by car); 277 party miles (13 on foot, 264 by car).

Martha Dillenbeck, Helenhill Dove, Glenn Eller — compiler — Rt. 3, Grandview Terrace, Elizabethton 37643), Sally Goodin, Dick Hegler, Ralph Keffer, Rick Knight, Joy Kyle, Richard Lewis, Dick Lura, Alan Smith, Glenn Swafford, Jane Whitehead.

Details submitted on the unusual species.

BRISTOL - 27 Dec.; temp. 31 to 48° F; 9 observers.

Carolyn Coffey, Janet Coffey, Wallace Coffey, Bert Hale, Ken Hale, Loraine Hale, Richard Lewis (compiler — Rt. 3, Box 470, Bristol 37620), Robin Rasor, John Wright.

ROAN MOUNTAIN — 30 Dec.; 0645 to 1545; temp. 6 to 42° F; 6 observers.

Bill Bridgeforth, Helenhill Dove, Glenn Eller (compiler — Rt. 3, Grandview Terrace, Elizabethton 37643), Harry Farthing, Sally Goodin, Rick Knight.

MAGAZINE REVIEW

THE LIVING BIRD QUARTERLY — Published by the Laboratory of Ornithology, Cornell University, P. O. Box 223, Etna, NY 13062. Volume 1, No. 1 of this new magazine was mailed in July 1982. It is a descendent of *The Living Bird*, the Lab's former annual bulletin. When the annual *Living Bird* was first published in 1962, its goal was to present varied articles on bird life, understandable to amateur ornithologists and birdwatchers, as well as professionals. The quarterly pledges to carry on this tradition. As with the annual, the quarterly is illustrated with original drawings and paintings, and also includes color and black-and-white photography, printed on glossy paper.

At present, *The Living Bird Quarterly* is publishing invited articles. The first issue, 24 pages in length, features an article on reproductive success in songbirds by Raymond J. O'Conner, director of the British Trust for Ornithology, and articles on the International Crane Foundation and the Atlantic Puffin reintroduction program at Eastern Egg Rock, Maine. There is also a charming painting of a fledgling cuckoo by George Miksch Sutton. In its present format, the quarterly will not be able to publish the long, copiously illustrated articles which previously appeared in the annual. The Lab intends to publish *The Living Bird* occasionally as a supplement, and thus, I hope, continue to provide a niche for the longer articles.

Subscription to *The Living Bird Quarterly* is included with membership in the Laboratory of Ornithology. I wish the Lab luck with this new endeavor. It should further the Lab's goal of involving amateurs in bird study, and is just one of several benefits of Lab membership. I also hope that the quarterly is not host to the production delays which continually plagued the former annual.

CHARLES P. NICHOLSON



ROUND TABLE NOTES

FISH CROWS OVER SAVANNAH BAY, HAMILTON COUNTY, TEN-NESSEE — At 1015, 10 April 1979, I was outside our house on Savannah Bay, Chickamauga Lake, when my attention was directed to four calling Fish Crows (Corvus ossifragus) leisurely flying very low overhead. Immediately I ran into the house and alerted my wife Lil to rush outside and listen for a strange bird. Without hesitation, she blurted out "Fish Crows." The birds flew slowly from the south to the north over the bay. There were no further observations of the birds.

In a later conversation with Lil, Chris Haney who lives about 10 km south of us, commented he had a similar experience a few minutes earlier on the same day. These were probably the same birds.

This is the first local record for the species, and to my knowledge, the first East Tennessee record for the species. The southeastern section of the country had recently experienced weather disturbances, and this is probably the reason the crows were temporarily relocated from their usual coastal plain haunts.

The above comments are further details on the observation reported in *The Migrant* 50(3):71-1979.

KENNETH H. DUBKE, 8139 Roy Lane, Ooltewah TN 37363. Accepted 2 November 1981.

SEED-CRACKING ATTEMPTS BY A CAROLINA WREN — On 5 February 1980 at about 1330, I observed a Carolina Wren (*Thryothorus ludovicianus*) attempt several times to crack sunflower seeds at my residence at 4680 Camp Road, Collegedale, Hamilton County, Tennessee. After arching its head up, the bird quickly brought the bill down on the seeds at a near vertical angle. The wren only struck those seeds lying in 12 mm-wide cracks formed by adjacent bricks on a concrete and brick patio. If the seed moved out of the crack as a result of a glancing blow, the wren retrieved it or another seed and deliberately wedged the seed in a crack for another try. After at least ten apparently unsuccessful attempts, the wren gave up and continued foraging in a more usual fashion. I do not know how long the wren had been feeding in this way or if attempts prior to my observations were successful.

The Carolina Wren has a long decurved and compressed bill, ill-equipped for cracking hulls of large seeds. Bent (Life Histories of North American Nuthatches, Wrens, Thrashers, and Their Allies. U.S. Natl. Mus. Bull. 195, 1948) states that animal matter, mostly insects make up 94% of the diet. The remaining 6% is made up of small fruits or seeds that can usually be swallowed whole.

Jays and other corvids, titmice, and nuthatches regularly use their feet or crevices in bark and rocks to restrain seeds while they split them open with blows of the bill. These species, however, have morphologically generalized bills as opposed to the Carolina Wren's more specialized one. Whether this compensatory feeding mechanism is common among wrens and whether it is an innate or learned response is not known. If it is an adaptive response or a solution to permit access to previously unavailable resources (food), it may represent a form of insight learning. Insight learning is difficult to ascertain in wild birds and I would be interested to hear of other, similar instances in feeder-attending Carolina Wrens. J. CHRISTOPHER HANEY, Department of Zoology, University of Georgia, Athens, Georgia 30602. Accepted 2 June 1982.

NEST BOX UTILIZATION BY HOODED MERGANSERS AT HATCHIE NATIONAL WILDLIFE REFUGE — The breeding population of Hooded Mergansers (Lophodytes cucullatus) in the United States has been estimated at 76,000 (Bellrose, Ducks, Geese and Swans of North America, Stackpole Books, Harrisburg, PA, 1976). Relatively little is known about population changes of Hooded Mergansers, although most observers believe the species has declined in numbers, partially, at least, due to destruction of river bottom woodlands (*ibid.*). Possibly the largest concentration of nesting Hooded Mergansers in Tennessee occurs at the Hatchie National Wildlife Refuge in Haywood and Lauderdale Counties.

Between 1967 and 1972, intensive nest box surveys were conducted. These surveys showed an increase in the number of Hooded Merganser nests from 0 in 1967 to 113 in 1972 (Table 1). Intensive nest box surveys have not been conducted in most years since 1972. However, inspections in 1977, 1978, 1980 and 1981 indicate that at least 20% of the approximately 400 nest boxes were used by Hooded Mergansers each year.

	No. Boxes	Nest S	Nest Starts		essful sts	Duck Prod	
Year	Available	WD ^a	HM ^b	WD	HM	WD	HM
1967	58	37	0	35	0	358	0
1968	125	64	13	53	13	634	145
1969	161	98	41	80	20	1032	244
1970	207	85	88	72	61	872	737
1971	227	130	77	111	50	1414	836
1972	298	164	113	128	87	1647	1059

TABLE 1. Results of intensive nest box surveys 1967-72 at Hatchie NW	TABLE 1.	Results of intensive	nest box surveys	1967-72 at Hatchie	NWR
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a. WD = Wood Duck

b. HM = Hooded Merganser

Eggs from Hatchie NWR were used to start the resident flock of Hooded Mergansers at the Patuxent Wildlife Research Center in Laurel, Maryland. The success of the Hatchie NWR nest box program is a positive reflection on the management practices being conducted there. Thanks go to Dean Rundle, Assistant Refuge Manager at Hatchie NWR, for providing the data used in this note.

MARTHA G. WALDRON, 1626 Yorkshire Dr., Memphis, TN 38119. Accepted 15 July 1982.



FALL MIGRATION: 1 AUGUST - 30 NOVEMBER 1981

If the length of the reports here is any indication, this was an interesting season. Weather was mild through most of the period, and the wild food crop was very good. There was no mention of strong cold fronts and attendant waves of migrating birds. Many birds arrived earlier than normal and others lingered beyond normal departure times.

Among the outstanding observations was a Black-legged Kittiwake which landed on the playing field during a Tennessee Tech University football game at Cookeville. At least two Swallow-tailed Kites were reported near Pikeville. This is the easternmost occurrence of this species in Tennessee. Also reported from the Eastern Ridge and Valley Region was a Caribbean Coot. Although the origin and the taxonomy of the coot are debatable, this record, if accepted, will be the first state occurrence and one of the northernmost observations of the species.

Other Rallidae made a good showing. In addition to the usual rail reports, both Common and Purple Gallinules were observed near Chattanooga. Tennessee's first fall Hudsonian Godwit was observed near Charleston in September, a Goshawk was reported at Roan Mountain in August, and Rough-legged Hawks were found at Memphis in October. All three species of scoters occurred at Nashville. Red-breasted Nuthatches were reported from across the state by mid-September, and significant movements of vireos and warblers were observed in August.

"b" denotes a banded bird.

WESTERN COASTAL PLAIN REGION - Climatic conditions were not a significant factor during the period of this report. Fall migration records include a Red Knot at Pace Point, 2,000 Common Nighthawks near Camden, an increase in the number of Sharp-shinned Hawks observed in Shelby County, and the migration of Broad-winged Hawks in Bells. Also included are notable observations from the fall TOS meeting at Paris Landing State Park, 13-15 November.

Grebe-Eagle: Horned Grebe: 13-14 Nov (12-10) PLP (TOS). Double-crested Cormorant: 14 Nov (3) PLP (TOS); 14-15 Nov (4) PAP (TOS). Great Blue Heron: 14 Nov (60) BSU (TOS). Canada Goose: 15 Nov (3000) BRF (TOS). Snow Goose: 15 Nov (50) BRF (TOS). Snow Goose (blue morph): 15 Nov (20) BRF (TOS). Black Duck: 15 Nov (50) BRF (TOS). American Wigeon: 15 Nov (100) BRF (TOS). Hooded Merganser: 14 Nov (22) BSU (TOS). Red-breasted Merganser: 14 Nov (60) PAP (TOS). Sharp-shinned Hawk: 1 Oct (1) OVP (JLS); 10 Oct (1) RAL (DAV); 19 Oct (1) BP (JRW); 16 Nov (1) MEM (DAV). Cooper's

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Hawk: 10 Nov (1) MEM (DAV). Broad-winged Hawk: 24 Sep (310 and 200 in two groups, at about 1000 hrs) BEL (DM, GM). Rough-legged Hawk: 21 Oct (1) PRI (HBD, SCF, SSL); 25 Oct (1) PEF (JRW). Bald Eagle: 13 Nov - 2 Dec (1 ad, 1 imm) OPL (DAW).

Knot-Crossbill: 29 Aug (1), 30 Aug (1) PAP (MPS). Sanderling: 29 Aug (6) PAP (MTOS); 7 Sep (14) PSP (WJB). Western Sandpiper: 30 Aug (1) PAP (MPS). Least Sandpiper: 16 Nov (450) ENB (BBC, LCC, WLW). Bonaparte's Gull: 29 Aug (1) PAP (MTOS); 30 Aug (1) PAP (MPS). Forster's Tern: 29 Aug (8) PAP (MTOS). Common Tern: 29 Aug (19) PAP (MTOS). Black Tern: 29 Aug (30) PAP (MTOS). Common Nighthawk: 29 Aug (2000) between PAP and Camden (JAF, SCF). Red-headed Woodpecker: 25 Oct (107) SHF (MTOS). Purple Martin: 29 Aug (200) BIS (DAD, MGW). Red-breasted Nuthatch: 16 Sep (1) RAL (SCF); 16 Sep (1) MEM (MGW); 12 Oct (1) COV (HAS); 25 Oct (1) SHF (MTOS); 21 Nov (1) PNF (CHB, MGW). House Wren: 10 Oct (2) KEP (JAF, MTOS); 25 Oct (1) SHF (MTOS); 1 Nov (1) MEM (WBF); 22 Nov (2) FPP (JRW). Robin: 14 Oct (2500 in roost), 12 Nov (1000 in roost) MEM (WRP). House Finch: 27 Oct (1) MEM (CAW). Red Crossbill: 15 Nov (11) PLP (TOS).

Locations: BEL — Bells, Crockett Co.; BIS — Big Sandy; BP — Bartlett Park, Shelby Co.; BRF — Britton Ford; BSU — Big Sandy Unit, Tennessee Nat. Wildl. Ref.; COV — Covington; ENB — Ensley Bottoms, Memphis; FPP — Fort Pillow State Park, Lauderdale Co.; KEP — Kennedy Park, Shelby Co.; MEM — Memphis; OPL — Open Lake; OVP — Overton Park, Memphis; PEF — Shelby Co. Penal Farm; PRI — President's Island, Shelby Co.; PAP — Pace Point; PLP — Paris Landing State Park; RAL — Raleigh; SHF — Shelby Forest State Park.

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CENTRAL PLATEAU AND BASIN REGION — Fall migration in the Nashville area was good. This was at least partially due to periods of overcast conditions and a warm fall into November. One did not have to look hard to locate a flock of warblers of up to six species and 20 individuals feeding in one tree or a small group of trees. The most predominate warbler species in October were Tennessee, Black-throated Green, and Bay-breasted. Richard Simmers considered the peak migration dates for warblers, grosbeaks, and thrushes at his farm near Cookeville to be 20, 25, 28, 29, 30 Sept and 4 Oct, and for Myrtle Warbler 20, 26 Oct and 1 Nov.

Loon-Hawk: Common Loon: 7 Nov (6) Old Hickory L (MLB), max for period Nash area; 21 Nov (20) Woods Res (KHD, LHD, RCS). Horned Grebe: 7 Nov (40) Old Hickory L (MLB), max for period Nash area. Double-crested Cormorant: 8 Nov (4) Old Hickory L (MLB); 14 Nov (2) Cross Creeks NWR (TOS). Great Egret: 7 Aug (7) Gallatin (MPS), nice number; 25 Oct (3) dam, Cheatham L (MLB). Green-winged Teal: 3 Oct (43) Gallatin (DTC, JPC, DRJ), nice number. Northern Shoveler: 8 Aug (1) Nash (DFV), earliest Nash eighteen days. Wood Duck: 15, 16 Oct (52) Radnor L, Nash (MLB), max this fall on lake. Canvasback: 28 Oct (3) Franklin Res, WMC (CHS), early. Bufflehead: 20 Oct (1) Radnor L (MLB), earliest Nash two days. White-winged Scoter: 29 Oct (1 female type) Radnor L (MLB), limited records Nash. Surf Scoter: 12 Oct - end of period (1 imm male) Radnor L (MLB); 19-22 Nov (1 female type) Franklin Res (CHS), limited records Nash area. *BLACK SCOTER:* 18 Nov (2 female types) Radnor L (MLB), sixth record Tenn, second Nash. At no time has Nash ever recorded two species of scoters on the same day much less two species on the same body of water and all three species in the same period. Ruddy Duck: 20 Oct (1) Radnor L (MLB), early. Hooded Merganser: 7 Nov (2) Old Hickory L (MLB); 18 Nov (6) Hillsboro (ER); 21 Nov (200) Woods Res (KHD, LHD, RCS), large number; 21 Nov (23) Franklin Res (CHS); seemed to be more reports this fall. Turkey Vulture: 10, 11 Nov (70) Bucksnort, HIC, I-40, mi 154 (DAD). Sharp-shinned Hawk: 4 Oct and 11 Oct (1) Cook (RMS); 10 Oct - 7 Nov (1 each at three locations) Nash area (NTOS); 9 Nov (1) Cross Creeks NWR (AHH, EJW). Cooper's Hawk: 15 Nov (1) Cross Creeks NWR (TOS); 18 Nov (1) Hillsboro (ER). Red-shouldered Hawk: 24 Oct (6) Cheatham L (MLB), best area for species Nash area; 15 Nov (1) Sewanee area (HCY), had caught female Bobwhite. Bald Eagle: 14 Nov (1 ad, 1 imm) Cross Creeks NWR (TOS); 21 Nov (2 ad) Woods Res (KHD, LHD, RCS); 23 Nov (1 ad) Cross Creeks NWF (DWB). Marsh Hawk: 3 Oct (1) Gallatin (DTC, JPC, DRJ), first for season; 15 Nov (2) Cross Creeks NWR (TOS).

Rail-Vireo: Sora: 4 Sep and 4 Oct (1) Metro Center, Nash (DFV); 12 Oct (1) found dead) Nash (KAG). PIPING PLOVER: 5 Sep (1) Gallatin Steam Plant (LFK), about ninth record Nash area. American Golden Plover: 5 Sep (1) Gallatin Steam Plant (LFK), occasional fall Nash area. American Woodcock: 2 Nov (1 calling before dawn) Cook (RWS). Greater Yellowlegs: 13, 14 Nov (1) Cross Creeks NWR (TOS). Lesser Yellowlegs: 13 Nov (1) Cross Creeks NWR (KHD, LHD), getting late. Stilt Sandpiper: 3 Sep (1) Gallatin Steam Plant (DTC, JPC, MPS). Sanderling: 6 Aug (1) beach, Old Hickory L (MPS), early. BLACK-LEGGED KITTIWAKE: 10 Oct (1 imm, photo) Cook (LBD), third Tennessee record. Forster's Tern: 20 Aug (2) Metro Center (DFV); 3 Sep (2) Gallatin Steam Plant (DTC, JPC). Caspian Tern: 9 Sep (3) New Johnsonville (JDF). Yellowbilled Cuckoo: 8 Nov (1) Old Hickory L, SUC (MLB), getting late. Common Nighthawk: Late Aug into early Sep (200) Green Hills, Nash (NTOS); 29 Aug (400) Belle Meade, Nash (KAG, DFV). WESTERN KINGBIRD: 3 Sep (1) Metro Center (DFV), fourth Nash record. SCISSOR-TAILED FLYCATCHER: last seen 21 Sep (1) Murfreesboro (ALH), species present every summer since 1978. Yellow-bellied Flycatcher: 23 Sep (1 b) Nash (KAG), only verified individual for fall, usually more. Olive-sided Flycatcher: 25 Aug 1979 (2) Fort Campbell, MTC (MLB, TNH); 29 Aug (1) Radnor L (EMQ, JLB). Tree Swallow: 24 Oct (4) Gallatin (DTC, JPC), getting late. Red-breasted Nuthatch: 9 Sep (1) Radnor L (JWB); 29 Sep (2) Cook (RWS); 7 Nov (12) Craggie Hope, CHC (NTOS); invasion underway. Winter Wren: 24 Sep (1) Cook (RWS). Bewick's Wren: pair nested twice home RUC (RVM) and pair nested twice home Lebanon (EB), once in bluebird box. Long-billed Marsh Wren: 11 Oct (1) Metro Center (MLB). Short-billed Marsh Wren: 3 Oct (1) Radnor L (FJM); 10 Oct (1) Cook (RWS); 11 Oct (1) Metro Center (MLB); 25 Oct (2) Pardue's Pond, CHC (MLB). Water Pipit: 3 Oct (9) Gallatin (DTC, JPC, DRJ); 31 Oct (25) near Ashland City Marsh, CHC (MLB); 9 Nov (6) Cross Creeks NWR (AHH, EJW); 13 Nov (75) and 15 Nov (250) Cross Creeks NWR (TOS); was reported more than usual and in good numbers. Cedar Waxwing: 16 Aug (1) Nash (JCM), earliest Nash by two days; 1 Nov (30) and 29 Nov (80) Cook (RWS). Solitary Vireo: 3-9 Oct (1 each at three locations) Nash (FJM, MPS, JCA); 4 Oct (1) and 29 Oct (1) Cook (RWS).

Warbler-Sparrow: An August date for the following warblers represents the first fall sighting. These nine transient species of warblers show how significant the

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fall migration is in some passerines *before* the first of September. Tennessee Warbler: 22 Aug (1) Nash (JCM); 27 Aug (1) Clarksville (AHH); 6 Nov (1) Nash (MLB, AN), last for fall. Orange-crowned Warbler: 19 Oct (1) Radnor L (MLB); 24 Oct (1 found dead) and 27 Oct (1 found dead) Nash (KAG); 6 Nov (1) Nash (MLB). Magnolia Warbler: 25 Aug (1) Nash (JCA). Black-throated Blue Warbler: 9 Sep (1 male) Nash (MLM), ten days earliest fall Nash; 4 Oct (1 male) Cook (RWS). Black-throated Green Warbler: 23 Aug (1) Nash (JCA). Blackburnian Warbler: 23 Aug (1) Nash (JCA). Chestnut-sided Warbler: 22 Aug (1) Nash (JCM). Bay-breasted Warbler: 23 Aug (1) Nash (JCM). Palm Warbler: 21 Oct (1) Cook (RWS); 9 Nov (1) and 17 Nov (2) Hillsboro (ER). Northern Waterthrush: 29 Aug (1 b) Basin Spring (KAG). Mourning Warbler: 5 Sep (1 b) and 28 Sep (1 b) Basin Spring, WMC (KAG). Yellow-breasted Chat: 15 Nov (1 b) Nash (HAR, JNR), latest Nash by eleven days. Wilson's Warbler: 22 Aug (1) Nash (MLM). Canada Warbler: 20 Aug (2) Nash (MLM). Rose-breasted Grosbeak: 11 Nov (1 male) Radnor L (HWS, LKD, LPW), latest fall Nash by five days. Evening Grosbeak: 3 Oct (1) and 5 Oct (1) different locations Nash (MLJ, MLM), first for fall: 8 Nov (1) Cook (RWS); 27 Nov (1) West Meade, Nash (CKS); these sightings probably denote an "echo" flight from the light invasion of winter 1980-81. Purple Finch: 28 Oct (1), first for fall, then max 29 Nov (20) Cook (RJS); few Nash area (NTOS). House Finch: 9 Nov (1) Gallatin (DTC, JPC), first for fall Nash area; small numbers scattered by end of period in Nashville, Gallatin, Lebanon, and Murfreesboro. Pine Siskin: 24 Oct (3) DIC (MLB) and (10) Cook (RWS); 30 Oct (30) Cedar Hill, RBC (DBD); these were first of season, invasion underway. COMMON REDPOLL: 10 Nov (1) Clarksville (JH, AHH), is at least ninth Tenn record, earliest and furthest west in the state of all records. RED CROSSBILL: 8 Aug (1 male singing) Nash (RJF); 12 Sep (1 female in bird bath) Franklin, WMC (BJC); unprecedented for time of year locally, ninth and tenth records Nash area. Grasshopper Sparrow: 8 Aug (2) RUC (MRM, RVM), one was singing. Vesper Sparrow: 15 Nov (1) Cross Creeks NWR (TOS); 18 Nov (1) Hillsboro (ER). White-throated Sparrow: 18 Sep (1) Smyrna, RUC (MLM), near early date. Lincoln's Sparrow: 26 Oct (1) Cook (RWS); 4 Nov (1) Palmyra, MTC (DNS). Song Sparrow: 2 Aug (1) LaVergne, RUC (MPS), another new summer location.

Locations: CHC — Cheatham Co.; DIC — Dickson Co.; HIC — Hickman Co.; MTC — Montgomery Co.; RBC — Robertson Co.; RUC — Rutherford Co.; SUC — Sumner Co.; WMC — Williamson Co.

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EASTERN RIDGE AND VALLEY REGION — A number of active field workers surveying several important habitats reported a large amount of meaning-ful information this period.

High numbers of Great Blue Herons were recorded at both Douglas Lake and the Hiwassee River Area. Each fall since 1977 immature White Ibis have been appearing in the region. This season only one was identified. TWRA officer Tommy Stanfill reported as many as two Swallow-tailed Kites present for at least a week in Sequatchie Valley. Were they local nesters or late summer wanderers?

The very close monitoring of the Kingston Steam Plant once again yielded the now-to-be expected variety of species. The first Tennessee fall record of the Hudsonian Godwit was reported from along the Hiwassee River. The sharp-eyed Randy Stringer picked out a Purple Gallinule and a Common Gallinule from the many thousands of American Coot feeding in the abundant aquatic vegetation in Chickamauga Lake.

The general consensus of many reporters was the breeding population of Purple Martins appeared much reduced this year. This was apparently reflected in the late summer roost that is expected along the Hiwassee River. It never really appeared and the very few individuals that did departed early.

Hawk watchers at Signal Point observed a Yellow-billed Cuckoo feeding two dependent young on the late date of 20 September. Intense mist netting was carried out by Rick Knight and Richard Lewis at Austin Springs while Chuck Nicholson also operated near Norris Dam. Their results have been incorporated in the body of the report.

Loon-Ibis: Common Loon: 24 Oct (3), 26 Oct (39) BOL (RLK); 27 Oct (2) CHL (KHD, LHD). Horned Grebe: 27 Sep (3) KSP (DRJ); 10 Nov (1) CHL (KHD, LHD); 17 Nov (47) BOL (RLK). Eared Grebe: 21 Sep (3) KSP (KHD, LHD). White Pelican: 2 Oct (2) CHA (RCS); 3-6 Nov (1) AUS (GDE, HLF). Double-crested Cormorant: 26 Sep, 3 Oct (1) AUS (RLK, RL); 12 Oct (1) HRA (RCS, LHD); 24 Oct (1) CHL (JWS); 26 Oct (4) AUS (RLK); 10 Nov (1) CHL (KHD, LHD). Great Blue Heron: regular, max 28 Nov (113) HRA (KHD, LHD); there always appear to be good numbers on Douglas Lake, max 11 Oct (189) (JAK). Green Heron: max 9 Aug (40) RAB (JAK); 11 Aug (14) KSP (KHD, LHD); 28 Aug (22) HRA (KHD, LHD); last 26 Sep (1) AUS (RLK), 22 Oct (2 heard at night) NRL (JCH). Little Blue Heron: 5-8 Aug (1 ad) SAB (KHD, LHD); 5 Sep (2) HRA (JWS); 8 Sep (3) KSP (KHD, LHD); 12 Sep (2) HRA (JWS). Cattle Egret: 8 Aug (1) HRA (KHD, LHD). Great Egret: 1 Aug (7) RAB (JAK); 4 Aug (1) HRA (KHD, LHD); 19 Aug (1) EBH (LJT); 22 Aug (1) RAB (JAK); 5, 8, 12 Sep (1) HRA (KHD, LHD, JWS); 4 Oct (3) RAB (JAK); 28 Nov (1) HRA (KHD, LHD). Black-crowned Night Heron: 14 Oct (1) AUS (SG, MD). Yellow-crowned Night Heron: 23 Aug (1 ad, 1 imm) HRA (fide J. W. Knott); 4 Nov (1) AUS (SG, DQ). White Ibis: 18, 30 Aug (1 imm) HRA (KHD, LHD).

Swan-Merganser: Whistling Swan: 28 Nov (1) CHL (LHD). Snow Goose: 27 Oct - 10 Nov (2 morph) HRA (KHD, LHD). Mallard: 24, 25 Aug (110 --- this was late summer peak) KSP (KHD, LHD). Black Duck: 31 Aug (1) KSP (RCS). Gadwall: 5 Sep (1) KSP (KHD, LHD); 19 Oct (1) AUS (RLK). Pintail: 17, 25 Aug (1) KSP (KHD). Green-winged Teal: 14 Sep (4) KSP (KHD, LHD, RCS); max 28 Nov (375) HRA (KHD, LHD); 1 Nov (160) DOL (JAK); Blue-winged Teal: max 14 Sep (100) SAB (KHD, LHD, RCS); 21 Sep (100) HRA (KHD, LHD) with last on 11 Oct (1) AUS (RLK, RL). American Wigeon: 7, 8 Sep (1) KSP (KHD, LHD). Northern Shoveler: 28 Aug (1) SAB (LHD, JP); 22 Nov (1) DOL (JAK); 26 Nov (10) HRA (KHD, LHD). Redhead: 7 Nov (1) HRA (KHD, LHD); 21 Nov (1) DOL (JAK). Rink-necked Duck: 12 Oct (2) HRA (KHD, LHD, RCS); 22 Nov (50) DOL (JAK). Canvasback: 24, 25 Oct (1) SAB (KHD, LHD, RCS); 22 Nov (1) DOL (JAK). Greater Scaup: 17 Nov (35) CHL (KHD, LHD). Lesser Scaup: 24 Oct (1) SAB (KHD, LHD, RCS). Common Goldeneye: 28 Nov (1) CHL (KLD). Bufflehead: 7 Nov (1) HRA (KLD); 22 Nov (17) DOL (JAK). Black Scoter: 13 Nov (1) KSP (ARH). Ruddy Duck: 24 Oct (2) CHL (JWS). Hooded Merganser: max 24 Nov (233) HRA (KHD, LHD). Red-breasted Merganser: 17 Nov (5) BOL (RLK); 22 Nov (3) DOL (JAK).

Vulture-Coot: Turkey Vulture: 18 Oct (65) KNX (ARH, RDH). SWALLOW-TAILED KITE: 7 Sep (1 ad confirmed) Sequatchie Valley, north of Dunlap, Bledsoe County (KHD, LHD, DTC, JPC, Don & Audrey Perry) - TWRA officer Tommy Stanfill reported the species and stated he had seen as many as two present for at least a week. Cooper's Hawk: 7 Aug (1) SAB (KHD, LHD). Golden Eagle: 17 Sep (1) Citico, Tellico Lake (WKJ, Greg Reed); 3 Oct (1 ad) Elder Mt. (RCS, JTP). Bald Eagle: 1 during period NRL (JCH); 31 Aug (1) Decatur (KHD, LHD, RCS); 18 Sep (1 imm) AUS (RLK); 16 Oct (1) DOL (PSP). Marsh Hawk: 1-2 regular AUS (RLK et al.). Osprey: 13 Sep - 9 Oct (1 occasional) AUS (LHTOS). Peregrine Falcon: 5 Oct (1 imm) found wounded by gunshot near Crossville airport, currently at KNX zoo with prospects for release uncertain (MWA). Merlin: 9 Sep (1) Dunlap (CRH); 20 Sep (1) CHA (RCS); 23 Sep (1) KSP (RCS). Sandhill Crane: several flocks totaling about 160 between 6-9 Nov in KNX area (WKJ, CPN et al.); also flock of 25 on 29 Nov NOR (Ed Beddow); 24 Oct (4) SAB (KHD, LHD); 7 Nov (46) HRA (KLD, LHD); 12 Nov (16) Collegedale (Dave Mathewson, Jr.); 20 Nov (9) SAB (KLD). Virginia Rail: 1 Nov (1) McDonald area, Greene County (JAK). Sora: 26 Sep (2) AUS (RLK). PURPLE GAL-LINULE: 8-10 Sep (1 imm) HRA (first identified by RCS, later viewed by LHD this is a first fall record and only the second record for the area since 1963). Common Gallinule: 12 Oct (1 imm) HRA (RCS, KHD, LHD). American Coot: 3 Aug - 8 Sep (2) KSP (KHD, LHD); regular, max 17 Nov (4000) HRA (KHD, LHD); 17 Nov (4500) CHL (KHD, LHD). CARIBBEAN COOT: 8 Nov - end of period (1) Chickamauga Dam (first observed by Kenneth McLean, later observed by many others) — details to be published.

Plover-Phalarope: Semipalmated Plover: 1 Aug - 12 Sep (8-25) RAB (JAK); 3 Aug - 14 Sep (2-17) KSP (KHD, LHD); 10 Aug (1) SJP (RLK); 13 Sep (3) SJP (HHD). Killdeer: Regular, max 20 Nov (197) HRA (KHD, LHD); 40-60 regular RAB (JAK). American Golden Plover: 5-12 Sep (1-4) RAB (JAK); 25 Sep - 5 Oct (2-4) KSP (KHD, LHD, DRJ, MWA). Black-bellied Plover: 10 Aug (2) KSP (KHD, LHD); 21 Aug (1) KSP (MWA); 21, 22 Aug (1) SAB (KHD, LHD, JP); 22 Aug - 12 Sep (1-2) RAB (JAK); 7 Nov (2) HRA (James T. Tanner). Ruddy Turnstone: 1 Aug (1) RAB (JAK); 29 Aug - 14 Sep (1-3) KSP (KHD, LHD). American Woodcock: 31 Oct (1) AUS (RLK). Common Snipe: 28 Aug (1) SAB (LHD, JP); 10 Sep (1) KSP (KHD, LHD); 28 Nov (84) SAB (KHD, LHD). Spotted Sandpiper: max 17 Aug (18) KSP (KHD, LHD); regular to 29 Sep AUS (RLK); 1 Aug (10) RAB (JAK). Willet: 21, 22 Aug (1) KSP (MWA, RCS et al.); 8 Sep (1) HRA (KHD, LHD). Greater Yellowlegs: 1-9 Aug (2-5) RAB (JAK); 3 Aug - 8 Sep (1-5) KSP (KHD, LHD); 4 Nov (1) AUS (GDE, HLF); 24 Oct - 2 Nov (16-22) HRA (KHD, LHD) with the last reported 10-13 Nov (3) SAB (KHD, LHD). Lesser Yellowlegs: 1 Aug - 13 Sep (20-83) RAB (JAK); 3 Aug - 29 Sep (1-32) KSP (KHD, LHD). Red Knot: 21 Aug (2) DOL (JAK); 31 Aug - 8 Sep (1) KSP (KHD, LHD, MWA). Pectoral Sandpiper: 1 Aug - 12 Sep (75-300) RAB (JAK); 3 Aug - 29 Sep (1-25) KSP (KHD, LHD); 27 Oct (30) SAB (KHD, LHD); 10 Nov (1) SAB (KHD, LHD). Baird's Sandpiper: 11 Aug (1) KSP (KHD, LHD); 31 Aug (3) KSP (KHD, LHD, RCS); 14 Sep (1) KSP (KHD, LHD, RCS). Least Sandpiper: regular, max 8 Sep (115) KSP (KHD, LHD). Dunlin: 23 Aug (1) KSP (RLK); 1 Sep (1) KSP (LHD); 11 Oct - 22 Nov (10-46) RAB (JAK); 27 Oct (6) AUS (RLK); 27 Oct (110) SAB (KHD, LHD); 27 Oct (187) HRA (KHD, LHD). Dowitcher spp.: 1 Aug - 12 Sep (4-125) RAB (JAK); 24 Aug - 14 Sep (1-9) KSP (KHD, LHD); 5 Sep (2) HRA (JWS); 15-19 Oct (2-5) HRA (KHD, LHD). Stilt Sandpiper: 3 Aug - 14 Sep (1-4) KSP (KHD, LHD, CPN); 5-7 Sep (10) RAB (JAK); 26 Sep (1) RAB (JAK). Semipalmated Sandpiper: regular, max 8 Sep (220) KSP (KHD, LHD) with the last 15 Oct (1) HRA (KHD, LHD); 1 Aug - 12 Sep (35-249) RAB (JAK). Western Sandpiper: 9 Aug - 12 Sep (3-10) RAB (JAK); 15 Aug - 14 Sep (1-20) KSP (KHD, LHD); 31 Aug - 12 Sep (1-2) SJP (RLK *et al.*); 19 Sep (2) RAB (JAK); 1 Nov (4) RAB (JAK). Buff-breasted Sandpiper: 24 Aug (2) EBF (LJT); 25-29 Aug (1-2) KSP (KHD, LHD, MWA); 29 Aug (8) RAB (JAK); 14 Sep (1) KSP (KHD, LHD, RCS). Hudsonian Godwit: 5-7 Sep (1) HRA (CRH *et al.*). Details in *The Migrant* 52(3):69, 1981. Sanderling: 3 Aug - 14 Sep (1-3 occasional) KSP (KHD, LHD, ARH, RDH), 7 Sep (2) RAB (JAK); American Avocet: 7 Aug (1) KSP (MWA). Wilson's Phalarope: 22 Aug (1) KSP (LHD, RCS); 29 Aug (1) KSP (LHD). Northern Phalarope: 29 Aug, 5 Sep, 1 Nov (1) RAB (JAK); 8 Sep (1) KSP (KHD, LHD).

Gull-Woodpecker: Ring-billed Gull: 13 Sep (1) Fort Loudoun Dam (JAK); 3 Oct (1) BOL (RLK, RL); 20 Oct (15) CHL (EK). Forster's Tern: 18 Aug (1) SAB (KHD, LHD); 8 Sep (1) KSP (KHD, LHD); 27 Sep (11) KNX (PSP). Common Tern: 16 Aug, 5, 7 Sep (1) RAB (JAK). Caspian Tern: 9 Aug (1) KSP (DRJ); 18 Aug (1) HRA (KHD, LHD); 19 Aug (5) SAB (KHD, LHD); 20-29 Aug (1-2) SAB (LHD); 7 Sep (6) KSP (KHD, LHD); 23 Sep (2) CHL (RCS). Black Tern: 11 Aug -7 Sep (2-20) RAB (JAK); 11 Aug - 10 Sep (1-13) occasional) KSP (KHD, LHD, CPN, ARH); 29 Aug - 6 Sep (3-8) SAB (KHD, LHD). Yellow-billed Cuckoo: adult feeding two dependent young 20 Sep at Signal Point (fide R. Bruce Wilkey, Starr T. Klein, Michael & Barbara McMahan). Black-billed Cuckoo: 29 Sep (1) JNC (MD). Barn Owl: reported from NRL (JCH), Maryville (fide J. B. Owen) and White Pine (JAK). Common Nighthawk: main passage through KNX area 30 Aug-5 Sep; lower numbers than reported in 1980; last report, 1 on 12 Oct at Knoxville (Marcia Davis). Chimney Swift: last report 22 Oct (6) KNX (Bob & Lavada Harris). Red-headed Woodpecker: 27 Sep (3) SHR (JCH, CPN); 2 Oct (2) SHR (JCH).

Flycatcher-Pipit: yellow-bellied Flycatcher: 4 Oct (1 b) & 10 Oct (1 b) NOR (CPN); Traill's Flycatcher. 22 Aug - 11 Sep (3 b) NOR (CPN). Least Flycatcher: 9 Aug - 25 Sep (5 b) NOR (CPN). Eastern Wood Pewee: none banded at NOR, vs. 12 banded in 1980 (CPN). Tree Swallow: 19 Sep (900) RAB (JAK); 20 Sep (75) SAB (LHD); 20 Sep (100) HRA (EK); 25-27 Oct (2-45) SAB (KHD, LHD); 3 Oct (3) AUS (RL). Bank Swallow: 30 Aug - 19 Sep (50-200) RAB (JAK); 14 Sep (3) AUS (RLK). Rough-winged Swallow: 1 Aug SAB (KHD, LHD). Barn Swallow: 19 Oct (1) HRA (KHD). Čliff Swallows: 30 Aug - 7 Sep (200-300) RAB (JAK); 18 Sep (1) AUS (RLK). Red-breasted Nuthatch: good early movement into KNX area, first reports 9 Sep (1) SHR (JCH), 13 Sep (2) NOR (CPN) with them becoming uncommon toward the end of the period. In the Chattanooga area the first report was 11 Sep (LHD, JP) and then becoming widely distributed thereafter for the remainder of the period. Brown Creeper: first report, 7 Oct (1) SHR (JCH); good numbers KNX by end of period. Winter Wren: 10 Oct (1 b) NOR (CPN). Catharus thrushes: capture rate of Swainson's and Gray-checked at NOR was 1/4 the 1980 rate (CPN); abundant food crop in 1981 may not have concentrated birds as in 1980. Very poor flight of Veeries (CPN). Swainson's Thrush: 4 Nov (1) CHA (JP). Ruby-crowned Kinglet: 18 Sep (1) SHR (JCH); 19 Sep (1) JNC (HD); 19 Sep (1 b) NOR (CPN). Water Pipit: 26 Sep - 11 Nov (2-7) AUS (RLK et al.); 17 Oct (2) KSP (KHD, LHD).

Vireos-Warblers: Vireos: numbers banded at NOR of White-eyed, Yellowthroated, Red-eved and Philadelphia were all much lower than in 1980 (CPN). White-eyed Vireo: last reports 19 Oct (1) SHR (JCH); 17 Oct (1) NOR (CPN). Red-eved Vireo: good migratory movement during August at NOR, 46 b, many with fat deposits (CPN); general scarcity in KNX area during Sep; last reports, 10 Oct (1 b) NOR (CPN); 14 Oct (1) SHR (JCH). Philadelphia Vireo: first report 13 Sep (1 b) NOR (CPN) and last in KNX 14 Oct (1) SHR (JCH); well noted in the JNC area 24 Sep - 12 Oct with 1-3 being identified (SG, MD, Glenn Swofford). Warblers: good migration in KNX area. Worm-eating Warbler: several migrants (with fat deposits) banded during mid-August at NOR (CPN); 15 Aug (1) at home CHA (JP). Golden-winged Warbler: 2 Aug (1) at home CHA (JP). Blue-winged Warbler: common throughout season KNX; first report, 8 Aug (1 b) NOR (CPN); 10, 18, 19 Aug (1) at home CHA (JP); last, 3 Oct (1) KNX (ARH, RDH). Orange-crowned Warbler: 7 Oct (1) SHR (JCH); 12 Oct (1) JNC (SG); 31 Oct (1 b) NOR (CPN); 7 Nov (1) HRA (CPN). Nashville Warbler: 9 Sep (1) SHR (JCH). Northern Parula Warbler: 15 Aug (1) at home CHA (JP). Yellow Warbler: 15 Aug (1 b) NOR (CPN). Magnolia Warbler: 31 Aug (1) SHR (JCH). Blackburnian Warbler: 19 Aug (1) SHR (JCH). Palm Warbler: 7 Sep (1) SHR (JCH) — early there; 10 Sep - 6 Nov (seen in large numbers 100+ with 14 b) AUS (RLK, RL). Ovenbird: good movement at NOR during Aug and continuing into Oct (CPN). Mourning Warbler: 20 Sep (1 b) NOR (CPN). Wilson's Warbler: several reports from KNX and NOR between 19 Aug and 23 Sep (ARH, RDH, JCH, CPN).

Bobolink-Sparrow: Bobolink: 11 Sep - 7 Oct (2-9) AUS (RLK, RL). Orchard Oriole: 1 Aug (2) SAB (KHD, LHD) — this was the last report for the season in area where they used to be common till the end of the month. Northern Oriole: 16 Sep (3) SHR (JCH). Rose-breasted Grosbeak: very low numbers in KNX area — KNC fall count total only 10 on 27 Sep, average about 100 with last year's total 437 (CPN). Indigo Bunting: last 14 Oct (1) SHR (JCH). Evening Grosbeak: the only report for the period was 4 Nov (55) AUS (GDE, HLF). Purple Finch: first 19 Oct (1) AUS (RLK) and 9 Nov (1) CHA (JP); they were somewhat later than normal KNX and only present in small numbers (CPN). House Finch: 2-4 birds were regular thru the summer JNB area with migrating birds arriving in mid-Oct (RLK et al.); present in KNX area through period; numbers increasing in Oct and Nov (CPN). Pine Siskin: very few reports; 17 Oct (1 b) AUS (RLK, RL); 16 Nov (1) NOR (CPN); 17 Nov (5) CHL (KHD, LHD). Savannah Sparrow: 14 Sep - 11 Nov (52 b) AUS (RLK, RL). Henslow's Sparrow: 3 Nov (1 imm) SAB (KHD, LHD). Vesper Sparrow: 9 Oct - 7 Nov (1-4 regular with 2 b) AUS (RLK, RL); 24 Nov (1) CHL (KHD, LHD). Field Sparrow: 26 banded AUS (RLK, RL). White-crowned Sparrow: first fall sighting 2 Oct AUS followed by banding 42 (RLK, RL). White-throated Sparrow: first fall report 6 Oct (1) KNX (Mabel Sanders) and 11 Oct (1) AUS (RLK, RL). Fox Sparrow: 17 Oct (1 b) NOR (CPN). Lincoln's Sparrow: 26 Sep - 27 Oct (2-5 regular with 11 b) AUS (RLK, RL); 10-31 Oct (6 b) NOR (CPN). Swamp Sparrow: first report 4 Oct (1 b) NOR (CPN) and 67 banded AUS (RLK, RL). Song Sparrow: 11 Sep - 11 Oct (308 b) AUS (RLK, RL).

Locations: ALM — Alcoa Marsh; AMM — Amnicola Marsh; AUS — Austin Springs; BOL — Boone Lake; CHA — Chattanooga; CHL — Chickamauga Lake; COL — Cove Lake; DOL — Douglas Lake; EBF — Eagle Bend Fish Hatchery; FLL — Fort Loudoun Lake; GNC — Greene County; GRE — Greeneville; HRA — Hiwassee River Area; JEC — Jefferson County; JNB — Jonesboro; JNC — Johnson City; KNC — Knox County; KSP — Kingston Steam Plant; KNX — Knoxville; MHL — Melton Hill Lake; NOR — Norris; NRL — Norris Lake; OKR — Oak Ridge; RAB — Rankin Bottoms (Cocke County section of Douglas Lake); SAB — Savannah Bay; SHR — Sharp's Ridge, Knoxville; SIP — Signal Point; SJP — St. John's Pond; TRG — Tennessee River Gorge.

KENNETH H. AND LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION — Above average temperaturs and below average rainfall along with an excellent wild food crop created some very interesting observations for our region. The cone crop on Roan Mountain was the best in my memory.

Late dates for some shorebirds and warblers, good vireo and warbler migration flights, and some early "northern finch" invasion movements have made for very interesting birding this period. Also notable were the high numbers of raptors reported from the Look Rock area in the Smokies. This compiler appreciates the much needed reports that came in from the southern part of the region this period. One interesting and maybe confusing side note is that from mid-summer through the end of November, numerous Red Crossbills were reported from the Great Smoky Mountains. In similar habitat, only a few air miles away in the Roan, Iron, and Unaka Mountains, however, only 2 single crossbills were reported.

Loon-Vulture: Common Loon: first fall sighting 28 Nov (1) WTL (HLF). Great Blue Heron: more numerous in area than compared to previous years. Green Heron: last seen 26 Sep (1) RC (EHS). Green-winged Teal: first fall 25 Oct (1) WibL (TL, RP). Wood Duck: large concentrations during Sep and Oct with a few staying until end of period. Bufflehead: first fall 22 Oct (2) WibL (GDE, HLF). Hooded Merganser: first fall 22 Oct (1) WatR (GDE, HLF). Red-breasted Merganser: 19 Nov (11 females) WTL (GDE, HLF). Turkey Vulture: 22 Oct (8 migrating) over RM (TL, RP); 29 Oct (10 migrating) over RM (GDE, HLF); 24 Oct (205 migrating) over LR (ARH, RDH). Black Vulture: 24 Oct (14 migrating) over LR (ARH, RDH).

Kite-Crane: KITE spp.: 20 Sep (1 migrating) over LR (BHS). Sharp-shinned and Cooper's Hawks: above average sightings through out period. *GOSHAWK:* 13 Aug (1) RM (TL, RP). Red-shouldered Hawk: 19 Sep (6), 23 Sep (7) over LR (BHS, SJS); 29 Oct (1 migrating) RM (GDE, HLF). Broad-winged Hawk: 19 Sep (5632 on 1 day) LR (BHS, SJS). Eagle spp.: 29 Oct (1) RM (GDE, HLF). Marsh Hawk: 24 Sep (7), 26 Sep (9) over LR (BHS, SJS). Peregrine Falcon: 18 Sep (1), 24 Oct (1 ad) LR (ARH, RDH). Merlin: 12 Oct (1) ELI (HLF). Sandhill Crane: 8 Nov (38) migrating over Walland (ARH, RDH).

Yellowlegs-Waxwing: Greater Yellowlegs: last 6 Nov (2) late, RC (GDE, GS). Pectoral Sandpiper: last 26 Sep (4) RC (GDE, HLF). Dunlin: 6 Nov (2) RC (GDE, GS). Sanderling: 26 Sep (2) RC (GDE, HLF). Forster's Tern: 2 Aug (8) WTL (GDE). Black-billed Cuckoo: last 2 Oct (1) HS (SG). Yellow-bellied Sapsucker: first fall 26 Sep (1) RC (GDE, HLF). Least Flycatcher: last 12 Sep (1) RM (EHS). Blue Jay: 14-22 Oct (250-300) migrating over RM (TL, RP). Common Raven: beginning 10 Oct several low elevation reports, ELI area. Red-breasted Nuthatch: returned to high elevations on RM in early Sep, abundant on RM and in GSMNP since then. Hermit Thrush: first fall 19 Nov (1) Erwin (GS). Swainson's Thrush: last 29 Oct (1) late, RM (GDE, HLF). Water Pipit: 24 Sep (2) LR (BHS, SJS); 21 Oct (2) RM (HLF). Cedar Waxwing: plentiful in ELI area through period.

Vireo-Blackbird: Solitary Vireo: last 8 Nov (1) Chilhowee Mtn. (ARH). Philadelphia Vireo: 26 Sep (3) IMG (SG, GS). Golden-winged Warbler: last 12 Sep (1) RM village (SG). Blue-winged Warbler: last 31 Oct, late (1) ELI (HLF). Orange-crowned Warbler: 2 Oct (1) HS (MD, SG). Nashville Warbler: last 12 Oct (1) ELI (HLF). Black-throated Blue Warbler: 24 Nov (1) WTL (GDE, HLF) — 33 days later than previous late date. Yellow-rumped Warbler: first 15 Sep (2) ELI (HLF). Palm Warbler: last 6 Nov (3) RC (GDE, GS), late. Northern Oriole: last 21 Sep (1) Erwin (GS). Rusty Blackbird: 27 Nov (5) ELI (GDE).

Grosbeak-Snow Bunting: Evening Grosbeak: first 9 Nov (45+) RM (GDE, HLF), up to 300 on RM by end of period; also present high elev., GSMNP. Purple Finch: first 12 Oct (2) ELI (HLF), small numbers since then. House Finch: first 25 Nov (1) ELI (GDE). Pine Siskin: first 22 Oct (75+) RM (TL, RP); up to 400 on RM since then; 14 Nov (80) NFG (David A. Hankins). Red Crossbill: 10 Aug (7) NFG (AHH); numerous other small flocks reported in GSMNP; 29 Oct (30) Clingmans Dome, GSMNP (MPS). Vesper Sparrow: 16 Aug (2) Hump Mtn (EHS). Chipping Sparrow: last 27 Nov (2) ELI (GDE). White-throated Sparrow: first 11 Oct (1) ELI (HLF). Fox Sparrow: first 9 Nov (2) RM (GDE, HLF, RLK). Snow Bunting: 14-18 Nov (6-8) RM (RLK, EHS).

Locations: ELI — Elizabethton area; GSMNP — Great Smoky Mtns. National Park; HS — Hunter Swamp, Elizabethton; IMG — Iron Mountain Gap; LR — Look Rock, Chilhowee Mountain; NFG — Newfound Gap; RC — Roans Creek; RM — Roan Mountain; WTL — Watauga Lake; WatR — Watauga River; WibL — Wilbur Lake.

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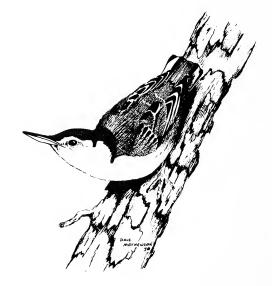
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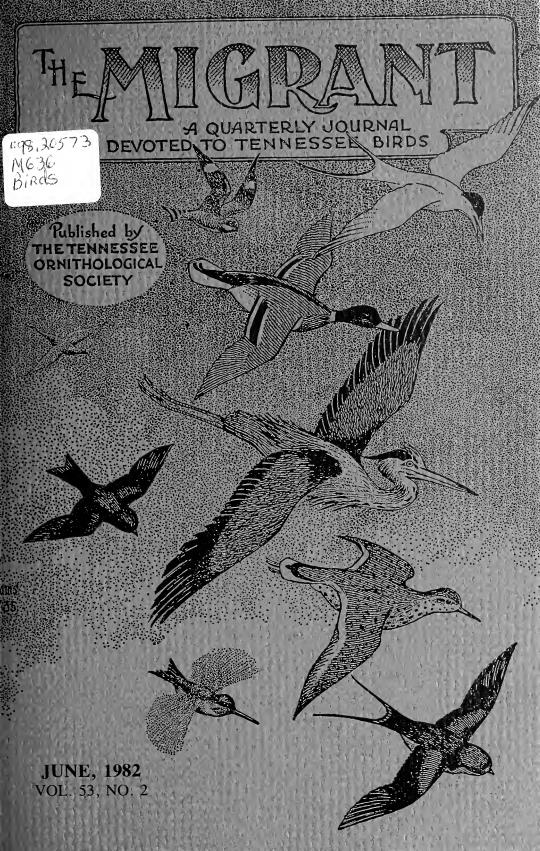
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THE BIRDS OF PICKETT COUNTY, TENNESSEE

CHARLES P. NICHOLSON

Pickett County, the site of the 1979 Tennessee Ornithological Society breeding bird foray, is located along the Kentucky border in middle Tennessee. Two distinct physiographic regions occur, the Cumberland Plateau in the east and the Eastern Highland Rim of the Interior Low Plateau in the western part of the county. The Cumberland Plateau section, most of which is within Pickett State Park and Forest, is dissected by several streams forming gorges that drain east and north to the Big South Fork of the Cumberland River. Elevations in this section vary from approximately 355 m on the ridges to 299 m in the bottom of gorges formed by Langham Branch and Flint Fork. Rock bluffs occur along many of the gorges. Virtually all of the plateau portion of Pickett County is forested. Forest cover is mixed shortleaf-Virginia pine and oak-hickory on the upland areas, and white pine, hemlock, and cove hardwoods in the gorges.

The dividing line between the plateau and Highland Rim is poorly defined, and several knobs of up to 545 m elevation, with vegetation and geology typical of the plateau, occur west of the plateau almost to Byrdstown. The Highland Rim section is drained towards the west by the Wolf River and Obey River, which was impounded in 1948 to form Dale Hollow Reservoir. The lowest elevation in the county is this reservoir, which has a full pool elevation of 191 m. Much of the rim area has been cleared for pasture, hayfields, and corn and tobacco cultivation. The 1980 population of Pickett County was 4,358, and the area of the county is 40,923 ha.

The first investigation of the birdlife of Pickett County was in 1937, when Pickett Forest was the site of an early Tennessee Ornithological Society expedition. Fourteen observers spent 14-20 June in the area, and their results were published by Albert F. Ganier (1937). Pickett Forest and many adjacent areas had been wilderness until the early 1900's, when railroads were built into the area. Much of the present State Park and Forest was logged in the 1920's and 1930's. Following logging, the Pickett Forest tract was donated to the state and park developments were carried out, in part by the Civilian Conservation Corps. The 1937 TOS expedition recorded 69 species of birds. Because of the brushy vegetation following logging, several species of early successional habitats were listed as common. These included the Prairie Warbler, described as the most common species, the Eastern Bluebird, Indigo Bunting, American Goldfinch, and "Redeyed" (Rufous-sided) Towhee.

LIRRARIES

Visits to Pickett Forest were made in April 1942 by Walter R. Spofford and R. Herbert (Spofford 1942), and by G. R. Mayfield and others in July 1942 (Mayfield 1942). Among the species mentioned in these reports were the Peregrine Falcon, American Kestrel, and Red-cockaded Woodpecker. Spofford was again in Pickett Forest during the first week of June 1946, and gave account of 6 species not recorded by the 1937 expedition (Spofford 1948). During the next 20 years, the only published accounts of Pickett County birdlife were Game and Fish Commission reports of the status of Ruffed Grouse (Schultz 1953), and Turkey (Schultz 1955; Lewis 1962), and a blackbird-Starling survey (Legler 1966).

Beginning in 1969, Byrdstown residents Dave and Robbie Hassler began recording bird observations, publishing Round Table Notes, and providing records for "Season" reports in *The Migrant*. Their documentation of the regular spring and fall passage of Sandhill Cranes through the Byrdstown area is especially noteworthy (Hassler 1969, and subsequent "Season" reports). The Hassler's observations laid the groundwork for the 1979 TOS breeding bird foray, which was held 1-4 June. Fentress County was also covered during this foray, and results from Fentress County, as well as foray techniques, have been recently published (Nicholson 1981).

The following annotated list of Pickett County birds includes 1979 foray results as well as other available published and unpublished Pickett County observations. Published observations include the reports by Ganier, Spofford and others described above, as well as numerous records from "Season" reports. For the sake of brevity, records from "Season" reports are cited only by the volume and page number of The Migrant, and, unless otherwise stated, are from the Byrdstown-Dale Hollow Lake area. Observations given without a citation and without an observer's name are those of the Hasslers, and include miscellaneous observations as well as day-long winter counts in the Byrdstown-Dale Hollow Lake (DHL) area conducted on 23 December 1978, 12 January 1980 and 9 January 1982. Also listed are observations by the Hasslers and Nicholson on 27-28 April 1979, by Morris D. Williams from Pickett State Park (PSP) on 8-9 September 1976, and by a group of 21 led by Michael L. Bierly which worked Pickett State Park on 14-16 May 1982. Observations are listed by season, spring through fall. For species observed on the foray, the total number of individuals, exclusive of Breeding Bird Survey results, is given first. This is followed by the BBS results, given as the number of total individuals observed, over the number of stops, out of 18, at which each species was observed. This route, in the PSP area, was censused on 2 June by Nicholson and King.

COMMON LOON — 1 on 5 Jan. 1976 on DHL (41:21).

HORNED GREBE — 5 on 23 Dec. 1978; 3 on 12 Jan. 1980; all on DHL.

PIED-BILLED GREBE — 6 on 23 Dec. 1978; 7 on 12 Jan. 1980; 2 on 9 Jan. 1982, all on DHL.

- GREEN HERON -2, 0/0.
- GREAT BLUE HERON 2 on 23 Dec. 1978 on DHL.

LITTLE BLUE HERON — 1 imm. on 1 July 1973.

CATTLE EGRET --- 1 on 11 Nov. 1978.

SNOWY EGRET — 1 on 9-14 May 1971 (Amer. Birds 25:866).

- BLACK-CROWNED NIGHT HERON 1 at lake in PSP on 15 June 1937 by R. M. Mengel (Ganier 1937); not observed by Spofford and not on Foray.
- CANADA GOOSE 14 on 13 Oct. 1969 (40:81); 130 on 16 Dec. 1969 (41:21).
- MALLARD 7 on 23 Dec. 1978.
- BLACK DUCK 45 on 9 Jan. 1982.
- GADWALL 20 on 30 Oct. 1969 (40:89); 130 on 16 Dec. 1969 (41:21).
- PINTAIL 8 on 16 Dec. 1969 (41:21).
- BLUE-WINGED TEAL 2 on 20 Aug., 27 on 31 Oct. 1969 (40:89).
- NORTHERN SHOVELER 14 on 17 Oct. 1969 (40:89); 36 on 16 Dec. 1969 (41:22).
- WOOD DUCK 2-5 from 3 Feb. to 30 Apr. 1970 (41:42); 2 on 5 and 18 May 1980; female with 22 young on 17 May 1979; foray 17 in 2 broods, 0/0.
- REDHEAD 3 on 12 Jan. 1980.
- RING-NECKED DUCK 26 on 23 Jan. 1978.
- CANVASBACK 2 on 23 Dec. 1978.
- LESSER SCAUP 15 on 23 Dec. 1978; 39 on 12 Jan. 1980.
- COMMON GOLDENEYE 1 on 9 Jan. 1982.
- BUFFLEHEAD 3 on 23 Dec. 1978.
- HOODED MERGANSER 4 on 23 Dec. 1978; 20 on 9 Jan. 1982; 4 on 12 Jan. 1980.
- TURKEY VULTURE 1 on 27 Apr. and 12 on 28 Apr. 1979 by DRH, CPN; 3 on 18 May 1980; 1 on 12 May 1982 by MLB *et al.*; foray — 6, 0/0; 3-4 daily by AFG *et al.*, June 1937; 2 on 14 June 1980.
- SHARP-SHINNED HAWK 1 window kill on 16 Mar. 1978 (49:67); 1 on 15 Aug. 1969 (40:45); present all May 1969 (40:68); 12 at Stepp Gap on 24 Sep. 1970 (42:1-4); 3 on 13 Oct. 1975 (47:18); 1 on 12 Jan. 1980; 2 through winter of 1970 (41:22).
- COOPER'S HAWK pair defended old crow's nest, 16-30 April 1975 (46:66); 1 on 2 May and 13 June 1971 (42:69); 1 by AFG *et al.*, June 1937.
- ACCIPITER spp. 1 on 15 May 1982 by Virginia Price and Rowan DeBold at PSP.
- RED-TAILED HAWK 1 on 27 April 1979 by DRH, CPN; 1 on 16 May 1982 by MLB et al.; 6 pairs along Wolf River, 20 May 1978; 10 by AFG et al., June 1937; 2 on 23 Dec. 1978; 4 on 9 Jan. 1982; 4 on 12 Jan. 1980.
- RED-SHOULDERED HAWK 2-4 through spring of 1969 (40:68); on nest at PSP, 16 April 1978 and 27 April 1979, by DRH, CPN; 1 in May 1979 (42:69); nesting near Lovelady, 1976 and 1980; 1 on 9 Jan. 1982; 1 on 12 Jan. 1980.
- BROAD-WINGED HAWK 1 carrying food on 15 May 1980; 2 on 15 and 16 May 1982 by MLB *et al.*; 1 on 7 June 1980 at PSP; 1 on 5 July 1937 by AFG *et al.*; 2-4 through summer 1969 (40:68); 41 on 20 Sep., 1178 on 24 Sep., and 754 on 25 Sep. 1970 at Stepp Gap (42:1-4); nesting in BT area, 1977-1979.
- ROUGH-LEGGED HAWK 1 during winter 1978; 1 on 1 March 1980.
- BALD EAGLE regularly winters on Dale Hollow Lake; high count of 15 on 8 Feb.

1975 (46:71); earliest, 2 on 22 Nov. 1974 (46:71); latest, 1 on 22 April 1978 (49:67).

- GOLDEN EAGLE 1 adult on 1 Jan. 1978 (49:42); 1 adult on 2 March 1977.
- MARSH HAWK 1 on 1 May 1971 (42:69); 1 on 4 July 1970 (41:69).
- OSPREY 1 on 15 April 1972 at Static; 1 on 22 April 1973; 1 on 22 April 1978 (49:67); 1 on 2 Oct. 1971; 1 on 29 Nov. 1975 at Eagle Cove Dock.
- PEREGRINE FALCON 6 birds at 4 locations were reported by Ganier (1937:25). Of these locations, a pair at an eyrie site "a mile south of Rock House fire tower . . . in the face of The Rock Island . . . above Laurel Fork" was apparently in Fentress County; one bird in "Rock Creek canyon near the Kentucky line" was apparently in Scott County, and one bird "over the valley east of Chimney Rock" was either in Pickett County or in Wayne County, Kentucky. The other report was of 2 birds soaring over the PSP lake "and probably from the Wolf River cliffs." Spofford and R. Herbert revisited 2 of these eyries in April 1942 (Spofford 1942), and reported the Rock Island site occupied by American Kestrels, and saw no birds at the other site. They also reported a new eyrie, probably with young in the nest, in Wolf River Gorge. During early June 1946, Spofford (1948) observed 1 bird near the eyrie in Wolf River Gorge, and no evidence of Peregrines at the other eyries. There have been no recent reports of nesting Peregrine Falcons in the area.
- AMERICAN KESTREL 1 on 27 April 1979 near BT by DRH, CPN; foray 4, 0/0, all in western part of county; 16 in June 1937 by AFG *et al.*; pair using former Peregrine Falcon eyrie at Rock Island in June 1946 (Spofford 1948); 5 on 23 Dec. 1978; 1 on 9 Jan. 1982; 7 on 12 Jan. 1980.
- RUFFED GROUSE at Hassler residence near Lovelady in 1963, 1965, 1966, 1978 (Hassler 1970, 49:67); foray, 1, 0/0, on 2 June in PSP; nest with 5 eggs in PSP in 1936 (*fide* Ganier 1937); 3 on 15 May 1982 along Hidden Passage Trail by MLB *et al.*
- BOBWHITE 2 on 27 April 1979 by DRH, CPN; foray, 14, 0/0, all in western part of county; observed in June 1946 in PSP by Spofford (1948).
- TURKEY observed prior to 1920, and in 1930-31 (Ganier 1937); game farm birds released in 1941 and 1950 (Schultz 1955); present in 1962 (Lewis 1962); 1 on 1 Sep. 1975 at PSP.
- SANDHILL CRANE regular migrant over Lovelady-Byrdstown area, observed in March and late Oct. - early Dec. Extremes: spring — 372 between 1-4 March 1979; 30 on 21 March 1971; fall — about 10 on 21 Oct. 1968; 768+ on 1-2 Dec. 1978.
- AMERICAN COOT 500 on DHL on 31 Oct. 1969 (40:89); 10 on 23 Dec. 1978; 44, harrassed by Bald Eagle, on 9 Jan. 1982; 11 on 12 Jan. 1980.

COMMON SNIPE --- 8 on 30 Oct. 1969 (40:89).

- SPOTTED SANDPIPER 1 at lake in PSP on 15 May 1982 by MLB *et al.;* 1 on 14 Oct. 1969 (40:69).
- KILLDEER 1 on 27 Apr. 1979 by DRH, CPN; foray 10, 0/0, all in W part of county; 12 on 23 Dec. 1978; 2 on 9 Jan. 1982.
- DUNLIN 10 on 30 Oct. 1969 (40:69).

RING-BILLED GULL — 1 on 23 Dec. 1978; 2 on 9 Jan. 1982; 4 on 12 Jan. 1980.

- ROCK DOVE 6 on 28 April 1979 by DRH, CPN; foray 12, 0/0, all in western part of county; 16 on 23 Dec. 1978; 4 on 9 Jan. 1982; 10 on 12 Jan. 1980.
- MOURNING DOVE 10 on 27 April and 25 on 28 April 1979 by DRH, CPN; foray 68, 0/0, most in western part of county; 13 observed by AFG *et al.*, June 1937; 42 on 23 Dec. 1978; 2 on 9 Jan. 1982; 10 on 12 Jan. 1980.
- YELLOW-BILLED CUCKOO foray 34, 2/2, widespread; 7 observed by AFG et al., June 1937; 2 on 15-16 May 1982 by MLB et al.
- BLACK-BILLED CUCKOO 1 on 8 May 1971 at Byrdstown (42:69).

SCREECH OWL — 1 on 18 May 1980; 1 on 8 Sep. 1976 at PSP by MDW.

- GREAT HORNED OWL 1 on 1 March and 22 April 1970 (41:43); 1 on 20 May 1970 (41:69); 1 heard by AFG *et al.*, June 1937; 2 on 9 Nov. 1969 (40:22); 2 on 3 Dec. 1979; 2 on 18 Dec. 1979; 1 on 19 Dec. 1970 (42:19); 1 on 5 Jan. 1980; 1 on 9 Jan. 1982; 2 on 12 Jan. 1980.
- BARRED OWL 1 on 1 March, and up to 4 through spring 1970 (41:43, 69); 2 on 15-16 May 1982 by MLB *et al.*; 1 heard in PSP by Spofford (1948), June 1946; 1 on 23 Dec. 1978; 2 on 12 Jan. 1980.
- CHUCK-WILL'S WIDOW 1 on 20 April 1971 (42:49); 1 on 30 Aug. 1970 (41:85); regularly heard during summer at Byrdstown.
- WHIP-POOR-WILL 1 on 1 April 1980; 1 on 19 April 1971 (42:74); 2 on 15 April 1970 (41:43); 10 on 15-16 May 1982 by MLB *et al.*; described by AFG *et al.* as fairly common, June 1937; 1-7 summer 1970 (41:69); observed by Spofford, June 1946; 1 on 24 Sep. 1970 (41:85).
- COMMON NIGHTHAWK 3 observed by AFG et al., June 1937; 1 on 26 July 1971 (42:69).
- CHIMNEY SWIFT 40 on 27 April, and 50 on 28 April 1979 by DRH, CPN; 9 on 15-16 May 1982 by MLB *et al.*; foray 0/0, 61; described as fairly common by AFG *et al.*, June 1937.
- RUBY-THROATED HUMMINGBIRD 1 on 23 April 1980; 1 on 26 April 1980; foray -0/0, 1 on 3 June; observed by AFG *et al.*, June 1937.
- BELTED KINGFISHER pair observed in PSP by AFG et al., June 1937; 1 on 12 July 1981 in PSP by CPN; 2 on 23 Dec. 1978; 2 on 12 Jan. 1980.
- COMMON (YELLOW-SHAFTED) FLICKER 1 on 27 April 1971 by DRH, CPN; 1 on 16 May 1982 by MLB *et al.*; foray 3/2, 23; described as fairly common by AFG *et al.*, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 1 on 23 Dec. 1978; 2 on 9 Jan. 1982; 10 on 12 Jan. 1980.
- PILEATED WOODPECKER 2 on 27 April 1979 by DRH, CPN; 8 on 15 May, 1 on 16 May 1982 by MLB *et al.*; foray 1/1, 17; 4 observed by AFG *et al.*, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 2 on 23 Dec. 1978; 3 on 9 Jan. 1982; 7 on 12 Jan. 1980.
- RED-HEADED WOODPECKER 14 observed by AFG *et al.*, June 1937; 30 on 30 Oct., none on 31 Oct. 1969 at Obey River Park (40:90); 2 through winter 1970, and 10 on 1 Feb. 1970 (41:23, 43); a few in winter 1978 and 1979.
- RED-BELLIED WOODPECKER 1 on 27 April and 3 on 23 April 1979 by DRH,

CPN; foray — 0/0, 7; 2 observed by AFG *et al.*, June 1937; 3 on 23 Dec. 1978; 5 on 9 Jan. 1982; 9 on 12 Jan. 1980.

- HAIRY WOODPECKER 1 on 27 April 1979 by DRH, CPN; 1 on 4 May 1980; 1 on 15 May 1982 by MLB *et al.*; foray 0/0, 1 on 2 June; 9 recorded by AFG *et al.*, June 1937; 1 present Jan. and Feb. 1979; 1 on 12 Jan. 1980.
- DOWNY WOODPECKER 2 on 28 April 1979 by DRH, CPN; 2 on 16 May 1982 by MLB et al.; foray — 1/1, 5; 5 observed by AFG et al., June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 2 on 23 Dec. 1978; 4 on 9 Jan. 1982; 3 on 12 Jan. 1980.
- RED-COCKADED WOODPECKER all of the following reports are from PSP: 3 groups of birds observed by AFG *et al.*, June 1937; 2 pairs observed by Mayfield on 20 July 1942 (Mayfield 1942); 4 nest holes, 1 fresh, observed by Spofford near the Natural Bridge in June 1946, and additional new nest hole found in June 1947 (Spofford 1948); nest cavity reported by M. Pritchard during the mid-1960's along Hidden Passage Trail (Nicholson 1977); adult feeding 2 fledged young observed by DRH on 1 June 1969 (40:69); nest cavity observed by DRH on 6 June 1971 (42:69). During 1973, tornadoes felled pines in the region of the most recent observations, but much suitable habitat remains. Some of this was searched during the foray, but no birds or nest trees were observed.
- EASTERN KINGBIRD 1 on 22 April 1980; 2 on 27 April 1979 by DRH, CPN; foray — 0/0, 19; all in western part of county; 3 recorded by AFG *et al.*, June 1937; nest at PSP observed by Spofford, June 1946.
- GREAT CRESTED FLYCATCHER 2 on 15 April 1972 (42:51); 1 on 28 April 1979 by DRH, CPN; 4 on 15-16 May by MLB *et al.*; foray 0/0, 8; described by AFG as common, June 1937.
- EASTERN PHOEBE 6 on 2 March and 3 on 21 March 1969 (40:46); nest with 5 eggs on 6 April 1979 at BT; nest with 4 eggs on 6 April 1980 at BT; 3 on 28 April 1979 by DRH, CPN; 9 on 15 May 1982 by MLB *et al.*; foray 0/0, 4, and nest, contents unknown, on 2 June under bridge over Franklin Cr. by MLB, CPN, DFV; described by AFG as abundant, June 1937, and many nests observed over streams on rock overhangs and cliffs; 1 on 23 Dec. 1978.
- ACADIAN FLYCATCHER 3 on 15 May 1982 by MLB *et al.*; foray 0/0, 19; several observed by Spofford, June 1946.
- EASTERN WOOD PEWEE 2 on 15 May, 3 on 16 May by MLB *et al.*; foray 0/0, 8; described by AFG as common, June 1937.
- HORNED LARK foray 0/0, 1, on 2 June; brood on 14 June 1937, 6 km north of BT, and adult on 5 July 1937 10 km north of BT, observed by AFG *et al.;* no known recent nestings; present during winter of 1978 in flocks of up to 500 in BT area.
- ROUGH-WINGED SWALLOW 12 on 27 April 1979 by DRH, CPN; 5 on 5 May 1980; 2 over lake in PSP on 15 May 1982 by MLB *et al.*; foray — 0/0, 3; 6 nesting in potholes along creeks observed by AFG *et al.*, June 1937; observed nesting in PSP by Spofford, June 1946.
- BARN SWALLOW 5 on 4 April 1969 (40:46); 40 on 27 April, 50 on 28 April 1979 by DRH, CPN; 2 on 16 May 1982 by MLB *et al.*; foray 0/0, 349.
- CLIFF SWALLOW 15 on 22 April 1980 at Obey River Bridge.

- PURPLE MARTIN 1 on 13 March 1979; 1 on 23 March 1980; 120 on 28 April 1979 by DRH, CPN; foray 0/0, 93, and several colonies in western part of county; 5 observed by AFG *et al.*, June 1937; 25 nesting at BT in 1969 (40:69).
- BLUE JAY 3 on 27 April 1979 by DRH, CPN; 3 on 15-16 May 1982 by MLB et al.; foray 3/3, 35; fairly common according to AFG et al., June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 45 on 23 Dec. 1978; 70 on 9 Jan. 1982; 48 on 12 Jan. 1980.
- COMMON CROW 3 on 27 April and 15 on 28 April 1979 by DRH, CPN; 12 on 15-16 May 1982 by MLB *et al.*; foray 27/13, 83; several reported in June 1946 by Spofford; 1 on 9 Sep. 1976 at PSP by MDW; 37 on 23 Dec. 1978; 45 on 9 Jan. 1982; 97 on 12 Jan. 1980.
- CAROLINA CHICKADEE 3 on 27 April, 3 on 28 April 1979 by DRH, CPN; 3 on 15 May, 1 on 16 May 1982 by MLB *et al.*; foray — 1/1, 24; fairly common according to AFG *et al.*, June 1937; 17 on 23 Dec. 1978; 15 on 9 Jan. 1982; 6 on 12 Jan. 1980.
- TUFTED TITMOUSE 2 on 27 April, 3 on 28 April 1979 by DRH, CPN; 6 on 16 May 1982 by MLB *et al.*; foray — 5/5, 22; fairly common according to AFG, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 25 on 23 Dec. 1978; 12 on 9 Jan. 1982; 32 on 12 Jan. 1980.
- WHITE-BREASTED NUTHATCH 1 on 28 April 1979 by DRH, CPN; 1 on 15 May 1982 by MLB *et al.*; foray 0/0, 1 on 2 June; fairly common according to AFG *et al.*, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 3 on 23 Dec. 1978; 4 on 9 Jan. 1982; 5 on 12 Jan. 1980.
- RED-BREASTED NUTHATCH 1 on 27 April 1978 (49:68); present during fall 1972 (43:99); 1 on 17 Dec. and 31 Jan. 1970 (41:23); none during winter of 1980; 1 on 9 Jan. 1982; occasional winter resident in BT area, probably fairly common during invasion years in PSP.
- BROWN CREEPER 1 on 18 Oct. 1969 (40:90); 1 on 27 Oct. 1970 (41:85); 1 on 17 Nov. 1978; 1 on 9 Jan. 1982; 1 on 12 Jan. 1980.
- HOUSE WREN first county summer record, 1 on 19 June 1976 (47:100); nesting pair on 15 May 1978 (49:68); foray 0/0, 1 on 2 June; 1 on 6 Oct. 1971; all records from BT area.
- BEWICK'S WREN formerly nesting; fairly common according to AFG et al., with nest with 6 eggs and nest with 5 young on 16 June 1973; present 28 Feb., 12, 14 March, 4 April 1971; 2 pairs on 2 April 1972; pair building nest on 10 April 1972; 1 singing on 6 April 1970; 1 singing on 27 May 1978 (49:93); 1 on 31 Jan. 1970 (41:23).
- CAROLINA WREN 4 and fledged brood near BT on 28 April 1979 by DRH, CPN; 1 on 15 May 1982 by MLB *et al.;* foray — 0/0, 3; described as fairly common and nest observed by AFG *et al.*, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 2 on 23 Dec. 1978; 3 on 9 Jan. 1982; 5 on 12 Jan. 1980.
- MOCKINGBIRD 1 on 27 April 1979 by DRH, CPN; foray 0/0, 24; 2 on 23 Dec. 1978; 6 on 9 Jan. 1982; 4 on 12 Jan. 1980.
- GRAY CATBIRD 2 on 28 April 1980; 1 on 16 May 1982 by MLB *et al.*; foray 0/0, 20; described as fairly common and several nests observed by AFG *et al.*, June 1937.

BROWN THRASHER — 1 on 27 April and 1 on 28 April 1979 by DRH, CPN; foray — 0/0, 12; fairly common according to AFG et al., June 1937; 3 on 9 Jan. 1982; 1 on 12 Jan. 1980.

AMERICAN ROBIN — 6 on 27 April and 15 on 28 April 1979 by DRH, CPN; foray
— 0/0, 45; 4 birds and nest observed by AFG *et al.*, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 29 on 23 Dec. 1978; mass migration lasting 1 hr., 20 min. observed on 26 Dec. 1969 (41:23); 19 on 9 Jan. 1982; 5 on 12 Jan. 1980.

WOOD THRUSH — 4 on 23 April 1980; 1 on 27 April and 2 on 28 April 1979 by DRH, CPN; 1 on 15 May 1982 by MLB *et al.*; foray — 2/2, 16; common according to AFG *et al.*, June 1937.

HERMIT THRUSH — 1 on 9 Oct. 1969 (40:70); 5 on 20 Nov. and 1 on 22 Nov. 1972; 1 on 9 Jan. 1982; 1 on 12 Jan. 1980.

- SWAINSON'S THRUSH 1 on 9 May 1971; 7 on 16 May 1982 by MLB et al.; 1-3 until 21 May 1970 (41:90).
- EASTERN BLUEBIRD 10 on 2 March 1980; 8 on 27 April 1979 by DRH, CPN; foray 0/0, 27; common according to AFG *et al.*, June 1937; 14 on 23 Dec. 1978; 9 on 9 Jan. 1982; 45 on 12 Jan. 1980.
- BLUE-GRAY GNATCATCHER 1 on 31 March 1979; 3 on 31 March 1980; 10 on 4 April 1978; 4 on 27 April and 10 on 28 April 1979 by DRH, CPN; 1 on 15 and 16 May 1982 by MLB et al.; foray — 7/5, 28; 2 observed by AFG et al., June 1937.
- GOLDEN-CROWNED KINGLET 2 on 23 Dec. 1978; 1 on 9 Jan. 1982; 2 on 12 Jan. 1980.
- CEDAR WAXWING 1 on 27 April 1979 by DRH, CPN; 7 on 15 May and 7 on 16 May 1982 by MLB et al.; 5 on 16 May 1980; 12, and pair building nest observed by AFG et al., June 1937; 4 on 22 June 1969, flycatching (40:91); 16 on 20 Oct. 1970 (41:86); 20 occasionally, winter 1970 (41:23); 100+ on 23 Dec. 1978; 25 on 9 Jan. 1982; 172 on 12 Jan. 1980; 100 on 25 Feb. 1973 (44:23).
- LOGGERHEAD SHRIKE foray 0/0, 3, in western part of county; none during summer 1970 (41:69); 1 on 9 Jan. 1982; 1 on 12 Jan. 1980; 1 on 24 Jan. 1979.
- STARLING 5 on 27 April and 40 on 28 April 1979 by DRH, CPN; foray 0/0, 69, most in western part of county; below normal, fall 1969 (40:91); 21 on 23 Dec. 1978; 1300 on 9 Jan. 1982; 110 on 12 Jan. 1980.
- WHITE-EYED VIREO 7 on 15 May and 2 on 16 May 1982 by MLB et al.; foray 0/0, 32; fairly common according to AFG et al., June 1937.
- YELLOW-THROATED VIREO 3 on 15 May 1982 by MLB et al.; foray 1/1, 20; common according to AFG et al., June 1937.

RED-EYED VIREO — 1 on 27 April and 6 on 28 April 1979 by DRH, CPN; 40 on 15 May, 16 on 16 May 1982 by MLB et al.; foray — 37/17, 183; common and 2 nests with young reported by AFG et al., June 1937.

PHILADELPHIA VIREO — 1 on 16 May 1972.

BLACK-AND-WHITE WARBLER — 1 on 28 April 1979 by DRH, CPN; 20 on 15 May, 6 on 16 May 1982 by MLB *et al.*; foray — 6/6, 27; fairly common according to AFG *et al.*, June 1937.

- PROTHONOTARY WARBLER adults observed feeding young in nest cavity along Obey River on 18 May 1980; foray 0/0, 4, all in western part of county.
- SWAINSON'S WARBLER 2 along Hidden Passage Trail, PSP on 15 May 1982 by MLB *et al.*; foray 0/0, 2 on 2 June by MLB and DV along stream in PSP.
- WORM-EATING WARBLER 1 on 25 April 1980; 1 on 28 April 1979 by DRH, CPN; 10 on 15 May and 3 on 16 May 1982 by MLB *et al.*; foray 2/1, 20.
- TENNESSEE WARBLER window casualty on 3 Sep. 1970 (41:86).
- NORTHERN PARULA 4 on 15 May 1982 and 2 on 16 May 1982 by MLB et al.; 1 on 18 May 1980; foray 0/0, 8; several birds and nest with 4 eggs on 3 June 1946 reported by Spofford.
- YELLOW WARBLER 1 on 21 April 1980; 1 on 27 April 1979 by DRH, CPN; 5 on 18 May 1980; foray 0/0, 4.
- CAPE MAY WARBLER 1 on 28 April 1979 by DRH, CPN; 1 on 2 June 1946 by Spofford.
- BLACK-THROATED BLUE WARBLER 1 on 28 April 1979 by DRH, CPN at BT.
- YELLOW-RUMPED (MYRTLE) WARBLER 3 on 28 April 1979 by DRH, CPN; 1 on 13 and 17 Oct. 1979 (40:91); 19 on 23 Dec. 1978; 36 on 9 Jan. 1982; 11 on 12 Jan. 1980.
- BLACK-THROATED GREEN WARBLER 31 on 15 May and 2 on 16 May 1982 by MLB *et al.*; foray 6/4, 38, all in PSP area; 6 on 12 July 1970 at PSP (41:69).
- BLACKBURNIAN WARBLER 1 on 24 April 1980; 1 on 15 May, 11 on 16 May 1982 by MLB *et al*.
- CERULEAN WARBLER 1 on 18 May 1980.
- YELLOW-THROATED WARBLER 1 on 8 April 1980; nest at BT, bird incubating on 23 April 1980; 3 on 15-16 May 1982 by MLB *et al.*; foray 1/1, 13; 1 reported by AFG *et al.*, June 1937.
- BAY-BREASTED WARBLER 1 on 15 May and 2 on 16 May 1982 by MLB et al.
- BLACKPOLL WARBLER 1 on 16 May 1982 by MLB et al.
- PINE WARBLER 8 on 15 May, 2 females gathering nest material on 16 May 1982 by MLB *et al.*; foray — 10/7, 41, most in PSP area; reported by AFG *et al.* as common, June 1937; bird gathering nest material on 1 June, also present 6, 22 June 1969 at PSP (40:69); 1 on 12 June 1970 at PSP (41:69); 4 on 9 Sep. 1976 at PSP by MDW.
- PRAIRIE WARBLER 3 on 28 April 1979 by DRH, CPN; 5 on 15 May, 2 on 16 May 1982 by MLB *et al.*; foray 3/1, 39; most abundant bird in June 1937, also nest with 3 eggs, and nest with grown young described by AFG *et al*.
- OVENBIRD 4 on 21 April 1980; 4 on 27 April, 3 on 28 April 1979 by DRH, CPN;
 28 on 15 May and 13 on 16 May 1982 by MLB *et al.*; foray 29/17, 87, most common in PSP area; recorded daily by AFG *et al.*, June 1937; common on 1 June 1969 at PSP (40:69); common on 12 July 1970 at PSP (41:69-70); 1 on 9 Sep. 1976 at PSP by MDW.
- NORTHERN WATERTHRUSH 1 singing on 15 May 1982 at PSP lake by Mary Ann Guschke.

- LOUISIANA WATERTHRUSH 1 on 27 April 1979 by DRH, CPN; 1 on 15 May 1982 by MLB et al.; foray 0/0, 1; 10 recorded by AFG et al., June 1937.
- KENTUCKY WARBLER 2 on 18 April 1980; foray 1/1, 13, in both PSP area and western part of county; fairly common according to AFG *et al.*, June 1937.
- COMMON YELLOWTHROAT 2 on 28 April 1979 by DRH, CPN; 1 on 15 May, 1 on 16 May 1982 by MLB *et al.*; foray 1/1, 40, most common in western part of county; fairly common and nest with 4 hatching eggs on 17 June 1937, reported by AFG *et al.*
- YELLOW-BREASTED CHAT on 27 April 1979 by DRH, CPN; 8 on 15 May and 3 on 16 May 1982 by MLB et al.; foray 2/1, 35; common according to AFG et al., June 1937.
- HOODED WARBLER 1 on 21 April 1980; 4 on 28 April 1979 by DRH, CPN; 50 on 15 May, 4 on 16 May 1982 by MLB et al.; foray — 6/3, 40, common throughout county; common according to AFG et al., June 1937.
- HOUSE SPARROW 15 on 28 April 1979 by DRH, CPN; foray 0/0, 20, all in western part of county; 3 observed by AFG *et al.*, June 1937; 3 on 23 Dec. 1978; 25 on 9 Jan. 1982; 1 on 12 Jan. 1980.
- EASTERN MEADOWLARK 19 on 27 April and 30 on 28 April 1979 by DRH, CPN; foray — 0/0, 114, all in western part of county; 102 on 23 Dec. 1978; 1 on 9 Jan. 1982; 21 on 12 Jan. 1980.
- BOBOLINK 52 on 7-11 May 1975 (46:67); also recorded spring 1976, in alfalfa fields.
- RED-WINGED BLACKBIRD 32 on 27 April 1979 by DRH, CPN; foray 0/0, 75, in western part of county; 1000+ on 12 Jan. 1980.
- ORCHARD ORIOLE 1 on 22 April 1980; 3 on 28 April 1979 by DRH, CPN; foray — 0/0, 30, in western part of county.
- NORTHERN ORIOLE 1 on 16 May 1982 by MLB et al.
- COMMON GRACKLE 10 on 27 April, 30 on 28 April 1979 by DRH, CPN; 1 on 16 May 1982 by MLB *et al.*; foray — 0/0, 109, most in western part of county; 13 on 23 Dec. 1978; 500 on 9 Jan. 1982; plentiful winter 1970 (41:23).
- BROWN-HEADED COWBIRD 4 on 28 April 1979 by DRH, CPN; foray 2/2, 41.
- SCARLET TANAGER 4 on 28 April 1979 by DRH, CPN; 14 on 15 May, 10 on 16 May 1982 by MLB *et al.*; 2 on 18 May 1980; foray — 5/4, 26, more common in PSP area; common according to AFG *et al.*, June 1937; nesting pair at BT, 1969 (40:60); 1-5 until 20 Oct. 1970 (41:87).
- SUMMER TANAGER 1 on 27 April, 2 on 28 April 1979 by DRH, CPN; 2 on 30 April 1980; foray — 2/2, 30; common according to AFG *et al.*, June 1937; pair feeding young, assisted by Wood Thrush pair, summer 1969 (40:69); 1 on 9 Sep. 1976 at PSP by MDW.
- CARDINAL 4 on 27 April, 15 on 28 April 1979 by DRH, CPN; 3 on 15 May and 1 on 16 May 1982 by MLB *et al.*; foray 1/1, 26; 17 and 1 nest reported by AFG *et al.*, June 1937; 1 on 9 Sep. 1976 at PSP by MDW; 13 on 23 Dec. 1978; 26 on 9 Jan. 1982; 26 on 12 Jan. 1980.
- ROSE-BREASTED GROSBEAK 1 on 5 May 1980; 5 on 15 May, 2 on 16 May 1982 by MLB et al.

- INDIGO BUNTING 1 on 28 April 1979 by DRH, CPN; 7 on 15 May and 15 on 16 May 1982 by MLB et al.; foray — 8/4, 138; common according to AFG et al., June 1937.
- BLUE GROSBEAK 3 on 18 May 1980; foray 0/0, 9, all in western part of county.
- EVENING GROSBEAK up to 32 during winter 1969-70, from 10 Dec. on (41:23); 15 through spring 1970, last, 1 on 12 May 1970 (41:44, 70); 7 on 19 April 1978, last for season (49:68); none during 1979; only record for 1980, 5 on 23 March.
- PURPLE FINCH 15 on 21 April 1980; 11 on 23 Dec. 1978; up to 50 during winter 1970 (41:23); 6 on 9 Jan. 1982; 20 on 12 Jan. 1980.
- HOUSE FINCH 25 on 9 Jan. 1982; up to 50 rest of winter.
- PINE SISKIN none in winter 1978 (49:43); also absent during 1979, 1980.
- AMERICAN GOLDFINCH 1 on 27 April and 5 on 28 April 1979 by DRH, CPN; foray 0/0, 5; common according to AFG *et al.*, June 1937; 6 on 23 Dec. 1978; 16 on 9 Jan. 1982; 3 on 12 Jan. 1980.

RED CROSSBILL — 18 on 28 Oct. 1972 at PSP by DRH (43:100).

- RUFOUS-SIDED TOWHEE 2 on 27 April, 3 on 28 April 1979 by DRH, CPN; 10 on 15 May and 1 on 16 May 1982 by MLB *et al.*; foray 4/3, 29; common, and nest with eggs described by AFG *et al.*, June 1937; 1 on 23 Dec. 1978; 2 on 9 Jan. 1982; 4 on 12 Jan. 1980.
- GRASSHOPPER SPARROW foray 0/0, 3, near Huddleston Knob and Greenbrier; 2 present 8-15 July 1970 (41:70).
- BACHMAN'S SPARROW 9 recorded in park area by AFG *et al.*, June 1937; no recent records, and the maturation of the forests since the 1930's has probably reduced the amount of suitable habitat.
- TREE SPARROW 5 on 26 Jan. 1978 (49:43).
- CHIPPING SPARROW 1 on 1 April 1980; 20 on 28 April 1979 by DRH, CPN; 2 on 15-16 May 1982 by MLB *et al.*; foray 0/0, 37; fairly common according to AFG *et al.*, June 1937.
- FIELD SPARROW 3 on 28 April 1979 by DRH, CPN; 1 on 15 May, 1 on 16 May 1982 by MLB *et al.*; foray — 0/0, 10; fairly common according to AFG *et al.*, June 1937; 6 on 23 Dec. 1978; 15 on 9 Jan. 1982; 51 on 12 Jan. 1980.
- WHITE-THROATED SPARROW 5 on 27 April, 5 on 28 April 1979 by DRH, CPN; 3 on 14 Oct. 1969 (40:92); 4 on 18 Oct. 1970 (41:86); 40 on 23 Dec. 1978; 64 on 9 Jan. 1982; 87 on 12 Jan. 1980.
- WHITE-CROWNED SPARROW 1 on 22 April 1980; none observed during winters of 1970 (41:23), 1977, 1978 and 1979.

FOX SPARROW - 1 on 23 Dec. 1978.

SONG SPARROW — 2 on 27 April, 3 on 28 April 1979 by DRH, CPN; first summer record at BT, 1 pair in 1968; however, possibly in area earlier, as reported from Cumberland Co., Kentucky, just northwest of Pickett Co., in 1938 (Mengel

1965); at 3 locations during summer 1969 (40:69); 1 pair summer 1970 (41:70); many pairs by 1976 (47:100); foray — 0/0, 9, in BT area; 20 on 23 Dec. 1978; 7 on 9 Jan. 1982; 11 on 12 Jan. 1980.

At present, 159 species are known from Pickett County. Seventy-nine species were observed during the 1979 foray, and all of these probably nest in the county. An additional 13 species have been observed in Pickett County during recent nesting seasons, and all of these probably nest there. These are the Cooper's, Red-tailed, Red-shouldered and Broad-winged Hawks, Turkey, Screech, Great Horned and Barred Owls, Chuck-will's-widow, Whip-poor-will, Belted Kingfisher, Cedar Waxwing and Cerulean Warbler. Four species have not been recorded in recent years and probably no longer nest in Pickett County. These are the Peregrine Falcon, Red-headed and Red-cockaded Woodpeckers, and Bachman's Sparrow. The House Wren and Song Sparrow are recent additions to the breeding fauna.

Foray Participants — Fred J. Alsop, III, Michael L. Bierly, James M. and Betty Reid Campbell, Sam and Kathryn Coward, Dave and Robbie Hassler, Glen King, Thomas Laughlin, Doc and Johnnie Little, George, Mark and Rad Mayfield, Charles P. Nicholson, Holly Overton, Paul Pardue, Rick Phillips, Thomas Phillips, Polly Ryder, and David Vogt.

LITERATURE CITED

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HASSLER, R. 1969. Sandhill Cranes in Pickett County. Migrant 40:63-64.

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MAYFIELD, G. R. 1942. Red-cockaded Woodpecker still at Pickett State Park. Migrant 13:47.

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—. 1981. Birds of Fentress County, Tennessee, including the 1979 Foray. Migrant 52:53-62.

SCHULTZ, V. 1953. Status of the Ruffed Grouse in Tennessee. Migrant 24:45-52.

-----. 1955. Status of the Wild Turkey in Tennessee. Migrant 26:1-8.

SPOFFORD, W. R. 1942. Nesting of the Peregrine Falcon in Tennessee. Migrant 13:29-31.

-. 1948. Some additional notes on the birds of Pickett Forest, Tennessee. Migrant 19:12-13.

P. O. Box 402, Norris, Tennessee 37828. Accepted 15 September 1982.

MINUTES OF THE ANNUAL BOARD OF DIRECTORS' AND BUSINESS MEETING, 1982

BOARD OF DIRECTORS' MEETING

The 67th Annual Meeting of the Board of Directors of the Tennessee Ornithological Society convened at 2105 on 7 May 1982 at the Baptist Convention Center, Brentwood, Tennessee. President Michael Bierly called the meeting to order, with Secretary Pat Stallings recording the minutes. The minutes of the 14 November 1981 meeting were approved as read.

REPORTS OF OFFICERS

There were no reports from the Vice Presidents, Directors-at-Large, or the Secretary.

The CURATOR, James T. Tanner, reported sales of back issues of *The Migrant* had netted the Society \$179.38 during the past year.

The TREASURER, George R. Payne, Jr., reported that as of 30 April 1982 the Society had assets of \$26,846.05 with anticipated liabilities of \$7,850, leaving a capital reserve of \$18,996.05. Income for the last six months was \$7,398.96 with expenses of approximately \$3,000, including two issues of *The Migrant*.

Chairman Bierly reported for Charles P. Nicholson, EDITOR, that the December issue of *The Migrant* was being typeset now. Members were urged to send in material to be published. At present, there would be a short time span between receipt of material and publication.

NEW BUSINESS

Chairman Bierly asked for comments on *The Tennessee Warbler* as to format, content, or improvements. Ben Coffey commented on late delivery, which made it impossible to meet the published deadlines for making room reservations for the Spring meeting. Bierly stated that he thought the mail problems would be resolved and he would like to see information or announcements for publication from every chapter. Deadline for the Fall issue is 2 August 1982.

TOS CERTIFICATION COMMITTEE — The resolution to establish a TOS Certification Committee to verify an official Tennessee bird list was presented and George Payne moved that the resolution as printed in the March 1982 newsletter be brought to the floor for discussion; Anne Young seconded the motion. No changes were made and the resolution as printed was adopted unanimously. (Copy of the resolution is included in the minute book).

ENDANGERED SPECIES ACT — George Payne made a motion that the Society send a letter to the United States Senators and Congressmen from Tennessee urging reauthorization of the Endangered Species Act. Carolyn Bullock seconded the motion. Charles Nicholson had drafted a letter stating the Society's position and it was voted to send this letter to the Tennessee delegation.

REPORTS OF COMMITTEES

FINANCE — The President stated that he had received a letter from Richard G.

Taylor, Finance Committee Chairman, saying that the records of the Treasurer had been examined and found to be in order.

NOMINATING — Tom Gushke, Chairman, placed in nomination the name of Tony Koella of the Knoxville Chapter as President-elect. No other nominations were received and the directors voted to present the name of Koella to be voted upon by the general membership at the business meeting.

CONSERVATION — Arlo Smith stated that the Memphis chapter participated in the Bald Eagle hacking project at Reelfoot Lake in 1981. Three eagles were successfully hacked. One was caught in a coyote trap in South Dakota and lost. The whereabouts of the other two are unknown.

Mr. Smith further reported that the Corps of Engineers was considering re-meandering some formerly channelized areas of the Forked Deer and Obion Rivers. Chuck Cook of The Nature Conservancy in Tennessee asked for suggestions for areas along the Hatchie River for possible acquisition to be added to existing wildlife areas.

Ken Dubke stated that several wildlife observation areas have been established in the state and a new Great Blue Heron rookery with seven nests has been found within the Savannah Bay observation area. Also, a pair of Ospreys have a nest with two eggs in the Tennessee River gorge near Chattanooga and six pairs of Ospreys have been reported from Watts Bar Lake.

A draft Environmental Impact Statement has been prepared for Amnicola Marsh and preservation of approximately 55 acres was proposed. The land has been valued at \$14,000 an acre however, Dubke sees a good chance of its preservation.

ANNOUNCEMENTS

FALL 1983 MEETING — Lloyd Clayton of the Buffalo River chapter extended an invitation to the membership for the Fall 1983 meeting. Lula Coffey moved to accept the invitation, Ann Hettish seconded, and the motion carried.

SPRING 1983 MEETING — Arlo Smith, reporting for Martha Waldron, invited the Society to West Tennessee for the Spring 1983 meeting to be hosted by the Memphis chapter, the location to be decided later.

FALL 1982 MEETING — Marjory Harper reported that the Highland Rim chapter would host the Fall 1982 meeting to be held 12-14 November in the vicinity of Woods Reservoir.

FORAY — The President stated that he had had difficulty in obtaining a Foray Director, and as yet, the position is unfilled. The 1982 Foray will be held in White County, 28-31 May. Lil Dubke suggested Marion County as a possible site for the 1983 Foray.

The meeting adjourned at 2150.

ANNUAL BUSINESS MEETING

Following the banquet Saturday evening, 8 May 1982, the business meeting was called to order with 138 persons present. The President related the actions of

the Board of Directors Meeting and the name of Tony Koella was presented as President-elect. No other nominations were received and Koella was elected unanimously.

Members from each chapter present, members-at-large, and visitors were recognized.

Following announcements and awarding of door prizes, the membership was entertained by a program from Dot and Paul Crawford entitled "To the Yukon and Beyond."

Pat Stallings, Secretary

AOU CENTENNIAL

THE AMERICAN ORNITHOLOGISTS' UNION, oldest and largest of the ornithological societies in North America, is celebrating the hundredth anniversary of its founding in 1983. Its quarterly journal, THE AUK, now includes about 1000 pages a year of papers on a wide variety of ornithological topics. The long-awaited sixth edition of the AOU Checklist of North American Birds will be published in time for the centennial meeting. If interested in knowing more about the AOU please write to Membership Chairman Dr. Gustav A. Swanson, Department of Fishery and Wildlife Biology, Colorado State University, Ft. Collins, CO 80523.

BOOK REVIEW

THE FALCONS OF THE WORLD — Tom J. Cade, paintings by R. David Digby. 1982. Cornell University Press, Ithaca, New York. 192 pp. + 44 color plates. \$38.50. — This book is in two parts, biology of falcons (here restricted to members of the genus Falco), and species accounts. Topics discussed in the first part include characteristics and taxonomy of falcons, distribution, migration, feeding adaptions, flight performance and hunting success, sexual dimorphism, and behavior and reproduction. In the final chapter of Part I, "Falcons and men," Cade describes and defends the sport of falconry, and the contribution falconers have made to raptor conservation, particularly through captive propogation. Thirty-nine species are described and illustrated in Part II. Species accounts include descriptions of the birds, their geographic ranges, feeding and nesting habits, population estimates and the species' conservation status, and other interesting aspects of their biology. A lengthy current bibliography is included, and many unpublished studies are cited. Range maps appear at the end of the species accounts. Perhaps my major criticism of the book is that some maps show ranges of 2 species, without distinguishing them on the map or in the map key. The plates are well done, and I especially like the Orange-breasted Falcon (Falco deiroleucus) and Hobby (F. subbuteo). "Falcons of the World" is a handsome book, well illustrated and full of factual information written by a leading authority on Falco. I recommend it to anyone interested in raptors or raptor art.

— CHARLES P. NICHOLSON

1982

ROUND TABLE NOTES

FIRST HOUSE FINCH NEST IN TENNESSEE — On 31 March 1981 I found a nest, containing one egg, of the House Finch (*Carpodacus mexicanus*) in my yard in Johnson City, Tennessee. The nest was 1.5 m above the ground in a dense coniferous shrub (Arbor Vitae, *Thuja* spp.) A single egg was added on each of the next two days. Before the clutch could be completed, however, the nesting was disrupted by a cat on 3 April. The nest was torn out of the shrub, all but one of the eggs were destroyed, and the female was apparently killed. The nest and egg were salvaged and donated to Milligan College.

The nest was a well-made cup of grasses, weed stems, and debris (pieces of paper towel). It was lined with fine grasses and hair. The nest's dimensions were: total diameter — 11 cm, height — 8 cm, cup diameter — 6 cm, and cup depth — 4 cm.

The egg was pale bluish-green with sparse black speckling confined to the larger end. It measured $20 \times 14 \text{ mm}$.

Though not the first nesting of House Finches in Tennessee (see *Migrant* 51:95, 1980 and 52:19, 1981), this is to my knowledge the first nest found in the state.

RICHARD L. KNIGHT, 804 North Hills Drive, Johnson City, TN 37601. Accepted 5 September 1982.

NESTING OF THE HOUSE FINCH AT KINGSPORT, TENNESSEE — Since the introduction of the House Finch (*Carpodacus mexicanus*) into the New York area during the 1940's, this western bird has extended its nesting and winter ranges steadily in the eastern United States (Elliot and Arbib, *Auk* 70:31-37, 1953). The House Finch was first observed in Tennessee on 24 March, 1972, near Greeneville, Tennessee (Holt, *Migrant* 43:87, 1972). The first recorded Kingsport area sighting came on 28 October 1978, and subsequent sightings have occurred on dates ranging throughout the year. The first evidence of local nesting came during May 1980, when Laughlin and Phillips observed an adult male and female House Finch feeding recently fledged young in Oak Hill Cemetery (Laughlin and Phillips, *Migrant* 52:19, 1981).

I returned to Oak Hill Cemetery on 1 May 1981, to search for further evidence of nesting. On this date I located a total of four males and three females frequenting an area of open park-like habitat, vegetated with native and ornamental trees and shrubs, predominantly conifers. Particularly prominent are plantings of Arbor Vitae (*Thuja occidentalis*).

On 14 May I visited the cemetery again and noticed a male House Finch frequenting a clump of four Arbor Vitae shrubs, singing from the tops and occasionally disappearing into the foliage. As I approached these shrubs a female House Finch flew from cover in the needles and began calling excitedly. A quick examination revealed a nest (nest 1) containing one egg, 2.15 m from the ground and .75 m from the highest point of the shrub. I left at this time as I did not wish to disturb the adults any further.

I returned to Oak Hill Cemetery on 16 May to check the nest contents and make photographs of the nest and surrounding habitat. While carrying out these activities I was fortunate to find three additional nests in the immediate vicinity. All nests were in Arbor Vitae. Nest 1 and nest 2 held four eggs, nest 3 was empty, and nest 4 contained three young which fledged as I examined the shrub.

I again visited Oak Hill Cemetery on 29 May to photograph and band the young. I banded four young House Finches (numbers 920-81510 through 920-81513) from nest 1; nest 2, nest 3, and nest 4 were empty.

The young were quite active when taken from the nest and placed on the ground, attempting to crowd against each other for warmth. Two of the young had been recently fed as evidenced by seeds visible through the thin, distended skin of the neck. The rim of the nest was quite filthy with excreta. The young were banded, photographed and returned to the nest. The adults constantly protested.

This constitutes additional documentation of nesting of House Finches in Tennessee. With the cooperation of other observers across the state, perhaps the extension of the nesting range and new role of permanent resident of the House Finch may be well documented in seasons to come.

RICK PHILLIPS, 1332 Tranbarger Drive, Kingsport, Tennessee 37660. Accepted 20 October 1982.

AN ALBINO AMERICAN CROW — During a trip in middle Tennessee, about 10 km south of U.S. 70 and McEwen, Humphrey County, near Blue Creek, I saw an apparent albino American Crow (*Corvus brachyrhynchos*). The sighting occurred on 12 August 1981 between 1130 and 1145 on the farm of Mr. and Mrs. Bullington. A large solid white bird was observed by the Bullingtons and me flying out of a wooded area along Blue Creek northward up the valley.

Initial identification, without the aid of field glasses and at a distance of approximately 75 m, could have mistaken it as a species of gull. However, the strong, slow, deliberate wing beats, the body size and flight characteristics were aids in the species identification. Identification was confirmed when the individual transected the area and repeated the species' typical call "cah, cah" several times. No other crows were observed in the vicinity during this period.

This individual did not display any melanistic hues along either the dorsal or ventral surfaces. Details of the legs and facial features, specifically the eyes, were not distinguishable.

CARY R. HENDERSON, Rt. 1, Box 378, White House, TN 37188. Accepted 5 February 1982.



WINTER: 1 DECEMBER 1981 - 28 FEBRUARY 1982

The mild fall temperatures continued into early December, and among the lingering species were Green Heron, Osprey, Blue-gray Gnatcatcher, and Common Yellowthroats. Pine and Palm Warblers were reported in higher than average numbers, and a Cape May Warbler wintered at a Knoxville feeding station. From late December through mid-February it was very cold, and sub-zero temperatures in January approached record lows. The extremely low temperatures did not last long, and there was no early indication of cold-induced mortality. Snowfall was below average. February temperatures were below normal early in the month, but warmed rapidly and reached 80° F during the second half of the month. During this period, early returning Purple Martins tied or broke spring arrival records in East Tennessee.

There were several reports of Rough-legged Hawks and Tree Sparrows, both of which usually occur in numbers only during severe winters. Rough-legged Hawks were reported from all regions except the Eastern Mountains. Tree Sparrows were reported as far south as Memphis in the Western Coastal Plain, and from several locations in Middle Tennessee. The only East Tennessee report was at Chattanooga. Red-breasted Nuthatches were reported from throughout the state in good numbers. Pine Siskins were present in moderate to high numbers, and few Evening Grosbeaks were present outside of the mountains. Purple Finches were reported in very low numbers, and were outnumbered by House Finches in some areas. Many reporters commented on the lower than average numbers of other fringillids observed at both feeding stations and in the field.

Results of the 1982 midwinter eagle survey are shown in Table 1. This count was held 2-16 January, with a target date of 9 January. Reports were received from personnel of the Tennessee Wildlife Resources Agency, U.S. Fish and Wildlife Service, U.S. Corps of Engineers, Tennessee Valley Authority, as well as T.O.S. members. This year's total of 241 Bald Eagles is lower than the previous 2 years, and much of the difference was at Reelfoot Lake, where only 99 Bald Eagles were seen, down from the previous 2 year average of over 160.

CBC denotes Christmas Bird Count.

TABLE 1

1982 MIDWINTER EAGLE SURVEY

	Adult	Bald Eagle Imm. Unk.		Total	Golden Adult	Eagle Imm.
	Addit	I nun .	onk.	IULAI	Aduit	
West Tennessee						
Reelfoot Lake	68	30	1	99	-	-
Lauderdale County	2	-	-	2	-	-
Tennessee NWR	8	21	-	29	5	3
Totals	78	51	1	130	5	3
Middle Tennessee						
Land-Between-the-Lakes	13	16	_	29	-	-
Barkley Reservoir	1	1	-	2	-	-
Cross Creeks NWR	5	2	-	7	-	-
Barkley WMA - Dyers Cr.		1	-	1	-	-
Cheatham Reservoir	1	-	-	1	-	-
Cordell Hull Res.	4	-	-	4	3	1
Center Hill Res.	2	1	-	3	-	-
Franklin County	2	1	-	3	-	-
Coffee County	-	-	-	_	-	1
Dale Hollow Res.	24	9	-	33	_	
Totals	52	31	-	83	3	2
East Tennessee						
Norris Reservoir	4	2	-	6	_	_
Cherokee Reservoir	2	-	-	2	-	-
Fort Loudoun Res.	1	-	-	1	-	-
Watts Bar Res.	9	2	-	11	-	-
Chickamauga Res.	2	1	-	3	-	-
Nickajack Res.	1	4	_	5		
Totals	19	9	-	28	-	-
GRAND TOTALS	149	91	1	241	8	5

WESTERN COASTAL PLAIN REGION — Based on frequent field observations, the variety of species expected for the season was present. However, there was a significant decrease in the number of individuals in the Fringillidae family. Speculation, including erratic weather conditions, failed to produce reasons for the decrease.

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Grebe-Owl: Horned Grebe: 2 Dec (1) HNWR (WDR). Great Blue Heron: 20 Dec (20 total, 12 in one flock) MEM CBC (MTOS). Snow Goose: 6 Feb (75) RL (SR, STR). Ruddy Duck: 15 Feb (1200), 9 Mar (650) RoL (BBC, LCC). Sharpshinned Hawk: 20 Dec (1). 23 Dec (1) MEM (JDV). Cooper's Hawk: 9 Dec (1) PEF (HBD, CHD, SSL, NEM). Rough-legged Hawk: 23 Dec (1) HNWR (WDR), 21 Jan (1) Fayette Co., I-40 (MLB). Great Horned Owl: 14 Jan (2) different locations, MEM (JRW), 25 Jan (1) MEM (JRW), 1 Feb - 20 Feb (1) on nest, MEM (JDV, MGW).

Woodpecker-Sparrow: Red-headed Woodpecker: 6 Jan (45) SHF (CHB, CWB, SCF). This was a partial coverage of the park. Previous counts in Fall 1981, indicated numbers around 140. Horned Lark: 5-7 Feb (1500) Tn 78 from Tiptonville to Air Park Inn, Lake Co. (SR, SRR). Red-breasted Nuthatch: 1 Nov (6) PF, 17 Jan (3), 2 Feb (5) PEF (CHB, DAD, MGW), feeding stations (MEM) reported 1-2 daily. Catbird: 20 Dec (1) OVP, CBC (HV). Common Yellowthroat: 20 Dec (1 male) MI, MEM CBC (RTC). Western Meadowlark: 14 Feb (3) PEF (CHB, HBD, JBG, JRW, MGW), 20 Feb (2) PEF (DAD, MGW), 28 Feb (3) PEF (TM, JRW). Pine Siskin: 10 Nov (20) HNWR (BBC, LCC, WLW), 22 Nov (22) FPP (MTOS), 12 Jan (1) MEM (NEM), 9 Jan (43) HPL (MTOS), 13 Jan (1) MEM (WRP), 24 Feb (3-20) MEM (JRW), 25 Feb (12) MEM (BL), mid Feb - Mar (250) MEM (LSB), feeding stations reported groups of 10 to 15 in late February. LeConte's Sparrow: 24 Jan (1) PEF (JBG, JRW), 7 Feb (1) PEF (RTC, CHB, JBG, JRW, MGW), 14 Feb (1) PEF (CHB, HBD, JRW, MGW). Vesper Sparrow: 20 Dec (16) MEM CBC (BBC, JRW). Tree Sparrow: 14 Jan (3) PEF (CHB, JRW, MGW), 17 Jan (12) PEF (JBG, JRW), 24 Jan (27) PEF (CHB, JRW, MGW), 7 Feb (27) PEF (CHB, JRW, MGW), 5-7 Feb (6) RL (SR, SRR), 13 Feb (22) PRI (MTOS), 14 Feb (25) PEF (MTOS), 20 Feb (3) (MTOS). White-crowned Sparrow: 26 Jan (50) PRI (HBD, CHB, MFD, SCF, NMS, SSL).

Locations: FPP — Fort Pillow State Park, Lauderdale Co.; HNWR — Hatchie National Wildlife Refuge, Haywood Co.; HPL — Herb Parson Lake, Fayette Co.; RL — Reelfoot Lake, Lake Co.; RoL — Robco Lake, Southwest Shelby Co.; MEM — Memphis; MI — Mud Island, West Shelby Co.; OVP — Overton Park, Shelby Co.; PEF — Penal Farm, Northeast Shelby Co.; PRI — President's Island, Shelby Co.; SHF — Shelby Forest State Park, Northwest Shelby Co.

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

CENTRAL PLATEAU AND BASIN REGION — The winter of 1981-82 can be characterized as one of mixtures. Mixtures of cold and snow; periods of warm and sun; and movements of birds and the lack of birds. The winter months of December, January, and February in Nashville were below normal in temperature with January the coldest, -4.3 degrees below normal. The period of severe cold in mid-January contributed to the feeling of record cold for the month though in reality the temperature was far from a record. Record cold for January was set in 1977 with an average temperature of 24.5 F, -13.8 degrees below normal. The -11 F in Nashville 17 January was just four degrees shy of the all time coldest day ever recorded. It has been a number of years since the area has experienced such intense cold. Temperatures warmed dramatically the latter part of February with several days in the low 80's. Precipitation was average for the period. Snowfall in Nashville was 9.7 inches (including an inch in March), of which 4.8 inches fell on 12-13 January. Average snowfall is 10.7 inches.

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The often heard comment from birders this winter was, Where are the birds? Bird populations were small both at feeders and in the field where food was in good supply. Even when the cold weather hit in January, there was little increase in bird numbers at the feeders. Of the boreal species, only the Red-breasted Nuthatch can be said to have had a major invasion year.

Loon-Eagle: Common Loon: 1 Dec (72) Woods Res (KHD, LHD), nice number. Green Heron: 6 Dec (1) Metro Center, Nash (MLB, et al.), limited winter records. BRANT: 17 Dec (2) then through end of period (1) Cross Creeks NWR (DWB then others), second Middle Tennessee and seventh Tennessee record. Blue-winged Teal: 20 Feb (2) Dyson's Ditch, Ashland City (RJM), first return Nash area. Ring-necked Duck: 25 Jan (150) Cross Creeks NWR (DWB). Oldsquaw: 12 Dec (1) MTC (BBW, RCW). Surf Scoter: from last period - end of period (1 imm male) Radnor L, Nash (NTOS), except during almost complete freezing of lake; 1 Dec (1) Woods Res (KHD, LHD). Hooded Merganser: 1 Dec (50) and 8 Dec (45) Woods Res (KHD, LHD). Common Merganser: 23 Jan (5) Cordell Hull L (MRM, RVM); 6 Feb (20) Cheatham L (RJM). Red-breasted Merganser: 1 Dec (95) Woods Res (KHD, LHD). Turkey Vulture: 1 Dec (130) Woods Res (KHD, LHD), nice number. Goshawk: 19 Dec (1) Ashland City (MPS, JCA), ninth record Nash area. Sharp-shinned Hawk: 8 birds reported in period from DVC (2), HPC, LWC (2), MTC (2), and MUC. The bird in HPC was found stunned at Waverly 8 Feb and had been banded 6 Oct 1981 in Minnesota. Cooper's Hawk: 8 birds reported in period from CHC, DVC, LWC, MTC (2), MUC (2), and RUC. The Sharp-shinned Hawk and Cooper's Hawk seem to be observed a little more frequently now. Red-tailed Hawk: 9 Jan (2, dark ph) Woodbury (HCY, JY). Rough-legged Hawk: 12 Dec - end of period (7) from DVC (2), LWC, MTC, MUC, RBC, and RUC, denotes widespread occurrence during winter. Golden Eagle: 2-17 Dec (1 imm) Cross Creeks NWR (DWB). 9 Jan (1 imm) Tenn 53 at line Cannon-Coffee Counties (HCY, JY). Bald Eagle: 1 Dec (1 imm) Woods Res (KHD, LHD); 19 Dec (1 ad, 1 imm) Cheatham L (NTOS); 9 Jan (2 ad, 1 imm), 4 Feb (1), 14 Feb (1 ad) Woods Res (RL, ECR, MR, HCY, JY, BS); regular during period Cross Creeks NWR, max 19 Dec (1 ad, 3 imm) (DWB). Osprey: 9 Jan (2) Woods Res (HCY, JY).

Rail-Pipit: Virginia Rail: again apparently wintered at Monsanto Ponds, Col (CTOS). Sora: again apparently wintered at Monsanto Ponds. Col (CTOS). American Coot: 1, 8 Dec (none) Woods Res (KHD, LHD), normally numerous. American Woodcock: good number of birds observed in courtship flights in the Nash area in Feb; in contrast, only a few birds found in regular courtship areas in Nash in February and March 1981. Spotted Sandpiper: 26 Dec (2) Col (AP), limited winter records. Ring-billed Gull: 1 Dec (75), 8 Dec (70) Woods Res (KHD, LHD); 24 Dec (350) Cross Creeks NWR (DWB); first week Jan (200-250) Zinc Plant, Clark (MDF). Barn Owl: 22 Feb (1) Clark (EJW), regular site. Short-eared Owl: 31 Dec (1) Laurel Hill L, LWC (DJS, DGB). Saw-whet Owl: 28 Dec (1) HIC (DBA), apparently hit by vehicle, died during night; 2 Feb (1) near Pulaski, GLC (TOM), apparently hit by vehicle along I-65, taken to Nash, recovered, released. There are limited records Middle Tennessee. Horned Lark: 31 Dec - Jan (20, flock) Loretto, LWC (LWC, DKS, MER, DJS); during period (15) Fort Campbell, MTC (JW). Red-breasted Nuthatch: major invasion throughout region during period. House Wren: 2 Jan (1) nature trail, Old Hickory Lake (MLB, SRR, et al.), second winter record Nash area. Golden-crowned Kinglet: more than

usual Nash area, two out of three Nash area CBCs had more Golden-crowned than Ruby-crowned Kinglets. Water Pipit: 2 Jan (75) Clark (WAS).

Warbler-Sparrow: Pine Warbler: 12-19 Dec (1-2) dam, Cheatham L (TNH, MLB), regular breeding site and occasional winter site; 2 Jan (1) dam (north side), Old Hickory L (MLB, et al.), first time found here. Palm Warbler: 5-6 Dec (1) Metro Center, Nash (MLB); 26 Dec (1) Col (AP) and (1) Bell's Bend, Nash (MLB, TNH, JRS); 2 Jan (1) dam (north side), Old Hickory L (MLB, et al.) and (11) Shelby Bottoms, Nash (MPS, KL). Common Yellowthroat: 19 Dec (1) Ashland City (RJM). YELLOW-HEADED BLACKBIRD: 28 Jan (1 imm male) Nash (ABP), limited records Nash and Tenn. Dickcissel: mid-Dec - end of period (1) Williamsport, MUC (KGA), at feeding station. Evening Grosbeak: only scattered reports in northern Middle Tennessee, generally 1-2 birds at a time, and then usually only for a day or so. Purple Finch: lowest number during winter by most observers in recent memory. Observers in Clarksville commented that numbers were low when compared to other years (AHH). In Columbia, the species showed a marked decline from all feeding stations, most stations reported none until late February (AL). In Lawrence County, the species was fairly common though no unusually large numbers, numbers unusually small at feeders (DKS). In the Manchester-Tullahoma-Hillsboro area, very few folks had any, very few in number (ELR). Most feeding stations had fewer than ten birds, some none, slight increase beginning in late February. House Finch: reported from CFC, DVC, MTC, MUC, PUC, RUC, SUC, WLC, and WMC during period. Number at any one feeding station generally five or less. Up to (50) at one time home, Murf. (ALH), regular (30) at Gallatin (DTC, JPC) max (28) Algood (SC), and (51 banded) home, Nash (KAG). None reported LWC (DKS). Pine Siskin: a few birds appeared in the fall then virtually none until mid-January with increasing number in February. Some feeders had none, some a few birds, and some as many as 20 individuals. The greatest number of birds present in area at end of period. LeConte's Sparrow: 2 Jan (1) Salem Community, Clark area (EJW) and (1) Shelby Bottoms, Nash (KL). Tree Sparrow: 14 Jan (1) Clark (AHH) and (1) Nash (MLM); 14-15 Jan (1) Gallatin (DTC, JPC). Denotes movement. Chipping Sparrow: 9 Feb - end of period (1) Clark (AHH), denotes spring return. HARRIS' SPARROW: 2 Jan (1 ad) Clark (BM); 4 Jan (1 imm) Clark (EJW). Fox Sparrow: Jan - Feb (1-10) Clark (AHH), max of ten during snow and cold period 12-15 Jan.

Locations: CHC — Cheatham Co.; CFC — Coffee Co.; DVC — Davidson Co.; GLC — Giles Co.; HIC — Hickman Co.; HPC — Humphreys Co.; LWC — Lawrence Co.; MTC — Montgomery Co.; MUC — Maury Co.; PUC — Putnam Co.; RBC — Robertson Co.; RUC — Rutherford Co.; SUC — Sumner Co.; WLC — Wilson Co.; WMC — Williamson Co.

MICHAEL LEE BIERLY, 3825 Bedford Avenue, Nashville 37215.

EASTERN RIDGE AND VALLEY REGION — As usual the largest concentration of waterfowl was located in the lower section of the region. Unprecedented was the sudden arrival of at least 265 Pied-billed Grebes on Chickamauga Lake in the last part of January. Also, most unusual, was the one day occurrence of 28 White-winged Scoters sighted by Jo Stone on 30 December. Never before have numbers like this been reported for the region. It seems the three counties of Greene, Jefferson and Hamblen take the top honors for numbers of Horned Larks reported. If other areas have populations such as this, they have never been reported to the compilers.

Two warbler species were of special interest this period. Three reports of Palm Warblers were not unexpected, however, the wintering Cape May Warbler surviving at a feeder was more unusual. With more active and knowledgeable field workers we will probably have more observations of this type in the future.

In the upper section of the region this appeared to be a Pine Siskin and Red-breasted Nuthatch winter with good numbers being sighted. On the other hand, Evening Grosbeaks and Purple Finches seemed to be in fewer numbers and more widely scattered. House Finches were present, but not in such huge numbers as in the past few years.

Loon-Goose: Common Loon: last noted BOL 12 Jan (1) (RLK); 1-10 regular CHL (KHD, LHD). Horned Grebe: 1-23 Feb (2-5) BOL (RLK); 2-70 regular CHL (KHD, LHD). Pied-billed Grebe: usual numbers were around 25 CHL; on a regular CHL survey 11 Jan, 26 birds were observed and on the 25th, 265; on 1 Feb, 170 with the numbers then dropping rapidly; this movement was unprecedented in the area (KHD, LHD). Double-crested Cormorant: 16 Dec (4) CHA (RCS); 25 Jan and 8 Feb (1) CHL (KHD, LHD). Great Blue Heron: 20 Jan (65) DOL (JAK); 21 Feb (28) DOL (JAK); regular, max 16 Dec (161) HRA (KHD, LHD). Great Egret: 7 and 16 Dec (1) HRA (KHD, LHD); 3 Jan (1) CHL (EK). Yellow-crowned Night Heron: 4 Nov (1) AUS (SG). Whistling Swan: 4 and 5 Feb (1) SAB (KHD, LHD). Snow Goose: 10-12 Dec (10 blue, 2 white) OKR (WKJ, CPN); 22 Feb (11 blue, 3 white) HRA (KHD, LHD).

Mallard-Merganser: Mallard: 30 Jan (1810) DOL (JAK); regular, max 11 Jan (5000) HRA (KHD, LHD). Black Duck: 7 Feb (80) DOL (JAK); regular, max 7 Dec (500) HRA (KHD, LHD). Gadwall: 13 Dec - 29 Jan (20-40) DOL (JAK); regular, max 7 Dec (125) CHL (KHD, LHD). Pintail: 21 Jan (8) BOL (SG); 30 Jan 7 Feb (40-50) JEC (JAK); regular, max 7 Dec (60) HRA (KHD, LHD). Green-winged Teal: 9 Jan - 21 Feb (12-80) DOL (JAK); regular, max 16 Dec (250) HRA (KHD, LHD). American Wigeon: 8-20 irregular JEC (JAK). Northern Shoveler: 7 Dec (1) HRA (KHD, LHD); 11 Jan (5) HRA (KHD, LHD); 21 Jan (1) BOL (SG). Wood Duck: first for season 9 Feb (2) BOL (RLK). Redhead: 6 Feb (5) NOV (JAK); 22 Feb (1) CHL (KHD, LHD). Ring-necked Duck: 13 Feb (16) DOL (JAK); regular, max 8 Feb (150) CHL (KHD, LHD). Canvasback: 27 Jan (2) CHL (EK); 11-15 Feb (1) BOL (RLK); 15 Feb CHL (KHD, LHD). Scaup spp. 8 Feb (850) CHL (KHD, LHD). Greater Scaup: regular, max 11 Jan (340) CHL (KHD, LHD). Lesser Scaup: 6 Feb (1) NOV (JAK). Common Goldeneye: regular, max 1 Feb (10) CHL (KHD, LHD). Bufflehead: 30 Jan - 7 Feb (2) DOL (JAK); regular, max 4 Jan (24) CHL (KHD, LHD). White-winged Scoter: 30 Dec (28) CHL (Jowayne Stone); none present the next day; 27 Jan (1) CHL (EK); 1, 8 Feb (1) CHL (KHD, LHD); 7-13 Feb (1) Fort Loudoun Lake (Gregg N. Lagerberg); 16 Jan - 12 Feb (1-2) BOL (RLK, SG). Surf Scoter: 19 Dec (3) CHL - CBC (RCS). Ruddy Duck: 5 Dec (8) BOL (RLK); 8 Jan (1) BOL (SG); 15 Feb (14) CHL (KHD, LHD). Hooded Merganser: regular, max 11 Jan (50) HRA (KHD, LHD). Common Merganser: 7 Dec (1) CHL (KHD, LHD); 14 Feb (22) DOL (JAK). Red-breasted Merganser: 14 Feb (4) DOL (JAK).

Vulture-Crane: Turkey Vulture: 25 Jan (1) CHL (KHD, LHD); first northward migrants KNX 11 Feb (9) (Janice Schneitman *fide* JBO). Black Vulture: 6 Feb (200) HRA (LHD, Angela Davis). Sharp-shinned Hawk: nine sightings EJC — about average there (LHTOS). Cooper's Hawk: 5 Jan (1) JNC (RLK); 20 Feb (1) NOR (CPN). Red-shouldered Hawk: 4 Feb (1) AUS (RLK). Rough-legged Hawk: 30 Dec (1) Kodak, SVC (CPN); 23 Jan (1) ALC (LNA, MWA). Golden Eagle: 16 Jan (1 imm) TRG (RCS, Johnny T. Parks); 24 Jan (1 ad) TRG (KHD, LHD); 5 Feb (1) Sevierville (Paul S. Pardue). Marsh Hawk: at least 8 reports KNX, a good number there (KTOS); 21 Dec (1) GNC (WRN); 7 Jan (1) JNC (RLK); 12 Jan (1) Piney Flats (RLK); 25 Jan (1) AUS (RLK); 4 records JEC (JAK); 13 reports CHA (KHD, LHD). American Kestrel: 15+ regular WHP (JAK); numerous all winter EJC (LHTOS). Sandhill Crane: late fall report of 2 seen and more heard 19 Dec, near LaFollette (Greg Reed); first spring report 17 Feb (15) HRA (Don Fox and Chuck Copeland, TWRA *fide* KHD).

Coot-Raven: American Coot: 21 Dec - 29 Jan (80-160) ALC (JAK): 25 Jan (4000) CHL (KHD, LHD). American Woodcock: 5 Feb (1) GNC (WRN). Common Snipe: regular, max 3 Jan (62) SAB (KHD, LHD). Least Sandpiper: 6 Dec (10) DOL (JAK); 17 Feb (5) SAB (KHD, LHD). Dunlin: 6 Dec - 30 Jan (6-65) DOL (JAK); regular, max 3 Jan (121) SAB (KHD, LHD). Herring Gull: 25-50 all season BOL (RLK et al.); regular, max 25 Jan (25) CHL (KHD, LHD). Ringbilled Gull: 15 Dec (400+) Cherokee Lake (JCH) — a high count for this area; 150-200 all period BOL (RLK et al.); regular, max 25 Jan (650) CHL (KHD, LHD); 14 Feb (300) DOL (JAK). Bonaparte's Gull: 24 Jan (1) NOR Dam (Gordon Hall) — not a regular location for this species; 25 Jan (1) CHL (KHD, LHD). Great Horned Owl: an active nest site Jonesboro (RLK). Red-headed Woodpecker: 29 Dec (1) GNC (WRN); 25 Feb (1) Norris Lake (JCH). Eastern Phoebe: a noteable influx KNX beginning 18-19 Feb (KTOS). Horned Lark: 30-40 regular WHP (JAK); 17 Jan (300) Lowland (JAK); 6 Feb (110) GNC (WRN). Purple Martin: first report on 19 Feb (Eldon Wright fide JBO); ties earliest KNX record set in 1956. Two different reports on 20 Feb (fide JBO). These reports were following several days of strong south winds. 28 Feb (1) JNC (SG, Martha Dillenbeck). Common Raven: more records at low elevation with 2 at AUS 18 Jan (RLK).

Nuthatch-Warbler: Red-breasted Nuthatch: regular in good numbers at various feeders EJC (LHTOS); widely scattered but in low numbers KNX (KTOS); few scattered birds reported CHA (CTOS). Brown Thrasher: 3-5 regular EJC (LHTOS); 1-2 regular GNC (WRN). American Robin: high numbers EJC probably due to excellent dogwood crop (LHTOS). Hermit Thrush: only one record on 5 Jan for the EJC area (RLK). Eastern Bluebird: more conspicuous this winter JEC, especially after the hard freeze in January - migrants? (JAK); good numbers present, no winter mortality reported KNX (KTOS). BLUE-GRAY GNAT-CATCHER: 19 Dec (1) Amnicola Marsh - CBC (KHD et al.). Water Pipit: 2 Dec -18 Jan (1-5) AUS (RLK); 24 Jan (50+) Tri-Cities Airport (RLK); regular WHP and very much in evidence when snow was on the ground (JAK); regular SAB, max 100 (KHD, LHD). CAPE MAY WARBLER: early Jan - 9 Feb (1) KNX, at feeder (Mrs. Roger Thompson, et al., photographed). The bird survived the 2 occurrences of sub-zero temperature, and left during a spell of warm weather. There seem to be at least 3 previous East Tennessee winter records. PALM WARBLER: a very late report 2 Dec (1) AUS (RLK); this is almost 30 days later than their other Upper East Tennessee dates. 16 Dec (1) CHA (RCS); 2 Jan (1) NOR - CBC (CPN, David A. Hankins).

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Blackbirds-Sparrows: Rusty Blackbird: 24 Jan (15) JNB (RLK); 20 Feb (18) Boones Creek (RLK); present in good numbers KNX (KTOS). Evening Grosbeak: few reports EJC area at low elevations and then only 1-5 birds at scattered locations and not regular (LHTOS); one report from KNX 18 Jan (3) W. E. Edington fide JBO; small numbers present at NOR (CPN); Townsend and Oakdale (fide JBO); 3 weeks in Jan (1) GRE (Dutch Brown); only one single reported from CHA 20 Feb (KHD). Purple Finch: small groups of 3-8 individuals EJC during period (LHTOS); lower than normal numbers KNX throughout season (KTOS); no reports GRE (Helen Spees): very few CHA (CTOS). House Finch: 4-6 groups of 15-30 birds regular EJC (LHTOS); 25-35 regular GRE (Alice Murray); continues to spread and increase KNX (KTOS); only report CHA on CBC (CTOS). Pine Siskin: in the EJC area after 1 Jan a major invasion was reported down from higher elevation to feeders throughout the area, several feeder watchers were heard to say "siskins were everywhere and almost a nuisance." In Knoxville an invasion was noted with large numbers wide spread after early Jan. Very few reported from Greeneville and Chattanooga. Red Crossbill: 19 Dec (2) CHA - CBC (LHD). Savannah Sparrow: 20 regular WHP (JAK). GRASSHOPPER SPARROW: 19 Dec (1) CHA - CBC (J. Christopher Haney). Vesper Sparrow: 8 Feb (2) HRA, (KHD, LHD); 13 Feb (1) KNX (SJS). Dark-eyed Junco: present in less than 1/2 normal numbers KNX (KTOS). Tree Sparrow: 19 Jan (1) CHA (KHD, LHD). Chipping Sparrow: 9 Jan (10) CHA (KHD, LHD); 30 Jan (1) Kingsport (Joy Kyle); 1 Feb (1) CHA (KHD, LHD); 13 Feb (1) KNX (SJS). White-crowned Sparrow: 3-5 all season AUS (RLK); found 3 locations NOV and 5 locations JEC (JAK). White-throated Sparrow: numbers down by about 1/3-1/2 KNX (KTOS). Fox Sparrow: 11 Jan (1) HRA (KHD, LHD); 21 Jan (2) JNC (RLK).

Locations: ALC — Alcoa; AUS — Austin Springs; BOL — Boone Lake; CHA — Chattanooga; CHL — Chickamauga Lake; DOL — Douglas Lake; EJC — Elizabethton-Johnson City Area; GNC — Greene County; GRE — Greeneville; HRA — Hiwassee River Area; JEC — Jefferson County; KNX — Knoxville; NOR — Norris; NOV — Nolichucky Valley; OKR — Oak Ridge; SAB — Savannah Bay; SVC — Sevier County; TRG — Tennessee River Gorge; WHP — White Pine.

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EASTERN MOUNTAIN REGION — The weather for our area was basically "winter time cold" throughout with very little snowfall. The warm fall temperatures turned suddenly cold on December 6 and remained so throughout the period. Snowfall totals were below normal, especially in January and February. Higher than usual rainfall was recorded during January and February.

Our waterfowl totals were very low compared to previous seasons. Ringnecked Duck, Lesser Scaup and wigeon sightings were noticeably down, and numbers of other species were low.

The Accipiter picture was confusing. Sharp-shinned sightings were of average numbers, but only 2 sightings of Cooper's Hawks were reported during the entire period. What caused this difference? Only one eagle sighting was reported. Probably the most unusual raptor sighting was that of an out of season Osprey seen on the Elizabethton Christmas Bird Count, for which convincing details were submitted.

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Northern finches began showing up during the fall period at higher elevations and began moving down to lower elevations after the first of the year. Pine Siskins were reported in extremely high numbers and almost became a nuisance at feeders throughout the area.

Loon-Scoter: Common Loon: 1-3 birds seen during Dec and Jan on WTL. Canada Goose: 18 Feb (50+) WatR (HLF). Green-winged Teal: 25 Dec (5) WatR (GDE). American Wigeon: very low winter totals compared to past years. Wood Duck: 1 Dec (2) WagIs (GDE, HLF) last fall sighting, 12 Feb (1) WatR (HLF) first spring sighting. Ring-necked Duck, Lesser Scaup: overall totals were conspicuously lower than average. American Goldeneye: month of Jan (3-5) seen along WatR (*fide* GDE, HLF). OLD SQUAW: 26 Dec (1) WTL (RLK, RDL). WHITE-WINGED SCOTER: 29 Jan (1) WTL (RLK).

Hawk-Phoebe: Sharp-shinned Hawk: normal winter reports of 8-10 separate sightings during period. Cooper's Hawk: only 2 sightings all period - 2 Dec (1) ELI (HLF), 30 Dec (1) Laurels (SG). Red-shouldered Hawk: 24 Jan (1) SV (SG). GOLDEN EAGLE: 22 Dec (1) WTL (HLF). Marsh Hawk: 27 Dec (1), 21 Feb (1) both at SHL (RL). OSPREY: 26 Dec (1) WagIs (SG, GS) details submitted to *American Birds* also. American Woodcock: 22 Feb (1) first sighting in ELI (John and Donna Adams). Great Horned Owl: at least 3 separate nest sites in area (*fide* RLK, RL). Barred Owl: 30 Dec (1) RM (RLK, BB). Eastern Phoebe: average winter sightings of 3-4 birds all period.

Lark-Waxwing: Horned Lark: 3-5 birds irregularly all period in SV (fide GDE, GOW). Purple Martin: 20 Feb (1) eight days earlier than ever reported, 25 Feb (2) ELI (fide LH). Common Raven: 1-2 birds seen irregularly at low elevation in ELI (GDE), 5-7 regular on RM throughout period. Red-breasted Nuthatch: RM infested all period, 30 Dec (128) seen on CBC alone. Winter Wren: 30 Dec (1) RM (RLK, BB) only sighting all period. Robin: large flocks remained all winter probably due to abundant dogwood berry and excellent wild food crop that remained thru mid Jan. Hermit Thrush: 26 Dec (1) RC (RLK, RDL), only sighting all period. Water Pipit: 21 Feb (7) SHL (RL). Cedar Waxwing: very abundant all period, 26 Dec (1007) Eliz CBC.

Shrike-Sparrow: Loggerhead Shrike: 3-5 birds wintered, above average. Common Yellowthroat: 1 Dec (1) CF (GDE, HLF) very late migrant. Rusty Blackbird: 2 Jan (75) ELI (GDE). Evening Grosbeak: abundant during Dec on RM, very few after 1 Jan at either high or low elevations. Purple Finch: 3-8 birds at various feeders throughout area all period (*fide* HLF). House Finch: 2-3 flocks of 15-25 birds each at separate feeders in area (*fide* GDE). Pine Siskin: "Bird of the Winter," month of Dec saw major invasion at high elevations on RM, CBC alone counted 752 birds above 4000'. After 10th of Jan they moved down to low elevations and were reported everywhere and in high numbers. Red Crossbill: 1 Dec (3) ELI (HLF) — only sighting all period. White-crowned Sparrow: below average sightings for period. White-throated Sparrow: overall numbers down throughout the period. Fox Sparrow: 30 Dec (1) Erw (GS) and 30 Dec (2) RMSP (SG, HHD) — only sightings during period.

Locations: CF — County Farm near Eliz.; ELI — Elizabethton area; Erw — Erwin; RC — Roans Creek; RM — Roan Mtn.; RMSP — Roan Mtn. State Park; SHL — South Holston Lake; SV — Siam Valley near Eliz.; WagIs — Wagners Island along WatR; WTL — Watauga Lake; WatR — Watauga River.

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BOOK REVIEW

SEASONAL OCCURRENCES OF SHELBY COUNTY, TENNESSEE BIRDS — Martha Waldron (ed.). 1982. Memphis, Memphis Chapter, Tennessee Ornithological Society. 16 pp. \$2.00 ppd from Martha Waldron, 1626 Yorkshire Dr., Memphis, TN 38117. — This pamphlet is a listing of 288 species which were observed in Shelby County between 1928 and 1981. Bar graphs show early and late dates, as well as seasonal abundance for each species. This information was compiled from an analysis of 3800 field checklists, primarily those of Ben B. Coffey, Jr. This was quite an undertaking. I have 2 minor complaints, however. These are the use of ''accidental'', defined as outside normal range, for some species infrequently recorded in Shelby County, but still well within their normal range, and fall records of species of *Empidonax* flycatchers based on sight records. Complaints aside, this publication is a valuable contribution to Tennessee ornithology. Observers are encouraged to turn in field records to assist in the preparation of future editions. — CHARLES P. NICHOLSON

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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 $8\frac{1}{2} \times 11^{"}$ 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.

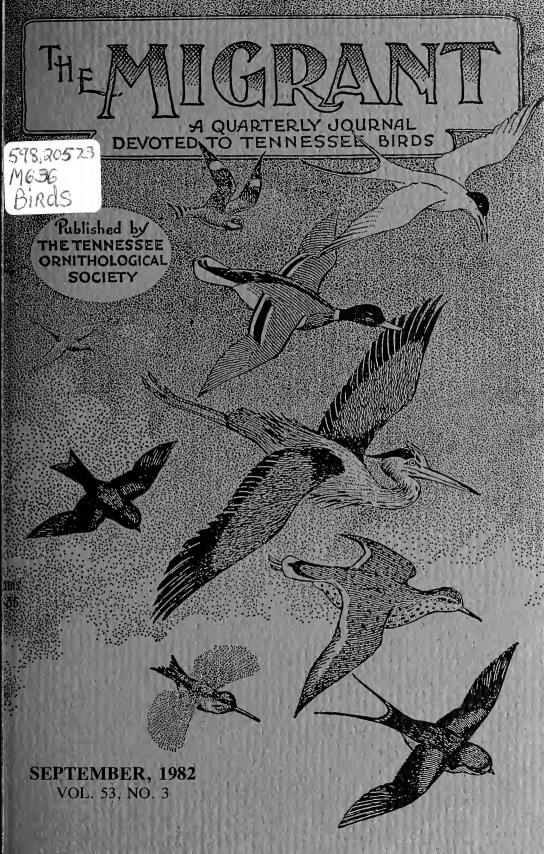
IDENTIFICATION: Rare or unusual species identification to be acceptable must be accompanied by verifying evidence. This should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic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

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Books for review and articles for publication should be submitted to the editor. Seasonal reports and items should be forwarded to the appropriate departmental editor whose name and address will be found on the inside front cover.

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OCT 2 8 1983

LIENAMIES

1982 SPRING FIELD DAYS

Richard D. Lura

The 1982 Spring Field Days yielded 206 species from 12 count areas around the state. The high points of the counts were the Marbled Godwit, Carribean Coot, and Scissor-tailed Flycatcher.

As is the custom, the counts are tabulated from west to east across the state.

INFORMATION ON THE COUNTS

MEMPHIS: 25 April; group leaders: Ben B. Coffey, Jr. (compiler — 762 N. Belvedere, Memphis 38107), Lula Coffey, Helen Dinkelspiel, James Ferguson, Martha Waldron.

The Willet was seen by many observers.

MONTGOMERY COUNTY: 1, 2 May; temp. 45° to 72° F; 8 observers. Mike Dinsmore (compiler — Jarman Hollow, Palmyra 37142), Jim Lowney, Bill Milliken, Gloria Milliken, John Quick, Ellen Walker, John Whearley, Barbara Wilber.

LAWRENCE COUNTY: 24 April; 0500 to 1930; temp. 42° to 72° F; 6 observers in 3 parties. Andy Augustin, David Beckman, Helen Clayton, Lloyd Clayton, Don Simbeck, Damien Simbeck (compiler — Box 164, Loretto 38469).

COLUMBIA: 30 April, 1 May; temp. 60° to 80° F; 19 observers. Elizabeth Anderson, Kenneth Anderson, Dot Byassee, Ed Byassee, Daniel Gray, Mary Anne Guschke, Tom Guschke, Barbara Finney, Jim Finney, Phyllis Hermann, William Jernigan, Lucy Kuykendall, Anne Lochridge, Bedford Lochridge, Cleo Mayfield, George Mayfield (compiler — Maury Co. Hospital, Columbia 38401), Allen Pressnell, Mitzi Thornell.

Good details submitted on the Marbled Godwit.

NASHVILLE: 8, 9 May; 48 hours, midnight to midnight; sunny, light wind, temp. 47° to 79° F. Count was in conjunction with the spring meeting of TOS, Nashville Chapter, host.

MURFREESBORO: 1, 2 May; temp. 60° to 74° F; 11 observers. C. E. Greever, Edith Haynes, Anne Hettish (compiler — 1018 Lawndale, Murfreesboro 37130), Bob Hettish, Wilma Hunter, Jenny Justice, Pat Martin, Larry McFallin, Ruth McMillan, John Ratten, Alberta Spence, Frances Vaughn.

The Scissor-tailed Flycatcher was present for the fifth year.

THE 1982 SPRING FIELD DAYS

	Memp	Mont	Lawr	Colu	Nash	Murf	Wíls	High	Chat	Knox	Gree	Eliz
Common Loon Pied-billed Grebe Double-cr. Cormorant Great Blue Heron Green Heron	 9	 4	 4	2 7 11	2 1 15 26	 3 6	 4 10	 3	1 2 1 15 12	 1 8	 2	2 4 17
Little Blue Heron Cattle Egret Great Egret Black-cr. Night Heron Yellow-cr. Night Heron	12 15 	 	 		20 2 1 100	2 1	 		12 1 3	 	1 2 	 2 1
American Bittern Canada Goose Mallard Green-winged Teal Blue-winged Teal	 21 82	12 3 2	4 4 11	2 23 1 7	103 13 5	4 	387 10 5	 2 9	 44 30 7	30 3 8	19 19 5	1 48 30
Wood Duck Ring-necked Duck Greater Scaup Lesser Scaup Scaup spp.	11 61 	8 	1 	16 	33 6 	3 	13 1 	 	18 1 	17 1	20 	60 2 1
Bufflehead Ruddy Duck Hooded Merganser Red-breasted Merganser Turkey Vulture	15 	 3	1 7	 27	 43	 5	 25	 2	 1 26	 3	 18	32 4 43
Black Vulture Mississippi Kite Sharp-shinned Hawk Cooper's Hawk Red-tailed Hawk	 1	1 2 5	1 9	1 2 3	15 1 23	16 1 9	29 5	11 1	24 1 2 9	 3	1 3	 4 7
Red-shouldered Hawk Broad-winged Hawk Bald Eagle Marsh Hawk Osprey	2 3 	 1 	2 	7 4 	8 5 1 2	 1	1 1 	 	$3 \\ 12 \\ 2 \\ \\ 4$	1 1 2	 3	1 55 6
American Kestrel Ruffed Grouse Bobwhite Turkey Sandhill Crane	 28 3	4 23 	2 13 	5 35 4 	20 63 20	22 21 8	18 106 	8 3 	4 10 	2 3 25 	 9 	10 8 23 3
Virgínia Raíl Sora Carribean Coot American Coot Semipalmated Plover	 1	 	 1 1	7 10 1	1 2 2	 	 	 	 1* 21	 1 	 	
Killdeer American Woodcock Common Snipe Upland Sandpiper Spotted Sandpiper	23 2 6	13 3	5 4 1	$\frac{22}{-1}$ $\frac{1}{-2}$	30 3 4 18	16 	9 2 2	4 	23 17	$\frac{23}{1}$	$\frac{5}{2}$	22 1 25 13
Solitary Sandpiper Willet Greater Yellowlegs Lesser Yellowlegs Pectoral Sandpiper	21 1* 16 48 81	1 1 	3 1 	3 5 5	4 2 5 2	7 1	4 1 	 5 3	6 2 4	8 1 1 	5 	26 1 5 1
Least Sandpiper Short-bil. Dowitcher Semipalmated Sandpiper Marbled Godwit Herring Gull	 	 	 	1 1 1*	61 _2 	 	 	 	2 2 5 	 	 	1
Ring-billed Gull Bonaparte's Gull Forster's Tern Caspian Tern Rock Dove	16 1	 40	 6	 10	4 82	 	 109	 5	27 1 1 56	27 65	 5	53 3 84

	Memp	Mont	Lawr	Colu	Nash	Murf	Wils	High	Chat	Knox	Gree	Eliz
Mourning Dove Yellow-billed Cuckoo	73	61 4	52	14 14	140 31	99 7	108 5	34	141 5	338 1	73	205 2
Black-billed Cuckoo Barn Owl		2		1	1		1 2		1			2
Screech Owl				3	2		15		1	5	2	3
Great Horned Owl Barred Owl		 1		2	1 4	1	6 12		2	2 5		
Chuck-will's Widow Whip-poor-will			2 3	6 30	2 4	2 3	21 19		10 3	19	1	1 2
Common Nighthawk	1	4		1	5	10	18		7			
Chimney Swift Ruby-throated Hummingbird	20 18	84 4	12	43 10	339 9	71 3	158 2	27	126 16	195 2	77 2	275 1
Belted Kingfisher Common Flicker	1 14	3 8	3	3 21	21 35	3 20	9 18	5	16 23	5 24	3 16	19 42
Pileated Woodpecker	14	5	7	21	37	1	4	3	13	16	6	17
Red-bellied Woodpecker Red-headed Woodpecker	27 60	33 2	10 14	39 13	66 32	17 4	38 9	13 11	21 9	46	10	21 2
Hairy Woodpecker Downy Woodpecker	5 35	1 13		10 41	6 62	6 12	12 23	7	3 26	8 39	1 7	1 23
Scissor-t. Flycatcher						1*						
Eastern Kingbird Great-crested Flycatcher	4 28	18 13	5 4	14 13	58 41	41 7	63 30	6 1	17 15	3 2	5 8	14 1
Eastern Phoebe	1	8	5	24	25	3	29 1*		5	8	4	27
. Yellow-bel. Flycatcher Acadian Flycatcher	2	1	1	9	9				8			
Least Flycatcher Empidonax spp.		3	 1	2	15				1			
Eastern Wood Pewee	9	14		17	41	1			20		2	
Horned Lark Tree Swallow	3 6	12	1 	3	35			2	5	13		1 64
Bank Swallow Rough-winged Swallow	 35	12 2	5 10	 35	108	10 5	2 61		103	 61	 11	126
Barn Swallow	61	29	74	61	153	135	162	45	116	186	96	325
Cliff Swallow Purple Martin	18	10 74	36	41	590 133	12	$^{1}_{68}$	10	102 67	153	31	57
Blue Jay Common Raven	52	97	43	581	139	400	246	62	82	235	70	320 9
Common Crow	19	57	48	51	84	225	148	20	73	173	71	283
Fish Crow Carolina Chickadee	15 83	46	11	71	100	67	52	9	40	173	32	72
Tufted Titmouse White-breasted Nuthatch	85 1	53 9	30	68 29	96 20	20	62 3	15 6	48 11	91 5	37 1	64 8
Red-breasted Nuthatch Brown-headed Nuthatch	3	1	1	4	1		1		3	8		27
Brown Creeper						1	1					2
House Wren Bewick's Wren		7		2 2	6 2	1 12	9 5			6	21	3
Carolina Wren	72	26	3	23	79	15	19	6	53	90	29	57
Long-billed Marsh Wren Short-billed Marsh Wren				1	1 4							
Mockingbird Gray Catbird	32 3	35 27	26 2	41 19	84 38	100 13	95 30	27	74 13	134 1	 11	99 2
Brown Thrasher American Robin	9	28	34	50	66	47	58	13	22	52	24	35
Wood Thrush	81 46	147 23	33 8	78 36	201 62	456 9	195 16	47 1	96 35	314 38	130 15	749 11
Hermit Thrush Swainson's Thrush	4 41			1 13	115		2 1			2		1
Gray-cheeked Thrush	5			1	10				1	2		
Veery Eastern Bluebird	3 10	3 14	37	11 22	16 58	1 36	2 98	21	$^{1}_{62}$	28	2 14	77
Blue-gray Gnatcatcher Golden-crowned Kinglet	142	40	21	103	75	24	54	2	81 	85 3	9	33 4
Ruby-crowned Kinglet	6	2		5	1	1	2			37		13
Cedar Waxwing Loggerhead Shrike	68 5	14 9	8	16 10	185 10	57 7	1 3	31 1	203 2	383 1	40 2	139 2
Starling White-eyed Vireo	135 75	102 33	14 15	81 75	812 86	2M 11	671 28	17 1	188 28	630 46	198 7	1M 19
Yellow-throated Vireo Solitary Vireo	9 1	7	3	5 1	13		3		15	7		3 13
Red-eyed Vireo	62	18	4	1 54	3 88	14	26	2	3 65	14 61	5	7

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	Memp	Mont	Lawr	Colu	Nash	Murf	Wils	High	Chat	Knox	Gree	Eliz
Philadelphia Vireo Warbling Vireo Black-and-White Warbler Prothonotary Warbler Swainson's Warbler	1 6 2 72 5	 8 5 11 	 1 4 1	2 22 21	3 24 10 72	 22 1	2 2 14 18 1		2 10 13 2	1 21 3	1 1 1 	3 24
Worm-eating Warbler Golden-winged Warbler Blue-winged Warbler Tennessee Warbler Orange-crowned Warbler	5 60 	2 5 27 		14 1 45 54	17 17 171 1	 4	22 2 4 3	 1 	9 2 5 30 1	16 3 7 11 1		2 3
Nashville Warbler Northern Parula Yellow Warbler Magnolia Warbler Cape May Warbler	6 61 2 6	3 16 1 2	6 	18 13 34 16 1	32 12 10 10 10	 17 20 2	4 10 1 7	 1	5 4 23 1 12	2 3 5 8	 3 2 3	18 30 1
Black-thr. Blue Warbler Yellow-rumped Warbler Black-thr. Green Warbler Cerulean Warbler Blackburnian Warbler	62 16 24	67 8 3	20 4	1 96 18 19 6	81 20 8 11	2 34 	6 249 6 1 8	 36 1 1	 94 9 7 1	1 340 28 23 	41 	10 107 15 1 1
Yellow-throated Warbler Chestnut-sided Warbler Bay-breasted Warbler Blackpoll Warbler Pine Warbler	4 4 	 1 26 1	1 1	10 3 83 3	15 13 11 162 3	 2 22 1	1 2 56 4		31 2 2 34 11	3 1 1 4	 1 11	9 3 1 1
Prairie Warbler Palm Warbler Ovenbird Northern Waterthrush Louisiana Waterthrush	1 9 1 15	23 35 1 2 6	11 5 1 4	47 78 18 6 9	22 22 13 9 9	2 40 1	75 22 3 4 4	6 	4 12 4 3 4	19 8 25 2	2	1 2 24 5
Kentucky Warbler Common Yellowthroat Yellow-breasted Chat Hooded Warbler Wilson's Warbler	60 15 2 11	5 41 9 5	2 3 	34 47 22 14	10 122 47 20 1	22 5 2	12 63 15 6	1 	15 22 18 16	8 22 2 28	38 4 3	12 23
Canada Warbler American Redstart House Sparrow Bobolink Eastern Meadowlark	 14 C 61 94	 3 56 50 61	 3 104 79 47	10 36 57	3 10 95 10 208	3 3M	315 305	 57 100+	1 44 95 23 73	4 124 156	2 2 30 8 68	7 171 212
Red-winged Blackbird Orchard Oriole Northern Oriole Rusty Blackbird Common Blackbird	390 29 8 281	95 7 6 111	 2 95	258 26 2 340	458 35 20 339	750 18 8 6 3M	232 29 4 6.8M	70 3 63	44 24 4 189	304 7 547	38 6 1 175	754 3 1 5 998
Brown-headed Cowbird Scarlet Tanager Summer Tanager Cardinal Rose-breasted Grosbeak	132 13 41 115 17	33 3 11 140 15	88 2 47 1	83 5 23 125 51	138 15 26 183 96	18 3 5 650 7	162 12 39 245 20	15 1 4 49	51 52 19 105 50	90 20 7 260	17 6 2 38 5	103 5 196 2
Blue Grosbeak Indigo Bunting Painted Bunting Dickcissel Evening Grosbeak	5 91 1 15 	3 37 	12 12 12	4 102 3 	2 179 3 	7 15 4	17 171 	1 	109 1 3	3 19 	2 3 22	 82
Purple Finch House Finch Pine Siskin American Goldfinch Rufous-sided Towhee	2 27 128 26	28 9 167 63	2 2 89 19	1 6 63 61	 3 163 113	 34 48	3 21 55	 9 160 19	1 46 159 51	7 27 131 356 98	 14 22	22 14 393 479 80
Savannah Sparrow Grasshopper Sparrow Vesper Sparrow Lark Sparrow Dark-eyed Junco	21 1	1 		2 2 	43 5 	 1	6 1 8	2 4 	1 	16 4 1	1 	48 27
Chipping Sparrow Field Sparrow White-crowned Sparrow White-throated Sparrow Fox Sparrow	15 10 4 198	30 19 4 94	10 17 13 	196 94 16 65 	32 119 4 29 	20 37 18 22	26 284 35 73 	12 22 23	28 33 1 70	44 115 7 214	8 35 30 37	73 66 2 84 1

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	Memp	Mont	Lawr	Colu	Nash	Murf	Wi1s	High	Chat	Knox	Gree	Eliz
Lincoln's Sparrow				2								
Swamp Sparrow	1		2	3	20		1		7	10		25
Song Sparrow	1			1	58	14	6	11	92	224	32	489
Species, Total Species, Grant Total	131 206	118	91	145	157	104	138	67	155	125	93	135
* See Information on Count	s		M =	1000		C =	Common					

WILSON COUNTY: 1, 2 May; temp. 50° to 70° F; 12 observers. Earline Berry, Vernon Berry, Paulette Brady, Melissa Canon, Ruth McMillan (compiler — Rt. 2, Box 141, Lascassas 37085), Lou Overman, Ray Pope, Jeff Reed, Alice Savage, Billy See, Bill Senter, Grace Speck.

Details submitted on Yellow-bellied Flycatcher.

HIGHLAND RIM: 24 April; 9 observers. Ruth Luckadoo, Agnes Marcom, Nickey Medley, Anna Parker, Chloe Peebles, Erma Rogers (compiler — Rt. 1, Hillsboro 37342), Lillian Willard, Truman Winnett, Wanda Winnett.

CHATTANOOGA: 2, 3 May; temp 43° to 79° F; 24 observers. Carl Adams, Katherine Boyles, Edith Bromley, Kathy Davidson, Angela Davis, Kenneth Dubke, Lillian Dubke (compiler — 8139 Roy Lane, Ooltewah 37363), Gertrude Fleming, Paul Harris, Gary Hartman, Frank Hixon, Richard Hughes, Daniel Jacobson, Billy Johnson, Starr Klein, Dick Menuet, Jeanne Menuet, Johnny Parks, Janet Phillips, Peter Robinson, Ann Senn, Randy Stringer, Mary Tunsberg.

Good details on unusual species.

KNOXVILLE: 25 April; cloudy AM, slow rain PM; temp. 46° to 56° F; wind 0 to 5 mph; 28 observers. Laurie Armstrong, Betty Reid Campbell, Jim Campbell, Howard Chitwood, Marcia Davis, Mary Ann Handel, Dave Hankins, Paul Hartigan, David Highbaugh, Audrey Hoff, Ron Hoff, J. C. Howell, Tony Koella, Beth Lacy, Bettie Mason, Jim Mason, Ken McLean, Chuck Nicholson, Holly Overton, J. B. Owen (compiler — 2309 North Hills Blvd., Knoxville 37917), Truett Patterson, Mark Reeves, Kenneth Sanders, Mabel Sanders, Boyd Sharp, Maxie Swindell, Jim Tanner, Ralph Zaenglein.

GREENEVILLE: 2 May; ? observers. Mrs. Royal Spees (compiler — Box 356, Greeneville 37743).

ELIZABETHTON: 24 April; 0445 to 2000; temp. 29° to 70° F; 19 observers. Glen Eller (compiler — Rt. 3, Grandview Terrace, Elizabethton 37643) (Lee R. Herndon Chapter).

AUTUMN HAWK FLIGHTS 1981

Linda J. Fowler

The 1981 fall hawk migration through Tennessee was spectacular. The total of 14,896 Broad-winged Hawks (24,097 including Mendota firetower, Virginia) was the highest ever reported for Tennessee. Ospreys, Northern Harriers, and Red-shouldered Hawks were up in 1981 from numbers reported in previous years. Golden Eagles, Peregrine Falcons, and a Mississippi Kite were the rarest species reported from Tennessee lookouts. Hawks were reported from 15 Tennessee locations, including private residences and established lookouts. A summary of records from Mendota is presented in the table for purposes of continuity although these data are not included in the Tennessee totals. As stated in last year's report (Migrant 52:87-90, 1981) the Virginia Ornithological Society has assumed responsibility for reporting these records. Precise location of each lookout is given in the station descriptions. Lookouts that were described in detail in last year's report will not be repeated this year. Codes for sky conditions and wind speed are those standardized by the Hawk Migration Association of North America (HMANA) and can be found in last year's report.

The migration was slow during the early part of September. Temperatures were slightly lower than average while rainfall was above average in both September and October. Highest rainfall occurred on 15 and 16 September in most of Tennessee. Most eastern Tennessee climatological stations reported rain on at least 10 of the first 16 days of September. Heavy rains during the early part of the month were followed by a cold front, with clear skies and near freezing temperatures. On 17 September, the first flight of hawks exceeding 100 was reported. Jim Graves counted 270 unidentified buteos flying high over the Middle Prong of the Little River between 1730 and 1800 hours. On 18 September, only three Broad-wings were reported by Lil Dubke at Ooltewah firetower, the only active station of the day.

On 19 September, Broad-wing numbers reached their peak in Tennessee. Barbara Stedman counted 5,632 Broad-wings from Look Rock in 9½ hours of observation, setting a record high for total number of Broad-wings seen from a Tennessee lookout. On that same day, Linda Fowler counted 1,113 Broad-wings from Kyles Ford firetower in 3³/₄ hours of observation. Lil Dubke saw 159 Broad-wings from Ooltewah firetower on 19 September, which was the highest number reported from that station this season. Paul Pardue watched 173 Broadwings soar over his Knoxville home between 1100 and 1200 hours on this same day. Signal Point, which was manned for 9 hours on 19 September, saw only 77 Broad-wings. This is not surprising since Signal Point has not been known over the years for having large flights of Broad-wings. On 20 September, Broadwings peaked at Signal Point, with 383 birds in 9 hours. Broad-wing numbers exceeding 100 were reported from five of the six active stations. Linda Fowler, David Highbaugh, and George Woods counted the high for that day of 1,774 Broad-wings at Look Rock. On 24 September, George Woods counted 832 Broad-wings from his Townsend home in 7 hours. This was the last report of Broad-wing numbers exceeding 100.

Accipiters continued this year to migrate through Tennessee in relatively low numbers, with Sharp-shins outnumbering Cooper's Hawks by almost 2:1. In the southern Appalachian region as a whole, the *Accipiter* migration peaked in late September. In Tennessee, accipiters were seen in low numbers throughout September and October with no peaks observed. Mendota reported the southern Appalachian region's highest Cooper's Hawk total of 118 birds, with a ratio of Sharp-shins to Cooper's of nearly 1:2 (just the reverse of Tennessee). Almost 65 percent of the total accipiters identified in Tennessee were Sharp-shins.

Red-tailed Hawk numbers seemed comparable to numbers observed in previous years. Most lookouts reported at least one Red-tailed Hawk during the 1981 season; however, many of these birds seen in September and October were probably resident birds. Most hawk watching had ceased in Tennessee before late October and early November when Red-tailed flights peaked in most of the southern Appalachian region.

Red-shouldered Hawks were seen in unusually high numbers in Tennessee in 1981. About 63 percent of these sightings were reported from Look Rock. Barbara Stedman, who manned this lookout during most of the period, reported that all of these birds were adults and that most appeared as "single birds flying low over the ridge" (HMANA Newsletter 7(2):26, 1982).

The Northern Harrier, which has been steadily declining in numbers over its range, was reported in much higher numbers this year. A total of 27 Harriers was seen from Tennessee lookouts, more than double last year's total. Most of these sightings (85 percent) were from Look Rock. Mendota reported a total of nine Harriers in 1981.

Osprey numbers were up considerably from previous years in Tennessee. A total of 23 Ospreys was seen in Tennessee and another 15 from Mendota. In 1980 only eight Ospreys were seen from Tennessee lookouts. Most major lookouts in the southern Appalachian region also recognized increases in Osprey numbers this year. This upsurge in numbers of Ospreys observed from lookouts does not correspond to the low nesting success of Ospreys at Chesapeake Bay (one of the prime nesting areas of the Osprey).

The American Kestrel and other unidentified falcons were seen in low numbers from Tennessee lookouts, but in slightly higher numbers than last year. Two Peregrine Falcons were seen by Barbara Stedman at Look Rock (additional information unavailable).

Sightings of both species of vultures were up considerably from last year. Turkey Vultures were seen from nearly every lookout in the State, although many of these birds appeared to be residents. On 24 October, 205 Turkey Vultures passed over Look Rock in 4 hours. This was the highest daily vulture total for Tennessee and for the southern Appalachian region as a whole. Of 138 Black Vultures seen in Tennessee in 1981, 80 percent were reported from Look Rock and nearby Chilhowee Dam. Since Black Vultures are regularly seen at Look Rock, many of these birds were probably repeated counts of resident birds. No large flocks of Black Vultures were reported from Tennessee.

Three Golden Eagles, two adults and one immature, were reported from Tennessee in 1981. The first Golden Eagle, an immature, was seen by Wesley James on Citico Creek on Tellico Reservoir on 17 September. George Woods saw the other two eagles from his Townsend home "flying together" on 24 September (the last day of high Broad-wing numbers). No Bald Eagles were reported from Tennessee lookouts although there were sighting of this species on area reservoirs. On 20 and 21 September, E. Scott reported two Bald Eagles from Mendota.

A Mississippi Kite was seen by Ken Dubke on 26 September at Signal Point, which is the first sighting of this species from a Tennessee lookout. Two American Swallow-tailed Kites were seen by many birders around soybean fields near

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Date	Station	Reporter (No. Observers)	Hours	Wind	SKY	T(°C)
9/05	Bald Mt.	G. Mavfield(14)	5	S₩(1-4)	2,7	
9/11	Ooltewah FT	L. Dubke(1)	6	SW(0-2)	5,2	20-28
9/12	Signal Pt.	L. Fowler(11)	4	SW(1)	1-2	27-30
9/13	Signal Pt.	K. Dubke(1)	9	SW(0-2)	0	22-30
9/13	Mt. Roosev. FT	L. Fowler(11)	4-1/2	SW(1-2)	5,0	18-23
9/17	Middle Prong	J. Graves(1)	1/2	NW(3)	1	18
9/17	Citico Creek	W. James(2)	1/2	NW(3)	2	20
9/17	Look Rock	W. James (2)	1/2	N(3)	0-2	18
9/17	Ooltewah FT	L. Dubke(2)	6	N(3)	0-2	18-20
9/17	Look Rock	B. Sharp(2)	4	N(4)	0	16
9/18	Ooltewah FT	L. Dubke(1)	2	N(3)	3	16
9/19	Signal Pt.	K. Dubke(2)	9	N(2)	0	16-20
9/19	Ooltewah FT	L. Dubke(2)	7	N(2)	0	16-20
9/19	Look Rock	D. Highbaugh(2-6)	4	NW(2)	0	16-20
9/19	Knoxville	P. Pardue(1)	1	NW(2)	0	16
9/19	Kyles Ford FT	L. Fowler(2)	3-3/4	SW(2-3)	1-3	12-15
9/20	Mt. Roosev. FT	W. James(2)	2	SW(1)	1	15-16
9/20	Look Rock	L. Fowler(1-3)	4-1/4	SW(1-2)	ō	15-19
9/20	Kyles Ford FT	R. Nevius(2)	4-1/4	SW(2)	0	19
9/20	Joppa	F. Fisher(1)	3-1/2	SW(2)	Ő	20-21
9/20	Birchwood	K. Selvidge(1)	1	S(2)	Ő	21-22
9/20	Signal Pt.	K. Dubke (2)	9	S(2)	õ	16-22
9/21	Birchwood	K. Selvidge(1)	2	SSE(2)	Ő	26
9/21	Look Rock	G. Woods(2)	4	S(2)	0	24-26
9/22	Ooltewah FT	L. Dubke(2)	6	S(1-2)	0	20-27
9/22	Mt. Roosev. FT	J. Owen(4)	3-1/4	SW(2)	1	15-21
9/22	Walnut Mt. FT	L. Fowler(2)	1-3/4	SW(1-2)	3	15-17
9/23	Ooltewah FT	L. Dubke(2)	5	N(3)	0-2	19-22
9/23	Mt. Roosev. FT	J. Owen(2)	5	N(2)	1	14-20
9/23	Kyles Ford FT	L. Fowler(3)	2	N(3)	0	17
9/24	Townsend	G. Woods(2)	7	-	_	
9/25	Ooltewah FT	L. Dubke(2)	5	VAR(2)	1-3	17-26
9/25	Chilhowee Dam	B. Stedman(1)	2	SW(2)	1	20-25
9/25	Look Rock	P. Hartigan(1)	6	VAR(0-2)	0-1	10-23
9/26	Pilots Knob FT	L. Fowler(2)	1	SW(2)	0	21
9/26	Signal Pt.	K. Dubke(2)	10	S(2-3)	0-1	21-28
9/26	Ooltewah FT	A. Davis(2)	2-1/2	S(2)	3	26
9/27	Ooltewah FT	L. Dubke (2)	3 3	VAR(2-3)	1	30
9/27	Kyles Ford FT	R. Nevius(2)	5	SW(2-6)	1-3	-
10/03	Signal Pt.	K. Dubke (2)	8-1/2	VAR(2-3)	0	14-18
0/04	Signal Pt.	K. Dubke(2)	9	SW(2-3)	1-3	15-23
0/11	Signal Pt.	K. Dubke(2)	9	SW(0-2)	2-5	20-28
0/18	Signal Pt.	K. Dubke(2)	8	WNW(4-5)	3	18-19
10/18	Knoxville	A. Hoff(1-2)	2-1/2	N(3-5)	1-2	24
	¹ Look Rock	B. Stedman	99-3/4	-	-	_
	² Mendota FT, VA		94-1/2	-	-	-
		³ TOTAL	275-1/4	-	_	-

¹HMANA Newsletter 7(2):25.

²HMANA Newsletter 7(2):25. Data from Mendota FT are not included in overall total.
 ³Columns do not always sum to "total" line because of necessary edits

in Look Rock data.

60

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3 3 1 1 6 1 2,606 173 15 4 3 3 1 1,113 4a,9u 61 1 1a	79
173 15 4 3 3 1 1,113 4a,9u 61 1 1a	181
15 4 3 3 1 1,113 4a,9u 61 1 1a	2,621
61 1 la	173
	1,152
	63
8 2 2 2 2 1,774 la,3b,1	
1 3 346	350
5 2 1 4 2 282 2 lf	299
446	446
1 2 1 3 383 lf	391
107	107
10 2 1 1 620	634
2 1 2 1 1 91	98
6 1 2a	9
2 1 14 lb	16
4 1 2 13	20
5 60 1 2b	68
13 1 1 1 1 1b	18
832 1 1 2GE	836
12 3 4 32 2 1f	54
6 9 1 1 80 4a,1b	
8 10 5 2 33 1 3a,4u	
4 1 1 1b	7
3 1 12 1MK	17
4 2 21	27
4 2 2 32	40
5 1 15	21
2 1 1	4
1 1 2 1	5
5 2 7	
37 5 9 1	52
65 1 1 1a,1b,3	
339 102 18 7 54 23 8,173 22 12 7 2PF, 25	
7 71 118 62 9,201 9 15 41 2BE,15u	9,541
566 138 57 31 98 38 14,896 27 23 11 336	16,221

Dunlap on 7 September. This is the first record for this species in eastern Tennessee.

KEY TO ABBREVIATIONS IN TABLE

Reporters: Angela Davis (Chattanooga), Kenneth H. Dubke (Ooltewah), Lillian H. Dubke (Ooltewah), Frank Fisher (Morristown), Linda J. Fowler (Clinton), Jim Graves (Townsend), Paul D. Hartigan (Knoxville), David Highbaugh (Knoxville), Audrey Hoff (Knoxville), Wesley K. James (Oak Ridge), George R. Mayfield (Columbia), Richard Nevius (Greeneville), Paul Pardue (Knoxville), J. B. Owen (Knoxville), Kathleen Selvidge (Birchwood), A. Boyd Sharp (Knoxville), Barbara Stedman (Franklin), George Woods (Townsend).

LOOKOUT STATIONS

Bald Mountain — Located in the Cherokee National Forest in Unicoi County along the Tennessee-North Carolina border, this lookout is at an elevation of 3107 feet (36°30'10"N,82°36'30"W, Flag Pond, Tennessee 7.5' Quad. USGS).

Birchwood — From the town of Birchwood, Hamilton County, at an elevation of 740 feet (35°21′40″N,84°59′17″W, Birchwood, Tennessee 7.5′ Quad. USGS), hawks can be seen migrating down Walden's Ridge.

Chilhowee Dam — Chilhowee Dam is located on the border of Blount and Monroe Counties at an elevation of 820 feet $(35^{\circ}32'45''N, 84^{\circ}03'05''W, Tallassee, Tennessee 7.5' Quad. USGS). Hawks can be seen migrating down the Chilhowee Mountains from this lookout.$

Citico Creek, Tellico Reservoir — At an elevation of 800 feet, in Monroe County (35°32'15"N,84°06'00"W, Tallassee, Tennessee 7.5' Quad. USGS) birds can be seen migrating down the Chilhowee Mountains.

Knoxville — From the city of Knoxville, Knox County (35°53' 00"N,83°56'55"W, Knoxville, Tennessee 7.5' Quad. USGS), at an elevation of 900 feet, hawks are probably coming off the end of the Clinch Mountain.

Joppa — The town of Joppa is located in the Richland Valley on the east side of the Clinch Mountains at an elevation of 960 feet (36°14'15"/N,83°37'10"W, Joppa, Tennessee 7.5' Quad. USGS) in Grainger County.

Middle Prong of the Little River — At an elevation of 1,200 feet in Blount County in the Great Smoky Mountains National Park (35°39'00"N,83°41'37"W, Wear Cove, Tennessee 7.5' Quad. USGS), hawks can be seen migrating down the Appalachians.

Pilot's Knob FT — This firetower is located on the Cumberland Plateau at an elevation of 2,051 feet in Morgan County (36°03'12"/N,84°45'10"/W, Hebbertsburg, Tennessee 7.5' Quad. USGS).

Townsend — This town lies at the foot of the Great Smoky Mountains in Tuckaleechee Cove at an elevation of 1,036 ft. (35°40'35"N,83°45'30"W, Kinzel Springs, Tennessee 7.5' Quad. USGS) in Blount County.

Walnut Mountain FT — Located 3 km northwest of the town of LaFollette along the Tennessee Valley Divide in Campbell County (36°24'35''N, 84°10'34''W, Ivydell, Tennessee 7.5' Quad. USGS), hawks can be seen migrating down Walnut Mountain of the Cumberlands.

Rt. 4, Box 541, Valley Lane, Clinton, TN 37716. Accepted 1 March 1983.

ROUND TABLE NOTES

ESTABLISHMENT OF A NEW HERON AND EGRET COLONY AT REELFOOT LAKE, TENNESSEE — A new heron and egret colony (Figure 1) was established at Reelfoot Lake, Tennessee, during the early 1970's. In 1976 local duck hunters reported they had observed large nests on the south edge of Little Ronaldson Slough for several years. Steve Pardue and Jimmy Cox (employees of Reelfoot Lake State Park) inspected the colony during the winter of 1976-1977 and counted approximately 90 nests. They visited the colony during the 1977 nesting season and noted that most of the birds were Great Blue Herons (Ardea herodias), but they also photographed 2 Anhingas (Anhinga anhinga), 1 on a nest. In addition at least 6 Cattle Egrets (Bubulcus ibis) and 2 Great Egrets (Casmerodius albus) were present. On 5 February 1978 I visited the colony site with Jimmy Cox, Steve Pardue, Kelley Swearingen (all of Reelfoot Lake State Park) and W. L. Smith (Univ. of Tn. at Martin biologist). Approximately 135 nests were counted with 1 to 20 nests per tree. All nests were in bald cypress (Taxodium distichum) trees. On 9 June 1981 J. Cox, W. L. Smith, and I again visited the colony. A count showed 211 active nests of Great Blue Herons and 10 nests of Great Egrets; no Cattle Egrets were seen. A pair of Anhingas circled the colony, but we were not able to positively identify their nest. A total of 31 bald cypress trees contained nests, with a maximum of 20 nests per tree. On our approach to the colony by canoe across Little Ronaldson Slough we observed 1 Snowy Egret (Egretta thula) perched in a tree at the edge of the colony. No other Snowy Egrets were seen in the colony and apparently none were nesting there. One Little Blue Heron (Florida caerulea) and 8 Yellow-crowned Night Herons (Nyctanassa violacea) were observed at the edge of a cultivated field approximately 2 km west of the colony; neither species was seen in the colony. The absence of



Figure 1. Reelfoot Lake heron colony, 1980. Photo courtesy of Burline Pullin, Tennessee Valley Authority, Norris, Tennessee.

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Cattle Egrets and the small number of Great Egrets is contrary to the impression of observers who inspected the colony by airplane in 1977 (M. D. Williams, pers. comm.) and 1980 (C. P. Nicholson, pers. comm.).

The colony site is in Lake County and is owned by the Tennessee Wildlife Resources Agency. The colony is approximately 2.8 km southwest of the former colony at Cranetown which was disbanded by 1963 (Gersbacher, E. O. 1964. J. Tenn. Acad. Sci. 28:15-16). Normally there is virtually no human activity near the colony during the nesting season since Little Ronaldson Slough is isolated from the remainder of the lake, and access is too inconvenient for most fishermen. However, in 1981 the northeast side of Little Ronaldson Slough was the site of a Bald Eagle (*Haliaeetus leucocephalus*) hacking project. Eagle rearing and observation platforms were constructed in May and June; eagles and observers were present from late June into August. Observers working with the eagle hacking project reported seeing many herons and egrets, but they did not observe any adverse effects of the eagle project on the heron colony (Noreen Smith, pers. comm.).

The last active heron colony at Reelfoot Lake was apparently Crane Roost at the north end of the lake in Kentucky; it contained 1000 nests in 1963 (Gersbacher, ibid.) Mengel (1965. The birds of Kentucky. Ornith. Monogr. No. 3, p. 160) refers to this colony as Little Cranetown. This colony apparently disbanded in the late 1960's, although the exact date is not known. Presumably, there were no active colonies at Reelfoot Lake from the time Crane Roost disappeared until the formation of the Little Ronaldson Slough colony described here. The continued presence of herons and egrets on the northeast side of the lake, approximately 16 km from the Little Ronaldson Slough, leads to speculation of another colony in that area.

T. DAVID PITTS, Dept. of Biological Sciences, Univ. of Tn. at Martin, Martin, TN 38238. Accepted 1 August 1982.

SUMMER RECORD OF BALD EAGLE IN CHESTER COUNTY, TEN-NESSEE — On 21 June 1980, I found the carcass of a dead immature Bald Eagle (*Haliaeetus leucocephalus*) just south of Chickasaw State Park and Wildlife Management Area, Chester County, Tennessee. The bird, approximately 3-4 years of age, had been shot twice with a high-powered rifle and had been dead about 10 days. No arrest was ever made. Two weeks before my discovery, I had received a report of a Bald Eagle sighting near the Henderson city limits. This is the first confirmed record of a Bald Eagle in Chester County, and one of few recent summer records from west Tennessee.

RON MASTERS, Tennessee Wildlife Resources Agency, Henderson, TN (present address: Oklahoma Department of Wildlife Conservation, Box 1412, Mc-Alester, OK 74501).

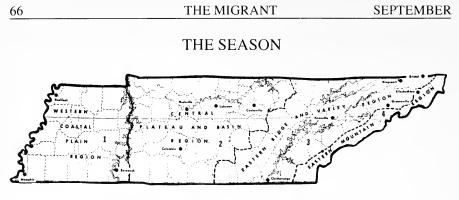
SOUTHEAST TENNESSEE OCCURRENCES OF MISSISSIPPI KITE — Mississippi Kites (*Ictinia mississippiensis*) have been recorded 4 times in recent years near Chattanooga. The first local record of the species was my observation on 22 September 1978. On that day, I was watching migrating hawks outside my apartment. Fontaine Village Apartments, elevation 212 m, are nestled at the foot of Signal Mountain just west of Red Bank, Hamilton County, Tennessee. A small knoll lies to the north and craggy outcroppings are visible near the brow of Signal Mountain (622 m elevation). On 22 September winds were northwesterly at 3-6 kph. Temperatures were in the low 80's °F. Cloud cover was broken — allowing excellent views of moving birds. Between 1400 and 1615, I counted 393 Broad-winged Hawks (*Buteo platypterus*), and 8 other hawks of 5 species. Shortly after 1530, I saw a long-winged, long-tailed hawk just above my apartment. As it flew directly above me at about 10 m, I noted its uniform grayish appearance. The wings were pointed at the end and notched at the wrist. The tail was long, dark and notched at the end. Poor lighting did not permit color distinctions. It was being pursued by 2 Chimney Swifts (*Chaetura pelagica*), and was dodging its pursuers in butterfly-like movements. Actually, the characteristics closely fit those of a Common Nighthawk (*Chordeiles minor*). For nearly 10 minutes I observed this demonstration, until the bird circled upward in a series of soars and flaps. After reaching an altitude of approximately 60 m, it flew north out of sight.

From my previous experience with hawks, I knew I had seen a Mississippi Kite. Only 4 months earlier I had found this species engaging in similar actions and habits in the Francis Marion National Forest near Charleston, South Carolina. Mississippi Kites are presently undergoing a substantial range expansion and population increase throughout their range in the southern United States (Parker and Ogden, Amer. Birds 33:119-129, 1979). In Tennessee, its normal range is in the Mississippi River Valley from Memphis to Reelfoot Lake. There are few records from other parts of the state (Bierly, Bird Finding in Tennessee, 1980). There are 2 records in the 1890's from Cherokee County, North Carolina, in the extreme southwest corner of the state (Lynch, Chat 45:42-44, 1981). There are breeding season records from Wheeler National Wildlife Refuge, in northern Alabama (Imhof, Alabama Birds, 1976), but apparently no records from north Georgia (Denton *et al.*, Annotated Checklist of Georgia Birds, 1977).

Three additional Mississippi Kites have been reported from southeast Tennessee since 1978. On 27 August 1979, an adult bird was seen by Ken and Lil Dubke and me near Decatur, Meigs County. We leisurely studied the bird for about 15 minutes as it headed south. On 17 April 1980 Ken Dubke watched a Mississippi Kite near Savannah Bay. The most recent sighting was of a bird flying south, seen by Dubke and others at Signal Point, Signal Mountain, on 26 September 1981.

All of these observations were made with 7x binoculars or higher power optics. Since the 1978 sighting, I have observed numerous kites in southern Mississippi and southern Texas. I have no hesitation in suggesting more sightings are ahead.

RANDY C. STRINGER, 758 Emory Drive, Chattanooga, TN 37415. Accepted 20 April 1983.



SPRING MIGRATION: 1 MARCH - 31 MAY 1982

Only one regional editor out of the 3 reporting commented on the weather, a major influence on migration. In the eastern part of the state, March was warmer than average, causing many plants to bloom early. Several of the early migrants were reported a bit earlier than normal. The second week of April was very cold, and heavy frosts destroyed much of the fruit crop. During the rest of April, temperatures were near or below normal, and May was dry with above average temperatures. During the second half of the period, migration was slow and no large waves of passerines were reported.

Larger than normal numbers of shorebirds were reported from the Memphis area, where the fifth state record of the Hudsonian Godwit was reported. Bonaparte's Gulls passed through east Tennessee in large numbers, and the 350 reported at Chattanooga may be a record count.

Interesting nest records included reports of Hooded Mergansers and House Finches at Chattanooga. This was the first report of Hooded Merganser reproduction in east Tennessee. Evidence of House Finch reproduction has now been reported throughout the length of the ridge and valley region.

WESTERN COASTAL PLAIN REGION — Spring migration was slow and light.

Heron-Osprey: Yellow-crowned Night Heron: 17 Mar through nesting season, 17 active nests, approximately 4 young to nest, McCorkle site, MEM (JLS). Sharp-shinned Hawk: 7 Mar (1) PF (JRW). Cooper's Hawk: 1 Apr (1) MEM (DV). Golden Eagle: 6 Mar (1 imm) WL (JRS, JS). Bald Eagle: 6-7 Mar (45) RL (JRS, JS). Osprey: 6 Mar (2) Air Park Inn, RL (JRS, JS).

Godwit-Blackbird: HUDSONIAN GODWIT — 17 Apr (1) PF (JLL, HBD). Golden Plover: 2 Mar (29), 24 Mar (184) PF (JRW). Upland Plover: 21 Mar (6) PF (MGW). Pectoral Sandpiper: 14 Mar (6), 22 Mar (7), 31 Mar (236) PF (JRW), 16 May (600) ENB (BBC, LCC). Least Sandpiper: 16 May (280) ENB (BBC, LCC). Ovenbird: 26 May (2 ad, 2 y) BHP (SCF, SLL). Brewer's Blackbird: 7 Mar (10-12) PF (JRW).

Locations: BHP — Big Hill Pond, McNairy Co.; ENB — Ensley Bottoms, Memphis; MEM — Memphis; PF — Penal Farm, Shelby Co.; RL — Reelfoot Lake; WL — Walnut Log, Reelfoot Lake.

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EASTERN RIDGE AND VALLEY REGION — The continuing effort to encourage more observers to record their observations and submit them for publication in this report seems to be paying dividends. However, many more sightings need to be incorporated for a more meaningful and comprehensive survey of the region's avifauna.

From the reports received, it appears the waterfowl migration progressed in a normal fashion. Of special interest was the region's first documentation of the Hooded Merganser nesting at Chattanooga. Details are to be submitted. Probably the best example of encouraging even the most casual observer to note their observations was the large number of migrating Sandhill Cranes reported this season. Another excellent example of reporting was the continued observations on the huge numbers of Bonaparte's Gulls that dropped down at Chattanooga and spent a period of time before departing the area.

Many birding enthusiasts had an opportunity to study the conspicuous American Avocets that rested all day on Chickamauga Lake on 16 April.

The most detailed report on the passerine migration originated from Knoxville. Usually few Palm Warblers are noted in the Elizabethton-Johnson City area during the spring movement, however, this year, they were much more widely observed.

A good illustration on the late winter distribution of northern finches will be noted in reading this summary for the period. Virtually no reports were made in the Chattanooga area while many finches were reported from Knoxville, Newport, Greeneville and the Elizabethton-Johnson City area. House Finches continue to expand and extend their range with the first nesting reported from Chattanooga.

Loon-Goose: Common Loon: 18 Apr (9) WBL (DKF, LJF); 2 May (2) WBL (DKF, LJF); regular, max 4 Apr (39) CHL (LHD); last reports 4 May (1) AUS (RLK) and 9 May (1) NIL (KHD, LHD). Horned Grebe: 1-5 regular to 22 Mar CHL, last 5 Apr (KHD, LHD); 23 Apr (1) AUS (MD, SG). Pied-billed Grebe: 1-27 regular to 10 Apr CHL (KHD, LHD). Double-crested Cormorant: 6 Apr (2) HRA (KHD, LHD, CRH); 27 Apr (11) FLL (MWA) — a high number for this area; 2-4 May (1-2) AUS (RLK); 5 May (2) DOL (JCH). Little Blue Heron: 18 Apr (1) CHL (PCH, STK); 22 Apr (1) SAB (KHD, LHD). Great Egret: 31 Mar (1) CHA (STK); 5 Apr (3) HRA (KHD, LHD); 26 Apr (1) KSP (KHD, LHD); 18-27 Apr (1-2) AUS (RLK, SG, MD). Black-crowned Night Heron: 2 Apr (1-2) AUS (RLK). White-fronted Goose: 27 Mar (8) HRA (LHD, JWS, *et al.*). Snow Goose: 18 Mar (1 blue phase) MHL (WKJ).

Gadwall-Merganser: Gadwall: 9 May (1) NIL (KHD, LHD). Pintail: 2 Mar (5) HRA (KHD, LHD); 9 Mar (20) HRA (KHD, LHD). Green-winged Teal: 6 Apr (1) HRA (KHD, LHD). Blue-winged Teal: 12 Mar - 4 May (few regular) AUS (RLK, SG, MD); 8 Mar - 3 May regular, max 6 Apr (131) HRA (KHD, LHD). American Wigeon: 6 Apr (30) HRA (KHD, LHD); very low numbers upper section of the region (LHTOS). Northern Shoveler: 9 Mar (9) HRA (KHD, LHD); 13 Apr (13) SAB (KHD, LHD). Redhead: 5 Apr (6) CHL (KHD, LHD). Ring-necked Duck: 5 Apr (3) CHL (KHD, LHD). Greater Scaup: max 185, last 29 Mar (6) CHL (KHD, LHD). Lesser Scaup: 13 May (3) KSP (JTT); 6 Apr (1) HRA (KHD, LHD). Common Goldeneye: 15 Mar (1) HRA (KHD, LHD). Bufflehead: 5 Apr (2) CHL (KHD, LHD). White-winged Scoter: 10 Mar (3) Holston River, Hawkins County (Steve Cottrell, Ed Beddow). Ruddy Duck: 27-29 Mar (1-2) CHL (KHD, LHD); 10-12 Apr (1) AUS (RLK). Hooded Merganser: 1 Apr (4) PHL (RLK); nested at

CHA (RBW). Common Merganser: 2 Mar (4) CHL (KHD, LHD). Red-breasted Merganser: 15 Mar (2) SAB (KHD, LHD); 27 Mar (1) CHL (LHD).

Vulture-Rail: Turkey Vulture: migration of several hundred birds noted 16-19 Mar in KNX area (JBO, Len Hurley, et al.); Black Vulture: nest at Oak Ridge, near K-25 plant 6 Apr (1 egg), 24 May (2 y) (Ken McLean). Sharp-shinned Hawk: 5 sightings upper section of the region (LHTOS). Cooper's Hawk: 2 Apr (1) BOL (SG, MD); 12 Apr (1) AUS (RLK). Red-tailed Hawk: at least 4 regular around WHP (JAK). Red-shouldered Hawk: pair on territory, Heiskell, KNC (Dave Hankins); 8 May (1), 17 May (1) south KNX, different locations (PDH). Bald Eagle: 14 Mar (4) HRA (RBW, PDR); 12 May (1 ad) MHL (WKJ). Marsh Hawk: several reports KNX late Mar - mid Apr (KTOS); 13 Mar (1) WHP (JAK); 2 Apr (1) AUS (RLK). Osprey: 27 Mar - 12 May ("regular") AUS (LHTOS); late records included 15 May (1) NRL (JCH); 26 May, 5 Jun Cherokee Lake near Kodak (MLD, Chris Hamilton). American Kestrel: "common'' around WHP, with pair nesting in smoke house (JAK). Ruffed Grouse: 1 May (2) Panther Creek State Park (MLD). Sandhill Crane: 2 Mar (42, migrating) HRA, Blythe Ferry (CWC); 3 Mar (35, migrating) HRA, Blythe Ferry (CWC), (40, migrating) Dayton (Bill McSpadden), (50, migrating) CHA, at 1600 (Paul H. Davis), (100, migrating) at 1500, (25, migrating) at 1600, SAB (Bill Roy family); 4 Mar (200, migrating) HRA, Blythe Ferry (CWC), (70, roosting on edge of water, not noted night before) SAB, at 0730 (KHD, LHD); 5 Mar at 1735 (73, migrating) White Oak Mt. near SAB (Nelson E. Bennett); 7 Mar at 1730 (5, landing at water's edge in slough) HRA, Blythe Ferry (CRH); 8 Mar at 1100 (75, feeding, resting, probably present 6-7 Mar) HRA, Hiwassee Island (KHD, LHD); 9 Mar at 1200 (150, apparently spent day in field) HRA, Blythe Ferry (CWC); 15 Mar at 1800 (3, first noted migrating, then dropped to roost, feed) SAB (KHD, LHD); 16 Mar at 1815 (3, migrating) SAB (KHD, LHD); 27 Mar at 1600 (1, landed briefly, then departed area) HRA, Gunstocker Creek (LHD et al.). King Rail: 24, 31 Mar (1) ALM (MWA, LNA, ARH, BHS). Virginia Rail: 31 Mar (1) ALM (MWA, LNA, ARH, BHS).

Plover-Tern: Semipalmated Plover: 26 Apr - 24 May (1-6) KSP (KHD, LHD). American Golden Plover: 6 Apr (1) SAB (LHD). Black-bellied Plover: 6 Apr (2) SAB (LHD); 17-25 May (1-2) KSP (KHD, LHD, GNL). Common Snipe: regular, max 31 Mar (125) SAB (LHD); last 10 May (1) AUS (RDL). Upland Sandpiper: 16 Apr (1) KSP (MWA); 17-18 APR (1) KNX (ARH, RDH, SJS, BHS). Greater Yellowlegs: 10 May (10) KSP (KHD, LHD); Lesser Yellowlegs: 10 May (55) KSP (KHD, LHD). Pectoral Sandpiper: 27 Mar - 6 Apr (1-37) HRA (KHD, LHD). White-rumped Sandpiper: 6-31 May (1-6) KSP (KHD, LHD). Least Sandpiper: 10 May (100) KSP (KHD, LHD). Dunlin: 4 Mar (30) SAB (LHD). Stilt Sandpiper: 15-31 May (1-3) KSP (MWA, GNL, KHD, LHD). Semipalmated Sandpiper: 15-31 May (4-215) KSP (KHD, LHD). American Avocet: 16 Apr (36) remained for the day resting in the middle of CHL (first reported by JWS, then observed by many others). Herring Gull: 29 Mar (5) CHL (KHD, LHD). Ring-billed Gull: 24 May (2) KSP (KHD, LHD). Laughing Gull: 14 May (1) KSP (MWA). Bonaparte's Gull: probably the largest count ever, with as many as 350 below Chickamauga Dam (Nickajack Lake) on 4 Apr (Johnny T. Parks, KHD, LHD, RCS) with lesser numbers (150+) remaining till 12 Apr. There were many other scattered reports: 19 Apr (20) FLL (JAK); good count of 36 on 2 Apr KSP (MWA); on NRL until 20 Apr (2) (JCH). Forster's Tern: 27 Apr (1) SAB (KHD); 10-15 May (2-4) KSP (KHD, LHD). Caspian Tern: 15 Apr (1) NRL (JCH); 3-15 May (2-5) KSP (JTT, KHD, LHD).

Cuckoo-Shrike: Yellow-billed Cuckoo: 24 Apr (1) EJC (MD); 25 May (active nest) Hoss Cove (RPL). Barn Owl: 3 different sites EJC (LHTOS); pair regular WHP (JAK). Great Horned Owl: 2 active sites EJC (LHTOS); 14 Mar (1 ad, 2 y) HRA (RBW, PDR). Red-headed Woodpecker: only reports received 4 Apr (1) KNX (CPN) and 24 Apr (2) Unicoi (RLK). Willow Flycatcher: 21 May (1) AUS (RLK). Tree Swallow: 23 Mar - 27 Apr (''regular'') AUS (RLK); 15-16 Apr (5) SAB (LHD). Bank Swallow: 20 Apr (2) AUS (RDL); 22 May (3) KSP (KHD, LHD). Rough-winged Swallow: 20 Mar (1) KSP (MWA, LNA). Cliff Swallow: 5-7 pair nesting JNB (RLK). Red-breasted Nuthatch: scattered reports KNX with last 11 May (JCH). Long-billed Marsh Wren: 9 May (1) AUS (RDL). Short-billed Marsh Wren: 1 May (1) KNX (PDH). Water Pipit: 23 Mar (1) AUS (RLK). Cedar Waxwing: very numerous EJC area during period (LHTOS); more abundant than usual KNX with flocks of several hundred birds (CPN, JBO *et al.*). Loggerhead Shrike: 4-5 reports EJC — above average numbers there (LHTOS); 5 May (pair with fledgling) KNX (PDH).

Vireo-Warbler: Yellow-throated Vireo: 5 Apr (1) NOR (CPN) early. Solitary Vireo: early arrivals - 19 Mar (1) NOR (CPN); 19 Mar (2) KNX (MWA, LNA); 20 Mar (1) Hoss Cove (RPL); 22 Mar (10) SVG (CPN). Philadelphia Vireo: 22 Apr (1), 25 Apr (1) KNX (MLD, JCH). Warbling Vireo: only area report for several years — 2 May (2) NOR Dam (CPN). Black-and-white Warbler: early — 22 Mar (1) SVG (CPN). Prothonotary Warbler: 20-27 Apr (2) along Watauga River (RLK); summer resident under I-40 bridge over Holston River, KNC (JAK). Blue-winged Warbler: first 21 Apr (1) EJC (MD) — with above average sightings there. Orange-crowned Warbler: 28 Mar (1) CVL (MLD); 17 Apr (1) KNX (ARH, RDH). Magnolia Warbler: late arrival KNX, with first report there 3 May (3) (JCH). Black-throated Blue Warbler: 25 Apr - 12 May (6 reported, higher number than average) KNX area (James M. Campbell, Betty Reid Campbell, ARH, MLD, JCH, CPN). Cerulean Warbler: 28 Apr (1) EJC (RLK). Blackburnian Warbler: 27 Apr (1) KNX (JCH) — first report there, a late arrival. Yellow-throated Warbler: 20 Mar (1) KSP (MWA); 25 Mar (1) NOR (CPN). Palm Warbler: unusual spring movement EJC this year, in this area normally very few if any seen during spring migration (LHTOS). Connecticut Warbler: 9-10 May (1) KNX (RDH, JCH); 14 May (1) KNX (JTT). Canada Warbler: 22 Apr (1) KNX (JCH) — early there.

Bobolink-Sparrow: Bobolink: 17 Apr (1) KNX (MWA, LNA, RDH, ARH) very early; 2 May (50) KNX (MLD, A. Boyd Sharp); 27 Apr - 11 May (2-13) AUS (RLK); 3 May (1) KSP (KHD, LHD). Rusty Blackbird: few observed EJC — last 9 Apr (HHD, MD). Rose-breasted Grosbeak: 26 May (1) KNX (JCH) — late there. Blue Grosbeak: first upper region sighting 12 May JNB (RLK). Dickcissel: 12-14 May (1-3) JNB (RLK) — an unusual observation for this area. Evening Grosbeak: increase in numbers KNX late Mar - early Apr (fide JBO) with last report there 27 Apr (25) (fide JBO); a few sporadic EJC with last sighting there 4 May (SG); week of 28 Mar (about 600) near GRE (Mrs. Tom Austin); 30 Mar - 13 Apr (7) Newport (JAK); 21-22 Mar (5-6) Collegedale (Dave Mathewson, Jr.); 19-20 Apr (2-7) CHA (JP). Purple Finch: last reported 30 Apr (1) EJC (HHD). House Finch: at least 3-4 pair apparently nested EJC this season with young birds seen at several locations (LHTOS); 10 May (3 pair) GRE (Royal B. Spees); no comment from KNX; first nesting report CHA, see the Round Table Notes for details: Pine Siskin: peak numbers of 500-800 Newport (JAK); 1-20 Mar (5-6 at feeder) GRE (Alice Murray); regular to last sighting 5 May (1) EJC (SG, MD); present in good numbers KNX to 11 May (JCH). Grasshopper Sparrow: at least 7 singing regularly WHP after 24 Apr (JAK); 10-12 singing on territory near JNB second week of May (RLK). Vesper Sparrow: 10 Apr (1) WHP (JAK). White-throated Sparrow: last reports: 10 May (1) AUS (SG); 15 May (1) KNX (Jim and Betty Mason).

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Locations: ALM — Alcoa Marsh; AUS — Austin Springs; BOL — Boone Lake; CHA — Chattanooga; CHL — Chickamauga Lake; CVL — Cove Lake; DOL — Douglas Lake; EJC — Elizabethton - Johnson City; FLL — Fort Loudoun Lake; HRA — Hiwassee River Area; JNB — Jonesboro; KNC — Knox County; KNX — Knoxville; KSP — Kingston Steam Plant; MHL — Melton Hill Lake; NIL — Nickajack Lake; NOR — Norris; NRL — Norris Lake; PHL — Patrick Henry Lake; SAB — Savannah Bay; SVG — Savage Gulf, Grundy County; TRG — Tennessee River Gorge; WBL — Watts Bar Lake; WHP — White Pine.

KENNETH H. AND LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah 37363.

EASTERN MOUNTAIN REGION — This was one of the driest springs on record, with a rainfall deficit of almost 2 inches each month. Early March had warm temperatures and a cold spell at the end of the month. April temperatures were near normal, with only the second week cooler than average. Temperatures during May were above average.

The spring hawk migration was good throughout the area, except that fewer than normal Cooper's Hawks were reported. Waterfowl and shorebird numbers were below average. Canada Geese and Wild Turkeys, stocked by TWRA personnel, appear to be doing well in the upper sections of Sullivan County near South Holston Lake. A Common Raven was found nesting in the Doe River Gorge near Elizabethton at the very low elevation of 2500 feet. This species seems to be expanding its range in the northern mountain region, and this report supports recent low elevation sightings.

Loon-Hawk: Common Loon: last report 2 May (4) SHL (RPL). Double-crested Cormorant: 2 May (1) SHL (RPL). Green Heron: first report 28 Mar (1) ELI (HLF). Yellow-crowned Night Heron: first report 9 Apr (2) ELI (GDE, HLF), birds using same nest as previous years. Canada Goose: 2-3 successful nests near SHL (*fide* GDE). Blue-winged Teal: first report 12 Mar (4), last 4 May (2) ELI (MD, SG). Northern Shoveler: 9 Apr (4) ELI (GDE, HLF). Wood Duck: good early nest reports through area. Bufflehead: 2 birds still present on WibL at end of period (RLK *et al.*). Red-breasted Merganser: 30 May (1) WatL (GDE) late. Sharp-shinned Hawk: 7 separate sightings during period, about average. Cooper's Hawk: 13 Mar (1), 18 Mar (1) CHM (BHS, SJS). Red-shouldered Hawk: 24 Apr (1) RC (JLM, LH). Broad-winged Hawk: first 13 Apr (1) MC (GOW); 19 Apr (12 migrating) CHM (BHS, SJS). Marsh Hawk: 18 Apr (2) CHM (BHS, SJS).

Osprey-Woodpecker: Osprey: first 24 Mar (1), last May (1) ELI (GDE, HLF); 18 Apr (6 migrating) CHM (BHS, SJS). Wild Turkey: 3-4 broods fledged near SHL (*fide* GDE, TWRA). Greater Yellowlegs: first 23 Mar (2) St. Johns (RLK). Pectoral Sandpiper: 24 Apr (3) (JLM, LH). Bonaparte's Gull: 9 Apr (5) WatL (GDE, HLF); 24 Apr (3) RC (JLM, LH); 2 May (4) SHL (RPL). Forster's Tern: 2 May (1) SHL (RPL). Saw-whet Owl: 24 Apr (1) Indian Gap, GSMNP (MLD, LJT). Whip-poor-will: 23 May (1 nest, 2 eggs) SHL (RPL). Red-headed Woodpecker: 24 Apr (2) Unicoi (RLK), only report. Hairy Woodpecker: noticeable decline in ELI area.

Flycatcher-Warbler: Willow Flycatcher: first 13 May (2) SHL (RPL). Least Flycatcher: first 30 May (1) RM (RLK). Tree Swallow: first 23 Mar (7) ELI (GDE). Barn Swallow: first 24 Mar (3) ELI (HLF). Common Raven: 29 Apr (1 nest) Doe River Gorge, 2500 ft. elev. (*fide* PR). Hermit Thrush: 24 Apr (1) RC (JLM, LH) only report. Swainson's Thrush: 1 May (1 singing) ELI (LHTOS). Veery: first 24 May (1) RM (HHD). Water Pipit: 9 Apr (8) SV (GDE, HLF).

Warbling Vireo: first 19 Apr (1) SHL (RPL). Black-and-white Warbler: first 13 Apr (1) Unicoi (GS). Swainson's Warbler: first 21 May (2) RCP (MD, HHD). Blue-winged Warbler: first 25 Apr (1) ELI (HLF), then above average numbers. Black-throated Blue Warbler: first 3 Apr (1) Abrams Falls, GSMNP (HO) early. Cerulean Warbler: first 22 Apr (1) SHL (RPL). Blackpoll Warbler: first 24 Apr (1) ELI (GDE, HLF).

Grosbeak-Sparrow: Blue Grosbeak: first 14 May (2) SHL (RPL). Evening Grosbeak: 19 Apr (100+) CHM (BJS); last 7 May (1) ELI (GDE). Purple Finch: last 30 Apr (1) ELI (HLF). House Finch: large flocks gone by second week of May, scattered individuals through end of period. Pine Siskin: last 6 May (3) ELI (GDE). Red Crossbill: 25 Mar (4) Newfound Gap, GSMNP (AHH), only report. Grasshopper Sparrow: 12 May (4) SHL (RPL). Vesper Sparrow: no reports. White-crowned Sparrow: last 3 May (2 singing) SHL (RPL). White-throated Sparrow: last 11 May (1) ELI (HLF). Fox Sparrow: 24 Apr (1) RC (JLM, LH) only report.

Locations: CHM — Chilhowee Mtn.; ELI — Elizabethton Area; GSMNP — Great Smoky Mountains National Park; MC — Milligan College; RC — Roans Creek; RCP — Rock Creek Park; RM — Roan Mtn.; SHL — South Holston Lake; St. Johns — St. Johns Pond; SV — Siam Valley; WatL — Watauga Lake; WibL — Wilbur Lake.

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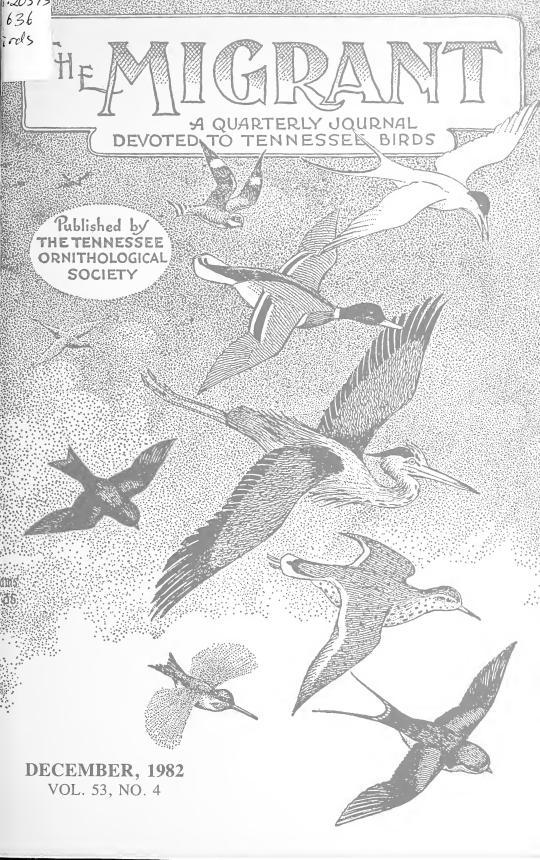
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NESTING OF THE TREE SWALLOW IN TENNESSEE

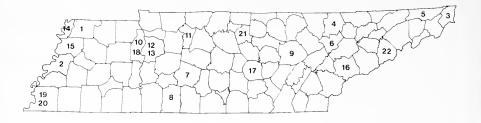
CHARLES P. NICHOLSON AND T. DAVID PITTS

Although a part of Tennessee's nesting avifauna since at least 1918 (Ganier 1964), Tree Swallows (*Tachycineta bicolor*) have greatly expanded their nesting range in recent years. This increase has not been restricted to Tennessee, but has occurred along much of the southern edge of the bird's range. Although it possibly nested in western Kentucky in the late 1800's (Pindar 1925), the first positive nesting in Kentucky was in 1973 (Stamm 1976), and since then the population has increased to the point that 80 pairs were reported in Ballard County in June 1980 (Kleen 1980). The first nest record for North Carolina was in Ashe County in 1979 (LeGrand and Potter 1980), and the second was in Buncombe County in 1981 (Duyck 1981). The first nest record for Oklahoma was also in 1979 (Lehman and Schram 1979). In Missouri, the Tree Swallow has recently been found nesting in large numbers south of its former range (Kleen 1980), and nests also have recently been reported from Arkansas (Jackson 1980). Robertson (1980) in a summary of range expansions for the 5-year period 1976-1980, noted that Tree Swallows have increased their range to the south in the Rockies, Appalachians, and Midwest. Coinciding with the range expansion has been an increase in production of offspring from traditional breeding areas such as northern Illinois (Kleen 1980) and Pennsylvania (Hall 1981).

In this paper, we review the nesting distribution (Figure 1) and breeding of the Tree Swallow in Tennessee. We have relied on published observations, our own unpublished notes, and other unpublished material made available to us. It is possible that other nest records exist of which we are unaware.

NESTING DISTRIBUTION

The first nest of Tree Swallows in Tennessee was found by A. F. Ganier at Reelfoot Lake, most likely in Obion County, in 1918 (Ganier 1964). This gives some support to Pindar's (1925) designation of the species as a rare nester in southwest Kentucky at the turn of the century. Although suitable nesting habitat, in the form of dead trees standing in or near water, existed from prior to 1918 until the present, the nesting population at Reelfoot Lake must have been extremely low, and non-existent later, because Ganier and numerous other observers failed to find the species during the nesting season in succeeding years (Whittemore 1937). From 1918 until 1960, the only nesting season report of Tree Swallows in



- 1. Obion Co. 1918 nest
- 2. Lauderdale Co. 1942 summer
- 3. Johnson Co. 1964 summer
- 4. Campbell Co. 1967 summer
- 5. Sullivan Co. 1967 summer
- 6. Anderson Co. 1968 nest
- Maury Co. 1968 nest
 Lawrence Co. 1972 summer
- 9. Cumberland Co. -1972 nest
- 9. Cumberland Co. -1972 nest 10. Benton Co. -1973 - summer
- 11. Cheatham Co. -1973 summer

- 12. Humphreys Co. 1974 summer
- 13. Humphreys Co. 1975 nest
- 14. Lake Co. 1976 nest
- 15. Dyer Co. 1977 nest
- 16. Blount Co. 1979 nest
- 17. Warren Co. 1980 nest
- 18. Benton Co. 1981 nest
- 19. Shelby Co. 1981 summer 20. Shelby Co. — 1982 — nest
- 20. Shelby Co. -1982 hes
- 21. Smith Co. 1982 nest 22. Cocke Co. — 1982 — nest

FIGURE 1. Breeding season distribution of the Tree Swallow in Tennessee, showing first year of occurrence during the breeding season ("summer") and of evidence of nesting ("nest") by counties.

Tennessee was from Open Lake in Lauderdale County, where Ganier and Clebsch (1942) observed 3 birds on 19 June 1942.

Beginning in 1960, a number of nesting season records were made without finding nests. At Reelfoot Lake, B. B. Coffey, Jr. (1960) saw 1 Tree Swallow on 22 May 1960, and J. Ellis (1963) reported the species on 15-16 May 1963. K. H. Dubke reported a single bird at Shady Valley, Johnson County, on 14 June 1964, and another bird from an unspecified location near Elizabethton on 24 May (Dubke 1964). Two Tree Swallows were at the Tri-City Airport, Sullivan County, on 31 May 1967 (McPeak 1967).

Since 1967, Tree Swallow nests have been reported almost annually. From 1967-1969, Tree Swallows were reported on the Elk Valley Breeding Bird Survey route in Campbell County. In 1968, 3 nests were found in Eastern Bluebird (*Sialia sialis*) nest boxes below Norris Dam, Anderson County (Olson 1968). In the following year, 5 nests were found (Campbell 1969), but the species apparently did not use the site again until 1979. Also in 1968, an immature and 2 adult birds were observed at a dead snag at the Monsanto ponds near Columbia, Maury County (Gray 1968). The 1968 nests were the first definite nesting records for the state since 1918.

In 1972, 2 nests were found at Crockett Bottoms, near the Obion River, Obion County (Pitts 1973). This site (Figure 2) was used for nesting each year for 10 years (Pitts, field notes), but it was apparently not used in 1982. During 1972, a nest was also reported in a bluebird nest box near a pond in Cumberland County (West 1973). On the 1972 foray in Lawrence County, (26-29 May), 2 Tree Swallows were observed but no nest reported (Alsop and Williams 1974).



FIGURE 2. Tree Swallow on nest tree, Crockett Bottoms, Obion County, Tennessee, 1973. Photo by T. D. Pitts.

In 1973, Tree Swallows were again reported nesting at Reelfoot Lake (Bierly 1973). During this same year, 12 birds were reported on the Pond Creek Breeding Bird Survey route in Cheatham County. Three Tree Swallows were reported on the Benton County foray, held 25-28 May 1973 (Alsop 1976). Although these were reported as transients, they were possibly nesting birds. Across the Tennessee River at the Duck River Unit of the Tennessee National Wildlife Refuge, Humphreys County, 2 Tree Swallows were observed by J. Ledbetter on 21 June 1974 (Waldron 1974), and on 15 June 1975, 2 adults feeding 4 bob-tailed young were observed by M. L. Bierly, W. J. Jones, and E. Holzhausen (Waldron 1975). On 1 June 1975, a single Tree Swallow was observed at Ashland City Marsh, Cheatham County, by Bierly and D. Vogt (Williams 1975).

In 1976, Tree Swallows again nested at the Monsanto ponds, Maury County, where O. Hotchkiss reported an adult feeding fledged young on 6 June (Williams 1976). A single nest was also found in Lower Blue Basin, Reelfoot Lake, apparently the first Lake County nest record (Pitts, field notes). In 1977, W. G. Criswell found a Tree Swallow nest along the Mississippi River in Dyer County (Waldron 1977). In 1979, a Tree Swallow again nested near Norris Dam in Anderson County, and M. L. Davis observed an adult with 3 fledged young at a pond near Louisville, Blount County (Dubke and Dubke 1979).

In 1980, a Tree Swallow nest was reported in Warren County by C. Malone (Bierly, pers. comm.). During that same year, Pitts toured the middle portion of Reelfoot Lake on 11 June searching for Tree Swallows, and observed at least 18 birds. A similar route in 1981 produced 8 Tree Swallows. In 1982, both authors searched the north and middle parts of Reelfoot Lake on 18 June and counted 24 Tree Swallows.

On 9 June 1981, Ben and Lula Coffey saw 10 Tree Swallows, including adults feeding young, at Camden Landing, Benton County. The first Shelby County nesting season records were made by the Coffeys at North Lake on 18 June 1981, when they observed 5 Tree Swallows (Waldron 1981). The following year, they observed 6 pairs using cavities in willows at North Lake on 18 May.

There were several other 1982 nest reports. These included a nest at Douglas Lake, Cocke County, reported by J. A. Koella (pers. comm.), and a nest at a farm pond near Dixon Springs, Smith County, observed by Nicholson (Figure 3). During May and June, Nicholson also did field work at New Johnsonville and the Duck River Unit, Tennessee National Wildlife Refuge, Humphreys County. Swallows were common along the shoreline of Kentucky Lake and in the dewatering area at the refuge, and on 16 June 1982 Nicholson counted 35 swallows, including several fledged young and adults at cavities, in the refuge area.

BREEDING BIOLOGY

Because many of the Tree Swallow nests reported in Tennessee have been in relatively inaccessible cavities over water, information on egg-laying dates, clutch size and hatching success is limited and is mostly from nests in bluebird boxes. Full accounts of nesting, from nest site selection through fledging of young, are available for only a few nests.

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FIGURE 3. Farm pond nesting habitat, near Dixon Springs, Smith County, Tennessee, 1982. Photo by C. P. Nicholson.





FIGURE 4. Tree Swallow nest in bluebird nest box near Norris Dam, Anderson County, Tennessee, 1979. Photo by C. P. Nicholson.

Tree Swallows select nest sites in Tennessee as early as late April. In 1968, Tree Swallows built a nest between 24 and 30 April, when eggs were found (Olson 1968). In 1972, Adele West first noticed Tree Swallows around a nest box in her yard on 30 April (West 1974), and Nicholson observed a pair of Tree Swallows entering a cavity in a wood fence post on 30 April 1982. Eggs have been observed in nests as early as 30 April 1968 and as late as 27 June 1968, when a box was used by swallows for a second brood (Olson 1968). Dates of apparently complete clutches include 18 May 1972 (West 1973), 22 May 1918 (Ganier 1964), 19 June 1977 (Waldron 1977), and 27 June 1968. There have been 2 reports of clutches of 4 eggs, 3 reports of 5 eggs, and 2 reports of 6 eggs. The 2 eggs remaining in the clutch collected by Ganier (1964) (the other 2 were broken) measure 18.4 x 14.1 and 18.4 x 13.9 mm (M. D. Williams pers. comm.) and are preserved in the Louisiana State University Museum of Zoology.

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The only actual observation of the hatching of Tree Swallow eggs in Tennessee is that of West (1973), who observed it on 5 June 1972, after an incubation period of 18 days. A nest observed by Olson (1968) hatched around 14 May 1968. West (1973) observed young leave the nest on 1 June 1972, 19 days after hatching, and a brood at Norris Dam fledged on 20 July 1968, the latest record for Tennessee (Olson 1968). After fledging, Tree Swallows may rapidly leave the nest area. Olson (1968) was unable to locate Tree Swallows near the nest the day after they fledged on 20 July 1968. Tree Swallows were present at North Lake, Memphis until 20 July 1982 (Waldron 1982).

All Tree Swallow nests, for which habitat descriptions are available, have been either over water or near water. Nest sites include large and small dead trees standing in water (Figure 2), willows along a shoreline, a wood fence post in water (Figure 3), and bluebird nest boxes (Figure 4) up to 0.4 km from water. The water may be large, impounded reservoirs such as Kentucky or Douglas Lakes, natural lakes such as Reelfoot, farm ponds, or moving water such as the Clinch River below Norris Dam.

The Tree Swallow is unique among North American passerines in that the female requires two years to achieve plumage maturity, which resembles that of the male bird (Tyler 1963). First year females, with dull brown back plumage, are capable of breeding. The nests observed by Bierly (1973), West (1973), and one of the nests reported by Pitts (1973) were attended by first year females.

DISCUSSION

In recent years, Tree Swallows have nested throughout Tennessee (Figure 1), except in the southeast corner of the state and in the mountains along the eastern border. Two areas, Reelfoot Lake and Benton-Humphreys Counties, have large populations which have likely used the area for several years. Most other areas have been used only for 1 year or 2 consecutive years, although at the Monsanto Ponds and Norris Dam, Tree Swallows returned for one season after an absence of several years. Reasons for Tree Swallows not returning to some nest areas are not clear. In some cases, the habitat has changed through loss of standing dead trees, and in a few cases it is possible the area was not checked the year following discovery of the birds.

Tree Swallows are relatively early migrants, both to and from their nesting grounds, making it difficult to distinguish migrants from nesting birds. By mid-March Tree Swallows are not uncommon on Reelfoot Lake and in other parts of Tennessee. Nesting Tree Swallows may be on territory by late April, when northward-moving migrants may still be present. Small numbers of Tree Swallows present in suitable nesting habitat in late April or May should be suspected of nesting, and such areas should be rechecked throughout the season. Southward migration through Tennessee begins early in July. Pitts, for example, observed an estimated 1000 Tree Swallows at one site on the north side of Reelfoot Lake on 10 July 1976. At Crockett Bottoms, where 2-3 pairs normally nest, several dozen pairs often occur in early July. Adult swallows have been observed still feeding nestlings in other parts of the state in early July. Later in the fall, huge numbers of Tree Swallows migrate through the state, especially in West Tennessee, where 500,000 were reported from the Reelfoot Lake area on 18 October 1970 (Patterson 1970).

The reasons for the Tree Swallow's recent range expansion are not known. Suitable nesting habitat has probably increased in Middle and East Tennessee with impoundment of rivers and construction of farm ponds. The recently filled Tellico Lake with its areas of flooded timber should be observed for evidence of nesting Tree Swallows. Recent flooding of bottomlands and resultant timber kills in West Tennessee have also created new nesting habitat. Nesting habitat, however, has been available at Reelfoot Lake for years with little Tree Swallow use until recently. Prior to the formation of Reelfoot Lake in 1811-12, nesting habitat was probably available in the many oxbow lakes of the Mississippi River and other West Tennessee rivers. Another factor which has an effect on Tree Swallow population levels nationwide is the large number of nest boxes placed primarily for bluebirds (Zeleny 1976).

If present trends continue, we predict that the Tree Swallow will become a widespread and common nesting species in Tennessee. Continued documentation of this range change is important. Also needed is additional information on nesting activities, site fidelity, and survival rates. It is important to remember that this range expansion is not restricted to Tennessee, and information on the species in Tennessee will help to understand the species throughout its range.

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ROUND TABLE NOTES

FIRST TENNESSEE RECORD OF CARIBBEAN COOT — At 1300 on 8 November 1981, Andrew P. Avel and I visited Chickamauga Boat Harbor, approximately one-half mile upstream from Chickamauga Dam, Hamilton County, Tennessee. As we gazed over a flock of approximately 30 American Coots (*Fulica americana*), I noticed that the frontal shield of one coot (Figure 1) extended to the top of its head past its eyes; whereas on the other coots, the shield ended just above the eyes. Since the coots were tame enough to come as close as 5 feet to accept food, we did not have to use binoculars to determine that the shield of this one coot was also broader, tinged with yellow on top, and showed no indication of red. By using *A Field Guide to the Birds East of the Rockies*, Fourth Edition, by Roger Tory Peterson, I identified this bird as a Caribbean Coot (*F. caribea*) — the first record of the species in Tennessee. I had seen a Caribbean Coot in Everglades National Park during the previous winter, and since then have carefully checked flocks of American Coots for a possible Caribbean Coot.

The Caribbean Coot is an accidental species from the Caribbean Islands. The first sighting of the species in the United States was in Fort Lauderdale, Florida on 28 January 1974 (Bolte, W. J., 28:3, 1974, American Birds). Since that time, Caribbean Coots have been spreading north in Florida as far as St. Marks on the



FIGURE 1. Caribbean Coot near Chickamauga Dam, Hamilton County, Tennessee, November 1981. Photo by H. K. McLean.

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Gulf Coast (Ripley, S. D., 1977, Rails of the World). Caribbean Coots have been sighted in Miami in 1976, at Port St. Lucie in 1979, and at the Eco-pond in Everglades National Park in 1981 (American Birds, 30:3, 1976; 33-3, 1979; and 35:3, 1981).

The Caribbean Coot sighted at the Chickamauga Boat Harbor was very aggressive towards the other coots. The way the bird held its left wing indicated it may have been injured.

The Caribbean Coot was also observed by Gary Hartman and Dorothy Hartman on 8 November 1981. On 9 November 1981, the sighting was confirmed by J. B. Owen, Robert J. Floyd, and Kenneth H. and Lillian H. Dubke. The bird was apparently unable to fly, and remained throughout the winter, through the summer of 1982, and was recorded on both the 1981 and 1982 Chattanooga Christmas Bird Counts (G. S. Hartman, pers. comm.). Whether the Caribbean Coot was overlooked prior to 8 November 1981 is not known. Observers should closely check all coots and be alert for future occurrences.

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FURTHER COMMENTS ON THE CARIBBEAN COOT IN TENNESSEE - At its meeting on 6 August 1983, The Tennessee Ornithological Society Certification Committee discussed the Caribbean Coot (Fulica caribea) in Hamilton County, Tennessee. The consensus of the committee was to include the coot on the official confirmed list of Tennessee birds. Although the origin of the bird and even its specific status (DeBenedictis, American Birds 36:150, 1982) are debatable, the bird was added to the list for the following reasons: 1) The most recent American Ornithologists' Union Committee on Classification and Nomenclature checklist (in press) recognizes F. caribea as a distinct species; 2) The bird was not banded, and showed no signs of having been in captivity; 3) The bird was less tame than several American Coots (F. americana) in the same area; 4) An attempt was made to determine if the coot had escaped from area waterfowl breeders. No escapes were reported; 5) The Caribbean Coot was aggressive towards American Coots, and did not closely associate with them. The Caribbean Coot has never been seen in flight, and apparently has a crippled left wing, which may have resulted from a collision with one of the many powerlines or some other structure in the area.

Because of its crippled status, the Caribbean Coot will not be included in future Christmas Bird Count or Spring Field Days tabulations.

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THE YELLOW WARBLER IN WEST TENNESSEE — The eastern subspecies of the Yellow Warbler, *Dendroica petechia aestiva*, reaches the southwestern limits of its breeding range in central Oklahoma, northern Arkansas, and central Alabama (AOU 1957). This range encompasses West Tennessee, where there are few historic summer records of Yellow Warblers. In recent years, there has been an increased number of nesting season reports from West Tennessee. This note summarizes available information on the status of the Yellow Warbler as a breeding bird in Tennessee, west of the Tennessee River. This species is a fairly early spring migrant, with birds passing through in mid- to late April, and nesting birds are on territory by early May. Fall migration begins early and reports from late July and early August may be birds in passage.

Based on historic records from western Kentucky, the Yellow Warbler may have been of fairly regular occurrence in northwest Tennessee in the late 1800's and early 1900's. According to Leon G. Pindar (1889, 1925), it was present in Fulton County, Kentucky in the late 1880's and in 1893, but its abundance apparently varied greatly from year to year, and it was absent during some summers. Gordon Wilson (1923) described the Yellow Warbler as a common summer resident in Calloway County, Kentucky. West Tennessee had no resident ornithologists during this same period, and little published information is available. Samuel Rhoads (1895) did not observe Yellow Warblers in West Tennessee during his 1895 statewide survey. It was not until the 1930's that ornithologists were regularly reporting from West Tennessee.

Ben B. Coffey, Jr. observed a Yellow Warbler on 15 July 1935, south of Union City, Obion County. During this same period, several ornithologists (e.g. Whittemore 1937) were working Reelfoot Lake. None reported Yellow Warblers during the nesting season. Single Yellow Warblers were reported by Walker (1952) from near the Tennessee River in Benton County on 11 July 1950, and by Coffey in Hardin County on 29 June 1959.

Since 1971, there have been reports of more than 1 Yellow Warbler, or of birds present during more than 1 year, from Benton, Lauderdale, and Shelby Counties, as well as the Reelfoot Lake area, and scattered reports of single birds elsewhere. Scattered reports include 1 bird reported in 1971 by Victor Julia on the Moscow Breeding Bird Survey route, Fayette County, and 1 bird observed by James M. and Betty Reid Campbell on the McNairy County Foray on 24 May 1981. Eight Yellow Warblers were reported on the Benton County Foray, 25-28 May 1973 (Alsop 1976), and others have been observed in recent years at Camden Landing (Waldron 1981). Yellow Warblers have also been regularly observed directly across the Tennessee River in Humphreys County.

In 1972, single Yellow Warblers were reported by Gina Manning on the Tiptonville and Paw Paw BBS routes. Both of these routes extend from Lake County into Obion County, and are in the general vicinity of Reelfoot Lake. Yellow Warblers were also recorded on the Tiptonville route by Kenneth H. Leggett in 1976 (3 birds), and on the Paw Paw route by Leggett in 1977 (3 birds), 1980 (2 birds), and 1981 (1 bird). The only record, to my knowledge, of Yellow Warblers from Reelfoot Lake itself is that of 2 singing birds observed by David Pitts and me on 18 June 1982. Both of these birds were in the vicinity of Nix Towhead, just north of Samburg, Obion County.

Other Yellow Warblers have been reported near or along the Mississippi River. Seven were reported on the Lauderdale County Foray, 24-25 May 1975 (Coffey 1976). Two of these were at the Fort Pillow State Park lake, where the Coffeys later observed 2 birds on 12 June 1975 (Coffey 1976). Yellow Warblers have occurred on Mud Island, in Memphis, Shelby County, since 1979, when a single bird was observed on 14 July by James G. Holt (Waldron 1979). In June 1980 and 1982, a maximum of 2 Yellow Warblers was observed at the same site, and on 31 May 1981, a nest was found by Jeff Wilson.

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Recent established populations of Yellow Warblers have been recorded near the Tennessee River in Benton County, near the Mississippi River in Shelby and Lauderdale Counties, and in the Reelfoot Lake area. These reports probably reflect an increasing population in West Tennessee, with birds apparently invading from the north. The Mississippi and Tennessee Rivers may be functioning as corridors for the southward expansion, or, alternatively, the birds may be found there solely because of the presence of moist, shrubby habitats. Because of population decreases in other parts of its range, the Yellow Warbler has for several years been included on the Blue List published in *American Birds* (Tate and Tate 1982), and the species should be closely watched in West Tennessee during future years.

I thank Martha G. Waldron and Ben B. Coffey, Jr., for providing unpublished records, and Danny Bystrak for providing Breeding Bird Survey results.

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NESTING SEASON RECORDS OF WILLOW FLYCATCHERS IN WEST TENNESSEE — The first Tennessee nests of Willow Flycatchers (*Empidonax traillii*) were discovered in upper East Tennessee in 1958 (Herndon, Migrant 29:37-42, 1958). Since then nests have been observed in other parts of the state including Knox County (Alsop, Migrant 42:25-26, 1971) and Davidson County (Alsop and Goodpasture, Migrant 43:81-84, 1972). No nests have been reported from West Tennessee.

The first nesting season records for West Tennessee were the 6 birds seen on the Benton County foray in 1973 (Alsop, Migrant 47:81-86, 1976). Apparently the only other nesting season records for West Tennessee are from Obion County. On 10 June 1976 I observed 4 singing Willow Flycatchers in Crockett Bottom. This area is a shallow water impounded area of approximately 300 ha at the junction of the North and Middle Forks of the Obion River in eastern Obion County. It is a part of the Gooch Wildlife Management Area. Prominent vegetation includes scattered bald cypress (*Taxodium distichum*), both living and dead, and buttonbush (Cephalanthus occidentalis). Since 1976, with the exception of 1977 when I did not visit the area in the nesting season, 1 to 3 Willow Flycatchers have been observed singing and patrolling territories each year, including 1982. Several hours have been spent observing the singing birds and trying to locate nests; however, the dense growths of buttonbush are almost impenetrable, and nonsinging birds are difficult to follow. No nests have been found. I spent many hours in Crockett Bottom during the nesting seasons of 1971 and 1972 without encountering the species; few visits were made during the years 1973-1975 when Willow Flycatchers apparently began using the area.

On 18 June 1982 Charles P. Nicholson and I heard 2 Willow Flycatchers at Reelfoot Lake. One bird was singing at the north end of Brewer's Bar and the other at the south end of Nation's Ditch. Both sites are in Obion County near the Lake County boundary.

In addition to the above records, I heard 2, or possibly 3, Willow Flycatchers at the Middle Fork of the Obion River near Gleason (Weakley County) on 21 May 1981; the site was not checked later to determine if the birds remained during the nesting season.

The above records indicate that Willow Flycatchers have been present in West Tennessee during the nesting season since at least 1973. While the late migration and nesting of the species may cause them to be overlooked, the distinctive songs are easily detected making the species, or at least the males, conspicuous to observers in the field at this time of year. I predict, as have others (e.g. Alsop, Migrant 49:89-90, 1978), that nests will be found in the near future.

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BOOK REVIEW

WEST VIRGINIA BIRDS — DISTRIBUTION AND ECOLOGY. By George A. Hall. 1983. Special Publication No. 7, Carnegie Museum of Natural History, Pittsburg. 190 pp, photos, maps, drawings. \$20.

The bulk of this book is accounts of the 304 species of birds recorded in West Virginia. Species accounts describe seasonal distribution, early and late dates, breeding and wintering populations, the location of specimens in museums, and subspecies collected in the state. Population information includes data from Breeding Bird Survey routes, Singing Male Censuses, Christmas Bird Counts, and fall banding at the Allegheny Front Migration Observatory. Information on behavior and nesting biology is not included. Maps, drawings by George Sutton, and photos by Hal Harrison illustrate several species.

Introductory chapters are devoted to an account of the history of West Virginia ornithology and descriptions of the physiography, climate, major avian habitats and avifaunal regions of the state. Hall recognizes 3 avifaunal regions. The Allegheny Mountains region is easily separated from the other 2, but the resemblance between the Western Hills and the Ridge and Valley regions is high. The avifaunal analysis is not as detailed as that in Mengel's "Birds of Kentucky," but is certainly adequate. Hall lists 14 species which reach the southern limit of their range in West Virginia. He mentions the perhaps accidental summer occurrences of the Magnolia Warbler and Savannah Sparrow in southwestern Virginia and northeastern Tennessee in the mid-1970's, but does not mention the regular occurrence of Alder Flycatchers on Roan Mountain since the late 1970's. Hall speculates why some of the boreal species do not nest further south in the more extensive boreal forests of North Carolina and Tennessee. The lack of wetland habitat in the southern mountains probably accounts for the absence of the Common Snipe, Nashville Warbler, and Northern Waterthrush, and an island effect may explain the absence of some other species. For some species, Hall admits there is no ready explanation. Black-and-white habitat photos accompany this section. A map showing the major river systems, which are frequently mentioned in the text, would have been a useful addition. Appending sections include a gazetteer (which should be required in such books), an extensive listing of cited literature through May 1982, and a list of literature consulted but not cited in the text.

"West Virginia Birds" is well produced, free of errors, and reasonably priced considering its $8\frac{1}{2} \times 11$ inch format. Studying it will help us understand our Tennessee avifauna. I recommend it.

CHARLES P. NICHOLSON



SUMMER: 1 JUNE - 31 JULY 1982

Temperatures across the state were near normal and rainfall was slightly below normal.

Several new nesting locations for several species were reported. Willow Flycatchers and Yellow Warblers were observed on territory at Reelfoot Lake, and new Willow Flycatcher locations were reported from the eastern regions. Tree Swallows were found nesting in the Memphis area and at Douglas Lake, and a new Bank Swallow colony site was observed near Memphis. Cliff Swallows were also reported from new locations. Documentation of new nesting locations such as these is one of the most important aspects of the Summer Season Report, and such occurrences should continue to be reported in the future.

Among other significant finds were a Golden-crowned Kinglet nest on Roan Mountain, and Pine Siskins with young in the Great Smoky Mountains National Park. As usual, several reports of lingering species were received. These are described in the following reports.

WESTERN COASTAL PLAIN REGION — *Grebe-Kestrel:* Pied-billed Grebe: 11 Jun (2) MEM (DAV). White Ibis: 9 Jul (9 imm), 20 Jul (2) Hillville, HNWR (WDR); 27 Jul (1 imm) MEM (JLS). Ruddy Duck: 20 Jul (pair) Robco Lake, MEM (BBC, LCC). Mississippi Kite: 27 May (2) MEM (JLS); 30 May (56) FPSP (DM, GM); 17 Jun (1) CB (TDP), 19 Jun (1) HNWR (JRW), 19 Jul (13) SFSP (BBC, LCC), 6-8 Aug (6-8) MEM (JLS). Sharp-shinned Hawk: 6 Aug (1) MEM (JLS). Cooper's Hawk: 5 Jun (1) 2 mi SSE of Big Sandy (BBC, LCC); 18 Jun (1) RL (CPN, TDP). Red-shouldered Hawk: 24 Jul (1) TN 100, Hatchie River (BBC, LCC); 24 Jul (1) S of Jack's Creek, Chester Co. (BBC, LCC). Marsh Hawk: 19 Jun (1) Trenton (DM, GM). American Kestrel: 16 Jun (2) Covington, (1) Pleasant Hill (BBC, LCC); 17 Jun (4) Hornbeak (BBC, LCC).

Sandpiper-Sparrow: White-rumped Sandpiper: 2-5 Jun (30) PP (WPP, WRP). Willow Flycatcher: 25 May - 17 Jun (2 singing) CB (TDP); 18 Jun (2 singing) RL (CPN, TDP). Tree Swallow: nesting on North Lake, MEM, 1 mi N of Mississippi state line, 18 May (6 pairs) using willow cavities near N shore of North Lake, seen over lake through 20 Jul; 5 Jun (2) Camden Landing (BBC, LCC). Bank Swallow: 28 Jun, 19 Jul (40) nesting, Mississippi River bank 15 mi N of colony on Wolf River (BBC, LCC); 20 Jul (200) North Lake (BBC, LCC). Cliff Swallow: 1 Jul (80 active nests) Mansard Island Boat Dock, Henry Co. (TDP). Carolina Wren: 23 Jun (22 heard in 10.5 mi circuit N of US 64, E of Hatchie River) (BBC, LCC). (This is an unusual number for such a circuit, numbers in other areas were much less). Swainson's Warbler: 22 Jun (1) Wolf River, N of Rossville, 23 Jun (1) Hatchie River and US 64, 24 Jun (3 at 3 different locations) TN 100, Hatchie River, 24 Jun (3 at 3 different locations) S Fork, Forked Deer River, Chester Co. (BBC, LCC). Yellow Warbler: 18 Jun (2) RL (CPN, TDP); 22 Jun (2) Mud Island, MEM (CHB, DAD, JRW, MGW). Grasshopper Sparrow: 22 Jun (1) 1 mi SW of Rossville (LCC). White-throated Sparrow: 2 Jul (1) MEM (BBC, LCC).

Locations: CB — Crockett Bottoms, Obion Co.; FPSP — Fort Pillow State Park; HNWR — Hatchie National Wildlife Refuge; MEM — Memphis; PP — Phillipy Pits, Lake Co.; RL — Reelfoot Lake, Obion Co.; SFSP — Shelby Forest State Park.

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EASTERN RIDGE AND VALLEY REGION — A close watch during the period revealed several interesting observations. Ring-necked Ducks and Lesser Scaup were present at the Kingston Steam Plant in July. Good numbers of late moving White-rumped and Semipalmated Sandpipers were still traveling north at Kingston in early June. Nonbreeding Ring-billed Gulls were on Douglas Lake in June and July.

Encouraging news is continuing to be reported regarding the small nesting population of Osprey on Watts Bar Lake. This year a high total of six active nests were reported. Also, it is of interest that five Barn Owl sites are being monitored in the region.

It certainly seems reasonable to expect more, but only three reports were received regarding the conspicuous Red-headed Woodpecker. Do we have more that are not being reported, or are they really an uncommon nesting species? Nesting activity by a pair of Tree Swallows was observed on Douglas Lake. This is one species that is rapidly expanding its range southward and all suitable nesting habitat should be closely watched in the future.

In many sections of the country the Loggerhead Shrike seems to be disappearing as a nesting species. From the reports received, we seem to have the usual small scattered nesting pairs. Keeping in mind what is happening elsewhere, it is requested that all nesting activity be reported so that we can closely monitor our resident population for change.

Loon-Coot: Common Loon: 5 Jun (3) NRL (JCH). Pied-billed Grebe: 4 Jun (1) PHL (MD). Great Blue Heron: first bird present on NRL 23 Jun, then up to 3 since (JCH); 1-2 per day DOL (JAK). Green Heron: regular w/max 17 Jul (30) DOL (JAK). Little Blue Heron: 10-14 Jul (1-3) SAB (KHD, LHD); 17, 24 Jul (7) DOL (JAK). Great Egret: one regular SAB 3 Jun - 10 Jul, then up to 4 regular (KHD, LHD); 21 Jun - 31 Jul (1) AUS (RLK); 17-31 Jul (11-12) DOL (JAK); 11 Jul (7) French Broad R. KNC (MLD, PDH, HKM) — a high count for this area; 20 Jul (2) Cherokee Dam (WKJ); 24 Jul (2) DOL (WKJ). Black-crowned Night Heron: 10 Jul (1 adult) SAB (KHD, LHD). Yellow-crowned Night Heron: 4, 8 Jul (nest w/at least 1 young) Lesser Alcoa Marsh (Gregg N. Lagerberg). Blue-winged Teal: 12, 26 Jul (1) KSP (KHD, LHD). Ring-necked Duck: 12-31 Jul (2 female) KSP (KHD, LHD). Lesser Scaup: 12-31 Jul (1-3 males, 2 females) KSP (KHD, LHD). Sharp-shinned Hawk: 16 Jun (1) South KNC (ARH). Cooper's Hawk: 13 Jun (1)

WHP (JAK). Bald Eagle: 19 Jun (1 imm) Cherokee Lake (MLD, LJF); 7 Jul (1 ad) NRL (JCH); 27 Jul (1 imm) Chickamauga Lake (Greg Reed); 30 Jul (1 imm) Tellico Lake (WKJ). Osprey: 5 Jun (1) French Broad River, KNC (MLD, Chris Hamilton); 6 active nests on Watts Bar Lake — the highest number ever (WKJ, T. Ed Beddow). American Coot: 2 Jun, 12 Jul (1) KSP (KHD, LHD).

Sandpiper-Owls: Spotted Sandpiper: 19 Jul (1) KSP (KHD, LHD); 22 Jul (2) KSP (SJS); 26 Jul AUS (RLK). Solitary Sandpiper: 11 Jul (2) DOL (JAK); 22 Jul (1) KSP (SJS). Greater Yellowlegs: 17 Jul (2) DOL (JAK). Lesser Yellowlegs: 2 Jun (2) KSP (KHD, LHD); 10 Jul (2) KSP (MWA); 19 Jul (15) KSP (KHD, LHD); 22 Jul (1) KSP (SJS); 24 Jul (4) DOL (JAK). Pectoral Sandpiper: 22 Jul (1) KSP (SJS); 26 Jul (10) KSP (KHD, LHD); 24 Jul (3) DOL (JAK). White-rumped Sandpiper: 2-7 Jun (35-132) KSP (KHD, LHD). Least Sandpiper: 12 Jul (1) KSP (KHD, LHD); 17 Jul (4) DOL (JAK); 22 Jul (5) KSP (SJS). Stilt Sandpiper: 2 Jun (1) KSP (KHD, LHD); 22 Jul (1) KSP (MWA, SJS); 31 Jul (19) KSP (MWA). Semipalmated Sandpiper: 2-7 Jun (10-32) KSP (KHD, LHD); 12-26 Jul (5-40) KSP (KLD, LHD); 24 Jul (2) DOL (JAK). Western Sandpiper: 18-26 Jul (1-4) KSP (KHD, LHD, MWA, ARH, RDH). Sanderling: 30 Jul (1) KSP (MWA). Ring-billed Gull: 20 Jun - 31 Jul (up to 7) DOL (JAK); 2 Jul (1) KSP (MWA). Caspian Tern: 19 Jul (1) KSP (KHD, LHD); 24-25 Jul (3) DOL (JAK); 30 Jul (1) KSP (MWA). Black Tern: 20 Jun (1) DOL (JAK); 28 Jul (2) NRL (JCH). Barn Owl: 2 active nest sites WHP (JAK); at least 3 active nest sites in WGC (RLK et al.); one road kill Sullivan County, 20 Jun (GDE).

Woodpecker-Veery: Red-headed Woodpecker: only 1 nest found near JNB (4 young fledged) RLK et al.; present at 2 locations KNX (fide J. B. Owen). Willow Flycatcher: 2 nests near JNB and 2 nests AUS (RLK et al.); 1-19 Jun (1) SAB (KHD, LHD). Horned Lark: 12 Jun (1 fledgling) UT Plant Science Farm, KNC (Dean Brown, MLD); 2-4 regular KSP (KHD, LHD, SJS); 20+ first part of season on farm WHP (JAK). Tree Swallow: on 6 and 13 Jun 2 adults were observed going in and out of a willow tree snag on DOL; on 20 and 27 Jun they were still present, but successful nesting could never be ascertained (JAK). Cliff Swallow: 5 nests in a barn near JNB (RLK); 9 nests at I-40 at Midtown exit, Roane County (MWA, ARH); 4 nests at Hwy 33 bridge over NRL, Union County (JBO) - first NRL nest record; during the season 20 were usual at the Walters Bridge (Hwy 25 over DOL) and 80-100 at Swann's Bridge over DOL (JAK). Purple Martin: the usual late season gathering areas along the Hiwassee River Area did not materialize this year (KHD, LHD). House Wren: on a quick 1¹/₄ hour tour of Newport's residential area on 6 Jul JAK counted 16 singing birds. Veery: several singing birds noted at Frozen Head State Park, Morgan County (James M. Campbell, Betty Ried Campbell, Lou Fuller).

Shrike-Sparrow: Loggerhead Shrike: 23 Jun (active nest) JNB (RLK); observed at 2 locations in KNC and Rutledge during Jun (MLD, PDH, CPN); 19 Jun (2 adults w/4 young) East Brainerd, Chattanooga (Robin A. Rudd); 8 Jul (adult w/2 young) SAB (KHD, LHD). Prothonotary Warbler: 8 Jun one along the Watauga River (RLK); at least 3 singing early Jun near I-40 bridge over Holston River, east of Knoxville (JAK). Northern Oriole: 6 Jun (1) Little Chuckey Creek, GNC (HS); 13 Jun (pair gathering nesting material) Johnson Bible College, KNC, not seen on later visits (MLD, PDH). Rose-breasted Grosbeak: 22 Jun (1 female) Eastern State WMA, KNC (Beth Lacy). Blue Grosbeak: at least 6-8 singing birds WGC (RLK *et al.*). Dickcissel: none noted in usual WHP location, however, 3 were found in

GNC (JAK). House Finch: 13 Jun (1) Greeneville (HS); several observations of young birds in the Elizabethton-Johnson City Area, but no actual nests found this year (Lee R. Herndon Chapter, TOS). Grasshopper Sparrow: at least 7 singers on farm WHP, 4 locations in Blount County and everywhere else they have previously been seen or heard (JAK); 2-3 new locations Elizabethton-Johnson City Area this year (RLK, GDE, Richard Lewis).

Locations: AUS — Austin Springs; DOL — Douglas Lake; GNC — Greene Co.; JNB — Jonesboro; KNC — Knox Co.; KNX — Knoxville; KSP — Kingston Steam Plant; NRL — Norris Lake; PHL — Patrick Henry Lake; SAB — Savannah Bay; WGC — Washington Co.; WHP — White Pine.

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EASTERN MOUNTAIN REGION — Temperatures during the period were near normal. Rainfall was below normal until the last week of July, when 75 percent of the total rain for the period fell.

Few reports were received during this period. Are each of us doing our part in contributing personal sightings for inclusion in our state journal, *The Migrant*?

Probably the best find during the period was the second confirmed state nesting record of the Golden-crowned Kinglet, at Roan Mountain. Three birds that have recently declined in this area, the Willow Flycatcher, Blue Grosbeak and Grasshopper Sparrow, seemed to be more prominent this season than during the past three or four. The reason is yet unknown, but bears further investigation next year. Purple Martin populations made a slight comeback this season but are not yet back to normal levels.

Egret-Owl: Great Egret: 4-6 Jul (1-3) WatL (GDE). SNOWY EGRET: 1 Jun (1) WatR (GOW). Yellow-crowned Night Heron: 1 nest successful, ELI, same location as previous years, seen through end of period (GDE *et al.*). Wood Duck: good nesting reports, several broods in area. Bufflehead: 1 bird spent entire summer on WibL (RLK *et al.*). Sharp-shinned Hawk: 16 Jun (1) RM (MD); 15 Jul (1) RM (RAP). Cooper's Hawk: 27 Jun (1) ELI (GDE). Spotted Sandpiper: 23 Jul (1 early fall) RC (RLK). Ring-billed Gull: unusual summer sighting 26 Jun (1) WatL (GDE). Great Horned Owl: 2-3 active nest sites near SHL (RL *et al.*).

Flycatcher-Vireo: Willow Flycatcher: 7 Jun (1 singing male) SHV, 15 Jun (2 singing males) RM village, 18 Jun (2 singing males) CF, 25 Jun (2 singing males) Unicoi (RLK *et al.*). Alder Flycatcher: 15 Jun (1) RM, first sighting, 18-26 Jun (2-4 singing males) RM above 5000' elevation (RLK, RL). Purple Martin: last seen 20 Jul (2) ELI (HLF). Common Raven: regular on RM, IMG, Indian Gap, GSMNP and near Doe River Gorge. Black-capped Chickadee: 12 Jun (2) Newfound Gap, GSMNP (ARH, RDH). Red-breasted Nuthatch: numerous all period on RM above 5000' elevation. GOLDEN-CROWNED KINGLET: 7 Jul (1 nest, 5 young fledged) RM (RLK) only second reported nest in state. Cedar Waxwing: good numbers all period. Warbling Vireo: 2 separate nesting birds near SHL (RL *et al.*).

Warbler-Sparrow: Swainson's Warbler: 31 Jul (1 singing) RMSP (DTC). Golden-winged Warbler: 2-3 regular RMSP (RLK *et al.*). Magnolia Warbler: 3

Jun (1 late) SV (GOW). Blackburnian Warbler: 10 Jul (1) Newfound Gap, GSMNP (KTOS). Prairie Warbler: 27 Jun (1 nest) WatL (GOW). Canada Warbler: 6 Jun (first spring sighting) IMG (HHD). Blue Grosbeak: 2-3 singing males near SHL (RL *et al.*). House Finch: young birds near SHL during period (RL *et al.*). PINE SISKIN: 12 June (6 apparently feeding young) Indian Gap, GSMNP (ARH, RDH). Grasshopper Sparrow: 5-6 singing males at new location near SHL (RL *et al.*). White-throated Sparrow: 18 Jul (1) ELI (HLF), thorough search next day and week could not relocate the bird, first ELI summer record.

Locations: CF — County Farm near Elizabethton; ELI — Elizabethton area; GSMNP — Great Smoky Mountains National Park; IMG — Iron Mountain Gap; RC — Roans Creek; RM — Roan Mountain; RMSP — Roan Mountain State Park; SHV — Shady Valley; SHL — South Holston Lake; SV — Siam Valley near Elizabethton; WatL — Watauga Lake; WatR — Watauga River; WibL — Wilbur Lake.

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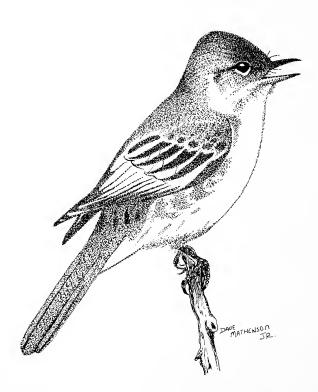
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