

# THE MIGRANT

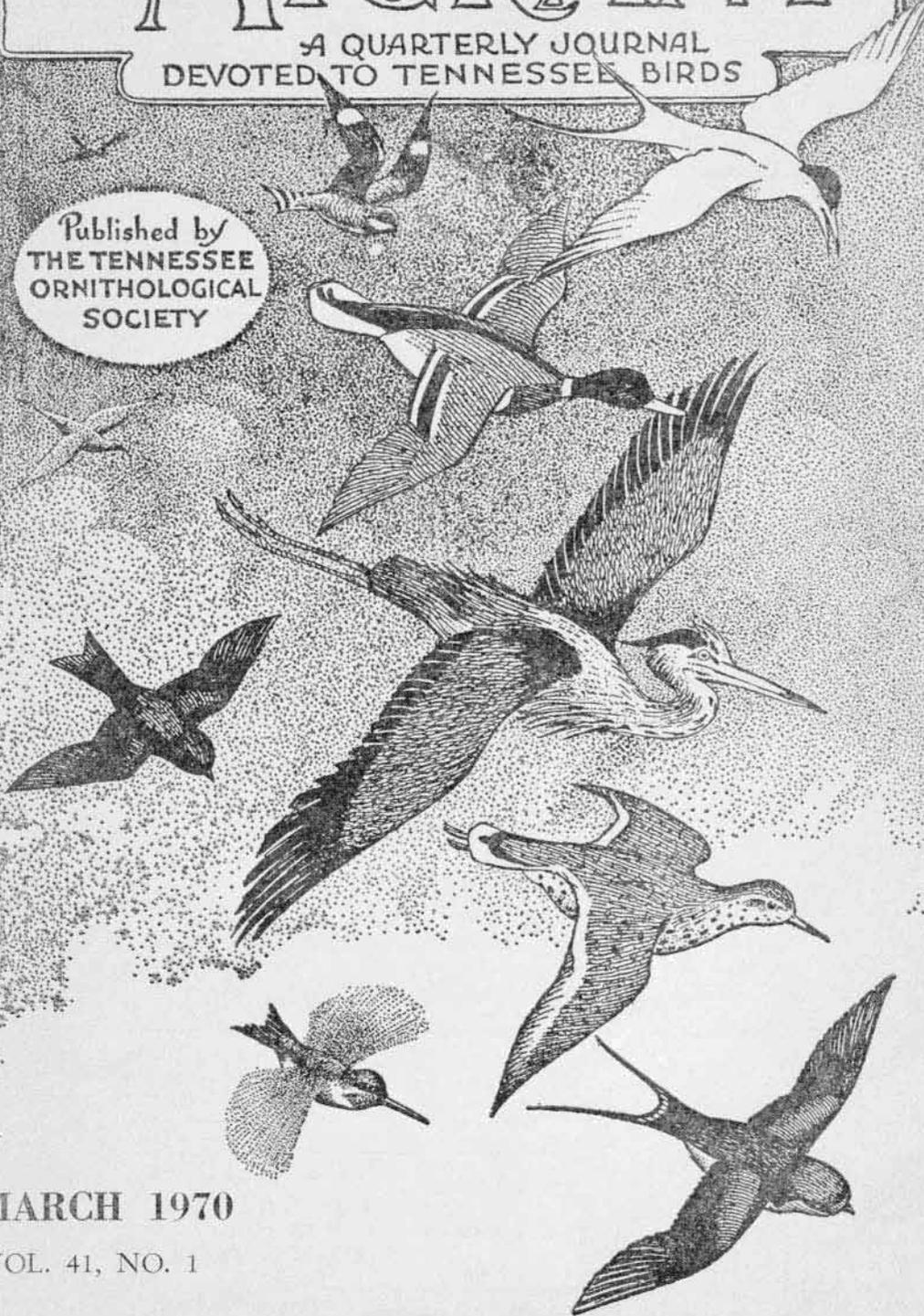
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## ADDENDUM: THE BIRDS OF KNOX COUNTY, TENNESSEE

BY FRED J. ALSOP, III AND GARY O. WALLACE

In the twelve years since the publication of "The Birds of Knox County", by Joseph C. Howell and Muriel B. Munroe, 22 additional species have been recorded in Knox County. "The Birds of Knox County, Tennessee" (Howell and Monroe, 1957) listed 231 species as reliably reported within the boundaries of that county. In the condensed version of that work (Howell and Monroe, 1958) three additional species were added, bringing the total to 234.

This paper is intended as a supplement. Herein we have strived for consistency with the original work. Listed are the species for which there are available reliable records for Knox County from June, 1956 to October, 1969. Sources of information utilized were issues of *The Migrant* and the personal records of members of the Knoxville Chapter of the Tennessee Ornithological Society.

The 22 species treated in this paper are arranged in the order in which they appear in the *Check-list of North American Birds* (1957) prepared by the American Ornithologists' Union.

The information on each record is given in the following order: date, number of individuals, location (referring to the nearest named landmark; see map, Fig. 1), and the observer.

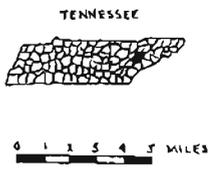
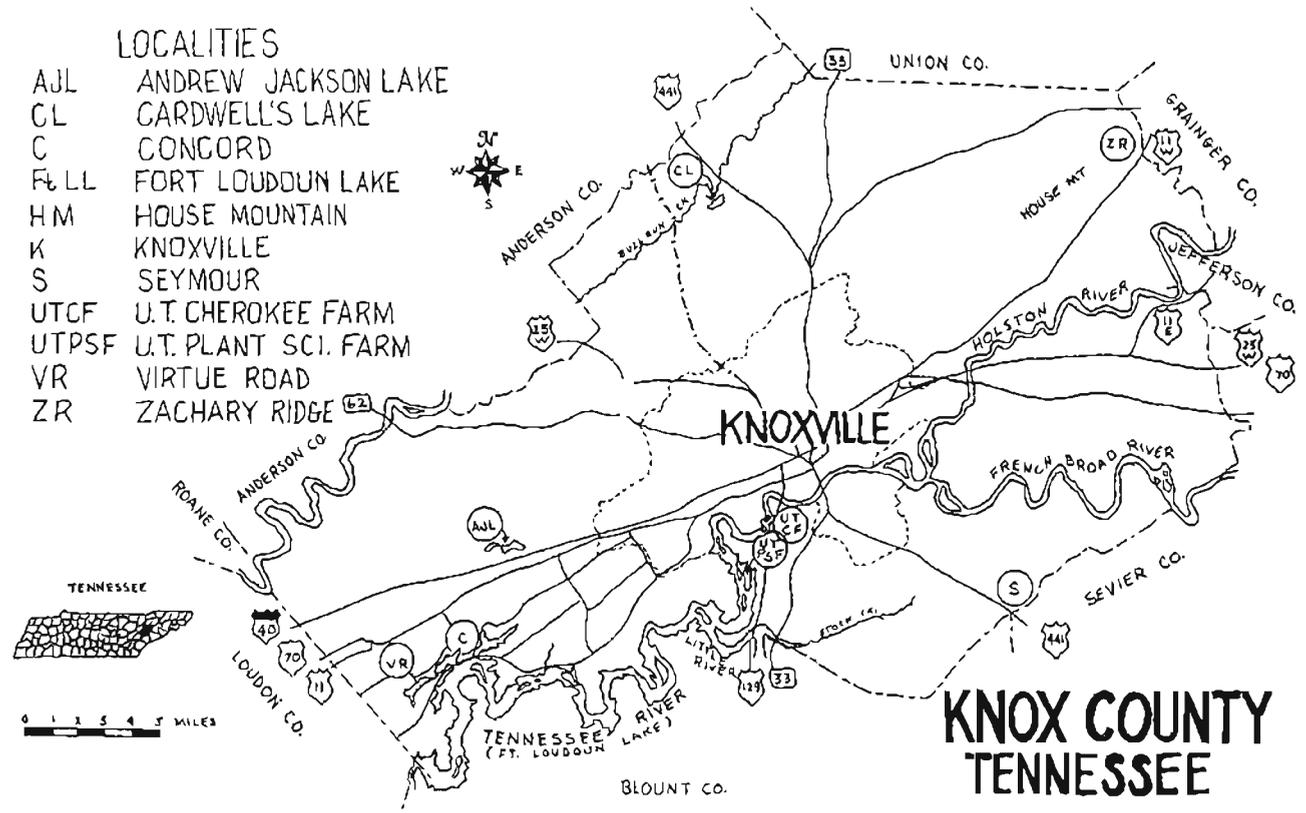
RED-THROATED LOON (*Gavia stellata*).—Known from two records: 6 Nov. 1959 (1) Ft. LL (JBO, RBH, *Migrant* 31:15); 30 Apr. 1967 (1) Ft. LL (TK, *Migrant* 38:36).

CATTLE EGRET (*Bubulcus ibis*).—One record: 5 May 1968 (11) UTCF (DM, GM, BM, JMC, JTT, TOS, *Migrant* 39:65) photographed FJA.

WHISTLING SWAN (*Olor columbianus*).—One record: 9 Dec. 1967 (4) Ft. LL (CM, TOS, *Migrant* 39:13).

COMMON SCOTER (*Oidemia nigra*).—One record: 14 May-14 June 1967 (1) male, CL (JMC, RME, ETS, TOS, *Migrant* 38:67).

- LOCALITIES
- AJL ANDREW JACKSON LAKE
  - CL CARDWELL'S LAKE
  - C CONCORD
  - F&LL FORT LOUDOUN LAKE
  - HM HOUSE MOUNTAIN
  - K KNOXVILLE
  - S SEYMOUR
  - UTCf U.T. CHEROKEE FARM
  - UTPSF U.T. PLANT SCI. FARM
  - VR VIRTUE ROAD
  - ZR ZACHARY RIDGE



# KNOX COUNTY TENNESSEE

FJA, III

ROUGH-LEGGED HAWK (*Buteo lagopus*)—One record: 20 Jan. 1968 (1) light phase, VR (JCH, FJA, JMC, RME, *Migrant* 39:16) and 21 Jan. 1968 (TOS).

GOLDEN EAGLE (*Aquila chrysaetos*)—One record: 29 Oct. 1961 (1) HM (JO, BG, *Migrant* 33:20).

PURPLE GALLINULE (*Porphyryla martinica*)—Known from three records: 12 Oct. 1958 (1) K (ME, *Migrant* 30:9); 15 Apr.-5 May 1962 (1) K (GHB and JBO, *Migrant* 33:34); 1-8 May 1962 (1) C (JBO, *Migrant* 33:34).

AMERICAN GOLDEN PLOVER (*Pluvialis dominica*)—Known from two records: 15 Oct. 1966 (1) UTPSF (FJA and JMC), 16 Oct. (JTT), present through 26 Nov. 1966 (FJA and TOS, *Migrant* 38:1-3); 23 Mar. 1968 (125) and 24 Mar. 1968 (30) UTPSF (PP, IW, BW, TOS, *Migrant* 39:45).

WILLET (*Catoptrophorus semipalmatus*)—Known from three records: 7 Sept. 1963 (1) Sterchi's Bait Farm on Dry Gap Pike and Jim Sterchi Road (MS); 17 April 1967 (1) pond near jct. Cedar Bluff Rd. and I-40 (PP); 14 May 1967 (1) UTPSF (FJA and JCH).

WHITE-RUMPED SANDPIPER (*Erolia fuscicollis*)—One record: 17 Oct. 1958 (1) AJL (RBH, *Migrant* 30:9).

LONG-BILLED DOWITCHER (*Limnodromus scolopaceus*)—Known from two records: 2 Oct.-8 Oct. 1966 (1) UTPSF (JMC, FJA, WFS, TOS, *Migrant* 38:1-3), photographed (FJA); 14 May 1967 (20) P (JMC, RME, and ETS).

BUFF-BREASTED SANDPIPER (*Tryngites subruficollis*)—One record: 12 Sept.-22 Sept. 1969 (3-6) UTPSF (JB, GB) also (WFS, FJA, JTT, JMC, JBO, TOS) photographed (FJA).

RED-COCKADED WOODPECKER (*Dendrocopos borealis*)—One record: 1 Jan. 1968 (1) S (BC, *Migrant* 39:22).

TRAILL'S FLYCATCHER (*Empidonax traillii*)—10 May 1959 (1) UTCF (KD, RBH, *Migrant* 31:39); 16 May 1959 (1) UTCF (DH, PP, JE, *Migrant* 31:39); night of 20-21 Sept. 1963 (1) tower kill, WBIR-TV, Zachary Ridge (Mr. and Mrs. JCH); 16 May 1969 (1) UTCF (FJA)

VERMILION FLYCATCHER (*Pyrocephalus rubinus*)—One record: 21-22 Oct. 1964, one male in first winter plumage with a second bird which could have been a female, K (JBO, TW, *Migrant* 36:14-15).

SWAINSON'S WARBLER (*Limnithlypsis swainsonii*)—Known from four records, all killed at WBIR-TV tower, Zachary Ridge: night of 20-21 Sept. 1963 (3) (Mr. and Mrs. JCH); night of 12-13 Sept. 1964 (1) (JCH and JMC); night of 2-3 Oct 1964 (2) (JCH, JMC, RME); night of 4-5 Oct 1964 (1) (JCH, JMC, RME).

WESTERN MEADOWLARK (*Sturnella neglecta*)—One record: 19 April 1959 (1) C (DK, RBH) present through 23 May 1959 (RBH, *Migrant* 30: 24, 30-31), also observed by (JCH, PP, BK, AK, CF, RB).

COMMON REDPOLL (*Acanthis flammea*)—29 Dec. 1968 (1) Karns (TM); one bird seen at the same location 10 Jan. 1969 (JBO).

WHITE-WINGED CROSSBILL (*Loxia leucoptera*)—31 Jan. 1964, one female and one male, 15 Hedgewood Dr., K (NC); 1 Feb. 1964, two females and one male, Lynnhurst Cemetery, K (NC, JMC); the crossbills remained in the cemetery through 22 March 1964, numbers observed varied from 1-20 (av. 7), (JMC, *Migrant* 35: 25-30).

HENSLow'S SPARROW (*Passerberbulus henslowii*)—Known only from one record: night of 28-29 Sept. 1963 (1) a bird killed during a night migration when it struck WBIR (Channel 10) TV Tower, Zachary Ridge (JCH).

OREGON JUNCO (*Junco oreganus*)—21 Jan. 1963 (1) 15 Hedgewood Dr., K (NC) also observed by (JMC, MCF); 27 Jan. 1963 (1) K (ME, *Migrant* 34:16); all of Jan. 1965 (2) K (PP); 17 Jan. 1965 (1) K (JMC); and 3 Feb. 1965 (1) K (ME, *Migrant* 36:10).

TREE SPARROW (*Spizella arborea*)—17-26 March 1960 (1) K (BL, JTT, *Migrant* 31:15); 2-3 Feb. 1965 (1) K (MS, *Migrant* 36:10); 25 Jan. 1968 (10) HM (PP, *Migrant* 39:22); 10 Feb. 1968 (4) UTSPF (CM), the 4 Tree Sparrows were present through 9 March 1968 (FJA).

*Observers:* FJA—Fred J. Alsop, III, GHB—G. H. Baker, GB—Gilbert Banner, J. B.—Joshua Banner, RB—Ralph Bullard, JMC—James M. Campbell, NC—Nancy Campbell, BC—Brockway Crouch, KD—Kenneth Dubke, RME—Ray M. (Danny) Ellis, JE—John Elson, ME—Mary Enloe, MCF—Mr. and Mrs. Merritt C. Farrar, CF—Mr. and Mrs. Carl Frister, BG—Bill Gallagher, RBH—Robert B. Hamilton, DH—David Highbaugh, JCH—Joseph C. Howell, AK—Audrey Kaiman, BK—Berney Kaiman, TK—Tony Koella, BL—Beth Lacey, BM—Beulah McGhee, DM—Dennis McGhee, GM—George McGhee, TM—Terry McGown, CM—Chris McMillan, JO—John Ogden, JBO—J. B. Owen, PP—Paul Pardue, WFS—William F. Searl, III, ETS—Ed. T. Smith, MS—Maxie Swindell, JTT—James T. Tanner, TOS—Tennessee Ornithological Society (Knoxville Chapter), TW—Mr. and Mrs. Tom Walton, BW—Bill Williams, IW—Irene Williams.

#### SUMMARY

This list adds 22 species of birds to those already listed for Knox County. The total number of species recorded from within the boundaries of that county now stands at 256.

#### ACKNOWLEDGMENTS

We wish to thank Dr. J. C. Howell for his suggestions and critical reading of this manuscript.

#### LITERATURE CITED

- American Ornithologists' Union. 1957. Check-List of North American Birds. 5th ed. Amer. Ornith. Union, Baltimore, Md.
- Howell, J. C. and Muriel B. Monroe. 1957. The birds of Knox County, Tennessee. *J. Tenn. Acad. Sci.* 32 (4): 247-322.
- . 1958. The birds of Knox County, Tennessee. *The Migrant*, 29 (2): 17-27.

Department of Zoology and Entomology, The University of Tennessee, Knoxville 37916.

## THE 1969 CHRISTMAS SEASON BIRD COUNT

The fortieth annual Christmas Season Bird Count listed a total of 126 species. This represents the second highest species count ever recorded for the Christmas Count and is exceeded by the previous high count of 130 species recorded in 1965. The number of individual counts also continues to increase, with seventeen counts being submitted this year.

Perhaps the highlight of this year's counts was the unusual sightings reported from various locations, among them being: Rough-legged Hawk and Lesser Yellowlegs at Memphis; Virginia Rail, LeConte's Sparrow, Tree Sparrow, and Lapland Longspur at Reelfoot Lake; Least Sandpiper and Brewer's Blackbird at Columbia; Oldsquaw, Goshawk, and Tree Sparrow at Nashville; Least Sandpiper, Bonaparte's Gull, and Snow Bunting at Hickory-Priest; White-winged Scoter at Chattanooga; Least Sandpiper and Dunlin at Hiwassee; Semipalmated Plover, Lesser Yellowlegs, and Summer Tanager at Knoxville; White-winged Crossbill at Great Smoky Mountains National Park; and Swainson's Thrush at Elizabethton.

With an increase in both the numbers of counts taken and the number of individual participants in the field, compilers are urged to renew their efforts at attaining undisputable accuracy in reporting counts for publication.

### INFORMATION ON THE COUNT

MEMPHIS—35° 09' N, 89° 56' W (All points within a 15-mile diameter circle, center Highland Heights; roughly 1953 areas; wooded bottomlands 22%, deciduous woods, city parks and cemeteries 30%, pastures, bare fields 15%, suburban roadsides 30%, river edge 3%). 21 December; 07:00 to 16:30, rain, sleet, snow; temp. 39° to 34° wind NW, 10-17 m.p.h. Twenty-three observers in eight parties. Total party-hours 69 (48 on foot, 21 by car); total party-miles 157 (47 on foot, 110 by car).

Rough-legged Hawk (BC, ER, 5 minutes, close), Lesser Yellowlegs (LJ, BG, close), Vesper Sparrow (HV, 2nd Memphis count). Seen in count period but not on count day: Dickcissel (GH), Pine Siskin (WLW), Oregon Junco (Helen D.)

Mr. and Mrs. Ben B. Coffey, Jr. (compilers), Dr. Julian Darlington, Mary Davant, Mr. and Mrs. Henry Dinkelspiel, Jack Embury, Earl J. Fuller, Billy C. Grimm, George Hervey, Robert Holt, Lee R. Johnson, Edward M. King, Nelle Moore, John Morrow, George Payne, Jr., Ella Ragland, Ernest Restivo, Dr. and Mrs. Arlo I. Smith, Dr. Howard Vogel, Dr. Wendell L. Whittemore, Bobby Whittemore.

REELFOOT LAKE—36° 25' N, 89° 23' W (All points within a 15-mile diameter circle, center in Reelfoot Lake on west side of Starve Pond, extending northward to north end of Lake 9 in Ky., eastward to bridge on South Reelfoot Creek near Protemus and to Hornbeak, southward to north end of Lake Isom Refuge, westward to Miss. River; deciduous woods 30%, fields and pastures, 50%, lakes and swamps 20%). 26 December; 07:00 to 16:00, clear; temp. 33° to 46°; wind SW, 0-5 m.p.h. Eight observers in four parties. Total

party-hours 35 (16 on foot, 15 by car, 4 by boat); total party-miles 186 (16 on foot, 152 by car, 18 by boat).

Virginia Rail (JD). Seen in area during count period but not on count day: Turkey Vulture.

Ben Coffey, Lula Coffey, John DeLime, Janice Leggett, Kenneth Leggett (compiler), Clell Peterson, Arlo Smith, Noreen Smith.

HENDERSON—All points within a 15-mile diameter circle, east extremity, city of Henderson running west to east shore of Lake LaJoie in Chickasaw Park. Center just east of main entrance to park. Area includes Highway 100, Chickasaw Park, Hughes Road south to Montezuma, lower Montezuma Road, Old Jacks Creek Road to Talley Store, surrounding farm roads and barnyards. 31 December; 06:00 to 17:15, temp. 33°; wind 1-5 m.p.h., completely overcast after three days and nights of constant rain. One observer. Total party-hours 11  $\frac{1}{4}$  (4 on foot, 7 $\frac{1}{4}$  by car); total party-miles 65 (4 on foot, 61 by car).

Seen in area during count period but not on count day: Common Crow, Cedar Waxwing.

Mrs. Eddie M. Carpenter (compiler).

SAVANNAH—All points within a 15-mile diameter circle, center six miles SE of Savannah courthouse. 31 December; 07:00 to 17:00. Temp. 30° to 36°; wind 0-10 m.p.h., cloudy and dark. Four observers in two parties. Total party-hours 18; total party-miles 110.

Both Bald Eagles were adults, with white heads, necks, and tails.

David (compiler), Mike, Paul, and Roger Patterson.

COLUMBIA—35° 36' N, 87° 10' W (All points within a 15-mile diameter circle, center, 1 mile west of Zion Presbyterian Church to include Columbia, Mt. Pleasant, Arrow Lake, Hampshire, Williamsport, Duck River; deciduous woods 20%, fields and pastures 50%, swamps, lakes, and river banks 15%, farm yards 5%, towns 10%). 27 December; 07:00 to 17:30; partly cloudy; temperature 22° to 36°; wind NE 0-8 m.p.h.; patches of snow on ground. Eight observers in four parties. Total party-hours 19 $\frac{1}{2}$  (6 by car, 10 on foot, 3 by canoe,  $\frac{1}{2}$  by plane); total party-miles 259 (180 by car, 10 on foot, 9 by canoe, 60 by plane).

Large blackbird and Robin roost was present in area. Seen in area during count period but not on count day: American Woodcock, Winter Wren, Golden-crowned Kinglet.

William Dale, William Fuqua, Mary Lucy Fuqua, Daniel Gray, Jr., Gaither Gray, Cleo Mayfield, George Mayfield, Jr. (compiler), and Evelyn Ridley.

NASHVILLE—All points within a 15-mile diameter circle, center on the Harpeth River bridge on Tennessee Highway 100. Radnor Lake was included. Deciduous wooded hills, 40%; fields and pastures, 25%; river bottom fields, 20%; roadsides and suburban yards, 15%. 27 December; 06:30 to 17:00 plus one party from midnight to 01:30 on an unsuccessful hunt for owls. Temp.

## THE 1969 CHRISTMAS SEASON BIRD COUNTS

	Memphis	Reelfoot	Henderson	Savannah	Columbia	Nashville	Hickory P.	Lebanon	Chattanooga	Hickory	Norris	Knoxville	GSMNP	Greenville	Elizabethton	Kingsport	Aristotle
Common Loon	--	--	--	7	--	--	--	--	1	--	--	--	--	--	--	1	--
Horned Grebe	--	--	--	7	--	--	11	--	10	--	--	--	--	--	1	6	3
Pied-billed Grebe	?	1	--	16	1	4	34	--	5	1	--	--	--	2	4	6	5
Great Blue Heron	--	5	--	--	8	--	9	--	1	44	6	2	--	1	--	5	9
Canada Goose	--	12500	--	35	--	31	1	20	5	4100	--	--	--	6	1	--	--
Snow Goose	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
Blue Goose	--	2	--	--	--	--	1	--	--	1	--	--	1	--	--	--	--
Mallard	31	55000	1	--	397	29	24	200	47	2100	--	21	--	2	8	155	51
Black Duck	--	550	--	--	211	1	29	--	60	1200	--	16	--	--	--	400	21
Gadwall	--	3300	--	--	8	3	4	--	15	27	--	140	--	--	--	1	--
Pintail	--	175	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--
Gr.-winged Teal	--	--	--	--	16	--	--	--	4	34	--	--	--	--	--	--	--
Amer. Woodcock	--	1200	--	--	14	48	--	--	--	41	--	1	--	--	--	1	--
Shoveler	--	250	--	--	2	--	--	--	--	--	--	--	--	--	1	--	--
Wood Duck	--	650	--	2	6	--	--	--	--	--	--	--	--	--	--	--	--
Redhead	--	20	--	--	2	4	--	--	--	--	--	--	--	--	2	--	--
R.-necked Duck	--	4800	--	--	86	67	--	--	2	--	--	5	--	--	80	68	--
Canvasback	--	161	--	--	--	19	14	--	--	--	--	--	--	--	--	--	1
Greater Scaup	--	--	--	--	--	--	--	--	123	--	--	--	--	--	--	--	--
Lesser Scaup	--	350	--	--	4	64	16	--	--	1	--	--	--	--	6	100	26
Common Goldeneye	--	20	--	10	3	27	13	--	12	--	--	--	--	--	--	4	--
Wh.-winged Scoter	--	--	--	--	--	--	--	--	6	--	--	--	--	--	--	--	--
Bufflehead	--	4	--	14	--	7	11	--	--	18	--	--	--	--	28	9	--
Oldsquaw	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ruddy Duck	--	225	--	--	--	5	--	--	--	--	--	--	--	--	--	--	--
Hooded Merganser	--	20	--	--	2	--	20	--	1	14	--	--	--	--	--	1	2
Common Merganser	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1
Red-br. Merganser	--	--	--	--	--	--	--	--	1	2	--	--	--	--	--	--	--
Turkey Vulture	--	--	10	--	--	1	--	--	--	--	--	--	--	--	--	--	104
Black Vulture	--	3	12	--	82	4	--	--	--	2	--	--	--	2	--	--	17
Goshawk	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
Sharp-shinned Hawk	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
Cooper's Hawk	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	3
Red-tailed Hawk	10	23	1	2	9	18	--	2	6	2	1	4	2	--	--	1	--
Red-sld. Hawk	--	6	1	2	1	--	1	--	--	1	--	--	--	--	--	--	--
Rough-legged Hawk	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Golden Eagle	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bald Eagle	--	45	--	2	--	--	--	--	--	1	--	--	--	--	--	--	1
Marsh Hawk	?	14	--	3	4	3	--	2	2	2	--	--	1	--	--	--	--
Sparrow Hawk	7	12	4	--	7	25	10	1	4	1	--	4	5	3	5	1	5

	Mewp- his	Reel- foot	Hender- son	Savan- nah	Colum- bia	Nash- ville	Hick- ory P.	Leba- non	Chatt- anooga	Hiwas- see	Norris	Knox- ville	GSMNP	Greene- ville	Eliza- bethton	Kings- port	Bris- tol
Ruffed Grouse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--
Bobwhite	44	4	--	56	52	100	--	17	6	45	--	38	5	44	1	14	12
Turkey	--	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Virginia Rail	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
American Coot	--	2600	--	250	650	225	196	--	87	1	--	4	--	--	1	10	--
Semipalmated Plover	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--
Killdeer	52	23	1	3	8	45	22	--	15	31	6	79	15	15	13	2	25
Common Snipe	2	14	--	2	38	3	1	--	2	5	--	32	1	--	1	--	2
Lesser Yellowlegs	1	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--
Least Sandpiper	--	--	--	--	8	--	1	--	--	--	--	--	--	--	--	--	--
Dunlin	--	--	--	--	--	--	--	--	--	56	--	--	--	--	--	--	--
Herring Gull	--	4	--	2	--	--	6	--	8	--	--	--	--	--	--	10	--
Ring-billed Gull	3	52	--	52	--	--	199	--	26	55	--	36	--	--	--	3	1
Somparis's Gull	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--
Mourning Dove	201	132	5	120	486	139	52	186	194	102	67	147	191	165	10	75	263
Barn Owl	--	--	--	--	--	--	--	2	1	--	--	--	--	--	1	--	--
Screach Owl	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	1	1
Great Horned Owl	--	1	--	--	5	--	--	--	--	--	1	--	--	--	--	1	2
Barred Owl	--	2	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--
Belted Kingfisher	--	1	1	7	9	13	9	1	2	5	4	8	8	3	3	5	4
Vl.-shafted Flicker	106	71	10	31	17	56	11	10	15	5	12	24	2	3	5	8	1
Pileated Woodpecker	6	11	2	6	15	33	1	--	2	2	7	7	9	2	5	5	4
Rd.-bellied Woodpecker	61	72	7	23	31	85	8	7	10	2	11	21	2	10	1	3	6
Rd.-headed Woodpecker	4	9	2	--	--	7	1	1	6	1	--	2	--	--	--	2	1
Vl.-bellied Sapsucker	23	13	3	6	9	32	5	4	4	5	10	18	12	3	1	6	--
Hairy Woodpecker	4	11	1	8	8	12	--	3	8	1	7	2	13	--	--	1	2
Downy Woodpecker	26	37	5	11	30	77	12	9	21	4	22	28	12	15	12	12	20
Eastern Phoebe	--	--	--	--	1	2	--	--	--	--	3	16	10	--	--	--	2
Horned Lark	16	886	--	3	29	2	41	--	22	--	3	16	20	25	2	--	--
Blue Jay	348	156	26	140	9	160	51	59	51	20	35	219	68	64	37	40	63
Common Raven	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--	--	--
Cremson Crow	36	1100	--	43	77	418	64	97	34	170	214	536	194	60	101	318	457
Fish Crow	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bl.-cap. Chickadee	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--
Carolina Chickadee	97	102	10	65	69	268	29	45	42	8	83	191	138	46	25	60	65
Tufted Titmouse	29	32	9	36	77	157	19	37	41	1	29	96	32	41	23	68	38
Wh.-br. Nuthatch	1	4	--	5	1	10	2	--	10	--	5	3	3	4	5	6	6
Rd.-br. Nuthatch	3	--	5	3	1	3	1	--	13	3	3	21	24	3	4	6	5
Brown Creeper	1	4	--	3	1	4	--	--	4	--	1	12	3	1	--	3	1
Winter Wren	6	13	--	1	--	4	--	--	2	2	2	2	5	--	1	1	1
Bewick's Wren	--	2	--	2	--	2	3	6	--	--	--	--	--	2	--	--	--
Carolina wren	59	60	3	20	21	45	9	1	21	5	20	92	25	10	14	10	15
Mockingbird	147	22	9	8	53	195	47	52	41	6	66	142	42	25	1	1	--
Brown Thrasher	23	2	1	3	3	4	3	--	1	--	1	32	--	1	--	1	--
Robin	1705	53	3	654	153100	3100	26	513	25	510	43	27	98	2	6	54	3

	Near-	Reel-	Hender-	Savan-	Colum-	Nash-	Hick-	Leba-	Chatta-	Hiwas-	Norris	Knok-	GSMMP	Greene-	Eliza-	Kings-	Bria-
	his	foot	son	an	bia	ville	ory P.	non	nooga	see	ville	ville	ville	ville	bethton	port	tol
Hermit Thrush	15	--	--	6	2	7	--	--	1	--	--	3	11	--	--	--	--
Swainson's Thrush	3	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
Eastern Bluebird	16	1	1	8	4	136	14	3	8	6	48	1	1	3	10	1	10
Gold-cr. Kinglet	11	27	4	5	--	17	4	1	5	2	1	12	19	2	7	5	12
Ruby-cr. Kinglet	12	31	1	1	4	12	--	--	--	2	9	4	8	--	--	2	3
Water Pipit	--	1	--	--	7	1	--	--	5	6	--	12	3	--	--	--	--
Cedar Waxwing	98	7	4	522	155	160	57	45	30	450	390	19	49	10	--	32	117
Log.-hd. Shrike	4	15	4	4	4	33	9	4	2	5	9	9	4	1	2	7	7
Starling	6804	4800	102	490	506300	8479	5367	1147	1112	52800	1530	2159	509	193	606	73	1316
Myrtle Warbler	73	18	--	1	4	108	2	--	5	38	147	39	9	7	7	12	--
Pine Warbler	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--
House Sparrow	727	360	23	50	240	56	106	174	62	16	14	135	79	115	69	60	88
Eastern Meadowlark	191	41	3	142	109	367	73	66	55	25	76	186	120	193	11	11	227
Rd.-wdg. Blackbird	2480	3730	97	10000	300426	535	--	--	275	3	--	17	8	--	--	--	--
Rusty Blackbird	20	7	250	--	200040	--	--	1	195	--	--	42	--	--	8	--	--
Brewer's Blackbird	--	--	--	6	--	--	--	--	--	--	--	--	--	--	--	--	--
Common Grackle	2707	2400	150	1500	410600	659	15	164	80	--	1	3516	200	2032	22	20	1
Br.-hd. Cowbird	106	2800	--	1	100750	60	--	--	6	--	9	21	--	--	--	--	--
Summer Tanager	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
Cardinal	627	235	31	96	97	498	156	171	98	35	142	315	249	93	56	78	101
Evening Grosbeak	--	--	--	12	--	--	--	--	--	4	4	--	125	35	52	--	10
Purple Finch	81	1	22	77	3	167	28	167	84	65	106	74	57	34	3	21	7
Fine Siskin	--	--	--	178	--	52	--	--	103	36	36	619	740	13	43	--	4
Amer. Goldfinch	223	67	49	167	88	471	36	8	100	50	73	181	195	36	57	36	164
Red Crossbill	--	--	--	--	--	--	--	--	--	--	--	--	275	--	12	10	--
Wh.-winged Crossbill	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--
Ru.-sided Towhee	64	10	15	52	40	95	45	17	65	15	35	191	60	50	7	26	17
Savannah Sparrow	17	3	--	25	4	1	--	--	2	--	--	5	35	--	--	--	1
LeConte's Sparrow	2	1	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--
Vesper Sparrow	2	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--
Sl.-colored Junco	768	241	137	468	72	701	115	44	270	45	207	129	1060	27	130	138	84
Tree Sparrow	--	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chipping Sparrow	--	--	--	--	--	1	--	--	1	--	--	--	--	--	1	--	--
Field Sparrow	86	105	1	48	105	234	120	8	85	118	109	291	131	46	37	24	37
Wh.-cr. Sparrow	15	--	39	--	30	75	177	36	3	--	--	2	--	103	5	4	10
Wh.-throated Sparrow	1042	223	78	122	104	218	23	12	175	26	173	547	358	49	38	92	32
Fox Sparrow	56	12	7	5	2	16	4	--	3	--	--	2	2	2	3	1	--
Swamp Sparrow	101	74	2	74	28	7	7	--	20	16	--	36	8	--	1	--	--
Song Sparrow	274	124	9	117	44	192	68	1	36	22	86	342	321	31	54	25	50
Lapland Longspur	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Snow Bunting	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--
TOTAL INDIVIDUALS	19667	90220	1340	15869	1674968	18921	7647	3332	3910	61641	3876	10916	5613	3635	1679	2183	3599
TOTAL SPECIES	60	91	48	65	74	77	63	40	77	69	44	68	58	49	60	68	61

23° to 38°; wind 0-5 mph from SW. Clear until noon, then some clouds. Thirty-eight observers in fourteen parties. Total party-hours 113 (78 by car, 35 on foot); total party-miles 313 (275 by car, 38 by foot).

Goshawk by Albert Ganier and party (Ben Grose, John and Martha Herbert). (*The Migrant* 40: 87). Oldsquaws by Erline Elmore on Radnor Lake. Confirmed later in the afternoon by both Harry Monk and Henry Parmer. Tree Sparrow was by Roger Harshaw. Two additional birds were found a few days later. The Chipping Sparrows were by Goodpasture, Mike Bierly, Harshaw, and Tarbel.

B. H. Abernathy, Francis Abernathy, Clyde and Vivian Anderson, Bob Ake, Buck Bell, Sue Bell, Mike Bierly, Mary Rose Bradford, Kenneth Bunting, Annella Creech, Milbrey Dugger, Erline Elmore, Charles Farrell, Clara Fentress, Albert F. Ganier, Katherine A. Goodpasture, Ben Grose, Roger Harshaw, John and Martha Herbert, Mrs. A. B. Herron, Louise Jackson, Carol Knauth, Margaret Mann, Harry C. Monk, Anne Nickols, Henry E. Parmer (Compiler), Mr. and Mrs. Oscar Patrick, Mr. and Mrs. Bob Sharp, Mrs. Walter Sharp, Anne Tarbell, Laurence O. Trabue, Joey Vaudrey, Mr. and Mrs. George Woodring.

HICKORY-PRIEST (Formerly Old Hickory Lake)—All points within a 15-mile diameter circle, center mouth Stones River at the Cumberland, northward to dam and lower 8 miles of Old Hickory Reservoir, southward to lower 4 miles J. Percy Priest Lake, westward to Bush Lake, eastward to 1 mile west of Mount Juliet; fields and pastures 40%, town and suburbs 30%, deciduous woods 20%, lakes and rivers 10%. 21 December: 07:00 to 16:45; temp. 38° to 42°; wind S 6-12 m.p.h.; overcast, rain all day. Seven observers in three parties plus three at feeders\*. Total party-hours 19 (8 on foot, 11 by car); total party-miles 159 (6 on foot, 153 by car).

The Blue Goose (Riggins-Tarbell) was an immature and had been present for a month. The Least Sandpiper (Riggins-Tarbell) had been present occasionally all winter. The Brown Thrashers were at feeders. Five thousand of the 5567 Starlings reported were seen in the town roost. Of the 177 White-crowned Sparrows seen, 173 were in one flock at the back of Bush Lake. The Snow Buntings (Monk-Parmer) were first sighted on 29 November and have been photographed. They have been seen by over twenty observers on fifteen different days. Seen in area count period, but not on count day: Red-tailed Hawk, Marsh Hawk, Ruby-crowned Kinglet.

Michael Bierly (compiler), Marie Drumright\*, Roger Harshaw, Carol Knauth\*, Margaret Mann\*, Harry Monk, Henry Parmer, Heather Riggins, John Riggins, Ann Tarbell.

LEBANON—All points within a 15-mile diameter circle center Wilson County. 26 December; weather good; temp. 35°.

Mrs. Alice B. Gilreath (compiler).

CHATTANOOGA—All points within a 15-mile diameter circle, center on the National Cemetery; fields and pastures 35%, woodlands 20%, ponds and lakes 15%, creeks and rivers 15%, roadsides 10%, and residential areas 5%. 28 December: 05:00 to 19:00. Temp. 33° to 47°; wind 0-6 m.p.h. from the SW, some very light rain in the early a.m., cloudy all the p.m., some

patches of snow in the higher elevations and shaded areas. <sup>Twelve</sup>~~Eleven~~ observers in seven parties.

The six White-winged Scoters (2 males, 4 females) were observed by DeVore and Garrett immediately above Chickamauga Dam on the lake. The birds were first seen in flight over the lake as they were circling a raft of other waterfowl. The white speculum was clearly visible. After landing on the lake the birds were again brought under observation, this time with a 20x scope. The white eye patch of the males was visible as the birds swam within 150 yards of the observers. The birds remained at this location all during the day and since that time there have been several additional sightings of this species from the same area.

Francis Barnwell, Jon E. DeVore (compiler), Kenneth Dubke, Dr. and Mrs. John R. Freeman, James Garrett, Gladys Nelson, Mable Norman, Beulah Parks, Lee Shafer, Veta Slinger, Mary Tunsberg.

HIWASSEE—All points within a 15-mile diameter circle, center on State Highway 58 Bridge at the Hiwassee River; agricultural fields 30%, deciduous woods 30%, creeks and rivers 15%, residential areas 10%, roadside and weedy areas 10%, evergreen woods 5%. 23 December: 06:00 to 19:00. Temp. 29° to 41°; overcast all day with somewhat lighter conditions in the late p.m. Three observers in two parties. Total party-hours 21 (12 on foot, 9 in car); total party-miles 175 (30 on foot, 145 by car).

The Bald Eagle (DeVore) was an adult and was seen perched in a large dead tree at the Hiwassee Island State Waterfowl Refuge. The Least Sandpiper and Dunlin (Dubke-Wagner) were observed at the Mouse Creek and Candies Creek area. These birds have been present all winter and are presumed to be, in part, the same group which has wintered in this area for the past several years.

Jon E. DeVore (compiler), Kenneth H. Dubke, Mark Wagner.

NORRIS—36° 13' N, 84° 15' W (All points within a 15-mile diameter circle, center BM 1062, Norris Dam, to include Clinch River, Hinds Creek, Clear Creek, Norris Lake, Cane Creek, Norris, Andersonville, Lake City mixed hardwoods, cedars, pines 55% fields and pastures 40%; towns 5%; in typical southern Appalachian ridges and valleys. 20 December: 08:00 to 16:30, clear a.m.; partly cloudy p.m.; temp. 23° to 40°; wind NNW, 0-10 m.p.h.; puddled water frozen, other water open. Ten observers in four parties. Total party-hours 49 (42 on foot, 7 by car); total party-miles 135 (21 on foot, 114 by car).

James H. Burbank (compiler), Mrs. J. H. Duggins, Richard Fitz, Gordon Hall, Frank Holland, Ben D. Jaco, Bill Jaco, Mrs. Frances Olson, Walter P. Nickell, Mrs. George Wood.

KNOXVILLE—35° 59' N, 83° 59' W, (All points within a 15-mile diameter circle, center Oak Ridge Highway and Third Creek, including Island Home, Toole's Bend, Andrew Jackson Lake, Powell Station; mixed hardwoods 30%, fields and pastures 26%, roadsides 24%, suburbs 12%, lakeside 8%). 21 December: 07:00 to 17:00, overcast; temp. 30° to 35°; wind NE 0-5

m.p.h.; rain, sleet, and snow during half of day. Eighteen observers in twelve parties. Total party-hours 82 (47 on foot, 35 by car); total party-miles 410 (50 on foot, 360 by car).

The Semipalmated Plovers were observed at close range, watched for a half hour, all field marks seen, by Muriel Monroe. The Lesser Yellowlegs was identified by Tony Koella. The Summer Tanager has been appearing regularly at a feeding station, where it has been seen by several observers.

Joshua Bonner, James Campbell, John Elson, J. C. Howell, Susan Hoyle, Tony Koella, Terry McGown, Muriel Monroe, Holly Overton, J. B. Owen, Myrtle Sanders, Boyd Sharp, Mr. and Mrs. Louis Smith, James Tanner (compiler), Gary Wallace, Mr. and Mrs. Bill Williams.

GREAT SMOKY MOUNTAINS NATIONAL PARK—35° 40' N, 83° 29' W, (All points within a 15-mile diameter circle, centered on Bullhead to include US 441 Pigeon Forge to Gatlinburg, Tenn. 73 Emerts Cove to Gatlinburg; Newfound Gap Road from Gatlinburg to Newfound Gap; Little River Road from Sugarlands to Metcalf Bottoms; West Prong Little Pigeon River; Little River; LeConte Creek; Laurel Falls; Wear Cove; Greenbrier Cove; Cherokee Orchard; Sugarlands; open farmland 15%; abandoned fields 10%; farm woodlots 5%; stream courses 15%; deciduous forest 25%; pine forest 5%; spruce-fir forest 15%; towns 5%; roadsides 5%). 28 December, 06:45 to 17:00. Overcast, light drizzle and light rain all day. Temp. 16° to 44°. Wind variable in direction, 0-10 m.p.h. Four inches snow in lower elevations, 22 inches in higher elevations. Twenty-eight observers in nine parties. Total party-hours 66 (30 on foot, 36 by car); total party-miles 273 (32 on foot, 241 by car).

Winnifred E. Brown, Danny Ellis, Maurice Grigsby, David Hassler, Robbie Hassler, Joseph C. Howell, Greg Jackson, Tony Koella, Mrs. George McGown, Kevin McGown, Mary McIlwain, Chris McMillan, Robert A. Monroe, Mrs. R. A. Monroe, Louise Nunnally, Pauline G. Ryder, Richard Ryder, Terry Satterfield, Johneta L. Smith, Louis F. Smith, Jr., Bill Williams, Irene Williams, George Wood, Hedy Wood, Richard C. Zani (compiler).

GREENEVILLE—All points within a 15-mile diameter circle, center three miles west of Greenville on Highway 11E. Woodlands 50%; fields, farm lands, and stream borders 40%; towns and residential 10%. 27 December: 08:00 to 17:00. Temp. 26° to 33°; winds 0-3 m.p.h., cloudy, snowing a.m., clearing p.m., snow up to five inches deep on ground. Fifteen observers in ten parties. Total party-hours 34, total party-miles 56 (6 on foot, 50 by car).

Elizabeth Burleson, Mrs. Marjorie Clemens, Mrs. Chester Darnell, Mrs. Elizabeth Edens, Mr. and Mrs. William Fischer, Mr. and Mrs. King Gaut, Richard Kulmeyer, Mr. and Mrs. Irving Landmark, Mr. and Mrs. Richard Nevius (compilers), Richard Sievert, Mrs. Royal Spees.

ELIZABETHTON—All points within a 15-mile diameter circle, center Wilbur Dam, to include Wilbur Lake, major portion of Watauga Lake, parts of Watauga and Doe Rivers, parts of Holston and Iron Mountains, city of Elizabethton; lake borders 5%, stream borders 50%, woodlands 30%, weed fields 15%. 28 December: 07:00 to 17:00. Temp. 16-40° F.; wind light and

variable; clear a.m., cloudy p.m.; all waters clear; 12-16 inches snow on ground throughout area. Ten observers in five parties. Total party-hours 27 (19 on foot, 8 by car); total party-miles 156 (12 on foot, 144 by car).

The Swainson's Thrush and Chipping Sparrow were observed by Bill Bridgforth, Dr. Jerry W. Nagel, Pete Range, and Charles R. Smith. Both species were observed at close range (15-30') for periods of 10-15 minutes with 7x and 10x binoculars.

Mr. and Mrs. Fred W. Behrend, Bill Bridgforth, Mrs. Harold Dillenbeck, Jo Ann Dillenbeck, Joy Dillenbeck, Roby May, Dr. Jerry W. Nagel, Pete Range, Charles R. Smith (compiler).

KINGSPORT—36° 30' N, 82° 31' W (All points within a 15-mile diameter circle, center Pactolis, to include parts of Bays Mt., borders of Holston River, Patrick Henry and Boone Lakes; fields 15%, woods 20%, residential 25%, lakes, rivers, and shores 40%). 27 December: 07:30 to 17:30, cloudy with occasional light rain and snow; temp. 24° to 30°; no wind; 10 inches of snow on ground, preventing roadside parking. Eight observers in eight parties. Total party-hours 26 (21 on foot, 5 by car); total party-miles 78 (13 on foot, 65 by car).

The Red Crossbills were seen by Finucane on Bays Mt.

Roy Allen, Marie Brown, Tom Finucane (compiler), Ed Gift, Martin King, Arthur Smith, Ann Switzer, Jonathan Wert.

BRISTOL—All points within a 15-mile diameter circle, center at junction of Route 647 and Route 654, to include Bristol, South Holston Lake and River; fields and farmland 40%, mixed deciduous forest 25%, lakes and rivers 15%, towns and residence 10%, misc. 10%. 21 December; 07:10 to 18:00. Temp. 25° to 38° F; wind NE 2-10 m.p.h.; ground bare, water open. Twelve observers in eight parties. Total party-hours 47½ (30¼ on foot, 10¼ by car, 7 by boat); total party-miles 283 (14 on foot, 211 by car, 58 by boat).

The Common Merganser was found at Avens Bridge, Va. on South Holston Lake by Wallace Coffey and Brent Rowell. A good study with a 30x Balscope. Gerry Delantonas identified the Savannah Sparrow near Saddle Dam, Tenn. at South Holston Lake. Both species represent first records for the Bristol count.

Ann Cantwell, J. Wallace Coffey (compiler), Mrs. Ernest Dickey, Mr. and Mrs. Gerry Delantonas, David McPeak, Mr. and Mrs. C. T. Ottenfeld, Brent Rowell, Enno VanGelder, Johnny Wood.

## ANNUAL AUTUMN HAWK COUNT

BY THOMAS W. FINUCANE

The 1969 T.O.S. total was about 4500, our lowest since 1964. In contrast, stations where hawk migration is studied northeast of the T.O.S. area reported record highs in 1969, as in 1968, when we also had a record count of 24,000. Analysis of the 1969 fall migration of the Broad-winged Hawk is in preparation by Aaron Bagg for publication in the *Audubon Field Notes*, on the basis of our data and data from many other sources.

Fluctuations in the numbers of Broad-winged Hawks observed in fall migration are related to variations in weather. There are many ways for the weather to determine the character of the migration. It is possible, for example, to account for what seems to be a steady increase in the fall Broad-wing migration in Pennsylvania and in our areas by taking note of the decrease in the numbers counted at major stations on the Great Lakes. There is no simple explanation for this effect, but the existence of regular weather cycles of 10 to 12 years has been firmly established, and these have been shown to be part of a system of larger cycles. Before any evaluation of the effects of such cycles on the fall hawk migration can be made, we need better comparisons of year-to-year variations in the counts at all stations in the United States and Canada.

It is well known that hawks migrate on a roundabout course. In particular, they do not cross the Great Lakes. Furthermore, when they encounter a large area of heavy overcast, they detour. The Broad-winged Hawks migrate where they find updrafts of the kind for which they are adapted. Such updrafts are not found over water and are suppressed over land areas under clouds and rain. In 1969 there was an area of rainy weather just north and east of our stations, during the days when our heaviest hawk migration is expected. Since these hawks are generally heading southwest, they probably would bypass our area by flying west on a course north of it.

Besides depressing the counts, heavily overcast skies change the migration routes of hawks traveling within the area under clouds. In the T.O.S. project the effect has nearly always been relatively high counts at low-altitude stations. This effect has been mentioned before, in connection with counts made by Mr. Scott in Nickelsville and simultaneous counts at the Mendota Fire Tower lookout. We have noticed also that under overcast skies the Rogersville Kyles Ford lookout has higher counts than the Mendota, although we have been listing both at 3000 ft. Now we find the former to be listed as only 2400 ft. high, on maps we have recently purchased from the TVA. On four of the five days of simultaneous observations from these stations higher counts were made at the lower altitude station in 1969.

On a rainy September day in 1957 at the FM transmitter on Bays Mt. (2300 ft.), we counted 19 migrating hawks in four hours: a Sharp-shin, 16 Broad-wings, a Marsh Hawk, and an Osprey. During a week of clouds and rain in September, 1969, when I might have stayed all day on the Mendota Fire Tower without seeing a single Broad-winged Hawk, I tried the FM location on Bays Mt. again and counted four in 1½ hours. The only other hawk watch on Bays Mt. in 1969 was on the River Mt. Fire Tower (2400 ft.) where Bill

and Dick Finucane saw only one Broad-wing in 6½ hours, in good weather in the heart of the migration season for the species. In previous years Tom Odom's data have demonstrated that River Mt. has low counts on days when the Mendota Fire Tower has its highest counts.

For a period of eight days, 17 to 25 Sept., exactly in the middle of our Broad-wing migration, the Mendota Fire Tower total was only 125, including 109 on 18 Sept., when there was a slight improvement in the weather. The next two days were cloudy and rainy, but we did spend some time on the lookout to check the weather. Then conditions improved on 21 Sept., but we had only eight hawks in six hours of observation. Mr. Scott, however, had counted eleven on his way to the lookout. He also had heard from a motorist that there was an extensive area of heavy rain not far north from our lookout that morning. (This was the day Frances Olson saw a flight of 300 Broad-wings in Knoxville). Next day, 22 Sept., the count at the Mendota Fire Tower was zero. The following three days were rainy (including the day I saw four hawks on Bays Mt.) Then came a clear day, 26 Sept., the day of the big count in the Chattanooga area. We had 155 at Mendota and 660 on the day after. The weather was getting worse, however, and next day, 28 Sept., the count on Mendota was zero again.

It is not only in bad weather that the Mendota Fire Tower has poor counts. When the sky is perfectly clear, the migration may proceed on lower ridges. This happened, for example, in 1960, when the T.O.S. total exceeded 10,000, but the Mendota Fire Tower count was only 845 for 60 hrs. of observation. Large hawk flights were seen at four low-altitude locations: Kingsport; the gap below the Rogersville Kyles Ford Tower Knob; Knoxville; and especially in Chattanooga, where Mrs. Crownover reported 4985 Broad-wings flying at all levels past the Elder Mt. Fire Tower (1880 ft.) on 25 Sept. 1960. If high flight is more efficient, then clear skies do not always provide the best conditions for hawk migration. But in the best weather for hawk migration the flights may be too high to be visible from our lookouts. Or perhaps in the best weather for migration the hawks are scattered rather than concentrated, or perhaps they ride in the updrafts generated by advancing cold fronts. (See *The Migrant* 31:2, 1960).

Good hawk counts are more difficult to explain than poor hawk counts. If atmospheric conditions are such that the distinction between good lookouts and surrounding areas is enhanced, a larger fraction of the flight will appear at the lookout. As I remember some of the large flights I saw in 1968, they seemed to be moving more slowly than flights we have observed in other years. In 1968 we saw large, swirling masses drifting along where we had in other years seen streams of hawks that never wavered from direct flight. So perhaps the best conditions for hawk migration are not the best conditions for hawk counts.

The halfway point in the data came on 26 Sept., when 1136 hawks were recorded in the Chattanooga area, including 886 recorded in five hours on the Dunlap Tower Lookout by Gene and Adele West.

Recorded hours of observation were 249 (about average), but the number of observation sorties was far above average. Besides the items in Table 1,

TABLE 1  
 ANNUAL AUTUMN HAWK COUNT 1969

No.	Date	Obs.	Hrs.	Area	Wind	Sky	T.	Shn	Cpr	Rdt	Rsh	Bwg	Msh	Osp	SpH	Undnt
1	8/30	R	3	E	E	0	70	-	-	-	-	15	-	-	-	-
2	31	D	5½	D	1-5 ESE	3	70	-	-	-	-	1	-	-	-	-
3	31	W	1½	R	1-5 ESE	3	70	-	-	-	-	3	-	-	-	-
4	9/1	W	½	R	0	3	75	-	-	-	-	2	-	-	-	-
5	1	CR	6	M	-	-	-	-	-	-	-	-	-	-	-	-
6	7	DM	4	D	1-5 WSW	0-4	75	-	-	-	-	3	-	-	-	-
7	9	K	6	D	2 NNW	0	65	-	-	-	-	6	-	-	1	-
8	10	CE	4	N	1-4	-	55	-	-	-	-	68	-	-	2	-
9	11	F	2½	N	2 E-NE	1-3	65	1	-	1	-	120	-	-	-	-
10	12	W	1	R	0	2	75	-	-	-	-	38	-	-	-	-
11	12	CFB	7½	M	1 E	3	60	-	-	-	-	62	-	1	3	-
12	13	LO	8	K	1 SE	0	63	-	-	3	-	173	-	1	-	5
13	13	CR	4	Q	-	-	-	-	-	-	-	27	-	-	-	-
14	13	ABY	8	M	2 N	1	-	-	-	2	-	32	-	-	-	-
15	14	DM	5	D	1-2 SSE	1	76	-	-	-	-	11	-	-	-	-
16	14	H	1½	L	2-4 SE	2	70	-	1	-	2	27	-	-	-	-
17	14	LEO	8	K	4 E-SE	1	68	-	-	3	-	64	-	-	-	4
18	14	R	2	Q	-	4	58	-	-	-	-	7	-	-	1	-
19	14	UV	6½	V	0	1	73	-	-	1	-	1	-	-	-	1a
20	15	K	4	D	2-4 E	0	69	-	-	1	-	11	1	-	-	-
21	15	FSV	8	M	-	-	-	-	-	3	-	171	-	1	-	5
22	16	K	4	D	3-5 SE	1	68	-	-	2	-	-	-	-	-	-
23	16	ABV	6	M	3 E	1	66	-	-	-	-	147	-	-	1	1
24	16	CE	3	H	-	-	-	-	-	-	-	19	-	-	-	-
25	17	V	7	K	2-5 SW	5-3	65	-	-	4	-	16	-	-	-	-
26	17	F	7	M	3 SE	4	80	-	-	-	-	9	-	1	-	1b
27	18	W	4	D	1 E	3	76	-	-	-	-	15	-	-	-	-
28	18	UV	7½	N	2-6 NW	3	73	2	-	2	-	109	-	-	1	-
29	20	FG	3	M	3	5	-	-	-	-	-	1	-	-	-	-
30	21	W	1	R	0	4	-	-	-	-	-	152	-	-	-	-
31	21	B	½	N	-	-	-	-	-	-	-	300	-	-	-	-
32	21	T	6½	K	2 E-SE	0	68	-	1	3	-	29	-	-	-	2
33	21	FGS	5½	M	3 SE	1	65	-	-	1	-	6	-	-	-	1
34	21	S	½	Z	3 SE	1	65	-	-	-	-	11	-	-	-	1
35	21	CR	5½	H	0-5 SE	-	62	-	1	2	-	-	-	-	1	-
36	22	CFB	2½	M	0-3 E	2	67	-	-	1	-	-	-	-	-	-
37	24	W	3	D	0-1 NW	4	-	-	-	-	-	12	-	-	-	-
38	24	F	1½	B	0	4	-	-	-	-	-	4	-	-	-	-
39	25	W	3	D	0-3 NNW	4-0	-	-	-	-	-	8	-	-	-	-
40	25	W	1½	S	0-3 NNW	0	-	-	-	-	-	66	-	-	-	-
41	26	W	5	D	1-2 N	1	-	-	-	-	-	886	-	-	-	-
42	26	Q	½	X	1-2 N	1	-	-	-	-	-	250	-	-	-	-
43	26	APJ	6	N	0-1 NE	0	63	2	1	-	-	155	-	-	-	3
44	27	WX	3	D	3 SE	1	-	-	-	-	-	30	-	-	-	-
45	27	Z	6	Q	1-2 SE	1	68	-	-	-	-	13	-	-	1	-
46	27	T	8	K	1 SE-W	1	68	4	1	2	3	191	-	1	-	1a 2b
47	27	API	8½	M	0-3	2	64	2	2	-	1	653	-	1	-	1
48	28	D	5½	D	2-5 NNW	0-2	70	-	-	-	-	150	-	-	-	-
49	28	wh	2	R	0-1 N	2	70	-	-	-	-	116	-	1	-	-
50	28	t	4½	K	0-2	4	-	-	1	1	-	4	-	-	-	-
51	28	F	4½	M	3-4 NE-W	4-0	-	-	-	3	1	-	-	-	-	-
52	30	K	4	D	2 E-NW	1	62	-	1	-	-	-	-	-	-	-
53	30	F	7½	M	2-0 SSE	2	65	-	-	-	-	21	-	-	-	1
54	10/3	F	6	M	1 NW	3	65	3	-	1	-	-	-	-	2	2a
55	9	F	9	M	3-0 SE	0	60	-	-	-	-	-	-	-	-	-
TOTALS			249				14	9	36	7	4215	1	7	13	31	

TABLE 2

Observations in the Roan Mt. Area by Mrs. Swindell

	8/22	24	25	26	27	28	29	31	9/1	7	9	16	17	18	19	22
Coopers Hawk	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	3
Red-tailed	-	-	5	-	-	-	-	-	1	-	2	-	-	4	-	6
Broad-winged	9	6	12	14	8	12	-	9	2	-	7	-	-	1	2	1
Marsh Hawk	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	3

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	9/25	26	27	28	30	10/1	3	4	10	24	29	30	31	11/2	18
Sharp-shinned	4	3	-	-	-	-	-	1	-	-	-	-	-	-	-
Coopers Hawk	2	-	2	1	3	2	2	-	1	-	-	-	-	-	-
Red-tailed	26	5	2	1	-	-	2	-	3	4	-	-	-	-	-
Red-shouldered	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Broad-winged	87	12	5	3	-	-	-	-	-	-	-	-	-	-	-
Marsh Hawk	1	-	-	-	-	-	-	-	-	-	3	2	1	1	-
Sparrow Hawk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

we made a few October and November observations from four stations on the Clinch Mt. and Powell Mt. On 29 October, we saw a Golden Eagle making several dozen circles in the valley north of the Mendota Fire Tower before disappearing down range. Although this was the first Golden Eagle recorded at the Mendota Fire Tower since 12 October 1957, the record has little significance since we spend very little time observing hawks at this lookout after the first week in October. On the other hand, Mrs. Swindell's observations continued into November, in the Roan Mt. area, with better results than ours on the Clinch and Powell (See Table 2).

## KEY TO REPORTERS

A—Charlotte Finucane, Kingsport; B—Frances Olson, Norris; C—Wallace Coffey, Bristol; D—Jon DeVore, Chattanooga; E—Johnny Wood, Bristol; F—Thos. Finucane, Kingsport; G—Mr. and Mrs. Roy Allen, Mr. and Mrs. Arthur Smith, Kingsport; Robert Quillen, Bristol; H—Mrs. Chester Darnell, Mrs. Irvin Landmark, Greeneville; I—Mr. and Mrs. Roy Allen, Barney Finucane, Peggy Ferrell, Cub Den 2, Pack 88, Kingsport; J—Mrs. David Hedberg, Kingsport; K—Ken Dubke, Chattanooga; L—Tom and Carol Finucane, Knoxville; M—Max Ley, Chattanooga; N—Mrs. Richard Nevius, Mrs. Helen Reed, Greeneville; O—Tom Odom and Tom Odom III, Kingsport; P—Bob Smith, Bristol; Q—Charles Sterchi, Chattanooga; R—Brent Rowell, Bristol; S—E. E. Scott, Nickelsville, Va.; T—Tom Odom; U—Dickie Finucane; V—Bill Finucane; W—Mr. and Mrs. Eugene West, Chattanooga; X—Carl Gevers, Chattanooga; Y—Gracie, Barney, Marion Finucane, Robin Ferrell, Cub Den 2, Pack 88; Z—Mr. and Mrs. Ottenfeld, Mr. and Mrs. Nunley, Mr. and Mrs. Coffey; b—Don Wiley, Kevin Henry, Kingsport; d—Maxine Crownover, Mr. and Mrs. H. L. Slinger, Chattanooga; h—Kay Bosworth, Chattanooga.

## KEY TO OBSERVATION STATIONS

B—Bays Mt. FM Tower, 2300 ft.; D—Dunlap Fire Tower, 2637 ft.; E—2227 Edgemont, Bristol City Limits, 1672 ft.; H—Haytor's Gap Knob Fire Tower, 4208 ft.; K—Rogersville Kyles Ford Fire Tower, 2401 ft.; L—Meadow Creek Fire Tower, 2875 ft.; M—Mendota Fire Tower, 3018 ft.; N—Knoxville, 1000 ft.; Q—McQueen's Knob Fire Tower, 3885 ft.; R—Red Bank, residence of E. M. West; V—River Mt. Fire Tower, Kingsport, 2397; X—Hixon High School, near Chattanooga; Z—Moccasin Ridge, 2200 ft.; S—Signal Point Park, 1620 ft.

## IN MEMORIAM

RALPH L. DUNCKEL

Ralph L. Dunckel, 66, died of a heart attack during the night of 7 December 1969, after spending his last day happily banding White-throated Sparrows and Purple Finches at his home in suburban Cookeville. With his passing, organized "birding" in the entire Highland Rim area of the Upper Cumberland lost its earliest guiding spirit and one of its most knowledgeable participants.

As a boy in his native New York (he was born in Fort Plain in 1903), he organized his first bird club. It had four members, and a fine of one cent was levied against those who missed a meeting. (Mrs. Aline Dunckel still possesses a precious copy of the minutes of the meetings.)

After a number of years in military service, he was forced into temporary retirement by heart trouble. He and Mrs. Dunckel moved to the Ozarks, in Arkansas, where bird-watching served as a therapeutic treatment which restored him soon to a normally active life.

He came to Tennessee Tech in 1956 as professor of Mechanical Engineering, and in 1957 set about organizing bird lovers of the area into the Upper Cumberland Bird Club. He took the lead in sponsoring a three-year series of Audubon Screen Tours, beginning in 1958. He served three terms as president of the Upper Cumberland Bird Club, taught bird identification through their songs to Boy Scout groups, and heightened interest in bird lore throughout the area by the example of his enthusiasm and knowledge.

He spent three years in Indonesia in the early 1960's at the National Institute of Technology, at Bandung, on an A.I.D. assignment from the University of Kentucky. This experience broadened his knowledge of the exotic birds of the world.

In the words of one of his many friends, "Ralph L. Dunckel was a man of dignity of bearing, yet never lacking in his concern for those around him; a man who was gentle yet strong."

DR. SIDNEY MCGEE, Tennessee Technical University, Cookeville, 38501.

## ROUND TABLE NOTE

EVENING GROSBEAKS AT NASHVILLE—My year of the Evening Grosbeaks (*Hesperiphona vespertina*) began 23 December 1968, with the arrival of a beautiful male. My husband and I were surprised and excited because we had never seen an Evening Grosbeak before. Within the hour we had every available container filled with sunflower seeds.

Our efforts were rewarded by the arrival of a female on 28-29 December, and a male and female on 6-7 January. On 8 January, 2 males and 2 females came. The number gradually increased until on February, a flock of 48 Evening Grosbeaks were counted in the yard at one time. During the sleet and snow on 15 February, 37 arrived later than usual, all with frozen tail feathers. A week later, 23 February, 53, the largest number counted at one time were in the yard. This number gradually decreased until only 2-7, all females were seen from 1 through 9 April. On 10 April, small flocks of approximately equal numbers of males and females started to come again. These had greenish beaks, while the ones seen during the winter had either yellow or bone colored beaks. No Evening Grosbeaks were seen 27 April. On 28 April, flocks of 16-30 appeared. This time the males were more numerous than females. One day 13 males and 2 females were on the feeder at once. Birds kept coming until 5 May, when the last three females were seen. Evening Grosbeaks were absent from the feeders only one day, 27 April, from 6 January until 5 May and on this day a single male Rose-breasted Grosbeak was there. The largest number of males counted at one time was 17. Judging from counts of numerous small flocks, they consisted of about one third males all winter.

During the winter, the Evening Grosbeaks appeared about twenty minutes after daybreak, except for one sleeting, snowy day, and left between 12:30 and 13:30 each day. This habit did not change even though it started getting light earlier each day. After 10 April, when the flocks began to build up they appeared about 07:30 and would stay until 15:30-16:00. Without exception, the largest flocks came on cloudy or rainy days. All winter they seemed to prefer to feed and perch in the shade; in March and April, they spent most of their time in the sunny tree tops preening.

The grosbeaks would eat at the window tray while I sat inside. On one occasion, when I ran the vacuum cleaner, they lined up on the window sill and peered in as though fascinated by the sound. During their daily visits, they constantly bickered among themselves for space at the feeder but would let small birds crowd into their group. One day I saw a tiny goldfinch peck two female grosbeaks until they moved away.

Mr. H. E. Parmer and Mrs. Carol Knauth alerted members of the Nashville Chapter of T.O.S. to our flock of unusual visitors. Many members came to watch from the window with us. Mrs. Goodpasture banded 25 of the grosbeaks, plus several each of the other species. I fed a little over 200 lbs. of sunflower seeds and at least 50 lbs. of mixed seeds. In addition to the open window feeder at second story level, there were 3 other feeders close by in the yard. Four large trees offered perching-preening areas.

MRS. GEORGE R. MILLER, 573 Croley Drive, Nashville.

## THE SEASON

CHARLES R. SMITH, *Editor*



The weather for the months of November, December, and January may be described accurately with a single statement. It was very cold; colder than ever recorded in some areas.

According to data from the U. S. Weather Bureau, November temperatures were the coldest ever recorded for Chattanooga for that month. Memphis experienced its coldest November in the last ten years. It was especially cold in the Ridge and Valley and Mountain Regions during that month. A statewide cold spell on 14 and 15 November set new daily record low temperatures for northeastern Tennessee, Chattanooga, Knoxville, and Nashville. A second cold spell from 20 to 29 November was not as severe as the first. Precipitation was below normal and unevenly spaced throughout the month, with many areas becoming quite dry by the end of November. The first measurable snowfall occurred on 14 November, with 1-4 inches over the mountains and little or none across the rest of the state.

December continued the cold trend, with temperatures 4-5 degrees below average across the state. Precipitation was from 2-4 inches above average for December. A period of relatively heavy snow occurred from 25-27 December, with some heavy rain on 29 and 30 December, across the state.

January was very cold and very dry. Most of the precipitation fell as snow, but the total precipitation still remained 2-5 inches below normal for most of the state. It was the driest January since 1963 for the state as a whole. The eastern portion of the state experienced the coldest January since 1940, according to U.S. Weather Bureau data.

The effects of the severe winter weather remain difficult to assess with respect to avian activity. My impression is that the overall populations of both land and water birds appeared somewhat reduced. However, it may be that only the activity of the bird-watchers experienced the reduction! Unfortunately, data from the Ridge and Valley Region were not available for this period. Therefore, it is difficult to accurately evaluate the season for the state.

Unusual observations were numerous, especially from the Central Plateau and Basin Region. Some of the more notable records follow: Common Scoter, Black-headed Grosbeak, and Oregon Junco from the Western Coastal Plain; White Pelican, Whistling Swan, White-fronted Goose, White-winged Scoter, Goshawk, wintering Catbird, and Snow Bunting from the Central Plateau and Basin; wintering Catbird, and Brewer's Blackbird from the Mountain Region.

Reports of wintering Brown Thrashers remain widespread across the state, indicating that that species might be successfully extending its winter range northward. Details of the above observations and additional observations may be found in the reports which follow.

WESTERN COASTAL PLAIN REGION—*Loon-Sparrows*: Common Loon: 31 Dec. (7) S. Canada Goose: 31 Dec. (35) S. Common Scoter: 22 Feb. (1, female) HL (LC). Bald Eagle: 31 Dec. (2) S. Bonaparte's Gull: 14 Dec. (5) HL (BC, LC). Tree Swallow: 22 Feb. (1) HL (BC, LC). Red-breasted Nuthatch: more than usual all season, 13 Dec. (12) S. Cedar Waxwing: 31 Dec. (522) S. Black-headed Grosbeak: 19 Jan. to 1 Mar. (1) SB home, Raleigh, near M (SB, LK). Dickcissel: 24 Dec. (1, possibly immature) M (GH). Evening Grosbeak: 31 Dec. (12) S. Purple Finch: many records in region, 31 Dec. (77) S. Pine Siskin: many records in region, 13 Dec. (140) S. Oregon Junco: 24 Dec. (1) M (HD), 31 Dec. (1) H (EC). Vesper Sparrow: 22 Jan. (1) S (DP). White-throated Sparrow: back to usual numbers this winter, 31 Dec. (132) S.

*Locations*: H—Henderson, HL—Horseshoe Lake, Crittendon Co., Arkansas, M—Memphis Area, S—Savannah Area.

*Observers*: SB—Mrs. Stanley Buchman, EC—Mrs. Ed Carpenter, BC—Ben B. Coffey, Jr., LC—Lula Coffey, HD—Mrs. Henry Dinkelspiel, GH—George Hervey, LK—Mrs. Leslie Kostka, DP—David Patterson.

DAVID E. PATTERSON, Harbert Hills Academy, Savannah 38372.

CENTRAL PLATEAU AND BASIN REGION—*Loons-Geese*: Common Loon: (1-7) thru 5 Jan. WR (KHD), 9 Nov. (3) OHL (HEP *et al.*), 16 Nov. (1) PPL (MLB, ROH), 5 Jan. (1) BT (RDH). Horned Grebe: peak (139) 15 Dec. to (18) end of period WR (KHD); peak OHL 31 Jan. (27) (JHR). Pied-billed Grebe: 16 Nov. (10) PPL (JHR); from (9) 4 Nov. to a peak of (65) 8 Dec., then down to (25) 30 Jan. WR (KHD); (1-4) NA. White Pelican: 24 Nov. (1), 15 Dec. (1) Big Sandy Unit, TNWR (GNB). Double-crested Cormorant: 4, 5 Nov. (1) LD (RTH), 15 Nov. (1) DRU (MLB, ROH). Great Blue Heron: occasional reports (1-2) entire area. Whistling Swan: 4 Jan. (5) upper OHL (GBW), 13 Jan. (1) DRU (GNB). Canada Geese: to (135) during entire period WR (KHD); 9 Nov. (44) OHL (HCM *et al.*), 15 Nov. (2000) DRU (NC), about (33), (some color-collared for locally breeding birds) OHL entire period (NC); 24 Nov. (50) BT (RDH), (24-70) during period LD (RTH). White-fronted Goose: 8 Dec. (1) WR (KHD). Blue Goose: 9 Nov. (4) OHL (HEP *et al.*), (1) entire period BL (NC).

*Ducks*: Mallard: 15 Nov. (5000) DRU (NC), 8 Dec. (1250) down to (15) 30 Jan. WR (KHD), 31 Jan. (150) OHL (JHR), well below normal NA. Black: 15 Nov. (300) DRU (NC), (200+) during period WR (KHD), to (200) by 5 Jan. OHL (MLB, JHR). Gadwall: 4 Nov. (34) WR (KHD), 16 Dec. (130) BT (RDH), (2-5) during period NA. Pintail: 15 Nov. (20) DRU (NC), 8 Dec. (40) WR (KHD), 17 Dec. (3) RL (AT), 16 Dec. (8) BT (RDH), 31 Jan. (50) OHL (JHR). Green-winged Teal: 29 Nov. (13) all males, BL (HEP), (1-12) WR (KHD) during period. American Widgeon: 15 Nov. (25) DRU (NC), 18 Nov. a peak of (95)

down to (26) 30 Jan. WR (KH), 23 Dec. (71) RL (MLB), 31 Jan. (100+) OHL (JHR). Shoveler: 8 Nov. (3) (HCM, HEP) to 5 Jan. (6) (JHR) both RL, 16 Dec. (36) BT (RDH). Wood: 3 Nov. (34) ACM (JHR), 26 Nov. (9) RL (MLB), 8 Dec. (1) WR (KHD) last report. Red-head: 13 Dec. (5) RL (AT), 30 Jan. (33) WR, (KHD), 31 Jan. (1) CL (JHR). Ring-necked: from a peak of only (45) 18 Nov. to (25) 30 Jan. WR (KHD), 31 Jan. (100) upper OHL (JHR), very scarce during period NA. Canvasback: from (13) 18 Nov. to (161) 30 Jan. WR (KHD), 26 Dec. peak of (25) RL (AT), 31 Jan. (7) CL (LOT). Lesser Scaup: up to a peak of (460) 20 Jan. WR (KHD), 27 Nov. (83) CL (MLB), 31 Jan. (74) upper OHL (JHR), well below normal around NA. Common Goldeneye: late, first 24 Nov. (5) RL (MLB), from 8 Dec. (1) to 20 Jan. (51) WR (KHD), peak RL 30 Nov. (13) (JHR), peak OHL 31 Jan. (27) (JHR). Bufflehead: 1 Nov. (4) (MLB), to 27 Nov. (21) (JHR) both CL, from 18 Nov. (2) to 30 Jan. (77) WR (KHD), few during period RL. Oldsquaw: 10 Nov. (1) RL (MLB), 30 Nov. (1) H (FM) and (4) RL (JHR), 5 Jan. (10) DRU (GNB). White-winged Scoter: 2 Nov. thru 24 Dec. (2), 22 Dec. (3) (AT) both RL, 25 Jan. (1) dam OHL (FA, *et al.*), 30 Jan. (3) WR (KHD). Ruddy: 1 Nov. (5) CL (JHR), from 18 Nov. (3) to 30 Jan. (31) WR (KHD), 26 Dec. (6) RL (AT, MLB). Hooded Merganser: 15 Nov. (15) DRU (NC), from 18 Nov. (6) to 5 Jan. (193) then down to (1) 30 Jan. WR (KHD), few NA. Common Merganser: 16 Dec. (8) BT (RDH), 30 Jan. (8) WR (KHD), 31 Jan. (4) OHL (JHR). Red-breasted Merganser: 12 Jan. (2) WR (KHD), first report to writer in three years.

*Vultures-Hawks*: Turkey Vulture: absent NA Dec., Jan. Black Vulture: 26 Dec. roost (71) ML (MLB), 30 Jan. roost WR (35) KHD). Goshawk: 27 Dec. (1) mature plumage RR (AFG *et al.*) Sharp-shinned Hawk: "(2) thru period after birds at feeders" BT (RDH), 11, 13 Jan. (1) LD (RTH). Cooper's Hawk: 24 Jan. (1) CH (MLB, JHR) only report. Golden Eagle: 23 Nov. (2), 13 Dec. (1) WB (HB). Bald Eagle: 15 Nov. (2) DRU (NC), 16 Dec. (2) BT (RDH), 12 Jan. (1) imma. WR (KHD); (1-5) during entire period, with the (5) being 24 Dec., LD (RTH). Marsh Hawk: 3 Nov. (1) TJ and (2) ACM (MLB, JHR), 19 Nov. (1) BL (HEP), 23 Dec. (1) BL (JHR), 12 Jan. (1) W (KHD), 18 Jan. (1) PPL (ROH), most records for several years NA. Osprey: 19 Nov. (1) PPL (ROH), first NA Nov. record in 15 years.

*Coots-Gulls*: American Coot: 4 Nov. (10,000) down to (125) 12 Jan., then to (832) 30 Jan. WR (KHD), 1 Nov. (148) OHL (JHR) about constant during period, as were (100-150) RL, 16 Nov. (113) PPL (JHR). American Woodcock: 1 Nov. (12) LD (RTH), 5 Nov. (3) BT (RDH). Common Snipe: 1 Nov. (4) CL, (14) OHL (JHR), 27 Nov. (2) BL (JHR), (2) wintering PPL (ROH). Spotted Sandpiper: 5-11 Nov. (1) BL (HEP), only report. Lesser Yellowlegs: 1 Nov. (3) OHL (MLB, JHR), 15 Nov. (2) DRU (NC). Pectoral Sandpiper: 9 Nov. (2) CL (HCM, HEP), 15 Nov. (1) DRU (NC). Least Sandpiper: 1 Nov. (8), 27 Nov. (5) CL (JHR), from (6) down to (1) 27 Dec. for period BL (JHR, HEP). Dunlin: 8 Nov. (7) (JHR), 11 Nov. (4) (HEP), 19 Nov. (8) (HEP), 27 Nov. (1) (JHR), all BL; 13 Dec. (2) PPL (ROH). Herring Gull: 19 Jan. (6) OHL seems the peak NA, few WR (KHD). Ring-billed Gull: 8 Dec. (6)

to 5 Jan. (211) WR (KHD), peak OHL (400) 26 Jan. (MLB). Bonaparte's Gull: (4-6) OHL except 3 Jan. (75) (MLB); 15 Nov. (4) PPL (ROH).

*Owls-Warblers:* Great Horned Owl: 9 Nov. (2) BT (RDH), 4 Jan. (1) RL (MLB). Long-eared Owl: 3 Jan. (1) H (VJW) plus many (NC), first report NA in 20 years. Ruby-throated Hummingbird: 1 Nov. (1) H (Mrs. TWC). Red-headed Woodpecker: (2) thru season BT (RDH), mid Nov.; (2) plus (3) young CV (SLM). Red-breasted Nuthatch: well above normal NA, 29 Nov. (20) CH (MLB), 17 Dec. and 31 Jan. (1) BT (RDH), (1-3) LD (RTH). Winter Wren: 22 Jan. (1) RL (AT) only report. Bewick's Wren: 17, 18 Jan. (1) LB (WmS), 31 Jan. (1) BT (RDH). Catbird: 3, 6 Nov. (1), 2 Jan. (1) LD (RTH). Brown Thrasher: many wintering reports with (1-2) WR (KHD), (1) H WB (HB), several at NA, (1) 20 Nov. LD (RTH). Robin: about 20 Dec. thru 20 Jan. a roost (800,000) S.W. Nashville; from BT Robbie Hassler says "we watched a mass migration 26 Dec. for one hour and twenty minutes". Kinglets: occasional records over area. Cedar Waxwing: a huge invasion, NA with many flocks (100-500, to (20) occasionally BT (RDH). Starling: (200,000) roosting with Robins NA in Jan. Myrtle Warbler: scarce over area with most reports being of single birds.

*Blackbirds-Sparrows:* Rusty Blackbird: 7 Nov. (1) RL (KAG, MLB), 9, 17 Jan. (1) H (AT), (18) wintering H PPL (ROH). Common Grackle. (10,000) 12 Jan. WR (KHD), "plentiful" BT (RDH), scarce NA. Indigo Bunting: 3 Nov. (2) TJ (MLB). Evening Grosbeak: "to (32) daily since 10 Dec." BT (RDH), (4-7) 14 Dec. thru 13 Jan. WB (HB), 19, 20 Jan. (1) LB Wm. Welty (*vide* WmS), 4 Jan (8), 28 Jan. (18) J. P. Mulhern (*vide* MLB) only report NA. Purple Finch: perhaps most ever NA with many flocks (50+) at feeders. (1-50) BT (RDH). Pine Siskin: numerous NA with many flocks (40+) and at some feeders for first time. American Goldfinch: below normal NA. Red Crossbill: 22-23 Nov. (9) BS (KAG, *et al.*), first middle Tenn. record. Savannah Sparrow: 27 Dec. (1) TJ (HEP). Oregon Junco: 7 thru 31 Jan. (1) (GRM), well photographed and seen by many (NC). Tree Sparrow: several reports (1-3) from 27 Dec. NA, with the largest being (10) during Jan. TJ (KAG). Chipping Sparrow: 27 Dec. (2) Bellevue (KAG, *et al.*) White-crowned Sparrow: 8 Nov. (3), 27 Nov. (100+), 21 Dec. (170), all BL (JHR); absent BT (RDH); few WB (HB). White-throated Sparrow: still declining entire area, unusual to have as many as (10) reported. Fox Sparrow: few NA, 24 Jan. (9) CH (JHR, MLB). Swamp Sparrow: scarce NA. Snow Bunting: 29 Nov. (2) near dam OHL Jack N. Carusos; seen regularly thru 25 Jan. by many TOS members; 31 Jan. only female found.

*Locations:* ACM—Ashland City Marsh, BS—Basin Springs, BL—Bush Lake, BT—Byrdstown, CL—Coleman's Lake, CV—Cookeville, CH—Craggie Hope, DRU—Duck River Unit, TNWR, LB—Lebanon, LD—Lilly Dale, ML—Murray Lane, NA, NA—Nashville Area, OHL—Old Hickory Lake, PPL, Percy Priest Lake, RL—Radnor Lake, RR—River Road, NA, TNWR—Tennessee National Wildlife Refuge, TJ—Two Jays Sanctuary, WB—Woodbury, WR—Woods Reservoir.

*Observers:* FA—Fred Alsop, MLB—Mike L. Bierly, HB—Mrs. Hoyte Brvson, GNB—Gary N. Burke, NC—Nashville Chapter, TWC—Mrs. T. W.

Clarke, KHD—Kenneth H. Dubke, AFG—Albert F. Ganier, KAG—Katherine A. Goodpasture, ROH—Roger O. Harshaw, RDH—Robbie and Dave Hassler, RTH—Roy T. Hinds, SLM—S. L. McGee, GRM—Mr. and Mrs. Geo. R. Miller, HCM—Harry C. Monk, FM—Fanny Murphy, HEP—Henry E. Parmer, JHR—John and Heather Riggins, WmS—William Senter, AT—Anne Tarbell, LOT—Laurence Trabue, VJW—Violet Jane Watkins, GBW—George B. Woodring.

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

EASTERN MOUNTAIN REGION—*Loon-Merganser*: Common Loon: 8 Nov. (4) WaL (PR), 22 Nov. (8) WaL (LRH). Horned Grebe: 8 Nov. (5) WaL (PR). Great Blue Heron: 8 Nov. (1) WaL (PR). Canada Goose: 31 Dec. (8) WaL (PR). Mallard: 22 Nov. (2) WaL (PR). Black Duck: 22 Nov. (54) WaL (LRH). Ring-necked Duck: 22 Nov. (2) WaL (PR), 21 Jan. (25) WiL (FWB). Lesser Scaup: 8 Nov. (20) WiL (PR), 21 Jan. (2) WiL (FWB). Common Goldeneye: 22 Nov. (5) WaL (PR). Bufflehead: 8 Nov. (18) WiL (PR), 22 Nov. (4) WaL (PR). Hooded Merganser: 22 Nov. (3) WaL (PR). Red-breasted Merganser: 22 Nov. (3) WaL (PR).

*Hawks-Sparrows*: Cooper's Hawk: 2 Nov. (1) UM (PR). Sharp-shinned Hawk: 11 Jan. (1) MC (CRS). Red-tailed Hawk: throughout November and December (1-2) HC (MS). Marsh Hawk: 2 Nov. (1) HC (MS). American Woodcock: 2 Nov. (2) UM (PR). Common Snipe: 13 Nov. (1) WiL (CRS). Great Horned Owl: 4 Dec. (2) MC (CRS). Hairy Woodpecker: 9 Nov. (1) RM (FWB), 5 Dec. (1) HC (MS). Brown Creeper: 9 Dec. (1) MC (CRS), throughout Jan. ECG (LRH). Catbird: throughout Jan. (1) E (LRH *et al.*) Brown Thrasher: throughout Jan. (1) E (LRH *et al.*) Hermit Thrush: 30 Nov. (1) HC (MS). Brewer's Blackbird: 22 Nov. (1) WaL (LRH). Evening Grosbeak: throughout period (11-75) E. Pine Siskin: throughout period (100's) RM (FWB). Fox Sparrow: 7-9 Dec. (2-3) HC (MS). Lincoln's Sparrow: 6 Nov. (1) EGC (LRH).

*Locations*: E—Elizabethton, EGC—Elizabethton Golf Course, HC—Heaton Creek, near Roan Mountain, RM—Roan Mountain, UM—Unaka Mountain, WaL—Watauga Lake, WiL—Wilbur Lake.

*Observers*: FWB—Fred W. Behrend, LRH—Lee R. Herndon, PR—Pete Range, CRS—Charles R. Smith, MS—Maxie Swindell.

CHARLES R. SMITH, Route 2 Johnson City 37601.

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**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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