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THE MIGRANT

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BREEDING BIRD FORAYS IN TENNESSEE'S UPPER CUMBERLAND REGION: PART I (DEKALB, PUTNAM, CUMBERLAND AND MORGAN COUNTIES)

Stephen J. Stedman 2675 Lakeland Drive, Cookeville, TN 38506 sstedman@tntech.edu

Edmund K. LeGrand 1631 Leffle Webb Road, Crossville, TN 38572 elegrand@frontiernet.net

Starting in 2008 the senior author (SJS) initiated a series of breeding bird forays in the Upper Cumberland region including 16 counties in Tennessee as well as 10 counties in Kentucky. This effort was intended to supplement prior breeding bird foray work and especially Breeding Bird Atlas work undertaken from 1986 to 1991 (Nicholson 1997), both to enhance coverage and to document ensuing changes in bird species distribution and abundance.

Here we present foray data from four of the 16 Tennessee counties in the first of a series of articles (Figure 1). The counties presented extend geographically from west to east, thereby emphasizing elevational differences among the counties; these differences will be highlighted in a summary article dealing with all 16 counties. DeKalb County lies about equally in the Central Basin (average elevation c. 180 m) and on the Highland Rim (average elevation c. 305 m); Putnam County extends from the edge of the Central Basin across the Highland Rim to the Cumberland Plateau (elevation range c. 520–580 m); and Cumberland and Morgan counties lie on the Cumberland Plateau. Cumberland and Morgan Counties have small mountains rising above the plateau, including Hinch Mountain (elevation c. 930 m) in the former and Frozen Head Mountain (elevation c. 1000 m) in the latter county.

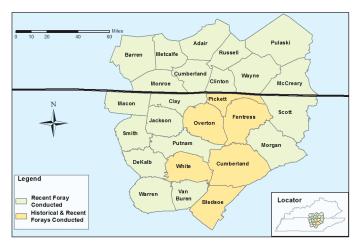


Figure 1. UCR Counties Where Forays Have Been Conducted.

METHODS

Each county was divided into survey blocks derived from United States Geological Survey topographic maps. Topographic maps are 7.5-minute quadrangles, each approximately 11.3 x 13.9 km, that were subdivided into six 5.7 x 4.6 km blocks (26.2 km²) as described by Nicholson (1997). These blocks were overlain on the county boundaries, with a typical county having 40–50 blocks (range 24–75 blocks). However, the county boundaries split many blocks such that many were considered as partial blocks or were completely excluded if little of the block lay within the county. Forays were conducted during late May or in June; the period of each foray varied from several days to two weeks, being mostly 3–7 days in length.

Each block was covered by a daylight counting period to record all individual birds seen or heard and to record evidence of breeding. The counting period could start no earlier than 0515 CDT and lasted exactly two hours; however, counting periods begun after 0930 CDT lasted exactly three hours. Thus, a typical full day might involve five counting periods (e.g., 0515-0715, 0720-0920, 0925-1125, 1145-1445, and 1500-1800). Partial blocks on the border of the county typically received only half of the allotted counting time. Some blocks had limited access and received correspondingly reduced coverage, and occasional blocks had no access and therefore no coverage. During the counting period only adults and non-fledgling birds were counted. Each observer/party was given the choice of how to allot time spent within the block as to locations and coverage method, such as when and where to drive, walk, or stop. No deliberate means of attracting birds, such as spishing or playing recorded bird vocalizations, were allowed during the counting period. However, once a species had been detected a recording could be used to confirm the identification.

Night counting periods lasting 15 or 30 minutes were conducted in selected blocks before dawn or after dusk wherein only designated "night birds" were counted. These were limited to woodcock, owls, and nightjars. While recordings or imitations to attract woodcocks and owls were permitted, calls for nightjars were not. If any of these species were found

during the daylight counting period, they would not be enumerated, but their presence and breeding status in the block would be noted.

In addition to counting periods, observers were encouraged to spend additional time within the blocks to determine the presence of species not yet recorded in the block and to find evidence of breeding. However, the highest evidence of breeding for each species was determined for the entire county rather than on a block-by-block basis. Only the presence of additional species in each block was recorded during non-counting periods. There were no restrictions on the use of spishing or recordings during non-counting periods.

The status of each species was classified as one of the following:

- I. Transient (TRANS), based on presumption of lack of breeding by the species;
- II. Possible Breeder (POSS), denoted by X-present during the foray;
- III. Probable Breeder (PROB), denoted by T-territorial (present at same site on dates at least a week apart; not usually possible), P-pair, A-agitated behavior (presumably near nest or young), and C-courtship or copulation; and
- IV. Confirmed Breeder (CONF) denoted by
 - a. DD-distraction display,
 - b. CN-adult carrying nest material,
 - c. NB-adult building nest,
 - d. UN-used nest,
 - e. FY-adult carrying food for young,
 - f. BG-begging young,
 - g. FL-fledged young,
 - h. FS-fecal sac removed from nest by adult,
 - ON-adult on nest incubating,
 - j. NE-nest with eggs, and
 - k. NY–nest with young.

While observers were encouraged to spend extra time in the blocks, coverage during forays emphasized completion of counting periods in each block, with secondary encouragement to conduct night counts. In each county surveyed, all blocks were successfully covered by daylight counting periods to the extent that block size and access allowed. However, night counting periods were sporadic.

RESULTS

The overall foray statistics for each county are presented (Table 1). The occurrence of each species, the highest level of breeding status found, and its abundance are also presented Appendix I. The data listing "Average/hour" and "% blocks present" are meant to be directly comparable across counties and to birding activity in general. In contrast, the data listing "Individuals counted" and "# blocks present" are dependent on the size of the county and/ or the extent of additional coverage outside the day or night counting periods. Similarly, the highest level of breeding status found in each county was affected both by total coverage and especially by additional hours and observers.

Table 1. Summarized Foray Effort and Results by County

County	<u>DeKalb</u>	Putnam	Cumberland	Morgan
	3-26 May 2008	6-12 June 2011	29 May - 4 June 2010	1-7 June 2014
Blocks in county	40	46	75	58
Blocks with any coverage	40	46	75	55
Blocks with complete coverage	27	32	63	34
Blocks with 2 hour				
counting period	16	28	46	28
Blocks with 3 hour				
counting period	11	4	17	6
Blocks with night coverage	10	13	26	15
Total daylight counting hours				
(all blocks)	87.25	85.5	158.25	98.5
Night counting hours	5	3.5	12.75	4.65
Additional hours	18.25	24.25	42.5	1.35
Observers	13	10	11	2
Total species	112	114	120*	105
Confirmed	47	69	70	29
Probable	7	8	14	7
Possible	52	33	32*	68
Transient	6	4	4	1
(Atlas species missed on Foray)	** (2)	(3)	(4)	(9)
(Foray species missed on Atlas)	** (13)	(8)	(15*)	(5)
Average # spp./2- and 3-hr bloc	ks 56.4	64.1	60.1*	51.4
Range of spp. # in 2- and				
3-hr blocks	36-70	46-81	42-77	28-61
Total individuals counted	12,649	19,957	22,911*	10,001
Individuals/hr: 2-hour				
counting period	148.7	239.7	147.2	110.1
Individuals/hr: 3-hr				
counting period	128.5	207.0	139.31*	81.8
Individuals/hr: 2- & 3-hr				
counting periods	138.4	233.9	144.41*	103.3
Individuals/hr: all daylight				
counting periods	144.5	232.6	143.51*	100.7

^{*} Includes "Brewster's" Warbler

^{**} Transient species excluded

DISCUSSION

Part of the methodology of these forays was based on that of Tennessee's Breeding Bird Atlas project, notably the division of the county into blocks and the use of similar breeding status codes. However, in contrast to the counting periods used here as a measure of abundance, the breeding bird atlas used mini-routes of 15 stops along roads (where possible), stops being approximately 800 meters (0.5 mile) apart and conducted for 3 minutes each. To improve efficiency during the atlas work, individuals were not counted; rather, the number of stops (out of 15) at which a species was recorded became the measure of abundance (Nicholson 1997). Because of the limited number of field observers, typically only one of the six blocks in a quadrangle was assessed for abundance during the atlas project. The atlas project placed considerable emphasis on covering blocks, as well as unique habitats, for as many species as possible and on obtaining the highest breeding code possible, such that some blocks had many hours of effort (e.g., observers "were encouraged to move on to another block after working 16–20 hours in the block and recording a reasonably complete species list", see Nicholson 1997, p. 6). Our forays, in contrast, emphasized completing a short counting period in every block where access was not an issue.

The counting period method of determining relative abundance suffers from the obvious limitations of relative detectability of species, variable and unreproducible coverage within an area, and variations in observer skill, limitations also seen with Christmas Bird Counts. However, the counting period counts, especially when multiple counts are averaged, have utility over time. That is, the number of individuals found per hour by competent field observers who can identify all species by sight and sound (without deliberate efforts to attract birds) is a valuable statistic. Likewise, the percentage of blocks covered by full 2- or 3-hour counting periods in which a species was found by competent observers is another statistic likely to hold up over time and place.

An additional advantage of the use of and emphasis on short counting periods involves observer satisfaction, hence participation. Nicholson (1997) ably documents the difficulty of finding and retaining atlas participants and how that difficulty affected methodology. More than one of our foray observers remarked on the enjoyment of the challenge of time-limited counts, trying to find common species all over again every few hours. On the other hand, it was less rewarding to spend long hours searching for higher breeding codes and additional species in blocks, all the while ignoring numbers and previously found species.

In establishing the standards for this series of forays, SJS chose not to limit counting periods to the early morning hours in order to cover every block in each county during as few days as possible. Arbitrarily, three hours in the afternoon was considered to be equivalent to two hours in the morning, with a count starting after 0930 becoming a 3-hr counting period. Data from these four counties show the total individuals in 3-hr counting periods to be somewhat less than those from 2-hr counting periods (Table 1). In retrospect, 4-hr afternoon (i.e., starting after 0930) counting periods would have been more comparable to 2-hr morning periods. However, observers would have completed fewer counting periods per day (both because time for five counting periods in one day would not have been available and because the extra field work in the afternoons would have been less rewarding per hour). As expected, woodland songbirds disproportionately diminished

during the afternoon 3-hr counts compared to the early morning 2-hr counts (data not shown).

There will always be breeding bird survey efforts in Tennessee, and observer participation will always be a limiting factor. We have found from experience that the foray methodology described here offers a feasible means of monitoring bird populations at a regional level. Equally important has been the recognition that participants have generally found the counting period method to be a satisfying experience.

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We dedicate this work to the memory of Barbara H. Stedman.

LITERATURE CITED

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Appendix I. Species Breeding Status and Abundance by County

DeKalb County 2008

Species	Breeding Status ¹					Maximum
		Hour ²	Present ³	Counted ⁴		(any block) ⁶
Canada Goose	POSSX	0.5	22%	46	9	24
Wood Duck	CONFFL	0.1	11%	7	4	3
Mallard	PROBP	0.1	7%	6	4	3
Northern Bobwhite	CONFFL	0.7	63%	60	22	8
Ruffed Grouse						
Wild Turkey	CONFFL	0.1	7%	8	8	3
Common Loon	TRANS	0.0	4%	2	1	2
Pied-billed Grebe						
Double-crested Cormorant						
Least Bittern						
Great Blue Heron	CONFON	0.1	15%	11	12	3
Green Heron	POSSX	0.1	22%	11	9	3
Yellow-crowned Night-Heron						
Black Vulture	POSSX	0.5	52%	46	22	7
Turkey Vulture	POSSX	2.2	78%	191	37	18
Osprey						
Mississippi Kite	TRANS	0.0	4%	1	1	1
Sharp-shinned Hawk	ATLAS					
Cooper's Hawk	POSSX	0.0	11%	4	4	1
Bald Eagle	CONFNY	0.0	0%	0	1	0
Red-shouldered Hawk	POSSX	0.1	15%	10	8	3
Broad-winged Hawk	POSSX	0.2	26%	16	10	3
Red-tailed Hawk	POSSX	0.2	26%	14	14	3
Killdeer	CONFFL	0.9	67%	80	27	9
Spotted Sandpiper	TRANS	0.0	0%	0	1	0
American Woodcock	POSSX	0.2	10%	1	1	1
Common Tern	TRANS	0.0	0%	0	1	0
Rock Pigeon	POSSX	0.4	22%	36	11	8
Eurasian Collared-Dove	POSSX	0.0	4%	2	1	2
Mourning Dove	CONFON	4.6	100%	398	38	35
Yellow-billed Cuckoo	POSSX	0.4	63%	32	24	4
Black-billed Cuckoo						
Barn Owl						
Eastern Screech-Owl	POSSX	0.4	20%	2	2	1
Great Horned Owl	POSSX	0.2	10%	1	1	1
Barred Owl	POSSX	1.2	40%	6	7	3
Common Nighthawk	POSSX	1.0	20%	5	3	3
Chuck-will's-widow	POSSX	4.8	80%	24	11	8
Eastern Whip-poor-will	POSSX	1.4	30%	7	3	5
Chimney Swift	CONFCN	1.0	74%	87	29	12
Ruby-throated Hummingbird		0.3	37%	22	15	4

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Belted Kingfisher	POSSX	0.0	4%	1	5	1
Red-headed Woodpecker	POSSX	0.1	4%	5	6	2
Red-bellied Woodpecker	CONFFL	1.5	96%	127	37	8
Downy Woodpecker	CONFFL	0.1	15%	11	16	3
Hairy Woodpecker	POSSX	0.1	11%	6	6	2
Northern Flicker	POSSX	0.1	33%	13	13	2
Pileated Woodpecker	POSSX	0.5	59%	46	25	8
American Kestrel	PROBP	0.2	37%	16	11	3
Eastern Wood-Pewee	POSSX	2.2	96%	189	39	11
Acadian Flycatcher	POSSX	1.7	74%	151	28	20
Willow Flycatcher						
Least Flycatcher						
Eastern Phoebe	CONFON	1.7	96%	147	37	17
Great Crested Flycatcher	CONFCN	0.9	81%	78	35	5
Eastern Kingbird	CONFFY	1.2	74%	105	33	7
Loggerhead Shrike	CONFNY	0.0	7%	3	2	2
White-eyed Vireo	POSSX	2.7	96%	234	38	24
Yellow-throated Vireo	POSSX	0.8	67%	66	29	6
Blue-headed Vireo						
Warbling Vireo	POSSX	0.0	4%	1	1	1
Red-eyed Vireo	POSSX	6.4	93%	562	37	49
Blue Jay	CONFFY	1.3	89%	115	35	10
American Crow	CONFFL	3.0	100%	263	38	22
Horned Lark	POSSX	0.0	4%	0	2	0
Northern Rough-winged						
Swallow	CONFON	0.9	59%	80	22	10
Purple Martin	CONFON	1.5	37%	132	14	21
Tree Swallow	POSSX	0.0	7%	4	4	2
Barn Swallow	CONFNY	4.0	89%	346	36	66
Cliff Swallow	CONFON	3.4	26%	295	11	83
Carolina Chickadee	CONFFL	1.0	85%	90	33	8
Tufted Titmouse	POSSX	2.6	93%	223	38	17
White-breasted Nuthatch	CONFUN	0.5	44%	47	17	7
Brown-headed Nuthatch						
House Wren	POSSX	0.1	19%	8	5	3
Carolina Wren	CONFFS	3.2	96%	282	39	17
Bewick's Wren	ATLAS					
Blue-gray Gnatcatcher	CONFON	2.6	89%	227	36	20
Eastern Bluebird	CONFFL	4.3	93%	372	38	29
Veery						
Wood Thrush	CONFFY	1.5	70%	133	28	14
American Robin	CONFFL	3.6	85%	318	35	51
Gray Catbird	POSSX	0.3	33%	23	13	5

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Brown Thrasher	CONFFY	1.0	74%	88	30	7
Northern Mockingbird	CONFFY	4.1	89%	354	37	39
European Starling	CONFNE	12.8	89%	1120	34	248
Cedar Waxwing	CONFCN	1.5	48%	132	24	22
Ovenbird	POSSX	0.4	26%	31	10	5
Worm-eating Warbler	POSSX	0.1	19%	13	6	5
Louisiana Waterthrush	CONFFY	0.3	26%	23	12	7
Golden-winged Warbler						
Blue-winged Warbler	CONFFY	0.3	30%	29	11	6
Brewster's Warbler						
Black-and-white Warbler	POSSX	0.1	19%	8	5	3
Prothonotary Warbler	CONFFS	0.0	7%	3	4	1
Swainson's Warbler						
Connecticut Warbler	TRANS	0.0	4%	1	1	1
Kentucky Warbler	POSSX	0.7	56%	60	23	8
Common Yellowthroat	POSSX	3.8	100%	330	39	30
Hooded Warbler	POSSX	0.7	56%	58	21	8
American Redstart	POSSX	0.2	22%	14	8	7
Cerulean Warbler	PROBT	0.4	33%	37	15	6
Northern Parula	POSSX	1.3	56%	112	29	14
Blackburnian Warbler						
Yellow Warbler	POSSX	0.1	11%	13	7	3
Blackpoll Warbler	TRANS	0.0	0%	0	1	0
Black-throated Blue Warbler						
Pine Warbler	POSSX	0.0	11%	3	3	1
Yellow-throated Warbler	PROBP	0.7	48%	62	21	7
Chestnut-sided Warbler						
Prairie Warbler	POSSX	1.2	74%	106	34	12
Black-throated Green Warbler	•					
Canada Warbler						
Yellow-breasted Chat	CONFFY	2.1	89%	186	37	15
Grasshopper Sparrow	POSSX	0.4	22%	31	9	8
Henslow's Sparrow	POSSX	0.1	7%	5	4	2
Chipping Sparrow	CONFNY	3.4	93%	293	38	26
Field Sparrow	CONFBG	4.5	100%	391	40	35
Song Sparrow	POSSX	1.9	70%	164	28	29
Eastern Towhee	POSSX	1.9	96%	168	40	11
Summer Tanager	POSSX	1.6	85%	139	38	9
Scarlet Tanager	POSSX	0.4	41%	36	19	5
Northern Cardinal	CONFFY	4.2	100%	370	40	20
Rose-breasted Grosbeak						
Blue Grosbeak	CONFCN	1.0	59%	89	29	11
Indigo Bunting	CONFFY	9.8	100%	854	40	78

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Dickcissel	CONFCN	0.6	19%	54	6	17
Red-winged Blackbird	PROBP	2.7	74%	234	31	23
Eastern Meadowlark	CONFFY	4.4	81%	385	33	54
Common Grackle	CONFFY	2.6	78%	224	32	43
Brown-headed Cowbird	CONFFL	1.7	96%	150	38	15
Orchard Oriole	PROBP	1.0	63%	90	27	12
Baltimore Oriole	POSSX	0.0	0%	0	1	0
House Finch	CONFFY	0.3	52%	30	15	4
American Goldfinch	PROBP	1.7	93%	147	37	15
House Sparrow	CONFON	1.8	59%	157	24	32
Total				12649		

- 1 See text for codes.
- 2 Includes all counting hours. Abundance data for nocturnal species (*) are based on effort during night counting periods only.
- 3 Based on blocks with complete 2- or 3-hr counting periods. Abundance data for nocturnal species (*) are based on blocks with night counting periods only.
- 4 Total individuals counted during all daylight counting periods or night counting periods.
- 5 Total number of blocks where found (includes effort conducted in addition to counting periods).
- 6 Counting periods only.

Putnam	County	2011

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Canada Goose	CONFFL	2.4	47%	204	18	115
Wood Duck	CONFFL	0.3	34%	22	15	3
Mallard	CONFFL	0.5	19%	43	7	20
Northern Bobwhite	POSSX	0.9	72%	73	30	7
Ruffed Grouse	CONFDD	0.0	3%	1	1	1
Wild Turkey	CONFFL	0.3	38%	24	18	5
Common Loon						
Pied-billed Grebe						
Double-crested Cormorant	TRANS	0.0	0%	0	1	0
Least Bittern						
Great Blue Heron	CONFNY	0.4	31%	33	17	7
Green Heron	PROBA	0.5	53%	40	25	4
Yellow-crowned Night-Heron	PROBP	0.0	3%	2	1	2
Black Vulture	POSSX	0.4	22%	34	9	14
Turkey Vulture	POSSX	1.3	66%	109	28	15
Osprey	ATLAS					
Mississippi Kite						
Sharp-shinned Hawk	ATLAS					
Cooper's Hawk	POSSX	0.1	16%	5	5	1

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Bald Eagle						
Red-shouldered Hawk	CONFBG	0.4	50%	32	26	4
Broad-winged Hawk	CONFBG	0.1	19%	11	9	4
Red-tailed Hawk	CONFBG	0.2	28%	17	13	3
Killdeer	CONFFL	0.7	72%	61	32	4
Spotted Sandpiper	TRANS	0.0	3%	1	1	1
American Woodcock*	POSSX	1.4	31%	5	4	2
Common Tern						
Rock Pigeon	CONFNY	0.8	22%	70	8	26
Eurasian Collared-Dove	PROBC	0.2	19%	14	7	4
Mourning Dove	CONFCN	8.1	97%	689	46	39
Yellow-billed Cuckoo	CONFFY	0.9	81%	81	37	8
Black-billed Cuckoo						
Barn Owl*	POSSX	0.0	0%	0	2	0
Eastern Screech-Owl*	POSSX	3.1	69%	11	10	2
Great Horned Owl*	CONFBG	4.6	77%	16	11	3
Barred Owl*	CONFBG	2.0	46%	7	9	2
Common Nighthawk*	POSSX	1.1	15%	4	2	3
Chuck-will's-widow*	POSSX	3.4	38%	12	7	4
Eastern Whip-poor-will*	PROBA	3.7	38%	13	8	6
Chimney Swift	POSSX	1.1	66%	96	33	8
Ruby-throated Hummingbird	POSSX	0.5	59%	43	25	4
Belted Kingfisher	POSSX	0.0	9%	4	4	2
Red-headed Woodpecker	CONFNY	0.5	53%	43	22	4
Red-bellied Woodpecker	CONFFL	2.2	91%	184	43	12
Downy Woodpecker	CONFFY	0.5	59%	43	26	4
Hairy Woodpecker	CONFFL	0.2	31%	14	14	2
Northern Flicker	CONFFL	0.8	59%	72	31	5
Pileated Woodpecker	CONFFY	0.7	75%	58	34	6
American Kestrel	POSSX	0.2	28%	15	13	2
Eastern Wood-Pewee	POSSX	2.0	100%	171	44	17
Acadian Flycatcher	CONFCN	1.8	63%	157	25	21
Willow Flycatcher						
Least Flycatcher	TRANS	0.0	0%	1	1	1
Eastern Phoebe	CONFFL	1.8	91%	152	42	9
Great Crested Flycatcher	CONFNY	0.9	84%	74	39	5
Eastern Kingbird	CONFFL	2.3	100%	197	44	17
Loggerhead Shrike	POSSX	0.0	3%	1	1	1
White-eyed Vireo	CONFFY	3.5	94%	296	45	23
Yellow-throated Vireo	POSSX	0.7	75%	58	34	4
Blue-headed Vireo	POSSX	0.2	13%	15	5	5
Warbling Vireo	ATLAS					
Red-eyed Vireo	CONFCN	8.9	100%	759	46	72

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block)6
Blue Jay	CONFNY	3.2	94%	271	44	18
American Crow	CONFFL	9.3	100%	792	45	58
Horned Lark	PROBC	0.0	0%	3	2	3
Northern Rough-winged						
Swallow	CONFFY	0.4	41%	37	21	4
Purple Martin	CONFNY	4.9	72%	423	31	90
Tree Swallow	CONFON	0.4	53%	38	24	4
Barn Swallow	CONFNY	6.6	94%	564	42	74
Cliff Swallow	CONFON	0.8	9%	71	5	50
Carolina Chickadee	CONFFL	3.4	94%	289	44	19
Tufted Titmouse	CONFFL	4.9	100%	423	46	21
White-breasted Nuthatch	POSSX	1.1	84%	95	38	12
Brown-headed Nuthatch	POSSX	0.0	0%	0	1	0
House Wren	CONFON	1.3	47%	115	19	31
Carolina Wren	CONFNE	5.7	100%	488	45	22
Bewick's Wren						
Blue-gray Gnatcatcher	CONFFY	2.0	84%	169	39	21
Eastern Bluebird	CONFNY	5.0	100%	424	43	24
Veery						
Wood Thrush	POSSX	1.5	63%	128	31	14
American Robin	CONFFY	8.2	94%	699	41	45
Gray Catbird	CONFFY	0.6	72%	54	30	5
Brown Thrasher	CONFFL	1.7	97%	147	42	11
Northern Mockingbird	CONFNY	6.6	97%	564	43	43
European Starling	CONFON	18.9	91%	1616	41	140
Cedar Waxwing	POSSX	0.6	53%	55	22	16
Ovenbird	POSSX	1.6	50%	139	26	16
Worm-eating Warbler	CONFFL	0.3	38%	25	14	3
Louisiana Waterthrush	POSSX	0.4	31%	35	15	7
Golden-winged Warbler						
Blue-winged Warbler	POSSX	0.2	13%	14	7	4
Brewster's Warbler						
Black-and-white Warbler	CONFFL	0.5	38%	39	19	5
Prothonotary Warbler	PROBT	0.0	9%	4	4	2
Swainson's Warbler						
Connecticut Warbler						
Kentucky Warbler	PROBP	1.2	63%	106	31	15
Common Yellowthroat	CONFFY	4.2	97%	361	45	23
Hooded Warbler	POSSX	1.5	59%	128	29	14
American Redstart	POSSX	0.5	19%	40	8	13
Cerulean Warbler	POSSX	0.5	16%	41	9	16
Northern Parula	POSSX	1.2	59%	106	25	17
Blackburnian Warbler						

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Yellow Warbler	POSSX	0.4	28%	30	16	4
Chestnut-sided Warbler						
Blackpoll Warbler						
Black-throated Blue Warbler	TRANS	0.0	3%	1	1	1
Pine Warbler	CONFFL	0.2	22%	13	10	2
Yellow-throated Warbler	POSSX	0.5	50%	46	22	7
Prairie Warbler	CONFFY	1.8	69%	157	34	13
Black-throated Green Warbler	POSSX	0.0	3%	2	2	1
Canada Warbler						
Yellow-breasted Chat	CONFFY	3.6	97%	309	45	21
Grasshopper Sparrow	CONFFY	0.3	31%	25	16	4
Henslow's Sparrow	POSSX	0.0	3%	1	1	1
Chipping Sparrow	CONFNY	5.3	100%	457	46	26
Field Sparrow	CONFFL	3.9	97%	337	44	24
Savannah Sparrow						
Song Sparrow	CONFFL	4.6	94%	394	41	27
Eastern Towhee	CONFFL	4.5	97%	383	45	20
Summer Tanager	CONFFY	1.4	91%	119	38	10
Scarlet Tanager	CONFFY	1.6	63%	134	27	12
Northern Cardinal	CONFFY	8.5	97%	724	45	47
Rose-breasted Grosbeak						
Blue Grosbeak	CONFCN	2.5	88%	212	36	19
Indigo Bunting	CONFFY	10.9	100%	929	46	53
Dickcissel	POSSX	0.2	16%	16	6	9
Red-winged Blackbird	CONFNY	9.6	94%	825	42	102
Eastern Meadowlark	CONFFL	3.8	94%	329	39	24
Common Grackle	CONFFL	4.0	88%	342	39	26
Brown-headed Cowbird	CONFFL	3.9	97%	336	44	31
Orchard Oriole	CONFFL	2.5	88%	216	41	14
Baltimore Oriole	CONFFY	0.1	6%	6	3	3
House Finch	CONFFL	2.9	72%	249	29	38
American Goldfinch	PROBC	3.4	94%	293	43	34
House Sparrow	CONFNY	5.6	88%	482	35	88
Total				19957		

¹ See text for codes.

² Includes all counting hours. Abundance data for nocturnal species (*) are based on effort during night counting periods only.

³ Based on blocks with complete 2- or 3-hr counting periods. Abundance data for nocturnal species (*) are based on blocks with night counting periods only.

⁴ Total individuals counted during all daylight counting periods or night counting periods.

⁵ Total number of blocks where found (includes effort conducted in addition to counting periods).

⁶ Counting periods only.

		iana Coun	•			
Species	Breeding Status ¹	_				Maximum
		Hour ²	Present ³	Counted ⁴		(any block)6
Canada Goose	CONFFL	1.5	30%	245	23	73
Wood Duck	CONFFL	0.3	27%	46	23	10
Mallard	PROBP	0.2	24%	39	15	6
Northern Bobwhite	PROBP	0.3	32%	50	26	6
Ruffed Grouse	CONFFL	0.0	5%	3	5	1
Wild Turkey	CONFFL	0.1	22%	23	20	4
Common Loon						
Pied-billed Grebe	ATLAS					
Double-crested Cormorant	TRANS	0.0	0%	1	1	1
Least Bittern						
Great Blue Heron	POSSX	0.1	14%	11	15	2
Green Heron	POSSX	0.1	13%	10	15	2
Yellow-crowned Night-Heron						
Black Vulture	POSSX	0.1	10%	9	10	2
Turkey Vulture	POSSX	0.8	49%	125	42	25
Osprey	ATLAS					
Mississippi Kite	TRANS	0.0	2%	1	1	1
Sharp-shinned Hawk	POSSX	0.0	2%	1	1	1
Cooper's Hawk	PROBC	0.0	5%	4	9	1
Bald Eagle	CONFNY	0.0	0%	0	1	0
Red-shouldered Hawk	PROBA	0.2	29%	25	26	4
Broad-winged Hawk	POSSX	0.2	30%	24	28	2
Red-tailed Hawk	CONFBG	0.1	22%	22	18	3
Killdeer	CONFFL	0.6	54%	91	39	8
Spotted Sandpiper	TRANS	0.1	5%	9	4	5
American Woodcock*	POSSX	0.2	12%	3	6	1
Common Tern						
Rock Pigeon	POSSX	0.4	21%	58	16	35
Eurasian Collared-Dove	POSSX	0.0	0%	0	1	0
Mourning Dove	CONFCN	5.1	94%	810	72	55
Yellow-billed Cuckoo	CONFCN	0.5	62%	77	52	5
Black-billed Cuckoo	ATLAS					
Barn Owl*	CONFNY	0.0	0%	0	1	0
Eastern Screech-Owl*	POSSX	1.4	50%	18	13	2
Great Horned Owl*	POSSX	0.4	15%	5	5	2
Barred Owl*	POSSX	1.3	42%	16	19	2
Common Nighthawk*	PROBC	0.2	12%	3	5	1
Chuck-will's-widow*	POSSX	2.4	31%	30	8	7
Eastern Whip-poor-will*	POSSX	9.8	85%	125	23	32
Chimney Swift	POSSX	0.8	60%	120	42	22
Ruby-throated Hummingbird	CONFCN	0.3	52%	47	42	3
Belted Kingfisher	PROBA	0.1	19%	13	12	2
	11102 11	0.1	22/0	10		-

Species	Breeding Status ¹	Average/ Hour²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block)6
Red-headed Woodpecker	CONFON	0.3	35%	53	29	8
Red-bellied Woodpecker	PROBP	1.7	95%	264	68	10
Downy Woodpecker	CONFFY	0.4	63%	69	50	3
Hairy Woodpecker	PROBP	0.2	29%	32	26	5
Northern Flicker	CONFNY	0.6	63%	91	50	7
Pileated Woodpecker	PROBP	0.7	75%	117	58	4
American Kestrel	PROBP	0.2	27%	26	21	3
Eastern Wood-Pewee	CONFNB	1.6	89%	251	69	16
Acadian Flycatcher	CONFON	0.6	41%	94	35	16
Willow Flycatcher	POSSX	0.1	8%	12	6	6
Least Flycatcher						
Eastern Phoebe	CONFNB	1.0	86%	158	62	8
Great Crested Flycatcher	CONFON	1.1	86%	170	64	9
Eastern Kingbird	CONFCN	0.8	71%	131	51	10
Loggerhead Shrike	ATLAS					
White-eyed Vireo	CONFFY	1.3	90%	209	66	20
Yellow-throated Vireo	CONFFY	0.7	84%	116	63	9
Blue-headed Vireo	CONFFY	0.7	41%	103	35	13
Warbling Vireo						
Red-eyed Vireo	CONFFL	6.8	100%	1074	75	54
Blue Jay	CONFFL	1.9	94%	307	73	11
American Crow	CONFFL	4.7	97%	745	73	33
Horned Lark	POSSX	0.0	10%	7	7	2
Northern Rough-winged						
Swallow	CONFON	0.7	60%	111	44	14
Purple Martin	CONFNY	2.1	54%	337	44	50
Tree Swallow	CONFON	0.7	48%	112	33	12
Barn Swallow	CONFON	4.5	84%	720	62	53
Cliff Swallow	CONFON	0.1	3%	8	2	6
Carolina Chickadee	CONFFL	2.0	95%	313	72	12
Tufted Titmouse	CONFBG	3.6	98%	569	73	22
White-breasted Nuthatch	CONFFY	0.9	83%	136	61	6
Brown-headed Nuthatch						
House Wren	CONFFY	0.9	46%	145	30	21
Carolina Wren	CONFFL	3.3	100%	519	75	21
Bewick's Wren						
Blue-gray Gnatcatcher	CONFFY	1.8	94%	289	72	16
Eastern Bluebird	CONFFL	3.2	94%	506	70	25
Veery	POSSX	0.0	0%	0	1	0
Wood Thrush	CONFFY	2.2	97%	344	68	17
American Robin	CONFFY	4.9	90%	782	65	64
Gray Catbird	CONFFS	0.5	54%	75	35	5
Brown Thrasher	CONFFL	1.5	94%	237	67	9

Species	Breeding Status ¹	Average/ Hour²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Northern Mockingbird	CONFFY	1.9	84%	299	60	16
European Starling	CONFFY	13.8	87%	2176	62	242
Cedar Waxwing	CONFNY	1.3	68%	202	55	12
Ovenbird	CONFFY	2.6	90%	406	71	25
Worm-eating Warbler	CONFFY	0.4	40%	62	33	4
Louisiana Waterthrush	CONFDD	0.2	32%	27	26	2
Golden-winged Warbler	POSSX	0.0	0%	0	1	0
Blue-winged Warbler	POSSX	0.0	3%	3	4	1
Brewster's Warbler	POSSX	0.0	2%	1	1	1
Black-and-white Warbler	CONFFL	1.2	76%	187	58	10
Prothonotary Warbler	POSSX	0.0	2%	1	1	1
Swainson's Warbler	PROBA	0.1	6%	8	4	3
Connecticut Warbler						
Kentucky Warbler	POSSX	0.4	51%	68	40	6
Common Yellowthroat	CONFFY	2.2	95%	344	69	15
Hooded Warbler	CONFDD	2.1	79%	331	66	23
American Redstart	POSSX	0.2	6%	29	5	18
Cerulean Warbler	POSSX	0.1	3%	9	3	5
Northern Parula	CONFFL	0.4	43%	64	37	7
Blackburnian Warbler	TRANS	0.0	2%	1	1	1
Yellow Warbler	POSSX	0.1	11%	15	8	3
Chestnut-sided Warbler	POSSX	0.1	3%	8	5	7
Blackpoll Warbler						
Black-throated Blue Warbler						
Pine Warbler	CONFFY	0.6	46%	94	40	8
Yellow-throated Warbler	CONFFL	1.0	83%	164	64	8
Prairie Warbler	CONFFY	1.6	75%	257	57	18
Black-throated Green Warbler	POSSX	0.2	22%	30	15	6
Canada Warbler						
Yellow-breasted Chat	CONFFY	2.5	94%	389	71	25
Grasshopper Sparrow	POSSX	0.2	22%	33	18	4
Henslow's Sparrow						
Chipping Sparrow	CONFNY	3.0	94%	467	71	21
Field Sparrow	CONFFY	2.5	87%	399	69	19
Savannah Sparrow	PROBA	0.0	3%	4	2	2
Song Sparrow	CONFFL	3.6	90%	566	69	24
Eastern Towhee	CONFFY	2.6	98%	409	72	14
Summer Tanager	PROBP	0.1	22%	19	15	3
Scarlet Tanager	CONFCN	1.7	83%	263	68	17
Northern Cardinal	CONFFY	4.0	100%	635	75	22
Rose-breasted Grosbeak	POSSX	0.0	2%	1	2	1
Blue Grosbeak	CONFFY	1.0	67%	160	51	14
Indigo Bunting	CONFCN	5.8	98%	914	75	28

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Dickcissel	POSSX	0.0	2%	1	1	1
Red-winged Blackbird	CONFFY	4.8	81%	763	60	90
Eastern Meadowlark	CONFFS	2.7	81%	428	59	50
Common Grackle	CONFFL	2.0	71%	313	50	29
Brown-headed Cowbird	CONFFL	1.9	87%	302	66	22
Orchard Oriole	CONFCN	0.9	68%	140	51	13
Baltimore Oriole	POSSX	0.1	8%	10	7	4
House Finch	CONFON	0.8	54%	124	38	10
American Goldfinch	PROBP	1.7	87%	265	67	11
House Sparrow	CONFNY	1.4	57%	224	43	28
Total				22913		

- 1 See text for codes.
- 2 Includes all counting hours. Abundance data for nocturnal species (*) are based on effort during night counting periods only.
- 3 Based on blocks with complete 2- or 3-hr counting periods. Abundance data for nocturnal species (*) are based on blocks with night counting periods only.
- 4 Total individuals counted during all daylight counting periods or night counting periods.
- 5 Total number of blocks where found (includes effort conducted in addition to counting periods).
- 6 Counting periods only.

Morgan	County	201	4

Species	Breeding Status ¹	_	% Blocks	Individuals		
		Hour ²	Present ³	Counted ⁴	Present ⁵	(any block)6
Canada Goose	CONFFL	1.1	26%	112	11	75
Wood Duck	CONFFL	0.1	18%	11	10	3
Mallard	POSSX	0.0	0%	2	1	2
Northern Bobwhite	POSSX	0.1	6%	6	3	3
Ruffed Grouse	POSSX	0.0	0%	0	1	0
Wild Turkey	CONFFL	0.1	6%	5	5	2
Common Loon						
Pied-billed Grebe						
Double-crested Cormorant	TRANS	0.1	9%	7	3	4
Least Bittern	ATLAS					
Great Blue Heron	POSSX	0.0	6%	3	3	1
Green Heron	PROBP	0.1	15%	13	9	3
Yellow-crowned Night-Heron						
Black Vulture	POSSX	0.2	18%	24	6	10
Turkey Vulture	POSSX	0.7	56%	70	28	14
Osprey	POSSX	0.0	3%	1	1	1
Mississippi Kite						
Sharp-shinned Hawk	ATLAS					
Cooper's Hawk	POSSX	0.0	9%	4	4	1

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Bald Eagle						
Red-shouldered Hawk	PROBC	0.2	35%	17	14	2
Broad-winged Hawk	POSSX	0.2	29%	16	14	3
Red-tailed Hawk	CONFNY	0.1	9%	5	7	1
Killdeer	POSSX	0.3	38%	28	15	3
Spotted Sandpiper						
American Woodcock*	ATLAS					
Common Tern						
Rock Pigeon	POSSX	0.5	9%	51	6	41
Eurasian Collared-Dove						
Mourning Dove	PROBC	2.5	94%	245	48	21
Yellow-billed Cuckoo	CONFFY	0.3	35%	28	17	3
Black-billed Cuckoo	ATLAS					
Barn Owl*						
Eastern Screech-Owl*	POSSX	0.6	13%	3	2	2
Great Horned Owl*	ATLAS					
Barred Owl*	POSSX	0.4	7%	2	1	2
Common Nighthawk*						
Chuck-will's-widow*	POSSX	5.6	60%	26	10	8
Eastern Whip-poor-will*	POSSX	10.3	87%	48	13	8
Chimney Swift	POSSX	0.6	53%	63	23	10
Ruby-throated Hummingbird	POSSX	0.2	26%	21	13	4
Belted Kingfisher	POSSX	0.1	12%	5	5	2
Red-headed Woodpecker	POSSX	0.1	9%	6	4	2
Red-bellied Woodpecker	POSSX	1.1	91%	105	42	7
Downy Woodpecker	CONFBG	0.2	32%	16	14	3
Hairy Woodpecker	POSSX	0.2	24%	15	10	4
Northern Flicker	POSSX	0.3	38%	25	18	3
Pileated Woodpecker	POSSX	0.4	53%	43	24	4
American Kestrel	PROBP	0.0	3%	3	2	2
Eastern Wood-Pewee	POSSX	1.4	82%	133	40	11
Acadian Flycatcher	POSSX	0.8	50%	76	30	10
Willow Flycatcher	POSSX	0.1	9%	9	4	4
Least Flycatcher						
Eastern Phoebe	CONFUN	1.3	88%	127	43	7
Great Crested Flycatcher	POSSX	0.7	68%	66	33	6
Eastern Kingbird	PROBP	0.5	62%	49	27	5
Loggerhead Shrike						
White-eyed Vireo	POSSX	2.1	91%	211	47	17
Yellow-throated Vireo	POSSX	1.1	85%	111	40	14
Blue-headed Vireo	CONFCN	0.4	38%	38	19	10
Warbling Vireo						
Red-eyed Vireo	POSSX	7.2	100%	707	55	42

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Blue Jay	POSSX	1.1	91%	108	44	6
American Crow	CONFFL	3.3	97%	322	53	28
Horned Lark	ATLAS					
Northern Rough-winged						
Swallow	POSSX	0.3	38%	30	14	4
Purple Martin	POSSX	0.7	59%	70	25	12
Tree Swallow	CONFON	0.7	56%	73	23	19
Barn Swallow	POSSX	2.5	76%	246	37	47
Cliff Swallow	CONFFY	0.7	6%	73	2	70
Carolina Chickadee	CONFBG	2.1	100%	203	50	10
Tufted Titmouse	POSSX	2.7	100%	265	53	12
White-breasted Nuthatch	PROBP	0.7	76%	69	36	6
Brown-headed Nuthatch						
House Wren	CONFON	0.1	15%	13	6	7
Carolina Wren	CONFFL	3.6	100%	357	52	18
Bewick's Wren						
Blue-gray Gnatcatcher	POSSX	1.8	97%	179	52	13
Eastern Bluebird	CONFFL	2.1	91%	205	44	12
Veery	ATLAS					
Wood Thrush	POSSX	1.4	85%	138	43	8
American Robin	CONFFY	2.6	74%	252	38	16
Gray Catbird	CONFFY	0.2	24%	17	13	3
Brown Thrasher	POSSX	0.9	74%	84	36	7
Northern Mockingbird	CONFFL	0.9	71%	88	33	9
European Starling	CONFFL	3.7	71%	369	35	60
Cedar Waxwing	POSSX	1.1	71%	105	35	8
Ovenbird	CONFFL	2.4	85%	233	40	22
Worm-eating Warbler	POSSX	0.2	32%	19	13	3
Louisiana Waterthrush	CONFFY	0.4	35%	39	26	7
Golden-winged Warbler	ATLAS					
Blue-winged Warbler						
Brewster's Warbler						
Black-and-white Warbler	POSSX	1.0	79%	98	38	8
Prothonotary Warbler						
Swainson's Warbler	POSSX	0.0	9%	4	3	2
Connecticut Warbler						
Kentucky Warbler	POSSX	0.6	71%	60	32	4
Common Yellowthroat	CONFFL	1.5	76%	144	42	9
Hooded Warbler	CONFFY	2.9	100%	289	51	23
American Redstart	POSSX	0.5	12%	45	8	14
Cerulean Warbler	POSSX	0.3	15%	27	8	14
Northern Parula	POSSX	1.3	76%	126	38	10
Blackburnian Warbler	POSSX	0.0	3%	1	1	1
	- 000 11	3.0	2 /0	*	-	*

Species	Breeding Status ¹	Average/ Hour ²	% Blocks Present ³	Individuals Counted ⁴		Maximum (any block) ⁶
Yellow Warbler	POSSX	0.0	6%	2	2	1
Chestnut-sided Warbler	ATLAS					
Blackpoll Warbler						
Black-throated Blue Warbler	POSSX	0.0	3%	1	2	1
Pine Warbler	POSSX	0.2	26%	20	14	3
Yellow-throated Warbler	POSSX	1.7	97%	169	52	9
Prairie Warbler	POSSX	1.3	79%	126	37	10
Black-throated Green Warbler	POSSX	0.9	29%	85	19	19
Canada Warbler	ATLAS					
Yellow-breasted Chat	POSSX	1.8	88%	176	41	15
Grasshopper Sparrow	POSSX	0.0	0%	2	2	1
Henslow's Sparrow	POSSX	0.0	0%	1	1	1
Chipping Sparrow	CONFFL	2.6	91%	253	47	15
Field Sparrow	CONFFL	0.9	76%	90	35	11
Savannah Sparrow	POSSX	0.0	6%	3	3	1
Song Sparrow	CONFFL	2.9	88%	288	45	29
Eastern Towhee	POSSX	1.2	79%	114	36	10
Summer Tanager	POSSX	0.0	3%	2	2	1
Scarlet Tanager	POSSX	1.2	82%	119	44	10
Northern Cardinal	POSSX	3.2	97%	311	51	17
Rose-breasted Grosbeak	POSSX	0.0	3%	2	1	2
Blue Grosbeak	POSSX	0.8	68%	81	31	9
Indigo Bunting	POSSX	4.7	100%	466	55	34
Dickcissel						
Red-winged Blackbird	CONFFY	2.3	79%	226	40	17
Eastern Meadowlark	POSSX	0.9	62%	87	28	7
Common Grackle	CONFFY	0.7	47%	69	21	12
Brown-headed Cowbird	POSSX	1.1	88%	112	38	11
Orchard Oriole	CONFFS	0.5	65%	53	28	4
Baltimore Oriole						
House Finch	POSSX	0.5	26%	47	13	21
American Goldfinch	PROBC	1.1	82%	106	39	16
House Sparrow	POSSX	0.8	59%	83	25	21
Total				10001		

¹ See text for codes.

² Includes all counting hours. Abundance data for nocturnal species (*) are based on effort during night counting periods only.

³ Based on blocks with complete 2- or 3-hr counting periods. Abundance data for nocturnal species (*) are based on blocks with night counting periods only.

⁴ Total individuals counted during all daylight counting periods or night counting periods.

⁵ Total number of blocks where found (includes effort conducted in addition to counting periods).

⁶ Counting periods only.

ROUND TABLE NOTE

WHITEVILLE BREEDING BIRD SURVEY - The North American Breeding Bird Survey (BBS) was established in 1966. Jointly coordinated by the United States Geological Survey's Patuxent Wildlife Research Center and Canada Wildlife Service's National Wildlife Center, the survey consists of more than 4,100 pre-established individual routes across the United States, Canada and Mexico. There are 56 routes in Tennessee, but seven of these are currently inactive. Each route consists of 50 stops, .8 km apart. Routes are surveyed between May and July. Observers record all adult birds seen and heard during three minutes at each stop. No nestlings, juvenile or immature birds are recorded. On 9 June 2016, I completed the Whiteville (Hardeman County) BBS Route #82006 for the 20th consecutive year. The route had been run for 30 consecutive years before me, for a total of 50 years.

Since 1997, habitat conditions have remained remarkably static on this route except for logging or elimination of hedgerows for additional farm acreage at a few stops. These changes were most pronounced in 2015 and 2016.

Species totals have ranged from a low of 60 (2015) to a high of 68 (2006). Since 1997, the average number of species observed on the route is 64. The total number of individuals I detected on the route has ranged from a low of 670 (in year 2016) to a high of 1,228 (in year 2000). The average number of individuals has been 891. My cumulative species list is 95, while the cumulative list for the 50 years of the survey is 103. Species detected once or twice in the first 30 years of the Whiteville survey but never recorded by me include Cattle Egret (*Bubulcus ibis*), Yellow-crowned Night-Heron (*Nyctanassa violacea*), Common Nighthawk (*Chordeiles minor*), Fish Crow (*Corvus ossifragus*), Bewick's Wren (*Thryomanes bewickii*), Black-and-White Warbler (*Mniotilta varia*), Swainson's Warbler (*Limnothlypis swainsonii*) and Yellow-throated Warbler (*Setophaga dominica*).

While some difference in annual totals can be traced to weather conditions in a given year, most stem from a significant decline in grassland species. Chief among them are Northern Bobwhite (*Colinus virginianus*), Indigo Bunting (*Passerina cyanea*), Dickcissel (*Spiza americana*), Red-winged Blackbird (*Agelaius phoeniceus*) and Eastern Meadowlark (*Sturnella magna*). Other declining species along this route include Yellow-billed Cuckoo (*Coccyzus americanus*), Eastern Wood-Pewee (*Contopus virens*), Blue Jay (*Cyanocitta cristata*) and Pine Warbler (*Setophagus pinus*). Loggerhead Shrike (*Lanius ludovicianus*), which was recorded nearly every year for the first three decades of the survey, has essentially been eliminated, last detected in 1999. However, House Sparrow (*Passer domesticus*), while still regular, is on the decline.

The only species that have shown a significant population increase are Canada Goose (Branta canadensis), Black Vulture (Coragyps atratus) and Turkey Vulture (Cathartes aura). The most common species on the route are Mourning Dove (Zenaida macroura), Red-bellied Woodpecker (Melanerpes carolinus), White-eyed Vireo (Vireo griseus), American Crow (Corvus brachyrhynchos), Barn Swallow (Hirundo rustica), Carolina Wren (Thyrothorus ludovicianus), Eastern Bluebird (Sialia sialis), Northern Mockingbird (Mimus polyglottos), European Starling (Sturnus vulgaris), Common Yellowthroat (Geothlpis trichas), Northern Cardinal (Cardinalis cardinalis) and Indigo Bunting (Passerina cyanea). Species I've seen or

heard only once or twice are Mallard (Anas platyrhynchos), Pied-billed Grebe (Podilymbus podiceps), Little Blue Heron (Egretta caerulea), Eurasian Collared Dove (Streptopelia decaocto), Eastern Screech-Owl (Megascops asio), Loggerhead Shrike, Warbling Vireo (Vireo gilvus), Tree Swallow (Tachycineta bicolor), Cedar Waxwing (Bombycilla cedrorum), American Redstart (Setophaga rutcilla), Lark Sparrow (Chondestes grammacus) and Grasshopper Sparrow (Ammodramus savannarum).

Dick D. Preston, Munford, Tipton County, Tennessee

REPORT OF THE TENNESSEE BIRD RECORDS COMMITTEE, 2017

Ruben Stoll, Secretary 899 Miller Rd. Pleasantville, TN 37033

It is the responsibility of the Tennessee Bird Records Committee (TBRC) to maintain the Official List of the Birds of Tennessee and to ensure that sightings of rare species are documented accurately and adequately for posterity. This list, along with the by-laws of the committee and information on submitting documentation, may be viewed on the TBRC section of the TOS website. Members of the committee are Phillip Casteel, Ron Hoff, Daniel Jacobson, David Kirschke, Chris Sloan, Ruben Stoll and Terry Witt. The following is a report of the actions of the TBRC as of August 2016.

The committee members wish to thank those who submitted documentation; if you made a submission that is not included in the following report it is still under review.

Cinnamon Teal (Anas cyanoptera)

Written documentation and photograph of 1 male submitted by Leo Schrock, New Johnsonville Waste Treatment Plant, Humphreys County, 29 March 2013.

Accepted 6-0.

Purple Gallinule (Porphyrula martinica)

Written documentation and photograph, submitted by Ruben Stoll, Duck River Unit, TNWR, Humphreys County, 28 April 2013. Accepted 6-0.

Swallow-tailed Kite (*Elanoides forficatus*)

Written documentation and photograph, submitted by Ruth Schrock, Lobelville, Perry County, 18 May 2015. Accepted 6-0.

Black-legged Kittiwake (Rissa tridactyla)

Written documentation and photograph of 2 immatures submitted by Ruben Stoll and Alan Troyer, Pickwick Dam, Hardin County, 30 November 2015. Accepted 6-0.

Lesser Goldfinch (Carduelis psaltira)

Written documentation and photograph of 1 male submitted by Mark Greene, Reelfoot Airpark Campground, Lake County, 5 January 2016. This is a first state record. Accepted 6-0.

Snow Bunting (*Plectrophenax nivalis*)

Written documentation and photograph submitted by Mark Greene, Highway 45W and Old Dyersburg Road, Gibson County, 22 January 2016. Accepted 6-0.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

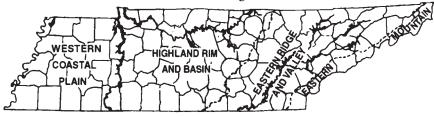
Written documentation of 1st year male submitted by Mark Greene, Trimble Road, Dyer County, 26 January 2016. Accepted 6-0.

Painted Bunting (Passerina ciris)

Written documentation of 1 female submitted by Jamin Beachy, 1235 Delano Road, Polk County, 24 April 2016. Accepted 6-0.

THE SPRING SEASON





1 March - 31 May 2016

The season began significantly warmer than average in March, spurring early northward movement by migrants. The remainder of the period saw near normal temperatures, except that early April was cooler than normal in East Tennessee. Rainfall amounts in March varied widely across the state from a record high at Memphis to record low in the Tri-cities. Precipitation over April and May ranged from near normal to deficient by a couple inches.

Rarity highlights this spring included Brown Pelican, Swainson's Hawk, Snowy Plover, Inca Dove, and Great-tailed Grackle. Also notable were White-winged Dove and Nelson's Sparrow in two regions each, long with Black-bellied Whistling-Duck and Anhinga in Middle Tennessee. The shorebird flight was good with Black-necked Stilts and American Avocets in three regions each, including a massive fallout of Willets near Nashville. Numbers of American White Pelicans continue to linger well into spring.

What's happening with Common Mergansers in East Tennessee? Pairs lingered there into April or May on several rivers or streams in the two eastern regions, suggestive of breeding. The species breeds locally in North Carolina and Virginia, and did so historically in Tennessee.

Away from their limited breeding range in the mountains, Alder Flycatchers were encountered in the other three regions. Scissor-tailed Flycatchers continued at several traditional sites, as did Western Kingbirds in Shelby County. A Bell's Vireo at Fort Campbell and a Bachman's Sparrow in Lawrence County indicate that these species are barely holding on in the state, but no Bewick's Wrens were reported. Common Ravens nesting on two man-made structures in East Tennessee were noteworthy.

Standard Abbreviations

ad - adult max - maximum count
Co - County m.ob. - many observers
Cr - Creek Mtn - Mountain

ers - earliest reported sighting NWR - National Wildlife Refuge

et al. - and others R - River SP - State Park

L - Lake WMA - Wildlife Management Area

lrs - latest reported sighting yg - young

WESTERN COASTAL PLAIN REGION - - March was the month of extremes. The region experienced three times its normal rainfall, with the greater Memphis area dealing with a record 16 inches, 3 inches more than the previous high for the month. March was also warmer than the historic average, being just a bit more than 4.5° above normal. In contrast, both April and May had little deviation from historic norms of temperature or precipitation.

The season produced a number of interesting sightings, with Snowy Plover, Inca Dove, Great-tailed Grackle, and Black-throated Blue Warbler leading the list. Hudsonian Godwit, White-winged Dove, Black-billed Cuckoo, and Nelson's Sparrow are always a treat. Thanks to all those who reported their sightings, especially those who provided photographs.

Duck - Rail: Black-bellied Whistling-Duck: 26 Mar (20) Ensley (Georges McNeil). Ross's Goose: 5 Mar (1) Coffee Bottoms (RS, VS), lrs. Red-throated Loon: 6 Apr (1 ad) Pace Point (RS). Pacific Loon: 26 Mar (1) Britton Ford, Henry Co (RS), continuing since Oct; 6 Apr (2 im) Pace Point (RS), new late spring date in state. Horned Grebe: 16 Mar (1) Coon Valley Rd (DDP), rare in Co. Eared Grebe: 3 Mar (1) Robco L, Shelby Co (RS); 24 Mar (2) Pickwick L (RS). Double-crested Cormorant: 12 Apr (1, carrying stick) Macedonia Bottoms, Gibson Co (MAG), possible nesting. Anhinga: 12 Apr (1) Eagle L, Shelby Co (RS, VS); 13 / 19 Apr (1) Macedonia Bottoms, Gibson Co (MAG); 7 May (18, flying over) Reelfoot L, Lake Co (RS, VS). American White Pelican: 3 Mar (575, flying over) Eagle L, Shelby Co (RS, VS), max. Snowy Egret: 15 Apr (1) Gibson Co (MAG), ers; 8 May (5) Great River Rd, Dyer Co (Virginia Reynolds). Cattle Egret: 14 Apr (1) Black Bayou (MAG), ers. Glossy Ibis: 13 Apr (1) Black Bayou (MAG); 8 May (1) Great River Rd, Dyer Co (Virginia Reynolds). *Plegadis* sp.: 2 Apr (2) Black Bayou (Glen Criswell). Harlan's Red-tailed Hawk: 3 Mar (1) Crockett Co (MAG), present all winter. Golden Eagle: 18 Mar (1 im) Lake Co (MAG). Virginia Rail: 25 Apr (1) Gibson Co (MAG); 15 May (1) Ensley (Jon Graham fide RS). **Sora**: 15 May (7) Ensley (RS, AT), max.

Shorebirds: Black-necked Stilt: 15 Mar (7) Mud L, Lake Co (MAG), ers; 5 Apr into May (4-18) Phillipy Pits (MAG); 28 Apr (2) Buckelew Slough, Obion Co (MAG); 14 May (79) Ensley (RS, VS), max. American Avocet: 13-14 May (2-4) Ensley (Georges McNeil, m.ob.). American Golden-Plover: 5 Mar (8) Coffee Bottoms (RS, VS), ers; 14 Apr (1500+) near Ridgely, Lake Co (MAG), max. SNOWY PLOVER: 31 Mar (1) Ben Parker Rd, Lake Co (MAG), 5th state record. Greater Yellowlegs: 13 Apr (356) Phillipy Pits (MAG), max. Willet: 13-14 / 28 Apr (1) Phillipy Pits (MAG), different birds. Lesser Yellowlegs: 13 Apr (550) Phillipy Pits (MAG), max. Upland Sandpiper: 16 Mar (1) Coon Valley Rd (DDP); 1 Apr (1) Lake Co (MAG). Marbled Godwit: 26 May (2) Phillipy Pits (MAG). Hudsonian Godwit: 26 May (1) Phillipy Pits (MAG). Ruddy Turnstone: 14 May (1) Ensley (RS, VS); 26 May (1) Tiptonville Bar, Lake Co (MAG). Stilt Sandpiper: 12 Apr / 14 May (3 / 17) Ensley (RS, VS), ers / max. **Dunlin**: 13-14 Apr / 6-7 May (1-10) Phillipy Pits (MAG, m.ob.). **Baird's** Sandpiper: 15 Mar (1) Mud L, Lake Co (MAG); 14 Apr (2) near Ridgely, Lake Co (MAG); 14 May (1) Ensley (RS, VS). Least Sandpiper: 14 May (1700) Ensley (RS, VS), max. Whiterumped Sandpiper: 4 May (12) Coffee Bottoms (RS, VS); 15 May (125) Ensley (RS, VS). Pectoral Sandpiper: 5 Mar (7) Coffee Bottoms (RS, VS), ers; 14 Apr (1056) Phillipy Pits

(MAG), max. **Semipalmated Sandpiper**: 14 May (550) Ensley (RS, VS), max. **Short-billed Dowitcher**: 13 Apr (3) Phillipy Pits (MAG), ers. **Long-billed Dowitcher**: 5 / 24 Mar (1) Coffee Bottoms (RS, VS); 5-14 Apr (3-13) Phillipy Pits (MAG); 30 Apr (6) Coon Valley Rd (DDP), first Tipton Co record. **Wilson's Phalarope**: 26 Mar / 12 Apr / 22 Apr / 14 May (1-2) Ensley (Georges McNeil, Hal Mitchell, RH, DDP, RS); 13 Apr (1) Thorny Cypress WMA, Dyer Co (MAG).

Gull - Falcon: Lesser Black-backed Gull: 12 Mar (1) Pickwick L (DJS). Least Tern: 14 May (11) TVA Lake, Shelby Co (RS, VS). Black Tern: 4 May (1) Pickwick L (RS, VS), ers. White-winged Dove: 24 May (1) Kenton, Gibson Co (MAG). INCA DOVE: 27 May (1) Ensley (DJS), about the 6th state record. Black-billed Cuckoo: 27 Apr (1) Boothspoint (MAG); 3 May (1) Munford, Tipton Co (DDP); 20 May (1) Ensley (RH). Barred Owl: 16 Apr (1, fledgling) Overton Park, Memphis (Michael Collins fide Martha Waldron), new early date for fledgling in state. Chimney Swift: 2 Mar (3 / 2) Memphis / Shelby Farms (Judy Dorsey / Martha Waldron), ers. Merlin: 1 Apr (1) Lake Co (MAG); 4 May (1) Coffee Bottoms (RS, VS). Peregrine Falcon: 12 Apr (1) Ensley (RS, VS); 10 May (1) Pickwick L (RS, VS).

Flycatcher - Thrush: Acadian Flycatcher: 19 Apr (1) Crockett Co (MAG), ers. Alder Flycatcher: 17 May (1) Lakeland, Shelby Co (Gaynell Perry). Western Kingbird: 6 May (4 pairs) President's Island / (3) North Treatment Plant, both in Shelby Co (RS, VS). Warbling Vireo: 13 Apr (1) White Lake, Dyer Co (MAG), ers. Philadelphia Vireo: 27 Apr (1) Dyer Co (MAG), ers. Fish Crow: 24 Mar (16) Pickwick L (RS). Brown-headed Nuthatch: 10 May (2, feeding yg) Pickwick L (RS, VS). Brown Creeper: 29 Apr (1, singing) Gooch WMA, Obion Co (MAG), in tupelo-cypress swamp, possible breeder. Sedge Wren: 15 Apr (1) Gibson Co (MAG). Swainson's Thrush: 12 Apr (1) Shelby Forest (RS, VS), ers. Wood Thrush: 26 Mar (1) Wolf R, Shelby Co (RH), new early date in state.

Warbler - Grackle: Blue-winged Warbler: 12 Apr (1) Shelby Forest (RS, VS), ers. Prothonotary Warbler: 12 Apr (2) Shelby Forest (RS, VS), ers. Swainson's Warbler: 18 Apr (1) Crockett Co (MAG), ers. Mourning Warbler: 9 May (1) Wolf R, Shelby Co (RH). Cape May Warbler: 21 Apr (2) Pace Point (RS, VS), ers. Northern Parula: 9 Mar (1) Munford, Tipton Co (DDP), new early arrival date in state. Blackpoll Warbler: 15 Apr (1) Gibson Co (MAG), ers. Black-throated Blue Warbler: 29 Apr (1 male) Obion Co (MAG), rare in west TN, especially in spring. Palm Warbler: 29 Apr (1, "Yellow Palm") Obion Co (MAG); 29 Apr (225) Boothspoint (RS, VS), max. Wilson's Warbler: 28 Apr (1) Lake Co (MAG), ers. Vesper Sparow: 3 Mar (2) Horn's Bluff Refuge, Crockett Co (MAG), ers. Lark Sparrow: 15 Apr thru season (1-2 at 5 sites) Gibson Co (MAG). Henslow's Sparrow: 27 Apr (1) Thorny Cypress WMA, Dyer Co (MAG); 6 May (4) Ensley (Fred Alsop, Kevin Brooks). Nelson's Sparrow: 15 May (1) Ensley (RS, VS). Scarlet Tanager: 12 Apr (1) Shelby Forest (RS, VS), ers. Painted Bunting: 25 Apr / 6 May (1 / 2, males) Ensley (DDP, RH / RS, VS). Dickcissel: 21 Apr (1) Pace Point (RS, VS), ers. Western Meadowlark: 7 Mar (8) Obion Co (MAG); 7 Mar (1) Coon Valley Rd (DDP). Brewer's Blackbird: 3 Mar (50) Crockett Co (MAG). GREAT-TAILED GRACKLE: 27 Apr (male and female) Boothspoint (MAG), female seen next day (DDP); 28 May (1 male) Ensley (David Chaffin); 3rd and 4th state records, all along Mississippi R.

Locations: Black Bayou - Lake Co; Boothspoint - Dyer Co; Coffee Bottoms - Hardin Co; Coon Valley Road - Tipton Co; Ensley - Shelby Co; Pace Point - Henry Co; Phillipy Pits - Lake Co; Pickwick L - Hardin Co; Shelby Forest - Shelby Co.

DICK D. PRESTON, 261 Sassafras Circle, Munford, TN 38058. dickpreston@rittermail.com

HIGHLAND RIM AND BASIN REGION - - Weather in Middle Tennessee this spring was unusually warm, with March being nearly 6° F above normal. April and May also had slightly above average temperatures. March started off the season with slightly above normal precipitation, but things soon turned dry with April having a 2 inch deficit in rainfall and May having a three inch deficit. Migration was productive in part due to birders being active and exploring new areas in the region. In March a large concentration of Western Meadowlarks was found, along with Red-throated and Pacific Loons continuing from the winter season. April brought Tricolored Heron, Glossy Ibis, Swainson's Hawk, and Whitewinged Dove. Also in April, a new high count for Willets in the state was set when 330 were found near the dam at Old Hickory Lake. In May, Black-bellied Whistling-Duck, Anhinga, Least Bittern, Bachman's Sparrow, and Nelson's Sparrow were observed.

Duck - Rail: Black-bellied Whistling-Duck: 3 May (1) Old Hickory L (Pam Haas, Justin Hiltner). Greater White-fronted Goose: 4 May (1) Cornelia Fort Airpark (MS et al.), late. Ross's Goose: 4 Mar (1) Hillsboro Pond (SZ). Cackling Goose: 26 Mar (1) Clarksville (JH). Gadwall: 2 May (2) Hillsboro Pond (CW), lrs. Greater Scaup: 3 Mar (8) Woods Reservoir (CW); 23 Mar (2) Edgar Evins SP (Mark Taylor); 28 Apr (1) Dickson Co (RS, VS). Redthroated Loon: 2 Mar (1) Bruton Branch, Pickwick L, Hardin Co (RS); 4-9 Mar (1-2) Percy Priest L (RHC, Jan Shaw, m.ob.). Pacific Loon: 2-12 Mar (1-2) Bruton Branch, Pickwick L, Hardin Co (RS, DJS); 3 Mar (1) Woods Reservoir (CW); 5-9 Mar (1-2) Percy Priest L (PDC, MS, m.ob.). Common Loon: 20 May (3) Old Hickory L (CA), lrs. Horned Grebe: 27 May (1) Edgar Evins SP (Mark Taylor), Irs. Anhinga: 17 May (5, flying over) Perry Co (RS). American White Pelican: 3 Mar (34) Woods Reservoir (CW); 8 Mar (14) Old Hickory L, Wilson Co portion (Ann Shapiro); 12 Mar (200+, flying over) Palmyra, Montgomery Co (SY); 15 Mar (191) Percy Priest L (RHC); 16 Mar (200, flying over) Goodlettsville, Davidson Co (Tarcila Fox). American Bittern: 15 Mar (1) Fort Campbell (DMo); 30 Mar (1) Smith Co (VS, John Foster); 2 Apr (1) Duck R Unit (RS); 3 Apr (1) Perry Co (RS); 4 Apr (1) Lascassas, Rutherford Co (Steve Buckner, photo); 2 May (1) Bark Camp Barrens, Coffee Co (CW). Least Bittern: 17 May (1) Perry Co (RS). Snowy Egret: 8 Apr (2) Clarksville (JH); 24 Apr (1) Estill Springs, Franklin Co (Dan Snell); 26 Apr (1) Savannah Bottoms (DJS); 30 Apr (1) Cornelia Fort Airpark (MS et al.); 14 May (1) Shelby Park and Bottoms (PDC, MS); 27 May (1) Cross Cr NWR (VS). Little Blue Heron: 15 Apr (1) Cornelia Fort Airpark (Justin Hiltner); 4 May (1) Cross Cr NWR (SY). Tricolored Heron: 4 Apr (1) Cornelia Fort Airpark (Justin Hiltner, m.ob.). Cattle Egret: 27 Mar (1) Percy Priest L (SZ); 28 Mar (3) Franklin Co (Dale Swant); 12 Apr (2) Bell's Bend, Davidson Co (FF); 30 Apr (1) Cornelia Fort Airpark (MS et al.); 14 May (1) Shelby Park and Bottoms (PDC, MS). Glossy Ibis: 26-29 Apr / 14 May (1-2) Duck R Unit (RS, VS, m.ob.). Mississippi Kite: 22 Apr (1) White Oak Ridge (AT); 4 May (6) Hardin Co (RS, VS); 12 May (1) Duck R Unit (RS, VS). Northern Harrier: 5 May (1) Fort Campbell (DMo), Irs. Broad-winged Hawk: 22 Apr (317) White Oak Ridge (RS, AT), large number for spring. SWAINSON"S HAWK: 13 Apr (1 im) White Oak Ridge (RS), about the 12th state record. Virginia Rail: 4 May (1) Savannah Bottoms (RS, VS). Sora: 2 May (1) Davidson Co (PDC, MS); 2 May (1) Fort Campbell (JH); 4 May (2) Savannah Bottoms (RS, VS); 18 May (1) Perry Co (VS).

Shorebirds: Black-necked Stilt: 27 Mar / 26 Apr (2) Duck R Unit (RS et al.). American Avocet: 22 Apr (2) Hillsboro Pond (Dale Swant); 30 Apr (30) Old Hickory L (CA, SZ, MS, PDC, m.ob.). Black-bellied Plover: 30 Apr (1) Old Hickory L (MS, PDC); 14 / 22 May (11 / 7) Duck R Unit (RS, VS). American Golden-Plover: 13 Mar (18) Perry Co (RS); 16 Mar (1) Eagleville, Rutherford Co (CA); 24 Mar - 26 Apr (1-12) Duck R Unit (RS et al.). Semipalmated Plover: 22 May (156) Duck R Unit (RS), max. Spotted Sandpiper: 31 Mar (1) Old Hickory L (PDC), ers. Solitary Sandpiper: 18 Mar (1) Duck R Unit (VS), ers. Willet: 25 Apr (8) Murfreesboro (Nolan Walker, CW, photo); 30 Apr (330) Old Hickory L (CA, MS, PDC, m.ob.), new high count for state. Upland Sandpiper: 12 May (1) Duck R Unit (RS, VS). Stilt Sandpiper: 11-26 Apr (1-2) Duck R Unit (RS). Dunlin: 16-26 Apr / 22 May (1-6) Duck R Unit (RS). White-rumped Sandpiper: 21 Apr - 22 May (1-30) Duck R Unit (RS, VS); 4 May (12) Hardin Co (RS, VS); 17 May (2) Perry Co (RS); 27 May (8) Cross Cr NWR (VS). Pectoral Sandpiper: 27 Mar (775) Duck R Unit (RS et al.), max. Semipalmated Sandpiper: 17 May (245) Perry Co (RS), max. Short-billed Dowitcher: 26 Apr / 12 May (3 / 5) Duck R Unit (RS). Long-billed Dowitcher: 16-26 Apr (2-46) Duck R Unit (RS); 27 Apr (3) marsh on Walter S. Davis Blvd, Nashville (CA, MS, FF). American Woodcock: 24 Mar (5) Fort Campbell (DMo).

Gull - Falcon: Franklin's Gull: 30 Apr (1) Old Hickory L (Chris Sloan, m.ob.). Caspian Tern: 27 Mar (2) Duck R Unit (RS et al.) and (2) Land Between the Lakes, Stewart Co (JH), ers. Black Tern: 18 May (1) Old Hickory L (Melinda Welton). Common Tern: 20 May (2) Duck R Unit (RS, VS). White-winged Dove: 28 Apr (1, at feeder) Rockvale, Rutherford Co (Kristy Baker, m.ob.); 14 May (1) Wilson Co (Greg Tomerlin). Black-billed Cuckoo: 21 Apr (1) Perry Co (Daniel Kinsinger); 27 Apr (1) Land Between the Lakes, Stewart Co (Bill Lisowsky); 30 Apr (1) Johnsonville SP (Cyndi Routledge, Steve Routledge). Barn Owl: 12 Mar (1) Putnam Co (RDH, DMy); 26 Mar (1) Perry Co (RS); 20 Apr (2) Bridgestone - Firestone WMA, White Co (EKL); 3 May (1) David Crockett SP, Lawrence Co (Keith Paluso). Chimney Swift: 7 Mar (1) Nashville (Mary Zimmerman), ers. Ruby-throated Hummingbird: 29 Mar (1) Clarksville (Cyndi Routledge), ers. Merlin: 6 Mar (1) Perry Co (RS, VS, AT); 28 Mar (1) Williamson Co (RS); 11 Apr (1) Old Hickory L (CA); 21 / 26 Apr (1) Duck R Unit (RS, VS, AT); 4 May (1) Hardin Co (RS, VS). Peregrine Falcon: 6 Mar (1) Perry Co (AT, VS); 11 / 21 Apr, 14 May (1) Duck R Unit (RS, VS).

Flycatcher - Thrush: Olive-sided Flycatcher: 1 May (1) Radnor L (PDC, MS, m.ob.); 22 May (1) Palmyra, Montgomery Co (SY). Yellow-bellied Flycatcher: 20 May (1) Perry Co (AT). Acadian Flycatcher: 19 Apr (1) Radnor L (FF), ers. Alder Flycatcher: 17-18 May (1) Perry Co (RS, VS); 19 May (1) Fort Campbell (DMo); 21 May (1) Shelby Park and

Bottoms (MS). Willow Flycatcher: 13 May (2) Bell's Bend, Davidson Co (CA); 17-18 May (2-4) Perry Co (RS, VS); 23 May (1) Fort Campbell (DMo). Least Flycatcher: 19 May (2) Fort Campbell (DMo). Eastern Kingbird: 30 Mar (1) Hardin Co (RS), ers. Scissor-tailed Flycatcher: 27 Apr thru season (2 pairs) Lytle Cr Rd, Rutherford Co (CW, m.ob.); 4 / 12 May (pair) Savannah Bottoms (RS, VS); 17 May (1) Murfreesboro (Kristy Baker); 26 May (1) Lawrence Co (DJS). Loggerhead Shrike: 9 May (2 ad with 2 yg) Couch Rd, Rutherford Co (SZ). Bell's Vireo: 2 May (1) Fort Campbell (DMo). Warbling Vireo: 11 Apr (1) Duck R Unit (RS), ers. Philadelphia Vireo: 4 May (5) Radnor L (KBo, m.ob.), max; 10 May (3) Fort Campbell (DMo). Red-eyed Vireo: 11 Apr (1) Humphreys Co (RS, VS), ers. Fish Crow: 3 Mar (1) Woods Reservoir (CW); 6 Mar (1) Perry Co (VS); 21 Apr (1) Duck R Unit (RS, VS, AT). Purple Martin: 3 Mar (1) Woods Reservoir (CW), ers. Sedge Wren: 7 May (1) Shelby Park and Bottoms (MS). Marsh Wren: 2 May (2) Fort Campbell (DMo); 18 May (1) Perry Co (VS). Swainson's Thrush: 12 Apr (1) Wilson Co (SZ), ers.

Warblers: Worm-eating Warbler: 14 Apr (1) Wilson Co (SZ), ers. Louisiana Waterthrush: 14 Mar (1) Perry Co (RS), ers. Blue-winged Warbler: 15 Apr (1) Radnor L (KBo), ers. Golden-winged Warbler: 19 Apr (1) Percy Warner Park, Davidson Co (Jim Arnett), ers. Prothonotary Warbler: 11 Apr (2) Johnsonville SP (RS), ers. Tennessee Warbler: 14 Apr (1) Springfield, Robertson Co (Tony Lance), ers. Orange-crowned Warbler: 8 Mar (1) Old Hickory L (CA); 11 Mar (1) Lewis Co (Bill Pulliam); 2 Apr (1) Perry Co (AT); 12 Apr (1) Putnam Co (Stephen Stedman). Nashville Warbler: 16 Apr (1) Duck R Unit (RS), ers. Connecticut Warbler: 7 May (1) Edgar Evins SP (Mark Taylor); 11 May (1) Radnor L (Joshua Stevenson); 13 May (1) Columbia, Maury Co (VS, RS); 17 May (1) Fort Campbell (DMo); 19 / 22 May (1) Shelby Park and Bottoms (FF / KBo). Mourning Warbler: 13 May (1) Radnor L (RHC); 16 May (1) Shelby Park and Bottoms (Jim Arnett); 19 May (6) Fort Campbell (DMo); 22 May (1) Westhaven golf course, Davidson Co (Chris Sloan); 24 May (1) Forest Hills, Davidson Co (Marty DeHart). Kentucky Warbler: 14 Apr (1) Wilson Co (SZ), ers. Cape May Warbler: 20 Apr (1) Nashville (KBo), ers. Cerulean Warbler: 4 Apr (1) Edwin Warner Park, Davidson Co (Sandy Bivens), ers. Northern Parula: 1 Apr (1) Coffee Co (SZ), ers. Blackburnian Warbler: 12 Apr (1) Coffee Co (Melisa Turrentine), ers. Yellow Warbler: 14 Apr (1) Wilson Co (SZ), ers. Black-throated Blue Warbler: 19 Apr (1) Clarksville (Cyndi Routledge, Steve Routledge). Yellow-throated Warbler: 27 Mar (1) Clarksville (Steve Routledge, Cyndi Routledge), ers. Prairie Warbler: 1 Apr (1) Coffee Co (SZ), ers. Black-throated Green Warbler: 30 Mar (1) Radnor L (KBo), ers. Wilson's Warbler: 3 / 11 May (1) Radnor L (FF et al.); 18 May (1) Perry Co (VS); 21 May (1) Marshall Co (RDH, DMy).

Sparrow - Siskin: Bachman's Sparrow: 30 May (1) Lawrence Co (Bill Pulliam). Lark Sparrow: 27 Apr / 9 May (1) Lytle Cr Rd, Rutherford Co (CW / SZ); 4 May (3) Hardin Co (RS, VS). Henslow's Sparrow: 1 Apr thru season (max 16) Fort Campbell (DMo); 20 Apr (11) Bridgestone - Firestone WMA, White Co (EKL); 25 Apr (1) Lewis Co (VS); 2 May (3) Bark Camp Barrens, Coffee Co (CW); 26 May (1) Lawrence Co (DJS); 26 May (3) Fort Campbell, Stewart Co portion (DMo). Nelson's Sparrow: 17-18 May (1) Perry Co (RS, VS). Lincoln's Sparrow: 12 May (4) Duck R Unit (RS, VS), max. Summer Tanager: 11 Apr (1) Duck R Unit (RS), ers. Blue Grosbeak: 11 Apr (2) Duck R Unit (RS), ers. Indigo Bunting:

11 Apr (1) Johnsonville SP (RS), ers. **Dickcissel**: 27 Apr thru season (max 7) Fort Campbell (DMo). **Bobolink**: 4 May (235) Hardin Co (RS, VS), max. **Western Meadowlark**: 5 Mar (46, very vocal) Savannah Bottoms (RS, VS). **Rusty Blackbird**: 11 Mar (377) Humphreys Co (RS), max. **Brewer's Blackbird**: 5 Mar (1) Savannah Bottoms (RS, VS). **Pine Siskin**: 12 May (3) Rutherford Co (Kristy Baker); 19 May (1) Nashville (Graham Gerdeman); 27 May (1) Cross Cr NWR (VS); Irs.

Addendum: The following records should be added to the report for Winter 2014 - 2015 at Fort Campbell, Montgomery Co (DMo): **Short-eared Owl**: 17 Dec / 6 Jan / 3 Feb (2 / 1 / 2). **American Tree Sparrow**: 5 Feb (3). **Le Conte's Sparrow**: 17 Dec / 2 Jan (2 / 3).

Locations: Cornelia Fort Airpark - Davidson Co; Cross Cr NWR - Stewart Co; Duck R Unit - unit of Tennessee NWR, Humphreys Co; Edgar Evins SP - DeKalb Co; Fort Campbell - Montgomery Co (unless specified otherwise); Hillsboro Pond - Coffee Co; Johnsonville SP - Humphreys Co; Old Hickory L - Davidson Co; Percy Priest L - Davidson Co; Radnor L - Davidson Co; Savannah Bottoms - Hardin Co; Shelby Park and Bottoms - Davidson Co; White Oak Ridge - Perry Co; Woods Reservoir - Franklin Co.

STEPHEN C. ZIPPERER, 3105 Chapel Hills Drive, Murfreesboro, TN 37129 stczipperer@aol.com

CUMBERLAND PLATEAU / RIDGE and VALLEY REGION - - March was considerably warmer and drier than normal. Temperatures were 6 degrees above normal, while rainfall of just under an inch made it the driest March on record in the Tri-cities. Early April was quite cool and seemed to slow the progression of migration, which began an early start in March. Temperatures were slightly above normal during the second half of April through May. Rainfall over the latter two months was slightly below normal in the Tri-cities area, but more than 5 inches deficient at Chattanooga. Water levels were once again low at Standifer Gap Marsh in Hamilton County, with no Least Bitterns detected at this former breeding site.

Waterfowl highlights included a hybrid teal, breeding by Hooded Merganser, and possible breeding by Common Merganser. Good numbers of American Bitterns and Snowy Egrets were found. A Brown Pelican added to the recent trend of increasing appearances in the state. Two Mississippi Kites and a Black-necked Stilt were rare for East Tennessee. Several uncommon shorebirds were observed regionally, but suitable habitat in northeast Tennessee was quite limited. Corvids made news, with Fish Crow expansion into the Tricities and Common Ravens nesting on two man-made structures. Also, a raven in Knox County was noteworthy. Among several early migrants, a Black-throated Green Warbler set a new early arrival date for the state. Dickcissels occurred at several sites, particularly notable away from Washington County where regular.

Goose - Pelican: Greater White-fronted Goose: 23 Mar (1) John Sevier L (SHu). Snow

Goose: 17 Mar (1) Hiwassee Refuge, Meigs Co (Charles Murray). Ross's Goose: 4 Mar (2) Dead Horse L, Knox Co (Beth Schilling). American Wigeon: from winter thru May (2) Leesburg, Washington Co (RLK, m.ob.), lrs. Blue-winged X Cinnamon Teal: 19 Mar (1 male) Lyon's Bend, Knox Co (Susan Hoyle, MM). Northern Shoveler: 23 May (1) Rankin Bottoms (MBS), Irs. Greater Scaup: 17-19 May (1) Paddle Cr Pond, Sullivan Co (RLK, RMC), new late date in NE TN Surf Scoter: 29 Mar (5) L Tansi, Cumberland Co (EKL). Hooded Merganser: 21 / 30 Apr (hen with 2 yg) Watauga R, Washington Co (Rick Phillips, Kevin Brooks / RLK), rare breeder in East TN Common Merganser: from Jan thru 5 May (1-2 males, 1-2 females) Beaver Cr, Sullivan Co (RRK, RMC, RLK, m.ob.); 17 May (1) Boone L, at mouth of Beaver Cr, about a half mile downstream from above sightings (RLK), this bird appeared to be a fully grown juvenile. Red-breasted Merganser: 13 May (2) Rankin Bottoms (MBS), lrs. Double-crested Cormorant: 28 Mar thru season (4 active nests, yg seen in late May) island in South Fork Holston R, Kingsport (RLK); thru May (6 nests) Rankin Bottoms (MBS). Brown Pelican: 15-17 May (1 im) Chickamauga L, Hamilton Co (Joy Wemmer, David Aborn, m.ob.). American White Pelican: 1-4 Mar (50-58) Fort Loudoun L, Blount Co (MD, m.ob.); 4 Mar (200+) Hiwassee Refuge, Meigs Co (Charles Murray), max there, with diminishing numbers into early Apr.

Bittern - Gallinule: American Bittern: 10 / 26 Apr (1 / 4) Standifer Gap Marsh (VS / KAC, DRJ); 13-19 Apr (1) Brainerd Levee (BD, m.ob.); 18 Apr (1) Meadowview golf course, Kingsport (RLK); 29 Apr (1) Phipps Bend (Gary Bailey et al.). Least Bittern: 21 Apr (1) Phipps Bend (HLF); 16 May (1) Kyker Bottoms Refuge, Blount Co (Randy Winstead); 17 May (1) Springfield Branch, Blount Co (Tom Howe). Snowy Egret: 3-4 Apr (1) Gupton Wetland, Roane Co (Eric Bodker / MM); 8 May (1) Rankin Bottoms (Ron Shrieves, photo); 13 May (1) Looney Island, Knox Co (Chris Welsh); 15 May (1) John Sevier L (SHu); 17 May (2) Amnicola Marsh, Hamilton Co (BD). Little Blue Heron: 26 Apr (1 ad) Brainerd Levee (KAC, DRJ). Cattle Egret: 8-9 May (1-2) Lowe's Ferry Rd., Blount Co (MD, m.ob.); 23 May (3) Rankin Bottoms (MBS). Yellow-crowned Night-Heron: 24 Mar thru season (5 nests) greenbelt along Reedy Cr, Kingsport (Gary Bailey, m.ob.). Osprey: early Apr thru May (pair at nest) South Fork Holston R, Kingsport (Bill Grigsby, m.ob.). Mississippi Kite: 13 May (2) Knox Co (Dean Edwards); 14 May (1) Alcoa, Blount Co (Melinda Fawver, photo). Broad-winged Hawk: 1 Apr (1) Campbell Co (NeM), ers. Virginia Rail: thru period (1-2) Standifer Gap Marsh (KAC); 6 Mar (1) Heritage Center Greenway Powerhouse Trail, Roane Co (Chuck Estes); 7 Mar - 2 May (1-4) Meadowview golf course, Kingsport (RLK, m.ob.); 7 / 10 Apr (4) Colinx Wetland (EKL). Sora: 2 Apr (1) Standifer Gap Marsh (KAC); 10 Apr (1) Colinx Wetland (EKL); 18 Apr - 17 May (1-4) Meadowview golf course, Kingsport (RLK, m.ob.); 19 Apr (1) John Sevier L (SHu). Common Gallinule: 8-17 May (1) John Sevier L (SHu, photo).

Stilt - Tern: Black-necked Stilt: 8 May (1) Lowe's Ferry Rd, Blount Co (MD). American Avocet: 12 Apr (5) Grace Pond, Hamilton Co (DRJ). Black-bellied Plover: 13 May (1) Rankin Bottoms (MBS). Semipalmated Plover: 1 May (11) Paddle Cr Pond, Sullivan Co (RLK), new high count in NE TN Spotted Sandpiper: 4 Apr (1) Eagle Bend fish hatchery, Anderson Co (RDH, DMy), ers. Solitary Sandpiper: 30 Mar (1) Delano, Polk Co (David Chaffin), ers. Greater Yellowlegs: 7 Mar (1) Grundy Co (BD), ers. Willet: 7-10 May (1-3)

Rankin Bottoms (MBS, m.ob.). **Upland Sandpiper**: 9 May (1) southern Cumberland Co (EKL). **Stilt Sandpiper**: 7 May (1) Rankin Bottoms (MBS). **Dunlin**: 10 May (2) Rankin Bottoms (Michael Ryon). **Baird's Sandpiper**: 7 May (1) Rankin Bottoms (MBS). **White-rumped Sandpiper**: 7 May (3) Rankin Bottoms (MBS); 8 May (1) New Market, Jefferson Co (Dean Edwards); 10/13 May (1 / 2) Eagle Bend fish hatchery, Anderson Co (MM / RDH, DMy); 15 May (1) Brainerd Levee (BD). **Short-billed Dowitcher**: 13 May (2) Rankin Bottoms (MBS); 15 May (10) John Sevier L (SHu); 15 May (10) Bowmantown, Washington Co (GDE, PGR). **Long-billed Dowitcher**: 7 May (1) Rankin Bottoms (MBS). **Caspian Tern**: 7 May (1) Rankin Bottoms (MBS). **Common Tern**: 2 May (1) Fort Loudoun L, Blount Co (MD, MM). **Forster's Tern**: 14 Apr / 11 May (2 / 8) John Sevier L (SHu).

Dove - Falcon: Eurasian Collared-Dove: 6 Mar (1) Loudon Co (Steve Clendenen, Gail Clendenen). Black-billed Cuckoo: 23 Apr (1) Washington Co (Don Holt); 25 Apr (1) Seven Islands SP (MM); 28-29 Apr (1) Johnson City (HLF); 29 Apr / 9 May (1) Phipps Bend (Gary Bailey / VS). Chuck-will's-widow: 16 Mar (1) Coltewah, Hamilton Co (Tim Jeffers), ers. Eastern Whip-poor-will: 15 Mar (1) Knox Co (John Lehman fide MM), ers. Rubythroated Hummingbird: 28 Mar (1) Signal Mtn, Hamilton Co (Jonnie Sue Lyons), ers. Merlin: 28 Mar (1) John Sevier L (SHu). Peregrine Falcon: 21 / 23 Apr (1) Steele Cr Park, Sullivan Co (Don Holt); 13 May (1) Rankin Bottoms (MBS).

Flycatcher - Thrush: Olive-sided Flycatcher: 7 May (1) Craven's House, Hamilton Co (KAC); 19 May (1) near town of Watauga, Carter Co (RLK). Yellow-bellied Flycatcher: 20 May (1) Seven Islands SP (JSt). Alder Flycatcher: 23 May (1) Forks of the River WMA, Knox Co (JSt). Willow Flycatcher: 13 May (3) Colinx Wetland (EKL); 20 May (1) Seven Islands SP (JSt). Scissor-tailed Flycatcher: 8 May - 1 Jun (1) near Cherokee Park, Hamblen Co (fide DK, m.ob.); 26 May (2 pairs + 2 singles) Sequatchie Valley portion of Bledsoe Co (EKL, Harry LeGrand). Loggerhead Shrike: thru Mar (pair) Meigs Co (Charles Murray); 22 Mar (pair) Hamilton Co (Hugh Barger); 26 May (1) Bledsoe Co (EKL, Harry LeGrand); thru season (1) Washington Co (RLK). White-eyed Vireo: 1 Apr (2) Greenway Farm, Hamilton Co (David Aborn), ers. Blue-headed Vireo: 11 Mar (1) Jacksboro, Campbell Co (NeM), ers. Red-eyed Vireo: 13 Apr (1) Jacksboro, Campbell Co (NeM), ers. Fish Crow: 16 Mar (1) Johnson City (DK), in residential neighborhood, second record there; 30 Apr into Jun (1-6) along South Fork Holston R, Kingsport (Rack Cross, RLK, TSM, m.ob.). Common Raven: 4 / 19 Mar (pair at nest in building / 3 yg in nest) Phipps Bend (SHu); 6 Mar / 13 Apr (1) Kingsport (Rack Cross); 16 Mar (2) Seven Islands SP (MM); 7 / 21 Apr (2 yg in nest) under grandstands of Bristol Motor Speedway, Sullivan Co (Michele Sparks, RLK), have nested here three of last four years; 30 May (1) Johnson City (RRK). Red-breasted Nuthatch: 2 May (1) Cumberland Co (John Cyrus), only report. Brown-headed Nuthatch: 27 Apr (1) southwestern Cumberland Co (EKL). Sedge Wren: 26 Apr (1) Standifer Gap Marsh (KAC, DRJ); 30 Apr (1) Austin Springs, Washington Co (RLK). Marsh Wren: 25 Mar (1) John Sevier L (SHu); 26 Apr / 10 May (4 / 1) Standifer Gap Marsh (KAC, DRJ); 5 May (1) Brainerd Levee (KAC). Blue-gray Gnatcatcher: 17 Mar (1) Kingsport (Rack Cross), new early arrival date in NE TN Wood Thrush: 15 Apr (1) Jacksboro (NeM), ers.

Warbler - Siskin: **Louisiana Waterthrush**: Mar into May (44 territorial males) Tennessee R Gorge, Hamilton and Marion Cos (Lizzie Goodrich, John Diener), total during specific

survey. Golden-winged Warbler: 2 May (1) Craven's House, Hamilton Co (KAC, DRJ). Black-and-white Warbler: 24 Mar (1) Marion Co (Tommie Rogers), ers. Prothonotary Warbler: 21 Apr (3) Phipps Bend (HLF); 8 May (1) John Sevier L (SHu); 23 May (1) Kingsport (RLK); generally scarce in upper East TN Swainson's Warbler: 12 Apr (1) Cove Lake SP, Campbell Co (NeM), ers. Orange-crowned Warbler: 29 Apr (1) Morristown (Kirk Huffstater). Connecticut Warbler: 14 May (1) Cove Lake SP, Campbell Co (RDH, DMy); 21 May (1, window kill) U.T. Chattanooga (David Aborn). Cerulean Warbler: 13 Apr (1) Jacksboro (NeM), ers; 15 May (3-4) Clinch Mtn, Hawkins Co (GDE, PGR, HLF), along Hwy 70. Chestnut-sided Warbler: 19 Apr (1) Morristown (Kirk Huffstater), ers. Black-throated Blue Warbler: 30 Apr (1) Cumberland Co (Stephen Stedman); 1 May (2) Sharp's Ridge, Knox Co (Shane Williams); 7-9 May (1) Morristown (Kirk Huffstater). **Prairie Warbler**: 8 Apr (1) Johnson City (RBB), new early arrival date in NE TN Black-throated Green Warbler: 10 Mar (1) Jacksboro (NeM), new early arrival date in state. Wilson's Warbler: 24 May (1) Kingsport (PGR). Vesper Sparrow: 19 Mar (5) Cherokee Farm, Knox Co (Chris Welsh). Henslow's Sparrow: 22 Apr (1) near Tri-cities Airport, Sullivan Co (PGR). Rose-breasted Grosbeak: 12 Apr (1 male) Knox Co (JSt), ers. Blue Grosbeak: 11 Apr (1) Laurel Run Park, Hawkins Co (Bill Grigsby et al.), ers. Dickcissel: 29 Apr (1) Hamilton Co (Tommie Rogers); 2-3 May (1) Bradley Co (Rick Houlk); 14 May thru season (1-2) Limestone, Washington Co (RLK, m.ob.); 15 May (1) Cherokee Farm, Knox Co (JSt); 21 May (7) Greenback, Blount Co (Tom Howe); 26 May (2) Sequatchie Valley portion of Bledsoe Co (EKL, Harry LeGrand); 26 May (2) Cumberland Co (EKL). Rusty Blackbird: 1 May (1) Kingsport (Rick Blanton), lrs. Purple Finch: 7 May (1) Morristown (Kirk Huffstater), lrs. Pine Siskin: 6 May (1) Maryville, Blount Co (WB); 7 May (1) Hamilton Co (fide KAC); 9 May (5) Johnson City (Kathy Noblet); 12 May (1) Jonesborough, Washington Co (Jonathan Lugo, David Lugo); lrs.

Locations: Brainerd Levee - Hamilton Co; Colinx Wetland - Cumberland Co; Jacksboro - Campbell Co; John Sevier L - Hawkins Co; Kingsport - Sullivan Co; Morristown - Hamblen Co; Phipps Bend - Hawkins Co; Rankin Bottoms - Cocke Co; Seven Islands SP - Knox Co; Standifer Gap Marsh - Hamilton Co.

RICHARD L. KNIGHT, 804 North Hills Drive, Johnson City, TN 37604 rknight8@earthlink.net

EASTERN MOUNTAIN REGION - - Precipitation was 2.5 inches below normal in March, while April and May had normal amounts of rain. March was very warm with average temperatures nearly 6° F above normal. Temperatures in April and May were slightly above normal.

A pair of Common Mergansers was watched closely for several weeks along the middle prong of the Little Pigeon River in the Smokies, but, alas, no breeding evidence was detected. The species also appeared on other regional rivers late into the season.

Duck - Harrier: American Wigeon: 5 May (1) Erwin, Unicoi Co (DK), Irs. Northern Shoveler: 5 May (2) Erwin, Unicoi Co (DK), Irs. Greater Scaup: 2 Mar (10) South Holston L (RLK). Common Merganser: 2 Mar (1 male, 1 female) Middle Prong of Little Pigeon R, near Greenbrier, GSMNP, Sevier Co (Olwen Claiborne, Keith Watson, photo), male seen thru 3 Apr and female thru 12 May (Keith Watson); 25 Mar - 16 Apr (pair, copulating on 16 Apr) Hiwassee R, Polk Co (Jamin Beachy, Mathan Beachy); 13 / 21 Apr (1 male, 2 females) Nolichucky R, Washington Co (GDE, PGR / RLK); 12 May (pair) Middle Prong of Little Pigeon R, in Pittman Center, Sevier Co (Keith Watson), different from birds above. Common Loon: 12 Apr (36) South Holston L (RLK), max; 23 Apr (5, flying over) Newfound Gap, GSMNP (MM). Eared Grebe: thru 25 Mar (1-2) South Holston L (RLK, m.ob.). Double-crested Cormorant: 23 Apr (9, flying over) Newfound Gap, GSMNP (MM). Little Blue Heron: 20 May (1 im) Watauga R (Kevin Brooks). Yellow-crowned Night-Heron: 25 Mar (3) Watauga R (TSM, CLM), ers. Northern Harrier: 5 May (1 male) Cades Cove, GSMNP (WB), Irs.

Plover - Falcon: American Golden-Plover: 30 Apr (1) South Holston L (GDE, RRK, PGR, HLF, Richard Lewis, Jerry Bevins). Semipalmated Plover: 13 May (10) Great Lakes Pond, Carter Co (BP, JP). Spotted Sandpiper: 7 Apr (1) South Holston L (RLK), ers; 28 Apr (1) Tremont, GSMNP (Logan Rosenberg). Solitary Sandpiper: 11 Apr (1) Watauga R (TSM, CLM), ers. Caspian Tern: 12 Apr (2) Great Lakes Pond, Carter Co (GOW); 17 Apr / 3 May (2 / 1) South Holston L (Mike Sanders / RRK). Forster's Tern: 14 Apr - 2 May (2-7, intermittently) South Holston L (RRK, GDE, m.ob.). Yellow-billed Cuckoo: 16 Apr (1) Holston Mtn (RMC, RBB), ers. Black-billed Cuckoo: 30 Apr (1) Shady Valley, Johnson Co (GDE, RRK, HLF, PGR, Richard Lewis, Jerry Bevins); 10 May (1) Hampton Cr Cove (RLK); 14 May (1) Look Rock, Blount Co (WB). Northern Saw-whet Owl: 25 Apr (1) Roan Mtn (RLK); 30 Apr (3) Unaka Mtn, Unicoi Co (Joe McGuiness). Eastern Whip-poor-will: 27 Mar (2) Wilbur L (BP, JP), ers. Merlin: 23 Apr (1) Cades Cove, GSMNP (WB, photo). Peregrine Falcon: 20 Feb - 27 May (2) Doe R Gorge, Carter Co (PGR, RLK); 11 Apr (2) Roan Mtn (GOW); 12 Apr (1) Watauga R (GOW); 30 Apr (1) Unicoi Co (Don Holt).

Flycatcher - Crossbill: Alder Flycatcher: 17 May (1 each) Hampton Cr Cove / Roan Mtn (RRK et al.), ers. Willow Flycatcher: 25 May (10) Shady Valley, Johnson Co (RLK). Loggerhead Shrike: 2 Apr (1) Holston Valley, Sullivan Co (RMC), only report. Blueheaded Vireo: 15 Mar (1) Buffalo Mtn (RLK), ers. Red-eyed Vireo: 16 Apr (3) Holston Mtn (RMC, RBB), ers. Common Raven: 15 Apr (3 yg in nest) Doe R Gorge, Carter Co (RLK, PGR). Cliff Swallow: 19 Mar (1) Watauga R (Bill Grigsby et al.), new early arrival date in NE TN Golden-winged Warbler: 23 Apr thru season (max 6) Hampton Cr Cove (RLK, m.ob.). Black-and-white Warbler: 2 Apr (1) Buffalo Mtn (Kathy Noblet), ers. Orange-crowned Warbler: 1 / 14 Mar (1, at suet feeder) Elizabethton (Ken Gough, photo); 17 Apr (1) Elizabethton linear trail (RBB); 22 Apr (1) Cades Cove, GSMNP (WB). American Redstart: 11 Apr (1) Elizabethton (TSM, CLM), ers. Black-throated Blue Warbler: 13 Apr (1) Holston Mtn (RMC), ers. Yellow-throated Warbler: 27 Mar (2) Watauga L, Carter Co (RBB), ers. Black-throated Green Warbler: 29 Mar (1) Buffalo Mtn (RRK, Jim Anderson), ers. Rose-breasted Grosbeak: 18 Apr (1) Wilbur L, Carter Co (BP, JP), ers. Indigo Bunting: 26 Mar (1, at feeder) Elizabethton (HLF), early migrant or wintered nearby? Red Crossbill:

13 Apr (5) Foothills Parkway, Blount Co (Tom Howe); 1 / 7 May (8 / 25) Holston Mtn (TSM, RBB / RBB, RMC).

Locations: Buffalo Mtn - Washington Co; Elizabethton - Carter Co; GSMNP - Great Smoky Mtns National Park; Hampton Cr Cove - Carter Co; Holston Mtn - Sullivan Co side; Roan Mtn - Carter Co; South Holston L - Sullivan Co; Watauga R - Carter Co.

RICHARD P. LEWIS, 407 V.I. Ranch Road, Bristol, TN 37620 mountainbirds@gmail.com

OBSERVERS

CA - Chris Agee EKL - Edmund K. LeGrand WB - Warren Bielenberg MM - Morton Massey RBB - Robert B. Biller CLM - Cathy L. McNeil KBo - Kevin Bowden TSM - Thomas S. McNeil KAC - Kevin A. Calhoon NeM - Nell Moore RMC - Ron M. Carrico DMo - Daniel Moss PDC - Phillip D. Casteel DMy - Dollyann Myers RHC - Richard H. Connors BP - Brookie Potter MD - Marcia Davis IP - Jean Potter BD - Bruce Dralle DDP - Dick D. Preston GDE - Glen D. Eller PGR - Peter G. Range HLF - Harry Lee Farthing DJS - Damien J. Simbeck FF - Frank Fekel MAG - Mark A. Greene

JH - Joe Hall
RH - Rob Harbin
RDH - Ron D. Hoff
SHu - Susan Hubley
DRJ - Daniel R. Jacobson
DK - David Kirschke
RLK - Richard L. Knight
RRK - Roy R. Knispel

MBS - Michael B. Sledjeski
MS - Mike Smith
RS - Ruben Stoll
VS - Victor Stoll
JSt - Jason Sturner
AT - Allan Troyer
CW - Chloe Walker
GOW - Gary O. Wallace
SY - Stanley York, Jr.
SZ - Stephen Zipperer

INSTRUCTIONS TO AUTHORS

The Migrant records observations and studies of birds in Tennessee and adjacent areas. SUBMISSIONS: The manuscript should be submitted electronically to Bob Ford at editorthemigrant@gmail.com. Submission of hard copies is optional. If so desired the original and two copies of the manuscript should be sent to the: Editor: Bob Ford, 808 Hatchie, Brownsville, TN 38012 editorthemigrant@gmail.com. Manuscripts that have been published in other journals should not be submitted.

MATERIAL: The subject matter should relate to some phase of Tennessee ornithology. It should be original, factual, concise and scientifically accurate.

STYLE: Both articles and short notes are solicited; 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 *Scientific Style and Format*, eighth edition, by the Council of Science Editors, councilscienceeditors.org.

COPY: Manuscripts should be double-spaced with adequate margins for editorial notations and emailed in Word.docx. Tables and figures should be prepared in a separate file with appropriate headings; see *Scientific Style and Format* for examples of appropriate form for tables. Photographs intended for reproduction should be at least 300 dpi or sharp with good contrast on glossy white paper. Weights, measurements, and distances should be in metric units. Dates should be in "continental" form (e.g., 16 March 1997). Use the 24-hour clock (e.g., 0500 or 1900).

NOMENCLATURE: The scientific name of a species should be given after the first use of the full common name in the text. The scientific name should be italicized and in parentheses. Names should follow the *A. O. U. Check-list of North American Birds* (seventh edition, 1998, or supplements).

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

ABSTRACT: Manuscripts of five or more pages should include an abstract. The abstract should be less then 5% of the length of the manuscript. It should include a brief explanation of why the research was done, the major results, and why the results are important.

LITERATURE CITED: List all literature citations in a "Literature Cited" section at the end of the text. Text citations should include the author and year.

IDENTIFICATION: Manuscripts including reports of rare or unusual species or of species at atypical times should include: date and 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 the identification and reference works consulted.

REPRINTS: Reprints are available to authors on request. Billing to authors will be through the TOS treasurer. Request for reprints must be made well in advance of printing.

SEASON REPORTS: Observations that are to be considered for publication in "The Season" section should be mailed to the appropriate Regional Compiler. Consult a recent issue of *The Migrant* for the name and address of the compiler.

CONTENTS

BREEDING BIRD FORAYS IN TENNESSEE'S UPPER CUMBERLAND REGION: PART I (DEKALB, PUTNAM, CUMBERLAND, AND MORGAN COUNTIES) Stephen J. Stedman and Edmund K. LeGrand	81
ROUND TABLE NOTE	
WHITEVILLE BREEDING BIRD SURVEY Dick D. Preston	101
REPORT OF THE TENNESSEE BIRD RECORDS COMMITTEE, 2017 Ruben Stoll	103
THE SPRING SEASON: 1 March – 31 May 2016 Richard L. Knight	105
WESTERN COASTAL PLAIN REGION	
Dick D. Preston HIGHLAND RIM AND BASIN REGION	106
Stephen C. Zipperer	108
CUMBERLAND PLATEAU/RIDGE AND VALLEY REGION Richard L. Knight	111
EASTERN MOUNTAIN REGION Richard P. Lewis	114