

### A QUARTERLY JOURNAL DEVOTED TO TENNESSEE BIRDS

Published by The Tennessee Ornithological Society

MARCH 2021 Vol. 92, No. 1

### THE MIGRANT A QUARTERLY JOURNAL OF ORNITHOLOGY

#### **P**UBLISHED BY

#### THE TENNESSEE ORNITHOLOGICAL SOCIETY The TOS is a non-profit, educational, scientific and conservation organization.

#### **EDITORIAL STAFF**

Editor: Bob Ford, 808 Hatchie, Brownsville, TN 38012 <editorthemigrant@gmail.com>

Associate Editors:

Susan McWhirter, 274 Beech Grove Road, McMinnville, TN 37110 <snmcwhirter@gmail.com> and

Martha Waldron, 1014 Murray Hill Lane, Memphis, TN 38120 <martha.waldron@gmail.com>

State Count Compiler: Ron Hoff, 166 Chahyga Way, Loudon, TN 37774 <web2brdrs@gmail.com>

Season Editor: Richard L. Knight, 804 North Hills Dr., Johnson City, TN 37604 <rknight8@earthlink.net>

Regional Season Editors:

Western Coastal Plain: Dick Preston, 261 Sassafras Circle, Munford, TN 38058 <dickpreston48@gmail.com>
Highland Rim and Basin: Stephen C. Zipperer, 3105 Chapel Hills Drive, Murfreesboro, TN 37129 <stczipperer@aol.com>
Eastern Ridge and Valley: Richard L. Knight, 804 N. Hills Rd., Johnson City, TN 37604 <rknight8@earthlink.net>
Eastern Mountain: Richard P. Lewis, 407 V.I. Ranch Rd., Bristol, TN 37620 <mountainbirds@email.com>

#### **OFFICERS FOR 2021**

President: Dr. Michael Collins, Rhodes College, 2000 N. Parkway, Memphis, TN 38112 <collinsm@rhodes.edu>

Vice Presidents:

East Tenn. - Chris Welsh, 5337 Hickory Hollow Rd., Knoxville, TN 37919 <cwelsh@utk.edu> Middle Tenn. - Danny Shelton, 705 Countrywood Drive, Franklin, TN 37064 <dashelt@comcast.net> West Tenn. - Dick Preston, 261 Sassafras Cl., Munford, TN 38058 <dickpreston48@gmail.com>

Treasurer: Pam Lasley, 5886 Wilshire Drive, Nashville, TN 37215 <plasley@comcast.net>

Secretary: Cyndi Routledge, 1515 N. Willow Bend Court, Clarksville, TN 37043 <routledges@bellsouth.net>

Directors-at-Large:

East Tenn. - Susan Hubley, 128 John Sevier Circle, Rogersville, TN. 37857 <shubley@msn.com> Middle Tenn. - Mac McWhirter, 274 Beech Grove Rd., McMinnville, TN 37110 <npmcwhirter@gmail.com> West Tenn. - Allan Trently, 580 East Lafayette Street, Jackson, TN 38301 <Allan.Trently@tn.gov>

Curator: Dr. Stefan Woltmann, Austin Peay State University, 601 College St., Clarksville, TN 37044 <woltmann@apsu.edu>

Webmaster: Amy Wilms, 3499 S. Bird Sanctuary Rd., Connorsville, IN 47331 <wilmsab@indianaaudubon.org>

*The Tennessee Warbler* (TOS Newsletter) Editor: Theresa Graham, P.O. Box 366, Oakland, TN 38060 <2graham@bellsouth.net>

The TOS website can be found at: www.tnbirds.org

Send subscriptions & address changes to: Tennessee Ornithological Society, 5886 Wilshire Drive, Nashville, TN 37215 Printed by: Russell Printing Options, 1800 Grand Ave., Knoxville, TN 37916 Copyright © 2014 by the Tennessee Ornithological Society — ISSN 0026-3575575

# THE MIGRANT

Published by the Tennessee Ornithological Society to Record and Encourage the Study of Birds in Tennessee Issued in March, June, September and December

VOL. 92

MARCH 2021

NO. 1

The Migrant 92(1): 1-12, 2021

## SUMMARY OF BIRD WINDOW CASUALTIES ON THE UNIVERSITY OF TENNESSEE-CHATTANOOGA CAMPUS

David A. Aborn

Department of Biology, Geology and Environmental Science University of Tennessee at Chattanooga Chattanooga, Tennessee 37403-2598 david-aborn@utc.edu

#### ABSTRACT

Collisions with windows are a major source of mortality for birds and are regarded as a serious threat to their populations. I have been monitoring bird casualties around 11 buildings on the campus of the University of Tennessee at Chattanooga for the past 20 years, documenting numbers of individuals and species killed or injured from striking windows. I have tallied 854 casualties comprising 76 species. Most casualties occur during migration, especially in the fall, and four buildings account for 90% of casualties. Common Yellowthroat was the most frequently detected species and accounted for nearly 10% of all casualties found.

#### INTRODUCTION

Each year, window collisions kill between 600 million and 1 billion birds in the United States (Klem 2006, 2009, Loss et al. 2014), and a large proportion of these birds are migrants. Migrating birds face numerous challenges during their journey, including finding enough food, avoiding predators, and seeking shelter from bad weather (Moore et al. 1995). Windows add an additional hazard to an already arduous journey, which accounts for a large portion of the annual mortality of migratory songbirds (Sillet and Holmes 2002). Most collisions occur because birds see the sky and vegetation reflected in the window and do not

THE MIGRANT

realize it is an obstacle. In addition, many songbirds migrate at night, and can be attracted to the lights left on in buildings, resulting in more collisions (Ogden 1996). Thus, window collisions are a significant threat to bird populations in the United States and around the world (Loss et al. 2014). Not all buildings, however, have equal collision rates. Factors such as the height of the building, the number and size of windows, type of glass used, and types of landscaping around the buildings all influence the number of collisions (Hager et al. 2013, Cusa et al. 2015, Hager et al. 2017). In addition to having a lot of landscaping, many college campuses (hereafter referred to as campuses) are comprised of low-rise buildings (4-11 stories tall), and such buildings account for the majority of casualties (Loss et al. 2014). Thus, campuses can pose significant risks for birds (Blem and Willis 1998, Somerlot 2003, Borden et al. 2010, Ocampo-Peñuela et al. 2016, Elmhurst and Grady 2017, Schneider et al. 2018). I have been documenting window collisions along a regularly surveyed route on the University of Tennessee at Chattanooga (UTC) campus since 2000. I hope to use these results to persuade the UTC administration to adopt more bird-friendly building options in the future.

#### **METHODS**

The Chattanooga campus of the University of Tennessee (35.05° N,-85.30° W) is one of four campuses in the University of Tennessee system. It is approximately 1.2 km from downtown Chattanooga, and less than 0.5 km from the Tennessee River. The campus occupies approximately 53 ha, with over 2,000 individual trees and shrubs comprising 70 different woody plant species. Since January of 2000, I have been following a prescribed route on the UTC campus, 3-4 days per week, all year round. The route encompasses 11 buildings: Holt Hall, Grote Hall, the engineering building (EMCS), Fine Arts Center, the old Lupton Library (now Lupton Hall), Brock Hall, the new UTC Library, McLellan Hall, the University Center, West Campus Housing, and the campus fitness center (ARC) (Figure 1). All these buildings are 3-4 stories tall. The area of window space of each building and the amount of vegetation around the buildings varied (see photographs in Appendix I). When I arrive at each building, I walk around its perimeter looking for any casualties that are in plain sight. I do not look behind or under any bushes that might be around a given building. For any casualties I find, I record the date, species, building, and whether the bird is dead or temporarily stunned. Dead specimens are collected for the UTC Natural History Museum (Federal Salvage Permit MB074613-0, TN Salvage Permit 1727) unless ants or flies have degraded a given carcass. I use chi-square tests to compare the proportion of casualties at different buildings and in different seasons, as well as to compare the proportion of different species found.

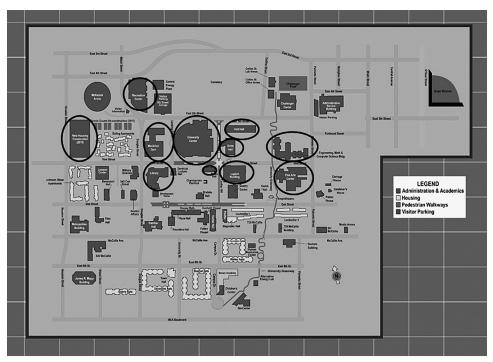


Figure 1. Map of the UTC campus with the buildings surveyed highlighted.

#### RESULTS

Between January 2000 and 31 December 2020, I have found 854 casualties comprising 74 species (Table 1). Of those, 82% were killed and 18% were stunned. Peak casualties occurred during migration, especially in the fall ( $\chi^2 = 1,076.85$ , df = 3, *P* < 0.0001; Figure 2). A disproportionate number of all casualties were long-distance migrants; species that breed in temperate and boreal regions of North America and migrate to Mexico, Central and South America and the Caribbean during the non-breeding season (Moore et al., 1995), (Long-distance migrants = 55%, Short-distance migrants = 23%, Residents = 22%;  $\chi^2 = 232.55$ , df = 2, *P* < 0.0001).

A Chi-square test revealed that casualties were not evenly distributed among the buildings ( $\chi^2 = 1,595.72$ , df = 10, *P* < 0.0001). Since it opened in 2015, I have found most casualties around the new library, which is a large 4-story building with many windows on all sides (Figures 3-4). Holt Hall and University Center also have a high proportion of casualties.

The proportion of the different species found was also not evenly distributed ( $\chi^2$  = 1,698.38, df = 73, *P* < 0.0001). Common Yellowthroats (*Geothlipis trichas*) were the most common casualty, followed by Ovenbirds (*Sieurus aurocapilla*) and Hermit Thrushes (*Catharus guttatus*) (Figure 5).

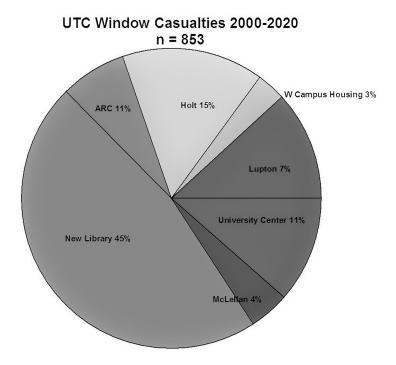


Figure 2. Number of window casualties by month on the UTC campus, 2000-2020.

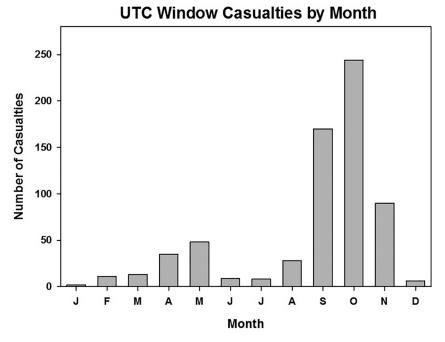
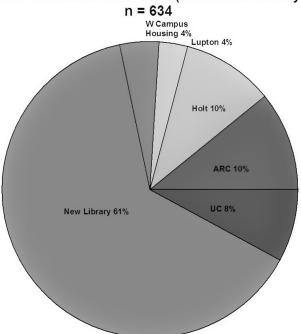


Figure 3. Proportions of window casualties at different buildings on the UTC campus,



**Figure 4.** Proportions of window casualties at different buildings on the UTC campus since the new library opened, 2015-2020.

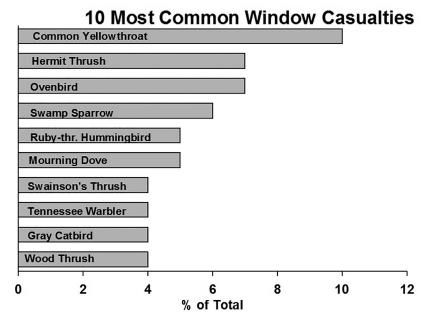


Figure 5. The ten most commonly found window casualties on the UTC campus 2000-2020.

## UTC Window Casualties 2015-2020 (since New Library opened) \$n=634\$

#### DISCUSSION

My numbers are likely an underrepresentation of avian window casualties on the UTC campus; I am not checking every day, not checking every building, and scavengers may remove carcasses before I find them. Kummer et al. (2016) found that over 67% of carcasses were scavenged, meaning there might have been as many 1,435 birds that have hit the buildings I check. The percentage of birds killed is like Klem et al. (2009; 85%), and higher than that reported by Gelb and Delacretaz (2009; 67%). The seasonal pattern of higher casualties during migration is also similar to other studies (Hager et al. 2008, Gelb and Delacretaz 2009, Borden et al. 2010). Unfortunately, UTC is not unique among college campuses. As noted earlier, many campuses possess features that increase the likelihood of collisions, such as low buildings and landscaped grounds. Additional features, such as proximity to water, might also increase a campus' attractiveness for birds, resulting in more collisions.

To further illustrate the impact of window collisions on bird populations, I have found two casualties that had US Geological Survey leg bands on them. These aluminum bands are individually numbered and are put on by researchers to monitor the movements and survival of individual birds. The first banded bird I found was a Gray Catbird (Dumatella carolinensis), and it had been killed by one of the windows at the UTC library on 27 September 2016. This bird had been banded at the Kalamazoo Nature Center in Michigan on 14 August 2016, and was aged as a hatch-year bird, meaning it hatched earlier that summer and was on its first migration. The second banded bird I have found was a female Hooded Warbler (Setophaga citrina), killed by one of the windows at the ARC on 4 May 2018. This bird had been banded in Belize on 9 April 2016. The bander determined it to be a second-year bird, meaning it hatched the previous year and was on its first spring migration after spending the winter in the tropics. This bird hatched somewhere in the eastern United States in 2015, survived the rigors of migration described in the Introduction, survived the winter, migrated north where it presumably bred in 2016, flew south again that fall, wintered, flew north and bred again in 2017, wintered in the tropics again, and finally met its demise at the ARC flying north to breed a third time. These two birds, along with the other birds I have found, represent a loss of reproductive potential and genetic variability, which may be detrimental to their respective populations. In addition, while I am not trying to anthropomorphize those banded birds, they nonetheless have stories and may help put a "face" to the hazard windows pose. This, in turn, might motivate the University of Tennessee administration, as well as the public, to take the necessary measures to mitigate the problem.

While it might seem unfeasible to retrofit the existing windows, there are relatively inexpensive options for reducing window collisions on the UTC campus, and certainly any new construction or renovation of existing buildings should incorporate bird-friendly components. Potential solutions to window collisions include UV coatings, 1-way colloidal films, fritted glass, and window screens. Of these, UV coatings and colloidal films provide the best solution, as they reduce collisions (Klem and Saenger 2013, Sheppard 2019), but do not interfere with the transmission of sunlight or people's ability to see out the windows. Hanging lines of parachute cord strung vertically 9-11 cm apart has also been shown to be

effective in reducing collisions (Klem and Saenger 2013) and might be more cost effective than window coatings or films but may prove difficult to accomplish on buildings with many windows. I hope to test different options to see which has the greatest reduction in collisions, as well as which option has the greatest appeal to students, faculty, and staff. Another partial solution would be to turn off all unnecessary lights at night. Not only would this help reduce window collisions, but it would also save the University money by reducing electricity costs. I also hope to determine why UTC has such a high proportion of Common Yellowthroat casualties, and why certain buildings have more casualties of certain species (e.g., most Ruby-throated Hummingbird and Song Sparrow casualties come from Holt Hall). Yellowthroats, Ovenbirds, and hummingbirds were also common casualties at Virginia Commonwealth University, but no explanation was given as to why those species might have been so prevalent (Blem and Willis 1998). The species I most commonly find tend to forage low, making them more vulnerable to hitting windows, but it does not explain specifically what it is about the UTC campus that is attractive to those species, especially yellowthroats.

I hope my results, in combination with a student-led awareness campaign, will persuade the UTC administration, and possibly the whole University of Tennessee system, to adopt bird-friendly building practices in the future

#### ACKNOWLEDGEMENTS

I thank Joelle Gehring, U.S. Fish and Wildlife Service, for her helpful comments on this manuscript.

#### LITERATURE CITED

- Blem, C. R. and B. A. Willis. 1998. Seasonal variation of human caused mortality of birds in the Richmond area. Raven 69:3-8.
- Borden, W. C., O. M. Lockhart, A. W. Jones, and M. S. Lyonn. 2010. Seasonal, taxonomic and local habitat components of bird-window collisions on an urban campus in Cleveland, OH. Ohio Journal of Science 110:44-52.
- Cusa, M., D. A. Jackson, and M. Mesure. 2015. Window collisions by migratory bird species: urban geographical patterns and habitat associations. Urban Ecosystems 18:1427-1446.
- Elmhurst, K. S. and K. Grady. 2017. Fauna protection in a sustainable university campus: bird-window collision mitigation strategies at Temple University; pp. 69–82 In Handbook of theory and practice of sustainable development in higher education (W. Leal Filho et al., eds.). New York: Springer International Publishing.
- Gelb, Y, and N. Delacretaz. 2009. Windows and Vegetation: Primary Factors in Manhattan Bird Collisions. Northeastern Naturalist 16:455-470.
- Hager, S. B., B. J. Cosentino, K. J. McKay, C. Monson, W. Zuurdeeg, and B. Blevins. 2013. Window area and development drive spatial variation in bird-window collisions in an urban landscape. PLOS ONE 8(1):e53371.
- Hager S. B., B. J. Cosentino, M. A. Aguilar-Gómez, M. L. Anderson, M. Bakermans, T. J. Boves, D. Brandes, M. W. Butler, E. M. Butler, N. L. Cagle, R. Calderón-Parra, A. P. Capparella, A. Chen, K. Cipollini, A. A. Conkey, T. A. Contreras, R. I. Cooper, C. E. Corbin, R. L. Curry, J. J. Dosch, M. G. Drew, K. Dyson, C. Foster, C. D. Francis, E. Fraser,

R. Furbush, N. D. G. Hagemeyer, K. N. Hopfensperger, D. Klem D, E. Lago, A. Lahey, K. Lamp, G. Lewis, S. R. Loss, C. S. Machtans, J. Madosky, T. J. Maness, K. J. McKay, S. B. Menke, K. B. Muma, N. Ocampo-Peñuela, T. J. O'Connell, R. Ortega-Álvarez, A. L. Pitt, A. L. Puga-Caballero, J. E. Quinn, C. W. Varian-Ramos, C. S. Riding, A. R. Roth, P. G. Saenger, R. T. Schmitz, J. Schnurr, M. Simmons, A. D. Smith, D. R. Sokoloski, J. Vigliotti, E. L. Walters, L. Walters, J. T. Weir, K. Winnett-Murray, J. C. Withey, and I. Zuria. 2017. Continent-wide Analysis of how urbanization affects bird-window collision mortality in North America. Biological Conservation 212:209-215.

- Klem D., Jr. 2006. Glass: A deadly conservation issue for birds. Bird Observer 34:73-81.
- Klem D., Jr. 2009. Preventing Bird-Window Collisions. The Wilson Journal of Ornithology 121:314–321.
- Klem D., Jr and P. G. Saenger. 2013. Evaluating the Effectiveness of Select Visual Signals to Prevent Bird-window Collisions. The Wilson Journal of Ornithology 125:406–11.
- Kummer J. A., C. J. Nordell, T. M. Berry, C. V. Collins, C. R. L. Tse, and E. M. Bayne. 2016. Use of bird carcass removals by urban scavengers to adjust bird-window collision estimates. Avian Conservation and Ecology 11:12 http://dx.doi.org/10.5751/ACE-00927-110212.
- Loss S. R., T. Will, and P. P. Marra. 2012. Direct human-caused mortality of birds: improving quantification of magnitude and assessment of population impact. Frontiers in Ecology and the Environment 10:357-364.
- Moore F. R., S. A. Gauthreaux, Jr, P. Kerlinger, T. Simons, T. Martin, and D. Finch. 1995. Habitat requirements during migration: important link in conservation. Pp. 121-144 *In*
- T Martin and D Finch (Eds.), Ecology and management of Neotropical migratory birds, a synthesis and review of critical issues. New York: Oxford University Press.
- Ocampo-Peñuela N., R. S. Winton, C. J. Wu, E. Zambello E, T. W. Wittig, and N. L. Cagle. 2016. Patterns of bird-window collisions inform mitigation on a university campus. PeerJ 4:e1652.
- Ogden, L. J. E. 1996. Collision course: the hazards of lighted structures and windows to migrating birds. Toronto: World Wildlife Fund Canada and the Fatal Light Awareness Program.
- Schneider, R. M., C. M. Barton, K. W. Zirkle, C. F. Greene, and K. B. Newman. 2018. Yearround monitoring reveals prevalence of fatal bird-window collisions at the Virginia Tech Corporate Research Center. PeerJ. 6:e4562.
- Sheppard, C. D. 2019. Evaluating the relative effectiveness of patterns on glass as deterrents of bird collisions with glass. Global Ecology and Conservation. 20:e00795.
- Sillett, T. S., and R. T. Holmes. 2002. Variation in survivorship of a migratory songbird throughout its annual cycle. Journal of Animal Ecology, 71:296-308.
- Somerlot, K. E. 2003. Survey of songbird mortality due to window collisions on the Murray State University campus. Journal of Service Learning in Conservation Biology. 1:1–9.

Common Name	Scientific Name	# of Casualties
Common Yellowthroat	Geothlypis trichas	81
Ovenbird	Seiurus aurocapilla	58
Hermit Thrush	Catharus guttatus	53
Swainson's Thrush	Catharus ustulatus	51
Swamp Sparrow	Melospiza georgiana	45
Tennessee Warbler	Leiothlypis peregrina	43
Ruby-throated Hummingbird	Archilochus colubris	39
Mourning Dove	Zenaida macroura	36
Wood Thrush	Hylocichla mustelina	33
Gray Catbird	Dumatella carolinensis	31
White-throated Sparrow	Zonotrichia albicolis	28
Magnolia Warbler	Setophaga magnolia	25
Song Sparrow	Melospiza melodia	25
American Robin	Turdus migratorius	24
Brown Thrasher	Toxostoma rufum	20
Gray-cheeked Thrush	Catharus minimus	19
Northern Waterthrush	Parkesia noveboracensis	16
House Finch	Haemorhous mexicanus	14
Yellow-bellied Sapsucker	Sphyrapicus varius	13
Black-and-white Warbler	Mniotilta varia	10
Eastern Towhee	Pipilo erythrophthalmus	10
Rose-breasted Grosbeak	Pheucticus ludovicianus	10
Yellow-breasted Chat	Icteria virens	10
Indigo Bunting	Passerina cyanea	8
Northern Cardinal	Cardinalis cardinalis	8
Chipping Sparrow	Spizella passerina	7
Field Sparrow	Spizella pusilla	7
American Redstart	Setophaga ruticilla	6
Cedar Waxwing	Bombycilla cedrorum	6
Hooded Warbler	Setophaga citrina	6
House Wren	Troglodytes aedon	6
Chimney Swift	Chaetura pelagica	5
Veery	Catharus fuscescens	5
Myrtle Warbler	Setophaga coronata	5
Winter Wren	Troglodytes hiemalis	5
Fox Sparrow	Passerella iliaca	4
Golden-crowned Kinglet	Regulus satrapa	4

 Table 1. Species found as window casualties on the UTC campus, 2000-2020.

Lincoln's Sparrow	Melospiza lincolnii	4
Marsh Wren	Cistothorus palustris	4
Northern Mockingbird	Mimus polyglottis	4
Red-bellied Woodpecker	Melanerpes carolinus	4
Worm-eating Warbler	Helmitheros vermivorum	4
Yellow-billed Cuckoo	Coccyzus americanus	4
Acadian Flycatcher	Empidonax virescens	3
American Woodcock	Scolopax minor	3
Bay-breasted Warbler	Setophaga castanea	3
Chestnut-sided Warbler	Setophaga pensylvanica	3
Red-eyed Vireo	Vireo olivaceous	3
Western Palm Warbler	Setophaga palmarum	3
Brown-headed Cowbird	Molothus ater	2
Black-throated-green Warbler	Setophaga virens	2
Carolina Chickadee	Poecile carolinensis	2
Connecticut Warbler	Oporornis agilis	2
Eastern Phoebe	Sayornis phoebe	2
European Starling	Sturnus vulgaris	2
Kentucky Warbler	Geothlypis formosa	2
Orange-crowned Warbler	Vermivora celata	2
Ruby-crowned Kinglet	Regulus calendula	2
Black-billed Cuckoo	Coccyzus erythropthalmus	1
Blackpoll Warbler	Setophaga striata	1
Canada Warbler	Setophaga canadensis	1
Chuck-wills-widow	Antrostomus carolinensis	1
House Sparrow	Passer domesticus	1
Least Flycatcher	Empidonax minimus	1
Northern Parula	Setophaga americana	1
Prairie Warbler	Setophaga bicolor	1
Rock Pigeon	Columba livia	1
Summer Tanager	Piranga rubra	1
Tufted Titmouse	Baeolophus bicolor	1
White-crowned Sparrow	Zonotrichia leucophrys	1
Wilson's Warbler	Cardellina pusilla	1
Yellow-bellied Flycatcher	Empidonax flaviventris	1
Yellow Palm Warbler	Setophaga palmarum	1
Yellow-shafted Flicker	Colaptes auratus	1
Yellow-throated warbler	Setophaga dominica	1
Yellow Warbler	Setophaga petechia	1

**Appendix I.** Factors such as the height of the building, the number and size of windows, type of glass used, and types of landscaping around the buildings all influence the number of collisions. These photographs provide a perspective of the variation in window space and amount of vegetation around buildings where birds were collected.



New Library



New library



The campus fitness center (ARC)



University Center



Holt Hall



Lupton Hall



West Campus Housing. All four corners are glass.

#### THE 2020 TENNESSEE CHRISTMAS BIRD COUNT SUMMARY

Ron Hoff Loudon, Tennessee

This Tennessee Christmas Bird Count (CBC) season was like no other in our history. The coronavirus pandemic was raging at its most lethal period, right before vaccinations started, when the CBC counts were run. The Tennessee Ornithology Society wants to thank all the observers who safely ventured out during the pandemic to record bird data.

This was the 77th consecutive compilation of CBC's in Tennessee (begun in 1930), and the 90th overall (no count was reported for 1943). Twenty-eight counts reported data this season. This represented 154 species, plus 4 count week species. The weather across the state was reasonably normal with some counts having light rain and windy conditions. The Duck River CBC had horrible weather. Temperatures ranged from a chilly 12° in Perry Couny to a comfortable 63° in Knoxville.

American Avocet and Cassin's Kingbird were new species for the state CBC, bringing the total species to 274 (+ 3 count week). Surf Scoter, Long-tailed Duck, Yellow-crowned Night-Heron, Long-eared Owl, Northern Saw-whet Owl, Spotted Towhee. Grasshopper Sparrow, and Black-and-white Warbler were other notable sightings.

The following species were recorded in record or unusually high numbers for this compilation: Ring-billed Gull, Herring Gull, Forster's Tern, American White Pelican, Barn Owl (3<sup>rd</sup> highest), Eastern Phoebe, Common Raven, Brown-headed Nuthatch, House Wren, Winter Wren, Hermit Thrush, Gray Catbird, Brown Thrasher, Orange-crowned Warbler, Palm Warbler, and Indigo Bunting. Record low or notably low totals were recorded for Ruddy Duck (lowest in 24 years), Northern Bobwhite (lowest ever and a continuing downward trend), Ruffed Grouse (first count period miss in 45 years), American Coot (lowest in 48 years), Belted Kingfisher (lowest in 39 years), Horned Lark (lowest in 38 years), and Field Sparrow (lowest in 32 years). What are called the irruptive finches (including Reb-breasted Nuthatch) had a banner year. Red-breasted Nuthatch (highest in 19 years), Evening Grosbeak (highest in 23 years), Purple Finch (highest in 31 years), Red Crossbill (about average), and Pine Siskin (highest in 12 years) were all found in much higher numbers this year. The hours recorded on foot was also the highest in the past 20 years.

*Please note that count summaries are in alphabetical order; count compilations read from west to east.* 

#### **COUNT SUMMARIES**

cw = count week species (3 days before and 3 days after actual count date, but not on count day) F/Y = feeder/yard watcher

**BENTON - BENT** (35.20069, -84.61837) – 18 December; 0630-1730. Weather: partly cloudy; wind: N 3 -8; 20-48° F. This is the first year for this CBC. All effort this year was on

foot. Highlights included Sora, Barn Owl, Blue-headed Vireo, Sedge Wren, Vesper Sparrow, and Indigo Bunting. Observers: Mathan Beachy (compiler), Sylvan Beachy, Derek Martin, Jason Martin, and Nelson Troyer.

**BIG SANDY – BGSA** (36.34050, -88.08210) - 27 December; no times given. Weather: clear, wind: 0-30; 32° F at start. Highlights included Forster's Tern, Pacific Loon, Golden Eagle, Barn Owl, and Le Conte's and Lincoln' sparrows. Observers: Tammy Devine, Joseph Hall, Iris Kilpatrick, Andrew Lydeard, Cynthis Routledge, Steve Routledge, Ruben Stoll (co-compiler), and Victor Stoll (co-compiler).

**BRISTOL** - **BRST** (36.58300°, -82.10000°) – 27 December; 0700-1730. Weather: partly cloudy; wind: N 0-6; 13-42° F. Gadwall and Swamp Sparrow were both found in record high numbers. Red-breasted Merganser, Herring Gull, Barn Owl, and Merlin were also notable. Observers: Rob Biller, Cade Campbell, Ron Carrico, Anne Cowan, Ben Cowen, Angela Cross, Rack Cross, Sam Evans, Tammy Griffey, Ron Harrington, Rick Knight, Roy Knispel, Phillip Lewis, Richard Lewis (compiler), Larry McDaniel, Adrianna Nelson, Randy Smith, and Michelle Sparks.

**BUFFALO RIVER – BUFF** (35.30000°, -87.46700°) – 17 December; 0615-1700. Weather: clear to cloudy; wind: NW 0-5; 23-39° F. 15 Loggerhead Shrikes, Vesper Sparrow, and Brewer's Blackbird were highlights. Observers: Dana Dodd, Jud Johnston, Paul Kittle, Rachel Lee, Roy McKey, Fran Menapace, Royce Neidert, Cynthia Rohrbach, Damien Simbeck (co-compiler), and Don Simbeck (co-compiler).

**CADE'S COVE - CADE** (35.60000°, -83.83300°) – 27 December; 0730-1715. Weather: two to six inches of snow on ground; 22-44° F. Notable sightings included Common Merganser, Sandhill Crane, Short-eared Owl, Red Crossbill, and Evening Grosbeak. Observers: Jean Alexander, Kat Barrow, Rick Barrow, Warren Bielenberg, Daniel Geleynse, Julianne Geleynse, Tom Howe, Susan Hoyle (compiler), David Johnson, and Martha Rudolph.

**CHATTANOOGA** - **CHAT** (35.10000°, -85.23300°) – 12 December; 0600-1800. Weather: partly cloudy, light rain; 48-60° F. Common Merganser, Pacific Loon (2<sup>nd</sup>), Virginia Rail, Sora, Gray Catbird, and Vesper Sparrow were notable. Observers: David Aborn, David Baker, Jeff Basham, Nelson Bennett, Harold Birch, Kevin Calhoon (compiler), John Diener, Lizzie Diener, Bruce Dralle, Danny Gaddy, William Haley, Daniel Jacobson, Kathy Jacobson, Barbara Johnson, Kristin Jones, Stephanie Jones, Sharon Klein, Gary Lanham, Pixie Lanham, Susan Longley, David Stone, Carl Swafford, Luke Thompson, Jane Trapnell, and Rick Williams.

CLARKSVILLE – CLRK (36.50000°, -87.38300°) – 19 December; 0700-1630. Weather: cloudy, light rain; wind: SE 5-14; 36-45° F. Black-crowned Night-Heron, Rufous Hummingbird, and Merlin were all new species. Barn Owl, and a count-week White-eyed Vireo were other nice finds. Observers: Sharon Arnold, Jackie Bastin, Suva Bastin, Tammy Devine, Elaine Faust, Jill Glover (F/Y), Patrick Glover (F/Y), Joe Hall, Deborah Hamilton (Compiler), Steve Hamilton, Iris Kilpatrick, Norbert Puskar (F/Y), Cyndi Routledge, Steve Routledge (F/Y), Joe Schiller, Sally Schiller, Rick Shipkowski, and Barbara Wilbur (F/Y).

**DUCK RIVER** - **DUCK** (35.53300°, -86.90000°) - 16 December; no times given. Weather: rain, sleet; wind: NW 10; 32-39° F. Grasshopper Sparrow was a new species for this count. Virginia Rail, Forster's Tern, Golden Eagle, Short-eared Owl, and Harris's Sparrow were also notable. Observers: Adam Beachy, Evan Beachy, Jamin Beachy, Jubal Beachy, Ruthanna Beachy, Tammy Devine, Joe Hall, Iris Kilpatrick, Andrew Lydeard, Daniel Redwine, Ruben Stoll (compiler), Victor Stoll, and Allen Trently.

ELIZABETHTON – ELIZ (36.33300°, -82.12300°) – 19 December; 0600-1800. Weather: cold, warmed by mid-day; 19-50° F. Notable finds included Gray Catbird, Evening Grosbeak, and Red Crossbill. Observers: Fred Alsop, Rob Armistead, Jerry Bevins, Debi Campbell, J. G. Campbell, Anne Cowan, Ben Cowan, Catherine Cummins, Harry Lee Farthing, Dave Gardner, Tammy Griffey, Jacki Hinshaw, Rick Knight (compiler), Roy Knispel, Vern Maddux, Joe McGuiness, Tom McNeil, Brookie Potter, Jean Potter, Pete Range, Judi Sawyer, Chris Soto, Michele Sparks, Bryan Stevens, Kim Stroud, and Charlie Warden.

**FAYETTE - FAYE** (35.20000°, -89.42000°) – 18 December; 0730-1600. Weather: clear to partly cloudy; wind: NE 2-6; 26-46° F. Bald Eagle, Red-breasted Nuthatch, Ruby-crowned Kinglet, Pine Siskin, and American Goldfinch were all recorded in record high numbers. Highlights included Barn Owl, Blue-headed Vireo, and Rusty Blackbird. Observers: Michael Collins, Judy Dorsey, Fields Falcone (compiler), Andrew Gafford, Kate Gooch, Gaynell Perry, Ted Perry, Dick Preston, Allen Trently, Jim Varner, and Martha Waldron.

**FRANKLIN/COFFEE COUNTIES – FRCO** (35.30200°, -86.05700°) – 21 December; 0800-1300. Weather: partly cloudy, light rain; wind: S 5-7; 45-48° F. Count highlights included Red-breasted Merganser, Loggerhead Shrike and American Pipit. Observers: Larry Bowers, Susie Bowers, Cheryl King, Murray King (co-compiler), John Lamb, Laura McCall, Monica Oosting, LouAnn Partington, Kerry Syler, and Marie Syler.

**GREAT SMOKY MOUNTAINS NATIONAL PARK - GSNP** (35.71700°, -83.48300°) – 20 December; 0630-1930. Weather: foggy, light rain; 27-49° F. Both night-herons, Fish Crow, Orange-crowned Warbler and 6 finch species were highlights. Observers: Mark Armstrong, Kat Barrow, Dolora Batchelor (F/Y), Tiffany Beachy, Warren Bielenberg, Tommy Bird, Gordon Brugman (F/Y), Melissa Crisp, Wanda DeWaard, Dale Ditmanson, Troy Evans, Alice Fisher, Julianne Geleynse, Frances Hensley, Owain Heyden, Bob Howdeshell, Tom Howe, Susan Hoyle, Kirk Huffstater, Marilyn Hughes (F/Y), Ross Hughes (F/Y), Kristine Johnson, Carey Jones, Martina Junod, Bill Keeler, Evan Kidd, Herb Kupfer, Julie Labhart, Rachel Long, Sue Maddox, Terry Maddox, Jaimie Matzko, Butch McDade, Chris Meyers, Pam Munson (F/Y), Dana Murphey, Becky Nichols, Ron Oliver, Hunter Palmer, Logan

Rosenberg, Martha Rudolph, Chick Steadman (F/Y), Judy Steadman, Kendra Straub, Paul Super, Andy Troutman, Debbie Troutman, Jeff Troutman, Harumi Umi, Don Utterback, Ken Voorhis, Greg Ward (F/Y), Keith Watson (compiler), Andrea Wilson (F/Y), Valerie Wininger, and Miranda Zwingelberg.

HICKORY-PRIEST - HKPR (36.20000°, -86.66700°) – 2 January; no times given. Weather: cloudy; wind: WNW 0-10; 42-52° F. The all-time species total for this count is 162. Notable sightings included Eared Grebe, Pacific Loon, Orange-crowned Warbler, and Rusty Blackbird. Observers: Phillip Casteel, Richard Connors (compiler), Jerry Drewry, Stacy Elliott, Richard Fox, Tarcila Fox, Graham Gerdeman, Mark Hackney, Joe Hall, Randy Harrod, Bob Ingle, Melissa James, Peter Lowen, Tim Lloyd, Judy Luna, Michael Smith, and Joe Stone.

HIWASSEE – HIWA (35.36700°, -84.90000°) – 1 January. Weather: cloudy, light rain; 51-57° F. Sightings of note included Snow Goose, 18,139 Sandhill Cranes, American White Pelican and American Pipit. Observers: David Aborn, Harold Birch, Gary Brunvoll, Kevin Calhoon (compiler), John Dever, Danny Gaddy, William Haley, David Hollie, Barbara Johnson, Cynthia Morton, Charles Murray, Kevin Thompson, Luke Thompson, Jane Trapnell, and Libby Wolfe.

**JACKSON – JKSN** (35.61700°, -88.81700°) – 2 January; 0630-1715. Weather: overcast, light rain; wind: N-5; 41-45° F. Short-eared Owl, Spotted Towhee, and Western Meadowlark. Merlin, American Pipit, and Le Conte's Sparrow were other highlights. Record totals were recorded for Red-shouldered Hawk, Wilson's Snipe, Downy Woodpecker, Le Conte's Sparrow, Song Sparrow, Swamp Sparrow, and Pine Siskin. Observers: Billie Cantrell, Maureen Ellis, Bob Ford, Mark Greene (compiler), and Allan Trently.

**KINGSPORT - KING** (36.50000°, -82.51370°) – 2 January; 0700-1715. Weather: partly cloudy; 45-60° F. Black-crowned Night-Heron, Common Raven, Gray Catbird, and Orangecrowned Warbler were highlights. Observers: Betty Bailey, Gary Bailey, Rob Biller, Belinda Bridwell, George Bridwell, Ben Chaney, Sunny Chaney, Anne Cowan, Ben Cowan, Bambi Fincher, Tammy Griffey, William Grigsby (compiler), Jean Henson, Neal Henson, Mike Hubley, Susan Hubley, Rick Knight, Roy Knispel, Tom McNeil, Harry Norman, Sherrie Quillen, Helen Sirett (F/Y), and Michele Sparks.

KNOXVILLE - KNOX (35.91700°, -84.08300°) – 2 January; 0543-1800. Weather: cloudy; wind: 0-10; 47-63° F. Least Sandpiper and Common Yellowthroat were new species. Record high totals were set for Canada Goose, Double-crested Cormorant, Great Egret, Yellow-bellied Sapsucker, Orange-crowned Warbler, Rusty Blackbird, and Common Grackle. Mute Swan, Green Heron, Herring Gull, Rufous Hummingbird, Gray Catbird, and Black-and-white Warbler were also notable. Observers: Amy Abercrombie, Robert Abercrombie, Stacy Adair, Steve Adair, Mark Armstrong, Stephen Lyn Bales, Rachel Barker, Kathryn Barrow, Rick Barrow, Meghan Bessy, Warren Bielenberg, Frank Bills, Deedee Blaine, Meredith

Boatman, Billie Cantwell, Howard Cox, Jeremey Dotson, K. Dean Edwards (compiler), Ashley Epstein, Chuck Estes, Lola Estes, Rachel Evans, Chris Foley, Patty Ford, Cheryl Greenacre, Dottie Habel, Paul Hartigan, Vickie Henderson, Lis Henry, Phill Henry, Ron Hoff, Angela Hoffman, Bob Howdeshell, Tom Howe, David Howell, Susan Hoyle, James Human, Kristine Johnson, Evan Kidd, Herbert Kupfer, Jerry Ledbetter, Jennifer Manges, Seth McConchie, Janet Lee McKnight, Jessica Moore, Dollyann Myers, Robin Nichols, Charles P. Nicholson, Jilynn Parmly, Joseph Pyle, Dawson Rader, Patrick Rakes, Jo Roy, Kelly Roy, Martha Rudolph, Michael Ryon, Elizabeth Schilling, Peter Sojka, Nickolus Stahlman, Colin Sumrall, Robert Terrell, Merikay Waldvogel, Randy Wegwerth, Chris Welsh, Jacob Wessels, Eddy Whitson, Michael Winck, and Valerie Wininger.

**LEBANON** - **LEBN** (36.19440, -86.38920) – 2 January; 0700-1540. Weather: cloudy, partly cloudy; 45-51° F. Northern Bobwhite, Great Egret, and Merlin were highlights. Observers: Siti Hidayati, Justin Nation, Robin Nation, Susan Schenk, Greg Tomerlin, JosEllen Turrentine, Melissa Turrentine, Roy Turrentine, Jeffery Walck, and Stephen Zipperer (compiler).

**MEMPHIS** - **MPHS** (35.15000°, -89.93300°) – 20 December; 0645-1715. Weather: dense fog, cloudy; wind: 43-47° F. Sora was a new speciesS. Other notable sightings this year included Ross's Goose, Short-eared Owl, Sedge and Marsh wrens, Orange-crowned Warbler, American Tree, Le Conte's, and Lincoln's sparrows, and Brewer's Blackbird. Observers: Betty Blaylock, David Blaylock, Chad Brown, Mary Bruno, Michael Collins, Emma Counce, Judy Dorsey, Gregg Elliot, Fields Falcone, Sue Ferguson, Bob Ford, Andrew Gafford, Van Harris, Scott Heppel, Richard Hickey, Margaret Jefferson (compiler), Lisa Jorgensen, Sarita Joshi, Keith Kunkel, George Payne, Dick Preston, P. J. Pulliam, Mary Schmidt, Nick Smith, Edwin Thomas, Cliff VanNostrand, Deon VanNostrand, Jim Varner, Anita Vincent, and Martha Waldron.

NASHVILLE - NASH (36.05000°, -86.93300°) – 19 December; no times given. Weather: cloudy; light rain; wind: S 0-14; 33-51° F. A Cassin's Kingbird was a new species for the Tennessee CBC. Other highlights included Golden Eagle, Long-eared Owl, Blue-headed Vireo, Gray Catbird, Vesper Sparrow, and Evening Grosbeak. Observers: Jim Arnett, Kim Bailey, Kristy Baker, Hugh Barger, Sharon Bell, Sandy Bivens, Kevin Bowden, Susan Bradfield, Trae Bradfiel d, Jean Buchanan, Richard Connors, Elizabeth Cook, Laura Cook, Anthony DeGeorge, Francis Fekel, Bill Fissell, Tarcila Fox, John Froeschauer, Graham Gerdeman, Steve Goodbred, Greg Greenhow, Sherlene Spicer Greenhow, Randy Harrod, Melissa James, Andy Lantz, Leah LaRocco, Tim Loyd, Judy Luna, Betty McGraw, Roy McGraw, Katie Merth, Camille Monohan, Tera Rica Murdock, Alexa Napoleon, Abra Osorio, Amy Potter, Jordan Rex, Julie Ridge, Polly Rooker, Janet Ross, Susie Russenberger, Sarah Scott, Tom Seador, Jan Shaw, Kathy Shaw, Danny Shelton, Laura Smith, Mike Smith, Jo Ann Staples, Austin Watkins, Paul Yoder, and Mary Zimmerman. Non-participating compiler: Scott Block. NICKAJACK LAKE - NICK (35.06700°, -85.51700°) – 19 December; 0600-1900. Weather: partly cloudy to cloudy; 24-54° F. Notable sightings included Great Egret, Fish Crow, Vesper Sparrow and Rusty Blackbird. Observers: Harold Birch, Betsy Bowden, Bruce Dralle (compiler), Traci Dralle, Danny Gaddy, William Haley, Matt Hooper, Barbara Johnson, Tommie Rogers, Rick Williams, and Libby Wolfe.

**NORRIS - NORR** (36.21700°, -84.08300°) - 19 December: 0615-1700. Weather: clear - cloudy; wind: NE 0-10, intermittently gusty; 25-46° F. Notable were the most Brownheaded Nuthatches ever for this count, Fox Sparrow, and Purple Finch. Observers: Karen Eagle, Chuck Estes, Lola Estes, Susan Hoyle, Bill Keeler, Morton Massey, Charles Nicholson (compiler), Jeff Paynter, Micaela Paynter, Martha Rudolph, Courtney Shea, Dan Thomas, and Jacob Wessels.

**PERRY COUNTY - PRRY** (35.70800°, -87.77500°) - 25 December; no times given. Weather: clear; wind: NW 10-20; 12-25° F. Long-tailed Duck, Common Loon, Orangecrowned and Palm Warblers. Other notable sightings included Golden Eagle, American Pipit, and Lapland Longspur. Observers: Adam Beachy, Jamin Beachy, Jubal Beachy, Ez Schwartz, Ruben Stoll (compiler), and Victor Stoll.

**REELFOOT LAKE - REEL** (36.41700°, -89.38300°) – 19 December; 0630-1715. Weather: cloudy, light rain; wind: S 5-11; 37-44° F. Yellow-throated Warbler was a new cw species. Common Loon, American White Pelican, Eastern Screech-Owl, Brown Thrasher, Palm Warbler, and Purple Finch all represent new high counts.

t. Observers: Jerry Drewry, Bob Foehring, Gabriel Garneau, Mark Greene (compiler), Mark Haas, Gail King, Gabrielle LeBeau, Andrew Lydeard, Brainard Palmer-Ball, Ruben Stoll, Victor Stoll, Mike Todd, Allan Trently, and Steve Yarbrough.

**ROAN MOUNTAIN** - **ROAN** (36.10600°, -82.11100°) – 20 December; 0615-1745. Weather: 1-2 inches of snow above 4000 ft.; wind: variable; 30-49°. A count-week Ruffed Grouse and 31 Common Ravens were notable. Observers: Fred Alsop, Catherine Cummins, Rick Knight (compiler), Roy Knispel, Thomas McNeil, Judi Sawyer, and Charles Warden.

SAVANNAH – SAVA (35.13300°, -88.15000°) – 23 December; 0530-1700. Weather: cloudy, rain; wind: SW 0-15; 45-60° F. Ross's Goose, Barn Owl, Marsh Wren, 2 Gray Catbirds, and a Lapland Longspur were notable. Observers: Dwight Cooley, Jeff Garner, Marcus Johnson, Warren Massey, Floyd Sherrod, Libba Sherrod, Damien Simbeck (compiler), Allen Trently, Paul Troyer, and Linda Yoder.

SHADY VALLEY/MOUNTAIN CITY - SHDY (36.50000°, -81.85000°) – 3 January. Weather: cloudy, light rain; wind: NE 10-15; 36-45° F. Northern Saw-whet Owl was a new species. Northern Harrier, American Woodcock, Brown Thrasher, American Pipit, and Rusty Blackbird were highlights. Count high totals were recorded for Northern Flicker, American Kestrel, and Common Raven. Observers: Robert Biller (compiler), Cade Campbell, Ron Carrico, Tammy Griffey, Rick Knight, Roy Knispel, Phillip Lewis, Richard Lewis, Cathy McNeil, Thomas McNeil, Adrianna Nelson, John Shumate, and Michele Sparks.

WHITE COUNTY – WHTE (35.90800°, -85.59800°) – 19 December; 0525-1650. Weather: partly cloudy; wind: 5-10; 27-52° F. Highlights included Virginia Rail, Merlin, 4 Loggerhead Shrikes, American Pipit, Palm Warbler, and Rusty Blackbird. Observers: Douglas A. Downs (compiler), Janie Finch, Ric Finch, Jim Layzer, Nancy Layzer, Mac McWhirter, Susan McWhirter, Allen Nabors, and Kathryn Uziel.

Count name	MPHS	FAYE	REEL	JKSN	SAVA	BGSA	DUCK	PRRY	BUFF	CLRK	NASH	HKPR	LEBN
Count date	20-Dec	18-Dec	19-Dec	2-Jan	23-Dec	27-Dec	16-Dec	25-Dec	17-Dec	19-Dec	19-Dec	2-Jan	2-Jan
6	4		2220			200	204			4			
Snow Goose	4 2	-	2320 5	-	-	308	304	-	-	4	-	CW	-
Ross's Goose	-	-		-	1	4	35	-	-	-	-	-	-
Greater White-fronted Go	ose -	-	1551	-	-	1020	956	31	-	-	-	3	-
Cackling Goose	-	-	-	-	-	12	290	-	-	-	-	-	-
Canada Goose	1032	73	12	74	132	355	349	175	153	114	219	182	157
Goose sp.	-	-	-	-	-	-	-	-	-	-	-	CW	-
Mute Swan	-	-	-	-	-	-	-	-	-	-	-	-	-
Wood Duck	6	14	34	2	-	12	27	2	-	50	2	-	-
Northern Shoveler	46	-	112	-	15	82	149	6	-	-	-	8	-
Gadwall	70	-	1299	2	7	5043	5147	502	-	18	14	19	6
American Wigeon	-	-	13	-	-	75	2236	30	-	-	-	2	-
Mallard	203	-	3049	10	7	9100	12501	836	33	62	28	324	41
American Black Duck	-	-	1	-	-	40	15	2	-	-	-	2	-
Northern Pintail	-	-	53	-	-	54	2050	1094	-	-	-	-	-
Green-winged Teal	-	-	14	-	-	153	3015	1	-	-	-	1	-
Canvasback	-	-	3	-	-	1307	12	2	-	-	-	1	-
Redhead	-	-	1	-	-	7	1	6	-	-	-	-	-
Ring-necked Duck	7	-	688	-	25	258	1026	28	-	43	17	4	3
Greater Scaup	-	-	2	-	-	105	4	-	-	-	-	CW	-
Lesser Scaup	9	-	1472	-	387	64	627	10	1	-	-	-	-
Surf Scoter	-	-	1	-	-	-	-	-	-	-	-	-	-
Long-tailed Duck	-	-	1	-	-	-	-	1	-	-	-	-	-
Bufflehead	47	-	205	1	42	107	584	-	CW	-	-	51	6
Common Goldeneye	-	-	3	-	27	494	10	2	-	-	-	16	-
Hooded Merganser	208	5	193	5	-	41	55	7	7	10	-	25	3
Common Merganser	-	-	-	-	-	2	-	-	-	-	-	-	-
Red-breasted Merganser	-	-	-	-	13	104	124	-	-	-	-	4	-
Ruddy Duck	24	-	842	1	-	24	59	-	-	-	75	30	6
Northern Bobwhite	-	-	3	-	-	-	-	-	-	cw	-	-	1
Wild Turkey	16	13	58	-	60	-	57	79	38	144	14	12	15
Ruffed Grouse	-	-	-	-	-	-	-	-	-	-	-	-	-
Pied-billed Grebe	16	-	74	2	44	8	35	-	4	-	1	128	11
Horned Grebe	-	-	9	-	27	57	8	-	-	-	-	213	-
Eared Grebe	-	-	-	-	-	-	-	-	-	-	-	1	-
Rock Pigeon	992	-	30	81	55	-	37	11	53	75	37	107	33
Eurasian Collared-Dove		3		2	15	-	3	2	7	-	_	-	2
Mourning Dove	1413	207	4	125	157	85	208	188	365	127	96	49	155
Rufous Hummingbird	-	_	-	-	-	-	-	-	_	1	1	-	-
Virginia Rail	-	-	3	-	3	-	1	-	-	-	-	-	-
Sora2	-	-	-	-	-	-	-	-	-	-	-	-	-
American Coot	3	-	28	-	320	43	100	-	-	37	-	595	-
Sandhill Crane	-	-	-	-	-	74	72	-	-	-	-	15	-
Summin Grune						/ 1	, 4					15	

20

THE MIGRANT

MARCH

21-Dec	19-Dec	19-Dec	12-Dec	1-Jan	18-Dec	2-Jan	19-Dec	27-Dec	20-Dec	2-Jan	19-Dec	20-Dec	27-Dec	3-Jan 28	
-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2942
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3561
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	302
31	223	80	1248	205	193	1277	171	23	59	215	645	27	794	123	8341
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CW
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
-	-	7	8	2	7	19	5	5	2	-	-	-	1	-	205
6	-	3	13	45	-	6	-	-	-	-	-	-	-	-	491
25	39	-	151	176	3	82	-	-	-	-	-	-	133	-	12736
-	-	-	1	4	-	CW	-	-	-	-	-	-	20	-	2381
35	72	19	251	1070	1	210	46	15	25	123	193	-	241	68	28563
6	-	-	-	8	-	2	-	-	-	-	-	10	4		90
3	-	-	-	3	-	-	-	-	-	-	-	-	-	-	3257
-	1	-	20	41	-	-	-	-	-	-	-	-	2	-	3248
-	-	5	-	332	-	-	-	-	-	-	-	-	-	-	1662
-	-	14	17	63	-	-	-	-	-	-	-	-	1	-	110
-	55	60	72	96	-	42	-	-	-	1	1	-	46	-	2472
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	112
-	1	90	83	-	-	-	-	-	-	1	-	-	-	-	2745
-	-	-	-	-	-	CW	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	CW	-	2
9	29	3	67	4	CW	-	-	-	-	-	105	12	200	-	1472
-	-	2	2	-	-	-	-	-	-	-	-	-	1	-	557
58	134	24	95	113	2	16	1	-	-	9	6	8	88	5	1118
-	-	-	1	-	-	-	-	6	-	-	-	-	-	-	9
1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	247
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1062
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
-	257	16	27	89	1	36	-	19	59	79	26	18	3	33	1169
-	-	-	-	-	-	-	-	-	-	-	CW	CW	-	-	CW
14	2	102	120	6	1	40	31	2	-	28	5	3	36	-	713
-	-	1	6	-	-	1	3	-	-	-	8	-	4	-	337
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
-	140	30	1180	44	137	214	114	-	183	205	313	16	340	97	4524
-	16	-	6	2	-	-	-	-	-	-	6	-	-	-	107
87	304	93	579	76	139	391	65	58	232	277	108	27	259	176	6050
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	3
-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	10
-	-	1	-	1	-	-	-	-	-	-	-	-	-	4	
12	-	1016	517	-	-	13	-	-	-	1	-	-	-	-	2685
11	-	12	2	18139	33	69	10	1	-	-	-	-	-	-	18438

FRCO WHTE NICK CHAT HIWABENTKNOXNORRCADEGSNPKINGELIZROANBRISSHDYTOTALS21-Dec19-Dec12-Dec1-Jan18-Dec2-Jan19-Dec20-Dec2-Jan19-Dec20-Dec2-Jan19-Dec27-Dec3-Jan 28

													-
Count name	MPHS	FAYE	REEL	JKSN	SAVA	BGSA	DUCK	PRRY	BUFF	CLRK	NASH	HKPR	LEBN
American Avocet	-	-	-	-	-	1	-	-	-	-	-	-	-
Killdeer	94	111	330	150	122	245	210	40	196	40	62	26	49
Least Sandpiper	47	-	-	-	-	-	-	-	-	-	-	-	-
American Woodcock	-	-	1	1	-	1	1	6	-	-	12	1	-
Wilson's Snipe	-	-	36	29	2	4	122	1	51	5	-	-	1
Bonaparte's Gull	-	-	234	-	29	610	471	317	9	-	-	330	58
Ring-billed Gull	18	-	5278	-	2313	50000	2200	5040	-	2	8	3483	262
Herring Gull	-	-	1	-	18	1000	150	16	-	-	-	7	-
Lesser Black-backed Gul	1 -	-	CW	-	-	3	5	-	-	-	-	-	-
Forster's Tern	-	-	-	-	-	5	10	-	-	-	-	-	-
Pacific Loon	-	-	-	-	-	1	-	-	-	-	-	1	-
Common Loon	-	-	12	-	26	53	3	1	-	-	-	136	-
Double-crested Cormora	ant 3	-	519	-	2	2	410	12	1	-	-	7	200
American White Pelican	-	-	1020	-	-	129	186	7	-	-	-	CW	-
Great Blue Heron	40	-	29	10	45	23	97	8	7	14	11	58	18
Great Egret	5	7	-	-	1	-	56	-	-	-	-	-	1
Green Heron	-	-	-	-	-	-	-	-	-	-	-	-	-
Black-crowned Night-Her	on -	-	-	-	-	-	-	-	-	1	-	2	-
Yellow-crowned Night-He		-	-	-	-	-	-	-	-	-	-	-	-
Black Vulture	12	45	29	6	12	110	145	124	104	270	233	95	39
Turkey Vulture	5	173	76	56	145	172	145	98	100	69	45	7	5
Golden Eagle	-	-	-	-	-	2	2	1	-	-	1	-	-
Northern Harrier	6	1	15	2	9	3	9	-	1	2	2	-	1
Sharp-shinned Hawk	1	-	3	CW	3	1	2	3	-	1	1	2	-
Cooper's Hawk	3	-	3	1	-	3	5	1	4	3	8	6	3
Accipiter sp.	-	-	-	-	1	-	-	-	-	1	-	-	-
Bald Eagle	-	7	58	-	12	31	62	10	2	2	6	3	-
Red-shouldered Hawk	27	15	22	22	12	15	22	9	12	9	6	5	2
Red-tailed Hawk	49	25	37	25	22	29	44	18	39	19	18	12	19
Buteo sp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Barn Owl	-	1	-	-	1	2	2	-	-	2	-	-	-
Eastern Screech-Owl	-	-	7	1	6	6	4	1	3	-	5	1	-
Great Horned Owl	2	-	5	1	3	2	4	1	1	5	4	3	1
Barred Owl	4	2	18	3	2	2	1	2	-	5	6	3	3
Long-eared Owl	-	-	-	-	-	-	-	-	-	-	2	-	-
Short-eared Owl	2	-	2	1	-	-	1	-	-	-	-	-	-
Northern Saw-whet Ow	1 -	-	-	-	-	-	-	-	-	-	-	-	-
Belted Kingfisher	11	3	7	4	4	3	24	1	6	10	14	11	6
Red-headed Woodpecke	er 5	5	8	-	7	61	20	2	3	5	-	-	3
Red-bellied Woodpecke		53	92	48	75	51	129	22	27	72	76	27	29
Yellow-bellied Sapsucker		17	28	7	20	16	47	15	16	15	25	18	7
Downy Woodpecker	55	18	67	34	25	32	92	29	35	43	74	26	25
Hairy Woodpecker	1	2	6	3	1	3	10	1	3	6	7	7	-
, 1													

THE MIGRANT

MARCH

#### FRCO WHTE NICK CHAT HIWA BENT KNOX NORR CADE GSNP KING ELIZ ROAN BRIS SHDY TOTALS

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
29	99	22	55	190	5	200	7	7	23	31	8	-	31	-	2382
-	-	-	-	65	-	CW	-	-	-	-	-	-	-	-	112
-	-	1	3	-	-	4	-	-	3	-	-	-	-	2	36
3	6	-	1	1	1	7	-	-	-	-	-	-	2	1	273
-	-	4	600	23	-	830	150	-	-	-	-	-	26	-	3691
10	60	440	855	279	-	2755	3	-	1	46	5	-	252	-	73310
-	-	-	1	-	-	1	-	-	-	-	-	-	1	-	1195
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	3
10	-	3	48	-	-	-	-	-	-	-	3	-	-	-	295
74	-	247	40	88	-	132	-	-	-	83	1	-	-	-	1821
-	-	-	6	635	-	CW	-	-	-	-	-	-	-	-	1983
15	16	39	96	117	2	178	12	1	10	27	21	4	23	3	924
-	-	1	-	1	-	20	-	-	-	-	-	-	-	-	92
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	5
- 72	- 210	-	-	-	-	-	-	-	1	-	-	-	-	- 21	1
73 83	319	39 122	253 39	168 17	4 13	65 57	21 70	-	7 43	229 58	14 14	-	15 52	31 9	2462 1913
03	234	-	-	-	-	- 57	70	-	- 45	- 50	- 14	6	- 52	-	6
1	4	-	-	-	-	- 1	-	3	-	-	-	-	-	2	63
1	3	-	1	1	1	5	1	-	-	1	1	-	4	1	37
-	5	1	2	2	1	11	-	3	7	5	4	1	6	4	92
-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	4
2	-	12	8	22	2	13	4	1	1	3	3	-	3	-	267
5	14	12	9	14	2	23	9	10	5	3	-	2	3	2	291
18	26	21	14	8	19	37	8	3	10	22	30	4	17	22	615
-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	10
-	-	5	3	-	-	1	2	-	2	2	4	-	5	3	61
1	2	-	2	-	2	2	1	-	-	-	1	-	3	cw	46
1	-	2	1	-	-	3	-	-	1	-	2	-	-	2	63
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
6	3	25	13	16	2	30	5	1	6	14	16	2	6	2	251
6	2	15	14	2	9	5	5	-	-	-	2	-	2	-	181
10	38	42	47	19	40	174	60	20	71	69	49	6	42	22	1521
7	10	10	26	21	20	81	30	11	21	22	14	2	10	1	537
5	23	12	54	27	17	118	34	21	101	56	29	13	28	17	1110
1	4	4	5	5	2	12	6	3	10	4	3	6	3	7	125

24			,	THE N	MIGR	ANT					М	ARCH	I
Count name	MPHS	FAYE	REEL	JKSN	SAVA	BGSA	DUCK	PRRY	BUFF	CLRK	NASH	HKPR	LEBN
Northern Flicker	83	45	92	45	45	59	244	50	13	49	47	65	28
Pileated Woodpecker	23	8	31	6	12	15	41	7	14	18	16	9	1
American Kestrel	28	12	21	9	10	10	19	7	40	17	14	3	17
Merlin	-	-	1	1	2	-	2	3	-	1	CW	CW	1
Eastern Phoebe	19	14	17	7	17	18	49	24	28	7	15	4	5
Cassin's Kingbird	-	-	-	-	-	-	-	-	-	-	1	-	-
Loggerhead Shrike	-	-	7	-	-	-	-	-	15	-	1	-	-
White-eyed Vireo	-	-	CW	-	-	-	-	-	-	CW	-	-	-
Blue-headed Vireo	-	2	-	-	-	-	-	-	-	-	1	-	-
Blue Jay	207	108	118	194	167	142	211	51	65	161	159	72	186
American Crow	65	287	123	551	1406	457	514	184	202	305	232	207	176
Fish Crow	10	-	1	-	3	-	-	-	-	-	-	-	-
Common Raven	-	-	-	-	-	-	-	-	-	-	-	-	-
Horned Lark	-	-	127	5	35	2	-	-	-	4	-	-	-
Carolina Chickadee	104	63	137	33	87	89	224	124	67	119	173	111	133
Black-capped Chickadee		-	-	-	-	-	-	-	-	-	-	-	-
Tufted Titmouse	73	60	98	42	98	117	200	105	153	99	155	64	41
Red-breasted Nuthatch	6	5	6	2	13	23	13	1	9	3	-	5	-
White-breasted Nuthatch		14	34	13	9	44	46	31	38	34	65	4	16
Brown-headed Nuthatch		-	-	-	27	-	-	-	-	-	-	-	-
Brown Creeper	6	-	16	2	14	7	11	7	-	4	5	13	2
House Wren	-	-	6	1	4	1	8	1	-	-	2	1	-
Winter Wren	4	6	38	5	17	15	82	16	6	9	7	8	1
Sedge Wren	2	-	5	-	-	-	-	-	-	-	CW	-	-
Marsh Wren	3	-	2	-	2	-	-	-	-	-	-	-	-
Carolina Wren	119	65	160	86	89	75	186	93	47	128	153	78	61
Golden-crowned Kinglet		30	64	13	57	38	122	96	27	20	56	31	14
Ruby-crowned Kinglet	57	26	74	12	48	31	196	80	12	12	30	19	4
Eastern Bluebird	134	203	61	93 22	192	132	245	197	195	109	200	70	84
Hermit Thrush	20	18	53	22	13	33	84 2510	40	20	7	37	21	2
American Robin	872 2	170	251	674 -	4682 2	- 1156	2510 5	509	171	764 -	3443 1	- 1284	593 -
Gray Catbird Brown Thrasher	2 15	4	31		2 11	- 14	37	23	-	- 7	6	3	-
Northern Mockingbird	13 57	4 49	29	11 50	39	28	49	2 <i>3</i> 39	51	84	109	125	96
European Starling	1408	240	3710	664	1634	360	2000	155	3727	1547	109	1312	1273
Cedar Waxwing	558	320	26	36	254	174	2000 781	133 347	79	85	1204	309	82
House Sparrow	34	6	172	20	21	52	62	26	10	78	1114	17	15
American Pipit	-	-	2	-	17	1	1	3	-	-	-	-	-
Evening Grosbeak	-	-	-	-	-	-	-	-	-	-	2	-	-
House Finch	- 74	26	- 77	20	46	17	- 7	47	91	56	103	54	20
Purple Finch	20	20	50	6	7	3	12	25	26	2	64	6	20 5
Red Crossbill	-	-	-	-	-	-	-	-	-	-	-	-	-
Pine Siskin	73	575	1	42	10	14	54	186	2	22	66	1	15
	, 5	515	1	14	10	11	51	100	4		00	1	10

20	21							iioiui	111						20
FRCO	WHTE	E NICK	CHAT	HIWA	BENT	KNOX	NORR	CADE	GSNP	KING	ELIZ	ROAN	BRIS	SHDY	TOTALS
14	15	26	59	37	28	82	18	9	19	27	17	2	26	32	1276
2	10	15	10	3	1	21	29	19	38	15	27	5	21	5	422
36	47	8	8	3	7	5	5	-	5	9	19	1	20	20	400
-	1	-	1	-	-	1	-	-	-	-	-	-	1	-	15
7	22	24	40	21	21	40	14	27	33	8	14	5	13	4	517
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CW
-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	4
118	137	146	410	94	181	456	69	84	221	231	199	37	195	69	4488
53	176	202	166	108	74	459	206	185	371	333	395	176	225	550	8388
-	-	1	3	-	-	19	-	-	1	-	-	-	-	-	38
-	-	-	-	-	-	-	-	3	4	1	9	31	2	13	63
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	173
8	35	88	148	77	53	493	122	64	434	135	159	68	82	82	3512
-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	7
10	79	98	112	64	52	286	132	63	298	115	110	32	78	38	2872
1	7	9	2	-	5	8	7	3	7	3	3	3	5	2	151
8	30	31	19	4	10	101	57	22	112	39	28	14	43	17	892
-	-	3	49	8	2	11	10	1	6	-	-	-	5	-	122
4	5	-	4	1	4	2	CW	-	15	1	2	1	3	1	130
-	-	6	6	-	2	3	-	-	1	-	-	-	-	-	42
1	2	10	6	2	5	7	11	5	11	10	9	4	12	6	315
-	-	-	2	-	2	-	-	-	-	-	-	-	-	-	11
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	8
19	59	72	169	61	40	358	103	63	177	174	136	39	80	56	2946
4	6	11	37	16	23	39	11	23	69	28	26	8	9	4	905
7	6	65	104	23	31	84	21	-	23	26	9	1	1	-	1002
34	150	81	138	131	136	370	150	40	149	163	134	30	126	105	3852
2	3	27	23	11	10	53	28	18	25	5	13	1	14	3	606
275	54	238	1111	1470	2610	1860	108	171	432	221	40	43	161	42	25915
-	-	-	1	-	-	1	-	-	-	1	1	-	-	-	14
7	11	16	26	9	15	19	6	4	3	5	-	-	3	1	291
219	69	45	133	54	21	270	37	12	38	110	69	10	82	14	1988
1207	4813	441	1406	649	2344	1819	432	49	157	862	1081	132	1675	671	37052
79	42	151	301	240	245	295	70	17	121	16	16	-	22	12	5792
-	11	14	138	4	15	33	27	-	15	9	49	20	50	15	925
2	30	-	-	4	141	-	-	-	-	32	51	-	28	1	313
-	-	-	-	-	-	-	-	23	73	-	1	-	-	-	99
2	28	51	219	47	15	346	30	24	48	58	27	4	47	36	1620
7	-	62	67	30	27	12	1	3	67	-	-	-	11	-	515
-	-	-	-	-	-	-	-	1	6	-	9	-	-	-	16
1	-	78	122	10	CW	8	-	80	20	-	-	-	CW	-	1380

THE MIGRANT											М	ARCH	I
Count name	MPHS	FAYE	REEL	JKSN	SAVA	BGSA	DUCK	PRRY	BUFF	CLRK	NASH	HKPR	LEBN
American Goldfinch	122	179	114	8	119	38	183	114	76	78	145	77	133
Lapland Longspur	-	-	3	-	1	-	-	1	-	-	CW	-	-
Grasshopper Sparrow	-	-	-	-	-	-	1	-	-	-	-	-	-
Chipping Sparrow	37	113	3	7	260	6	124	40	42	4	3	2	12
Field Sparrow	80	37	44	56	31	190	180	152	122	29	80	38	17
Fox Sparrow	11	6	57	12	9	8	32	22	5	6	9	9	1
Dark-eyed Junco	530	389	254	218	250	276	255	244	179	138	78	29	16
White-crowned Sparrow	74	13	76	9	-	60	43	39	20	15	7	1	3
White-throated Sparrow	691	401	624	259	291	336	804	561	145	204	490	165	75
Vesper Sparrow	-	-	-	-	16	-	13	-	1	-	1	-	-
Le Conte's Sparrow	-	-	1	2	-	1	7	-	-	-	-	-	-
Savannah Sparrow	239	64	57	16	44	49	16	2	72	5	40	-	1
Song Sparrow	206	123	188	175	68	234	1227	386	82	61	130	24	23
Lincoln's Sparrow	1	-	-	-	-	2	-	-	-	-	-	-	-
Swamp Sparrow	71	80	179	209	67	140	1338	221	9	49	47	15	2
Spotted Towhee	-	-	-	1	-	-	-	-	-	-	-	-	-
Eastern Towhee	60	50	21	55	25	44	73	52	20	37	57	9	17
Eastern Meadowlark	89	38	115	100	41	6	71	53	116	14	45	6	27
Western Meadowlark	-	-	1	2	-	-	-	-	-	-	-	-	-
Red-winged Blackbird	837	260	12955	201	944	125	5800	22	464	60	37	242	501
Brown-headed Cowbird	29	36	3652	5	206	1503	198	-	230	4	737	46	157
Rusty Blackbird	27	2	1163	5	65	15	296	-	6	-	9	2	14
Brewer's Blackbird	17	-	3	-	-	-	-	-	2	-	-	-	-
Common Grackle	941	44	5158	3425	2952	10	11318	-	1606	328	1155	153	206
Blackbird sp.	-	-	-	-	50	-	-	-	600	80	-	-	-
Black-and-white Warble		-	-	-	-	-	-	-	-	-	-	-	-
Orange-crowned Warble	er 1	-	1	-	-	-	5	3	1	-	3	3	-
Common Yellowthroat Palm Warbler	-	-	4	-	-	-	-	-	-	-	-	-	-
Paim Warbler Pine Warbler	- 3	- 7	4	-	2 24	1	1	1	1	4 4	2	2 2	-
	5 81	70	1 79	4		4 23	6 362	1 53	3 3	4 21	- 65	2 61	-
Yellow-rumped Warbler Yellow-throated Warbler				- 16	146		- 302	- 55	- -		- 05	-	- 44
Northern Cardinal	359	- 273	cw 316	216	- 162	- 147	392	276	201	- 352	346	208	112
Indigo Bunting	559	-	1	- 210	102	147	1	- 270	201	552	540	200	112
Total individuals	- 8466	4371	30638		- 14845	- 6376	30702	4518	- 9010	- 5055	10926	- 4878	- 4195
Total Species	93	4371 67	122	81	99	113	120	4518 96	78	81	85	4070 95	77
Count Week species	-	-	3	-		-	-	1	1	2	3	5	-
Count week species			5					1	1	2	5	5	
Observers	30	11	14	5	10	8	14	6	10	13	52	17	10
Parties	12	5	7	5	5	5	9	4	7	7	9	4	4
Party Hours	67.3	26.75	67.25	33.25	63	46.5	79	40	55	50.75	66.5	36.25	32.75
Hours by car	16.6	12.75	35.5	17.5	3875	29	28	25	34.5	33.75	19.25	15	25.75
Hours by foot	50.7	14	31.75	15.75	24.25	17.5	39	14	20.5	17	47.25	21.25	4

FRCO	WHTE	NICK	CHAT	HIWA	BENT	KNOX	NORR	CADE	GSNP	KING	ELIZ	ROAN	BRIS	SHDY	TOTALS
18	60	96	113	53	68	227	95	33	221	80	136	11	78	67	2742
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
3	56	109	246	75	28	54	30	20	27	51	15	-	58	-	1425
25	111	58	59	21	62	58	21	32	32	97	10	2	25	9	1678
-	-	5	3	-	CW	7	2	10	1	-	1	-	1	1	218
19	17	64	115	18	CW	51	79	115	100	28	65	30	71	103	3731
-	13	2	2	1	5	10	3	-	-	3	13	-	22	1	435
54	71	124	191	111	125	231	35	47	133	106	62	4	144	43	6527
-	-	1	1	-	1	-	-	-	-	-	-	-	-	-	34
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
5	19	5	27	34	30	12	-	1	-	-	-	-	10	-	748
3	98	68	755	146	138	313	59	123	182	156	179	89	158	110	5504
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
-	23	20	94	38	25	27	1	27	17	27	6	5	21	5	2763
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
11	14	67	82	54	39	167	38	22	46	48	20	5	42	13	1188
10	152	27	9	36	147	31	16	6	10	33	1	-	23	8	1230
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
7	485	854	1893	140	278	52	-	3	1	9	3	-	1	1	26175
-	18	1	42	37	28	19	1	-	2	4	1	-	21	-	6977
12	1	1	129	89	1	110	-	-	-	-	-	-	-	16	1963
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
182	50	500	656	13	79	2787	-	1	-	-	2	-	20	-	31586
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
-	-	-	5	-	-	4	-	-	1	2	1	-	-	-	30
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	5
5	1	2	13	2	55	18	4	-	1	1	1	-	3	-	124
-	-	8	17	1	5	7	2	-	1	-	-	-	-	-	100
8	19	68	167	65	65	151	21	2	25	130	71	-	5	3	1824
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CW
41	159	109	142	92	108	443	155	70	311	225	199	68	137	85	5704
-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3
2527	7142	4214	16468	4205	7393	12325	2254	1512	4019	3579	3360	842	3843	2234	217449
76	77	89	107	89	80	98	69	62	76	71	77	49	88	63	154
-	-	-	-	-	4	4	1	-	-	-	1	1	2	1	4
9	9	11	24	15	5	68	13	10	47	21	26	7	18	13	496
4	8	7	-	6	4	43	9	7	28	12	9	3	6	4	233
23	44.25	47.2	79	46	21.5	150.6	37.8	30.55	127.33	52.58	64	23	54.5	28.75	1494.36
22.5	36.75	23.2	40	20	-	39.87	18.6	10.55	49.9	17.25	38	10	18.5	14.25	651.97

26 22 110.73 19.2 20 77.43 35.33 26

13 36 14.5 788.14

0.5

7.5 24 39

28		THE MIGRANT										ARCH	H
Count name	MPHS	FAYE	REEL	JKSN	SAVA	BGSA	DUCK	PRRY	BUFF	CLRK	NASH	HKPR	LEBN
Hours by boat or other	-	-	-	-	-	-	12	1	-	-	-	-	3
Miles by car	183.2	115.5	325.25	150.75	301.7	238	214	71	280.5	331	197.1	204	261
Miles on foot	43.4	16.5	21.5	12	15.5	11.5	29.5	10	9.3	13	49.5	13	6
Miles by boat or other	-	-	-	-	-	-	17	1	-	-	-	-	2.5
Hours Owling	1.5	-	1.5	-	3.5	2.5	-	-	0.25	0.5	5.65	2	-
Miles Owling	1.5	-	16	-	11.7	12	-	-	1	1	25.35	5.75	-
Feeder / yard watchers	-	-	-	-	-	-	-	-	-	5	-	-	1
Feeder / yard hours	-	-	-	-	-	-	-	-	-	8	-	-	2.5

#### FRCO WHTE NICK CHAT HIWA BENT KNOX NORR CADE GSNP KING ELIZ ROAN BRIS SHDY TOTALS

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
224	300.5	191.7	247	176	-	326.75	202.5	59.4	251.79	178.78	379	121	334	230.6	6096.02
0.25	7	13.09	39	19	14	96.69	19.3	12.9	60.11	28.32	19	9	11	13.2	612.56
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.5
2.5	2.75	4	8	-	0.5	5.55	1	-	1	0.33	2	0.5	3	-	48.53
16	5.25	15	39	-	0.1	14.9	5	-	3	0.5	23	-	6	-	202.05
2	-	-	-	-	-	5	1	-	10	1	-	-	-	-	25
3.5	-	-	-	-	-	8.82	1.5	-	27.5	2	-	-	-	-	53.82

#### MINUTES OF THE 2020 FALL BOARD OF DIRECTORS MEETING

#### 11 November 2020

The Board of Directors meeting was held 11 November and called to order at 6:35 pm by President Danny Gaddy. Due to covid restrictions the meeting was held via Zoom. Secretary Cyndi Routledge determined there was a quorum. Minutes of the Spring meeting were approved as corrected.

#### **REPORTS OF OFFICERS**

**TREASURER:** Pam Lasley reported the assets the Society at the end of 2019 were \$400,241 including cash of \$2,864, and fair market value of our Vanguard investments at \$397,227. The year saw our investments experience a net increase of \$55,046 which includes a \$5,000 transfer to operating checking. Further information includes:

- Non-investment revenue for the year was \$11,865 for dues and subscriptions and \$560 from contributions. Total expenses were \$25,426. In total, revenues over expenses were \$47,045.
- Publications and communications at \$12,766 are our largest expense and includes four issues of *The Migrant*, three issues of *The Warbler*, and maintenance of our old website. Cost of insurance was the same as last year at \$997.
- A total of \$10,818 was awarded in Research and Conservation grants. Included in those grants was \$1,500 to Dauphin Island Bird Sanctuary for vital migratory bird habitat. This reduced our Conservation and Research Restricted fund to \$16,951. Insurance was the same as last year at \$997. In total revenues over expenses were \$47,045.
- For 2019 dividends and interest were \$11,990, but our assets increased in market value by \$48,055. In 2019, we distributed \$5,000 to our operating cash account for the year. Our current rate of return on our investments is in the 8% range for 10- and 5-year annualized return with 1- and 3-year rates averaging at 7.6%. The portfolio remains defensively structured for any upcoming market volatility with approximately 47% in equity positions.
- Total membership and subscriptions were up slightly, by eleven members. Memberships for 2019 were 639as compared to 630 in 2018.
- As required by the Constitution, an examination of the 2019 financial records was performed. Since there is no Finance Committee in place, and in consultation with the President, Betty Bailey of the Kingsport chapter to perform this exam. She submitted her report to the president indicating a clean exam.

Pam Lasley clarified other financial transactions:

• In September, the Executive Committee voted to support the Swan Conservation Trust in a grant application for purchase of 140 acres in Lewis County, adding to their 1358-acre Big Swan Headwaters Preserve. If their NAWCA grant is approved, we will donate \$5000 in matching funds in each of 2021 and 2022 towards protecting this wetland area.

A motion was made to accept the Financial report as written and presented; this passed unanimously.

*The Migrant:* Editor Bob Ford reported that all issues are available on the website SORA. Each current year can be found on the TOS webpage

**CURATOR:** President Gaddy announced that Chuck Nicolson will step down in April 2021, and Stefan Woltmann will take over the position.

#### **NEW BUSINESS**

Cyndi Routledge reported that the new website was launched on 4 March 2020. Dick Preston presented a proposal by Amy Wilms for a yearly maintenance contract for the webpage to be reviewed and renewed annually. Mac McWhirter moved to approve the contract; this passed unanimously

President Danny Gaddy announced that Dr. Michael Collins, Memphis Chapter, has agreed to serve as the next President of TOS. Melinda Welton made the motion for his nomination; Chris Welsh seconded. Passed unanimously.

President Gaddy stated that after a discussion with Michael Collins regarding technical logistics and the ongoing pandemic, and with approval of the Board of Directors, Dr. Collins has agreed to begin his tenure as the next President on 1 January 2021 instead of waiting till April 2021. Dick Preston made this motion, as a one-time exception to the normal installation of officers, due to extenuating circumstances of the pandemic. All other officers and committee chairs will be installed at the regular annual meeting in the spring. Mac McWhirter seconded. Passed unanimously

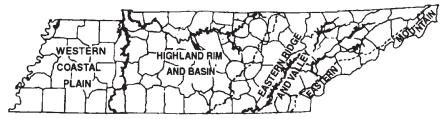
Pam Lasley made motion to adjourn the virtual meeting. Mac McWhirter seconded.

The meeting was adjourned at 8:12 pm central time.

Respectfully submitted, Cyndi Routledge, Secretary

#### THE FALL SEASON

Richard L. Knight, Editor



1 August - 30 November 2020

The challenges of this year's coronavirus crisis continued through autumn with no end in sight, yet birders were able to monitor the fall migration safely and effectively as it progressed from month to month. Good showings by some migrants may have been related to birders being able to spend more time in the field.

This year was one of the most active on record for tropical cyclones in the Atlantic basin, and five of these systems had some impact on Tennessee. However, only one tropical system caused a notable fallout here. Hurricane Laura, a Category 4 storm, hit the southwest Louisiana coast and moved inland as far as southern Missouri. As the remnant low turned eastward and moved across Kentucky, it brought locally heavy rains and gusty winds sweeping across Tennessee on 28-29 August. This produced a fallout of coastal and pelagic seabirds, highlighted by Pomarine Jaeger, Sooty and Royal Terns, Band-rumped Storm-Petrel, and Red-necked Phalarope. Pickwick Lake hosted the majority of this bounty despite being farther from the storm track than other water bodies to the north. Surprisingly few Laughing Gulls were in this fallout. This system also grounded numerous Black Terns and some other terns and shorebirds which may have been south-bound migrants.

The next two tropical systems passed well to the south of Tennessee after hitting the central Gulf coast. Remnants of Hurricane Sally produced light rain overnight and into 17 September in far eastern Tennessee, grounding a few Common Terns in the northeast corner of the state. A week later moderate rain associated with remnants of Hurricane Beta fell across Tennessee from west to east during 23-25 September. A Magnificent Frigatebird at Paris Landing State Park was likely related to this system, as were a few terns at South Holston Lake.

The last two systems had little avian influence in the state. Hurricane Delta hit the Louisiana coast on 9 October, with its remnants passing through southern Tennessee shortly thereafter, but with no associated storm waifs found in Tennessee. A Magnificent Frigatebird in Middle Tennessee on 18 October and 7 November was likely a wanderer after the passage of one of the earlier systems. Hurricane Zeta made landfall in hard-hit Louisiana in the afternoon of 28 October then raced inland, passing just east of the Tennessee / North Carolina border in mid-morning on the 29th with heavy rain and blustery winds

throughout East Tennessee. Despite this proximity, few storm birds were found, albeit with a Royal Tern and some Laughing Gulls in Polk County.

Waterfowl numbers were rather lackluster this autumn; however, more than 20 reports of scoters statewide was a good total, including two reports of Black Scoter that exceeded the previous high count in the state. Shorebird numbers and diversity were near normal. Songbird migration seemed to be strong, at least by recent standards. Boreal irruptives staged a good flight consisting of numerous Red-breasted Nuthatches, Purple Finches, and Pine Siskins, while 15 reports of Evening Grosbeaks scattered across all four regions were the most in many years. Rarities were many, including Common Ground Dove, Whitewinged Dove, Anna's Hummingbird, Allen's Hummingbird (two regions), Sabine's Gull (four reports in two regions), Great Black-backed Gull, Brown Booby (two regions), Roseate Spoonbill, Swainson's Hawk, Long-eared Owl, Western Kingbird (especially two reports in East Tennessee), Ash-throated Flycatcher, Say's Phoebe, and Black-headed Grosbeak. Many more notable sightings are packed into the regional reports that follow.

Because many observations are now documented by photos on eBird, use of the word "photo" in the species accounts usually indicates presence of such on this web source. Any photos not on eBird have been confirmed by the regional compiler and / or Season editor.

#### Standard Abbreviations

ad - adult	max - maximum count
ba - banded	m.ob many observers
Co - County	Mtn - Mountain
Cr - Creek	NWR - National Wildlife Refuge
ers - earliest reported sighting	photo - photo on eBird
et al and others	R - River
fide - reported by	SNA - State Natural Area
im - immature	SP - State Park
L - Lake	WMA - Wildlife Management Area
lrs - latest reported sighting	yg - young

WESTERN COASTAL PLAIN REGION - - Temperatures and precipitation across the region were within historic norms, except for rainfall during August at nearly 4 inches above normal.

The continuing COVID-19 pandemic did little to dampen the enthusiasm of area birders, who recorded more than the usual number of rarities. Among them, a Black-headed Grosbeak spent a week at a feeder in Fayette County. An adult female Rufous Hummingbird was banded in Haywood County, and a Magnificent Frigatebird visited Henry County, as did a Great Black-backed Gull. Lake County produced a Common Ground Dove, a Swainson's Hawk, two Sooty Terns, two Sabine's Gulls and two Cave Swallows. All three

scoters appeared in a single day at a small lake in Shelby County, and a single Surf Scoter was a great find in Fayette County. A Brown Booby meandered between Benton and Humphreys Counties on Kentucky Lake.

Thanks to everyone who submitted observations, especially those with photographs.

Waterfowl - Crane: Black-bellied Whistling-Duck: 11 Sep (1) Black Bayou (DR, AL); 14 Nov (4) Ensley (Douglas Logan), lrs. Greater White-fronted Goose: 7 Oct (3) Shelby Co (DDP, MTOS), ers. Green-winged Teal: 19 Aug (1) Tipton Slough, Lake Co (DR, AL), ers. Greater Scaup: 14 Nov (1) Herb Parson's L (RH), rare in Co. Surf Scoter: 30 Oct (1) Robco L (BFo, RH); 31 Oct - 1 Nov (1) Reelfoot L (RS); 6 Nov (1) Tiptonville Bar (RH, AL, m.ob.); 13-26 Nov (1) Tiptonville wastewater lagoon, Lake Co (RS, m.ob.); 14 Nov (1) Herb Parson's L (RH). White-winged Scoter: 29 Oct (2) Gibson Co L (MAG); 30 Oct (1) Robco L (BFo, RH). Black Scoter: 26 Oct (3) Reelfoot L (RS); 30-31 Oct (2) Robco L (BFo, RH); 31 Oct (32 females) Kentucky L, Benton Co (Mary Ganaway, photo), new high count for state; 13 Nov (2) Beech L, Henderson Co (RS); 14 Nov (21) Paris Landing SP (AL), also exceeds the previous high count in state. Red-breasted Merganser: 14 Nov (16) Herb Parson's L (RH), 1st county record. Horned Grebe: 29 Sep (1) Gibson Co L (MAG), ers. Red-necked Grebe: 31 Oct / 6 Nov (1) Reelfoot L (RS, m.ob.). Eared Grebe: 20 Oct (1) Reelfoot L (RS). Common Ground Dove: 25 Oct (1) Black Bayou (RS). White-winged Dove: 2 Aug (1) President's Island (Megan Massa); 24-26 Oct (1) Britton Ford (Niklas Klauss, m.ob.). Black-billed Cuckoo: 1 Sep (1) Paris, Henry Co (RWh). Ruby-throated Hummingbird: 12 Sep (70, ba) Fayette Co (CR, Steve Routledge, Judy Dorsey), at a single site, max; 11-14 Nov (1) Collierville, Shelby Co (Thomas Blevins), lrs. Rufous Hummingbird: 15 Nov (1, ba) Brownsville, Haywood Co (Bob Ford, CR), present 9 Nov thru season. Virginia Rail: 6 / 12 Oct (1 / 2) Black Bayou (AL / RS, VS). Sora: 15-27 Nov (1) Shelby Farms (JV, AG). Common Gallinule: 4 Sep (1) White Lake WMA, Dyer Co (MAG); 12-13 Sep (1) Black Bayou (DR, AL, RS). Sandhill Crane: 14 Oct (2) Shelby Farms (MGW), ers.

*Shorebirds*: Black-necked Stilt: 12 Oct (1) Ensley (BFo), lrs. American Avocet: 12 Aug (3) Lauderdale Co (DR, AL); 18 Aug (2) Tiptonville Bar (MAG); 16 Sep (1) Island 13 (RS); 19-28 Sep (1) Ensley (JV, CVN, m.ob.); 11 Oct (35) Ensley (Micky Louis); 16 Oct (1) Reelfoot L (RS); 28 Oct (1) Ensley (BFo, JV); 15 Nov (1) Britton Ford (AL). Black-bellied Plover: 12 Sep (3) Eagle Cr, Henry Co (Rick Shipkowski); 24-27 Oct (1) Britton Ford (AL, RS); 31 Oct - 27 Nov (2) Lake Co (RS, m.ob.). American Golden-Plover: 7 Oct (2) Tiptonville Bar (RS, VS); 24 Oct (4) Britton Ford (AL); 30 Oct (2) Obion Co (MAG); 31 Oct / 6 Nov (4 / 2) Black Bayou (RS, m.ob.); 7 Nov (1) Big Sandy Flats (MCT, RS). Piping Plover: 3 Aug (2) Tiptonville Bar (AL, DR / MAG). Marbled Godwit: 5 Sep (1) Ensley (MAG, MCT, RS, VS et al.). Upland Sandpiper: 24 Aug / 4 Sep (1) Ensley (MCT / Cameron Rutt, photo); 11 Sep (1) Great River Rd, Dyer Co (MAG). Ruddy Turnstone: 5 / 12-13 Sep (1 / 2) Tiptonville Bar (RS, VS, MAG, MCT et al. / RS, DR, AL); 3 Oct (1) Mississippi R, Lake Co (AL). Stilt Sandpiper: 1 Nov (1) Ensley (JV), Irs. Sanderling: 13 Aug - 13 Sep (1-5) Tiptonville Bar (DR, MAG, m.ob.); 20 Aug (1) Mississippi R, Lauderdale Co (DR, AL); 27 Aug (1) Ed Davis fish farm (AJT); 6 Sep (5) Island 13 (RS, VS); 24 Sep (25) Flowers Sheep Ridge Loop (VS);

13 Nov (3) Mississippi R, Lake Co (RS). **Dunlin**: 9 Oct (1) Eva Beach, Benton Co (AT), ers; 26 Oct (112) Britton Ford (Rick Shipkowski), max. **Baird's Sandpiper**: 14 Aug (1) Great River Rd, Dyer Co (DDP); 13 Sep (1) Tiptonville Bar (RS); 16 Sep (3) Island 13 (RS); 21 Oct (1) Big Sandy Flats (DR, AL); 30 Oct (1) Gray's Camp Rd, Lake Co (AL). **White-rumped Sandpiper**: 10-17 Aug / 25 Sep (1-2) Ensley (DDP / BFo, RH, Hal Mitchell). **Buff-breasted Sandpiper**: 30 Aug (4) Ed Davis fish farm (AJT); 1 Sep (1) Ensley (MCT); 16 Sep (1) Island 13 (RS). **Pectoral Sandpiper**: 27 / 30 Nov (1) Lake Co (RS / AL), lrs. **Long-billed Dowitcher**: 8 Aug (1) Lake Co (RS, VS, AT, JB); 9 / 21 Oct (1 / 7) Big Sandy Flats (DR); 12 Oct / 1 Nov (27 / 3) Ensley (BFo); 21 Oct (6) Eagle Cr, Henry Co (DR, AL). **Spotted Sandpiper**: 9 Nov (1) Pace Point, Henry Co (AL), lrs. **Willet**: 20 Sep (1) Ensley (JH). **Wilson's Phalarope**: 29 Aug (- 2 Oct (1-4) Ensley (DDP, MGW, MTOS, m.ob.). **Red-necked Phalarope**: 29 Aug (1) Ensley (DDP, MGW, MTOS).

Gull - Falcon: Sabine's Gull: 27 Aug (1) Reelfoot L (DR, AL); 15 Sep (1 im) Tiptonville Bar (MAG). Franklin's Gull: 6 Oct - 18 Nov (up to 205) Reelfoot L and Mississippi R, Lake Co (AL, RS, VS); 21 Oct (14) Eagle Cr, Henry Co (DR, AL); 15 Nov (1) Britton Ford (AL). Laughing Gull: 13 Aug / 12 Sep (1) Paris Landing SP (DR, AL); 27 Aug (4) Reelfoot L (DR, AL); 29 Aug (1) Gibson Co L (MAG); 10-12 Sep (2-5) Kentucky L, Benton / Humphreys Cos (RS, VS); 25 Oct (1) Reelfoot L (RS). Lesser Black-backed Gull: 12 Sep / 2 Oct (4 / 10) Paris Landing SP (DR / AL), ers / max; 20 / 25 Oct (1) Reelfoot L (RS). Great Black-backed Gull: 21 Oct (1) Big Sandy Flats (DR, AL); 26 Oct / 10 Nov (1 ad) Paris Landing SP (Rick Shipkowski / CR, Steve Routledge). Sooty Tern: 28 Aug (1-2 ad) Reelfoot L (DR, AL, RS, VS); 28 Aug (1 ad) Tiptonville Bar (MAG). Black Tern: 27 Aug (5) Gibson Co L (MAG); 27-29 Aug (50-100+) Reelfoot L (DR, AL, m.ob.); 28 Aug (5) Hyde L, Shelby Co (Gail King); 4 Sep (70) Tiptonville Bar (JN, RN); 11 Sep (1) Herb Parson's L (RH, BFo). Common Tern: 13 Aug (2) Paris Landing SP (DR, AL); 28 Aug (1) Hyde L, Shelby Co (Gail King); 30 Aug (3) Gibson Co L (AJT); 12 Sep (1) Kentucky L, Benton / Humphreys Cos (VS, AT). Redthroated Loon: 6 Nov (1) Reelfoot L (RH, RS, MCT); 6 Nov (1) Kentucky L, Henry Co (RS, MCT). Pacific Loon: 6 Nov (1) Reelfoot L (MCT, RS, RH). Common Loon: 26 Oct (5) Gibson Co L (MAG). MAGNIFICENT FRIGATEBIRD: 23 Sep (1) Paris Landing SP (DR, AL, photo). BROWN BOOBY: 10-18 Sep (1 sub-adult) Kentucky L, Benton / Humphreys Cos (RS, VS, photo, m.ob.). Anhinga: 29 Aug (1) Reelfoot L (Chris Barrigar); 12 Oct (1) Lake Co (RS). Neotropic Cormorant: 8 Aug (1) Lake Co (RS, VS, AT, JB); 26 Oct (1) Gibson Co L (MAG). American White Pelican: 3-28 Aug (2) Reelfoot L (MAG, m.ob.); 19 Sep (502) Lake Co (RS, VS); 22 Sep (40) Pace Point, Henry Co (AL); 29 Sep (150) Ensley (CVN); 9 / 21 Oct (370 / 500) Big Sandy Flats (DR); 25 Oct (2600) Tiptonville Bar (RS); 30 Oct (200) Robco L (BFo, RH); 8 Nov (50) Paris Landing SP (JH). Least Bittern: 11 Sep (2) Black Bayou (DR, AL). American Bittern: 9-11 Oct (1) Shelby Farms (BFo, RH, CVN, JV). White Ibis: 12-19 Aug (1 im) Tipton Slough / Phillipy, Lake Co (DR, AL, DDP); 6-11 Sep (1 im) Herb Parson's L (Sam Edge, photo); 16 Sep (1 im) McNairy Co (RS). Plegadis sp.: 6 Nov (1) Lake Co (MCT, RS, RH). Osprey: 14 Oct (1) Herb Parsons L (RH); Swallow-tailed Kite: 8 / 11 Aug (9 / 1) Lake Co (RS / MAG); 27 Aug (1) Obion Co (DR). Golden Eagle: 19 Sep (1 im) Jolly Landing (RS, VS). Mississippi Kite: 19 Aug (1) Henderson Co (RS, JB); 4 Sep THE MIGRANT

(1) Henry Co (JB). **Broad-winged Hawk**: 21 Sep (48) East Memphis (Gaynell Perry), max. **SWAINSON'S HAWK**: 19-20 Sep (1 im) Lake Co (RS, VS, photo, m.ob.). **"Harlan's" Red-tailed Hawk**: 14 Oct (1) Gibson Co (MAG), ers; also reported from Crockett and Obion Cos (MAG) and Shelby Farms (BFo, m.ob.); returns of wintering birds. **Rough-legged Hawk**: 9 Nov (1) Cypress Cr Bottoms, Obion Co (MAG). **Short-eared Owl**: 5 Nov (1) Jolly Landing (RS); 22-30 Nov (1-3) Shelby Farms (CVN); 26 Nov (1) Tumbleweed WMA, Lake Co (RS). **Northern Saw-whet Owl**: 23 Nov (1) Reelfoot L (DR, AL). **Merlin**: 30 Aug (1) Ed Davis fish farm (AJT), ers. **Peregrine Falcon**: 3 Aug thru season (multiple reports) Lake Co (AL, DR, RS, VS, MAG et al.); 5 Aug thru season (1) Ensley (MCT, RH, BFo et al.); 17 Sep (1) Gibson Co L (MAG).

Flycatcher - Siskin: Western Kingbird: 2 Aug (7) President's Island (Megan Massa); 6 Aug (1) Lower Hatchie NWR, Lauderdale Co (Van Harris); thru 15 Aug (1-5) Ensley (MCT, RH, BFo, CVN). Olive-sided Flycatcher: 20 Aug (1) Memphis (Justin Hensley, photo); 4-6 Sep (3 separate reports) Lake Co (MAG, RS, VS, MCT). Eastern Wood-Pewee: 30 Oct (1) Lake Co (AL), lrs. Yellow-bellied Flycatcher: 4 Sep (2) Tennemo Levee, Dyer Co (MAG); 9 Sep (2) Fort Pillow SP, Lauderdale Co (AL); 16 Sep (1) Island 13 (RS); 22 Sep (1) Hwy 79W, Lake Co (RS); 22 Sep (1) West Sandy WMA, Henry Co (AL); 24 Sep (1) Lake Isom NWR, Lake Co (MCT). Alder Flycatcher: 24 Aug / 4 Sep (1) Dyer Co (MCT / MAG); 8 Aug (1) Lake Co (RS, VS, AT, JB); 16 Sep (2) Lake Co (RS). Least Flycatcher: 8 Aug (1) Lake Co (RS, VS, AT, JB), ers; 15 Nov (1) Lauderdale Co (DDP), new late date in state by 26 days. Bell's Vireo: 8 Aug (1) Flowers Sheep Ridge Loop (RS, VS, AT, JB); 12 Aug (1) John Tully WMA, Lauderdale Co (DR, AL); 16-21 Aug (1) Shelby Farms (BFo); 9 Sep (1) Fort Pillow SP, Lauderdale Co (AL). Blue-headed Vireo: 23 Nov (1) Hatchie NWR, Haywood Co (Andrew Gafford), lrs. Fish Crow: 13 Sep (2) Benton Co (RS). Northern Rough-winged Swallow: 5 Nov (2) Reelfoot L (RS), lrs. Barn Swallow: 1 Nov (2) Reelfoot L (RS), lrs. Cave Swallow: 8 Aug (1) Flowers Sheep Ridge Loop (RS, VS, AT, JB); 12 Oct (1) Jolly Landing (RS, photo). Red-breasted Nuthatch: 5 Sep (1) Weakley Co (David Pitts), ers; widespread, found in at least 13 Cos. Blue-gray Gnatcatcher: 27 Nov (1) Lake Co (RS), lrs. Ruby-crowned Kinglet: 20 Oct (65) Hwy 79W, Lake Co (RS), max. Evening Grosbeak: 16 Nov (8) Paris, Henry Co (RWh, photo). Purple Finch: 23 Oct (2) Carroll Co (Donna Ward), ers. Pine Siskin: 3 Oct (4) Lake Co (AL), ers; 22 Nov (175+) Munford, Tipton Co (DDP), max; widespread reports.

Longspur - Bunting: Lapland Longspur: 27 Nov (10) Lake Co (RS); 28 Nov (2) Obion Co (MAG); 30 Nov (3 flocks totaling 235 birds) Lake Co (AL). Grasshopper Sparrow: 9 Oct (1) Shelby Farms (RH); 11 Nov (1) Hatchie NWR, Haywood Co (Bob Ford); 26 Nov (1) Shelby Farms (JV et al., photo), lrs. Lark Sparrow: 9 Oct (1) Jolly Landing (RS), only report. Clay-colored Sparrow: 26 Sep (1) Henry Co (Niklas Klauss, AL); 8-11 Oct (1) Shelby Farms (BFo, photo, m.ob.). American Tree Sparrow: 30 Nov (1) Black Bayou (AL). LeConte's Sparrow: 6 Oct (1) Black Bayou (AL); 11 Oct (1) Shelby Farms (DDP); 25 Oct (1) Cates Landing, Lake Co (RS); 12 Nov (14) Lauderdale Co (AL, DR); 29 Nov (1) Ensley (JV). Nelson's Sparrow: 28 Sep (1) Flowers Sheep Ridge Loop (RS); 14-16 Oct (1) Shelby Farms (BFo, photo). Henslow's Sparrow: 25 Oct (1) Cates Landing, Lake Co (RS). Lincoln's **Sparrow**: 20 Oct (7) Hwy 79W, Lake Co (RS), max. **Western Meadowlark**: 30 Oct / 25 Nov (3) Obion Co (MAG); 12 Nov (1) Lauderdale Co (DR, AL). **Brewer's Blackbird**: 30 Oct (20) Obion Co (MAG). **Blue-winged Warbler**: 7 Oct (2) Ensley (BFo), lrs. **Golden-winged Warbler**: 9 Sep (1) Fayette Co (RDH, DMy), ers; 10 additional reports from Benton, Carroll, Chester, Henry, Lake, and McNairy Cos; 24 Sep (5+) Lake Co fall count, max. **Orange-crowned Warbler**: 20 Oct (9) Hwy 79W, Lake Co (RS), max. **Mourning Warbler**: 19 Sep (1) Paris, Henry Co (RWh); 24 Sep (1) Lake Co (MAG, MCT). **Common Yellowthroat**: 24 Nov (1) Reelfoot Lake SP (DR, AL), lrs. **Yellow Warbler**: 16 Oct (1) Lake Co (RS), lrs. **Chestnut-sided Warbler**: 25 Oct (1) W.C. Johnson Park, Shelby Co (DDP, MTOS), lrs. **Blackpoll Warbler**: 7 Oct (1) Reelfoot Lake SP (RS, VS). **Black-throated Blue Warbler**: 13 Sep (1 female) Lake Co (RS). **Palm Warbler**: 12 Nov (1, Yellow) Lauderdale Co (DR, AL). **Black-throated Green Warbler**: 1 Nov (3) Lake Co (RS), lrs. **BLACK-HEADED GROSBEAK**: 7-13 Sep (1 male, at feeder) Fayette Co (Joanie Webb, photo, m.ob.). **Blue Grosbeak**: 30 Oct (1) Lake Isom NWR, Lake Co (Cynthia Donaldson), lrs. **Painted Bunting**: 5 Aug (1) President's Island (MCT), lrs.

*Locations*: Big Sandy Flats - Henry Co; Black Bayou - Lake Co; Britton Ford - Henry Co; Ed Davis fish farm - Gibson Co; Ensley - Shelby Co; Flowers Sheep Ridge Loop - Lake Co; Island 13 - Lake Co; Jolly Landing - Lake Co; Paris Landing SP - Henry Co; President's Island - Shelby Co; Reelfoot L - Lake Co; Robco L - Shelby Co; Shelby Farms - Shelby Co; Tiptonville Bar - Lake Co.

DICK D. PRESTON, Munford, TN dickpreston48@gmail.com

HIGHLAND RIM AND BASIN REGION - - Autumn weather in Middle Tennessee averaged warmer than normal. Temperatures from August through October were 1-2 degrees above normal, while November temperatures were 4 degrees above normal. Rainfall amounts were generally above normal, too, except for the final month of the season. August was the wettest at 2.7 inches above normal, while November was 3.1 inches below normal.

Because of an active hurricane season and poor cone production in Canada the fall season was an interesting time for regional birders. Pomarine Jaeger, Royal and Sooty Terns, Band-rumped Storm-Petrel, and two sightings of Magnificent Frigatebird were hurricane related. The start of an irruption year in much of the state began this fall with Red-breasted Nuthatch, Purple Finch, Pine Siskin, and Evening Grosbeak being reported. Other notables this fall included Eared Grebe, Allen's Hummingbird, Sabine's Gull, Roseate Spoonbill, Ashthroated Flycatcher, Say's Phoebe, Bell's Vireo, and Nelson's Sparrow.

*Goose - Crane*: **Snow Goose**: 30 Oct (1) Old Hickory L, Sumner Co (TLd), ers; 5-16 Nov (3-8) Percy Priest L (RH, PL, SL, FF); 16 Nov (29) Old Hickory L (JWb). **Ross's Goose**: 29 Oct (2) Duck R Unit (DR), ers; 4 Nov (1) Liberty Park, Montgomery Co (SWo); 13 / 16 Nov (1) Percy Priest L (MS / FF); 15 Nov (1) marsh on Walter S. Davis Blvd, Nashville (PL, SL). **Surf Scoter**: 31 Oct (1) Pickwick L (RH, Hal Mitchell). **White-winged Scoter**: 1-12 Nov (2)

THE MIGRANT

Franklin Reservoir, Williamson Co (JAr, m.ob.); 14 Nov (1) Normandy L, Coffee Co (JN, RN). **Black Scoter**: 31 Oct (2) Percy Priest L (JN, RN). **Eared Grebe**: 16 Oct (1) Radnor L (PL, SL, m.ob., photo); 8 Nov (1) Percy Priest L (MS). **Yellow-billed Cuckoo**: 8 Nov (1) Duck R Unit (Jimmy Welch), Irs. **Ruby-throated Hummingbird**: 1 Nov (1) Warren Co (SNM), Irs. **Rufous Hummingbird**: 26 Sep (1 ad male) Williamson Co (CR), returning bird; 19-21 Nov (1, ba) Nashville (CR). **Allen's Hummingbird**: 27 Nov (1 im male, ba) Murfreesboro (CR). **Virginia Rail**: 12 Sep (2) Duck R Unit (SA, JH). **Sora**: 10 Aug / 27 Oct (1 / 55) Duck R Unit (refuge staff), ers / max. **Sandhill Crane**: 15 Oct (2) Shelton Ferry WMA (DR, AL), ers.

Shorebirds: American Avocet: 13 Aug / 3 Sep (1 / 7) Duck R Unit (refuge staff / JN, RN); 9 Oct (3) Old Hickory L (JWb); 15 Oct (5) Floating Mill Park, Center Hill L, DeKalb Co (RSh, DSh); 14 Nov (6) Cross Cr NWR (JH, Iris Kilpatrick). Black-bellied Plover: 14 Aug (1) Bark Camp Barrens sod farm (SNM); 8 Sep / 8 Nov (1) Duck R Unit (RS). American Golden-Plover: 30 Aug - 1 Sep (1) Duck R Unit (RS, VS); 16-17 Sep (1) Old Hickory L (JWb, m.ob.); 24 Oct (1) Cross Cr NWR (SA, JH); 29 Oct (2) Bark Camp Barrens sod farm (SNM). Upland Sandpiper: 15 / 20 Aug (1) Cross Cr NWR (DR, AL / JH). Marbled Godwit: 31 Aug (1) Duck R Unit (AL). Ruddy Turnstone: 1 / 31 Aug (1 / 7) Duck R Unit (GG, CAS / RS); 13 Sep (2) Old Hickory L (MS). Stilt Sandpiper: 30 Aug - 8 Sep (6-20) Duck R Unit (RS, VS); 13 Sep (1) Eagleville (JWa). Sanderling: 30 Aug - 1 Sep (4) Duck R Unit (RS, VS). Dunlin: 11 Oct (4) Duck R Unit (AT), ers; 25-27 Oct (1-4) Williamson Co (JAr, m.ob.); 30 Oct (5) Eagleville (JWa); 10 / 28 Nov (11 / 2) Bark Camp Barrens sod farm (SNM / Ken Oeser). Baird's Sandpiper: 30 Aug / 8 Sep (7 / 3) Duck R Unit (RS, VS). White-rumped Sandpiper: 28-29 Aug (1) Hillsboro Pond, Coffee Co (TLR, MM); 31 Aug (1) Stephenson Rd (SNM, NPM); 24 Sep (1) Eagleville (GG). Buff-breasted Sandpiper: 13-19 / 29 Aug (1 / 3) Cross Cr NWR (DR, AL); 21 Aug / 2 Sep (2) Bark Camp Barrens sod farm (MS, m.ob.); 26 Aug - 3 Sep (3-2) Stephenson Rd (RSh, DSh); 30 Aug - 1 Sep (12-13) Duck R Unit (RS, VS); 31 Aug / 13 Sep (1) Eagleville (Tommy Edwards / JWa). Western Sandpiper: 27 Aug (1) Stephenson Rd (JWa); 27-30 Aug (1) Duck R Unit (RS, VS); 11 Sep (3) Percy Priest Dam (Kirk Huffstater). Short-billed Dowitcher: 26 Aug / 3 Sep (1 / 2) Stephenson Rd (RSh, DSh); 30 Aug (1) Old Hickory L (MS); 30 Aug (2) Duck R Unit (RS, VS). Long-billed Dowitcher: 30 Aug / 21 Oct (1 / 5) Duck R Unit (RS, VS / DR, AL). Spotted Sandpiper: 7 Nov (1) Duck R Unit (SA, JH), lrs. Willet: 27 Aug - 3 Sep (1-2) Duck R Unit (DR, RS, VS et al.). Wilson's Phalarope: 27 Aug - 1 Sep (4-7) Duck R Unit (RS, VS). Red-necked Phalarope: 30 Aug - 1 Sep (2-1) Duck R Unit (RS, VS); 1 Oct (1) Lake on Carter's Cr Pike, Williamson Co (JAr, photo, m.ob.).

*Jaeger - Falcon*: **Pomarine Jaeger**: 29 Aug (1 sub-adult) Pickwick L (RS, VS, AT, MCT, DR, photo). **jaeger sp.**: 28-29 Aug (1) Pickwick L (RS, VS, AT). **Sabine's Gull**: 12-15 Sep (1 im) Kentucky L, Humphreys Co (VS, AT, photo, m.ob.); 10-11 Oct (1 im) Old Hickory L (Robert Deegan, m.ob., photo). **Franklin's Gull**: 5 / 7 Nov (1) Percy Priest L (RH / GG); 14 Nov (1) Old Hickory L, Sumner Co (TLd, photo). **Laughing Gull**: 8 Aug / 8 Sep (2 / 1) Duck R Unit (DR, AL / RS); 28 Aug / 10 Oct (2) Pickwick L (RS, VS); 12 Oct (1) Drake's

Cr, Old Hickory L, Sumner Co (MS); 1 Nov (1) Percy Priest L (FF). Bonaparte's Gull: 27 Aug (1) Duck R Unit (RS, VS), ers. Herring Gull: 28 Aug (1 im) Pickwick L (RS, VS), ers. Lesser Black-backed Gull: 28 Aug thru season (1-3 im) Pickwick L (RS, VS, MCT, GG); 26 Sep (1 ad, 1 im) Duck R Unit (JB); 10-11 Oct (1 im) Old Hickory L (JWb, m.ob.); 5 Nov (1 im) Duck R Unit (DR); 7 Nov (1 im) Percy Priest L (GG); 21 Nov (1 im) Woods Reservoir (Stephen Zipperer et al.). Sooty Tern: 28-29 Aug (1-3 ad, 1 im) Pickwick L (RS, VS, AT, MCT). Least Tern: 1 Aug (1) Duck R Unit (CAS, GG). Black Tern: 28 Aug (20) Pickwick L (RS, VS); 28 Aug (50+) Duck R Unit (AT); 29 Aug (18) Old Hickory L (MS, m.ob.); 29 Aug (12) Woods Reservoir (SNM, NPM); 30 Sep (2) Pickwick L (RS), Irs. Common Tern: 10 Oct (6) Pickwick L (CAS, GG). ROYAL TERN: 29 Aug (1) Pickwick L (MCT, RS, VS, AT, DR). Red-throated Loon: 31 Oct (1) Percy Priest L, Rutherford Co (JN, RN, photo). Pacific Loon: 5-7 / 22 Nov (1) Percy Priest L (RH / GG). BAND-RUMPED STORM-PETREL: 29 Aug (1) Pickwick L (AT, RS, VS, MCT, DR, photo). MAGNIFICENT FRIGATEBIRD: 18 Oct (1) Rockland Rec. Area, Old Hickory L, Sumner Co (James Davis, Tara Davis, photo); 7 Nov (1) Percy Priest L (GG, photo); these possibly represent the same bird. Neotropic Cormorant: 1 Aug (1) Duck R Unit (AT); 22 Aug (1) Gatlin Point, Land Between the Lakes, Stewart Co (DR); 29 Aug / 7 Sep (1) Cross Cr NWR (AL / CR, Steve Routledge). American White Pelican: 27 Aug (2) Duck R Unit (RS); 4 Oct (250) Bear Cr WMA, Stewart Co (Niklas Klauss); 14 / 19 Oct (175 / 264) Old Hickory L, Sumner Co (JWb); 29 Oct (150) Tennessee R, Perry Co (RS); 31 Oct (135) Fall Cr Rec Area, Percy Priest L, Rutherford Co (JN, RN); 7 Nov (80, flying over) Mt Juliet, Wilson Co (JN); 14 Nov (5) Woods Reservoir (JN, RN); 16 Nov (23) Center Hill L, DeKalb Co (RSh, DSh); 28 Nov (7) Franklin Reservoir, Williamson Co (JAr). American Bittern: 1 Oct (1) Warren Co (Melinda Welton). Little Blue Heron: 21 Oct (1 im) Duck R Unit (DR, AL), lrs. White Ibis: 15 Aug - 1 Sep (1-2 im) Duck R Unit (JH, DR, RS, m.ob.); 26-29 Aug (1 im) Stephenson Rd (RSh, DSh, m.ob.); 29 Aug (2) Hillsboro Pond, Coffee Co (MM). Glossy Ibis: 7-12 Sep (1) Duck R Unit (Tommy Edwards / RS, m.ob.). Plegadis sp.: 21 Oct (1) Duck R Unit (DR, AL). Roseate Spoonbill: 14 / 30 Aug, 3 Sep (1) Duck R Unit (DR / RS, VS / JN, RN). Mississippi Kite: 9 Aug (2) Duck R Unit (RS); 10 Aug (2) Clarksville (RS); 20 Aug (1) Stones R National Battlefield, Rutherford Co (JWa); 1 Sep (3) Savannah, Hardin Co (RS); 4 Sep (1) Perry Co (RS); 4 Sep (1) Bedford Co (RDH, DMy); 16 Sep (1) Old Hickory L (MS). Golden Eagle: 27 Sep (1 im) Williamson Co (CAS); 28 Nov (1 ad) Pickwick L (RS), had been present for a few weeks (fide Clyde Cole). Long-eared Owl: 28 Nov (1) Bell's Bend (Thomas Kelly, photo). Short-eared Owl: 28 Nov (5) Palmyra Rd, Montgomery Co (JH). Northern Saw-whet Owl: 5 Nov (1, ba) Warner Park (Sandy Bivens). Peregrine Falcon: 15 Sep / 12 Oct (1) Radnor L (FF / JKS); 3 Oct (1) Perry Co (RS); 4 Oct (1) Putnam Co (Mark Taylor); 8 Oct (1) Duck R Unit (GG); 8 Nov (1) Sumner Co (TLd).

*Flycatcher - Swallow*: **Scissor-tailed Flycatcher**: 4 / 8 Aug (16) Lytle Cr Rd, Rutherford Co (Stephen Zipperer / JN, RN); 21 / 29 Aug (1 / 2) Eagleville (Kenny Benge / Hugh Barger); 28 Aug (1) Percy Priest WMA Field Trial Area, Rutherford Co (JN, RN); 26 Sep (30, at roost) Clifton, Wayne Co (RS); 30 Sep - 5 Oct (5-6) Wartrace, Bedford Co (Melissa Turentine). **ASH-THROATED FLYCATCHER**: 26 Nov - 2 Dec (1) Murfree Spring Wetland (Scott

Russom, photo, m.ob.). **Olive-sided Flycatcher**: 27 Aug (1) Duck R Unit (RS); 1 Sep (1) Franklin, Williamson Co (JAr); 10 Sep (1) White Co (SNM); 19 Sep (1) Cedars of Lebanon SP, Wilson Co (JWa, photo). **Eastern Wood-Pewee**: 30 Oct (1) Perry Co (VS), lrs. **Yellowbellied Flycatcher**: 19 Aug (1) Perry Co (RS), ers; also reported from Clay, Davidson, and Williamson Cos; 10-11 Oct (1) Hardin Co (RDH, DMy / BSc), lrs. **Alder Flycatcher**: 22 Aug (1) Barkley WMA, Stewart Co (DR); 30 Aug (1) Duck R Unit (RS, VS); 11 Sep (1) Warner Park (GG); 13 Sep (1) Perry Co (RS). **SAY'S PHOEBE**: 16 Oct (1) Park at Harlinsdale Farm, Williamson Co (JAr, photo, m.ob.). **Bell's Vireo**: 22 Sep (1) Perry Co (VS). **White-eyed Vireo**: 28 Nov (1) Pickwick L (RS), lrs. **Yellow-throated Vireo**: 16 Oct (1) Williamson Co (JAr), lrs. **Blue-headed Vireo**: 28 Nov (4) Pickwick L (RS), lrs. **Warbling Vireo**: 16 Oct (1) Bell's Bend (Randy Harrod, Melissa James, photo), lrs. **Fish Crow**: 7-8 Sep (2) Shelby Bottoms, Davidson Co (MS, m.ob.). **Northern Rough-winged Swallow**: 31 Oct (1) marsh on Walter S Davis Blvd, Nashville (MS, GG), lrs. **Purple Martin**: 19 Aug (150,000+) downtown Nashville (GG, m.ob.), at roost site. **Cave Swallow**: 2-4 Aug (1) Duck R Unit (RDH, DMy, m.ob.). **Cliff Swallow**: 1 Oct (2) Williamson Co (JAr, GG), lrs.

Nuthatch - Bobolink: Red-breasted Nuthatch: 6 Sep (1) Radnor L (JKS), ers; reports from at least 19 Cos. Blue-gray Gnatcatcher: 14 Nov (1) Duck R Unit (FF); 28 Nov (1) Pickwick L (RS), lrs. Swainson's Thrush: 26 Aug (1) Coffee Co (RDH, DMy), ers. Evening Grosbeak: 26 Oct (2) Williamson Co (Elmer Hill, photo); 30 Oct (2) Perry Co (VS, RS); 1 Nov (1) Warner Parks (GG et al.); 6 Nov (2) Radnor L (JKS). Purple Finch: 7 Oct (3) Cookeville, Putnam Co (Michele Ramsey), ers; widespread in small numbers. Pine Siskin: 1 Oct (1) Perry Co (VS), ers; widespread in moderate numbers. Lapland Longspur: 7 Nov (2) Duck R Unit (SA, JH). Grasshopper Sparrow: 5 Nov (1) Duck R Unit (DR), lrs. Clay-colored Sparrow: 30 Oct (1) Bell's Bend (MS). LeConte's Sparrow: 7 Oct (2) Humphreys Co (RS, VS); 21 Oct / 5 Nov (1 / 6) Duck R Unit (DR); 29 Oct (2) Hardin Bottoms, Perry Co (RS); 4 Nov (1) Shelton Ferry WMA (DR); 5 Nov (1) Giles Co (RS). Nelson's Sparrow: 14-22 Oct (1) Bell's Bend (FF, m.ob., photo); 21 Oct (1) Duck R Unit (DR, AL). Henslow's Sparrow: 5 Aug (2) Shelton Ferry WMA (SWo); 7 Oct (1) Humphreys Co (RS, VS); 16 Oct (1) Bell's Bend (FF, m.ob., photo). Yellow-headed Blackbird: 29 Aug (1 female) island in Center Hill L, DeKalb Co (Melinda Welton). Rusty Blackbird: 14 Oct (1) Bell's Bend (CAS), ers. Bobolink: 28 Aug (2) Eagleville (Hugh Barger), ers; 29 Oct (2) Hardin Bottoms, Perry Co (RS), lrs.

Warbler - Bunting: **Ovenbird**: 10 Nov (1) Coffee Co (SNM), lrs. **Blue-winged Warbler**: 7 Oct (1 each) Williamson / Davidson Cos (JAr / CAS); 30 Nov (1) Hendersonville, Sumner Co (TLd, photo), during snow flurries, see winter report. **Golden-winged Warbler**: at least 27 reports from 13 Cos; 6 Sep (1) Warner Park (GG), ers; 22 Sep (5) Perry Co (VS), max; 9 Oct (1) Dickson Co (VS), lrs. **Black-and-white Warbler**: 22 Nov (1) Bellevue, Davidson Co (FF), lrs. **Tennessee Warbler**: 5 Nov (1) Murfree Springs Wetland (JWa); 8 Nov (1) Duck R Unit (RS). **Orange-crowned Warbler**: 26 Sep (1) Old Hickory L (GG, MS), ers. **Nashville Warbler**: 5 Nov (1) Murfree Springs Wetland (JWa), lrs. **Connecticut Warbler**: 29 Aug (1) Nashville (Ed Schneider); 5 Sep (1) Montgomery Co (RS); 25 Oct (1) Perry Co (VS), new late fall date in state. **Northern Parula**: 1 Nov (1) Nashville (RDH, DMy), Irs. **Magnolia Warbler**: 29 Oct (1) Sumner Co (MS), Irs. **Yellow Warbler**: 11 Oct (1) Liberty Park, Montgomery Co (SWo); 13 Oct (1) Bell's Bend (MS); 28 Oct (1) Drake's Cr, Sumner Co (James Davis, photo); all late. **Chestnut-sided Warbler**: 16 Oct (1) Nashville (CAS); 22 Oct (1) Murfree Springs Wetland (JWa, photo), Irs. **Black-throated Blue Warbler**: 26 Sep (1 female) Edwin Warner Park, Davidson Co (Laura Cook et al.); 17 Nov (1 female) Nashville (CAS). **Black-throated Green Warbler**: 1 Nov (1) Radnor L (FF), Irs. **Rose-breasted Grosbeak**: 1-8 Nov (1, at feeder) Smith Co (Chris Agee); 14-23 Nov (1, at feeder) DeKalb Co (Carol Williams), Irs. **Painted Bunting**: 2-11 Aug (1-2 singing males) Percy Priest WMA Field Trial Area, Rutherford Co (GG, m.ob.).

*Locations*: Bark Camp Barrens sod farm - Coffee Co; Bell's Bend - Davidson Co; Cross Cr NWR - Stewart Co; Duck R Unit - unit of Tennessee NWR, Humphreys Co; Eagleville - Rutherford Co; Murfree Springs Wetland - Rutherford Co; Old Hickory L - Davidson Co (unless specified otherwise); Percy Priest L - Davidson Co (unless specified otherwise); Pickwick L - Hardin Co; Radnor L - Davidson Co; Shelton Ferry WMA - Montgomery Co; Stephenson Rd - Coffee Co; Warner Park - Davidson Co; Woods Reservoir - Franklin Co.

STEPHEN C. ZIPPERER, Murfreesboro, TN stczipperer@gmail.com

CUMBERLAND PLATEAU / RIDGE and VALLEY REGION - - Temperatures overall were above average for the season. Rainfall was above average each month except for August which was slightly below average.

The water levels in Douglas Lake remained high much later than normal this year, and the extensive mud flats at Rankin Bottoms were not exposed until early October. Consequently, only 14 species of shorebirds and low overall numbers were seen at this traditional migration staging site. Other areas, mainly south of Knox County, produced a good list of shorebirds. However, the Tri-cities area had little shorebird habitat this season.

Numerous rarities were found this fall, highlighted by the region's first Brown Booby, Neotropic Cormorant, and Anna's Hummingbird. Also notable were Red-necked Grebe, Allen's Hummingbird, Franklin's Gull, Brown Pelican, Roseate Spoonbill, Northern Sawwhet Owl, Western Kingbird, and Clay-colored Sparrow. The warbler flight was good. Boreal irruptives were well represented, including five reports of Evening Grosbeaks and a Red Crossbill. Given the generally mild temperatures, it's not surprising that several Neotropical migrants lingered later than normal, a continuing trend in this time of climate change.

A banding station was operated at Greenway Farm in Hamilton County by David Aborn for the 18th year. Banding was conducted on 24 days between 18 August and 5 November with 212 birds of 30 species banded. The top five species banded were Wood Thrush (28), Swainson's Thrush (26), Hooded Warbler (23), Gray Catbird (20), and Gray-cheeked Thrush (20). All three thrushes in this list were banded in record high numbers.

Goose - Crane: Snow Goose: 29 Sep (4) Chickamauga L (RHo); 14 Nov (2) Hiwassee Refuge (LT); 20 / 30 Nov (1) Lakeshore Park (RoK / Chuck Estes); 21 Nov (1) Kyker Bottoms (VW). Ross's Goose: 26-28 Aug (1) Seven Islands SP (MM et al., photo), remarkably early; 29 Nov (1) Camp Jordan, Hamilton Co (KAC). Greater White-fronted Gose: 9 Oct (1) Chester Frost Park (SKJ); 26 Oct (1) Nickajack L (RSh, DSh); 29 Nov (1) Camp Jordan, Hamilton Co (KAC); only reports. American Wigeon: 1 Sep (1) Chester Frost Park (SKJ), ers. Lesser Scaup: 19 Aug (2) Nickajack L (TLR), ers; 12 Nov (760) Boone L (RLK), max. Surf Scoter: 13 Nov (5) L Tansi, Cumberland Co (EKL); 13 / 24 Nov (1 / 6) Fort Patrick Henry L, Sullivan Co (Glen Eller / BFi, SQ); 25 Nov (4) Chickamauga L (JD, LD, m.ob.). White-winged Scoter: 25 Nov (1) Chickamauga L (JD, LD, m.ob.). Hooded Merganser: 1 Sep (1 im) Holston R, Hawkins Co (SHu). Common Merganser: 8 Aug (4 female-type) Rankin Bottoms (Ron Shrieves, photo); 4 Sep (1 female-type) Clinch R, below Melton Hill Dam, Roane Co (RoK); 4 Sep / 20 Oct (5 female-type) Watauga R, Washington Co (RLK); 22 Nov (1 female-type) Upper Douglas L, Cocke Co (BSc). Red-necked Grebe: 2 Nov (3) Boone L (RLK, m.ob.). Ruby-throated Hummingbird: 4 Nov (1) Chattanooga (JD, LD); 14 Nov (1) Johnson City (Larry McDaniel), lrs. ANNA'S HUMMINGBIRD: 29 Nov (1) Bledsoe Co (RSh, DSh, photo), 2nd state record. Allen's Hummingbird: 18 Nov (1 im male, ba) Clinton, Anderson Co (MA), present since 31 Oct. Virginia Rail: 8 Oct / 22 Nov (1) Gupton Wetland, Roane Co (RoK / Ken Oeser); 2 Nov (1) Jacob's Park, Johnson City (Melanie Kelley); 3 Nov (2) Kyker Bottoms (RW). Common Gallinule: 3-18 Aug (1 ad) VW Wetland, Hamilton Co (CM, m.ob.); 8 Oct (1 im) Reedy Cr Greenbelt, Kingsport, Sullivan Co (BFi, SQ, photo); 9-15 Oct (1) Lakeshore Park (RoK). American Coot: 16 Aug (1) Rankin Bottoms (Tony Headrick), ers. Sandhill Crane: 24 Nov (3) Hawkins Co (SHu), east of usual corridor.

Shorebirds: American Avocet: 24 Aug / 6 Sep (3 / 11) Nickajack Dam (Michael Hodge, m.ob. / JH, SA); 30-31 Aug / 27 Sep (4 / 2) Ish Cr Bay, Fort Loudoun L, Blount Co (RW, m.ob.). Black-bellied Plover: 15 Aug (1) New Hope Rd sod farm (MM, BSc, m.ob.). American Golden-Plover: 16 Oct (1) Tennessee R, Knox Co (CJW). Semipalmated Plover: 21 Nov (1) Union Co (MM, BSc), very late. Upland Sandpiper: 13 Aug (1) Corryton Pond, Knox Co (Denny McMahan, m.ob.). Ruddy Turnstone: 9 Sep (1) Douglas Dam, Sevier Co (MM). Stilt Sandpiper: 15-17 Aug (2) New Hope Rd sod farm (MM, BSc, m.ob.), only report. Sanderling: 4 Sep (1) Cleveland WTP (RHo, m.ob.); 10 Sep (1) Douglas Dam, Sevier Co (KW); 17 Sep (2) Nickajack Dam (DR, AL); 19 Sep (1) Rankin Bottoms (DK). Dunlin: 7 Oct (4) South Mouse Cr, Bradley Co (RHo); 17 Oct (3) John Sevier L (SHu); 17 Oct / 3 Nov (2 / 25) Rankin Bottoms (MWk / RH). Baird's Sandpiper: 26 Aug (1) Rankin Bottoms (JWs, photo). White-rumped Sandpiper: 19 Aug (1) Grace Ponds, Hamilton Co (BD); 4 Sep (1) Cleveland WTP (DRJ). Pectoral Sandpiper: 3 Nov (1) Rankin Bottoms (RH); 3 Nov (1) South Mouse Cr, Bradley Co (RHo); Irs. Western Sandpiper: 11 Aug (1) Pond Cr Rd, Monroe Co (MM), only report. Short-billed Dowitcher: 15 Aug (1) New Hope Rd sod farm (MM, BSc, RDH, DMy); 22-25 Aug (1) Rankin Bottoms (TSM, CLM, m.ob.); 4 Sep (1) Cleveland WTP (RHo, m.ob.). Long-billed Dowitcher: 26-29 Sep (1) Cleveland WTP (DRJ, m.ob.); 17 Oct (2) Rankin Bottoms (MWk, photo). Wilson's Snipe: 15 Aug (1)

Meigs Co (RSh, DSh).

New Hope Rd sod farm (Chuck Estes), ers. **Solitary Sandpiper**: 24 Oct (1) Indian Mtn SP, Campbell Co (Nell Moore), lrs. **Greater Yellowlegs**: 7 Nov (1) Oneida, Scott Co (BSc, MM); 21 Nov (1) Union Co (BSc, MM), lrs. **Red-necked Phalarope**: 8 Sep (1) Watts Bar Dam,

Jaeger - Falcon: Long-tailed Jaeger: 8 Sep (1 im) Watts Bar L, Meigs / Rhea Cos (RSh, DSh, photo). Franklin's Gull: 28 Sep (1) Chickamauga L (SKJ, m.ob.). Laughing Gull: 27-28 Sep (1 im) Chickamauga L (DRJ, m.ob.); 29 Oct (4) Tennessee R, Hamilton Co (BD). Herring Gull: 30 Aug (1 ad) Chickamauga L (JD, LD), ers; 31 Aug (1 im) Cherokee L, Grainger Co (MM). Black Tern: 22 Aug (4) Lakeshore Park (RoK), ers; 1 Sep (15) Upper Douglas L, Cocke Co (MM), max; 9 Sep (7) Chickamauga L (SKJ), lrs; plus 10 other reports from Blount, Cumberland, Hawkins, Meigs, Rhea, and Sevier Cos within the narrow window of dates cited. Common Tern: 17 Sep (5) Boone L (RLK); 17 Sep (2) John Sevier L (SHu); 27 Sep (1) Chickamauga L (DRJ); 27-28 Sep (3-2) Ish Cr Bay, Fort Loudoun L, Blount Co (RW, m.ob.). BROWN BOOBY: 20-28 Aug (1 sub-adult) Nickajack Dam (BD, m.ob., photo); 29 Aug - 2 Sep (1) Chickamauga Dam (DRJ, m.ob.), undoubtedly the same bird, representing the 1st record for East Tennessee. Neotropic Cormorant: 14 Aug - 6 Sep (1 im) Rankin Bottoms (Drew Dickert, m.ob., photo), 1st East Tennessee record. American White Pelican: 6 Oct (1) Barker Island, Watts Bar L, Rhea Co (RSh, DSh); 7 Oct (2) Roger's Cr, McMinn Co (RSh, DSh); 16 Oct (1) Chester Frost Park (SKJ); 17 Oct (6) Rankin Bottoms (Cara Simpson, Pasquel Lozenque); 19 Oct / 10 Nov (25 / 250) Hiwassee Refuge (CM / RSh, DSh); 1 Nov (17, flying over) Chattanooga (JD, LD); 24 Nov (500) Hiwassee Refuge (LT), all-time high count at this site and in region. Brown Pelican: 14 / 16 Aug (1 im) Warrior's Path SP, Sullivan Co (GB / BFi, SQ, photo). American Bittern: 3 Oct (1) Marion Co (TLR); 3 Oct (1) John Sevier L (SHu). Least Bittern: 13 Aug (2) Bradley Co (RHo, DRJ); 15 Oct (1) Standifer Gap Marsh, Hamilton Co (RHo). Great Egret: 1 Oct (72) Steele Cr Park, Sullivan Co (Jeremy Stout, Lance Jessee), large number for Northeast Tennessee. Snowy Egret: 28 Aug (1) Rankin Bottoms (Jamie Harmon); 29 Aug - 25 Sep (1-2) Old Ten Mile Rd, Meigs Co (RDH, DMy, m.ob.). Little Blue Heron: reported from Campbell, Claiborne, Cocke, Hamblen, Hamilton, Hawkins, McMinn, Meigs, and Roane Cos; 16 Sep (1) Emory Bend, Roane Co (RoK), lrs. Tricolored Heron: 12 Aug - 3 Sep (1 im) Rankin Bottoms (Aaron Graham, m.ob., photo), 2nd record at this site. Cattle Egret: 29 Aug (542) Meigs Co (MM), max. Yellow-crowned Night-Heron: 15 Oct (1 ad) Maryville Greenway (Evan Kidd), lrs. White Ibis: thru 22 Aug (1 im) VW Wetland, Hamilton Co (BD, m.ob.); 4 Aug (4 im) Emory Bend, Roane Co (RoK); 16-17 Aug (2 im) New Hope Rd sod farm (EBo, m.ob.); 18-27 Aug (1 im) Grainger Co (David Buehler). Roseate Spoonbill: 11 Aug (1) Bowater Pond, McMinn Co (MM, photo, m.ob.). Swallow-tailed Kite: thru 13 Aug (5-14) Stone Cave Rd, Sequatchie Co (m.ob.); 13-16 Aug (1-5) Bledsoe Co (RSh, DSh); 20 Aug (1) Bryant Cemetery Rd, Sequatchie Co (RSh, DSh). Mississippi Kite: thru 1 Sep (1-4) Sequatchie Co (m.ob.); 13 / 29 Aug (1 / 2) Bledsoe Co (RSh, DSh); 28 Aug (4) Chattanooga (BD). Northern Saw-whet Owl: 13 Nov (2, ba) Seven Islands SP (MA). Short-eared Owl: 25 Nov (1, fly-by) Lookout Mtn (BD). Merlin: 8 Sep (1) Knox Co (Carole Gobert, photo), ers; numerous reports. Peregrine Falcon: 2 Sep / 27 Sep / 12 Oct (1) Knox Co (BSc / JWs

/ DRy); 15 Sep (1) Washington Co (Rack Cross); 30 Sep (1) East Tenn. Tree Farm, Polk Co (RHo); 5 Oct (1) Maryville (VW); 7 Oct (1) Lakeshore Park (RoK); 11 Oct (1) Roane Co (RoK); 14 Nov (2) Hiwassee Refuge (LT).

Kingbird - Swallow: Western Kingbird: 13 Sep (1) Gupton Wetland, Roane Co (RoK, photo, m.ob.); 3-31 Oct / 1 Nov (1 / 2) Lone Oak Church, Bledsoe Co (RSh, DSh, photo, m.ob. / BSc). Scissor-tailed Flycatcher: 3-12 Oct (4-1) Lone Oak Church, Bledsoe Co (RSh, DSh, m.ob.); 17 Oct (1) Tollett L, Bledsoe Co (RSh, DSh). Olive-sided Flycatcher: 24 Aug (1) Marion Co (Gary Lanham, Pixie Lanham); 26 Aug (1) Chattanooga (JD, LD); 10 Sep (1) Lakeshore Park (RoK, m.ob.); 10 Sep (1) Chattanooga (KAC); 19 Sep (1) Kyker Bottoms (RW, photo); 26 Sep (1) Sequoya Park, Knox Co (CJW); 27 Sep (1) Seven Islands SP (BSc, MM); 27 Sep (1) Alcoa, Blount Co (TH); 3 Oct (1) Kingsport, Sullivan Co (GB). Eastern Wood-Pewee: 30 Oct (1) Lakeshore Park (RoK), lrs. Yellow-bellied Flycatcher: 31 Aug (1) Chester Frost Park (DRJ), ers; also reported from Blount, Campbell, Meigs, Sullivan, and Washington Cos; 2 Oct (1) South Chickamauga Cr Greenway, Hamilton Co (KAC), lrs. Yellow-throated Vireo: 27 Oct (1) Cumberland Co (EKL), lrs. Blue-headed Vireo: 15 Nov (1) Meigs Co (BSc), lrs. Philadelphia Vireo: 6 Sep (1) Bradley Co (Michael Brothers), ers; 20 Oct (1) Lakeshore Park (RoK), lrs. Red-eyed Vireo: 28 Oct (1) Lookout Mtn (BD), lrs. Fish Crow: 8 Aug (2) German Cr, Cherokee L, Grainger Co (RDH, DMy); 18 Nov (2) Rogersville, Hawkins Co (SHu); 6 Oct (72) Barker Island, Watts Bar L, Rhea Co (RSh, DSh); 3 Nov (72) Johnson City (Larry McDaniel); latter two reports tie for the new high count for East Tennessee. Common Raven: 12 Aug (1) Jefferson Co (RS, VS, JB); 20 Aug thru season (3 sites) Washington Co (RLK); 17 Sep / 17 Oct (1) Pioneer, Campbell Co (Charles Nicholson / Aidan Rominger); 23 Sep (1) Cross Mtn, Campbell Co (Bates Estabrooks); 20 Oct (1) Oneida, Scott Co (Robert Steele); 20 Oct (1) near Lakeshore Park, Knox Co (MWk); 20 Oct (1) Beaver Cr, Knox Co (Bruce Marshall); 21 / 26 Oct, 14 Nov (1) Maryville (DRy); 25 Oct (1) Rockford, Blount Co (Mary Tankersley); 26 Oct thru season (4 sites) Hawkins Co (GB, SHu). Bank Swallow: 4 Oct (2) Rankin Bottoms (CJW), Irs. Barn Swallow: 18 Nov (1) John Sevier L (SHu), lrs.

Nuthatch - Blackbird: Red-breasted Nuthatch: 26 Aug (1, at feeder) Chattanooga (JD, LD), ers; present in good numbers from at least 28 Cos in region. Brown-headed Nuthatch: 17 Aug (1) Swann's Bridge, Jefferson Co (MM); 20 Aug (2) Big Ridge SP, Union Co (JWs); 23 Aug (1) Steele Cr Park, Sullivan Co (Josh Alley). Sedge Wren: 7 Oct (1) John Sevier L (SHu); 4 Nov (1) Johnson City (DK). Blue-gray Gnatcatcher: 11 Nov (1) Turkey Cr, Knox Co (MWk); 12 / 22 Nov (1) Seven Islands SP (JWs / MA); Irs. Veery: 20 Oct (1) Chattanooga (JD, photo), Irs. Swainson's Thrush: 4 / 8 Nov (1) Knox Co (CJW); 8 Nov (1) Chattanooga (JD, photo); 11 Nov (1) Lookout Mtn (BD); Irs. Evening Grosbeak: 7 Nov (11) eastern Sullivan Co (Don Carrier); 10 Nov (5) Woodlawn Cemetery, Knox Co (J.D. Johnston); 12 / 30 Nov (7 / 5) Bledsoe Co (RSh, DSh); 19 Nov (4) Cumberland Co (Greg Sloan); 23 Nov (1) Johnson City (DK); all supported by photos. Red Crossbill: 7 Nov (1) Cumberland Co (EKL). Purple Finch: 4 Oct (1) Scott Co (BSc), ers; widespread in moderate numbers. Pine Siskin: 1 Oct (6) Bristol, Sullivan Co (Cade Campbell), ers;

widespread in good numbers. **Grasshopper Sparrow**: 27 Oct (1) Chattanooga (KAC); 1 Nov (1) Bledsoe Co (BSc); 14 Nov (1) Kyker Bottoms (EBo, photo); 24 Nov (1) Snow Hill, Hamilton Co (LT). **Lark Sparrow**: 30 Aug (1) Sewanee, Franklin Co (Sam Murray). **Claycolored Sparrow**: 13-15 Oct (1) Chattanooga (Barbara Johnson, photo, m.ob.). **Vesper Sparrow**: 31 Oct (8) Cherokee Farm, Knox Co (CJW), max. **LeConte's Sparrow**: 1 Nov (1) Chattanooga (DRJ); 14 Nov (1) Hiwassee Refuge (LT). **Nelson's Sparrow**: 24 Oct (1) Baylor School, Hamilton Co (TLR, LT). **Henslow's Sparrow**: 9 Aug (2) Bridgestone / Firestone Centennial Wilderness WMA, White Co (EBo); 4 Oct (1) Scott Co (MM, BSc). **Lincoln's Sparrow**: 27 Sep (2) Seven Islands SP (BSc, MM), ers; good number of reports. **Yellowbreasted Chat**: 20 Oct (1) Melton Hill Park, Knox Co (BSc), lrs. **Bobolink**: 29 Aug (2) Lakeshore Park (RoK), ers; 27 Oct (1) Chattanooga (TLR), lrs. **Baltimore Oriole**: 13 Oct (1) Chattanooga (BD), lrs. **Rusty Blackbird**: 17 Oct (1) John Sevier L (SHu), ers.

Warbler - Bunting: Northern Waterthrush: 20 Aug (1) Rankin Bottoms (MWk), ers. Golden-winged Warbler: 1 Sep thru 1 Oct, good number of migrants with at least 42 reports from 13 Cos (Blount, Cumberland, Greene, Hamblen, Hamilton, Knox, Loudon, McMinn, Meigs, Rhea, Roane, Sevier, Washington); 26 Sep (3) Meigs Co (MM, BSc), max. "Brewster's" Warbler: 5 Sep (1) Sharp's Ridge, Knox Co (JWs, photo). Tennessee Warbler: 2 Nov (1) Seven Islands SP (EBo); 4 Nov (1) Chattanooga (TLR); 4-6 Nov (1) Maryville (VW); 8 Nov (2) Chattanooga (JD); 21 Nov (1) Knox Co (MR); lrs. Orange-crowned Warbler: 5 Sep (1) Melton Hill Park, Knox Co (Colin Sumrall); 7 Sep (1) Morgan Co (RDH, DMy); 19 Sep (1) Blount Co (RDH, DMy); 22 Sep (1) Greenway Farm, Hamilton Co (DRJ); all rather early, but well described. Nashville Warbler: 22 Nov (1) Knox Co (MR), lrs. Blackand-white Warbler: 28 Oct (1) Lookout Mtn (BD), lrs. American Redstart: 28 Oct (1) Baylor School, Hamilton Co (LT), lrs. Cape May Warbler: 10 Nov (1) Knox Co (MR), lrs. Cerulean Warbler: 22 / 29 Nov (1 ad male) Campbell Co (Cathie Bird, photo), remarkably late, no previous Nov records in state. Magnolia Warbler: 3 Nov (1) Seven Islands SP (Huck Hutchens), lrs. Yellow Warbler: 5 Oct (1) Heritage Center Greenway, Roane Co (RoK); 15 Oct (1) Chester Frost Park (SKJ); 22 Oct (1) Seven Is SP (Simon Thompson); 8 Nov (1) Hall's Greenway, Knox Co (JWs, photo); lrs. Chestnut-sided Warbler: 16 Oct (1) Blount Co (DRy); 30 Oct (1) Chattanooga (JD), lrs. Blackpoll Warbler: 9 Oct (1) Seven Islands SP (TH); 11 Oct (1) Knox Co (Shane Williams); 14-16 Oct (1) Maryville (VW); 15 Oct (2) Chester Frost Park (SKJ); 17 Oct (1) Blount Co (DRy); 20 Oct (1) Halls Greenway, Knox Co (JWs); all supported with photos or good description, good numbers for a species typically rare in fall. Black-throated Blue Warbler: 23 Sep (1) Knox Co (Colin Sumrall); 5 Oct (1) Hawkins Co (SHu); 7 Oct (1) Seven Islands SP (EBo); 17 Oct (1) Jefferson Co (BSc); 19 Oct (1) Birchwood, Hamilton Co (CM); 30 Oct (1) Chattanooga (JD). Prairie Warbler: 25 Oct (1) Knox Co (Shane Williams); 6 Nov (1) Cumberland Co (RSh, DSh); 12 Nov (1) Seven Islands SP (JWs); lrs. Wilson's Warbler: 28 Nov (1) Union Co (Sandy Manter, photo), lrs. Scarlet Tanager: 25 Oct (1) Meigs Co (RDH, DMy), lrs. Rose-breasted Grosbeak: 3 Nov (1) Halls Greenway, Knox Co (Jeremy Dotson, photo), lrs. Blue Grosbeak: 28 Oct (1) Chattanooga (BD), lrs. Indigo Bunting: 14 Nov (1) Yuchi WMA, Rhea Co (BSc); 18 / 22 Nov (1) Seven Islands SP (KW / MA), lrs. Painted Bunting: 27 Jul (1 female-type, at feeder) Chattanooga (Lynette Spence).

Locations: Boone L - Sullivan Co; Chester Frost Park - Hamilton Co; Chickamauga L - Hamilton Co; Cleveland WTP - wastewater treatment plant in Bradley Co; Hiwassee Refuge - Meigs Co; John Sevier L - Hawkins Co; Kyker Bottoms - Blount Co; Lakeshore Park - Roane Co; Lookout Mtn - Hamilton Co; Maryville - Blount Co; New Hope Rd sod farm - Monroe Co; Nickajack L - Marion Co; Rankin Bottoms - Cocke Co; Seven Islands SP - Knox Co.

RICHARD L. KNIGHT, Johnson City, TN rknight8@earthlink.net

EASTERN MOUNTAIN REGION - - Temperatures were above normal for all four months, and precipitation was slightly above normal for the period. Notable sightings included White-winged Scoter, Long-tailed Duck, Rufous Hummingbird, Laughing Gull, and Royal Tern. Boreal irruptives staged a good flight, including the most Evening Grosbeaks seen in many years.

Bird banding operations were conducted at three sites: Big Bald Mountain, Whigg Meadow, and Holston Valley. In addition to songbirds, raptors and Northern Saw-whet Owls were banded at Big Bald Mountain, with a high number of 34 saw-whets banded. Most were during late fall migration except for two nestlings banded during the summer. Also encountered at Big Bald was a saw-whet originally banded in northern Michigan in 2019. Eight Blackpoll Warblers were banded at Big Bald, which is a high number. A Mourning Warbler was a rare catch at the Holston Valley banding station.

Big Bald Mountain, Unicoi County: 20 August - 31 October (2043 birds of 65 species banded), Mark Hopey, head bander. Top species banded: Tennessee Warbler (551), Swainson's Thrush (357), Black-throated Blue Warbler (250), Dark-eyed Junco (87), Cape May Warbler (77).

Whigg Meadow, Monroe County: 8 September - 4 October (1036 birds of 51 species banded), Scott Rush, head bander. Top species banded: Tennessee Warbler (359), Swainson's Thrush (150), Black-throated Blue Warbler (65), Blue-headed Vireo (51), Hooded Warbler (46).

Holston Valley, Sullivan County: 26 August - 9 November (640 birds of 63 species banded), Richard Lewis, bander. Top species banded: Swainson's Thrush (103), Tennessee Warbler (57), Northern Cardinal (48), White-throated Sparrow (35), American Goldfinch (28).

Big Bald Mountain raptor banding operation, Unicoi County: 19 September - 15 November (90 birds of 7 species banded), Mark Hopey, head bander. Species banded: Sharp-shinned Hawk (57), Cooper's Hawk (15), Red-tailed Hawk (8), Merlin (7), Northern Harrier (1), American Kestrel (1), Peregrine Falcon (1).

Goose - Rail: Ross's Goose: 15 Nov (1) Fishery Park, Unicoi Co (Bryan Stevens). Bluewinged Teal: 29 Sep (450) South Holston L (RLK), max. Lesser Scaup: 12 Nov (475) South Holston L (RLK), max. White-winged Scoter: 17 Oct (1) South Holston L (BP, JP, m.ob.). Long-tailed Duck: 12 Nov (2) Watauga L, Carter Co (BP, JP, RLK, RRK). Common **Goldeneye:** 2-5 Nov (1) South Holston R Weir (RLK, m.ob.), only report. **Common Merganser:** 2 Sep (2 female-type) Wilbur Lake, Carter Co (BP, JP); 5 Sep (10 female-type) Hiwassee R, Polk Co (Nolan Wright); 10 Sep / 14 Oct (7 / 9, all female-type) middle prong of Little Pigeon R, Sevier Co (KW); 19 Sep (1 female-type) Chilhowee L, below dam, Blount Co (VW, photo); 22 Oct (6 female-type) Watauga R, Carter Co (RLK). **Red-breasted Merganser:** 29 Aug (1 female) Watauga R, Carter Co (BP, JP), early. **Ruddy Duck**: 30 Oct (10) Great Lakes Pond, Carter Co (Sue Farthing, Harry H. Farthing). **Mourning Dove:** thru 1 Sep (1-2) Carver's Gap on Roan Mtn (RLK), unusual at high elevation. **Black-billed Cuckoo**: 1 ba at Big Bald Mtn (MEH), no date provided. **Rufous Hummingbird**: 12 Aug (1 female) Clingman's Dome, GSMNP (RS, VS, JB, photo); 3-6 Oct (2, 1 ba) near Roan Mtn (Judi Sawyer, MA). **Virginia Rail**: 23 Sep (2) Orchard Bog in Shady Valley (RLK);

24 Oct (1) Chota Refuge (BSc, MM). Sora: 15 Oct (1) Quarry Bog in Shady Valley (Debbi

Campbell); 24 Oct (2) Chota Refuge (MM, BSc).

Shorebirds - Falcon: Dunlin: 1 Nov (3) South Holston L (RLK). Spotted Sandpiper: 12 Aug (1) Clingman's Dome, GSMNP (RS, VS, JB), unusual location. Greater Yellowlegs: 11-12 Nov (1) South Holston L (RLK), lrs. Laughing Gull: 29 Aug (1) South Holston L (RRK); 29 Oct (5) L Ocoee (RHo, DRJ). Caspian Tern: 20 Aug / 25 Sep (3 / 1) South Holston L (RRK / RLK); 29 Oct (3) L Ocoee (RHo, DRJ). Black Tern: 11 / 29 Aug (1 / 6) South Holston L (RLK / BFi, SQ). Common Tern: 31 Aug / 17 Sep / 25 Sep (1 / 12 / 6) South Holston L (RLK). Forster's Tern: 20 Aug - 7 Nov (7 reports of 1-2 birds, max 11 on 5 Oct) South Holston L (RRK, RLK et al.). ROYAL TERN: 29 Oct (1) L Ocoee (RHo, DRJ). Common Loon: 26 Sep (1) Watauga Lake, Johnson Co portion (TSM, CLM), ers. Great Egret: 14 Oct (27, flying over) Pittman Center (KW), max. Turkey Vulture: 31 Oct (1753) Big Bald Mtn (MEH), massive flight. Golden Eagle: 2 seen at Big Bald Mtn during Oct (MEH). Broadwinged Hawk: 20 Sep (1213) Big Bald Mtn (MEH), max. Northern Saw-whet Owl: 14 Aug (1) Roan Mtn (Cade Campbell); 19 Sep (2 ba) Whigg Meadow (SAR); 26 Sep (1) Unaka Mtn, Unicoi Co (Joe McGuiness); thru season (34 ba) Big Bald Mtn (MEH). Merlin: 19 Sep (1) Shady Valley (TSM), ers; 20 Sep (6) Big Bald Mtn (MEH), max. Peregrine Falcon: 23 Sep (1) Newfound Gap, GSMNP (KW); 26 Sep (1) Watauga L, Carter Co (Scott Turner).

*Flycatcher - Blackbird*: Eastern Wood-Pewee 27 Oct (1) Cades Cove, GSMNP (Warren Bielenberg), lrs. Yellow-bellied Flycatcher: 18 Sep (1) Dry Hill, Johnson Co (RLK); 21 Sep (1 ba) Whigg Meadow (SAR). Blue-headed Vireo: 23 Nov (1) Pittman Center (KW), lrs. Philadelphia Vireo: 16 Sep / 3 Oct (1) Elizabethton (RLK); 19 Sep (1) River Bend, Sullivan Co (TSM); 22 Sep (2) South Holston L (RLK); 22 Sep (1 ba) Whigg Meadow (SAR); 22 Sep (5) Sevier Co (KW), max. Red-eyed Vireo: 28 Oct (1) Holston Valley (RPL), lrs. Fish Crow: from summer thru 25 Aug (2-3) Watauga Point, Carter Co (RLK, m.ob.); 31 Oct (43) Cades Cove, GSMNP (Harumi Umi, audio on eBird), regional high count. Common Raven: 3 Oct (1) L Ocoee, at dam (RHo). Brown-headed Nuthatch: thru mid Sep (1) South Holston L, at Hwy 421 boat ramp (m.ob.). Sedge Wren: 7 Sep (1) Shady Valley (BP, JP). Marsh Wren: 21 Sep (1) Simerly Cr, Carter Co (Bryan Stevens); 23 Sep (1) Shady Valley (RLK). Swainson's Thrush: 21 Nov (1) South Holston R Weir (John Shumate), new late

fall date in Northeast Tennessee. Hermit Thrush: 16 Sep (1 im) Roan Mtn (RLK), likely raised locally. Cedar Waxwing: 7 Nov (520) Carver's Gap on Roan Mtn (RLK), migrants passing thru in small flocks. American Pipit: 4 Nov (21) Round Bald on Roan Mtn (RLK); 7 Nov (20) South Holston L (BP, JP). Evening Grosbeak: 5 Nov (12) Pittman Center (KW); 6 Nov (1, flying over) Carver's Gap on Roan Mtn (Cade Campbell); 14 Nov (1, at feeder) near Roan Mtn (Judi Sawyer); 23 Nov (3) Cades Cove, GSMNP (Frank Bills); 28 Nov (3) Indian Warpath Rd, Blount Co (Warren Bielenberg). House Finch: 25 Aug (7, at feeders) Roan Mtn, at 4450 ft elevation (RLK), highest known regular site. Purple Finch: 15 Oct (1) Pittman Center (KW), ers; 24 Oct (25) Holston Valley (RPL), max; modest numbers in most areas. Red Crossbill: 15 Sep / 25 Nov (5 / 6) Cades Cove, GSMNP (RW / TH); 23 Sep (2) Newfound Gap, GSMNP (KW); only reports. Pine Siskin: thru Sep (5-15, at feeders) Roan Mtn, at 4450 ft elevation (m.ob.), known breeding site; 5 Aug / 23 Sep (1 / 2, at feeder) Townsend, Blount Co (Kat Barrow); 12 Aug (3) Clingman's Dome, GSMNP (RS, VS, JB); influx of northern birds beginning 8 Oct (3) Pittman Center (KW). Lincoln's Sparrow: 23 Sep (1) Shady Valley (RLK), ers; 26 Sep (1) Sevier Co (KW); 24 Oct (1) Chota Refuge (BSc, MM); 26 Oct (1 ba) Holston Valley (RPL). Swamp Sparrow: 26 Sep (1) Ripshin L, Carter Co (FJA et al.), ers. Bobolink: 24 Oct (1) Chota Refuge (BSc, MM). Rusty Blackbird: 14 Nov (4, flying thru) Carver's Gap on Roan Mtn (RLK).

*Warblers*: **Ovenbird**: 26 Oct (1 ba) Holston Valley (RPL), Irs. **Blue-winged Warbler**: 27 Sep (1) Elizabethton (RLK); 27 Sep (1, ba) Holston Valley (RPL); Irs. **Golden-winged Warbler**: 8-23 Sep (6 ba) Whigg Meadow (SAR); 26 Sep (1) Ripshin L, Carter Co (FJA et al.); 27 Sep (1, ba) Holston Valley (RPL); 29 Sep (1) Piney Grove Rd, Carter Co (TSM); 30 Sep (1) Sycamore Shoals SP, Carter Co (FJA). **Orange-crowned Warbler**: 26 Oct (2) Shady Valley (RLK). **Nashville Warbler**: 20 / 30 Sep (1 ba each day) Holston Valley (RPL); 7 Nov (1) near Roan Mtn (Judi Sawyer, photo), ties the late fall date in Northeast Tennessee. **Mourning Warbler**: 14 Oct (1 ba) Holston Valley (RPL, photo). **Yellow Warbler**: 27 Sep (1) Elizabethton (RLK), Irs. **Chestnut-sided Warbler**: 17 Oct (2) Sycamore Shoals SP, Carter Co (Debi Campbell, RRK, Joe McGuiness), Irs. **Blackpoll Warbler**: 13 Oct (1) Elizabethton (RLK); total of 8 ba at Big Bald Mtn (MEH), large number. **Black-throated Blue Warbler**: 18 Oct (1) Rock Cr Park, Unicoi Co (Jeff Bailey); 24 Oct (1) Chota Refuge (MM, BSc), Irs. **Yellow-throated Warbler**: 5 Nov (1) Townsend, Blount Co (Kat Barrow), Irs. **Wilson's Warbler**: 19 Sep (1) Shady Valley (RLK); 26 Sep (1) Roan Cr, Johnson Co (TSM, CLM); 26 Sep (1) Watauga Point, Carter Co (Debi Campbell); 7 Oct (1) Elizabethton (RLK).

*Locations*: Big Bald Mtn - Unicoi Co; Chota Refuge - Monroe Co; Elizabethton - Carter Co; GSMNP - Great Smoky Mtns. National Park; Holston Valley - Sullivan Co; L Ocoee - Polk Co; Pittman Center - Sevier Co; Roan Mtn - Carter Co; Shady Valley - Johnson Co; South Holston L - Sullivan Co; South Holston R Weir - Sullivan Co; Whigg Meadow - Monroe Co.

RICHARD P. LEWIS, Bristol, TN mountainbirds@gmail.com

FJA - Fred J. Alsop MA - Mark Armstrong JAr - Jim Arnett SA - Sharon Arnold GB - Gary Bailey JB - Jamin Beachy EBo - Eric Bodker KAC - Kevin A. Calhoon JD - John Diener LD - Lizzie Diener BD - Bruce Dralle FF - Frank Fekel BFi - Bambi Fincher BFo - Bob Foehring GG - Graham Gerdeman MAG - Mark A. Greene JH - Joe Hall RH - Rob Harbin RDH - Ron D. Hoff MEH - Mark E. Hopey RHo - Rick Houlk TH - Tom Howe SHu - Susan Hubley DRJ - Daniel R. Jacobson SKJ - S.K. Jones DK - David Kirschke RLK - Richard L. Knight RRK - Roy R. Knispel RoK - Roger Kroodsma PL - Pamela Lasley SL - Steven Lasley EKL - Edmund K. LeGrand RPL - Richard P. Lewis TLd - Tim Loyd AL - Andrew Lydeard MM - Morton Massey CLM - Cathy L. McNeil TSM - Thomas S. McNeil NPM - Mac McWhirter SNM - Susan N. McWhirter CM - Charles Murray

**OBSERVERS** DMy - Dollyann Myers JN - Justin Nation RN - Robin Nation BP - Brookie Potter JP - Jean Potter DDP - Dick D. Preston SQ - Sherrie Quillen DRy - Doug Raybuck DR - Daniel Redwine TLR - Tommie L. Rogers CR - Cyndi Routledge SAR - Scott A. Rush MR - Mike Ryon AG – Andrew Gafford BSc - Beth Schilling DSh - Debbi Shannon RSh - Roi Shannon JKS - Jan K. Shaw CAS - Chris A. Sloan MS - Michael Smith RS - Ruben Stoll VS - Victor Stoll LT - Luke Thompson MCT - Michael C. Todd AJT - Allan J. Trently AT - Alan Troyer CVN - Cliff VanNostrand JV - Jim Varner JWa - Jeffrey Walck MGW - Martha G. Waldron KW - Keith Watson JWb - Jerry Webb CJW - Chris J. Welsh JWs - Jacob Wessels RWh - Robert Wheat MWk - Mike Winck VW - Valerie Wininger RW - Randy Winstead SWo - Stefan Woltmann

MTOS - Memphis Chapter, TOS

## PHOTO GALLERY

*Editor's Note: The Migrant* will include a Photo Gallery at the end of some issues, as opportunity and space in the issue allows. The submission of photos is open to anyone. Photos should be of Tennessee birds and the picture taken in Tennessee. Relevant field marks should be easily seen in the picture. Pictures that include native habitats and plants are preferred but not required. The name of the bird and the name of the photographer and county are required. Those interested can submit one or multiple pictures to **editorthemigrant@gmail.com**.



**Hooded Warbler** (*Setophaga citrina*) Photo by Ron Hoff



**Prairie Warbler** (Setophaga discolor) Photo by Ron Hoff



**Rose-breasted Grosbeak** (*Pheucticus ludovicianus*) Photo by Georges McNeil



**Red-headed Woodpecker** (*Melanerpes erythrocephalus*) Photo by Cyndi Routledge

## **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. 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" should be mailed to the appropriate Regional Compiler. Consult a recent issue of *The Migrant* for the name and address of the compiler.

## CONTENTS

SUMMARY OF BIRD WINDOW CASUALTIES ON THE UNIVERSITY OF TENNESSEE-CHATTANOOGA CAMPUS David A. Aborn	1
THE 2020 TENNESSEE CHRISTMAS BIRD COUNT SUMMARY Ron Hoff	
MINUTES OF THE 2020 FALL BOARD OF DIRECTORS MEETING Cyndi Routledge	
THE SUMMER SEASON: 1 AUGUST – 30 NOVEMBER 2020 Richard L. Knight	
WESTERN COASTAL PLAIN REGION Dick D. Preston	33
HIGHLAND RIM AND BASIN REGION Stephen C. Zipperer	37
CUMBERLAND PLATEAU/RIDGE AND VALLEY REGION Richard L. Knight	41
EASTERN MOUNTAIN REGION Richard P. Lewis	
PHOTO GALLERY	50