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FORAGING IVORY-BILLED WOODPECKERS IN THE SINGER TRACT IN LOUISIANA: MATCHING JAMES T. TANNER'S FIELD NOTES WITH HIS PHOTOGRAPHS FROM 1939

Mark A. Michaels^{1,6,} Martjan Lammertink^{2,3,} William C. Hunter^{4,} and Thomas C. Michot⁵

ABSTRACT

Few photographs exist of living Ivory-billed Woodpeckers (*Campephilus principalis*), and no previously known photographs show the species foraging. We found a reference in James T. Tanner's field notes to several photographs taken on 23 April 1939 of a group of Ivory-billed Woodpeckers foraging in a recently dead pecan tree (*Carya illinoinensis*). We also found a series of four archived photographs taken by Tanner that shows the same upper branches of a recently dead pecan. We found at least one definitive and probably up to three Ivory-billed Woodpeckers in the photographs, indicating these were the intended subjects. Approximately 30% of the bark is removed from a perch branch between the first and last images in the sequence, consistent with known foraging behavior of Ivory-billed Woodpeckers. The photographs illustrate aspects of Ivory-billed Woodpecker foraging behavior described in the literature and show individuals in the group spaced at distances of <1 m. These are among the last known photographs from the Singer Tract population.

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INTRODUCTION

The Ivory-billed Woodpecker (*Campephilus principalis*) is a critically endangered (if not extinct) species that originally occurred throughout most of the southeastern U.S. and on Cuba. Photographs of Ivory-billed Woodpeckers are scarce and are of high importance, both as documentation and as references for the bird's appearance and ecology that can be used in field searches for individuals that may be extant. The largest number and best quality photographs of Ivory-billed Woodpeckers are from the years 1935–1939 when Arthur A. Allen and James T. Tanner photographed nesting pairs from tree blinds as well as a nestling during banding (Allen and Kellogg 1937, Tanner 1942). These photographs were taken in Northeast Louisiana's Singer Tract, an approximately 32,400 ha parcel at the time composed of old- and second-growth bottomland hardwood forest in the Mississippi alluvial floodplain, much of which now is second-growth included within Tensas River National Wildlife Refuge and Big Lake Wildlife Management Area.

The Singer Tract tree-blind and nestling series is preceded by three poor-quality photographs from Florida taken by Allen during 1924: (1) a heavily retouched image of a displaying pair (reproduced in Jackson 2004), (2) a similarly retouched, unpublished lantern-slide image of a male that is housed in Cornell University Library's Rare and Manuscript Collection, and (3) a distant image reportedly of an Ivory-billed Woodpecker (but unrecognizable as that species) perched on the trunk of a pine tree (Allen and Kellogg 1937). Three sets of photographs exist from Cuba: (1) three photographs taken in 1941 with one of an Ivory-billed Woodpecker at a cavity tree and two of a captive individual (Gallagher 2007, Estrada 2014), (2) a photograph taken in 1948 of a bird at an active nest cavity (Dennis 1948), and (3) a photograph taken in 1956 of a bird distantly perched in a live pine tree (Gallagher 2007). None of the seven known image sets shows a foraging Ivory-billed Woodpecker. Photographs of feeding trees, reportedly the work of Ivorybilled Woodpeckers, are presented in Allen and Kellogg (1937) and Tanner (1942) but it is unclear whether the foraging markings were presumed or confirmed to be of that species, limiting the usefulness of these photographs for deriving diagnostic features of Ivory-billed Woodpecker foraging sign.

We found reference in Tanner's unpublished field notes to his taking a "few pictures" while he was observing a family of four Ivory-billed Woodpeckers actively foraging in a recently dead pecan tree (*Carya illinoinensis*) on 23 April 1939. Furthermore, in a series of four archived photographs taken by Tanner and dated April 1939, we discovered woodpeckers in each of the photographs with plumage patterns and shapes indicating these were the Ivorybilled Woodpeckers Tanner mentioned as foraging on this same tree as described in his notes. One of the Ivory-billed Woodpeckers in the photographs appears to be scaling bark from a dead branch, a behavior that matches the known foraging behavior of the species.

Considering the potential biological and historical importance of a newly discovered series of images showing any Ivory-billed Woodpeckers, but especially some in the act of foraging, we present the unpublished field notes and cropped-in versions of the photographs from April 1939. Our objectives are, first, to examine the field notes, images, and photo-captions for matches and contradictions to determine whether this is the series of photographs showing foraging Ivory-billed Woodpeckers that Tanner mentioned, and second, to examine the photographs for any biological information they may contain, in particular, on the foraging sign made by Ivory-billed Woodpeckers, and on inter-individual spacing in groups during foraging.

METHODS

The photographs we examined are in a collection of 106 images by Tanner from the Singer Tract, taken between 1935 and 1941, inclusive, and archived in the Louisiana Digital Library as the Tensas River National Wildlife Refuge / U.S. Fish and Wildlife Service/ Ivory-billed Woodpecker Records (Mss. 4171), Louisiana State University Libraries, Baton Rouge, LA, USA. The photographs are available online at <u>https://louisianadigitallibrary.org/islandora/object/lsu-sc-tensas%3Acollection</u> (2 February 2021).

While looking for images of foraging markings of Ivory-billed Woodpeckers in the Louisiana Digital Library collection, we noted objects with the shape and color pattern of Ivory-billed Woodpeckers in four photographs, 4171072p through 4171075p. On the website, these photographs are numbered 86 through 89 and appear in a different order: 4140173p, 4171074p, 4171075p, and 4171072p. We inferred the long archival numbers represent the order in which the images were taken because they are congruent with the progressive removal of bark from the branch. Since the photo-captions indicate that the photographs were taken by Tanner in April 1939, we re-read his field notes from that month, archived in James Taylor Tanner papers, collection no. 2665, Division of Rare and Manuscript Collections, Cornell University Library, Ithaca, NY, USA. The only mention in the notes related to photographing a situation identical to that in the images in the Louisiana State University collection was dated 23 April 1939.

We cropped the photographs using the crop tool in Photoshop CS3 (Adobe) to an area where bark scaling occurs and where the woodpeckers are perched on branches at positions varying between the frames. Using the pencil tool in Photoshop CS3 we delineated an unequivocal Ivory-billed Woodpecker in red and other likely Ivory-billed Woodpeckers in purple.

RESULTS

Tanner's field notes from 23 April 1939 are typed and are somewhat faint but can still be read (Figure 1). The entry includes the following statement:

"...and then we found all four birds, Ma and Pa, Sonny Boy, and Baby Bunting, togeh (*sic.*) in one tree. They began to travel south, and in one or two flights, reached a big recently dead pecan just as the sun hit the tops of the trees. They fed there for some time, both parents feeding the young bird. At one time there were two Pileateds in the same tree with the four Ivory-bills. I took a few pictures. They continued on south from there...."

In all of Tanner's subsequent writings and publications he never identified any photographs as being the ones that he mentioned in his 23 April 1939 field notes.

<u>4/23 - Sun</u>. Jesse and I left camp about 4:00 and walked up to the roost holes, sitting down unde the old ash roost. About 5:15 the male slip ed quietly mout of his hole, flew to the near stub, called a bit from there. He soon flew east and in two flights apparently joined the famale. Theymade a few short flights and then we found all four birds, May and Fa, Sonny Boy, and Baby Sunting, toget in one tree. They began to travel south, and in one or two flights, reakhed a bit recently dead pecan just as the sun hit the tops of the trees. They fed there for some time, both parents feeding the young bird. At one time there were two Fileateds in the same the with the four Ivory-bilis. I took a few pictures. They continued on south from there in fairly long flights, stopping to feed on dead ordead-topped trees. About 3 o'clock they crossed Sharkey Road a little west of L. Carter's, seemd to go on down the slough. Jesse and I walked on out the road and faxe came to town. The young bird is growing rapidly and flies strongly. His crest has lengthened from his head, is still blunt; tail is getting pointed; eye in certain lights minas appears light. His voice is almost like the adult, but still a little weak, and he gives the same food call when approached by parents He pecks some himself now.

Figure 1. James T. Tanner's typed field notes from the Singer Tract, Louisiana, 23 April 1939, describing the observation and photography of a family group of four Ivory-billed Woodpeckers foraging in a dead pecan. Reproduced from field notes archived in the James Taylor Tanner papers, collection no. 2665, Division of Rare and Manuscript Collections, Cornell University Library.

The four archived photographs 4171072p through 4171075p taken by Tanner that we examined are all titled "Sweet pecan with ivory-billed woodpecker feeding sign, April 1939." These photographs depict the same scene in a series, the top of a tall dead tree seen through an opening in the foliage of lower trees (Figure 2). The tree is recently dead, based on the



Figure 2. Photo 4171072p, the first of a series of four photographs by James T. Tanner archived in the Louisiana Digital Library and labeled "Sweet pecan with ivory-billed woodpecker feeding sign, April 1939". The four photographs show the same tree-top under the same angle and lighting conditions. The full frame is reproduced here; in Figure 3, details are shown from the branch fork to the right of the center of the frame.

lack of foliage and small twigs still remaining. The dead tree is illuminated by sunlight from a low angle, which is consistent with Tanner's field notes about the pecan with the Ivorybilled Woodpecker family group.

When cropped into the center fork and enlarged, the sequence of photographs shows woodpeckers appearing and disappearing at various positions on the branches (Figure 3). In the first three photographs (4171072p - 4171074p), a woodpecker is perched with an elongated, vertical posture, and in the first two photographs (4171072p and 4171073p) its folded wings show the diagnostic triangular white shield of an Ivory-billed Woodpecker. In 4171074p the presence of a dorsal white wing shield is ambiguous, probably because the bird is perched on the shadow side of the branch. In image 4171073p, there is a white stripe above the white shield, consistent with the shoulder stripes of the Ivory-billed Woodpecker. The final frame (4171075p) shows a bird jumping from the top of the left branch and beginning to open its wings. This image does not show a white leading edge in the under wings which is consistent with another photograph of Ivory-billed Woodpecker. In 4171073p two additional woodpeckers with indistinct shapes and postures are discernable on the right branch of the fork, with white patches on their folded wings. In 4171074p an

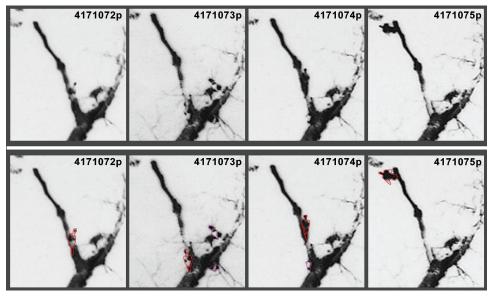


Figure 3. Top row: details from photographs 4171072p through 4171075p, showing a branch fork with at least one Ivory-billed Woodpecker and several black-and-white objects appearing and disappearing at various positions indicating additional woodpeckers with some characteristics consistent with Ivory-billed Woodpeckers. Bottom row: the same row of photo-details, now with outlined in red objects that match the shape and color pattern of Ivory-billed Woodpecker, and outlined in purple are the several black-and-white objects that appear in two images but not in other photographs of this scene. Note that between the first and last photograph bark is removed at the lower part of the left branch.

indistinct white triangle is visible at the base of the left branch at the same position where a more distinct woodpecker shape is apparent in the previous image.

In the first photograph in the series, 4171072p, the left branch appears mostly if not completely covered in dark bark. Bark has been removed in the next two photographs at the lower part of the branch, and in the last image ca. 30% of the branch length shows exposed wood (Figure 3). The branch from which bark is scaled has no twigs or small side branches remaining and so appears to be further along in the decay process compared to the right branch of the fork that has a few side branches and small twigs remaining.

Based on elongated woodpecker shape of the Ivory-billed Woodpecker in photograph 4171074p, and using its wing chord length for scale, we measured a diameter of 8 cm for the foraging branch. Using the same scale, and the transitory shapes with features consistent with other Ivory-billed Woodpeckers photographed in Figure 3 (indicated by purple outlining), we measured distances of 66, 49, 68, and 62 cm between the perch positions of the birds in the viewing plane of photographs. Allowing for slightly larger actual distances because the right branch is angling away from the viewing point, we estimated inter-individual perch distances to be less than 1 m.

DISCUSSION

The scene in the four archived photographs matches the scene described in Tanner's 23 April 1939 field notes, which mention his photography while observing a family of four foraging Ivory-billed Woodpeckers, made up of a breeding pair, a one-year-old male offspring from the previous year, and a recently fledged juvenile. Specifically, the photographs show a tall, recently dead tree that is illuminated by sunlight from a low angle, and the field notes describe the woodpeckers foraging in a big, recently dead pecan just as the sun hit the tops of the trees in the early morning. Tanner (1942:104) specified the scientific name Carya pecan for sweet pecan, a synonym for the currently accepted Carya illinoinensis. Sweet pecan and pecan are both common names for C. illinoinensis, with the latter now more widely accepted. Thus, the tree species in the captions, sweet pecan, matches that in the notes, pecan, and the year and month in the captions match the observation date. There are only three occasions that Tanner observed Ivory-billed Woodpeckers feeding on sweet pecans or bitter pecans (Carya aquatica, also commonly known as water hickory) (Tanner 1942:42). Tanner's notes indicated the other two were from 1938, on 25 March (involving scaling bark) and on 28 April (involving digging) and both involved a young male woodpecker in home ranges other than John's Bayou (a bird Tanner had named "Mack's Bayou Pete"), so neither the dates nor the location matches the photo captions. The existence of four photographs of the same scene matches Tanner's reference to "a few pictures" in the notes.

The changing positions of several objects in the photographs and the flight launch in the last of the series demonstrate that these objects are birds. The vertical perch positions indicate the objects are woodpeckers. The white triangular wing shields and white wing stripes are diagnostic for Ivory-billed Woodpecker, and the removal of bark by scaling is consistent with the dominant foraging behavior of the species (Tanner 1942:42). For these reasons, we conclude that the photographs show the group of foraging Ivory-billed Woodpeckers that Tanner reported to have observed and photographed on 23 April 1939. Importantly,

this sequence of photographs documents for the first time Ivory-billed Woodpeckers in the process of foraging through the removal of bark by scaling that is consistent with the dominant foraging behavior of the species, at least during the breeding season on the Singer Tract (Tanner 1942).

It appears that the archived photo-captions "Sweet pecan with ivory-billed woodpecker feeding sign, April 1939" are from Tanner, as there is no other way that the tree species, month, and year could have been specified. It seems odd, then, that Tanner did not mention the appearance of Ivory-billed Woodpeckers in these photographs. The archived images were made from negatives donated by Tanner in 1988 (Judy Bolton Louisiana State University pers. comm.) or 1990 (N. Tanner pers. comm.). It is possible the captions were written only then, decades after the photographs were taken; this may have introduced discrepancies. It is noteworthy that in his collection of 106 photographs from the Singer Tract archived at Louisiana State University, Tanner typically made or selected only one print or negative of any landscape scene or foraging tree, or at most two, but from different angles. The sweet pecan sequence is the only series in the entire collection that shows multiple successive photographs of one and the same scene. This suggests that Tanner was attempting to capture a non-static subject of high interest. We find it possible, but unlikely, that Tanner had forgotten about the presence of the Ivory-billed Woodpeckers in these photographs with the passage of time, given the uniqueness of what he witnessed. An alternative explanation is that he thought it unworthy of mention that there were Ivory-billed Woodpeckers in the photographs, given the tiny size of the birds and the distance involved.

In his field notes Tanner mentioned that in addition to four Ivory-billed Woodpeckers, two Pileated Woodpeckers (*Dryocopus pileatus*) were in the same tree at one point (Figure 1). In Tanner (1942:54) it is further specified that the Pileated Woodpeckers were in the same tree as the Ivory-billed Woodpeckers "for almost half an hour without paying any obvious attention to each other". Tanner did not specify in his notes whether or not he took the photographs while the Pileated Woodpeckers were present. Regardless, we can rule out Pileated Woodpecker as the identity of the woodpeckers in the images based on the presence of white wing shields, and we were unable to find Pileated Woodpeckers elsewhere in the photographs. In addition, Tanner (1942:44) recorded four foraging observations of Pileated Woodpeckers in pecans, and they all involved digging, so there is no indication that Tanner had observed a Pileated Woodpecker scaling bark on the sweet pecan during the 23 April 1939 event.

The feeding behavior documented in this series is largely but not completely typical for Ivory-billed Woodpecker foraging ecology as described by Tanner (1942). According to Tanner (1942:41), Ivory-billed Woodpeckers in Louisiana usually foraged high in the tops of recently dead or dying trees, and 70% of Tanner's feeding observations involved scaling bark (Tanner 1942:42), as is the case in this series of photographs. The photographs are atypical in that foraging on sweet pecan and bitter pecan was only rarely observed by Tanner – in 3% of observations – a frequency that matched the availability of these tree species in the environment. Sweet gums (*Liquidambar styraciflua*) and Nuttall oaks (*Quercus texana*) were generally preferred for foraging (Tanner 1942:42). Tanner summarized his findings by stating that, at least during the nesting season, Ivory-billed Woodpeckers mostly foraged

"under the bark of dead limbs," and only shared foraging space with Pileated Woodpeckers on "stumps" that were still "hard but partly punky" (Tanner 1942:51). The third foraging situation found by Tanner, punky and rotten tree trunks, logs, and dead limbs, were fed upon only by Pileated Woodpeckers, never by Ivory-billed Woodpeckers (Tanner 1942:51). The beetles found in the trunk of a dead hackberry (*Celtis* sp.), where Ivory-billed Woodpeckers fed far less frequently during the breeding season, have longer life cycles with considerably larger larvae primarily found in boles (Tanner 1942:43, Evans 2014).Whether or not postbreeding Ivory-billed Woodpeckers shift more into Pileated Woodpecker foraging space by digging into more fully punky to thoroughly rotted wood is unknown, but certainly Ivorybilled Woodpeckers have physical characteristics that would enable them to do so (Tanner 1942:44). Stomach samples taken from Ivory-billed Woodpecker specimens that were collected in late summer and in autumn indicated a more varied diet than what Tanner observed earlier in the season, with larger beetle larvae making up an important proportion of animal parts detected during the post-breeding period (Tanner 1942:40).

Tanner (1942:40, 74-76) noted that smaller beetle larvae were carried to the nest by adults to feed the unfledged young more frequently than were larger larvae. Tanner (1942:40-41) did also find hard parts of large beetle larvae in the nest debris, but he attributed this to their being more persistent than small larvae hard parts, which he surmised had been carried out with the fecal material by the adults. Tanner (1942:41) stated that wood-boring beetle larvae were "unquestionably the most important food of the Ivory-bill". There is some evidence (Haack 2017:110) that the smaller diameter high branches, when freshly dead, were mostly populated with small (<25mm) larvae, whereas the longer dead larger branches and dead stumps were populated with larger larvae. Therefore, works by authors (e.g., Jackson 2002, 2004; Snyder et al. 2009; U.S. Fish and Wildlife Service 2010) that state or imply that the loss of large beetle larvae from old forests was considered by Tanner (1942:52-53) to be largely responsible for the demise of the Ivory-billed Woodpecker, should be re-examined. In contrast, we interpret that Tanner's hypothesis that food was limiting included that the loss of smaller larvae especially, under the bark of primarily small high branches recently dead, as shown in this series of photographs, was a major factor in the demise of the Ivory-billed Woodpecker. This clarification on Tanner's observations should be investigated further. As the photo series provides visual documentation of a characteristic foraging substrate and characteristic scaling sign of the Ivory-billed Woodpecker and is the only such series where the photographed substrate and sign is unequivocally made by Ivory-billed Woodpecker, this photo series is of high importance in searches for persisting individuals of this species. It provides a visual search image that augments written descriptions of Ivory-billed Woodpecker foraging sign.

Tanner (1942:21), in his searches for populations of Ivory-billed Woodpeckers, used the occurrence of bark patches that had been scaled from recently dead tree trunks and branches as foraging sign indicative of Ivory-billed Woodpeckers. Tanner concluded that the species was likely present based on such foraging sign along the Apalachicola River in Florida without further corroborating evidence besides local reports. With regard to reported differences between Ivory-billed Woodpecker and Pileated Woodpecker foraging sign, Tanner (1942:21) indicated that scaling by Pileated Woodpeckers is usually confined to smaller branches and those longer dead. In recent searches for Ivory-billed Woodpeckers, following the descriptions of foraging sign from Tanner (1942), scaled bark from recently dead trees and branches was used as a clue for the possible presence of the species (Jackson 2004, Rohrbaugh et al. 2006, Hill 2007).

While the scaling of tight bark from tree trunks has now also been documented to have been performed by Pileated Woodpeckers to at least a limited extent (Rohrbaugh et al. 2007), this alone is not a contradiction to what Tanner (1942:21) described as he emphasized the presence of "extensive" foraging sign, especially in high limbs. Tanner also frequently relied on abundance of sign in conjunction with the presence of roost or nest holes, as an indicator of residence (1942:20-29). Tanner based this on his own observations as well as those of other observers familiar with the species, especially correspondence from H. Stoddard (Stoddard 1969). Tanner was more skeptical of relatively isolated or scattered potential foraging sign (again following Stoddard's advice). In such situations, i.e., where he found a small amount of potential sign, Tanner (1942:26-27) would suggest that, at best, this might have been from Ivory-billed Woodpeckers passing through an area (as Tanner believed was the case for Ivory-billed Woodpeckers reliably being reported along the Santee River in South Carolina during the mid-1930s), as opposed to a permanently occupied territory.

We recognize alternative explanations for the outlined shapes in purple (Figure 3) that match typical woodpecker postures or plumage patterns. For example, the purple shape in photograph 4171074p is consistent with the white shield of the vertically perched Ivory-billed Woodpecker that we found in the previous photograph, but the upper body and head are not evident in this photograph. An alternative explanation is that this shape could be a dislodged bark flake that goes missing again in the next and last photograph. Nevertheless, it stands to reason that Tanner took photographs while a group of Ivory-billed Woodpeckers were in view, rather than one, and reported the group stayed visible on the bare branches of the tree for an extended period (Tanner 1942:54). If the less distinctive objects in the photographs 4171073p and 4171074p are indeed Ivory-billed Woodpeckers, the individuals were in fairly close proximity to each other, less than 1 m apart. Tanner reported family groups traveled together and often foraged together in the same tree, but he did not comment on the distances maintained between foraging individuals. Other large woodpeckers such as Magellanic Woodpeckers (Campephilus magellanicus) and Great Slaty Woodpeckers (Mulleripicus pulverulentus) often forage in groups and individuals are frequently observed feeding together at distances of less than 1 m (Chazarreta and Ojeda 2011, Lammertink 2004). The Tanner series of photographs discussed herein suggests that such short inter-individual distances also occurred in Ivory-billed Woodpecker groups while foraging.

In addition to providing the only photographic documentation of foraging Ivory-billed Woodpeckers, the pecan series is significant as being among the last photographs from the last universally accepted population of Ivory-billed Woodpeckers in continental North America. The spring of 1939 was Tanner's final full field season in the Singer Tract. On 7 April 1939 Tanner photographed adult Ivory-billed Woodpeckers at John's Bayou on Dufaycolor film while they were feeding a large nestling in a Nuttall oak cavity (Bales THE MIGRANT

2010:204 and Tanner's notes). One color photo of this 1939 series, showing the diagnostic Nuttall's oak bark of the nest tree, is reproduced in Jackson (2004, Plate 10), though it is erroneously dated in the caption of the plate as March 7, 1938, a date on which Tanner also took Dufaycolor photos of nesting Ivory-billed Woodpeckers, but of a nest in a red maple (*Acer rubrum*) (Bales 2010: 139 and 145). On unspecified dates in April 1939 Tanner took two photographs of Ivory-billed Woodpeckers in flight: one labeled as a juvenile and one labeled as an adult, archived as photos 4171079p and 4171080p in the Louisiana Digital Library. The poor quality of the flight photos, and of the foraging series we discussed here, illustrate the difficulty in obtaining good photo documentation of Ivory-billed Woodpeckers away from occupied cavities. Tanner's 1939 color photos taken at the nest, the flight photographs that document the Singer Tract population of this species.

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Editor's Note: While this study does not include work carried out in Tennessee, it does involve a species that likely occured in west Tennessee and is based on the work done by longtime Tennessee resident Dr. James T. Tanner (1914-1991). Tanner, through his doctoral studies at Cornell University, became the world's foremost expert on the Ivory-billed Woodpecker. After a stint in the U.S. Navy during World War II and two years teaching at East Tennessee State University, Tanner spent the rest of his productive career on the biology faculty of the University of Tennessee at Knoxville conducting research on community ecology, teaching hundreds of students in these fields. He was a member and president of the Tennessee Ornithological Society and served as editor of The Migrant for many years. He died in 1991 and is buried in Knoxville, having adopted Tennessee as his home state for most of his life. - Bob Ford

ROUND TABLE NOTE

BROWN-HEADED NUTHATCH IN SHELBY COUNTY - - My wife and I are strictly backyard feeder watchers, but because our yard backs up to a closed 180-acre golf course, we are accustomed to seeing a good variety of birds. In one 45-minute period during the recent Christmas Bird Count (20 December 2020) we saw 18 different species. In mid-January 2021 we noticed a nuthatch that wasn't our usual White-breasted (*Sitta carolinensis*) or Redbreasted (*Sitta canadensis*) but was instead a Brown-headed Nuthatch (*Sitta pusilla*) (Figure 1). The nuthatch was a sporadic visitor to our sunflower heart feeders, saw only once or twice a day. We continued to see the nuthatch regularly until 23 March, the date of our last sighting. A search of eBird shows that Brown-headed Nuthatch is an exceedingly rare visitor to west Tennessee, and our sighting was the first record for Shelby County (eBird. An online database of bird distribution and abundance. Cornell Lab of Ornithology, Ithaca, New York. <u>www.ebird.org</u> accessed 20 April 2021).

Les Dewey, Germantown, Tennessee



Figure 1. This Brown-headed Nuthatch represents the first Shelby County record for the species.

2021 TENNESSEE SPRING BIRD COUNTS

Ron Hoff Loudon, Tennessee

There were 8 spring birds counts run this year. Two hundred fifty-two observers logged just over 612 party hours to record 50,502 individual birds, representing 216 species. The weather was decent overall with no major precipitation or high winds. Temperatures ranged from a brisk 34° F in Elizabethton to 81° F in Shelby County. Highlights included Greater White-fronted Goose, Common Gallinule (new to count since 2001), 19 species of shorebirds, American Bittern, Olive-sided Flycatcher, Bell's Vireo, Evening Grosbeak (also new to count since 2001), Yellow-headed Blackbird, 35 species of warblers, and Painted Bunting.

The following species were all recorded in record high numbers since 2001 (when my personal compilation started): Northern Shoveler, Stilt Sandpiper, Wilson's Snipe, Wilson's Phalarope, Greater Yellowlegs, Caspian Tern, Least Bittern, Green Heron, Red-shouldered Hawk, Broad-winged Hawk, Downy Woodpecker, Alder Flycatcher, Fish Crow, Red-breasted Nuthatch, Veery, Gray Catbird, Lincoln's Sparrow, Northern Waterthrush, Prothonotary Warbler, Tennessee Warbler, Northern Parula, Magnolia Warbler, Blackburnian Warbler, Yellow Warbler, and Summer Tanager. Total observers, total parties, hours on foot, and miles by foot were all new record high totals.

The following species were all reported in the lowest numbers in the past 20 years or nearly so: Black-bellied Whistling-Duck was the lowest in 8 years, one Loggerhead Shrike was recorded for the 3rd time in 4 years by a single bird, Common Raven was missed for the first time in 21 years, and Eastern Meadowlark was the lowest total in 21 years.

The counts in the table are arranged geographically from west to east. Taxonomic order follows the American Ornithological Society (AOS) Checklist of North and Middle American Birds, 60th supplement (2019) to the AOS Checklist. F/Y = feeder/yard watcher.

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

COUNTY 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

BLOUNT COUNTY (BLNT) – 0530-2130. Weather: cloudy; wind 7 mph; 47-68° F. Highlights included Least Bittern, Yellow-crowned Night-Heron, Common Gallinule, Barn Owl, Olive-sided Flycatcher, Alder Flycatcher, 30 species of warblers, Lincoln's Sparrow, and Evening Grosbeak. Observers: Jean J. Alexander, Kat Barrow, Rick Barrow, Christie Bass, Warren Bielenberg, Stephanie Crain, Wanda DeWaard, Marian D. Fitzgerald, Tom E. Fitzgerald, Sandy Borden Graves, Kirk Huffstater, Paul Hartigan, Kim J. Henry, Stephen

P. Henry, Bob Howdeshell, Thomas D. Howe (compiler), Susan Hoyle, James R. Human, David M. Johnson, Matt Kello, Jason Khym, Evan Kidd, Julie Labhart, Charles Lawson, Julie Moore, Logan Rosenberg, Martha Rudolph, Michael G. Ryon, Mary Tankersley, Harumi Tsuruoka, Jimmy Tucker, Janet Webber, Ralph Webber, June D. Welch, Valerie Wininger, and Randy C. Winstead.

ELIZABETHTON (ELIZ) - 0330-2300. Weather: clear; wind variable; 34-76° F. Brownheaded Nuthatch was a new species for this count. Other count highlights included Ruddy Duck, Willet, Marsh Wren, Evening Grosbeak, and Golden-winged Warbler. Observers: Fred Alsop, Rob Armistead, Betty Bailey, Gary Bailey, Jerry Bevins, Rob Biller, Ron Carrico, Catherine Cummins, Todd Eastin, Glen Eller, Harry Lee Farthing, Bambi Fincher, Dave Gardner, Tammy Griffey, Jean Henson, Neal Henson, Jackie Hinshaw, Lance Jessee, Jennifer Kennedy, David Kirschke, Rick Knight (compiler), Roy Knispel, Richard Lewis, Dianna Lynne, Vern Maddux, Frank McCollum, Larry McDaniel, Joe McGuiness, Cathy McNeil, Tom McNeil, Harry Norman, Susan Peters, Brookie Potter, Jean Potter, Sherri Quillen, Pete Range, Judi Sawyer, Chris Soto, Michele Sparks, Bryan Stevens, Peggy Stevens, Kim Stroud, Charles Warden, and Rex Whitfield.

HAMILTON COUNTY (HAML) – 0530-1830. Weather: clear; 51-78° F. Sightings of note included Least Bittern, Snowy Egret, Mississippi Kite, and Sora. Observers: Tim Baker, Harold Birch, Gary Brunvoll, Kevin Calhoon (compiler), John Dever, Bill Haley, Daniel Jacobson, Kathy Jacobson, Gary Lanham, Pixie Lanham, Barbara McMahan, Mike McMahan, Tommie Rogers, Luke Thompson, Cynthia Wilkerson, and Jimmy Wilkerson.

KNOX COUNTY (KNOX) – 0610-2030. Weather: partly cloudy; wind N 0-10 mph; 52-65° F. Highlights included Virginia Rail, Sora, and Bobolink. Observers: Amy Abercrombie, Robert Abercrombie, Mark Armstrong, Zachary Arnold, Erich Bell, Deedee Blaine, Eric Bodker, Doug Bruce, Jeremy Clothier, Amanda Clune, Howard Cox, Claire Dattilo, Jeremy Dotson, Dean Edwards (compiler), Bret Elgersma, Melinda Fawver, Dottie Habel, Jamie Harmon, Patricia Harmon, Dallas Harrell, Paul Hartigan, Howard Haysom, Dawn Headrick, Tony Headrick, Angela Hoffman, Susan Hoyle, James Human, Kathy Jinks, Kristine Johnson, Michelle Johnson, David Johnston, Jean Johnston, Bill Keeler, Pascal Lozengue, Jennifer Manges, Bruce Marshall, Morton Massey, Seth McConchie, Dave Parmly, Jilynn Parmly, Pat Phillips, Patrick Rakes, Martha Rudolph, Michael Ryon, Beth Schilling, Kurt Sickafus, Nickolas Stahlman, Ashley Stokes, Colin Sumrall, Laura Tappan, Murray Wade, Shane Williams, Misty Wong, Frank Woodward, Kathleen Wynegar, and Sheena Zarb.

MONTGOMERY COUNTY (MONT) – 0545-1845. Weather: partly cloudy; wind NE 5-7 mph; 53-61° F. Count highlights included American Bittern, Alder Flycatcher, 15 Henslow's Sparrows, and Canada and Wilson's warblers. Observers: Susan Arnold, Jenna Atma, Tammy Devine, Elaine Foust (compiler), Joe Hall, Debbie Hamilton, Steve Hamilton, Daniel Moss, Cyndi Routledge, Steve Routledge, Nate Sellick, and Sue Shipkowski (F/Y).

NASHVILLE (NASH) – 0515-2300. Weather: clear to partly cloudy; 50-78° F. Highlights included Black-bellied Whistling Duck, Greater White-fronted Goose, Loggerhead Shrike, Bank Swallow, Sedge Wren, and Bobolink. Observers: Rachel Anderson, Melinda Baker, Sandy Bivens, Kevin Bowden, Susan Bradfield, Trae Bradfield, Joel Bruyere, Jean Buchannan, Marilyn Burgess, Luke Burris, Ed Byrne, Jackie Byrom, Phillip Casteel, Frank Clayton, Richard Connors, Elizabeth Cook, Laura Cook, Brad Dowd, Frank Fekel, John Froeschauer, Graham Gerdeman, Steve Goodbred, Mark Hackney, Lauren Hagan, Joe Hall, Barbara Harris (compiler), Melissa James, Iris Kilpatrick, Megan Klopp, Sue Lanier, Jan Larson, Sue Larson, Denis Lovell, Tim Loyd, Kathy Malone, Tom Seador, Jan K. Shaw, Sheila Shay, Danny Shelton, Chris Sloan, Laura Smith, Michael Smith, Nathan Snell, Joe Stone, Pandy Upchurch, Grant Winter, and Paul Yoder.

PERRY COUNTY (PRRY) – 0444-1240. Weather: clear, light wind; 45-79° F. Redbreasted Merganser, Red-breasted Nuthatch, and Mourning Warbler were all new species for this count. Also notable were Caspian Tern, Bank Swallow, and Sedge and Marsh wrens. Observers: Adam Beachy, Evan Beachy, Jamin Beachy, Joseph Byler, David Kinsinger, Ruben Stoll (compiler), Victor Stoll, and Allan Troyer.

SHELBY COUNTY (SHLB) – 0520-1930. Weather: rain to partly cloudy; wind SE 4-15 mph; 52-81° F. Highlights included Western Sandpiper, Alder and Willow flycatchers, Bell's Vireo, Yellow-headed Blackbird, Mourning and Wilson's warblers, and Painted Bunting. Observers: Amy Ballentine, Judith Barrie, Bruce Batt, Betty Blaylock, David Blaylock, Chad Brown, Kathy Deshpande, Judy Dorsey, J. Fields Falcone, Bob Foehring, Andrew Gafford, Scott Heppel, Lynn Hui, Margaret Jefferson, Dianna Johnson, Rusty Johnson, Sarita Joshi, Gail King, Georges McNeil, Keith Paluso III, Dick Preston (compiler), Cameron Rutt, Mary Schmidt, Donna Smith, Richard Smith, Norman Soskel, Ruben Stoll, Victor Stoll, Ed Thomas, Allan Trently, Cate VanNostrand, Cliff VanNostrand, Deon VanNostrand, Ezra VanNostrand, Solomon VanNostrand, Barry Wall, Martha Waldron, John Whirley, and David Young.

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Virginia Rail1-23Sora221-27Common Gallinule1-1American Coot6-129311-41Black-necked Stilt4848Black-bellied Plover148Black-bellied Plover6-28Killdeer159132120131332136Stilt Sandpiper212021Least Sandpiper152220Pectoral Sandpiper205205Semipalmated Sandpiper11Long-billed Dowitcher11American Woodcock-21Mison's Snipe-24881Wilson's Phalarope66Spotted Sandpiper7-193323257Solitary Sandpiper7-193323257Solitary S			23		20	3	4		34	
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Black-necked Stilt 48 - - - - - 48 Black-bellied Plover 1 - - - - - 1 Semipalmated Plover 6 - - 2 - - - 1 Semipalmated Plover 6 - - 2 - - - 8 Killdeer 15 9 13 21 20 13 13 32 136 Stilt Sandpiper 152 2 - - - 2 - 156 White-rumped Sandpiper 20 - - - 20 - 207 Pectoral Sandpiper 205 - - - - 205 Semipalmated Sandpiper 1 - - - - 205 Semipalmated Sandpiper 1 - - - - 1 1 Long-billed Dowitcher 1 - - - - 1 - 3 Wilson's Snipe	Common Gallinule	-	-	-	-	-	-	1	-	1
Black-bellied Plover11Semipalmated Plover628Killdeer159132120131332136Stilt Sandpiper212-21Least Sandpiper1522220Pectoral Sandpiper205205-205Semipalmated Sandpiper7205Semipalmated Sandpiper17Western Sandpiper11Long-billed Dowitcher113Wilson's Snipe-248881Wilson's Phalarope66Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552322188Willet1010Greater Yellowlegs23315362 <td>American Coot</td> <td>6</td> <td>-</td> <td>1</td> <td>29</td> <td>3</td> <td>1</td> <td>1</td> <td>-</td> <td>41</td>	American Coot	6	-	1	29	3	1	1	-	41
Semipalmated Plover 6 - - 2 - - - 8 Killdeer 15 9 13 21 20 13 13 32 136 Stilt Sandpiper 21 - - - - - 21 Least Sandpiper 152 2 - - - 2 - - 20 Pectoral Sandpiper 205 - - - - - 205 Semipalmated Sandpiper 7 - - - - - 205 Semipalmated Sandpiper 7 - - - - - 205 Semipalmated Sandpiper 1 - - - - - 205 Semipalmated Sandpiper 1 - - - - - 7 205 Semipalmated Sandpiper 1 - - - - 1 1 1 1 1 1 1 1 1 3 3 1 3	Black-necked Stilt	48	-	-	-	-	-	-	-	48
Killdeer 15 9 13 21 20 13 13 32 136 Stilt Sandpiper 21 - - - - - - 21 Least Sandpiper 152 2 - - - 2 - - 21 Least Sandpiper 152 2 - - - 2 - - 156 White-rumped Sandpiper 200 - - - - - 20 Pectoral Sandpiper 205 - - - - - 205 Semipalmated Sandpiper 7 - - - - - 205 Semipalmated Sandpiper 1 - - - - - 7 205 Semipalmated Sandpiper 1 - - - - - 7 1 10 11 13 32 13 33 Long-billed Dowitcher 1 - - - - 1 - 3 34	Black-bellied Plover	1	-	-	-	-	-	-	-	1
Stilt Sandpiper 21 $ 21$ Least Sandpiper 152 2 $ 2$ $ 156$ White-rumped Sandpiper 20 $ 20$ Pectoral Sandpiper 205 $ 205$ Semipalmated Sandpiper 7 $ 205$ Semipalmated Sandpiper 1 $ 205$ Semipalmated Sandpiper 1 $ 7$ Western Sandpiper 1 $ 1$ Long-billed Dowitcher 1 $ 1$ American Woodcock $ 2$ $ 1$ $ 3$ Wilson's Snipe $ 24$ $ 8$ 8 8 1 49 Wilson's Phalarope 6 $ 6$ Spotted Sandpiper 7 $ 1$ 9 3 3 2 32 57 Solitary Sandpiper 47 9 5 $ 6$ 16 19 31 133 Lesser Yellowlegs 155 23 $ 2$ 10 Gr	Semipalmated Plover	6	-	-	2	-	-	-	-	8
Least Sandpiper15222156White-rumped Sandpiper2020Pectoral Sandpiper205205Semipalmated Sandpiper7205Semipalmated Sandpiper17Western Sandpiper17Western Sandpiper111Long-billed Dowitcher113Milson's Snipe-24888149Wilson's Phalarope666Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet362	Killdeer	15	9	13	21	20	13	13	32	136
White-runped Sandpiper2020Pectoral Sandpiper205205Semipalmated Sandpiper7205Semipalmated Sandpiper17Western Sandpiper11Long-billed Dowitcher11American Woodcock-21-Wilson's Snipe-24888149Wilson's Phalarope666Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet362	Stilt Sandpiper	21	-	-	-	-	-	-	-	21
Pectoral Sandpiper 205 - - - - - 205 Semipalmated Sandpiper 7 - - - - - 7 Western Sandpiper 1 - - - - - 7 Western Sandpiper 1 - - - - - 7 Western Sandpiper 1 - - - - - 1 Long-billed Dowitcher 1 - - - - - 1 American Woodcock - 2 - - - 1 - 3 Wilson's Snipe - 24 - - 8 8 8 1 49 Wilson's Phalarope 6 - - - - - 6 Spotted Sandpiper 7 - 1 9 3 3 2 32 57 Solitary Sandpiper 47 9 5 - 6 16 19 31 133	Least Sandpiper	152	2	-	-	-	2	-	-	156
Semipalmated Sandpiper77Western Sandpiper11Long-billed Dowitcher11American Woodcock-21-3Wilson's Snipe-24888149Wilson's Phalarope66Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet362	White-rumped Sandpiper	20	-	-	-	-	-	-	-	20
Western Sandpiper11Long-billed Dowitcher111American Woodcock-21-3Wilson's Snipe-24888149Wilson's Phalarope666Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet1010Greater Yellowlegs23315362	Pectoral Sandpiper	205	-	-	-	-	-	-	-	205
Long-billed Dowitcher 1 - - - - - 1 - 1 American Woodcock - 2 - - - 1 - 3 Wilson's Snipe - 24 - - 8 8 8 1 49 Wilson's Phalarope 6 - - - 8 8 1 49 Wilson's Phalarope 6 - - - - - 6 Spotted Sandpiper 7 - 1 9 3 3 2 32 57 Solitary Sandpiper 47 9 5 - 6 16 19 31 133 Lesser Yellowlegs 155 23 - - 6 2 - 2 188 Willet - - - - - 10 10 Greater Yellowlegs 23 31 5 - - - 3 62	Semipalmated Sandpiper	7	-	-	-	-	-	-	-	7
American Woodcock-21-3Wilson's Snipe-24888149Wilson's Phalarope66Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet1010Greater Yellowlegs23315362	Western Sandpiper	1	-	-	-	-	-	-	-	1
Wilson's Snipe-24888149Wilson's Phalarope66Spotted Sandpiper7-193323257Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet1010Greater Yellowlegs23315362	Long-billed Dowitcher	1	-	-	-	-	-	-	-	1
Wilson's Phalarope 6 - - - - - - 6 Spotted Sandpiper 7 - 1 9 3 3 2 32 57 Solitary Sandpiper 47 9 5 - 6 16 19 31 133 Lesser Yellowlegs 155 23 - - 6 2 - 2 188 Willet - - - - - 10 10 Greater Yellowlegs 23 31 5 - - - 3 62		-	2	-	-	-	-		-	
Spotted Sandpiper 7 - 1 9 3 3 2 32 57 Solitary Sandpiper 47 9 5 - 6 16 19 31 133 Lesser Yellowlegs 155 23 - - 6 2 - 2 188 Willet - - - - - 10 10 Greater Yellowlegs 23 31 5 - - - 3 62		-	24	-	-	8	8	8	1	49
Solitary Sandpiper4795-6161931133Lesser Yellowlegs1552362-2188Willet1010Greater Yellowlegs23315362			-							
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Willet - - - - 10 10 Greater Yellowlegs 23 31 5 - - 3 62				5	-	6		19	31	
Greater Yellowlegs 23 31 5 3 62		155	23	-	-	6	2	-		
					-	-	-	-		
Bonaparte's Gull 5 12 9 26		23	31	5			-	-		
	Bonaparte's Gull	-	-	-	5	12	-	-	9	26

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2021 Service - Countr	CLILD	עתתת	MONT	NIACII	114341	VNOV	DINT	FI 17	T-+-1-
2021 Spring Counts	SHLB		MONT				BLN I		Totals
Ring-billed Gull	-	-	-	38	-	-	-	6	44
Herring Gull	-	-	-	2	-	-	-	-	2
Caspian Tern	-	1	-	13	-	-	-	-	14
Forster's Tern	-	-	-	7	-	-	-	-	7
Common Loon	-	-	-	9	1	-	-	2	12
Double-crested Cormorant	26	31	7	204	26	54	16	48	412
American White Pelican	-	1	-	17	-	-	-	-	18
American Bittern	-	-	1	-	-	-	-	-	1
Least Bittern	-	-	-	-	1	-	1	-	2
Great Blue Heron	28	60	25	63	38	51	46	69	380
Great Egret	57	1	3	13	9	1	2	-	86
Snowy Egret	-	-	-	-	1	-	-	-	1
Little Blue Heron	1	-	-	-	-	-	-	-	1
Cattle Egret	-	-	-	-	3	-	-	-	3
Green Heron	13	6	13	8	-	13	37	17	107
Black-crowned Night-Heron	_	_	_	6	-	1	1	2	10
Yellow-crowned Night-Heron		-	-	-	-	_	4	5	13
Black Vulture	47	59	47	181	114	24	25	60	557
Turkey Vulture	38	181	47	73	54	47	58	128	626
Osprey	2	3	5	10	24	15	17	120	86
Northern Harrier	-	-	-	2	-	-	1	-	3
Sharp-shinned Hawk	-	-	_	-	_	1	-	1	2
1	3		2	- 5	2	7	6		
Cooper's Hawk	2 2	4 9	2 8	5 4	2		3	6	35
Bald Eagle	-	-		-		6		11	46
Mississippi Kite	112	-	-	-	1	-	-	-	113
Red-shouldered Hawk	17	26	9	12	9	15	12	-	100
Broad-winged Hawk	10	7	1	7	11	9	1	11	57
Red-tailed Hawk	16	22	2	18	11	19	8	21	117
Barn Owl		1	-	-	-	-	1	-	2
Eastern Screech-Owl	1	3	-	-	1	-	1	13	19
Great Horned Owl	1	2	1	2	-	1	4	1	12
Barred Owl	6	12	6	14	3	-	2	2	45
Belted Kingfisher	3	17	2	9	6	5	9	14	65
Red-headed Woodpecker	9	2	16	10	11	6	5	4	63
Red-bellied Woodpecker	66	47	50	72	46	73	74	125	553
Yellow-bellied Sapsucker	-	-	-	-	-	1	-	7	8
Downy Woodpecker	38	53	23	38	11	31	42	44	280
Hairy Woodpecker	2	3	8	3	2	5	5	9	37
Northern Flicker	1	3	3	5	4	11	18	41	86
Pileated Woodpecker	25	24	15	26	13	9	24	55	191
American Kestrel	3	2	-	5	1	2	-	9	22
Great Crested Flycatcher	39	51	38	42	3	7	23	12	215
Western Kingbird	4	_	_	-	_	-	_	-	4
Eastern Kingbird	209	52	18	39	10	10	25	59	422
Olive-sided Flycatcher	-	-	-	-	-	-	1	-	1
Eastern Wood-Pewee	89	39	60	38	4	2	19	6	257
Acadian Flycatcher	56	23	28	15	-	-	9	-	131
Alder Flycatcher	4	-	1	-	-	-	1	-	6
Willow Flycatcher	3	1	3	-	-	-	4		11
	5 6	2	2	2				- 5	
Least Flycatcher		2	-		-	-	-	5	17
Empidonax sp.	-			-	- 21	-	1		1
Eastern Phoebe	12	36	14	19	31	25	18	119	274
Loggerhead Shrike	-	-	-	1	-	-	-	-	1

2021 Spring Counts	SHLB	PRRY	MONT	NASH	HAML	KNOX	BLNT	ELIZ	Totals
White-eyed Vireo	58	145	51	83	21	17	36	15	426
Bell's Vireo	2	_	_	-	-	_	-	_	2
Yellow-throated Vireo	10	51	14	15	4	7	5	15	121
Blue-headed Vireo	-	-	1	3	3	5	15	76	103
Philadelphia Vireo	17	4	1	8	-	-	-	-	30
Warbling Vireo	27	5	11	11	-	-	1	11	66
Red-eyed Vireo	54	232	64	112	106	21	163	228	980
Blue Jay	45	92	37	161	56	151	181	329	1052
American Crow	46	133	88	85	118	104	165	358	1092
Fish Crow	16	-	-	-	18	3	8	1	46
Horned Lark	1	-	1	-	-	-	-	20	22
Bank Swallow	-	2	-	1	-	-	-	-	3
Tree Swallow	-	76	40	45	76	300	164	235	936
N. Rough-winged Swallow	59	143	25	90	84	40	84	95	620
Purple Martin	39	452	23	73	32	28	4	71	723
Barn Swallow	136	127	85	62	78	80	138	218	924
Cliff Swallow	189	544	61	186	550	171	158	473	2332
Carolina Chickadee	48	128	39	123	62	81	176	139	796
Tufted Titmouse	104	147	63	125	68	83	133	199	927
Red-breasted Nuthatch	-	3	-	130	1	5	-	10	20
White-breasted Nuthatch	16	45	20	38	18	21	27	43	20
Brown-headed Nuthatch	-	-	-	-	21	3	8	2	34
	-				-		-	2 5	54 5
Brown Creeper House Wren	-	- 1	- 13	- 3	7	23	14	60	121
Winter Wren			-	-			-	5	5
	-	- 2		- 1	-	-			3
Sedge Wren Marsh Wren	- 3	2 1	-	-	-	-	-	- 1	5 5
	3 49	104	41	- 84	-				829
Carolina Wren					40	104	205	202	
Blue-gray Gnatcatcher	52	216	63	112	45	25	52	75	640
Golden-crowned Kinglet	-	-	-		-	-	-	6	6 52
Ruby-crowned Kinglet	2	5	2	10	6	22	1	4	52
Eastern Bluebird	10	68	27	78	23	79	120	157	562
Veery	11	6	3	13	1	-	8	17	59 22
Gray-cheeked Thrush	7	8	-	6	1	-	-	-	22
Swainson's Thrush	32	16	55	47	10	-	34	-	194
Hermit Thrush	-	-	-	1	-	1	-	3	5
Wood Thrush	39	48	44	48	20	29	21	80	329
American Robin	59 20	64	79	109	248	178	536	801	2074
Gray Catbird	38	56	7	11	15	13	79	80	299
Brown Thrasher	19	46	20	29	23	48	57	66	308
Northern Mockingbird	48	51	45	72	72	70	109	121	588
European Starling	103	126	236	198	252	252	300	618	2085
Cedar Waxwing	127	20	19	678	225	34	47	15	1165
House Sparrow	11	40	53	29	76	9	35	70	323
Evening Grosbeak	-	-	-	-	-	-	1	48	49
House Finch	25	38	26	54	110	61	139	84	537
Purple Finch	-	-	1	-	3	4	-	-	8
Pine Siskin	4	33	-	17	45	-	44	31	174
American Goldfinch	71	134	71	97	106	70	96	283	928
Grasshopper Sparrow	-	-	3	1	-	-	5	1	10
Chipping Sparrow	26	107	59	42	75	32	58	117	516
Field Sparrow	8	118	46	94	61	75	90	79	571

THE MIGRANT

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JUNE

2021 Spring Counts	SHLB	PRRY	MONT	NASH	HAML	KNOX	BLNT	ELIZ	Totals
Dark-eyed Junco	-	-	-	-	3	-	4	68	75
White-crowned Sparrow	9	5	6	6	-	5	-	8	39
White-throated Sparrow	3	45	7	31	11	51	12	27	187
Savannah Sparrow	19	92	7	1	5	34	-	4	162
Song Sparrow	4	1	4	23	74	74	123	299	602
Lincoln's Sparrow	10	3	-	2	-	16	2	9	42
Swamp Sparrow	7	18	1	1	-		10	-	37
Eastern Towhee	39	64	59	55	66	93	79	213	668
Yellow-breasted Chat	31	49	29	29	16	4	58	9	225
Yellow-headed Blackbird	1	-	-	-	-	-	-	-	1
Bobolink	4	201	-	1	14	7	12	-	239
Eastern Meadowlark	48	44	30	24	16	29	51	-	242
Orchard Oriole	38	109	37	53	15	8	32	29	321
Baltimore Oriole	28	19	-	27	1	2	4	18	99
Red-winged Blackbird	163	130	113	126	151	127	195	550	1555
Brown-headed Cowbird	149	105	62	83	18	90	75	99	681
Rusty Blackbird	_	-	_	-	_	2	-	-	2
Common Grackle	126	103	24	114	119	88	288	324	1186
Ovenbird	7	7	2	4	11	3	20	157	211
Worm-eating Warbler	-	3	2	4	8	3	6	35	61
Louisiana Waterthrush	2	28	14	15	-	3	11	30	103
Northern Waterthrush	23	11	6	7	4	4	6	4	65
Golden-winged Warbler	1	-	-	-	-	-	-	2	3
Blue-winged Warbler	1	3	-	2	2	4	-	-	12
Black-and-white Warbler	14	57	3	8	12	3	22	79	198
Prothonotary Warbler	42	58	24	22	2	6	5	1	160
Swainson's Warbler	6	-	-	-	-	-	-	7	13
Tennessee Warbler	89	65	71	85	8	1	12	-	331
Orange-crowned Warbler	-	-	-	-	-	2	-	_	2
Nashville Warbler	2	6	6	9	-	1	1	1	26
Mourning Warbler	1	1	-	-	-	-	-	-	2
Kentucky Warbler	26	22	20	18	-	2	3	2	93
Common Yellowthroat	20 59	115	20 60	65	9	41	82	20	451
Hooded Warbler	21	38	4	10	4	10	37	163	287
American Redstart	39	31	4	8	8	7	18	11	126
Cape May Warbler	-	-	-	13	12	, 1	4	6	36
Cerulean Warbler	14	5	_	3	3	3	1	-	29
Northern Parula	49	209	52	44	3	23	30	53	463
Magnolia Warbler	28	10	10	10	9	-	14	4	85
Bay-breasted Warbler	10	10	9	18	4	-	11	1	65
Blackburnian Warbler	6	18	5	15	4	1	6	13	68
Yellow Warbler	19	21	15	18	18	3	10	16	120
Chestnut-sided Warbler	38	18	8	20	6	-	21	17	120
Blackpoll Warbler	19	11	1	14	15	1	3	-	64
Black-throated Blue Warbler	-	-	-	1	1	-	5	77	84
Palm Warbler	10	29	4	79	11	32	8	5	178
Pine Warbler	2	29	5	1	33	21	10	15	109
	9	34	3	76	7	94	12		251
Yellow-rumped Warbler Yellow-throated Warbler	9 7	54 34	5 18	76 31	2	94 4	12 8	16 25	129
Prairie Warbler	9	54 108	25	23	2 29	4 12	8 45	25 4	255
Black-throated Green Warbler		108	25	23 32		12	45 38	4 95	255 209
Canada Warbler	U				13				209
Wilson's Warbler	- 1	1 -	1 1	-	1 -	-	2 1	18	23 3
witsolls waldlel	1	-	1	-	-	-	1	-	5

72		TH	E MIGR	ANT					JUNE
Spring Counts	SHLB	PRRY				KNOX		ELIZ	
Summer Tanager	58	132	77	94	18	7	4	-	390
Scarlet Tanager	8	61	11	43	10	11	34	96	274
Northern Cardinal	198	217	154	248	128	239	277	359	1820
Rose-breasted Grosbeak	29	16	20	37	16	-	13	36	167
Blue Grosbeak	9	48	12	17	5	2	13	2	108
Indigo Bunting	241	310	130	103	53	9	158	62	1066
Painted Bunting	1	-	-	-	-	-	-	-	1
Dickcissel	118	82	24	-	1	-	14	-	239
Total individuals	5841	7715	3500	6455	4860	4454	6803	10874	50502
Total species	160	147	134	154	139	129	150	152	216
Observers	39	8	11	47	16	55	36	40	252
Parties	25	6	8	11	-	37	23	13	123
Party hours	55.25	52	44.46	58.5	40	113.46	137.35	111	612.02
Hours by car	14	22	19.58	18.75	18	7.28	20.8	-	120.41
Hours by foot	41.25	24	24.88	39.75	22	106.18	116.55	-	374.61
Hours by canoe or other	-	6	-	-	-	-	-	-	6
Miles by car	68	95	234.4	80.45	152	94.3	202.05	-	926.2
Miles by foot	30.75	17	17.1	44	21	77.33	73.8	-	280.98
Miles by canoe or other	-	10.5	-	-	-	-	-	-	10.5
Hours owling	1.75	1	-	1	1	-	4.75	9	18.5
Miles owling	0.75	4	-	3	8	-	3.25	-	19
Feeder observers	-	-	1	-	-	-	8	4	13
Feeder hours	-	-	1	-	-	8.65	7.75	-	17.4

MINUTES OF THE SPRING BOARD OF DIRECTORS MEETING 3 May 2021

The Spring Meeting of the Board of Directors was called to order at 6:04 pm by President Michael Collins. Because of continuing concerns regarding the covid virus the meeting was held via Zoom. Secretary Cyndi Routledge determined there was a quorum. Minutes of the Fall meeting were approved as amended

REPORTS OF OFFICERS

TREASURER: Pam Lasley - Assets for the Society at the end of 2020 were \$423,365 including cash of \$4,512 and fair market value of our Vanguard investments at \$416,709. The year saw our investments experience a net increase of \$19,482 which includes transfers of \$27,500 to operating checking. The reserve for issues of *The Migrant* to be printed remain the same as last year, and there were no charges to the Conservation and Research Restricted Fund.

Non-investment revenue for the year was \$12,302 for memberships and subscriptions and \$100 from contributions. Total expenses were \$36,260. Publications and communications at \$16,456 are our largest expenses and include 4 issues of *The Migrant*, all three issues of *The Tennessee Warbler*, and completion of our new website. We awarded \$15,180 in research and conservation grants. Insurance cost was the same as last year at \$997. Overall, the net revenue over expenses was \$23,124

Our Investments had another good year. Dividends and interest for 2020 were \$14,697 and we gained \$32,285 in market value for the year. In 2020, we distributed \$27,500 to our operating cash account for the year. Returns are 12.4% for 1 year return, 3 year annualized is 9.5%, 5 year is 10.2% and 10 year annualized return on investments is 8.7%. The portfolio remains defensively structured with approximately 45% in equity positions. At the end of the first quarter of the year our Vanguard investment account has risen to \$425, 495.

Total individual membership was exactly the same as last year, but institutional subscriptions were down by 3. There was very little significant movement in all chapters, but At-Large membership increased by 30%, 15 members. Almost all of the new At Large members have come via our new TOS website.

As required by the Constitution, an examination of the 2020 financial records was performed. Since there is no Finance Committee in place, Betty Bailey of the Kingsport Chapter performed this exam and submitted her report to the president.

The Conservation and Research Fund has awarded only \$3,322 in grants this year. The Swan Conservation Trust's grant application for the purchase of 140 acres in Lewis County was approved under the North Americn Wetlands Cconservation Act, so TOS will donate \$5,000 in matching funds this month and also in May of 2022 as per past approval.

NEW BUSINESS

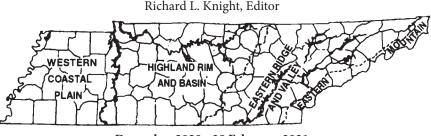
Danny Gaddy made the motion that the *The Tennessee Warbler* move to digital only by 1 June 2022 (August issue) to save on printing and mailing costs, but also would be more environmentally beneficial. Seconded by Mac McWhirter. Passed unanimously. Regarding *The Migrant* going to all digital, a breakdown of expense and discussion with editor Bob Ford needs to take place before a decision is made – issue tabled for now.

Mac McWhirter made the motion to allocate up to \$500 to move ahead with printing of the Field Checklist of Tennessee Birds cards. Seconded by Chris Welsh. Passed unanimously. Pam Lasley made the motion to adjourn; Steve Routledge seconded the motion. Passed

unanimously. Meeting adjourned at 8:25 pm

Respectfully submitted, Cyndi Routledge, Secretary

THE WINTER SEASON



December 2020 - 28 February 2021

After near normal weather in December and most of January, two meteorlogical events had clear avian responses. First, strong southerly winds with warming temperatures on 26 January brought the season's first Tree Swallow to the state (Hamilton County). This date ties the record early arrival for the species set in 2018. Over the last three decades we have seen the arrival of Tree Swallows come earlier and earlier. By contrast, Robinson's (1990) "Annotated Checklist of the Birds of Tennessee" listed just two February reports as early arrival dates before March. Sightings in February are now rather commonplace, at least in East Tennessee.

Second, a strong winter storm plowed southward through the center of the nation in mid February, even reaching the Gulf coast. This brought frigid temperatures and significant snowfall which extended into West and Middle Tennessee, causing an incursion of Lapland Longspurs and American Tree Sparrows into the western regions of the state. Waterfowl were grounded statewide also, including good numbers of some of the less common species (i.e., Canvasback, Greater Scaup, Common Goldeneye, and Common Merganser), plus several scoters and Long-tailed Ducks.

What a remarkable winter this was for rare birds in Tennessee. For starters, three first state records were found: Cassin's Kingbird in Davidson County, Pacific-slope Flycatcher in Blount County, and White-throated Swift in Hamilton County. Additionally, Trumpeter Swan, California Gull, Snowy Owl, Bullock's Oriole, and four separate Common Redpolls appeared. All of these were well documented. Also noteworthy were Eurasian Wigeon, Black-chinned Hummingbird, Iceland and Glaucous Gulls, Anhinga, Northern Goshawk, Spotted Towhee, and Western Tanager. For the second straight winter a roosting group of Long-eared Owls was discovered in northwest Tennessee.

Boreal irruptives appeared widely and in generally good numbers, including reports of Evening Grosbeaks from at least 19 counties, mostly in East Tennessee. It had been many years since we saw similar numbers of this large yellow finch in the state.

Once again, numerous Neotropical migrants lingered beyond their normal departure dates, overwintered, or at least attempted to overwinter in the state. This list included Green Heron, Yellow-crowned Night-Heron, White-eyed Vireo, Blue-gray Gnatcatcher, Wood Thrush, Grasshopper Sparrow, Baltimore Oriole, several warblers, Summer Tanager, and Indigo Bunting. Lingering or early arriving shorebirds had a strong presence this winter, as well. It is apparent that climate change is having an effect on migration and wintering stategies of some avian populations. It will be interesting to see how this plays out in the coming years.

The coronavirus pandemic continues; however, by this season's end the distribution of approved vaccines had begun and numerous restrictions were being eased or removed. This suggests that a return to "normal life" may be within sight. Birding has been one activity that has helped us through the crisis.

Standard Abbreviations

ad - adult	lrs - latest reported sighting
ba - banded	max - maximum count
CBC - Christmas Bird Count	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

WESTERN COASTAL PLAIN REGION - - Weather across the region was unremarkable during December and January. However, February was a different story. While our neighbors to the north might scoff, the temperatures and snowfall much of the region suffered through were near historic levels. A series of storms mid-month brought the mean temperature to 8.5 degrees below normal, and the daily average maximum was 10 degrees below normal. The storms dumped 4-12 inches of snow on a region that rarely sees more than a few inches over the course of an entire winter. The short term effects on the bird population is likely to be significant. Species dependent on insects and seeds had to deal with a solid week of subfreezing temperatures, as well as the ground remaining covered in snow and ice.

Among the more unusual sightings were a Yellow-crowned Night-Heron in Shelby County, as well as that county's first Brown-headed Nuthatch. The region hosted three Baltimore Orioles and two Summer Tanagers at feeders. Several rare gulls were found at the Camden landfill in Benton County, and adult Northern Goshawk made a brief appearance in Gibson County. Irruptive species were generally abundant, most notably Red-breasted Nuthatches and Pine Siskins. Two reports of Evening Grosbeak in Henry County were a welcome sight.

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

Swan - Crane: Ross's Goose: 5 Dec (1) Herb Parson's L (Andrew Gafford, JV). Tundra Swan: 18 Feb (1) Gibson Co L (MAG). Blue-winged Teal: 5 Dec (6) Lauderdale Waterfowl Refuge, Lauderdale Co (DDP); 8 Dec (30) Ensley Bottoms (BFo), lrs. Surf Scoter: 19 Dec / 23 Jan / 5 Feb (1) Reelfoot L (MCT / RS / DDP). White-winged Scoter: 24 Jan (1) Reelfoot L (RS); 18 Feb (1) Gibson Co L (MAG). Long-tailed Duck: 12 Dec - 5 Feb (1-4) Reelfoot L THE MIGRANT

(CVN, m.ob.). **Common Merganser**: 5 Dec (1 female) Pace Point (Geoff Hill); 27 Dec (2) Britton Ford (RS); 2 Jan (1 female) Reelfoot L (RS); 18 Feb (5 males) Gibson Co L (MAG); 19 Feb (100 +) Pace Point (VS); 19 / 21 Feb (4 male / 2 male, 1 female) Trap L, Shelby Farms (Richard Smith, photo / CVN, JV). **Red-breasted Merganser**: 14 Feb (7) Herb Parson's L (DDP). **Red-necked Grebe**: 22-23 Jan (1) Reelfoot L (MAG / RS). **Western Grebe**: 23-27 Jan (1) Pace Point (MS, m.ob.). **Rufous Hummingbird**: thru 31 Dec (1) Brownsville, Haywood Co (Bob Ford). **Virginia Rail**: 11 Dec (1) Ghost River SNA, Fayette Co (AJT). **Sora**: 8 Dec - 9 Jan (1) Ensley Bottoms (BFo, m.ob.). **Sandhill Crane**: 22 Dec (1,000) Hop-In Refuge, Obion Co (MAG), max.

Avocet - Falcon: American Avocet: 9-26 Dec (1) Britton Ford (Hap Chambers, m.ob., photo), 2nd and latest winter record in state. Black-bellied Plover: thru 13 Dec (1) Lake Co (DR, AL), 2nd winter record in state. Dunlin: 29 Jan (1) Black Bayou (DR, AL); 20 Feb (1) Halle Park, Shelby Co (Richard Smith, photo). Least Sandpiper: 22 Jan (2) Birdsong Cr, Benton Co (DR). Pectoral Sandpiper: 9 Dec (1) Lake Co (DR, AL), continuing from Nov. Greater Yellowlegs: 28 Jan (1) Coon Valley Rd (RS, VS). Little Gull: 8 Jan (1 ad) Reelfoot L (MAG). Franklin's Gull: 30 Dec / 27 Jan (1) Camden landfill (DR, photo). CALIFORNIA GULL: 12 Feb (1 ad) Camden landfill (DR, AL, photo). Iceland Gull: 8 Jan - 26 Feb / 12 Feb (1 im / 1 ad; both thayeri) Camden landfill (DR, AL, RS, VS). Lesser Black-backed Gull: 30 Dec (18) Camden landfill (DR), new high count in state; 21 Feb (1) Shelby Farms (CVN, photo). Herring Gull: thru season (400-500) Camden landfill (DR, RS, VS), new high count in state. Glaucous Gull: 9-12 Feb / 12 Feb (1 im / 1 ad) Camden landfill (RS, VS / DR, AL). Forster's Tern: 11 Feb (2) Kentucky L, Benton Co (Alan Troyer); 21 Feb (1) Pace Point (RS). Red-throated Loon: 26-27 Jan / 19-21 Feb (1) Pace Point (RS, VS). Pacific Loon: 5 Dec (1) Pace Point (Geoff Hill); 27 Dec (1) Big Sandy CBC (AL). Common Loon: 14 Feb (1) Robco L, Shelby Co (DDP). American White Pelican: 5 Feb (1400) Reelfoot L (DDP), max. Great Egret: 26 Jan (1) Britton Ford (AL). Green Heron: 9 Dec (1) Paris (RWh). Yellow-crowned Night-Heron: 3 Feb (1 ad) Shelby Farms (Ernest Restivo), rare in winter. Northern Goshawk: 19 Jan (1 ad) Gibson Co (MCT). "Harlan's" Red-tailed Hawk: reported from Crockett, Dyer, Gibson, and Obion Counties (MAG); Shelby Co (m.ob.). Golden Eagle: thru season (1-2) Big Sandy Unit, Henry Co (RS, VS, m.ob.); 6 Jan (1 im) Chickasaw NWR, Lauderdale Co (AL, DR). Long-eared Owl: 17 Dec - 2 Apr (5, at roost) Lake Co (DR et al.). Short-eared Owl: thru season (1-5) Shelby Farms (m.ob.); 1 Dec (1) Tumbleweed WMA, Lake Co (RS); 9 Dec - 23 Jan (1) Van Works Rd, Lake Co (AL, DR, RS, VS); 3 Feb (1) Dyer Co (Lisa Clifft, photo). Merlin: reported from Henry, Lake, Lauderdale, and Shelby Counties. Peregrine Falcon: 1 Dec (1) Ensley Bottoms (BFo); 15 Dec (2) Shelby Farms (BFo).

Vireo - Longspur: White-eyed Vireo: 2 Jan (1) Black Bayou (RS). Blue-headed Vireo: 18 Dec (1) Fayette Co CBC (AJT); 21 Dec - 16 Jan (5 reports of 1-2) Shelby Co (m.ob.); 6 Jan (1) Hatchie NWR (Andrew Gafford). Fish Crow: 19 / 27 Jan (3-4) Camden landfill (RS, VS / DR). Tree Swallow: 27 Feb (3) Hatchie NWR (Charles McCuskey), ers. Redbreasted Nuthatch: widespread in moderate numbers. Brown-headed Nuthatch: 14 Feb

2021

(1, at feeder) Germantown, Shelby Co (Leslie Dewey, photo), 1st Co record. **Marsh Wren**: 8 Dec - 28 Jan (1-6) Ensley Bottoms (BFo, m.ob.); 14 Dec (1) Reelfoot L (MAG). **Blue-gray Gnatcatcher**: 3 Jan (1) Shelby Farms (Scott Heppel); 23 Jan (1) Paris Landing SP, Henry Co (JH et al.). **Gray Catbird**: 11 Dec (1) Wolf River SNA, Fayette Co (AJT); 20 Dec (2) Wolf R Greenway, Shelby Co (J. Fields Falcone). **Evening Grosbeak**: 9 Dec (1) Paris (RWh, photo); 26 Jan (1) Pace Point (RS, VS, AL). **Purple Finch**: widespread in moderate numbers. **Pine Siskin**: widespread in moderate numbers; 18 Dec (400) Fayette Co CBC, max. **Lapland Longspur**: 1 Dec / 2 Jan (80 / 185) Van Works Rd, Lake Co (RS); 5 Dec (7) Halls Airport, Lauderdale Co (DDP); 17 Dec (65) Shelby Farms (BFo); 28 Jan (6) John Tully WMA (RS, VS); 28 Jan (1) Coon Valley Rd (RS, VS); 11 Feb (25) Gibson Co (MAG); 12 Feb (40) Henry Co (DR, AL); 16 Feb (500) Lake Co (RS, VS); 19-20 Feb (50-150) Shelby Farms (CVN, JV, RH, m.ob.); 19 Feb (15) Pace Point (VS); 28 Feb (1) western Hardin Co (RS).

Sparrow - Bunting: American Tree Sparrow: 19 Dec (1) Reelfoot NWR (AL); 20 Dec (1) Shelby Farms (CVN); 6 Jan (2) John Tully WMA (DR, AL); 29 Jan / 5 Feb (1) Reelfoot SP (DR, AL / DDP); 19 Feb (1) Shelby Farms (CVN, JV, RH); 19-20 Feb (1) Pace Point (VS / JH, IK). "Oregon" Dark-eyed Junco: 19 Dec (1) Reelfoot CBC (AL, photo). LeConte's Sparrow: 1 Dec (4) Hwy 79W, Lake Co (RS); 9-29 Dec (1-2) Shelby Farms (BFo et al.); 11 Dec / 12 Feb (1) Britton Ford (DR); 18 Dec (5) Cates Landing, Lake Co (DR); 6 Jan (16) John Tully WMA (DR, AL); 28 Jan (1) Coon Valley Rd (RS, VS); 3 Feb (2) Thorny Cypress WMA, Dyer Co (DR). Lincoln's Sparrow: 27 Dec (2) Big Sandy CBC; 23 Jan (1) Paris Landing SP, Henry Co (JH et al.); 28 Jan (1) Tipton Co (RS, VS). Western Meadowlark: 2-3 Jan (2) Madison Co (MAG / MCT); 6 / 28 Jan (1) John Tully WMA (DR, AL / RS, VS); 24 Jan (5) Lake Co (RS); 2 Feb (2) Bogota WMA, Dyer Co (MAG). Baltimore Oriole: 6 Dec - 7 Jan (1 male, at feeder) Munford, Tipton Co (DDP), returned wintering bird; 20 Jan (1 male, at feeder) Shelby Co (Christina George, photo); 12-24 Feb (1, at feeder) Union City, Obion Co (Stacie Thomas, photo); Orange-crowned Warbler: 5-6 Dec (1) Herb Parsons L (CVN, JV, BFo); 8 Dec / 23 Jan / 5 Feb (1) Reelfoot SP (RS et al.); 11 / 15 Dec (1) Tigrett WMA, Dyer Co (Daniel Estabrooks); 15 Dec (1) Paris (RWh); 18 Dec / 6 Jan (1) Lauderdale Co (DR); plus several reports from Shelby Co. Common Yellowthroat: 3 Dec (1) Ensley Bottoms (RDH, DMy); 13 Dec (1) Bogota WMA, Dyer Co (Daniel Estabrooks); 17 Dec (1) Shelby Farms (BFo); 19 Dec (2) Black Bayou (AL); 2 Jan (1) Choctaw Fields, Lake Co (RS); 29 Jan (1) Reelfoot Lake SP (DR, AL); 3 Feb (2) Hatchie NWR (DR). Palm Warbler: 26 Dec (1) Gibson Co (Gene Sattler). Yellow-throated Warbler: 22 Dec (1) Reelfoot SP (Kyle Bess, photo). Summer Tanager: 19 Dec - 3 Jan (1 female, at feeder) Germantown, Shelby Co (Susan Riley, photo), returned wintering bird; 14 Feb (1 female, at feeder) Shelby Co (Anne Brewer, photo). Indigo Bunting: 12 Feb (1) Britton Ford (DR, AL, photo).

Locations: Black Bayou - Lake Co; Britton Ford - Henry Co; Camden Landfill - Benton Co; Coon Valley Rd - Tipton Co; Ensley Bottoms - Shelby Co; Hatchie NWR - Haywood Co; Herb Parson's L - Fayette Co; John Tully WMA - Lauderdale Co; Pace Point - Henry Co; Paris - Henry Co; Reelfoot L (plus SP and NWR) - Lake Co; Shelby Farms - Shelby Co.

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

HIGHLAND RIM AND BASIN REGION - - This winter continued a pattern of warmer winter months except for February. December's temperatures were 1.3 degrees above average, while those for January were 4.3 degrees above normal. Precipitation in December was slightly above average, but January was more than an inch below normal. February was a different story. With the descent of the polar vortex the region was subjected to freezing temperatures and over 5 inches of snow and ice.

Best birds of the winter included a state-first Cassin's Kingbird, along with Trumpeter Swan, Allen's and Black-chinned Hummingbirds, Iceland Gull, Spotted Towhee, and Western Tanager. It was a good winter for irruptive finches with a few Evening Grosbeaks and a single Common Redpoll.

Waterfowl: Snow Goose: regular at Duck R Unit; several reports from Perry Co; plus at least 15 reports from 9 other Counties (Cannon, Coffee, Davidson, Franklin, Lincoln, Rutherford, Smith, Sumner, and Williamson); notable counts: 29 Jan (12) Eagleville (Hugh Barger); 1 Feb (75) Fort Campbell, Stewart Co (Daniel Moss); 11 Feb (19) Franklin Co (Sam Murray). Ross's Goose: regular at Duck R Unit; several reports from Perry Co; 29 Jan (5) Woods Reservoir (Richard Connors); 4 Feb (1) Coffee Co (SNM, NPM); 5 Feb (1) Franklin Co (Susan Lanier); 11 Feb (1) Memorial Park (TLd); 13 Feb (1) Eagleville (Scott Russom); 24 Feb (1) Davidson Co (Jerry Webb). Snow x Ross's Goose: 17 Dec (1) Hamilton Rd Rec Area, Davidson Co (Richard Connors, MS); 4 Feb (1) Memorial Park (TLd, photo). Greater White-fronted Goose: regular at Duck R Unit; several reports from Perry Co; 11 / 18 Dec (1 / 2) Sumner Co (Jared Oakes / JDa); 2 Jan (2) Coleman Pond, Davidson Co (MS, GG); 13 Feb (2) Eagleville (Scott Russom); 28 Feb into Mar (8) Hillsboro Pond, Coffee Co (SNM, NPM). Cackling Goose: regular at Duck R Unit; 22 Feb (8) Park at Harlinsdale Farm (Roy McGraw, m.ob.); 25 Feb (10) Hickman Co (RS). TRUMPETER SWAN: 27 Feb into Mar (1 im) Monsanto Ponds, Maury Co (Barbara Burnett / RS, VS, photo). Mute Swan: 12 Jan (1) Davidson Co (FF); 21 Feb (4) Cross Cr NWR, Stewart Co (VS). Eurasian Wigeon: 26 Dec -1 Jan / 13-19 Feb (1-2 males) Duck R Unit (Rachael Casey, photo, m.ob.). scaup sp.: 27 Feb (3,000 +) Old Hickory L, Sumner / Davidson Counties (MS), some Greaters in the flock. Surf Scoter: 27 Feb (1) Old Hickory L, Wilson Co (RN, JN, m.ob.). White-winged Scoter: 21 Feb (1) Percy Priest L, Rutherford Co (JWa); 24-25 Feb (3) Old Hickory L, Sumner / Davidson Counties (JDa, photo / GG, Jim Arnett); 26 Feb (2) Percy Priest L (FF); 27 Feb (1) Old Hickory L, Wilson Co (RN, JN, m.ob.). Black Scoter: 10 Dec (2) Normandy L, Coffee Co (SNM, NPM); 17 Dec (1) Old Hickory L (Chris Sloan). Long-tailed Duck: 25 Dec (1) Tennessee R, Perry Co CBC; 25-27 Feb (2) Percy Priest L (JN, RN). Common Merganser: 17 Dec (1 male) Old Hickory L (Chris Sloan); 16 / 28 Jan (1 female) Drake's Cr, Old Hickory L, Sumner Co (MS / TLd); 16 Feb (1 male) Franklin Reservoir, Williamson Co (Jim Arnett); 20 Feb (8 males) Woods Reservoir (Sam Murray); 22 Feb (3 males) Cross Cr NWR, Stewart Co (AL).

Grebe - Tern: **Horned Grebe**: 22 Jan (535) Woods Reservoir (JWa), max. **Red-necked Grebe**: 29 Jan (2) Woods Reservoir (SNM, NPM). **Eared Grebe**: 1-6 Jan (1) Old Hickory L, Sumner Co (MS, TLd, photo). **Black-chinned Hummingbird**: 31 Jan - 6 Feb (1 female, ba) Maury Co (CR, SR), present since Nov. **Rufous Hummingbird**: 1-8 Dec (1 ba) Lincoln Co (CR, SR); 3 Dec (1 ba) Wilson Co (CR, SR); 5 Dec (1 ba) Montgomery Co (CR, SR); 3-9 Jan (1 ba) Davidson Co (CR, SR); 8 Jan (1) Williamson Co (GG). **Allen's Hummingbird**: 3-10 Dec (1 ba) Rutherford Co (CR, SR). **Virginia Rail**: 16 Dec / 19 Jan / 27 Jan (1) New Johnsonville, Humphreys Co (RS, VS, DR); 23 Dec / 5 Jan (3 / 1) Walker Branch SNA, Hardin Co (AJT); 10 Jan / 4 Feb (1) Monsanto Ponds, Maury Co (MS). **Sora**: 19 / 27 Jan (1) New Johnsonville, Humphreys Co (RS, VS / DR). **Dunlin**: 10-12 / 28 Feb (2 / 1) Hillsboro Pond, Coffee Co (BD / SNM, NPM); 19 Feb (3) Fall Cr Rec Area (JWa, photo). **Least Sandpiper**: 26 Dec (1) Fall Cr Rec Area (JN, RN); 11 Jan - 12 Feb (8-12) Percy Priest WMA Field Trial Area, Rutherford Co (Stephen Zipperer); 30 Jan (1) Fowler Rd, Lincoln Co (Evan Buck); 13 Feb (1) Duck R Unit (DR, AL); 19 Feb (2) Dunbar Cave SP, Montgomery Co (JH, IK, m.ob.); 25 Feb (1) Hickman Co (RS). **Lesser Yellowlegs**: 13 Feb (1) Duck R Unit (DR, AL, photo); 28 Feb (1) Fall Cr Rec Area (RN, JN). **Iceland Gull**: 16 Feb (1, thayeri) Tennessee R, Perry Co (RS, VS). **Lesser Black-backed Gull**: 16 Feb (2) Tennessee R, Perry Co (RS, VS); 16 Feb (1 ad) Old Hickory L, Sumner Co (TLd, GG). **Forster's Tern**: 29 Jan (1) Kentucky L, Humphreys Co (RS, VS).

Loon - Falcon: Red-throated Loon: 13 Feb (1) Franklin Reservoir, Williamson Co (Steven Goodbred, m.ob., photo); 19 Feb (1) Woods Reservoir (Sam Murray). Pacific Loon: 5 Dec - 2 Jan (1) Percy Priest L (DR, m.ob.). American White Pelican: 3-29 Dec (35-100) Duck R Unit (RS); 11 Dec (40) Sycamore Cr, Cumberland R, Cheatham Co (James East); thru season (max 1,000 on 26 Feb) Percy Priest L, Rutherford Co (JN, RN); 14 Dec / 31 Jan (12 / 6) Woods Reservoir (Susan Wakeman / LouAnn Partington); 23 Dec - 31 Jan (75-275) Old Hickory L, Sumner Co (TLd). Great Egret: 2 Dec thru season (5-12) Drake's Cr, Old Hickory L, Sumner Co (JDa, TLd, m.ob.); 6 Jan (1) Arrington, Williamson Co (Tripp Grant); 27 Jan (5) Duck R Unit (DR). Green Heron: 18 Dec - 9 Feb (1) Centennial Park, Davidson Co (GG), 5th straight winter at this site. Osprey: 21 Dec / 20 Jan / 12 Feb (1) Cumberland R, Nashville (CA / FF / Mary Williamson); 25 Jan (1) Old Hickory L, Sumner Co (JDa); 21 Feb (1) Liberty Park (RS). Golden Eagle: thru season (1-2) Duck R Unit (RS, VS, m.ob.); 25 Dec / 3 Feb (1) Perry Co (RS). "Harlan's" Red-tailed Hawk: 17 Dec (1) Lawrence Co (Damien Simbeck), on Buffalo River CBC; 17 Jan (1) Duck R Unit (RS, VS). Short-eared Owl: 30 Dec (1) Hayne's Bottom WMA, Montgomery Co (JH); 10 Jan - 25 Feb (2-4) Jim Johnson Rd, Montgomery Co (CR, SR, m.ob.). Peregrine Falcon: 24 Dec / 17 Jan (1) Nashville (CR, SR / GG).

Kingbird - Longspur: **CASSIN'S KINGBIRD**: 6 Dec - 3 Jan (1) Bell's Bend Park (Mary Williamson, photos, m.ob.), 1st state record. **White-eyed Vireo**: 22 / 30 Dec (1) Hayne's Bottom WMA, Montgomery Co (IK, photo); 27 Jan (1) Pickwick Dam, Hardin Co (RS, VS). **Blue-headed Vireo**: 9 Dec (1) Bell's Bend (TSM); 13 Dec (1) Marcella Vivrett Smith Park, Williamson Co (Steven Goodbred); 19 Dec (1) Nashville CBC; 20 Dec (1) Park at Harlinsdale Farm (Jim Arnett); 11 Jan (1) Stones R National Battlefield, Rutherford Co (JWa). **Fish Crow**: 21 Feb (2) Shelby Bottoms, Davidson Co (MS, GG); 24 Feb (2) Sanders Ferry Park, Sumner Co (JDa, audio on eBird); with additional reports from both vicinities. **Tree Swallow**: 23 Feb (1) Williamson Co (Hugh Barger), ers; with subsequent Feb reports from Davidson, Hickman, Maury, Putnam, Rutherford, Stewart, Sumner, and Wilson

Counties. Sedge Wren: 13 / 20 Dec (1) Bell's Bend (MS et al.). Marsh Wren: 23 Dec / 5 Jan (2) Walker Branch SNA, Hardin Co (AJT). Blue-gray Gnatcatcher: 2-26 Dec (1) Sander's Ferry Park, Sumner Co (JDa, photo); 7 Dec (1) Nashville (Ed Schneider). Gray Catbird: 1 Dec (1) Old Hickory Dam (Jerry Webb); 8-19 Dec (1) Bell's Bend (MAG, m.ob.); 23 Dec (1) Hardin Co (Warren Massey); 26 Dec (1) Duck R Unit (Rachael Casey); 12 Jan (1) Park at Harlinsdale Farm (Tripp Grant); 23 Jan - 2 Feb (1) Clarksville (Nita Heilman); 7 Feb (1) Maury Co (RDH, DMy). Evening Grosbeak: 20 Dec (1) Indian Mound, Stewart Co (JH); 24 Dec into Mar (5-16) Olivehill, Hardin Co (Warren Massey, m.ob.). Purple Finch: widespread in moderate numbers. COMMON REDPOLL: 16 Dec (1 female, at feeder) Nashville (GG, photo). Pine Siskin: widespread in moderate numbers; 3 Jan (420, at feeder) Perry Co (VS), max; 11 Jan (250, at feeder) Smith Co (CA). Lapland Longspur: 5 / 7 Dec (3 / 1) Bell's Bend Park (MS); 25 Dec (1) Perry Co CBC; 10 Jan (13) Lincoln Co (Evan Buck); 11-12 Feb (50-67) Bark Camp Barrens sod farm, Coffee Co (SNM, NPM, m.ob.); 13-22 Feb (14-34) Duck R Unit (DR, AL); 14 Feb (40) Liberty Park (IK, m.ob., photo); 17 Feb (80) Bell's Bend sod farm (GG); 17 Feb (2) Wilson Co (CA); 19 Feb (20) Perry Co (RS); 19 Feb (2) Eagleville (JWa); 19 Feb (5) Smith Co (CA); 21 Feb (1) Houston Co (RS).

Sparrow - Bunting: Grasshopper Sparrow: 16 Dec (1) Humphreys Co (DR, AL). American Tree Sparrow: 22 Jan (1) Bell's Bend (Andy Lantz); 20-25 Feb (4-5) Liberty Park (Stefan Woltmann, photo, m.ob.); 22 Feb (1) Bell's Bend (FF); 22 Feb (1) Warner Parks, Davidson Co (GG). Vesper Sparrow: 15 Dec (10) Humphreys Co (RS); 1 Feb (12) Five Points, Lawrence Co (Damien Simbeck), max. Harris's Sparrow: 11 Dec - 7 Feb (1) Humphreys Co (VS, RS), present for 3rd straight winter. LeConte's Sparrow: 13 Dec (1) Bell's Bend (JH, Sharon Arnold, m.ob.); 15 / 16 Dec (1 / 6) Humphreys Co, separate sites (RS / DR, AL); 19 / 28 Jan (2 / 1) Shelton Ferry WMA, Montgomery Co (DR / CR, SR); 27 Feb (2) Perry Co (RS). Spotted Towhee: 7-23 Feb (1) Flat Cr Rd, Williamson Co (Paige O'Neal, m.ob., photo). Brewer's Blackbird: 5 Dec (40) Giles Co (Geoff Hill). Baltimore Oriole: 27 Dec - 4 Jan (1 female) Putnam Co (Mark Taylor, photo); 30 Jan - 5 Feb (1 female, at feeder) Nashville (Randy Harrod, Melissa James, photo). Black-and-white Warbler: 21 Jan (1) Bellevue, Davidson Co (FF). Blue-winged Warbler: 11-20 Dec (1) Memorial Park (TLd, photo), continuing from late Nov; 2nd winter record in state. Orange-crowned Warbler: reported from Cannon, Davidson, Dickson, Hardin, Humphreys, Lawrence, Montgomery, Perry, Rutherford, Sumner, and Williamson Counties. Nashville Warbler: 19 Jan (1) Nashville (Del Snell, photo). Common Yellowthroat: 1 Jan (1 female) Liberty Park (CR, SR, photo). Magnolia Warbler: 15 Dec (1) Old Hickory Dam (GG, photo), 2nd winter record in state. Palm Warbler: reported from Coffee, Davidson, Dickson, Franklin, Humphreys, Lawrence, Montgomery, Perry, Rutherford, Stewart, Trousdale, and Warren Counties. WESTERN TANAGER: 30 Jan - 1 Feb (1 male, at feeder) Cheatham Co (John Carreau, m.ob., photo). Indigo Bunting: 16 Dec (1) Duck R Unit (RS, VS); 23 Feb (1) Warner Park, Davidson Co (Melissa James, photo).

Locations: Bell's Bend - Davidson Co; Duck R Unit - Humphreys Co; Eagleville - Rutherford Co; Fall Cr Rec Area - Rutherford Co; Liberty Park - Montgomery Co; Memorial Park - Hendersonville, Sumner Co; Old Hickory L - Davidson Co (unless specified otherwise);

Park at Harlinsdale Farm - Williamson Co; Percy Priest L - Davidson Co (unless specified otherwise); Woods Reservoir - Franklin Co.

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CUMBERLAND PLATEAU / RIDGE and BASIN REGION - - Temperatures and precipitation in northeast Tennessee were both slightly above average for the season. The Tri-cities area received four snowfalls of 4 inches or less, two each in December and February.

Two first state records were documented in the region this winter. Most amazing was a White-throated Swift which lingered for six days at Chattanooga. Apparently this is just the second or third record east of the Mississippi River. Another state first was the Pacific-slope Flycatcher which lingered in Maryville for two weeks. There are very few records in the eastern U.S. of this Empidonax and a sibling species which are best separated by voice.

Other remarkable records were Snowy Owl, Common Redpoll (three separate birds), and Bullock's Oriole. Also notable this season were Eared Grebe, Little Gull, Anhinga, Northern Goshawk, and two western subspecies ("Harlan's" Red-tailed Hawk and "Oregon" Darkeyed Junco).

Waterfowl were highlighted by multiple scoters and Long-tailed Ducks. Boreal irruptives were well represented, including the best flight of Evening Grosbeaks into the region in many years with reports from ten counties. Lingering Neotropical migrants continue to amaze, with reports of Sora, Green Heron, Blue-gray Gnatcatcher, Wood Thrush, Baltimore Oriole, Summer Tanager, and 6 species of unexpected warblers. Several shorebirds were also unexpected for winter.

Waterfowl: Snow Goose: reported from 14 sites in Bledsoe, Blount, Hamblen, Hamilton, Hawkins, Knox, Meigs, and Washington Counties, mostly from late Jan thru end of period; 5 Feb (15) Hiwassee Refuge (RSh, DSh), max. Ross's Goose: reported from 7 sites in Bledsoe, Blount, Hawkins, Knox, and Roane Counties, mostly from late Jan thru end of period, all of 1-3 birds. Greater White-fronted Goose: reported from 13 sites in Blount, Greene, Hamblen, Hawkins, Knox, Loudon, Meigs, Monroe, Roane, Sullivan, and Washington Counties, mostly from late Jan thru end of period; 5 / 6 Feb (13 / 32) Lowland, Hamblen Co (RDH, DMy / BSc, MM), max; 17 Feb (14) Meigs Co (Charles Murray); 23 Feb (18) John Sevier L (SHu). Tundra Swan: 21 Feb (1, fly-over) Kingsport (CC). Bluewinged Teal: 9 Dec - 11 Jan (1-2) Standifer Gap Marsh (Mark Pellegri, BD); 26 Dec / 7 Feb (2) Heritage Center Greenway, Roane Co (RoK / BSc); 28 Dec (1) Melton L Park, Anderson Co (David Shoch); 24 Jan - 14 Feb (1) Whitetop Cr Park, Sullivan Co (Bambi Fincher, Sherrie Quillen, m.ob.). Canvasback: 1 Jan / 6 Feb (330 / 300) Hiwassee Refuge (KAC / RSh, DSh), max; 3-28 Feb (6 reports, max 22) Tri-cities area (m.ob.), good showing in northeast Tenn after no records last winter. Redhead: 6 Feb (350) Hiwassee Refuge (RSh, DSh), max. Greater Scaup: numerous reports of small numbers. Surf Scoter: 4 Dec / 21 Feb (1 / 2) Chickamauga L (JDi / TLR); 30 Dec (1) Tennessee R, Knox Co (Howard Haysom, m.ob.); 13 Feb (2) Jonesborough, Washington Co (RLK). White-winged Scoter: 7 Dec - 24

Jan, intermittently (2) Chickamauga L (BD, JDi, KAC); 26 Dec (1) pond on Thunderhead Rd, Knox Co (JDo, photo); 13 Feb (1) Paddle Cr Pond, Sullivan Co (RRK, m.ob.); 13-25 Feb (1) Swafford Pond, Bledsoe Co (RSh, DSh); 17-28 Feb (1-5) Douglas L (KW, m.ob.); 27 Feb (1) Nickajack L, Marion Co (Clyde Blum). **Black Scoter**: 1 Dec (2) Boone L, Sullivan Co (RLK, m.ob.); 1-2 Dec (3) Fort Loudoun L, Loudon Co (Jan Hansen, m.ob.); 25 / 30 Jan (2 / 1) Chickamauga L (LAW / BD); 2 Feb (2) Fort Loudoun L, Knox Co (BSc, MM). **Long-tailed Duck**: 8 Dec (4) Norris L, Union Co (Daniel Estabrooks, photo); 30 Jan - 6 Feb (1) Chickamauga L (BD, m.ob.); 13-27 Feb (1) Swafford Pond, Bledsoe Co (RSh, DSh); 14-20 Feb (1) pond on Falcon Rd, Jefferson Co (Josh Baysinger, m.ob.); 21 Feb (1) Rankin Bottoms (Aaron Burns, photo); 22 Feb (4) Douglas L (KW). **Common Merganser**: 12 Dec (1 female) Chickamauga L (Jeremy Rardin); 9 Jan (1 female) French Broad R, Knox Co (BSc); 27-28 Jan (4 male, 2 female) Cove Lake SP (NeM); 14 Feb - 2 Mar (1 male) Meadow Cr L, Bledsoe Co (RSh, DSh, photo); 27 Feb (1 male, 8 female) Douglas L (KW).

Grebe - Gull: Eared Grebe: 30 Jan / 9 Feb (1) Chickamauga L (TLR, m.ob., photo / JDi). WHITE-THROATED SWIFT: 10-15 Jan (1) Curtain Pole Road section of Tennessee Riverwalk, Hamilton Co (Wolf Jedamski, m.ob., photo), 1st state record. Rufous Hummingbird: 5 Dec (1, ba) Loudon Co (MA); 20 Feb (1, ba) Grainger Co (MA), present since Oct. Virginia Rail: 12 Dec / 25 Jan (2) Baylor School (LT); 13 / 23 Jan (1) Alcoa (TH); 17 Jan (1) Standifer Gap Marsh (BSc); 27 Jan (2) Meadowview, Kingsport (MGS, Tammy Griffey); 22 Feb (1) John Sevier L (SHu). Sora: 11 Dec - 23 Jan (1-2) Alcoa (TH); 12 Dec / 25 Jan (1) Baylor School (LT); 20 Dec thru season (1-2) Gupton Wetland, Roane Co (RoK, m.ob.); 11 / 17 Jan (1) Standifer Gap Marsh (BD / BSc); 12 Jan (1) Meadowview, Kingsport (RLK). Sandhill Crane: 1 Jan (18,000) Hiwassee Refuge, most ever on this CBC; 6 Jan (165) White Pine, Jefferson Co (Allen Welch), max on eastern edge of range. Whooping Crane: 9 Dec (3) Hiwassee Refuge (Mark Pellegri). Dunlin: 17 Dec (2) Rankin Bottoms (RDH, DMy). Least Sandpiper: thru season (up to 75) South Mouse Cr, Bradley Co (RHo, m.ob.), regular wintering site; 26 Dec (1) Soddy L, Hamilton Co (Jeremy Rardin); 1-5 Jan (1) Cherokee Farm, Knox Co (BSc, m.ob.); 9 Jan (12) Rankin Bottoms (Frank Woodward); 23 Jan into Mar (6-7) Cherokee L (MM, m.ob.); 5 Feb (5) Chester Frost Park (DRJ). Spotted Sandpiper: 20 / 22 Jan (1) Big Ridge SP (NeM, photo); 26 / 31 Jan (1) Cherokee L (Dawson Rader / Dallas Harrell). Lesser Yellowlegs: 28 Dec (1) Roger's Cr, McMinn Co (RDH, DMy). Greater Yellowlegs: 23 Dec / 20-22 Jan (1) Big Ridge SP (Mary Lucal / NeM, photo); 27 Dec - 31 Jan (1) Cherokee L (SHu, m.ob.); 28 Dec (2) Roger's Cr, McMinn Co (RDH, DMy). Bonaparte's Gull: 18 Feb (4500 +) Douglas Dam (KW), max. Little Gull: 18-23 Dec (1 ad) Ish Cr Bay, Fort Loudoun L (TH, m.ob., photo). Lesser Black-backed Gull: 28 Jan (1 ad) Fort Loudoun L, Knox Co (MM).

Loon - Falcon: **Red-throated Loon**: 18-21 Feb (1) Fort Loudoun L, Blount / Knox Counties (VW, m.ob., photo); 18 / 20 Feb (1 / 3) Chickamauga L (JDi / LAW). **Pacific Loon**: 6 Dec - 21 Feb (1, with 2 during 3-21 Feb) Chickamauga L (JDi, photo, m.ob.). **Anhinga**: 12 Jan (1) Standifer Gap Marsh (LAW / Jeremy Rardin), 4th Hamilton Co record, apparently just the 2nd winter record in the state. **American White Pelican**: 5 Dec (37) Chickamauga L (S.K. Jones); 16 Dec - 4 Feb (50-100) Fort Loudoun L (RW, m.ob.); 22 Dec (2) Douglas

Dam (Sharon Buck); 1 Jan (635) Hiwassee Refuge (fide KAC), on CBC; 10-20 Jan (50-100) Tennessee R, Knox Co (JDo, Shane Williams, m.ob.); 29 Jan (30, flying over) Bledsoe Co (RSh, DSh); 8-9 Feb (10-15) Douglas L, Jefferson Co (Joseph Purser, m.ob.). Great Egret: 3 Dec (18) Lyons Bend (Chris Welsh); 6 Dec (10) Hiwassee Refuge (Charles Murray); 12 Dec thru season (9-13) Lackey Cr, Blount Co (VW, m.ob.); 15 / 28 Dec (1) Washington Co (BP, JP / RLK); 11 Jan thru season (1-5) Knox Co (JDo, Laura Tappan); 4 Feb (15) Rattan Cr, Rhea Co (RSh, DSh). Green Heron: 7 Dec (1) Lakeshore Park, Roane Co (Robert Hunt, RoK); 2 Jan (1) Lakeshore Park, Knox Co (BSc); 9 Jan (1) Meigs Co (Zach Arnold); 20 Feb (1) Fort Loudoun L (Janet McKnight, m.ob.). Osprey: 8-11 Dec (1) Chester Frost Park (S.K. Jones, m.ob.); 8 Dec (1) Big Ridge SP (Daniel Estabrooks); thru season (several sightings) Knoxville / Kingston area lakes; 23 Jan (1) Chickamauga Dam (David Aborn); 22 Feb (1) Douglas Dam (KW). Northern Goshawk: 24 Feb (1 im) Chester Frost Park (DRJ). "Harlan's" Red-tailed Hawk: 23 Jan / 20 Feb (1) Sevierville, Sevier Co (KW, photo). SNOWY OWL: 6 Jan (2) Charleston, Bradley Co (Barry Winn, Jerry Croft, Jeffrey Dent fide David Chaffin, photo); 17-20 Jan (1) Chickamauga L, residential area near shoreline (Justin Hill, m.ob., photo). Merlin: over 2 dozen sightings. Peregrine Falcon: 16 Dec thru season (1-2) Chickamauga Dam (BD, m.ob.); 23 Dec - 18 Jan (3 reports) Roane Co (RoK, EBo); 10 Jan (1) Hawkins Co (SHu); 13 Jan (1) Limestone (RRK et al.); 13 Jan / 26 Feb (1) Knox Co (Colin Sumrall / JDo); 4 Feb (1) Louisville Point Park, Blount Co (TH); 5 Feb (1) Spring City, Rhea Co (RSh, DSh).

Flycatcher - Thrush: PACIFIC-SLOPE FLYCATCHER: 29 Dec - 12 Jan (1) Maryville Greenway (Evan Kidd, photos, m.ob.), 1st state record, ID based on recording of vocalization, pending TBRC acceptance. Empidonax sp.: 13 Dec (1) Maryville Greenway, near Sandy Springs Rd (Doug Raybuck), thought possibly to be Least Flycatcher. Loggerhead Shrike: reported from Bledsoe, Greene, Grundy, Hamilton, Hawkins, Jefferson, Loudon, Monroe, Rhea, and Sullivan Counties; mostly 1-2 birds per Co. Blue-headed Vireo: 12 Dec (1) Meigs Co (RDH, DMy); 15 Dec, 15-27 Jan (4 reports) Hamilton Co (m.ob.); 4 Jan (1) Cleveland, Bradley Co (Ryan Trenkamp). Fish Crow: 24 Feb (1) Kingsport (RLK); 25 Feb (1) Johnson City (Larry McDaniel); ers in Northeast Tennessee. Common Raven: reported from 5 sites in Hawkins Co (SHu, m.ob.); 18 Jan (2) Limestone (RLK); 5 Jan (1) Boone Dam, Sullivan Co (RLK); 10 Jan (1) Kingsport (RLK); 16 Jan (1 on nest) Bristol Motor Speedway, Sullivan Co (MGS); 7 Feb (1) Lowland, Hamblen Co (John Kitsteiner); 14 Feb (1) Wal-Mart Distribution Center, Greene Co (Jeff Bailey); 23 Feb (2) Knox Co (David Hankins). Horned Lark: 6 Jan (300) Limestone (RRK et al.), max. Purple Martin: 23 Feb (1 female / 1 male) separate Hamilton Co sites (David Stone / Barbara Johnson), ers. Tree Swallow: 26 Jan (1) Standifer Gap Marsh (BD, Barbara Johnson), ties earliest spring arrival date in state; 29 Jan (1) Lackey Cr, Blount Co (Doug Raybuck, RW); and more than 40 reports in Feb from 19 counties. Red-breasted Nuthatch: moderate numbers widespread. Brown-headed Nuthatch: 24 Feb (1) Douglas L (Carra Simpson). Blue-gray Gnatcatcher: 4 Dec - 2 Feb (1-2) Amnicola Marsh and vicinity, Hamilton Co (BD et al.); 23 Dec (1) Bristol, Sullivan Co (CC). Gray Catbird: 1-21 Dec (1) Chattanooga (JDi); 1 Dec (1) Cove Lake SP (EBo); 6 Dec (1) Rhea Co (A. Downing); 30 Dec (1) Greene Co (John Kitsteiner); 2 Jan (1) Warrior's Path SP, Sullivan Co (MGS); 4 Jan (1) Harrison Bay SP, Hamilton Co (Nolan Wright); 4 Jan

(1) Lyon's Bend (Susan Hoyle); 13 Jan - 5 Feb (1) Alcoa (TH); 2 Feb (1) Heritage Center Greenway, Roane Co (Karen Eagle); 22 Feb (1) Sewanee, Franklin Co (Peter Ceren); 27 Feb (1) Harrison Branch Rec Area, Blount Co (VW). **Wood Thrush**: 1 Dec (1) Cove Lake SP (EBo, photo).

Finches: **Evening Grosbeak**: reported from 10 Counties, mostly at feeders; 1 Dec thru season (up to 83) Bledsoe Co (RSh, DSh); 5-6 Dec / 12 Feb (2-15) Houston Valley, Greene Co (Gigi Gibson, photo); 15 Dec (1) Maryville (Warren Bielenberg); 18 Dec (6) Claiborne Co (Peggy Thornton); 26 Dec (1) Johnson City (RLK); 3 Jan (2) Blountville, Sullivan Co (Carl Ketron fide Fred Alsop); 8 Jan thru Feb (2-8) Anderson Co (Kathy Stout, photo); 10-11 Jan / 11 Feb (3 / 12) Horse Cr, Greene Co (Jeff Bailey); 2-16 Feb (6) Morgan Co (Lori McAlister, photo); 13-15 Feb (1) Marion Co (Jessica Honeycutt); 15-20 Feb (1) Loudon Co (Geoff White). **Purple Finch**: widespread in moderate numbers. **COMMON REDPOLL**: 19 / 21 Jan (1, at feeder) Preserve Dr, Chattanooga (EBo / Randy Harrod, Melissa James, photo); 21-22 Jan / 8 Feb (1, at feeder) Ohio Reservation National Military Park, Chattanooga (Jay Mills, photo, m.ob.); 1 Feb (1, at feeder) Maryville (VW, photo). **Red Crossbill**: 7 Jan (2) Charleston, Bradley Co (RS, VS); 13-17 Jan (7-16) Ooltewah, Hamilton Co (David Hollie); 17 Jan (1) Lookout Mtn, Hamilton Co (BD); 13-14 Feb (4-3) Butcher's Valley, Hawkins Co (Devonda Eiklor). **Pine Siskin**: widespread in moderate numbers; 24 Dec (280, at feeder) Marion Co (TLR), max.

Longspur - Tanager: Lapland Longspur: 3 Dec / 6 Jan (1) Limestone (RLK / RRK et al.). "Oregon" Dark-eyed Junco: 27 Jan (1) Chattanooga (Barbara Johnson). Lincoln's Sparrow: 5 Dec - 25 Feb (5 reports) Hamilton Co (LT, DRJ). BULLOCK'S ORIOLE: 13-19 Jan (1 im male, at feeder) Chattanooga (Diane Whitman, TLR, m.ob., photos); 22-24 Jan (same bird at different feeder) Chattanooga (fide Josh Dietrich); 3rd state record. Baltimore Oriole: 21 Jan (1 female, at feeder) Clinton, Anderson Co (Lelia Baylor, photo); 30 Jan - 16 Feb (1 female, at feeder) Chattanooga (Jay Mills, photo). Black-and-white Warbler: 2 Jan (1) Knox Co (Jacob Wessels, photo), on CBC. Tennessee Warbler: 30 Dec (1) Maryville (EBo, photo); 19 Feb (1) Knox Co (Tyler Edmondson, photo). Orange-crowned Warbler: Blount Co (3 sites), Hamilton Co (6 sites), Knox Co (5 sites), Sullivan Co (3 sites); plus 7 Dec - 31 Jan (1) Lakeshore P, Roane Co (RoK); 2 Jan (1) Washington Co (Rob Biller); 10 Jan (1) David Crockett Birthplace SP, Greene Co (Rack Cross); 19 Jan (1) Meigs Co (RDH, DMy); 23 Jan (1) Douglas Dam (MA); 26 Jan / 21 Feb (1) Gupton Wetland, Roane Co (EBo / Chuck Estes). Nashville Warbler: 10 Jan / 3 Feb (1) Riverfront Park, Kingsport (RLK). Common Yellowthroat: 17 Dec (1 female) Rankin Bottoms (RDH, DMy); 9 Jan - 16 Feb (1 im male) Chattanooga (BD); 4-8 Feb (1 male) Knox Co (Nick Stahlman, m.ob.); 17 Feb (1 ad male) Moccasin Bend, Hamilton Co (BD). Cape May Warbler: 18 / 26 Feb (1, at suet feeder) Hamilton Co (Jeannine Flynn, photo). Northern Parula: 7 Dec (1) Lyon's Bend (Susan Hoyle). Palm Warbler: reported from Bledsoe, Blount, Bradley, Cocke, Greene, Hamblen Hamilton, Hawkins, Knox, Loudon, Marion, Meigs, Monroe, Polk, Roane, Sequatchie, Sullivan, and Washington Counties. Yellow-throated Warbler: 3 Feb (1, at suet feeder) Bradley Co (Pamela Seals, photo). Summer Tanager: 20 Dec - 4 Jan (1, at feeder) Hamilton Co (LAW).

Locations: Alcoa - Blount Co; Baylor School - Hamilton Co; Big Ridge SP - Union Co; Cherokee L - Grainger Co portion; Chester Frost Park - Hamilton Co; Chickamauga L -Hamilton Co; Cove Lake SP - Campbell Co; Douglas L - Sevier Co portion; Fort Loudoun L - Blount Co (unless specified otherwise); Hiwassee Refuge - Meigs Co; John Sevier L -Hawkins Co; Kingsport - Sullivan Co; Limestone - Washington Co; Lyon's Bend - Knox Co; Maryville - Blount Co; Rankin Bottoms - Cocke Co; Standifer Gap Marsh - Hamilton Co

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EASTERN MOUNTAIN REGION - - Temperatures were above normal for the period. Precipitation was normal for December and January, but above average in February.

It was another not-so-good waterfowl season, despite a few scoters and Long-tailed Ducks. Boreal irruptive species were a little more interesting. For the first time in many years we had a good showing of Evening Grosbeaks. On the other hand, Purple Finches, which appeared in fairly good numbers in late fall, hung around only in ones and twos during the winter. The two that stayed at my feeder had conjunctivitus and were nearly blind. I wondered if that were true at other locations as well. Pine Siskins also had a good showing in late fall but were more scarce during the winter. A Yellow-crowned Night-Heron in Sevier County was very out-of-season.

Duck - Falcon: Canvasback: 6 Feb (2) South Holston L (RRK); 20 Feb (1) Great Lakes Pond, Carter Co (BP, JP); only reports. Redhead: from early Dec thru 6 Feb (1) Fishery Park, Unicoi Co (m.ob.); late Feb - early Mar (14) Wilbur L (BP, JP, m.ob.); only reports. Surf Scoter: 8 Dec (14) South Holston L (RLK); 10 Jan (3) Wilbur L (Fred Alsop, David Kirschke, m.ob.). White-winged Scoter: 15 Dec (1) South Holston L (RRK, m.ob.); 18 Feb - 4 Mar (1) South Holston L (CC, m.ob.); 22-27 Feb (1) L Ocoee (RHo, m.ob.). Long-tailed Duck: 28 Dec thru 17 Feb (1 female) South Holston R weir, Sullivan Co (Bambi Fincher, Sherrie Quillen, m.ob.); 18 Feb into Mar (1 male) South Holston L (CC, m.ob.). Common Goldeneye: from Nov thru 27 Feb (1) South Holston R weir, Sullivan Co (m.ob.); 21 Feb (1) L Ocoee (MM); only reports. Common Merganser: thru season (up to 7 males and 17 females) Little R, Blount Co (RW, m.ob.); 12 Jan (2 males) Wilbur L (Doris Ratchford); 14-20 Feb (1 male, 1 female) Watauga R, Carter Co (Katie Cordle, m.ob.); 15 Feb (3 male, 3 female) Chota Refuge, Monroe Co (David Chaffin). Sandhill Crane: 2 Dec (36, flying over) Erwin, Unicoi Co (Joe McGuiness); 30 Dec (4, flying over) South Holston L (Adrianna Nelson). Forster's Tern: 21 Feb (1) L Ocoee (RHo, MM, BSc). Red-throated Loon: 15-19 Dec (1) South Holston L (RLK, RRK, m.ob.). Great Egret: 16 Dec (1) South Holston L (MGS). Yellow-crowned Night-Heron: 10-31 Jan (1 ad) Pigeon Forge Riverwalk (Mary Lucal, KW, photo), 2nd winter at this site. Short-eared Owl: 11 Dec - 26 Jan (1) Cades Cove, GSMNP (Evan Kidd, m.ob.). Northern Saw-whet Owl: 3 Jan (1, calling) Orchard Bog in Shady Valley, on CBC (CC, Adrianna Nelson). Merlin: 26 Jan (1) South Holston L (MGS, Tammy Griffey); 20 Feb (1) Sycamore Shoals SP, Carter Co (Wendy Williams, photo). Peregrine Falcon: 1 Dec (1) South Holston L (BP, JP); 12 Jan (1) Cades Cove, GSMNP (EBo); 24 Feb (1) Doe R. Gorge, Carter Co (Pete Range).

Crow - Catbird: **Fish Crow**: 14 Jan (1) Pigeon Forge (Kirk Huffstater). **Common Raven**: 21 Jan (2) Parksville L, Polk Co (RHo). **Tree Swallow**: 21 Feb (12) South Holston L (Larry McDaniel), ers; 26 Feb (100) L Ocoee (RDH, DMy), max. **Brown-headed Nuthatch**: continuing at two sites on South Holston L (m.ob.). **Sedge Wren**: 2 Dec (1) Cades Cove, GSMNP (TH). **Marsh Wren**: 14 Jan (1) Unicoi Co (Jerry Bevins, MGS, Tammy Griffey). **Gray Catbird**: 4 Dec thru 30 Jan (1) Wilbur L (BP, JP).

Grosbeak: **Evening Grosbeak**: reported from at least 18 sites in 7 Counties; 30 Nov / 27 Dec (4) Shady Valley (John Shumate); 1 Dec (10) Hampton, Carter Co (fide Bryan Stevens); 1 Dec - 24 Feb (up to 75) King Hollow Rd, Sevier Co (KW, m.ob.); 3 Dec - 28 Jan (1-19) Wilbur L (BP, JP); 6 / 12 Dec, 1 Jan (8) Pittman Center, Sevier Co (KW); 9 Dec (2) Stoney Cr, Carter Co (fide Chris Soto); 10 Dec (1) Townsend, Blount Co (Kat Barrow); 16 Dec (2) Laurel Valley, Blount Co (Kat Barrow); 16 Dec - 10 Feb (up to 32) Musket Ridge, Townsend, Blount Co (m.ob.); 20 Dec (48) Caton, Sevier Co (Kirk Huffstater); 30 Dec (5) Unicoi Co (Rob Biller); 2 Jan - 21 Feb (40 Ladd Springs Rd, Polk Co (John Moss, RHo); 4 Jan (25) Iron Mtn trail, Polk Co (Liam Wolff); 24 Jan - 14 Feb (10-30) Cross Mtn, Johnson Co (CC, Tom McNeil); 26 Jan into Mar (10-81) Shady Valley (Todd Eastin); 16 Feb (1) town of Unicoi, Unicoi Co (MM).

Finch - Warbler: **Purple Finch**: scattered in small numbers. **Red Crossbill**: 19 Dec (9) Elizabethton CBC (Debi Campbell); 20 Dec (6) Pittman Center, Sevier Co (Kirk Huffstater); 4 Jan (3) Iron Mtn trail, Polk Co (Liam Wolff); 13 Jan (1) Conasauga, Polk Co (GG, MS); 20 Jan (10) Cades Cove, GSMNP (RW). **Pine Siskin**: scattered in small numbers. **Orange-crowned Warbler**: 19 Dec (1) Elizabethton CBC (Fred Alsop et al.); 5 / 18 Feb (1) Pigeon Forge (KW / Kent Cave). **Palm Warbler**: 12 Dec (1) Carter Co (BP, JP); 5 Jan (1) South Holston L (RLK); 12 Jan (1) Pigeon Forge (KW). **Pine Warbler**: 24 Dec thru Feb (1, at feeder) Wilbur L (BP, JP).

Locations: GSMNP - Great Smoky Mtns National Park; L Ocoee - Polk Co; Pigeon Forge - Sevier Co; Shady Valley - Johnson Co; South Holston L - Sullivan Co; Wilbur L - Carter Co.

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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.

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