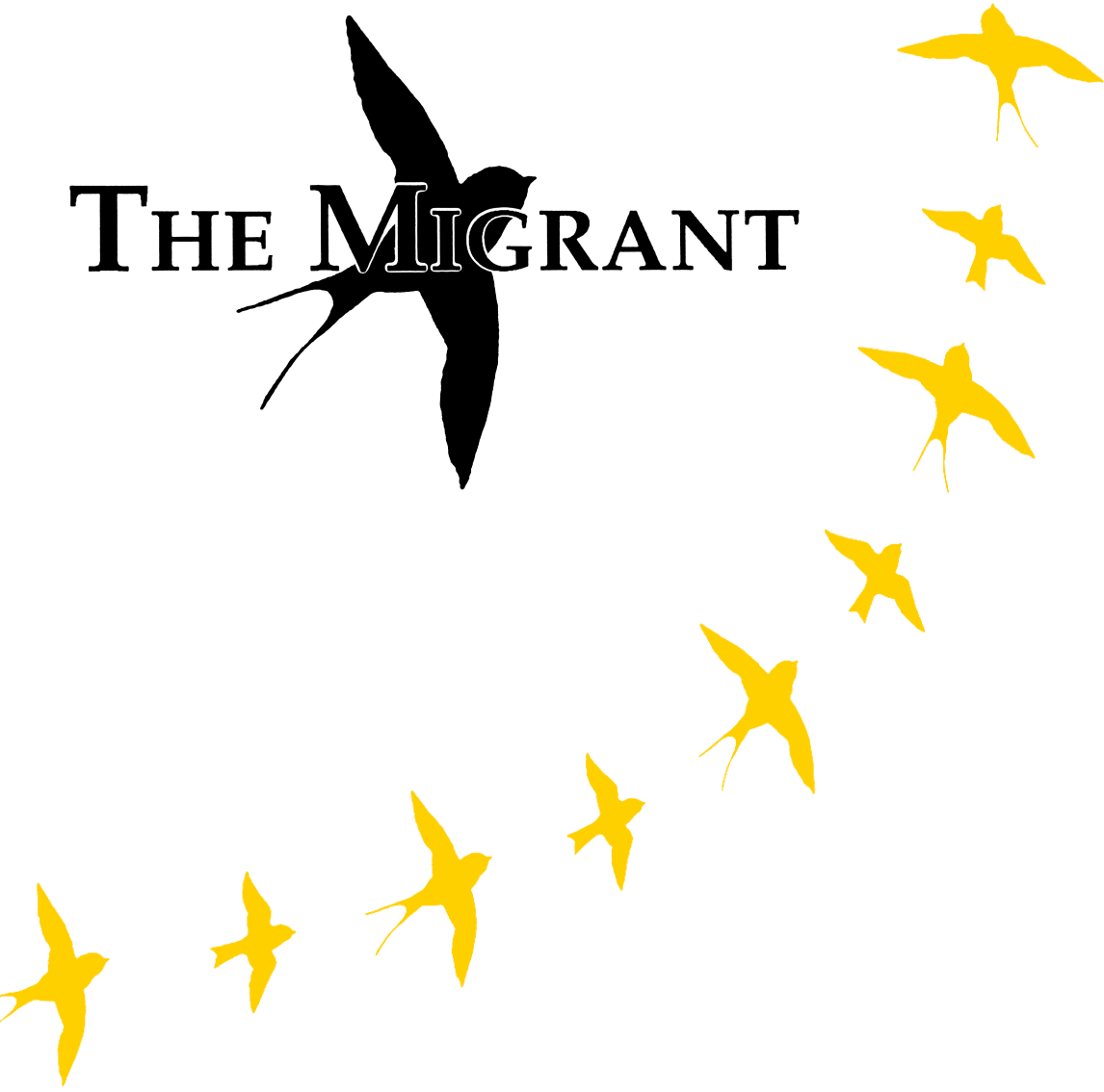

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UNDERSTANDING HIGHER-LEVEL TAXONOMIC CHANGES IN THE BIRDS OF TENNESSEE

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ABSTRACT

We investigate the changes made above the rank of genus for the birds of Tennessee since the publication of the American Ornithologists' Union's seventh edition of the Check-list of North American Birds in 1998. Forty-nine higher-level changes were identified over the 22-year period. Most changes (46; 94%) involved adjustments to classifications at the rank of order and below (i.e. order, suborder, superfamily, family, subfamily, and tribe), and these changes included the new recognition of three orders, two suborders, six families, and 12 subfamilies. Three changes (6%) occurred above the rank of order resulting in the addition of infraclass and parvclass to the check-list, and the discontinued use of superorder.

INTRODUCTION

Most birders are primarily interested in revisions that involve the recognition of new species. This species-centric bias is reflected in review studies that focus on how avian species concepts and delimitation criteria (e.g., Gill 2014, Barrowclough et al. 2016), along with patterns in lumping versus splitting of North American bird species, have changed over time (Sangster 2009, Vaidya et al. 2018). Although more attention is paid to these

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lower-order taxonomic changes, classification changes can and do occur at higher-level taxonomic ranks above species.

In this review article, we examine the taxonomic changes made above the rank of genus that have affected the higher-level classification of birds in Tennessee. We first discuss basic concepts on taxonomy, systematics, and nomenclature, and provide definitions for key terms used by researchers. Finally, we explain the important roles of the International Commission on Zoological Nomenclature (ICZN) and the American Ornithological Society (AOS) in governing the nomenclature and classification of birds.

Taxonomy, Systematics, and Nomenclature

Taxonomy and systematics are terms often used interchangeably to refer to two similar, but subtly different concepts. Taxonomy is the naming of organisms and groups of organisms. Systematics differs in its specific focus on evolutionary history, seeking to uncover the relationships in the tree of life. Taxonomy focuses more on present-day classifications, while systematics focuses on historical relationships among organisms and their ancestors.

The central goal of systematics is to reconstruct the evolutionary history of a group of species (termed a clade). These evolutionary relationships are often visualized as a phylogeny, a graphical depiction of the working hypothesis of the evolutionary relationships among taxa (Fig. 1). Taxa (singular, taxon) are groups of organisms treated together as a single unit and which are often formally recognized with a scientific name (if a species) or as a rank (such as a genus, family, order, etc.). Note that the phylogeny, also called a cladogram, is a hypothesis and is subject to change with the addition of new information, data, and analytical approaches. Systematics aims to identify monophyletic groups, or clades, which are groups of organisms that are related by descent from a single shared ancestor. Hummingbirds (Family Trochilidae), perching birds (Order Passeriformes), and birds (Class Aves) are all examples of monophyletic groups. In contrast, a paraphyletic group describes an "artificial" group, where one or more descendants of the common ancestor are excluded from the group. Reptiles, depending on the classification scheme, are paraphyletic because they usually exclude birds, which are the closest living relatives of crocodilians (Fig. 1). A polyphyletic group defines a group that does not share a single common ancestor, but which is instead defined on the basis of independently evolved or convergent traits. An example of a polyphyletic group would be diurnal raptors (Falconiformes and Accipitriformes; Fig. 2). Sister groups comprise two lineages or clades that are most closely related to each other and share a common ancestor. The basal group of a phylogeny is the earliest diverging lineage of a clade. The term "basal" is preferred over alternatives such as "primitive" or "ancestral," which may unintentionally suggest a false connotation of inferiority or a lack of complexity.

A concept related to both taxonomy and systematics is nomenclature. Nomenclature is closely allied with taxonomy but can be considered a distinct discipline that deals with the rules of naming organisms and their standardization and codification (de Queiroz 2006, 2012). The most familiar naming system used in biological classification is binomial nomenclature where individual species are given unique names containing two elements (binomial = two names). The first element is known as the generic name and indicates the genus to which the species belongs. The second element is the specific name, which uniquely identifies a single species within that genus. When combined, the genus and specific name constitute the scientific name for the species. As an example, the scientific name of Tennessee's state bird, the Northern Mockingbird is *Mimus polyglottos*. Here, *Mimus* is the genus and *polyglottos* is the specific name. It is important to note that the full

scientific name is represented by both the genus and its accompanying specific name. The specific name can never stand alone to represent a species. There is no species that is known as simply "*polyglottos*"; the genus must also be specified.

The scientific name is also sometimes informally referred to as a species' "Latin name". This is because of accepted nomenclatural standards that dictate the scientific name must follow the rules of Latin grammar, even though a binomial can be based on other languages. The nomenclatural rules used in biological classification are a crucial part of taxonomy, and it is important that there are worldwide standards in place to ensure a uniform system of naming organisms. It is the International Commission on Zoological Nomenclature that plays this role.

Zoological Nomenclature

The International Commission on Zoological Nomenclature (ICZN) is the governing scientific body responsible for the creation and maintenance of the International Code of Zoological Nomenclature, a uniform system of rules that establishes international standards to be used in animal nomenclature (ICZN 1999). Importantly, these rules regulate only nomenclature and do not dictate any taxonomic judgments, thus allowing scientific freedom in the practice of classifying animal taxa.

One under-appreciated aspect of the ICZN's code is that it applies only to the ranks of subspecies through superfamily. The four ranks in the family group (superfamily, family, subfamily, and tribe) all have standardized endings that indicate their position in the taxonomic hierarchy (Table 1). Taxonomic ranks above superfamily are not regulated by the ICZN and are not required to have standard endings, although by convention, the suffix *–iformes* is used for the rank of order in birds (and also fishes).

The American Ornithological Society

The North American Classification and Nomenclature Committee (hereafter, Committee) of the American Ornithological Society (AOS; previously known as the American Ornithologists' Union or AOU), is responsible for evaluating and codifying "the latest scientific developments in the systematics, nomenclature, and distribution of North and Middle American birds." (Chesser et al., 2019). The Committee's primary mission is to maintain an official check-list of birds found in the region along with publishing annual supplements to the check-list that incorporate new advances in avian taxonomy and nomenclature.

In 1998, the AOU published the seventh edition of its check-list which replaced the previous sixth edition (AOU 1983). Since its release, there have been 20 supplements to the AOU checklist that address taxonomic changes for North and Middle American bird species (Banks et al. 2000, 2002, 2003a, 2003b, 2005, 2006, 2007, 2008, Chesser et al. 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020). These supplements contain the taxonomic changes along with the evidence and reasoning to support them. All changes included in the supplements have been approved by the Committee.

When published, the seventh edition recognized 14 taxonomic ranks (Table 1). From most inclusive to least inclusive these are: 1) Class, 2) Subclass, 3) Infraclass, 4) Parvclass, 5), Superorder, 6) Order, 7) Suborder, 8) Superfamily, 9) Family, 10) Subfamily, 11) Tribe, 12) Genus, 13) Subgenus, and, 14) Species. Although the Committee values the biological utility of subspecies, this rank is excluded for reasons of expediency from the most recent check-lists.

Table 1. Hierarchy of taxonomic ranks, standardized suffix (if one exists), whether the rank is regulated by the ICZN, and examples from birds (Class Aves).

RANK	SUFFIX	REGULATED BY ICZN	EXAMPLES
Class	Not Standardized	No	Aves (all birds)
Subclass	Not Standardized	No	Neornithes (modern birds)
Infraclass	Not Standardized	No	Paleognathae (ratites and tinamous), Neognathae (typical birds)*
Parvclass	Not Standardized	No	Galloanseres (waterfowl and gallinaceous birds)
Superorder	Not Standardized	No	Paleognathae (ratites and tinamous), Neognathae (typical birds)*
Order	Not Standardized	No	Anseriformes (swans, geese, and ducks)
Suborder	Not Standardized	No	Ciconiae (storks and American vultures), Sulae (boobies, cormorants, and darters)
Superfamily	*-oidae*	Yes	Anatoidae (typical waterfowl), Alcedinoidea (kingfishers)
Family	*-idae*	Yes	Pandionidae (ospreys)
Subfamily	*-inae*	Yes	Pandioninae (ospreys), Stercorariinae (skuas and jaegers)
Tribe	*-ini*	Yes	Arenariini (turnstones), Limosini (godwits), Numeniini (curlews)
Genus	Not Standardized	Yes	*Setophaga* (wood-warblers), *Larus* (large, white-headed gulls)
Subgenus	Not Standardized	Yes	*Scolopax* (subgenus *Microptera*) *minor* (American Woodcock)
Species	Not Standardized	Yes	*Passer domesticus* (House Sparrow), *Mimus polyglottos* (Northern Mockingbird)
Subspecies	Not Standardized	Yes	*Setophaga coronata coronata* (Myrtle Warbler), *Setophaga coronata auduboni* (Audubon's Warbler)

** note the use of the same names for the two different ranks (infraclass and superorder)*

Dorn et al. (2019) previously explored the taxonomic changes for the birds of Tennessee at the level of species and genus. Our aim in this follow-up study is to explore the changes made in taxonomy above genera to the birds of Tennessee over the past 22 years since the publication of the American Ornithological Society's seventh edition of the "Check-list of North and Middle American Birds" (AOU 1998). We examine both the data and reasons that prompted these higher classification changes in an effort to understand how evolutionary history has developed to necessitate these changes.

Methods

For this study, we examine only taxonomic changes made above the rank of genus since the publication of the seventh edition of the American Ornithologists' Union Check-list (AOU, 1998). We searched each AOS supplement (20 total) for taxonomic changes that affected the higher-level classifications of 423 bird species recorded in Tennessee (Tennessee Ornithological Society, 2021). Classification changes involving species not recorded in Tennessee are not included in our analysis, even though the membership of the higher-level ranks is modified globally as species outside the state are added or removed.

Results

We identified 49 taxonomic changes above the rank of genus that affected the higher-level classification of birds in Tennessee over the 22-year study period (Appendix 1). Three new orders were added: 1) Cathartiformes (New World vultures), 2) Accipitriformes (hawks, kites, eagles, and allies), and 3) Suliformes (frigatebirds, boobies, cormorants, darters, and allies). Six new families were recognized: 1) Stercorariidae (skuas and jaegers), 2) Pandionidae (osprey), 3) Polioptilidae (gnatcatchers), 4) Calcariidae (longspurs and snow buntings), 5) Passerellidae (New World sparrows), and 6) Icteriidae (Yellow-breasted Chat; *Icteria virens*). Two suborders were recognized: the Sulae to accommodate the boobies, cormorants and darters, and the Cathartae, which was created for the American vultures.

Twelve additions occurred at the level of subfamily. New classifications in the shorebird family Scolopacidae added the subfamilies Numeniinae, Limosinae, Arenariinae, and Tringinae after the rank of tribe was discontinued. Similarly, the family Accipitridae (hawks kites, eagles and allies) was divided into three subfamilies. For Tennessee, this resulted in the recognition of the Elaninae (White-tailed Kite; *Elanus leucurus*), Gypaetinae (Swallow-tailed Kite; *Elanoides forficatus*), and the Accipitrinae (remaining members of the Accipitridae; numerous species). Five subfamilies were established for the blackbird family (Icteridae): 1) Xanthocephalinae (Yellow-headed Blackbird; *Xanthocephalus xanthocephalus*), 2) Dolichonychinae (Bobolink; *Dolichonyx oryzivorus*), 3) Sturnellinae (meadowlarks; genus *Sturnella* in Tennessee and *Leistes* outside the study region), 4) Icterinae (orioles; genus *Icterus*), and 5) Agelaiinae (various blackbird genera including *Agelaius, Molothrus, Euphagus,* and *Quiscalus* in Tennessee).

Four monotypic (represented by a single species) higher-level taxa were created. Two were treated at the rank of family: Pandionidae for Osprey, and Icteriidae for Yellow-breasted Chat. Subfamily status was assigned to the species Yellow-headed Blackbird (Xanthocephalinae) and the Bobolink (Dolichonychinae).

Elimination of taxonomic entities was also common (14 occurrences). The rank of superorder was removed from the check-list when it was instead treated at the alternative rank of infraclass (Table 1). Three suborders were deleted: Ciconiae (storks and American vultures), Accipitres (kites, eagles, hawks, secretarybirds, and allies), and Falcones (caracaras and falcons). The superfamily Tyrannoidae (tyrant flycatchers, cotingas, manakins, and allies) was also eliminated. All previously recognized tribes (a taxonomic rank below subfamily) were removed from the shorebird family (Scolopacidae) and their modified remnants were rearranged into five newly circumscribed subfamilies (see additions above). Other notable deletions include the subfamilies Melegridinae (turkeys), Tetraoninae (grouse), Phalaropodinae (phalaropes), and Coccyzinae (cuckoos).

Below, we provide a detailed discussion of higher-level taxonomic changes for Tennessee birds by year.

2003 (Flagged species)

In 2003, the Committee made an organizational adjustment to the AOU check-list that focused attention on the higher-level classifications of several problematic groups whose family placements were known to be incorrect based on genetic data, but for which their exact relationships to other groups and their position in the linear list of species was still uncertain. To address this issue, the Committee decided to continue using the existing linear sequence of families and species on the check-list (hence no change in taxonomy), but the problematic taxa were flagged with an asterisk "*" to signal the known uncertainty in their classification (Banks et al. 2003a). This "wait-and-see" approach was selected over other options that included the creation of a large catch-all category of unplaced species (i.e. *incertae sedis*) to reflect the lack of knowledge regarding their classification, or the tentative transfer of species to families where genetic data suggested they could possibly belong, but with a potential risk of creating an unstable classification if future data conflicted with the transfer (Banks et al. 2003a).

Nine species of Tennessee birds were marked with an asterisk by the Committee in 2003. These included three species of *Piranga* tanagers (Summer, Scarlet, and Western tanagers; then family Thraupidae), five putative members of Emberizidae (Snow Bunting and Lapland, Smith's, Chestnut-collared, and Thick-billed longspurs), and Yellow-breasted Chat (then family Parulidae). While flagging these species did not formally change their classification at the time, it did alert users of the AOU checklist that their current placement was problematic and was likely to be modified in the future. The family-level taxonomy of these species would all be addressed in future supplements.

2006 (Two changes: Stercorariinae & Coccyzinae)

The first higher-level taxonomic changes to actually modify the classification of Tennessee birds were made in the 47th supplement to the check-list (Banks et al. 2006). The Committee voted to elevate subfamily Stercorariinae (skuas and jaegers) to family level (Stercorariidae) based on DNA studies showing the group to be sister to the Alcidae (auks, murres, guillemots, and puffins) rather than a member of the Laridae where they were previously treated as a subfamily (Ericson et al. 2003, Paton et al. 2003, Fain and Houde 2004). Also, the subfamilies Coccyzinae (New World cuckoos, including the Yellow-billed Cuckoo and the Black-billed Cuckoo in Tennessee) and Cuculinae (Old World cuckoos) were merged into a single subfamily retaining the name Cuculinae. Both mitochondrial DNA and ribosomal RNA sequences indicated that subfamily Cuculinae was paraphyletic with respect to the Coccyzinae (Sorenson and Payne 2005) and the merger of the two subfamilies resolved the issue of paraphyly and created a monophyletic classification.

2007 (One change: Cathartidae)

The next higher-level change in taxonomy involved the classification of the New World vultures. The 6th edition of the AOU check-list (1983) had treated the New World vultures at the rank of family (Cathartidae) within the order Falconiformes. In 1998 with the publication of the 7th edition, the AOU subsequently transferred the family to the order Ciconiiformes, based on morphological similarities in syringeal structure that suggested the group was more closely related to herons and storks than to the diurnal birds of prey (Griffiths 1994, AOU 1998). Their classification was once again changed in 2007 when the Cathartidae was removed from the Ciconiiformes and returned back to the Falconiformes (Banks et al. 2007). This transfer was based on genetic data (e.g., Cracraft et al. 2004,

Fain and Houde 2004, Ericson et al. 2006) showing the group was clearly unrelated to storks. However, the exact phylogenetic relationship of the Cathartidae within the (then) Falconiformes was still unresolved at that time, and so the family was provisionally flagged with an asterisk to indicate the uncertainty in its placement within the order (see 2003 discussion above). In returning the family to the Falconiformes, the suborder Cathartae was erected to encompass the American vultures. Interestingly, the supplement overlooked one important taxonomic consequence of the transfer. At the time, the check-list classified the American vultures and storks together in the Ciconiae. With the movement of the Cathartidae out of the Ciconiiformes, the suborder would require modification to restrict the group to include only the storks, but this step was not addressed in the supplement.

2009 (One change: *Piranga*)

After flagging the genus *Piranga* in 2003 to indicate that its long-standing placement in the tanager family (Thraupidae) did not reflect the group's true evolutionary relationships, the Committee voted to transfer its nine species to the cardinal family (Cardinalidae). Evidence for this new classification was based on several phylogenetic studies utilizing mitochondrial DNA (Klicka et al. 2000, 2007, Burns et al. 2002, 2003, Chesser et al. 2009).

2010 (11 changes)

The 51st supplement in 2010 brought a massive number of changes in higher-level classifications based primarily on genetic data (Chesser et al. 2010). The following is a breakdown of the changes.

Division of Falconiformes

One significant change was the breaking up of the order Falconiformes. Based on new molecular phylogenetic studies showing that the traditional classification of the order did not represent a monophyletic group (Ericson et al. 2006, Griffiths et al. 2007, Hackett et al. 2008), the Committee split the Falconiformes into two separate orders, Falconiformes and Accipitriformes (Chesser et al. 2010). Amazingly, the new analyses revealed that the family Falconidae was more closely related to the parrots (order Psittaciformes) and perching birds (order Passeriformes) than they were to other families previously classified in the Falconiformes (Fig. 2; McCormack et al. 2013, Jarvis et al. 2014, Prum et al. 2015).

For the AOU region, this resulted in the new order Accipitriformes containing the families Cathartidae, Accipitridae, and Pandionidae (which was also elevated from subfamily to family at the same time; see below), and a reduced and newly circumscribed Falconiformes that included only the falcons and caracaras in the single family Falconidae (Chesser et al. 2010).

The classification of the Osprey has long been contentious with a recurring debate as to whether to the species should be treated as subfamily of the Accipitridae or be recognized in its own separate family. In the fifth edition of the AOU check-list (AOU, 1957) the Osprey was treated at the level of family (Pandionidae). This classification was later changed to subfamily in the sixth and seventh editions (AOU 1983, 1998). The 2010 supplement returned the family status of the Osprey citing the species' unique genetic and morphological distinctiveness (Helbig et al. 2005, Lerner and Mindell 2005, Ericson et al. 2006, Griffiths et al. 2007, Hackett et al. 2008). Since the osprey clade is basal to the all other members of the family (i.e., it is the sister taxa to the Acciptridae), its treatment at either the rank of subfamily or family is acceptable from a phylogenetic standpoint in that the

two options both result in monophyletic taxa. The choice of rank is an example where a higher-level change was made not to specifically resolve issues of paraphyly in classification, but instead based on subjective criteria such as a group's "evolutionary distinctiveness" or its extreme age. In the case of the osprey clade, molecular data show the lineage to have been independently evolving for 27 million years (Prum et al. 2015). This long period is within the estimated age ranges for other diurnal raptor families and also many other avian families (Jarvis et al. 2014, Prum et al. 2015, Mindell et al. 2018).

Other changes made in 2010 as part of the larger Falconiformes/Accipitriformes reorganization include the discontinued use of suborder in the check-list's classification, resulting in the two suborders Falcones and Accipitres being deleted, and also the elimination of subfamily rank in the classification of the family Accipitridae (Chesser et al. 2010).

Family Calcariidae

The genera *Calcarius* and *Rhynchopanes* (longspurs), plus *Plectrophenax* (Snow Bunting) were previously identified in the 2003 supplement as likely not belonging to the family Emberizidae (buntings) based on phylogenetic studies (Yuri and Mindell 2002). To indicate their uncertain family placement, they were flagged with an asterisk (along with numerous other genera and species) in anticipation that new forthcoming data would clarify their relationships (Banks et al. 2003a; see above). This expectation was realized when mitochondrial and nuclear DNA studies (Klicka et al. 2003, Alström et al. 2008) conclusively showed that the three genera are not closely related to the Emberizidae, but instead are a monophyletic clade within an early radiation of the New World nine-primaried oscines. Based on this new evidence, the genera were transferred from the family Emberizidae to the new family Calcariidae (Chesser et al. 2010).

Pelecaniformes and Ciconiiformes

Major realignments were made to the higher-level classifications of the Pelecaniformes and Ciconiiformes in 2010. Phylogenetic studies utilizing mitochondrial and nuclear gene sequences (van Tuinen et al. 2001, Ericson et al. 2006, Hackett et al. 2008) found that their traditional circumscriptions were highly polyphyletic with members of the two orders widely intermixed and one family (Phaethontidae/tropicbirds) being distantly unrelated, falling well outside of either order (Fig. 3).

Prior to the 2010 supplement, the order Pelecaniformes included six families within the AOU region, all characterized by possessing totipalmate feet (a trait where all four toes are completely united by a web). Of the six traditional families, five have been recorded in Tennessee: 1) Fregatidae (frigatebirds), 2) Phalacrocoracidae (cormorants), 3) Anhingidae (anhingas), 4) Sulidae (gannets and boobies), and 5) Pelecanidae (pelicans). The sixth family (Phaethontidae/tropicbirds) has not been documented in the state. The order Ciconiiformes was divided into six families, including the Ciconiidae (storks), Ardeidae (herons, egrets, and bitterns), and Threskiornithidae (ibises and spoonbills) in Tennessee, and the Scopidae (hammerkop) and Balaenicipitidae (shoebill) in the Old World. As previously noted, the New World vultures (Cathartidae) were previously classified in the Ciconiiformes before being transferred to the order Falconiformes in 2007 and then subsequently placed in the order Accipitriformes when it was split from the Falconiformes in 2010.

The updated classification involved the creation of two new orders and the transfer of several Ciconiiform families into the Pelecaniformes (Fig. 3). The tropicbirds

(Phaethontidae), previously placed in the Pelecaniformes, were revealed to be unrelated to either storks or pelicans and were placed in their own separate order (Phaethontiformes; Chesser et al. (2010). The families Sulidae, Fregatidae, Phalacorcoracidae, and Anhingidae, traditionally classified in the Pelecaniformes were found to form a monophyletic clade, being sister to a large clade containing birds classified in both the Ciconiiformes and the Pelecaniformes. This clade of four families was treated as the separate order Suliformes. As part of their transfer into the new order, the rank of suborder (Sulae) was added to accommodate the three families Sulidae, Phalacorcoracidae, and Anhingidae. Also, the removal of these families from the Pelecaniformes resulted in a new circumscription of the suborder Pelecani which was modified to include pelicans only.

The next adjustment involved the transfer of four families in the Ciconiiformes over to the Pelecaniformes (Fig. 3). In Tennessee, these include the Threskiornithidae (ibises and spoonbills) and the Ardeidae (herons and egrets). The families Scopidae (Hammerkop) and Balaenicipitidae (Shoebill) were also reclassified into the Pelecaniformes. Phylogenetic data show these two Old World families form a sister clade with the Pelecanidae and that this clade of three families is sister to the Ardeidae and Threskiornithidae. With the removal of these four families, the Ciconiiformes was reduced to the single family Ciconiidae. Finally, the use of suborder was discontinued in the classification of the Ciconiiformes and the previously used Ciconiae was eliminated. This action resolved the previous issue that was overlooked when the American vultures were removed from the order Ciconiiformes (and the Ciconiae) in 2007 (see above).

Blue-gray Gnatcatcher

In the seventh edition of the AOU check-list, the family Sylviidae (Old World warblers and gnatcatchers) was broadly interpreted and included a large number of species that were later determined to be more closely related to other families based on genetic studies, making Sylviidae non-monophyletic (Cibois 2003, Barker 2004, Barker et al. 2004, Alström et al. 2006, Johansson et al. 2008, Fregin et al. 2009, Gelang et al. 2009). The misclassified taxa were divided into several new families, most of which are not represented in Tennessee (e.g., Cettidae, Phylloscopidae, Acrocephalidae, and Megaluridae). As part of this rearrangement, the gnatcatchers were elevated to family level and given the name Polioptilidae after previously being classified at the level of subfamily (Polioptilinae) within the Sylviidae (Chesser et al. 2010).

2015 (Two changes)

The Committee voted to discontinue the use of the tribe Falconini and to delete the subfamily Caracarinae (caracaras), moving its members to the subfamily Falconinae. No specific reason was cited for either change in classification (Chesser et al. 2015).

2016 (12 changes)

The 57th supplement (Chesser et al. 2016) brought numerous higher-level changes to the check-list including those made at the highest taxonomic ranks during the study period.

Infraclass, parvclass, and superorder

Starting at the rank of class (all birds), the seventh edition of the check-list next placed the modern or true birds into the subclass Neornithes (which excludes extinct, more basal birds from the Jurassic and Cretaceous periods). The Committee decided to eliminate the

use of superorder and voted to change the (then) superorders Paleognathae (ratites and tinamous) and Neognathae (all other birds) to the higher rank of infraclass. Below subclass, the rank of superorder was recognized to classify all living birds into two groups. The superorder Paleognathae was used for the ratites and tinamous (no species in Tennessee), while all remaining bird species were placed in the Neognathae (typical birds). It is at the rank of superorder that the highest taxonomic change was made. The Committee decided to eliminate the use of superorder and instead treat the two clades Paleognathae and Neognathae at the higher rank of infraclass. In addition, between the ranks of infraclass and superorder, parvclass Galloanseres was established to address recent discoveries that had identified an unexpected sister-taxa relationship between orders Galliformes (gallinaceous birds) and Anseriformes (waterfowl). This relationship was supported by multiple lines of evidence including morphological characters (Dzerhinsky 1995, Livezey 1997, Cracraft 1998), and mitochondrial and nuclear DNA gene sequences (Mindell et al. 1997, Groth and Barrowclough 1999, van Tuinen et al. 2000).

Shorebird tribes

The seventh edition of the AOU check-list recognized eight tribes in the shorebird subfamily Scolopacinae (sandpipers and allies; Table 2). In 2016, the Committee voted to eliminate the use of tribes in the classification of shorebirds (Chesser et al. 2016) and to recognize six new shorebird subfamilies (Table 2). Three tribes were simply elevated directly to the rank of subfamily with no change in their membership. Tribes Arenariini (turnstones) and Calidrini (peeps and stints), were merged into a single subfamily (Arenariinae). Snipes (tribe Gallinagini) and woodcocks (Scolopacini) were merged to form a smaller, restricted subfamily Scolopacinae. Tribe Tringini, originally comprising the Tringine sandpipers (Spotted Sandpiper, Solitary Sandpiper, Lesser Yellowlegs, Willet, and Greater Yellowlegs in Tennessee), was combined with subfamily Phalaropodinae (phalaropes) with the name Tringinae having priority.

Cathartidae revisited

The family Cathartidae was elevated to the new order Carthartiformes (Chesser et al. 2016) based on phylogenomic studies showing the clade of New World vultures was as old as many other avian orders (perhaps dating back to the Paleocene; 55-65 mya). Given the group's long evolutionary history, it was considered best to treat them at the same taxonomic rank as similarly aged clades (Jarvis et al. 2014, Prum et al. 2015). These same studies also found that the Cathartidae was sister to the remainder of the Accipitriformes. The sister relationship is important in that it means the New World vultures could be equally be recognized as a family in the Accipitriformes or treated as a separate order; both classifications would give rise to monophyletic groups, and they would both be acceptable from a phylogenetic perspective.

This scenario is one of the few cases where a higher-level change was made not to specifically resolve issues of paraphyly in classification but was instead based on subjective criteria such as a group's "evolutionary distinctiveness" or its extreme age. The other example is the use of family rank instead of subfamily in the classification of the Osprey (see 2010 above).

Table 2. Within the family Scolopacidae, subfamily Phalaropinae and eight tribes of subfamily Scolopacinae were reorganized into eight subfamilies.

PREVIOUS TAXONOMY	REVISED TAXONOMY	TENNESSEE SPECIES
Numeniini	Numeniinae	Upland Sandpiper, Whimbrel, Long-billed Curlew
Limosini	Limosinae	Marbled Godwit, Hudsonian Godwit
Arenariini	Arenariinae	Ruddy Turnstone
Calidrini	Arenariinae	Red Knot, Ruff, Sharp-tailed Sandpiper, Stilt Sandpiper, Curlew Sandpiper, Red-necked Stint, Sanderling, Dunlin, Purple Sandpiper, Baird's Sandpiper, Least Sandpiper, White-rumped Sandpiper, Buff-breasted Sandpiper, Pectoral Sandpiper, Semipalmated Sandpiper, Western Sandpiper
Tringini	Tringinae	Spotted Sandpiper, Solitary Sandpiper, Lesser Yellowlegs, Willet, Greater Yellowlegs
Gallinagini	Scolopacinae	Wilson's Snipe
Limnodromini	Limnodrominae	Short-billed Dowitcher, Long-billed Dowitcher
Scolopacini	Scolopacinae	American Woodcock
Phalaropinae	Tringinae	Wilson's Phalarope, Red-necked Phalarope, Red Phalarope

2017 (Seven changes)

The 58th supplement (Chesser et al. 2017) saw several important adjustments to higher-level classifications in the AOU check-list, including the recognition of two new families (Passerellidae and Icteriidae), and a new subfamily classification for the blackbird family (Icteridae).

Passerellidae

The family Passerellidae was created to accommodate 129 species of New World sparrows in 25 genera (Klicka et al. 2014) that were previously classified in the large family Emberizidae (sparrows, buntings, and relatives). Phylogenetic studies utilizing both nuclear and mitochondrial DNA sequences (Barker et al. 2013, Klicka et al. 2014) found the New World sparrows to form a monophyletic clade, but with mitochondrial and nuclear data trees giving conflicting results as to the group's relationship with the Emberizidae (Chesser et al. 2017).

Yellow-breasted Chat: Icteriidae

One of the most interesting and intriguing changes in 2017 was the placement of the Yellow-breasted Chat (*Icteria virens*) into its own family, Icteriidae. While this species has traditionally been classified in the wood-warbler family Parulidae, it was long recognized that it was an atypical member, exhibiting several aberrant features that suggested a relationship outside the family. As previously noted, the species was marked with an asterisk in 2003 indicating that its classification in the Parulidae was known to be problematic (Banks et al. 2003a; see above). Molecular systematic studies have generated important insights into the phylogenetic relationships among the New World nine-primaried songbirds, a group that includes the Parulidae and other nearby families such as the Cardinalidae, Icteridae,

and the Thraupidae. These studies all show that the Yellow-breasted Chat is clearly not a member of the wood-warbler family, but instead represents a distinct evolutionary lineage, sharing a close relationship with the blackbird family (Icteridae) and several other enigmatic species such as the Wrenthrush (*Zeledonia coronata*) and the two species of Cuban warblers (genus *Teretistris*) (Lovette et al. 2010, Barker et al. 2013, Barker et al. 2015, Chesser et al. 2017). The exact relationship among these groups is still unclear as several nodes had low statistical support, or the phylogenies varied depending on the phylogenetic analysis. Given the overall distinctiveness of the Yellow-breasted Chat compared to warblers and blackbirds, and its uncertain placement in the phylogenies, the Committee (Chesser et al. 2017) voted to remove the Yellow-breasted Chat from the Parulidae and treat the species as a monotypic family (Icteriidae) following the recommendations of Barker et al. (2013).

Observant readers have probably noticed the use of the close spellings of Icteriidae (Yellow-breasted Chat) and Icteridae (blackbird family) which differ by an extra "i" in the Yellow-breasted Chat family. While the two spellings could be easily confused based on their similarity in spelling, the ICZN allows for their use: a one-letter difference is considered enough to distinguish them, and ICZN rules require that the name of the Yellow-breasted Chat family be based on the genus, *Icteria*, giving family Icteriidae (ICZN 1999).

New subfamily classifications for the Icteridae

The Committee voted in 2017 to adopt the use of subfamilies for the blackbird family (Icteridae) following the recommended classification system of Remsen et al. (2016). This was partly prompted by the discovery that the Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) represented an old lineage that is sister to the remaining members of the family (Powell et al. 2014). Seven subfamilies were created for the Icteridae of which five are represented in Tennessee: Xanthocephalinae (Yellow-headed Blackbird), Dolichonychinae (Bobolink), Sturnellinae (meadowlarks; *Sturnella*), Icterinae (orioles; *Icterus*), and Agelaiinae (various blackbird genera).

2018 (Four changes)

The 59th supplement (Chesser et al. 2018) saw four higher-level taxonomic changes that include an updated subfamily classification of the Accipitridae and the elimination of the superfamily Tyrannoidea.

Accipitridae subfamilies redux

After deleting subfamilies from the classification of Accipitridae in 2010 (Chesser et al. 2010), the Committee decided to return back to their usage eight years later (Chesser et al. 2018). The re-establishment of subfamilies was not a direct return to the same previous taxonomy, but instead used a new system advanced by Lerner and Mindell (2005) whose updated taxonomy addressed the prior issues of polyphyly in the designation of subfamilies. Three subfamilies are recognized in the AOU region including Tennessee: 1) Elaninae (White-tailed Kite), 2) Gypaetinae (Swallow-tailed Kite), 3) Accipitrinae (hawks, eagles, and Old World vultures).

2020 (Two changes)

The only higher-level changes made in 2020 (Chesser et al. 2020) to affect classification of Tennessee birds involved the discontinued use of subfamilies in the family Phasianidae (partridges, grouse, turkeys, and Old World quail). Phylogenetic analyses using both

molecular (nuclear and mitochondrial DNA) and morphological data showed that the subfamily classification used in the AOU check-list did not reflect their true evolutionary relationships (Crowe et al. 2006, Wang et al. 2013, Hosner et al. 2016). This finding resulted in the removal of the subfamilies Melegridinae (turkeys) and Tetraoninae (grouse) in Tennessee.

DISCUSSION

Most birders are aware that the names of birds change over time. Sometimes a bird's scientific or Latin name changes, such as when *Dendroica* warblers were assimilated into the genus *Setophaga*. Sometimes it's the standardized English name that changes, such as when Solitary Vireo became Blue-headed Vireo, and sometimes both the scientific and English name change. Dorn et al. (2019) examined name changes for the birds of Tennessee since the 7th edition of the Checklist of North American Birds was released (AOU 1998) and documented 116 changes in the scientific name and eight changes in the English name of bird species that occur in Tennessee. Some of these changes resulted from the splitting of a species into two or more species (e.g., the splitting of Common Gallinule (*Gallinula galeata*) in the Americas from Common Moorhen (*G. chloropus*) in Eurasia), but the majority (77%) of these changes were due to the reallocation of a species from one genus to another. Examples of generic reallocation include the movement of Downy, Hairy, and Red-cockaded woodpeckers from genus *Picoides* to genus *Dryobates* and the transfer of Garganey, Blue-winged Teal, Cinnamon Teal, and Northern Shoveler from *Anas* to *Spatula*. Although changes that occur at the genus and species level are well known among birders, less appreciated are the classification changes that occur at taxonomic ranks above genus.

We investigated the taxonomic changes made above the rank of genus for the birds of Tennessee since the publication of the American Ornithologists' Union's seventh edition of the Check-list of North American Birds in 1998 (AOU 1998). We documented 49 higher-level changes in bird classification for the birds of Tennessee over the past 22 years. Forty-six changes (94%) were adjustments to classifications at the rank of order and below (i.e. order, suborder, superfamily, family, subfamily, and tribe), and three changes (6%) occurred above the rank of order. In total, 26 higher-level taxa were added, including one infraclass (Neognathae), two parvclasses (Neoaves and Galloanseres), three orders (Acciptriformes, Cathartiformes, Suliformes), two suborders, six families, and 12 subfamilies. Fourteen taxa, mostly at the rank of subfamily and below, were deleted and are no longer recognized. Other changes involved the transfer (or reallocation) of nine taxa from one clade to another.

These higher-level changes in taxonomy were necessitated by changes in our understanding of the evolutionary relationships among birds. The ultimate goal of modern taxonomy and nomenclature is to mirror evolutionary history and to depict how life evolved from a common ancestor. As systemacists continue to reconstruct and refine the evolutionary history of birds, classifications will be adjusted to reflect our improved understanding of these evolutionary relationships. Molecular approaches that focus on the analysis of DNA data and ever-improving computational tools will continue to shed light on the evolutionary history of life. Without a doubt, this research will reveal new relationships among birds that will necessitate further adjustments to taxonomy.

One part of the avian evolutionary tree that remains uncertain is the placement of the Yellow-breasted Chat (*Icteria virens*). Several molecular studies show that the Yellow-breasted Chat is not closely related to the wood-warblers (Parulidae), where it had traditionally been grouped, but is a distinct evolutionary lineage now classified in the

monotypic family Icteriidae. The Yellow-breasted Chat is more closely related to blackbirds (Icteridae) and to two other families: Zeledoniidae, which contains only the Wrenthrush, and Teretistridae with the two species of Cuban warbler (Lovette et al. 2010, Barker et al. 2013, Barker et al. 2015, Chesser et al. 2017). However, the exact relationship among these four families is still unclear as several nodes had low statistical support, and different studies have suggested different relationships among them with Parulidae always the sister group (Barker et al. 2013, 2015, Oliveros et al. 2019). Additional study is needed to resolve these relationships.

A natural next step for this work would be to extend the study to include all birds of North America or around the globe. A larger and perhaps longer dataset would permit analyses to examine whether the frequencies of observed clade changes (e.g., splits, deletions, reallocation to a different group) or the data used to justify these changes vary over time. Our understanding of evolutionary relationships continually improves, and our findings emphasize that even in the modern age there is still much to learn about the history of life.

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FIGURES

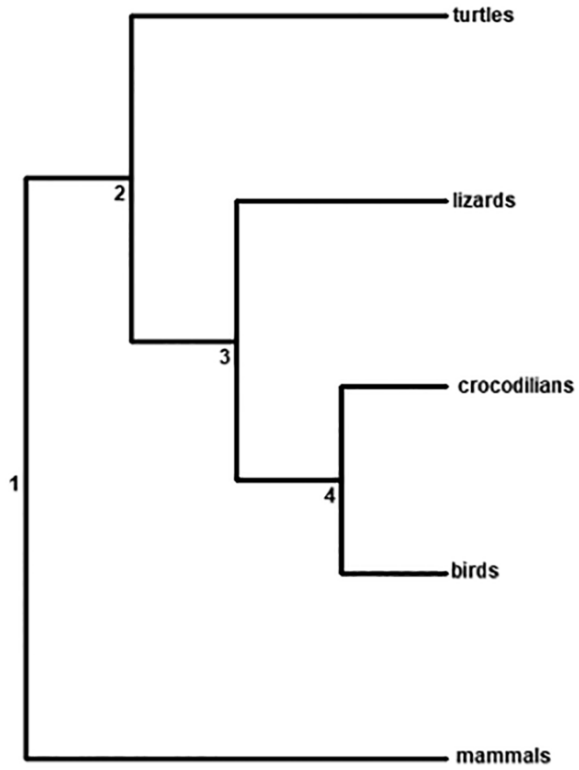

Figure 1. A phylogeny depicts the evolutionary relationships among taxa. Each branch tip represents a taxonomic group such as a species, family, or order. The base of the tree (1) represents the common ancestor of all taxa. Nodes (1-4) represent a split of one evolutionary lineage into two. The two resulting branches are called sister groups, each representing the closest living relative of their shared ancestor. Birds and crocodilians, for example, are sister taxa and share a common ancestor at Node 4. A clade is a monophyletic group of organisms that shares a common ancestor and is depicted as a portion of the evolutionary tree that contains the common ancestor (i.e., a node) and all descendants (branches) of that common ancestor. Each node or branch tip represents a clade.

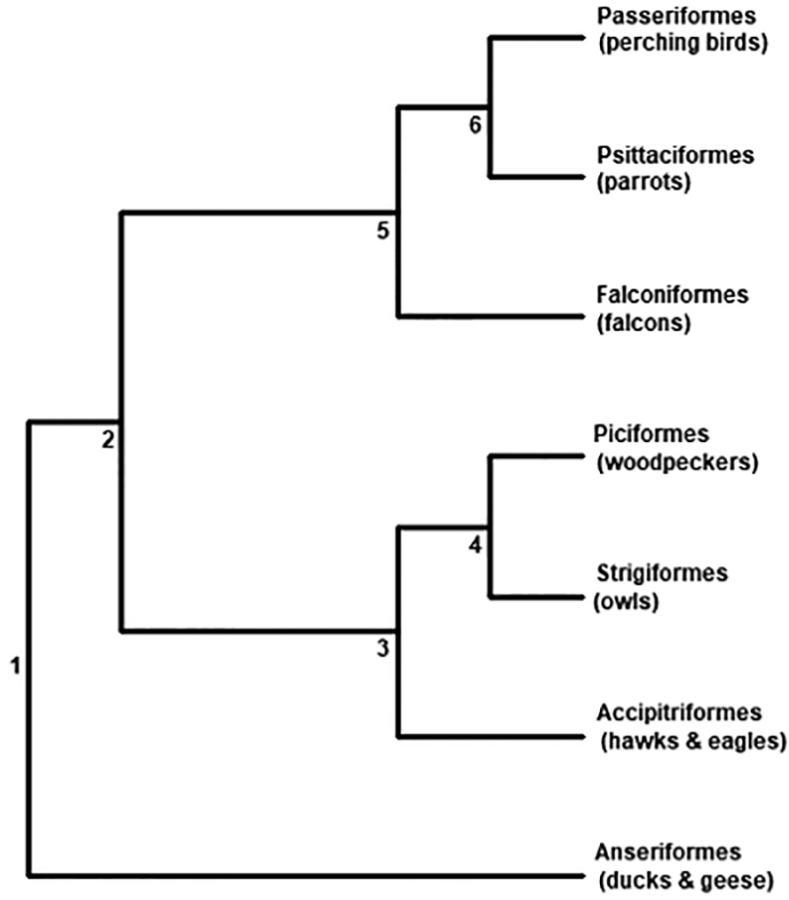

Figure 2. A phylogeny of selected avian orders depicts their evolutionary relationships. The hawks and allies (family Accipitridae) were grouped with the falcons (Falconidae) in the order Falconiformes until 2010, when molecular data demonstrated that hawks and falcons are not closely related. Falcons are more closely related to passerines and to parrots, sharing a common ancestor at Node 5, than they are to hawks. Hawks are more closely related to owls (Strigiformes) and woodpeckers (Piciformes), sharing a common ancestor at Node 3, than they are to falcons. Hawks were split from Falconiformes and placed in order Accipitriformes to reflect their distant evolutionary relationship.

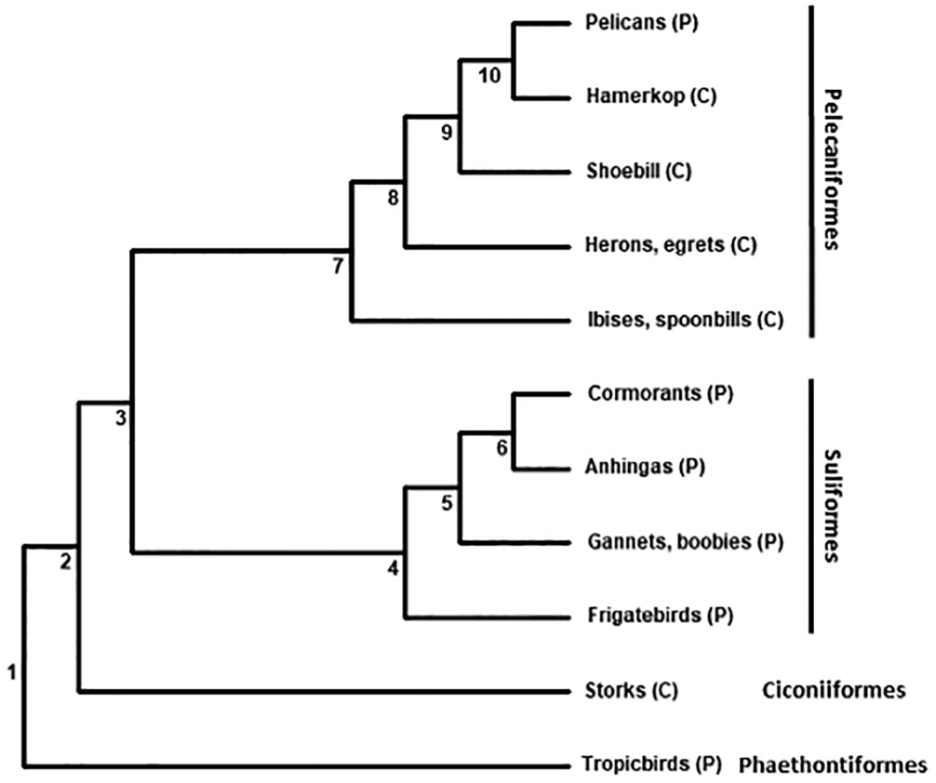

Figure 3. Paraphyly occurs when some, but not all, descendants of a shared ancestor are included in a group. Molecular evidence suggests that the traditional orders Pelecaniformes and Ciconiiformes are paraphyletic. The families of these two groups are depicted with the traditional order of each group represented by a P (Pelecaniformes) or C (Ciconiiformes). These orders are paraphyletic, with some families of each order more closely related to families in the other order. For example, pelicans are more closely related to the Hamerkop, Shoebill, herons, and ibises than to other pelecaniforms. Similarly, the Hamerkop, Shoebill, herons, and ibises are more closely related to pelecaniforms (sharing a common ancestor at Node 7) than to storks (with a common ancestor at Node 1). Tropicbirds are the most distantly related group. Several solutions could resolve the paraphyletic groupings. First, all families could be lumped or merged into a single order, Ciconiiformes, at Node 1. Another option, and the one that was adopted, is to reallocate all ciconiiform families except for storks into the Pelecaniformes (Node 7), to recognize Node 4 as order Suliformes, to keep the storks in Ciconiiformes, and to recognize tropicbirds as order Phaethontiformes. With this solution, all four orders (labeled on far right) are monophyletic.

BANDED PIPING PLOVER IN SHELBY COUNTY

Hal Mitchell[1], Rob Harbin[2], and Ruben Stoll[3]

[1,2] Memphis, Tennessee
[3] Centerville, Tennessee

The Piping Plover (*Charadrius melodus*) is a medium sized shorebird that is listed as threatened and endangered under the Endangered Species Act (USFWS 2021). The species is separated into distinct population segments (DPS). The Atlantic Coast and Northern Great Plains DPS, which is listed as threatened, and the Great Lakes watershed DPS which is listed as endangered.

A Piping Plover was observed during spring migration on 24 April through 26 April, 2020 (Figure 1) at the Maxson Wastewater Lagoons in southwestern Shelby County. It was originally seen by Rob Harbin and later that day by Hal Mitchell, Victor Stoll, and Ruben Stoll. The plover was observed foraging with other shorebird species including Least Sandpiper (*Calidris minutilla*), Pectoral Sandpiper (*Calidris melanotos*), and Lesser Yellowlegs (*Tringa flavipes*).

Figure 1. Photograph by Hal Mitchell of the Piping Plover foraging in the wastewater lagoon at the Maxson Wastewater Lagoons facility on 24 April 2021.

The Piping Plover was also observed to be color banded (Figure 2). Color bands make it possible for observers to identify individual birds using binoculars and spotting scopes. There are multiple projects across North America that color band Piping Plover (USFWS 2020).

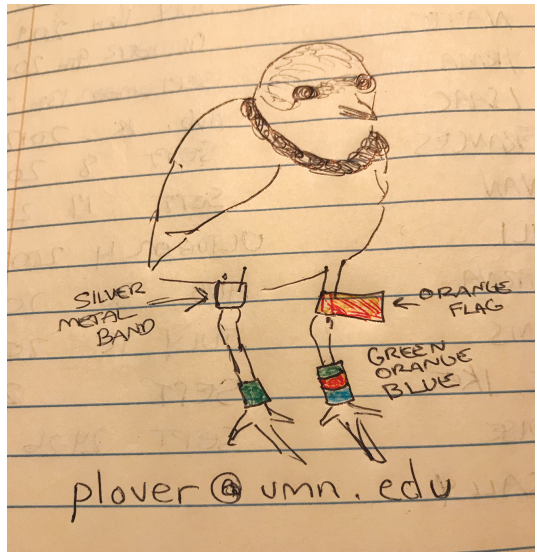

Figure 2. Sketch by Ruben Stoll of the color band configuration on the Piping Plover.

Ruben Stoll contacted the Great Lakes Piping Plover Conservation Team (GLPPCT) to report this sighting. On 2 May 2021, the GLPPCT replied with details of the life history of this individual bird (personal communication Alice Van Zoeren). The plover was banded as a chick in 2011 from its natal nest in North Manitou Island in Sleeping Bear Dunes National Lakeshore in Michigan. It hatched the day after its female parent was predated by a Merlin (*Falco columbarius*). It and its nest mate were then collected by the GLPPCT and captive-reared. The chicks were raised to a point where they could fly well and then released into the wild (GLPPCT 2021). This individual has been nesting at Muskegon State Park in recent years and spending its winters in Texas.

Through great conservation management and the tireless work of wildlife professionals, this individual and many of its cohorts were allowed to survive events that would have killed them otherwise. This captive-rearing program allowed this individual to live a long and productive life and should serve as a model for other vulnerable species (e.g., Red Knot [*Calidris canutus*]) in the future.

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ROUND TABLE NOTES

DECONSTRUCTING A HOUSE WREN'S NEST – In October 2020 my grandsons, Fisher and Tilghman Hollyday, helped me clean the bird houses at my home in Nashville, Davidson County. One of these was an Eastern Bluebird (*Sialis sialis*) house that contained the nest of a House Wren (*Troglodytes aedon*). The nest was removed from the birdhouse and placed into a box to study. Taking the nest apart, piles of ten sticks were made for a total of 680 sticks. A variety of sticks was used. The longest of the sticks measured 20.3 cm, the shortest 1.9 cm. The sticks varied from 0.8 cm wide to 0.3 cm wide. There was a remainder of mixed grasses, cedar bark, and vines which weighed 14 grams and filled 350 ml.

In spring the male House Wren arrives first, selects several nest sites, and places a few sticks therein (Harrison 1975). The female will accept a site and then proceed to build the nest. Though Harrison (1975) says she adds grasses, plant fibers, rootlets, feathers, hair, and rubbish to the twigs, our nest was made primarily of sticks.

Considering the size of the House Wren, 12 cm in length and weighing 11 grams, the number and size of sticks was truly amazing. The wren struggles to fit each stick into the 38 mm hole on the nest box; obviously she succeeds. At least two broods were raised this summer.

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Harrison, H.H. 1975. A Field Guide to Bird's Nests. Houghton Mifflin Company, Boston, Massachusetts.

Susan Hollyday, Nashville, Tennessee

FIRST HOUSE WREN NESTING IN SHELBY COUNTY – House Wrens (*Troglodytes aedon)* have been uncommon Tennessee residents in summer months with records dating back to 1913 in eastern and middle Tennessee, but records in the western part of the state have been scarce. The first nesting record in west Tennessee was 1976 in Dyersburg, Dyer County (Nicholson 1997). However, the last few years in Shelby County have been active with House Wren records as reported to eBird (2021). Singing or other observations were noted from eBird May and June 2019, June 2020, plus numerous records throughout the county in June and July of 2021.

In June of 2020 the first record of House Wrens breeding in Shelby County was noted in the Joffre neighborhood of Memphis. Homeowner L. Humphries (LH) requested species confirmation from F. Falcone (FF) via recordings, photos, and an on-site visit (Table 1). LH noted that in the previous year, Carolina Wrens (*Thryothorus ludoviciacus*) used the nest box in question, and the obvious difference in description (drabber gray-brown adults) and song prompted her inquiry to FF. LH observed one Brown-headed Cowbird (*Molothrus ater*) fledging from the 1st 2020 brood, and multiple House Wrens fledging from the 2nd 2020 brood.

In June and July 2021, House Wrens returned to the same nest box, which had been moved to a different location in the same back yard (Figure 1). Both nestings yielded multiple House Wren fledglings. The 2nd 2021 brood specifically yielded two nestlings, as observed by LH on fledge day (Table 1).

The yard consists of a large garden with primarily native perennials and vegetables with large shade trees in the back. Adult wrens could be seen foraging throughout the garden all summer. LH observed an increase in pest control issues in the vegetable garden by late August, a month after the wrens fledged their 2nd second brood.

In June 2021 M. Jefferson also observed House Wrens nesting in her garden nest box in the Evergreen neighborhood of Memphis (Table 1). Adults built, and the female laid a total of six eggs (Figure 2). For unknown reasons the nest was abandoned, and the eggs did not hatch. The pair did not return to the nest box that season.

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eBird [web application], Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. (Accessed: 10 September 2021)

Nicholson, CP. 1997. Atlas of breeding birds in Tennessee. University of Tennessee Press. Knoxville, Tennessee.

Josephine Fields Falcone, Memphis, Tennessee

Table 1. Observations of nesting House Wrens in two locations in Memphis, Shelby County.

Date of nest observation	Location	Observer(s)	Adult	Egg	Nestling	Fledgling	Notes
Jun-20	Marne St	LH, FF	2				1st Brood: 1 BHCO fledged from HOWR nest in nest box hanging from porch - nest box used by CARW pervious year (videos sent to FF for confirmation)
Jul-20	Marne St	LH, FF	2			2	2nd Brood: At least one nestling heard and adults observed feeding young by LH/FF, LH confirmed later in month that multiple HOWR fledged
Jun-21	Marne St	LH	2			2	1st Brood: At least two nestlings/fledglings observed from first brood of HOWR pair in same nest box, different location in yard
7/1/2021	Marne St	LH, FF	2	Y			2nd Brood: Female incubating, male (singing) visiting repeatedly feeding female, female sitting for 20min, assume eggs, last nest fledged approx 4 weeks ago according to LH
7/5/2021	Marne St	LH	2				Coming and going from same box
7/10/2021	Marne St	LH,FF	2				Multiple visitations by 2 adults over course of 2 hours, photo of adult at box taken
7/16/2021	Marne St	LH, FF	2		2		At least 2 nestlings heard begging from box, food carries by both adults to box (videos sent to FF)
7/18/2021	Marne St	LH	2		2		At least 2 nestlings heard begging from box, food carries by both adults to box (larger carries than previous, insects visible in bills)
7/26/2021	Marne St	LH	1		2		1 adult observed, 2 nestlings observed through hole of nest box
7/27/2021	Marne St	LH	2			2	1 nestling and 1 fledgling observed visually + vocalizations, 2nd nestling fledged later that day, both parents tending
8/4/2021	Marne St	LH	1				Singing bird continues to occasionally visit nest box but no deconstruction/building observed post-2nd brood

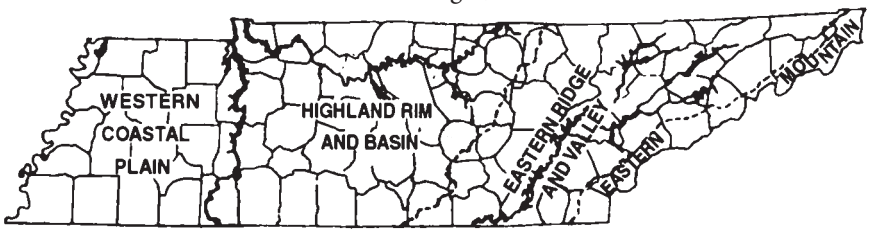
6/11/2021	Hawthorne St	MJ	1				Adult at garden nest box, unidentified brown bird seen going in and out of nest box two weeks prior, nesting material visible through hole
6/20/2021	Hawthorne St	MJ	1				Adult seen exiting and returning to nest box
6/30/2021	Hawthorne St	MJ	1				Adult seen entering next box
7/2/2021	Hawthorne St	MJ	1	6			Adult seen seen visiting next box only once throughout day, photo taken of contents. Nest abandoned after this last observation, cause unclear.

Figure 1. House Wren perched at nest box containing active nest on Marne St. in Memphis, Shelby County.

Figure 2. House Wren nest in nest box with six eggs abandoned on Hawthorne St. in Memphis, Shelby County.

THE SPRING SEASON

Richard L. Knight, Editor



1 March - 31 May 2021

Avian highlights were many this spring. A Burrowing Owl in Humphreys County became the long-anticipated first state record. A new addition to the list of breeding species in Tennessee was provided by Neotropic Cormorants nesting at Duck River Unit, also in Humphreys County. A Green-tailed Towhee in Nashville represented the fourth state record, with all prior sightings from the 1950s. This individual provided the first photo-documented record, although one of the earlier records was of a bird captured and banded. An injured Limpkin was found in Shelby County, but sadly died. This species appears to be expanding its range in the southeast, with vagrants showing up in several states including Tennessee. Other rarities included Trumpeter Swan, Cinnamon Teal, White-winged Dove (3 reports), Swainson's Hawk, Prairie Falcon, and Spotted Towhee.

Black-bellied Whistling-Ducks occurred again in the two middle regions of the state. Continued breeding evidence by Common Mergansers was reported in East Tennessee. Shorebird diversity was quite good, particularly in the two western regions. Among these were four separate Piping Plovers, including a color-banded individual, and four separate Ruffs, including the first state records of males in alternate plumage. King Rails have declined significantly in the state, so two reports this season were noteworthy. Wood Storks in East Tennessee were a pleasant surprise.

Bell's Vireo seems to be increasing in West Tennessee, with seven reports in four counties. The species also continues at Fort Campbell in Middle Tennessee. Fish Crow expansion continues in Middle and East Tennessee. Following the big winter flight, Evening Grosbeaks lingered in three regions along with other boreal finches. A Clay-colored Sparrow was photographed in Sevier County. Additional delights may be gleaned from the reports that follow.

Standard Abbreviations

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

WESTERN COASTAL PLAIN REGION - - March was both warmer (+ 4 degrees) and wetter (+ 4 inches) than normal, while April was the reverse, being cooler (- 2 degrees) and drier (- 2.5 inches). May temperatures were 2 degrees lower than normal, but the month saw a surplus of rainfall (+ 2.5 inches).

The most unusual sighting of the period was a Limpkin in Shelby County. The injured bird was captured and taken to a rehab facility. Unfortunately, an x-ray revealed a fracture in the spinal column and the bird died shortly afterwards. On a happier note, a color-banded Piping Plover was observed in Shelby County. Research revealed the bird was a ten year old male, having been captive raised in Michigan following the death of a parent by a Peregrine Falcon.

Other notable sightings included two additional Piping Plovers, typically more rare in spring than fall, and a total of four Ruffs, the most ever in one season. Also of note were a King Rail and Glossy Ibis in Shelby County, plus Whimbrel, Red-necked Phalarope and Swainson's Hawk in Lake County, and White-winged Doves in Shelby and Carroll Counties. Bell's Vireos appeared at seven sites in four counties, a very good showing.

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

Waterfowl - Limpkin: **Black-bellied Whistling-Duck**: 20 Mar (78) Ensley Bottoms (CVN, Jim Varner), ers; 23-28 May (2-3) Gibson Co (Diana King, photo / MAG); 27 May (2) Dyersburg, Dyer Co (Lisa Clift, photo). **Fulvous Whistling-Duck**: 10 Apr thru season (1-2) Ensley Bottoms (RH, m.ob.). **Greater White-fronted Goose**: 28 Apr (1) Phillipy Pits (RS, VS), lrs. **Redhead**: 16 Mar (338) Hwy 88 Bottoms (DDP), max. **Eared Grebe**: 14 Mar (1) Hwy 88 bottoms (DDP). **White-winged Dove**: 4 May (1, at feeder) Shelby Co (Julie Markham, photo); 17 May (1) McKenzie, Carroll Co (Donna Ward). **Black-billed Cuckoo**: 7 May (1) Eagle L (MCT); 8 May (2) Bogota WMA, Dyer Co (RS, VS); 19 May (1) Fritz Landing (RS, VS, DR, AL); 20 May (1) Shelby Forest (DDP); 21 May (1) Memphis (AT). **Eastern Whip-poor-will**: 8 Apr (1) Reelfoot Hickory Ridge Rd, Lake Co (RS), rare in Co. **Chimney Swift**: 29 Mar (1) Gibson Co (MAG), ers. **Virginia Rail**: 23 Apr (1) Hatchie NWR, Haywood Co (JH); 16 Apr (1) Ensley Bottoms (DDP). **King Rail**: 2 Apr (1) Riverport Rd, Shelby Co (JH). **LIMPKIN**: 11 Apr (1) Memphis (fide Martha Waldron), found injured, taken to North Mississippi Wildlife Rehabilitation where it died 18 Apr.

Shorebirds: **Black-necked Stilt**: 30 Mar (3) Ensley Bottoms (RH), ers; 10 Apr (31) Hwy 79W (RS, AT), max in northern Cos.; also seen in Dyer and Lauderdale Cos. **American Avocet**: 23 Apr (3) Chickasaw NWR (RS, DR, AL). **Black-bellied Plover**: 2 Apr (2) Robinson

Bayou (DR, AL); 13 Apr (1) Hwy 88 Bottoms (AL, DR); 23 / 28 Apr (2) Chickasaw NWR (RS, DR, AL); 25 Apr (2) Ensley Bottoms (RH, HM, m.ob.); 18 May (8) Lauderdale Co (DR, AL); 18-19 May (3-4) Phillipy Pits (RS, VS); 19 May (27) Black Bayou (DR, RS, VS). **American Golden-Plover**: 3 Mar (2) Obion R Bottoms, Lake Co (RS), ers; 13 Apr (1800) Robinson Bayou (DR, AL), max; 19 May (1) Black Bayou (DR, RS, VS), lrs. **Semipalmated Plover**: 5 Apr (5) Ensley Bottoms (RH), ers. **Piping Plover**: 23 Apr (1) Chickasaw NWR (RS, DR, AL); 23 Apr (1) Tiptonville Bar (RS); 25 Apr (1, with color bands) Ensley Bottoms (RH, HM, m.ob.), see intro. **Whimbrel**: 9 Apr (1) Hwy 79W (RS, VS). **Marbled Godwit**: 27 Apr (2) Swan Bay, Kentucky L, Henry Co (RDH, DMy). **Ruddy Turnstone**: 18 May (1) Tiptonville Bar (RS, VS). **Ruff**: 2-3 Apr (1 male, in alternate plumage) Robinson Bayou (DR, AL, m.ob., photo), apparently 1st time this plumage seen in state; 10 Apr (1 male) Hwy 79W (AT, RS, photo), different bird; 12 Apr (1 male) Mud L, Lake Co (MAG, photo); 19 Apr (1 female) Ensley Bottoms (RS, RH, photo). **Stilt Sandpiper**: 9 Apr (2) Hwy 79W (RS), ers. **Sanderling**: 18-23 May (2-11) Tiptonville Bar (RS, VS, m.ob.), rare in spring. **Dunlin**: 24 Mar (1) Hwy 79W (RS, DR, AL), ers; 5 May (800) Chickasaw NWR (DR, AL), max. **Baird's Sandpiper**: 11 Apr (3) Robinson Bayou (RS); 20-25 Apr (1-4) Ensley Bottoms (JH, m.ob.); 22 Apr (2) Hwy 79W (DR, AL); 23 Apr (1) Chickasaw NWR (RS, DR, AL). **White-rumped Sandpiper**: 23 Apr - 23 May (1-65) Chickasaw NWR (RS, DR, AL); 25 Apr - 5 May (2-26) Ensley Bottoms (RS, VS, m.ob.). **Pectoral Sandpiper**: 5 Mar (11) Hwy 88 bottoms (DR, AL), ers; 13 Apr (8,000) Robinson Bayou (DR, AL), new high count in state. **Semipalmated Sandpiper**: 12 Apr (1) Robinson Bayou (RS, VS), ers; 23 May (3600) Chickasaw NWR (RS, VS), max. **Short-billed Dowitcher**: 5 May (16) Chickasaw NWR (DR, AL), max. **Long-billed Dowitcher**: 24 Mar (86) Lake Co (RS, DR, AL), ers; 12 Apr (300) Robinson Bayou (RS, VS); 28 Apr (500) Chickasaw NWR (RS, VS), max. **Wilson's Snipe**: 13 Mar (350+) Milledgeville, McNairy Co (AT, RS, VS), max. **Lesser Yellowlegs**: 1 Mar (1) Eagle L (DDP), ers; 2 Apr (4,000) Robinson Bayou (MAG), max; 12 Apr (2,000) Hwy 88 Bottoms (VS). **Willet**: 20 Apr (1) Eagle L (CVN); 21-25 Apr (1-27) Ensley Bottoms (JH, BFo, Jim Varner, RH, HM); 24 Apr (1) Hatchie NWR (DDP); 24 Apr - 3 May (13-19) Paris Landing SP, Henry Co (AL, RDH, DMy); 28-29 Apr / 13 May (1) Phillipy Pits (RS, VS / MAG). **Greater Yellowlegs**: 3 Mar (16) Lake Co (RS), ers; 2 Apr (400) Robinson Bayou (MAG), max. **Wilson's Phalarope**: 3-13 Apr (1-5) Robinson Bayou (RS, VS, AT, m.ob.); 5 Apr - 5 May (1-23) Ensley Bottoms (RH, m.ob.); 23 Apr - 8 May (1-10) Chickasaw NWR (RS, DR, AL); 28 Apr / 22 May (3 / 1) Phillipy Pits (RS, VS / DDP). **Red-necked Phalarope**: 18-19 May (1) Phillipy Pits (RS, VS, m.ob.). **phalarope sp.**: 26 May (3) Pace Point, Henry Co (VS), likely Red-necked

Gull - Falcon: **Laughing Gull**: 13 Mar (1) western Hardin Co (RS, VS, AT). **Black Tern**: 14 May (1) Gibson Co L (MAG); 18 May (2) Tiptonville Bar (RS, VS). **Caspian Tern**: 31 Mar (1) Gibson Co L (MAG), ers. **Common Tern**: 28 Apr (1) Gibson Co L (MAG); 19 May (1) Fritz Landing (RS); 26 May (2) Pace Point, Henry Co (VS). **Common Loon**: 22 May (1) Phillipy Pits (DDP), lrs. **Anhinga**: 19 May (1) Dyer Co (MAG); 22 May (4) Reelfoot L, Obion Co (Roam Kiselev, photo); 27 May (2) Bogota WMA, Dyer Co (MAG). **American White Pelican**: 13 May (100) Phillipy Pits (MAG); 18 May (125) Chickasaw NWR (DR, AL); good numbers lingering. **American Bittern**: 3 Apr / 2 May (1) Black Bayou (Maureen Ellis / AL, Niklas Klauss); 8 Apr (1) Riverport Slough, Shelby Co (RH); 16 Apr (1) Tennemo Levee (DDP); 12 May (1) Jackson, Madison Co (MCT). **Little Blue Heron**: 31 Mar (1 ad) Shelby Farms (Andrew Gafford), ers. **Glossy Ibis**: 6-7 May (1) Ensley Bottoms (Caleb

Strand / BFo, CVN, photo). **Golden Eagle**: 6 Mar (1) Paris, Henry Co (Robert Wheat); 12 Apr (1 ad) Robinson Bayou (RS, VS). **Mississippi Kite**: 16 Apr (1) Tennemo Levee (DDP), ers; 5 May (128) Dee Webb Rd, Lauderdale Co (DR, AL), max. **Swainson's Hawk**: 12 Apr (1 ad) Robinson Bayou (RS, VS). **"Harlan's" Red-tailed Hawk**: 30 Mar (1) Ensley Bottoms (BFo, RH), lrs. **Peregrine Falcon**: 24 Mar - 19 May (1-2) Lake Co (DR, AL, RS, MAG); 11 Apr (1) Wolf R Greenway (Richard Smith); 18 Apr (1) Hwy 88 Bottoms (A.C. Hassal); 20 Apr (1) Tipton Co (RS); 20 Apr (1) Hatchie NWR, Haywood Co (Andrew Gafford); 20 Apr (1) Eagle L (CVN); 23-25 Apr (1) Ensley Bottoms (RH, BFo, m.ob.); 25 / 28 Apr (1 / 2) Chickasaw NWR (DDP / RS, VS); 29 Apr (1) Dyer Co (Mark Mayfield).

Kingbird - Blackbird: **Western Kingbird**: 5 May (3) Ensley Bottoms (RS, VS), ers; 30 May (1) North Treatment Plant, Shelby Co (Richard Smith). **Olive-sided Flycatcher**: 6 May (1) Overton Park (BFo); 17 May (1) Collierville, Shelby Co (RH); 18 May (1) Gibson Co (MAG); 18 May (1) Wolf R WMA, Fayette Co (RH); 19 May (1) Fritz Landing (RS); 20 May (2) T.O. Fuller SP (BFo); 22 May (1) Shelby Farms (RH). **Yellow-bellied Flycatcher**: 8 May (1) Tennemo Levee (RS, VS); 18 May (1) Mineral Slough, Fayette Co (RH); 18 May (1) Fritz Landing (DR, AL). **Alder Flycatcher**: 8 May (3) Lake Co (VS), ers; 19 May (12) Fritz Landing, Lake Co (RS, VS, AL, DR), max; 20 May (1) T.O. Fuller SP (BFo), lrs; also reported in Fayette, Gibson, and Madison Cos. **Bell's Vireo**: 29 Apr (1) Yarbro Rd, Dyer Co (RDH, DMy); 5 May (2) Thorny Cypress WMA, Dyer Co (DR, AL); 5 May (1) Ensley Bottoms (RS, VS); 13-19 May (1-2) Tumbleweed WMA, Lake Co (MAG); 13 May (1) Cate's Landing, Lake Co (MAG); 17 May (1) Mt Orange, Gibson Co (MAG, photo); 19 May (2) Hwy 78, Lake Co (DR, AL). **Yellow-throated Vireo**: 24 Mar (1) Wolf R Greenway (CVN), ers. **Warbling Vireo**: 8 Apr (2) Tennemo Levee (DR), ers. **Red-eyed Vireo**: 1 Apr (1) Shelby Forest (BFo), ers. **Fish Crow**: 19 Mar (2) Britton Ford, Henry Co (DR). **Northern Rough-winged Swallow**: 6 Mar (4) Eagle L (CVN), ers. **Bank Swallow**: 10 Apr (1) Hwy 79W (RS, AT), ers. **Barn Swallow**: 16 Mar (1) Obion Co (MAG), ers. **Red-breasted Nuthatch**: 10 May (1) Haywood Co (Bob Ford), lrs. **Grasshopper Sparrow**: 14 Apr (3) Lake Co (DR, AL), ers. **Lark Sparrow**: 15 Apr thru season (1-2 at 6 sites) Gibson Co (MAG); 27 Apr (2) Shelby Farms (BFo); 27 Apr (4 at 3 sites) Crockett Co (MAG). **Henslow's Sparrow**: 16 Apr / 26 May (2 / 16) Benton Co (DR / VS); 25 Apr (1) Ensley Bottoms (RH, HM). **LeConte's Sparrow**: 16 Apr (1) Henry Co (DR, AL), lrs. **Yellow-headed Blackbird**: 25 Apr (1 ad male) Ensley Bottoms (PL, SL, CR, SR, photo); 8 May (1) Ensley Bottoms (RS, VS). **Baltimore Oriole**: 15 Mar (1 male, at feeders) Munford, Tipton Co (DDP), apparently same wintering bird last seen in Jan, had survived extended freeze in Feb, but had possible frost-bitten feet. **Brewer's Blackbird**: 8 Apr (4) Lake Co (RS), lrs.

Warbler - Bunting: **Blue-winged Warbler**: 8 Apr (1) T.O. Fuller SP (Andrew Gafford), ers. **Golden-winged Warbler**: 24 Apr - 13 May (10 reports of 1-3 birds) Shelby Co (Richard Smith, BFo, MCT, DDP, RS, VS et al.); 30 Apr (1) Britton Ford, Henry Co (Niklas Klauss); 5 May (1) Lauderdale Co (DR, AL); 8 May (1) Black Bayou (VS); 8 May (1) Tennemo Levee (VS). **Black-and-white Warbler**: 20 Mar (1) Herb Parson's L, Fayette Co (Maureen Ellis), ers. **Prothonotary Warbler**: 1 Apr (1) Obion Co (MAG), ers. **Tennessee Warbler**: 4 Apr (1) Hickman Co (RS), ties early arrival date in state. **Nashville Warbler**: 14 Apr (1) Hickman Co (RS), ers. **Connecticut Warbler**: 14-16 May (1) Overton Park (David Compton, m.ob.); 15 May (1) Ensley Bottoms (Cameron Rutt). **Mourning Warbler**: 5 May (1) Ensley Bottoms (RS, VS); 7 / 20 May (1) Shelby Forest (MCT / DDP); 8 May (1) Wolf R Greenway (CVN et

al.); 13 / 19 May (1) Overton Park (Cameron Rutt / BFo); 19 May (6) Fritz Landing (RS, DR, AL). **Hooded Warbler**: 1 Apr (2) Shelby Forest (BFo), ers. **Cape May Warbler**: 3 May (1) Overton Park (BFo); 8 May (1) Black Bayoy (RS, VS); 18 May (1) Fritz Landing (AL, DR). **Northern Parula**: 21 Mar (1) Wolf R Greenway (CVN), ers. **Blackpoll Warbler**: 14 May (31) Herb Parson's L, Fayette Co (RH), max. **Indigo Bunting**: 5 Apr (1) Shelby Farms (JH), ers. **Painted Bunting**: 5 May (1) Ensley Bottoms (RS, VS), ers.

Addendum: **CALLIOPE HUMMINGBIRD**: 2 Jan 2021 (1 female, banded) Memphis (CR).

Locations: Black Bayou - Lake Co; Chickasaw NWR - Lauderdale Co; Eagle L - Shelby Co; Ensley Bottoms - Shelby Co; Fritz Landing - Lake Co; Hwy 79W - Lake Co; Hwy 88 Bottoms - Lauderdale Co; Overton Park - Shelby Co; Phillipy Pits - Lake Co; Robinson Bayou - Lake Co; Shelby Farms - Shelby Co; Shelby Forest - Shelby Co; Tennemo Levee - Dyer Co; Tiptonville Bar - Lake Co; T.O. Fuller SP - Shelby Co; Wolf R Greenway - Shelby Co.

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HIGHLAND RIM AND BASIN REGION - - Highlights this spring included a state-first Burrowing Owl and nesting Neotropic Cormorants in Humphreys County, along with Prairie Falcon and Green-tailed Towhee in Davidson County, and Spotted Towhee in Williamson County. Also notable were Black-bellied Whistling-Duck, a lingering Trumpeter Swan, White-winged Dove, Common Gallinule, Piping Plover, Marbled Godwit, and lingering Evening Grosbeaks.

After six years as regional compiler, the Winter Season report was the last for Stephen Zipperer. Thanks for a job well done! As of this writing a replacement had not been found, so the following data was compiled by the Season editor Richard Knight.

Waterfowl - Crane: **Black-bellied Whistling-Duck**: 16 May (1) Shelby Park / Bottoms (MS, photo). **Snow Goose**: 10 May (1) Duck R Unit (refuge staff), lrs. **Ross's Goose**: 2 Mar (5) Cannon Co (RSh, DSh), lrs. **Greater White-fronted Goose**: thru 2 Mar (9) Hillsboro Pond (m.ob.); thru May (1) Drake's Cr (TLd). **Cackling Goose**: 13 Mar (9) Williamson Co (JAr), lrs. **Trumpeter Swan**: thru 13 Mar (1 im) Monsanto Ponds, Maury Co (m.ob.). **Greater Scaup**: 3 May (1 male) Old Hickory L (MS), lrs. **Surf Scoter**: 20 Apr (4) Old Hickory L (RS). **White-winged Scoter**: 4-16 Mar (4-6) Percy Priest L (FF, MS, m.ob.); 4 Mar (2) Old Hickory L, Sumner Co (TLd); 6 Mar (3) Old Hickory L (JWb). **Long-tailed Duck**: 1 Mar (2) Pickwick L (Allan Trently). **Ruddy Duck**: 4 May (1) Old Hickory L (MS), lrs. **Horned Grebe**: 9-25 May (1) Drake's Cr (James Davis), lrs. **Eared Grebe**: 4 Mar (1) Old Hickory L, Wilson Co (TLd, photo). **White-winged Dove**: 17 Apr (1) Smyrna, Rutherford Co (Carole Swann, photo). **Black-billed Cuckoo**: 4 May (1) Memorial Park (TLd, photo); 10 May (1) Radnor L (Kevin Bowden, m.ob.); 12 May (1) Putnam Co (BSc, MM); 13 May (1) Walter Hill Park, Rutherford Co (SZ); 15 May (1) Shelby Park / Bottoms (MS, PDC); 19 May (1) Aspen Grove Park, Williamson Co (JAr). **Eastern Whip-poor-will**: 6 Apr (1) Perry Co (RS), ers. **Ruby-throated Hummingbird**: 27 Mar (1) Franklin Co (RCa), ers. **Virginia Rail**: 3 May (2) Montgomery Co (JH). **Common Gallinule**: 1-3 May (1) Duck R Unit (PL,

SL, m.ob.). **Sandhill Crane**: 2 / 24 May (1 / 2) Hillsboro Pond (Dale Swant), lrs.

Shorebirds: **Black-necked Stilt**: 25 Mar (1) Cross Cr NWR (DR, AL); 21 May (1) Duck R Unit (AT). **American Avocet**: 2 May (10) Duck R Unit (RS, VS). **American Golden-Plover**: 17 Mar (10) Duck R Unit (DR), ers; 23 Mar (1) Hickman Co (RS); 13 Apr (1) Eagleville (Chris Agee). **Piping Plover**: 20 Apr (1) Snow Bunting Peninsula, Old Hickory L (Andy Lantz, m.ob., photo). **Upland Sandpiper**: 20 Apr (1) Cross Cr NWR (AL). **Marbled Godwit**: 19 Apr (1) Old Hickory L (JWb, photo). **Ruddy Turnstone**: 14-18 May (6-2) Duck R Unit (refuge staff, m.ob.). **Sanderling**: 21 May (1) Duck R Unit (AT). **Dunlin**: 21 Mar (4) Hillsboro Pond (PL, SL); 3 May (1) Eagleville (SZ). **White-rumped Sandpiper**: 2-14 May (1-3) Duck R Unit (RS, VS); 4 May (3) Old Hickory L (MS, FF, JWb); 18 May (1) Crooked Branch Park, Davidson Co (JWb). **Semipalmated Sandpiper**: 14 May (120) Duck R Unit (RS, VS), max. **Short-billed Dowitcher**: 14 May (74) Duck R Unit (RS, VS). **Long-billed Dowitcher**: 26 Mar / 20 Apr (2 / 6) Duck R Unit (DR / AT); 23 Apr (14) Old Hickory L (MS, m.ob.); 25 Apr (3) Hickman Co (RS); 28 Apr (20) Cross Cr NWR (CR, SR); 29 Apr (8) Franklin Co (SM); 3 May (10) Eagleville (SZ). **Spotted Sandpiper**: 22 Mar (1) Center Hill L, DeKalb Co (Melinda Welton), ers. **Solitary Sandpiper**: 24 Mar (1) Memorial Park (TLd, photo), ers. **Lesser Yellowlegs**: 3 Mar (10) Duck R Unit (DR), ers. **Willet**: 19 Apr (4) Old Hickory L, Sumner Co (James Davis, m.ob.); 27 Apr (37) Old Hickory L (JWb, m.ob.); 28 Apr (50) Cross Cr NWR (CR, SR); 29 Apr (18) Johnsonville SP, Humphreys Co (AT); 2 May (16) Hillsboro Pond (Dale Swant); 2 May (43) Cheatham Dam, Cheatham Co (JH, Sharon Arnold); 2 May (1) Old Hickory L (JWb); 2-5 May (16-1) Duck R Unit (RS, VS, AT); 9 May (2) Carter's Cr L, Williamson Co (Paige O'Neal); 14 May (23) Duck R Unit (refuge staff). **Greater Yellowlegs**: 3 Mar (2) Duck R Unit (DR), ers. **Wilson's Phalarope**: 29 Apr (1) Franklin Co (SM); 4 May (1) Coffee Co (Dale Swant).

Gull - Falcon: **Laughing Gull**: 30 Apr - 8 May (1 ad) Old Hickory L (MS, m.ob.). **Herring Gull**: 13 May (1) Old Hickory L, Davidson / Sumner Cos (MS, TLd), lrs. **Lesser Black-backed Gull**: 12 / 20 Mar (1 ad / 1 im) Pickwick L (RS); 26 Mar (1 ad) Drake's Cr (TLd, photo); 20-21 Apr (1 im) Old Hickory L (GG, JWb, photo). **Black Tern**: 3 May (1) Old Hickory L (MS); 11 May (2) Cross Cr NWR (JH, Iris Kilpatrick); 15 May (1) Woods Reservoir (RCa); 29 May (2) Center Hill L, DeKalb Co (Mark Taylor). **Caspian Tern**: 25 Mar (1) Pickwick Dam (AT), ers. **Red-throated Loon**: 4-16 Mar (1-3) Percy Priest L (FF, m.ob., photo); 12 Mar (1) Pickwick L (RS); 5-7 Apr (1) Old Hickory L, Sumner Co (TLd, photo); 12 May (1) Old Hickory L (RS, VS), new late date in state. **Pacific Loon**: 3 / 13 Mar (1) Percy Priest L (GG, JAr / Ken Oeser), likely continuing from winter; 3 May (1, breeding plumage) Old Hickory L (MS), new late date in state and possibly 1st record of breeding plumage seen in state. **American White Pelican**: 3 Mar - 6 May (43-14) Woods Reservoir (RSh, DSh, m.ob.); 8 Mar (280) Percy Priest L (FF); 13 Mar (204) Tennessee R, Perry Co (RS, VS, AT); 17-18 Mar (9) Edgar Evins SP, DeKalb Co (Mark Taylor); 25 Mar / 1 May (120 / 1) Drake's Cr (TLd / MS); 27 May (28) Duck R Unit (DR); 29 May (1) Pickwick L (VS, RS), lrs. **Neotropic Cormorant**: 14-30 Mar (1) Drake's Cr (TLd, photo, m.ob.); 3-29 May (1-3, with 1-2 active nests) Duck R Unit (RS, m.ob.), 1st breeding record in state. **Least Bittern**: 12 May (1) Duck R Unit (RS, VS). **American Bittern**: 1-3 May (1) Duck R Unit (PL, SL). **Snowy Egret**: 13 / 29 Apr (2 / 1) Old Hickory L, Sumner Co (TLd, m.ob.). **Cattle Egret**: 11 Mar (1) Humphreys Co (RS), ers; 18 Mar (1) Shelby Bottoms (Thomas Kelly, photo). **Yellow-crowned Night-Heron**: 13 Mar (1) Murfree Springs Wetland, Rutherford

Co (Scott Russom, photo), ers. **Glossy Ibis**: 2-5 May (1) Duck R Unit (RS, VS, AT, photo, m.ob.). **White-faced Ibis**: 5 May (1) Duck R Unit (GG, MS, photo, m.ob.); 13-15 May (1) Percy Priest WMA Field Trial Area, Rutherford Co (Phillip Parsley, m.ob., photo). ***Plegadis* sp.**: 17 / 30 May (6 / 1) Duck R Unit (refuge staff / Ariel Dunham, Marjorie Dunham). **Golden Eagle**: 13 Mar (1) Coffee Co (Susan McWhirter). **Mississippi Kite**: 27 Apr (1) Dickson Co (Marjorie Dunham); 4 May (1) Perry Co (RS); 9 May (1) Cedars of Lebanon SP, Wilson Co (JN, Robin Nation, photo); 14 May (34) Duck R Unit (RS, VS); 15 May (7) Upper Savannah Bottoms (Warren Massey). **Broad-winged Hawk**: 28 Mar (1) Dickson Co (PL, SL), ers. **BURROWING OWL**: 1-10 Apr (1) Johnsonville Fossil Plant, Humphreys Co (Tammy Ross, photo, fide Damien Simbeck, m.ob.), in an area closed to the public but distantly visible from outside, 1st state record. **Short-eared Owl**: 4 Mar (1) Fort Campbell (DMo); thru 29 Mar (1) Jim Johnson Rd, Montgomery Co (Mike O'Malley). **Merlin**: 2 May (1) Duck R Unit (AT), lrs. **Peregrine Falcon**: 28 Apr (1) Rutherford Co (JWa); 29 Apr (1) Humphreys Co (AT); 7 May (1) Coffee Co (RSh, DSh); 10 May (1) Williamson Co (Hugh Barger); 12 May (1) Lawrence Co (Jamin Beachy). **PRAIRIE FALCON**: 20 Mar (1) Warner Parks, Davidson Co (GG, photo).

Flycatcher - Finch: **Scissor-tailed Flycatcher**: 7 Apr (1) Wartrace, Bedford Co (Roy Turrentine); 16 Apr (1) Manchester Pike, Rutherford Co (SZ); 20 Apr (1) Clifton, Wayne Co (RS); 20 Apr (1) Savannah Bottoms, Hardin Co (RS); 6 May (1) Wilson Co (Chris Agee); 8-26 May (1-3) Lytle Cr Rd, Rutherford Co (JWa, m.ob.); 12 May (1) Eagleville (Hugh Barger). **Olive-sided Flycatcher**: 6 May (1) Radnor L (VS, m.ob.). **Yellow-bellied Flycatcher**: 11-15 May (1) Radnor L (MAG, MCT, m.ob.); 12 May (1) Shelby Park/ Bottoms (PDC); 12 May (1) Fort Campbell (DMo). **Alder Flycatcher**: 4-18 May (at least 12 reports) Davidson, Humphreys, Montgomery, Sumner, and Williamson Cos (MS, GG, FF, TLd, DMo, RS, VS, Steve Goodbred); 15 May (3) Shelby Park / Bottoms (MS, PDC), max; good showing. **White-eyed Vireo**: 21 Mar (1) Williamson Co (JAr), ers. **Bell's Vireo**: 27 May (3) Fort Campbell (DMo). **Fish Crow**: thru May in Davidson and Sumner Cos (m.ob.); 3 / 19 Mar (1 / 3) Duck R Unit (DR / refuge staff); 3 Mar (5) Woods Reservoir (RSh, DSh); 20 Apr (1) Shelton Ferry WMA, Montgomery Co (DR, AL); 3 May (2) near Gray's Landing, Stewart Co (AL); 27 May (1) Barkley WMA, Stewart Co (DR). **Barn Swallow**: 13 Mar (2) Sumner Co (TLd), ers. **Cliff Swallow**: 15 Mar (5) Montgomery Co (JH), ers. **Red-breasted Nuthatch**: 11 May (1) Radnor L (MAG, MCT), lrs. **Evening Grosbeak**: thru 6 Mar (4) Olivehill, Hardin Co (m.ob.); 12 Mar (2) Perry Co (VS). **Purple Finch**: 15 May (1) Wilson Co (JN, Robin Nation); 15 May (1) Radnor L (RS, VS, MCT); lrs.

Sparrow - Grosbeak: **Lark Sparrow**: 20 Apr (1) Savannah Bottoms (RS); 6 May (1) Bell's Bend, Davidson Co (FF, m.ob.); 6 May (1) Wilson Co (JN); 13 May (1) Huntland, Franklin Co (SM); 13 May (2) Elora, Lincoln Co (SM); 15 May (1) Hardin Co (Warren Massey); 31 May (1) Coffee Co (RCa). **LeConte's Sparrow**: 19-23 Mar (1) Duck R Unit (DR); 21 Mar (1) Duck R, Hickman Co (RS). **Henslow's Sparrow**: 26 Mar / 27 May (3 / 19) Fort Campbell (DMo), ers / max; 17-20 Apr (1-2) Shelton Ferry WMA, Montgomery Co (CR, SR, m.ob.). **GREEN-TAILED TOWHEE**: 10-13 May (1, at feeder) Nashville (Ariel Dunham, photo, m.ob.). **Spotted Towhee**: thru 23 Mar (1) Williamson Co (m.ob.), continuing. **Yellow-headed Blackbird**: 6-13 May (1 male) Welch College, Sumner Co (MS, m.ob.). **Baltimore Oriole**: 9 Apr (1) Sumner Co (James Davis), ers. **Brewer's Blackbird**: 14 Mar (2 males) Leiper's Fork, Williamson Co (JAr, photo); 18 Mar (1 male) Bell's Bend, Davidson Co (GG);

26 Mar (1 female) Peeler Park, Davidson Co (GG). **Ovenbird**: 9 Apr (1) Sumner Co (TLd), ers. **Louisiana Waterthrush**: 12 Mar (1) Perry Co (VS), ers. **Northern Waterthrush**: 2 May (35) Duck R Unit (RS, VS), new high count in state. **Golden-winged Warbler**: 11 May (1) Hardin Co (Warren Massey). **Black-and-white Warbler**: 17 Mar (1) Perry Co (AT), ers. **Connecticut Warbler**: 16-18 / 21 May (1-2) Radnor L (Jan Shaw, m.ob.). **Mourning Warbler**: 1 May (1) Perry Co (fide RS); 6 May (1) Murfreesboro (JWa); 10-15 May (1-2) Radnor L (Randy Harrod, m.ob.); 10 May (1) Old Hickory Dam, Sumner Co (TLd, photo); 13 May (1) Rockland Rec Area, Sumner Co (MS, TLd); 16 May (1) Station Camp Greenway, Sumner Co (MS). **American Redstart**: 8 Apr (1) Putnam Co (Mark Taylor), ers. **Black-throated Blue Warbler**: 1 May (1 male) Natchez Trace Parkway, Williamson Co (Richard Connors); 6 / 15 May (1 female) Radnor L (Jan Shaw, Mary Zimmerman / Randy Harrod); 12 May (1 male) Radnor L (RS, VS). **Yellow-throated Warbler**: 21 Mar (1) Duck R, Hickman Co (RS), ers. **Prairie Warbler**: 30 Mar (1) Memorial Park (TLd, photo), ers. **Black-throated Green Warbler**: 20 Mar (1) Radnor L (PL, SL), ers. **Blue Grosbeak**: 10 Apr (1) Perry Co (VS), ers.

Locations: Cross Cr NWR - Stewart Co; Drake's Cr - on Old Hickory L, Sumner Co; Duck R Unit - unit of Tennessee NWR, Humphreys Co; Eagleville - Rutherford Co; Fort Campbell - Montgomery Co; Hillsboro Pond - Coffee Co; Memorial Park - Sumner Co; Old Hickory L - Davidson Co (unless specified otherwise); Percy Priest L - Davidson Co; Pickwick L - Hardin Co; Radnor L - Davidson Co; Savannah Bottoms - Hardin Co; Shelby Park / Bottoms - Davidson Co; Woods Reservoir - Franklin Co.

CUMBERLAND PLATEAU / RIDGE and VALLEY REGION - - March was a bit warmer than normal, while April and May were slightly cooler than normal. Rainfall in the Tri-cities area was heavy in March (6.6 in), nearly double the normal amount, while April and May were rather dry (1.1 and 2.25 in, respectively). Parts of the region experienced a major hatch of 17-year cicadas in May and June, making birdsong difficult to hear but providing an abundant food source for many birds.

Two sightings of Black-bellied Whistling-Duck added to the small number of regional records. A male Cinnamon Teal in Washington County provided the third record for East Tennessee; the other two had come from Hamilton County. Common Mergansers were widely scattered, including at several potential breeding locations. Good numbers of Black-billed Cuckoo, Virginia Rail, and Mississippi Kite occurred, along with three reports of Common Gallinule. Shorebirds were highlighted by Upland Sandpiper, Long-billed Dowitcher, Willet, and Red-necked Phalarope. A small group of Wood Storks in Blount County were very unexpected, especially in spring. A Tricolored Heron appeared in Hamilton County.

Scissor-tailed Flycatchers returned to two traditional breeding sites in the Sequatchie Valley, while another was seen in Hamilton County. A Clay-colored Sparrow in Sevier County was noteworthy. Lingering boreal irruptives included Evening Grosbeaks in five counties and two reports of Red Crossbill. Three Connecticut Warblers represented a good tally for spring in East Tennessee.

Waterfowl - Gallinule: **Black-bellied Whistling-Duck**: 17 May (4) Pickett CCC SP, Pickett Co (Allen Barlow, photo); 22 May (10) Lakeshore Park (RoK, m.ob., photo). **Snow Goose**:

25 May - 1 June (1) Steele Cr. Park, Sullivan Co (Jeremy Stout, Lance Jessee, m.ob.). **Ross's Goose**: thru 6 Mar (1) Knox Co (m.ob.), lrs. **Greater White-fronted Goose**: 14-20 Mar (1) Middlebrook L, Sullivan Co (RRK, m.ob.); 19-20 Mar (1) Fort Loudoun L (BSc); thru 2 Apr (1) Concord Park, Fort Loudoun L, Knox Co (m.ob.). **CINNAMON TEAL**: 29 Mar (1 male) Limestone, Washington Co (Warren Massey, m.ob., photo), 1st record in NE Tenn. **Redhead**: 4 May (1) Watts Bar L (RSh, DSh), lrs. **Greater Scaup**: 4 May (1 male) Watts Bar L (RSh, DSh, photo), lrs. **White-winged Scoter**: thru 6 Mar (1) Douglas Dam, Sevier Co (KW, m.ob.). **Common Goldeneye**: 4 May (1 female) Watts Bar L (RSh, DSh, photo), lrs. **Hooded Merganser**: 24 May (female with 7 yg) Kyker Bottoms (Dawson Rader). **Common Merganser**: 3 Mar (3 pairs) L Dartmoor, Cumberland Co (Nicole Koeltzow); 9 Mar (1 male) Leatherwood Ford, Big South Fork, Scott Co (Nell Moore); 11-12 Mar (1 female) Chickamauga L (Carra Simpson, Pasquel Lozengue, m.ob.); 12 Mar (pair) Austin Springs, Washington Co (RLK); 14 Mar / 8 May (1 female / pair) Tellico R, Monroe Co (KAC / Dawson Rader); 21 Mar (1 female) Little Sequatchie R, Marion Co (RCa, photo); 3 May (1 male) Pigeon R, just upstream from Newport, Cocke Co (BSc, MM). **Horned Grebe**: 2 May (1) Nickajack L (RSh, DSh), lrs. **Black-billed Cuckoo**: 6-8 / 18 May (1-2) Johnson City (DK, m.ob.); 8-12 May (4 reports) Bristol (Adrianna Nelson, Rob Biller, Lance Jessee); 8-9 May (1) VW Wetland, Hamilton Co (Geoff Jensen, m.ob.); 9 May (1) Kyker Bottoms (BSc, MM); 10 May (1) Loudon Co (MM); 11 May (1) Sharp's Ridge (Shane Williams); 16 / 17 May (1) Maryville (TH / RW); 23 May (1) Grainger Co (BSc). **Eastern Whip-poor-will**: 30 Mar (1) Hamilton Co (KAC, BD), ers. **Chimney Swift**: 31 Mar (1) Hamilton Co (BD), ers. **Ruby-throated Hummingbird**: 28 Mar (1) Hamilton Co (Tim Jeffers), ers. **King Rail**: 16-19 Apr (1) Kyker Bottoms (Nick Stahlman, m.ob., audio on eBird). **Virginia Rail**: from Feb thru 1 May (1-2) Meadowview golf course, Kingsport (BFi, SQ, m.ob.); late Feb thru 5 May (1) John Sevier L (SHu); 3-4 Mar (1) Bradley Co (RHo); 5 Mar - 15 Apr (1-2) Kingsport greenbelt (Gary Bailey); 14 Mar (1) Heritage Center Greenway, Roane Co (RoK); 20 Mar - 9 May (1) Kyker Bottoms (WB, m.ob.); 21 Mar (1) Swan Pond Rec Area, Roane Co (RoK); 17 Apr (1) Standifer Gap Marsh, Hamilton Co (Dan Jacobson). **Common Gallinule**: 8-19 May (1-2) Brainerd Levee (BD, m.ob.); 9-10 May (1-2) Kyker Bottoms (KB, Evan Kidd, photo); 14-15 May (1) John Sevier L (SHu).

Sandpiper - Falcon: **Upland Sandpiper**: 5 / 7 May (1) Camp Jordan, Hamilton Co (Joy Adama / Kent DuBois). **Dunlin**: 3 Mar (2) Candies Cr, Bradley Co (RHo). **White-rumped Sandpiper**: 9 May (1) Brainerd Levee (BD). **Short-billed Dowitcher**: 5 May (1) Brainerd Levee (BD). **Long-billed Dowitcher**: 15-17 Mar (1) Brainerd Levee (BD, m.ob., photo); 3 May (1) Ish Cr Bay, Fort Loudoun L (BSc, MM). **Lesser Yellowlegs**: 1 Mar (2) Chattanooga (BD), ers. **Willet**: 9 May (4) Concord Park, Fort Loudoun L, Knox Co (Mike Winck, photo). **Greater Yellowlegs**: 9 Mar (1) Brainerd Levee (BD), ers. **Red-necked Phalarope**: 20 May (2) Eagle Bend fish hatchery, Anderson Co (Pat Phillips, m.ob., photo); 26-28 May (1) Paddle Cr. Pond / South Holston R, Sullivan Co (RRK, m.ob., photo). **Laughing Gull**: 16 Mar (1) Watts Bar L (RSh, DSh). **Ring-billed Gull**: thru 25 May (1) Chickamauga L (BD), lrs. **Black Tern**: 5 May (1) Fort Loudoun L (TH), only report. **Caspian Tern**: 10 Apr (1) Nickajack L (TLR), ers. **Red-throated Loon**: thru 7 Mar (1) Chickamauga L (m.ob.); 10 Apr (1) Nickajack L (TLR). **Pacific Loon**: continuing thru 6 Mar / 8 Apr (1) Chickamauga L (m.ob.). **Wood Stork**: 28 May (3-4) Butler Mill Rd, Blount Co (Christie Bass, photo, m.ob.). **American White Pelican**: 4 Mar (368) Ish Cr Bay, Fort Loudoun L (WB, KB), max; 4 Mar (40) John Sevier L (SHu); 13 Mar (41) Seven Islands SP (Nick Stahlman); 23 Mar

(2) Watts Bar L, Roane Co (RoK); 2 May (2) Nickajack L (RSh, DSh); 8 May (57) Hiwassee Refuge (Barrie Davenport); 18 May (50) Hamilton Co (Pixie Lanham, Gary Lanham); 19 May (2) Soddy L, Hamilton Co (Jay Mills). **Least Bittern**: 16 Apr - 2 May (1) Standifer Gap Marsh, Hamilton Co (BD, m.ob.); 20 Apr - 10 May (1-2) Kyker Bottoms (RW, m.ob.). **American Bittern**: 12 Mar - 3 Apr (1-2) Kyker Bottoms (Michael McCloy, m.ob.); 5 Apr (1) Baylor School, Hamilton Co (Luke Thompson); 17 Apr (1) Standifer Gap Marsh (RCa). **Snowy Egret**: 17 Apr (1) Brainerd Levee (Carol Smith); 27 Apr - 2 May (1) Amnicola Marsh, Hamilton Co (BD, m.ob.); 5 May (1) Blount Co (TH). **Tricolored Heron**: 14-16 May (1) Brainerd Levee (Jay Mills, m.ob.). **Little Blue Heron**: 20 May (1 ad) Eagle Bend fish hatchery, Anderson Co (Pat Phillips, m.ob.); 30 May (1 ad) Roane Co (RHo); 30 May (6) Barker Island, Watts Bar L (RSh, DSh). **Green Heron**: 29 Mar (1) Knox Co (Jeremy Dotson), ers. **Yellow-crowned Night-Heron**: 24 Mar (1) Kingsport (BFi, SQ), ers, with 13 birds and 5 nests in Apr (RLK). **Golden Eagle**: 22 Mar (1 im) Bledsoe Co (RSh, DSh, photo). **Mississippi Kite**: 6 May (1) Sewanee, Franklin Co (Peter Ceren); 29 May (1) Seven Islands SP (EBo); 30 May (1) Maryville (WB); 31 May (1) Greene Co (Jeff Bailey); 31 May into Jun (1-2) Fountain City, Knox Co (Laura Tappan, BSc, m.ob.). **Broad-winged Hawk**: 17 Mar (1) Knox Co (TH), ers. **Peregrine Falcon**: 1 Mar (1) Lakeshore Park (Chuck Estes); 11 May (1) Johnson City (DK).

Flycatcher - Nuthatch: **Scissor-tailed Flycatcher**: 15 Apr thru season (2) East Valley Rd, Sequatchie Co (RSh, DSh); 15 Apr thru season (2) Nine-mile Crossroad, Bledsoe Co (RSh, DSh); 4 May (1) Riverport Fields, Hamilton Co (BD). **Olive-sided Flycatcher**: 8 May (1) Lookout Mtn (Luke Thompson); 9 May (1) Grainger Co (Dallas Harrell, photo); 16 May (1) Brainerd Levee (BSc); 20 May (1) Chattanooga (Luke Thompson). **Alder Flycatcher**: 9 May (1) Kyker Bottoms (BSc, MM); 19 May (1) Chester Frost Park, Hamilton Co (Donald Sutherland). **White-eyed Vireo**: 27 Mar (1) Chattanooga (BD), ers. **Philadelphia Vireo**: 22 Apr (1) Sharp's Ridge (TH, Laura Tappan). **Fish Crow**: 3 May (1) Alandale, Hawkins Co (SHu); thru season in Johnson City, Kingsport, and Bristol (m.ob.) as the species continues to increase in Northeast Tenn. **Common Raven**: thru season in Johnson City, Kingsport, and Bristol (m.ob.); 9 / 15 Mar (1) Bean Station, Grainger Co (Tammy Griffey / Dallas Harrell); 11 Mar - 20 Apr (1-2) Phipps Bend, Hawkins Co (Gary Bailey); 12 Mar (1) near Tusculum, Greene Co (Drew Dickert); 17 Mar (1) Forks of the River WMA, Knox Co (TH); 2 Apr (1) Sharp's Ridge (EBo, BSc); 12 Apr (1) Pickett CCC Memorial SP, Picket Co (Allen Barlow); 18 Apr (1) Seven Islands SP (Mark Armstrong); 15 May (1) Maryville (Valerie Wininger). **Brown-headed Nuthatch**: 15 May (1) Wartburg, Morgan Co (BSc).

Wren - Blackbird: **Sedge Wren**: 2 May (1) Brainerd Levee (Jim Flynn). **Blue-gray Gnatcatcher**: 4 Mar (1) Turkey Cr Greenway, Knox Co (Laura Tappan), new early arrival date in state. **Swainson's Thrush**: 31 May (1) Lookout Mtn (BD), lrs. **Wood Thrush**: 6 Apr (1) Bristol (Cade Campbell), ers. **Gray Catbird**: 6 Mar (1) Kyker Bottoms (Evan Kidd), ers, if not wintering nearby. **American Pipit**: 9 May (2) Roane Co (RoK, photo), lrs. **Evening Grosbeak**: lingering from winter at several sites; 17 Mar (4) Marion Co (RCa); thru 2 Apr (1) Loudon Co (Geoff White); thru 22 Apr (6) Greene Co (Jeff Bailey); thru 29 Apr (4) Anderson Co (Kathy Stout); thru 13 May (1) Bledsoe Co (RSh, DSh), lrs. **Red Crossbill**: 18 Apr (1) Lookout Mtn (KAC); 16 May (8) Avondale Springs, Grainger Co (Dallas Harrell, photo). **Purple Finch**: 5 May (1) Greene Co (Jeff Bailey); 26 May (1 male) Hamilton Co (Pixie Lanham, Gary Lanham), lrs. **Pine Siskin**: several scattered reports thru Apr and

into early May; 14 May (12) Fentress Co (Allen Barlow); 10-23 May (1-3) Steele Cr. Park, Sullivan Co (Don Holt, m.ob.), lrs. **Clay-colored Sparrow**: 23 Apr (1) Pigeon Forge, Sevier Co (Greg Ward, KW, photo). **Vesper Sparrow**: 9 Mar (1) Brainerd Levee (BD), ers. **Orchard Oriole**: 10 Apr (1) Marion Co (TLR), ers.**Brewer's Blackbird**: 2 Apr (2, male and female) Ooltewah, Hamilton Co (BD).

Warbler - Dickcissel: **Worm-eating Warbler**: 7 Apr (2) Fall Cr Falls SP, Van Buren Co (Ashley Peele), ers. **Northern Waterthrush**: 26 May (1) Seven Islands SP (Dan Lane), lrs. **Black-and-white Warbler**: 24 Mar (3) Lookout Mtn (BD), ers. **Golden-winged Warbler**: 22 Apr (1) Campbell Co (Doug Raybuck), ers; 5 May (1) Sharp's Ridge (Howard Haysom, m.ob.); 24 May (male paired with female Blue-winged Warbler) Anderson Co (Doug Raybuck). **"Brewster's" Warbler**: 19 May (3) Campbell Co (Doug Raybuck). **Connecticut Warbler**: 13-15 May (1) Greenway Farms, Hamilton Co (David Aborn, m.ob.); 15-17 May (1) Melton Hill Park, Knox Co (Colin Sumrall, m.ob.); 16 May (1) Lakeshore Park (RoK). **Mourning Warbler**: 16 May (1) Seymour, Sevier Co (KW). **Common Yellowthroat**: 22 Mar (1) Kyker Bottoms (RW), ers. **American Redstart**: 12 Apr (1) Sharp's Ridge (EBo), ers. **Blackpoll Warbler**: 25 May (1) Warrior's Path SP, Sullivan Co (BFi, SQ), lrs. **Black-throated Blue Warbler**: 6 May (1) Sewanee, Franklin Co (SM et al.). **Yellow-throated Warbler**: 22 Mar (1 each) Anderson Co / Morgan Co (Melinda Fawver), ers. **Black-throated Green Warbler**: 24 Mar (1) Lookout Mtn (BD), ers. **Indigo Bunting**: 8 Apr (1) Sharp's Ridge (Colin Sumrall), ers. **Dickcissel**: reported from a dozen Cos: Bledsoe, Blount, Franklin, Greene, Hamilton, Hawkins, Jefferson, Meigs, Roane, Sequatchie, Sevier, and Washington.

Addendum: **"Lawrence's" Warbler**: 19 Apr 2020 (1 male) Washington Co (Don Holt).

Locations: Brainerd Levee - Hamilton Co; Chickamauga L - Hamilton Co; Fort Loudoun L - Blount Co (unless specified otherwise); John Sevier L - Hawkins Co; Kyker Bottoms - Blount Co; Lakeshore Park - Roane Co; Lookout Mtn - Hamilton Co; Maryville - Blount Co; Nickajack L - Marion Co; Seven Islands SP - Knox Co; Sharp's Ridge - Knox Co; Watts Bar L - Rhea Co (unless specified otherwise).

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EASTERN MOUNTAIN REGION - - March was much warmer than normal but April and May were a little below normal in temperature. March was wet with nearly seven inches of rain. April and May were much dryer with rainfall below normal.

After this past winter's good showing of Evening Grosbeaks at several locations, most had cleared out by the start of the spring season. Not so at Todd Eastin's feeders in Shady Valley. He kept his feeders well supplied with sunflower seed and had 30 to 50 grosbeaks most days with over 100 present on 8 April. Also notable this season were Willet, Lesser Black-backed Gull, Golden Eagle, and Mississippi Kite.

Goose - Cuckoo: **Snow Goose**: 16 Apr (1) Great Lakes Pond, Carter Co (JHM, BP). **White-winged Scoter**: thru 4 Mar (1) South Holston L (m.ob.); thru 5 Mar (1) L Ocoee, Polk (RHo). **Long-tailed Duck**: 4 Mar (1 male, 4 females) South Holston L (RLK). **Hooded Merganser**: 1 May (1) South Holston R, Sullivan Co (Rob Biller), lrs. **Common Merganser**:

3 / 27 Mar (pair) West Prong of Little Pigeon R, Sevier Co (KW); 4 Mar (2 males) Watauga R, Carter Co (Andrew Julian); 1 May (1 female with 9 yg / 13 ad with 15 yg) separate sites on Little R, Blount Co (RW), continued breeding in this area. **Ruddy Duck**: 1 May (1) Mountain City, Johnson Co (TSM, CLM, DK), lrs. **Black-billed Cuckoo**: 7 May (2) Holston Valley, Sullivan Co (Richard Lewis); 9 / 15 May (1) Bluff Mtn, Sevier Co (KW / Bill Sullivan); 23-25 May (1) Hampton Cr Cove (Judi Sawyer / SHu); 24 May (1) Look Rock area, Blount Co (Andrew Feldt); 29-30 May (1) Cades Cove (Tyler Grudowski).

Rail - Falcon: **Virginia Rail**: 23 Mar / 1 May (2 / 1) Shady Valley (RRK et al.). **Willet**: 1 May (10) Roan Cr, Watauga L, Johnson Co (TSM, CLM, DK). **American Woodcock**: 3 Apr (1 ad, 2 yg) Polk Co (Jeffrey Schaarschmidt). **Lesser Black-backed Gull**: 13 Mar (1 ad) South Holston L (Debi Campbell, photo). **Caspian Tern**: 25 Apr (1) South Holston L (BP, JP). **American White Pelican**: 30 Mar (35, in flight) Roan Mtn summit (John Britt, photo). **Black-crowned Night-Heron**: 1 May (1) Dry Creek, Carter Co (Fred Alsop). **Yellow-crowned Night-Heron**: 26 Apr (1) Elizabethton (DK), only report. **Golden Eagle**: 15 Apr (1 im) Nolichucky River, Unicoi Co (JHM). **Mississippi Kite**: 26-28 May (1-2) Walland / Laurel L, Blount Co (Wanda DeWaard / KB). **Red-headed Woodpecker**: 25-30 Apr (1-2) Erwin, Unicoi Co (JHM); 1 May (1) Watauga Point, Carter Co (TSM, CLM); 9 May (1) Shady Valley (Chuck Carlson et al.). **Merlin**: 26 May (1 male) Unaka Mtn, Unicoi Co (RLK). **Peregrine Falcon**: 22 Mar (2) Doe R Gorge, Carter Co (Pete Range).

Flycatcher - Catbird: **Olive-sided Flycatcher**: 4 May (1) Pittman Center, Sevier Co (KW, photo). **Alder Flycatcher**: 17 May (1) Cades Cove (Harumi Umi), audio on eBird; 24 May (5) Roan Mtn (RRK), ers at breeding site. **Blue-headed Vireo**: 12 Mar (1) Carter Co (TSM), ers. **Fish Crow**: 1 May (1) Watauga Point, Carter Co (TSM, CLM); 24 May (1) Elizabethton (Leah McMillion). **Common Raven**: 17 Mar (2) Parksville L, Polk Co (RHo). **Cliff Swallow**: 25 Mar (2) Watauga R, Carter Co (BP, JP), ers. **Brown-headed Nuthatch**: continuing thru season (2-3) South Holston L (m.ob.). **Marsh Wren**: 1–6 May (1-3) Chota Refuge (MM et al.); 2 / 10 May (1 / 4) Pittman Center (KW); 11 May (1) Erwin, Unicoi Co (TSM). **Gray Catbird**: 2 Mar (1) Chilhowee L, Blount Co (RW); 4 Mar (1) Chota Refuge, Monroe Co (MM).

Finches - Warbler: **Evening Grosbeak**: thru 22 Apr (5-10) Townsend (m.ob.); 2 Apr (1) Gee Cr SP, Polk Co (RHo); thru 11 May (max 107 on 8 Apr) Shady Valley (Todd Eastin), lrs. **Purple Finch**: many reports but of only small numbers. **Red Crossbill**: thru season (multiple reports, 15 max) Cades Cove, GSMNP (m.ob.); 15 Mar (10) Townsend (KB); 5 Apr (10) Pittman Center, Sevier Co (KW); 16 May (12) Holston Mtn, Sullivan Co (Rob Biller); 26 May (1) Simerly Cr, Carter Co (TSM). **Pine Siskin**: 18 Apr (150) Townsend (KB), max; mid Apr thru season (1-4) Roan Mtn, at 4450 ft (RLK, RRK, m.ob.); 28 Apr (22) Simerly Cr, Carter Co (TSM). **Lincoln's Sparrow**: 8 May (1) Townsend (KB); 8 May (1) Cosby, Sevier Co (KW). **Northern Waterthrush**: 11 May (2) Erwin (TSM); 23 May (1) Pittman Center (KW). **Blue-winged Warbler**: 27 Apr (1) Simerly Cr, Carter Co (TSM, CLM); 14 May (1) Holston Valley, Sullivan Co (Richard Lewis); 18 May (1) Newfound Gap, GSMNP (BFo); only reports. **Golden-winged Warbler**: 27 Apr (4) Hampton Cr Cove (RRK et al.), ers, max 8 males at this breeding site. **Prothonotary Warbler**: 19 Apr (1) Little R, Blount Co (William Miller); 23 Apr (2) Gatlinburg Trail, GSMNP (Fred Shaffer); 1 May (1) Chota Refuge (Julie Moore, Christie Bass); 8 May (1) Townsend, Blount Co (Rick Barrow,

KB). **Wilson's Warbler**: 9 May (1) Shady Valley (Chuck Carlson et al.).

Locations: Elizabethton - Carter Co; GSMNP - Great Smoky Mtns National Park; Hampton Cr Cove - Carter Co; Roan Mtn - Carter Co; Shady Valley - Johnson Co; South Holston L - Sullivan Co; Townsend - Blount Co.

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