THE MISSISSIPPI KITE

Vol. 47 (2)

December 2017



THE MISSISSIPPI KITE

The Mississippi Kite is sent to all members of the Mississippi Ornithological Society not in arrears of dues. Send change of address, requests for back issues, and claims for undelivered or defective copies to the Membership Committee Chair, Gene Knight, at 79 Hwy. 9 W., Oxford, MS 38655.

Information for Authors

The Mississippi Kite publishes original articles that advance the study of birdlife in the state of Mississippi. Submission of articles describing species occurrence and distribution, descriptions of unusual birds or behaviors, notes on the identification of Mississippi birds, as well as scientific studies from all fields of ornithology are encouraged. Submit all manuscripts in either a paper copy or digital copy format to the Editor, Nick Winstead, at Mississippi Museum of Natural Science, 2148 Riverside Dr., Jackson, MS 39202 or through email at nick.winstead@mmns.state.ms.us.

COPY – Paper copy manuscripts should be typed and double-spaced throughout. Digital copy manuscripts should be prepared using 12 pt. Times New Roman font. If possible, please submit digital files in Microsoft Word. Handwritten manuscripts may also be accepted, but please contact the editor prior to submission.

STYLE – For questions of style consult previous issues of *The Mississippi Kite*. Manuscripts should include a title, names and addresses of all authors, text, and where applicable, literature cited, tables, figures, and figure legends. Number all pages in the upper right-hand corner. Avoid footnotes. **LITERATURE CITED** – List all references cited in the text alphabetically by the author's last name in the Literature Cited section. Citations should conform to the style of a recent issue of *The Mississippi Kite*.

NOMENCLATURE – Common names of bird species should be capitalized. Provide the scientific name, italicized and in parentheses, at the first mention of each species. Nomenclature should follow the American Ornithologists' Union *Check-list of North American Birds*, 7th edition (1998) and the 42nd (2000) through 58th (2017) supplements.

TABLES – Tables should be formatted with the size of *The Mississippi Kite* in mind, and should be interpretable without reference to the text.

FIGURES – Figures should be appropriate for photoreproduction without retouching.

THE MISSISSIPPI KITE

The Mississippi Kite is a biannual periodical published by the Mississippi Ornithological Society to record and further the study of Mississippi birdlife.

Vol. 47, No. 2

December 2017

CONTENTS

- 50 WINTERING RED-TAILED HAWK (*BUTEO JAMAICENSIS*) SUBSPECIES IN THE MISSISSIPPI ALLUVIAL VALLEY by Hal Mitchell and Kristina Mitchell
- 63 CHIMNEY SWIFT (*CHAETURA PELAGICA*) USE OF BRIDGE DEBRIS DEFLECTOR COLUMNS by Chazz Coleman and Andrea Schuhmann
- 68 BUCK ISLAND ROAD by J.R. Rigby
- 70 NORTH AMERICAN BREEDING BIRD SURVEY IN MISSISSIPPI by Daniel J. Twedt and Keith L. Pardieck
- 84 **BIRDS AROUND THE STATE: JANUARY-JULY 2017** by Nicholas A. Winstead
- 100 CLAPPER RAILS ALLOPREENING by Brian Johnston
- 101 **KILLDEER FOSSIL NEST** by George Phillips and James Starnes
- 102 UPLAND SANDPIPER SEEKING CAMOUFLAGE by Holly Cox
- 103 LEUCISTIC SEMIPALMATED SANDPIPER by Wayne Patterson
- 105 AVIAN PREDATORS AT A LEAST TERN COLONY DURING TROPICAL STORM CINDY by Holly Cox
- 106 AMERICAN GOLDFINCH EATING ALGAE by Nicholas A. Winstead
- 108 **THANK YOU TO THE 2017 REVIEWERS OF** *THE MISSISSIPPI KITE by Nicholas A. Winstead*

COVER IMAGE: Red-tailed Hawk (*Buteo jamaicensis*), 4 March 2017, Tunica County, Mississippi, by Hal Mitchell. Subspecies may be a heavily marked *B. j. borealis* or *B. j. abieticola*.

WINTERING RED-TAILED HAWK (*Buteo jamaicensis*) Subspecies in the Mississippi Alluvial Valley

Hal Mitchell and Kristina Mitchell 1363 Fox Chase Dr. Southaven, MS 38671

Every winter, the Mississippi Alluvial Valley (MAV) hosts thousands of Red-tailed Hawks (Buteo jamaicensis; National Audubon Society 2010). These individuals originate from a widespread geographic expanse that includes the breeding ranges of several subspecies. These subspecies include Eastern (B. j. borealis), Western (B. j. calurus), Northern (B. j. abieticola), Krider's (B. j. kriderii), and Harlan's (B. j. harlani) Red-tailed Hawks. It is important to note that not all experts agree on which subspecies should be designated as such. In this article we follow the American Ornithologists' Union 1957 Check-list of North American Birds (American Ornithologists' Union 1957), as it was the last to include subspecies. One exception is the Northern Redtailed Hawk, which was described in 1950 (Todd 1950), but not included in the 1957 Check-list. This article describes some of the plumage diversity we observed from these subspecies in the MAV during the 2011-2017 winter seasons. Further, we emphasize the difficulties of determining subspecies in the field due to overlapping field marks and the limited information on subspecies' wintering ranges.

For Red-tailed Hawk subspecies identification, consider that subspecies markings fall within a broad spectrum of plumage characters (e.g., abdominal band coverage, light vs. dark plumage, etc.). The plumage descriptions below note differences in the major body regions where one should focus attention when parsing out Red-tailed Hawk subspecies. Upperparts refer to the dorsal body, wings, and crown while underparts include the abdomen, underwings, and throat. Many of the plumage characters we mention often cannot be easily observed in the field; thus many individuals cannot be identified to subspecies. Additionally, many intergrades occur from interbreeding among subspecies and their respective color morphs, making subspecies identification problematic. However, adherence to referencing key field marks listed in the following descriptions may help birders elucidate origins of the many individuals that comprise one of the MAV's most ubiquitous birds.

SUBSPECIES AND ASSOCIATED COLOR MORPHS

Eastern Red-tailed Hawk

The most common subspecies encountered is the Eastern Red-tailed Hawk. Eastern Red-tailed Hawks are present year-round in the MAV, and they have a large breeding range throughout eastern North America. This subspecies exhibits a high degree of variability in its markings and coloration, but has only a single color morph (Dunne et al. 2012). Both immature and adult upperparts tend to be pale brown with some whitish spotting (averaging whiter on immatures), and underparts are usually characterized by unmarked white throats, a clean white upper breast with a dark brown abdominal band, and dark patagial bars (Dunne et al. 2012). Immature Eastern Red-tailed Hawks exhibit light to heavy abdominal markings, lighter-colored primary feathers that create translucent "panels", and a brownish-gray and black banded tail (Figure 1); while adults usually have moderate abdominal markings and the characteristic clean red tail with a thin black sub-terminal band (Figure 2; Dunne et al. 2012).

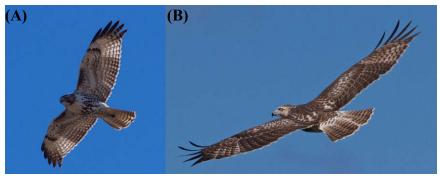


Figure 1. Immature Eastern Red-tailed Hawks, Tunica County, Mississippi, 2017. Underparts (A) show heavy abdominal streaking and pale inner primaries. Upperparts (B) show a brownish-gray tail with many dark bands.



Figure 2. Adult Eastern Red-tailed Hawks, Panola County, Mississippi, 2017. Underparts (A) show moderate abdominal streaking and an atypically dark throat. Upperparts (B) have whitish spotting and a characteristic red tail with a relatively thin black sub-terminal band.

Western Red-tailed Hawk

Western Red-tailed Hawks breed mostly west of the Rocky Mountains (Preston and Beane 2009), and are likely the rarest visitors to the MAV during winter (Brian Sullivan personal communication). Their prevalence may be misrepresented due to the near resemblance of plumage characteristics among light Western Red-tailed Hawks and heavily marked Eastern and Northern Red-tailed Hawks. However, most Western Red-tailed Hawks exhibit a thinly banded tail with a thick black sub-terminal band and rufous uppertail coverts (Lish and Voelker 1986, Liguori and Sullivan 2014).

Western Red-tailed Hawks exhibit polymorphism that is expressed in three unique plumages: light, dark, and rufous/ intermediate (Liguori 2004). <u>Light</u>: Light-morphs show darkerbrown upperparts with limited white spotting (compared to Eastern Red-tailed Hawks). The underparts tend to show an overall rufous wash throughout, and have heavy streaking on the abdominal band and underwings. The throat is usually dark. <u>Dark</u>: Dark-morphs show all dark plumage on the upper- and underparts. Sometimes, faint rufous tones are suffused throughout the upper breast. <u>Rufous/intermediate</u>: Rufous/intermediate-morphs resemble darkmorphs, with dark upperparts and mostly dark underparts; however, they usually also exhibit distinct rufous coloration on the upper breast (Liguori 2004).

Northern Red-tailed Hawk

Northern Red-tailed Hawks breed predominately in Canada (Dickerman and Parkes 1987), and are a more recent discovery to our region, likely having been overlooked as heavily marked Eastern or Western Red-tailed Hawks. Their body underparts exhibit a rufous tinge overall with a dark throat, an upper breast area usually characterized by brownish drip-like markings, and a heavy abdominal band often described as being "blobby" (Figures 3, 4; Liguori and Sullivan 2014). Their underwing may be characterized by dark patagials and other dark-rufous markings



Figure 3. Adult Northern Red-tailed Hawks, Tunica County, Mississippi, 2017. Underparts (A) with heavy abdominal markings, dark throat, and drip-like rufous markings on the upper breast. Upperparts (B) are mostly brownish averaging slightly darker than Eastern Red-tailed Hawks. Note banded tail with thick subterminal band.

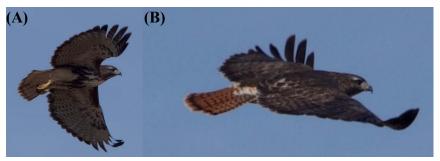


Figure 4. Adult Northern Red-tailed Hawk, Panola County, Mississippi, 2017. Underparts (A) show extremely heavy abdominal markings and rufous leg markings. Upperparts (B) are mostly dark brown with pale rufous uppertail coverts. Note banded tail with thick sub-terminal band.

(Figures 3, 4; Liguori and Sullivan 2014). On their upperparts, Northern Red-tailed Hawks show rufous uppertail coverts, and

average slightly darker than Eastern Red-tailed Hawks (Figures 3, 4; Liguori and Sullivan 2014). Their tails have thick sub-terminal bands, and many individuals have tails with widely spaced bands (versus narrowly spaced bands in Western Red-tailed Hawks; Figure 4).

Differentiating Northern from Western Red-tailed Hawks is sometimes challenging. Northern Red-tailed Hawks' heavily marked underparts can make them difficult to distinguish from light-morph Western Red-tailed Hawks; indeed, the identification to subspecies between the two may be impossible some of the time (Liguori and Sullivan 2014). Moreover, it is possible that darkmorph Red-tailed Hawks in the East that were previously presumed Western Red-tailed Hawks were actually part of a yet to be described color morph of Northern Red-tailed Hawk (Iron 2012, Jerry Liguori personal communication). The main premise of the argument is that the wintering location of these dark-morph birds aligns better with a Northern Red-tailed Hawk lineage. Other potential traits of dark-morph Northern Red-tailed Hawks include white spotting on the underwing coverts and axillaries, heavily patterned undertail coverts, and a diffuse rufous wash in the upper breast (Ruddy 2017). Some of these confounding individuals have been observed in the MAV (Figure 5), and hopefully future research will bear out any potential polymorphism.

Krider's Red-tailed Hawk

Krider's Red-tailed Hawks are visitors from the Northern Great Plains region. They exhibit a large degree of plumage variation, but tend to show very light coloration overall (Liguori and Sullivan 2010a). Specifically, adults and immatures are characterized by a light crown, limited markings on their abdomen, and a very light base of the tail (Figures 6, 7; Liguori and Sullivan 2010a). Immature Krider's Red-tailed Hawks will also show very

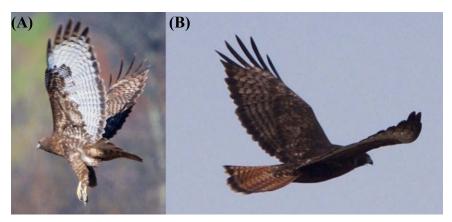


Figure 5. Possible adult Northern Red-tailed Hawk dark-morph (otherwise Western Red-tailed Hawk), Tunica County, Mississippi, 2017. Underparts (A) show white spotting on the axillaries and light rufous wash on the breast. Upperparts (B) are more dark brown and less white. Note banded tail with thick sub-terminal band.

pale primary panels on the under- and upperparts and a densely banded tail (Figure 6; Liguori and Sullivan 2010a).

Krider's Red-tailed Hawks are confounding. Although many consider them to be monomorphic, others believe they are a color morph of Eastern Red-tailed Hawks (Pittaway 1993). To add to the confusion, Krider's and Eastern Red-tailed Hawks interbreed where their ranges overlap thus producing intergrades that exhibit no clear ancestry (Figures 8, 9; Liguori and Sullivan 2010a).

Harlan's Red-tailed Hawk

Harlan's Red-tailed Hawks come to the MAV in the winter from their breeding range of Alaska through western Canada. In adults, the primary characteristic to distinguish Harlan's Red-tailed Hawks from other subspecies is mottling in the flight feathers and

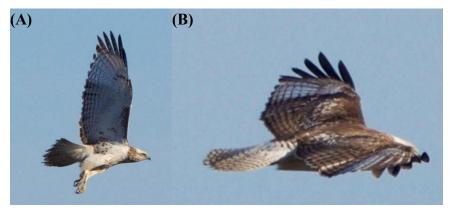


Figure 6. Immature Krider's Red-tailed Hawk, Tunica County, Mississippi, 2017. Underparts (A) with limited markings and pale inner primaries. Upperparts (B) are paler than Eastern Red-tailed Hawks. Note pale crown and pale tail with many fine bands.

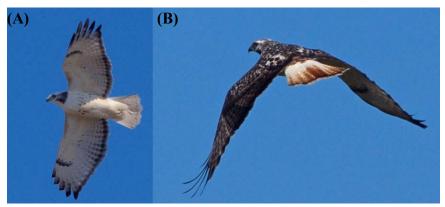


Figure 7. Adult Krider's Red-tailed Hawk, Tunica County, Mississippi, 2017. Note pale crown, faint patagial bars, and limited markings to the underparts (A), especially the abdominal band. Upperparts (B) show whitish mottling and a very pale base to the tail.



Figure 8. Possible immature Eastern x Krider's or Eastern x Harlan's Red-tailed Hawk, Leflore County, Mississippi, 2016. Bird shows intermediate features such as a densely banded tail and an abnormally light face.



Figure 9. Possible adult Eastern x Krider's Red-tailed Hawk, Tunica County, Mississippi, 2017. Bird shows the light tail of a Krider's Red-tailed Hawk and the dark crown of an Eastern Red-tailed Hawk.

tail. Mottling in the primary and secondary feathers can obscure any banding that normally occurs on other Red-tailed Hawk subspecies (Liguori and Sullivan 2010b). Most tails are a mottled

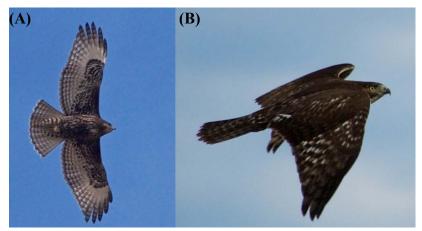


Figure 10. Immature Harlan's Red-tailed Hawk dark-morphs, Panola County, Mississippi, 2017 (A) and West Carroll Parish, Louisiana, 2011 (B). Underparts (A) mostly brownish-black with whitish mottling on the upper breast and throat. Upperparts (B) mostly brownish-black with some whitish spotting. Note the blackand-brown striped tail pattern.

grayish color in adults and black-and-brown banded in immatures; however, tail coloration can be extremely variable, ranging from red to almost white (Clark 2009).

Harlan's Red-tailed Hawks are polymorphic with dark and light color morphs (Dunne et al. 2012). <u>Dark</u>: Dark-morphs exhibit primarily brownish-blackish underparts, with the upper breast usually marked with varying amounts of white streaking (Figures 10, 11; Liguori and Sullivan 2010b). The upperparts are brownish-black in adults and immatures, but immatures also have some white spotting (Figures 10, 11; Liguori and Sullivan 2010b). Care should be taken when trying to distinguish between dark-morph Western and dark-morph Harlan's Red-tailed Hawks as they are superficially similar. <u>Light</u>: Light-morphs are similar to Eastern Red-tailed Hawks, with dark upperparts, pure white underparts,

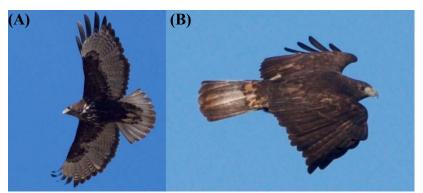


Figure 11. Adult Harlan's Red-tailed Hawk dark-morph, Tunica County, Mississippi, 2017. Underparts (A) similar to immature but with mottled primary and secondary feathers. Upperparts (B) mostly brownish-black with mottled tail.

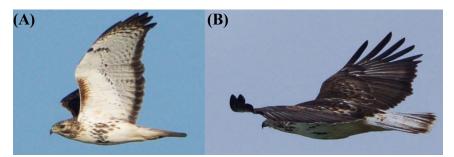


Figure 12. Adult Harlan's Red-tailed Hawk light-morphs, Tunica and Leflore counties, Mississippi, 2017. Note blackish "blobby" abdominal band, pure white underparts (A), and mottling on the primary and secondary feathers. Upperparts (B) are brownish-black with a mottled tail.

and "blobby" abdominal band (Figure 12; Liguori and Sullivan 2010b); however, the upperparts tend to average darker, and the abdominal band appears more "blobby" (Figure 12; Liguori and Sullivan 2010b).

LITERATURE CITED

- American Ornithologists' Union. 1957. *Check-list of North American Birds*, fifth edition. Lord Baltimore Press, Baltimore, MD, USA.
- Clark, W.S. 2009. Extreme variation in the tails of adult Harlan's Hawks. *Birding* 41(1): 30-36.
- Dickerman, R. and K. Parkes. 1987. Subspecies of the Red-tailed Hawk in the Northeast. *The Kingbird* 37(2): 57-64. New York State Ornithological Association, Long Lake, NY, USA.
- Dunne, P., Sutton, C., and D. A. Sibley. 2012. Buteos that migrate: Red-tailed Hawk. Pages 19-40 *in* Houghton Mifflin Harcourt Company (Ed.), Hawks in Flight, second edition. Boston, MA, USA and New York, NY, USA.
- Iron, J. 2012. Dark morph Red-tailed Hawk: *calurus* or *abieticola*? TOC Newsletter, Toronto Ornithological Club. Toronto, Ontario, CA.
- Liguori, J. 2004. Dark Red-tailed Hawks. Birding 36(4): 501-506.
- Liguori, J. and B. L. Sullivan. 2010a. A study of Krider's Redtailed Hawk. *Birding* 42(2): 38-45.
- Liguori, J. and B. L. Sullivan. 2010b. Comparison of Harlan's with Western and Eastern Red-tailed Hawks. *Birding* 42(2): 30-37.
- Liguori, J. and B. L. Sullivan. 2014. Northern Red-tailed Hawk (*Buteo jamaicensis abieticola*) revisited. *North American Birds* 67(3): 374-383.
- Lish, J. and W. Voelker. 1986. Field identification aspects of some Red-tailed Hawk subspecies. *American Birds* 40: 197-202.
- National Audubon Society. 2010. The Christmas Bird Count Historical Results. http://www.christmasbirdcount.org.
- Pittaway, R. 1993. Subspecies and Morphs of the Red-tailed Hawk. *Ontario Birds* 11(1): 23-29. Ontario Field Ornithologists, Toronto, Ontario, CA.

- Preston, C. R. and R. D. Beane. 2009. Red-tailed Hawk (Buteo jamaicensis), version 2.0. *In* P. G. Rodewald (Ed.), The Birds of North America. Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bna.52
- Ruddy, J. 2017. eBird Checklist: http://ebird.org/ebird/view/ checklist/S40298597. eBird: An online database of bird distribution and abundance. eBird, Ithaca, New York. http://www.ebird.org. (Accessed: 14 December 2017).
- Todd, W.E.C. 1950. A Northern Race of Red-tailed Hawk. Annals of the Carnegie Museum (Pittsburg) 31:289-296.

CHIMNEY SWIFT (*CHAETURA PELAGICA*) USE OF BRIDGE DEBRIS DEFLECTOR COLUMNS

Chazz Coleman¹ and Andrea Schuhmann^{1,2} ¹Mississippi Museum of Natural Science 2148 Riverside Dr. Jackson, MS 39202 ²Present address: Missouri Department of Conservation 2360 Highway D St. Charles, MO 63304

Bridges and culverts provide daytime roosting habitat for a number of bat species, including some of conservation concern. While assessing the importance of bridges and culverts for bats in Mississippi, we discovered several Mississippi bridges, particularly those designed with debris deflector columns (Figure 1), contained a significant number of bats. Interestingly, some of these bridges were also occupied by Chimney Swifts (*Chaetura pelagica*), and showed evidence of Chimney Swift nesting activity.

Bridges equipped with debris deflector columns are not a common design implemented in Mississippi. Debris deflector columns are typically made of concrete, are wedge-shaped, and are hollow throughout the column's interior. The upstream side is enclosed, and the downstream side is open. Each debris deflector column has multiple square posts that run vertically up the interior walls. This provides many corners inside and constricts sections of the column interior, forming distinct "chambers". The back chambers receive very little if any light, an element important for roosting bats and Chimney Swifts.

Chimney Swifts and Chimney Swift nests were observed within two debris deflector columns of one bridge in northern Panola County, Mississippi, during July 2011 (Figure 2). Both nests were approximately head-height, and were on the walls of the



Figure 1. Typical debris deflector columns. Photo by Kathy Shelton.



Figure 2. Chimney Swift near nest inside a debris deflector column during July 2011, northern Panola County, Mississippi.

vertical posts separating the column interior into chambers. There were signs of previous nests near the intact nests. Ceiling heights within the column were ~15-20 ft, and the length of the entire column was ~40-50 ft. At the time of observation, dense shrubby vegetation surrounded the entrances to the columns resulting in very low light conditions in the column interiors. Humidity within the column interiors was notably higher than outside, and the mud floors of the columns were prone to fluctuating water levels depending on stream conditions. Though the interiors of these columns were large, it appeared that only one pair of Chimney Swifts and their offspring occupied each column. The debris deflector columns of this bridge also supported a muskrat lodge and a maternity colony of Rafinesque big-eared bats (*Corynorhinus rafinesquii*; in the dozens) in one column and Southeastern myotis (*Myotis austroriparius*; in the hundreds to over 1,000) in the other.

On 11 January 2017, a Chimney Swift nest was observed while surveying a debris deflector column of a bridge in central Jefferson County, Mississippi (Figure 3). The nest was located on the north wall ~15 ft from the entrance of the debris deflector column and ~6 ft above the floor. The debris deflector column was ~25 ft long, and the floor to ceiling distance was ~12 ft. The bridge was surrounded by a combination of mixed pine/hardwood forest, agriculture fields, and rural residential area. The substrate was made up of compacted mud which covered the floor. No Chimney Swifts were present, but two big brown bats (*Eptesicus fuscus*) and one Rafinesque's big-eared bat were observed.

We have surveyed ~140 bridges within the past six years. Of those, 11 bridges were confirmed with debris deflector columns, four were recorded as not having debris deflector columns, and 125 were not specified. Those 11 bridges had 46 debris deflector columns, and 30 of the 46 have been surveyed. Twenty-five of the 30 debris deflector columns had bats present, and at least three of them had evidence of Chimney Swifts



Figure 3. Chimney Swift nest inside a debris deflector column during January 2017, central Jefferson County, Mississippi.

cohabitating with bats. The number of debris deflector columns with Chimney Swifts could be higher because the primary objective of these surveys was to gather information on bat populations, and Chimney Swift occupancy may not have always been recorded. To the authors' knowledge, these are the only known instances of Chimney Swifts nesting and roosting within debris deflector columns, and in close proximity to maternity roosting bats (Figure 4). These bats, like Chimney Swifts, historically roosted in tree cavities, but have adapted to roosting in man-made structures post-European settlement. Debris deflector columns may be a suitable, albeit unintentional, analog to the giant cypress, tupelo, or sycamore trees that once dominated the bottomlands of Mississippi and supported a bevy of wildlife in their ancient, hollowed interiors.



Figure 4. Chimney Swifts near Southeastern myotis within a debris deflector column during July 2011, northern Panola County, Mississippi.

BUCK ISLAND ROAD

J.R. Rigby 305 Garner St. Oxford, MS 38655

Those who have followed the MISSBIRD listserv for any length of time will have heard of Buck Island Rd. in Tunica County, Mississippi, just east of Robinsonville. Buck Island Rd. (34.813396, -90.290276) runs between Highway 713 at the north and Booth Rd. at its southern terminus. The northern half of the road runs due north-south until shortly after crossing Hambrick Rd. after which it jogs southwest before turning sharply to the southeast to meet Booth Rd.

The road's interest to birders is primarily during winter. With a mix of fallow and cultivated fields, Buck Island Rd. is in many ways a microcosm of winter birding in the Delta. Little more than a turnrow between soybean fields, Buck Island Rd. is most famous among Mississippi birders as a reliable location for Short-eared Owls (*Asio flammeus*). During winter months a sunset vigil behind the industrial plant near the north end would usually be rewarded with at least one and, if you were lucky, perhaps as many as five owls. In 2016 the fallow area behind the industrial plant was plowed for the first time in recent memory, apparently destroying much of the favorable owl habitat. The owls, however, seem to have persevered and are still regularly reported along the road.

Other species of interest in winter include Lapland Longspurs (*Calcarius lapponicus*), Sandhill Cranes (*Antigone canadensis*), Western Meadowlarks (*Sturnella neglecta*), and Rusty and Brewer's blackbirds (*Euphagus carolinus* and *E. cyanocephalus*). The proximity of this road to the Tunica landfill also results in irregular visits by large flocks of gulls. Typically

these flocks are Ring-billed Gulls (*Larus delawarensis*), but in larger aggregations a few other species have been found including Bonaparte's Gull (*Chroicocephalus philadelphia*), Herring Gull (*Larus argentatus*), and Lesser Black-backed Gull (*Larus fuscus*). Rare birds found at this site include fairly regular (but not annual) Sprague's Pipit (*Anthus spragueii*) sightings, a handful of Roughlegged Hawk (*Buteo lagopus*) sightings, Ferruginous Hawks (*B. regalis*) in the winter of 2004-2005 and in 2012, and a Burrowing Owl (*Athene cunicularia*) in 2014.

Also typical of the Delta, spring rains collected on plowed fields sometimes attract shorebirds such as Greater and Lesser yellowlegs (*Tringa melanoleuca* and *T. flavipes*), Pectoral Sandpipers (*Calidris melanotos*), and Least Sandpipers (*Calidris minutilla*). In 2007 two Upland Sandpipers (*Bartramia longicauda*) were tallied at this site by Jeff Wilson and Gail King. Grasshopper Sparrows (*Ammodramus savannarum*) can occasionally be found in the tall grass of fallow fields during spring and summer, replaced by the congeneric and equally elusive LeConte's Sparrows (*A. leconteii*) in winter.

In winter one can generally park anywhere along the road and get out of the car to listen and use a spotting scope. Beware during spring and fall, however, as the road may be busy with agricultural equipment and farm workers. While the road is public, all of the fields along the road are private property and should be considered restricted access particularly when crops are in the field.

For dependable sightings of winter Delta specialties and a reputation for turning up rarities, Buck Island Rd. is a worthy stop in the northern Delta on any winter outing.

NORTH AMERICAN BREEDING BIRD SURVEY IN MISSISSIPPI

Daniel J. Twedt¹ and Keith L. Pardieck² ¹U.S. Geological Survey, Patuxent Wildlife Research Center 3918 Central Ave., Memphis, TN 38152 dtwedt@usgs.gov ²U.S. Geological Survey, Patuxent Wildlife Research Center 2100 Beech Forest Rd., Laurel, MD 20708 kpardieck@usgs.gov

Does it seem like you are hearing fewer Northern Bobwhite (*Colinus virginianus*) calls in recent years than you remember when you were younger? Conversely, have you also noticed hearing more "cooing" of Eurasian Collared-Doves (*Streptopelia decaocto*)? Do such experiences reflect changes in bird populations or are they false impressions? Well, fortunately for us, we have one of the most powerful wildlife data sets freely available, only a few mouse clicks away, for divining these answers. For most of our songbirds, their population trends are estimated from data gathered during the North American Breeding Bird Survey (BBS). And indeed, BBS population trends for the State of Mississippi support a decline in Northern Bobwhite and an increase in Eurasian Collared-Dove (Figure 1; Sauer et al. 2017a).

The BBS was initiated in 1966 as a multi-national field survey of North American breeding birds, conducted by volunteer observers, to provide data to estimate bird species population trends (Sauer et al. 2017b). The BBS design is a network of randomly-located, roadside survey routes spaced on a 1° latitude and longitude grid. Routes are typically located along less-traveled secondary roads and entirely within a single physiographic region. Each route has 50 stop locations, spaced at approximately half mile intervals, where birds are counted.

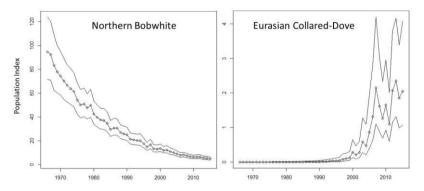


Figure 1. Trend in annual abundance indices, with lower (2.5%) and upper (97.5%) credible interval, as estimated using hierarchical model analysis (Sauer and Link 2011) of data from Breeding Bird Surveys in Mississippi (1966-2015) for Northern Bobwhite and Eurasian Collared-Dove. Graphs from https://www.mbr-pwrc.usgs. gov/bbs/specl15.html.

The BBS is an index survey, thus it is not intended to be a complete count of all birds along a route. Rather, the birds counted provide relative abundances of each species that are maintained in a publicly available database (Pardieck et al. 2017). The >2 million bird observations annually collected by BBS participants include count data on >700 species (including taxa groups), including >150 species in Mississippi (Appendix Table 1). Using these data, scientists have estimated and mapped relative abundances and population trends for >400 species nationally and 119 species for Mississippi (Sauer et al. 2017a), with future efforts anticipated to expand survey-wide results by >100 species (Sauer et al. 2017c).

The BBS provides support for landbird conservation in North America through the Avian Conservation Assessment Database (formerly Partners in Flight Species Assessment Database) which provides regional and statewide bird population estimates for 274 landbird species (Rosenberg et al. 2017, Twedt 2015). BBS information is also widely used by managers and scientists to: inform regional conservation and land use planning through species distribution models, inform environmental assessments, evaluate causes of population change, evaluate effectiveness of management actions, motivate conservation action, and much more (Hudson et al. 2017).

One "secret" to the success of the BBS has been minimizing variation in methods over the decades. This was accomplished through counting guidelines on when, where, and how to sample a route (www.pwrc.usgs.gov/BBS/participate/). Uniform methods help ensure that changes in bird numbers are due to actual population changes, and not due to changes in how or when birds were counted. Each BBS route is surveyed once per year during the breeding season (15 May-30 June in Mississippi) beginning 30 min before local sunrise. During 3 min spent at each stop location, an observer, skilled in bird identification and standing near the vehicle, records the number of each bird species heard or seen within 0.25 mi (400 m). To account for variation in weather, temperature, sky condition, and wind speed are recorded at the start and completion of each BBS route.

To consistently assess bird populations, the same BBS routes and stop locations along these routes are surveyed every year. However, over 50 years, roads are re-routed, bridges washout, and safety concerns arise. As such, some stop locations are moved and eight Mississippi routes have been moved from their origins, with three of these moved twice. There are currently 62 BBS routes located within Mississippi: 49 routes are in the uplands of the Gulf Coastal Plain whereas 13 routes are in the "Delta" (Figure 2). These routes comprise $\sim 2\%$ of the >3,500 BBS routes located across the U.S., and provide critical avian population data for the state, as well as for regional and national species assessments.

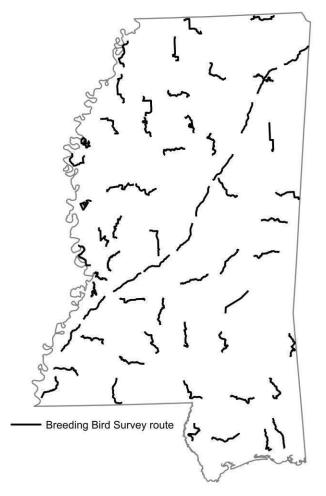


Figure 2. Locations of 62 active BBS routes in Mississippi intended to be surveyed during 2018. Routes in need of volunteer observers may be identified at https://www.pwrc.usgs.gov/bbs/RouteMap/Map.cfm.

Over the last 51 years, 138 Mississippi birders with the ability to identify birds by sight and sound have voluntarily awoke

before dawn and often traveled considerable distance to participate in the BBS. Thirty-two of these extraordinary birders have contributed their time and expertise to the BBS for over 10 years, while two individuals, Donald Lewis and Terence Schiefer, have each participated for over 30 years! During the past 10 years 60 total observers have surveyed an average 42 routes per year. As such, only 76% of the BBS routes in Mississippi are surveyed annually; meaning that each year there are vacant (i.e. unsampled) routes in Mississippi!

The most commonly detected birds on BBS routes during the past 50 years in Mississippi (Table 2) include: Northern Cardinal (Cardinalis cardinalis), Red-winged Blackbird (Agelaius phoeniceus), Mourning Dove (Zenaida macroura), American Crow (Corvus brachyrhynchos), and Northern Mockingbird (Mimus polyglottos). Notably some species that were very common during the first 2 decades of the BBS, from 1966-1985, have declined markedly. These declining species include Common Grackle (Quiscalus quiscula), Eastern Meadowlark (Sturnella magna), and Northern Bobwhite. Several exotic species, including House Sparrow (Passer domesticus), European Starling (Sturnus vulgaris), and Cattle Egret (Bubulcus ibis), were among the most commonly detected species during the early years of BBS, but have become less common over the decades. These declining species have been replaced on the list of most commonly detected species in recent decades by Eastern Towhee (Pipilo erythrophthalmus), Red-bellied Woodpecker (Melanerpes carolinus), Tufted Titmouse (Baeolophus bicolor), and White-eyed Vireo (Vireo griseus). On the other extreme, some species have rarely been detected on Mississippi BBS routes over the past 50 years including: Cerulean Warbler (Setophaga cerulea). Eagle Bald (Haliaeetus leucocephalus), and Inca Dove (Columbina inca; Appendix Table 1). The relative abundance and population trends for these and

	* · ·	1966-	1976-	1986-	1996-	2006-
	Species	1975	1985	1995	2005	2015
1	Northern Cardinal	4	2	2	1	1
2	Red-winged	2	1	1	3	2
	Blackbird					
3	Mourning Dove	7	7	3	4	4
4	American Crow	10	9	4	2	3
5	Northern	5	5	5	5	7
	Mockingbird					
6	Blue Jay	9	8	6	6	6
7	Common Grackle	1	3	8	13	22
8	Indigo Bunting	12	11	11	7	5
9	Yellow-breasted	13	16	10	8	8
	Chat					
10	Northern Bobwhite	3	4	9	18	45
11	Eastern	6	6	7	15	37
	Meadowlark					
12	Carolina Wren	16	18	13	11	10

Table 2. The relative rank (based on number of detections) of the twelve most common species on BBS routes in Mississippi during the past 50 years and changes among decades.

other species detected on Mississippi's BBS routes can be found on the BBS website at www.pwrc.usgs.gov/bbs/results/.

It bears mentioning that, although the BBS is the longest running program that has monitored breeding bird populations in our state, there are several other survey programs that provide information on Mississippi's bird populations from other times of the year. For example, the Audubon Christmas Bird Count has for decades monitored bird populations during winter. And more recently, birders have been contributing to eBird (http://ebird.org/ content/ebird/), the Cornell Lab of Ornithology's online checklist program, thereby providing year-round information on Mississippi's birds.

As a reader of this note in *The Mississippi Kite*, which was enriched by edits from D. King and D. Ziolkowski, it may be that you are skilled at both visual and aural bird identification. If so, please consider participating as a volunteer observer for the Breeding Bird Survey by contacting the authors or visiting the BBS website: https://www.pwrc.usgs.gov/bbs/. A map of current route vacancies can be viewed at www.pwrc.usgs.gov/bbs/RouteMap/ Map.cfm.

LITERATURE CITED

- Hudson, M.R., C.M. Francis, K.J. Campbell, C.M. Downes, A.C. Smith, and K.L. Pardieck. 2017. The role of the North American Breeding Bird Survey in conservation. The Condor 119:526-545.
- Pardieck, K.L., D.J. Ziolkowski, Jr., M. Lutmerding, K. Campbell, and M.R. Hudson. 2017. North American Breeding Bird Survey Dataset 1966 - 2016, version 2016.0. U.S. Geological Survey, Patuxent Wildlife Research Center, Laurel, MD. www.pwrc.usgs.gov/BBS/RawData/.
- Rosenberg, K.V, P.J. Blancher, J.C. Stanton, and A.O. Panjabi. 2017. Use of North American Breeding Bird Survey data in avian conservation assessments. Condor 119:594-606.
- Sauer, J.R., and W.A. Link. 2011. Analysis of the North American Breeding Bird Survey using hierarchical models. The Auk 128:87–98.
- Sauer, J.R., D.K. Niven, J.E. Hines, D.J. Ziolkowski, Jr, K.L. Pardieck, J.E. Fallon, and W.A. Link. 2017a. The North American Breeding Bird Survey, Results and analysis 1966 -2015. Version 2.07.2017. U.S. Geological Survey, Patuxent Wildlife Research Center, Laurel, MD.

- Sauer, J.R., K.L. Pardieck, D.J. Ziolkowski, Jr., A.C. Smith, M.R. Hudson, V. Rodriguez, H. Berlanga, D.K. Niven, and W.A. Link. 2017b. The first 50 years of the North American Breeding Bird Survey. The Condor 119:576-593.
- Sauer, J.R., D.K. Niven, K.L. Pardieck, D.J. Ziolkowski, Jr, and W.A. Link. 2017c. Expanding the North American Breeding Bird Survey analysis to include additional species and regions. Journal of Fish and Wildlife Management 8:154-172.
- Twedt, D.J. 2015. Estimating regional landbird populations from enhanced North American Breeding Bird Surveys. Journal of Field Ornithology 86:352-368.

APPENDIX

Appendix Table 1. Breeding bird species detected along BBS routes in Mississippi from 1966-2016.

		Years detected on
Common name (or taxa		at least one
group)	Scientific name	route
Black-bellied Whistling-	Dendrocygna	7
Duck	autumnalis	
Canada Goose	Branta canadensis	27
Wood Duck	Aix sponsa	51
Blue-winged Teal	Spatula discors	2
Mallard	Anas platyrhynchos	33
Mottled Duck	Anas fulvigula	14
Hooded Merganser	Lophodytes cucullatus	3
Northern Bobwhite	Colinus virginianus	51
Wild Turkey	Meleagris gallopavo	43

		Years
		detected on
Common name (or taxa		at least one
group)	Scientific name	route
Pied-billed Grebe	Podilymbus podiceps	11
Rock Pigeon	Columba livia	51
Eurasian Collared-Dove	Streptopelia decaocto	20
Inca Dove	Columbina inca	1
Common Ground-Dove	Columbina passerina	12
Mourning Dove	Zenaida macroura	51
Yellow-billed Cuckoo	Coccyzus americanus	51
Common Nighthawk	Chordeiles minor	51
Chuck-will's-widow	Antrostomus carolinensis	51
Eastern Whip-poor-will	Antrostomus vociferus	33
Chimney Swift	Chaetura pelagica	51
Ruby-throated Hummingbird	Archilochus colubris	51
King Rail	Rallus elegans	6
Common Gallinule	Gallinula galeata	13
American Coot	Fulica americana	8
Sandhill Crane	Antigone canadensis	22
Black-necked Stilt	Himantopus mexicanus	8
Killdeer	Charadrius vociferus	51
American Woodcock	Scolopax minor	4
Least Tern	Sternula antillarum	11
Black Skimmer	Rynchops niger	5
Wood Stork	Mycteria americana	6
Double-crested Cormorant	Phalacrocorax auritus	10
Anhinga	Anhinga anhinga	28
American Bittern	Botaurus lentiginosus	1

		Years
		detected on
Common name (or taxa		at least one
group)	Scientific name	route
Least Bittern	Ixobrychus exilis	4
Great Blue Heron	Ardea herodias	49
Great Egret	Ardea alba	48
Snowy Egret	Egretta thula	29
Little Blue Heron	Egretta caerulea	51
Tricolored Heron	Egretta tricolor	4
Cattle Egret	Bubulcus ibis	50
Green Heron	Butorides virescens	51
Black-crowned Night- Heron	Nycticorax nycticorax	12
Yellow-crowned Night- Heron	Nyctanassa violacea	31
White Ibis	Eudocimus albus	32
Glossy Ibis / White-faced Ibis	Plegadis falcinellus / chihi	3
Roseate Spoonbill	Platalea ajaja	3
Black Vulture	Coragyps atratus	51
Turkey Vulture	Cathartes aura	51
Osprey	Pandion haliaetus	2
Swallow-tailed Kite	Elanoides forficatus	14
Mississippi Kite	Ictinia mississippiensis	48
Bald Eagle	Haliaeetus leucocephalus	5
Sharp-shinned Hawk	Accipiter striatus	12
Cooper's Hawk	Accipiter cooperii	30
Red-shouldered Hawk	Buteo lineatus	50
Broad-winged Hawk	Buteo platypterus	43
Red-tailed Hawk	Buteo jamaicensis	48

		Years
		detected on
Common name (or taxa		at least one
group)	Scientific name	route
Barn Owl	Tyto alba	1
Eastern Screech-Owl	Megascops asio	16
Great Horned Owl	Bubo virginianus	33
Barred Owl	Strix varia	49
Belted Kingfisher	Megaceryle alcyon	51
Red-headed Woodpecker	Melanerpes	51
in the second second	erythrocephalus	
Red-bellied Woodpecker	Melanerpes carolinus	51
Downy Woodpecker	Picoides pubescens	51
Hairy Woodpecker	Picoides villosus	51
Red-cockaded	Picoides borealis	10
Woodpecker		
Northern Flicker	Colaptes auratus	51
	auratus	
Pileated Woodpecker	Dryocopus pileatus	51
American Kestrel	Falco sparverius	33
Eastern Wood-Pewee	Contopus virens	51
Acadian Flycatcher	Empidonax virescens	51
Eastern Phoebe	Sayornis phoebe	43
Great Crested Flycatcher	Myiarchus crinitus	51
Western Kingbird	Tyrannus verticalis	1
Eastern Kingbird	Tyrannus tyrannus	51
Scissor-tailed Flycatcher	Tyrannus forficatus	1
Loggerhead Shrike	Lanius ludovicianus	51
White-eyed Vireo	Vireo griseus	51
Yellow-throated Vireo	Vireo flavifrons	51
Warbling Vireo	Vireo gilvus	31
Red-eyed Vireo	Vireo olivaceus	51

		Years
		detected or
Common name (or taxa		at least one
group)	Scientific name	route
Blue Jay	Cyanocitta cristata	51
American Crow	Corvus brachyrhynchos	51
Fish Crow	Corvus ossifragus	51
Horned Lark	Eremophila alpestris	50
Purple Martin	Progne subis	51
Tree Swallow	Tachycineta bicolor	9
Northern Rough-winged Swallow	Stelgidopteryx serripennis	50
Bank Swallow	Riparia riparia	1
Cliff Swallow	Petrochelidon pyrrhonota	23
Barn Swallow	Hirundo rustica	51
Carolina Chickadee	Poecile carolinensis	51
Tufted Titmouse	Baeolophus bicolor	51
White-breasted Nuthatch	Sitta carolinensis	33
Brown-headed Nuthatch	Sitta pusilla	51
House Wren	Troglodytes aedon	1
Carolina Wren	Thryothorus ludovicianus	51
Bewick's Wren	Thryomanes bewickii	20
Blue-gray Gnatcatcher	Polioptila caerulea	51
Eastern Bluebird	Sialia sialis	51
Wood Thrush	Hylocichla mustelina	51
American Robin	Turdus migratorius	51
Gray Catbird	Dumetella carolinensis	51
Brown Thrasher	Toxostoma rufum	51
Northern Mockingbird	Mimus polyglottos	51
European Starling	Sturnus vulgaris	51

		Years
		detected on
Common name (or taxa		at least one
group)	Scientific name	route
Cedar Waxwing	Bombycilla cedrorum	4
House Sparrow	Passer domesticus	51
House Finch	Haemorhous mexicanus	24
American Goldfinch	Spinus tristis	43
Eastern Towhee	Pipilo erythrophthalmus	51
Bachman's Sparrow	Peucaea aestivalis	43
Chipping Sparrow	Spizella passerina	51
Field Sparrow	Spizella pusilla	51
Lark Sparrow	Chondestes grammacus	27
Grasshopper Sparrow	Ammodramus	27
	savannarum	
Song Sparrow	Melospiza melodia	7
Yellow-breasted Chat	Icteria virens	51
Eastern Meadowlark	Sturnella magna	51
Orchard Oriole	Icterus spurius	51
Baltimore Oriole	Icterus galbula	51
Red-winged Blackbird	Agelaius phoeniceus	51
Brown-headed Cowbird	Molothrus ater	51
Common Grackle	Quiscalus quiscula	51
Boat-tailed Grackle	Quiscalus major	13
Ovenbird	Seiurus aurocapilla	11
Worm-eating Warbler	Helmitheros	36
	vermivorum	
Louisiana Waterthrush	Parkesia motacilla	39
Blue-winged Warbler	Vermivora cyanoptera	3
Black-and-white Warbler	Mniotilta varia	48
Prothonotary Warbler	Protonotaria citrea	51
Swainson's Warbler	Limnothlypis swainsonii	38

		Years
		detected or
Common name (or taxa		at least one
group)	Scientific name	route
Kentucky Warbler	Geothlypis formosa	51
Common Yellowthroat	Geothlypis trichas	51
Hooded Warbler	Setophaga citrina	49
American Redstart	Setophaga ruticilla	47
Cerulean Warbler	Setophaga cerulea	4
Northern Parula	Setophaga americana	51
Yellow Warbler	Setophaga petechia	7
Pine Warbler	Setophaga pinus	51
Yellow-throated Warbler	Setophaga dominica	36
Prairie Warbler	Setophaga discolor	50
Summer Tanager	Piranga rubra	51
Scarlet Tanager	Piranga olivacea	24
Northern Cardinal	Cardinalis cardinalis	51
Blue Grosbeak	Passerina caerulea	51
Indigo Bunting	Passerina cyanea	51
Painted Bunting	Passerina ciris	51
Dickcissel	Spiza americana	51

BIRDS AROUND THE STATE: JANUARY-JULY 2017

Compiled by Nicholas A. Winstead Mississippi Museum of Natural Science 2148 Riverside Dr. Jackson, MS 39202

The following is a summary of noteworthy bird sightings in Mississippi for the period 1 January through 31 July 2017. The sequence of information in each account is: species, number, date, place, observer(s), and significance. Numbers of birds sighted are underlined. The significance of sightings is indicated by letters in parentheses following a record. These letters are as follows: (Ac) = accidental, (Ca) = casual, (E) = early date, (L) = late date, (N) = unusually large number, (R) = species rare in area, (RS) = species rare in that season, (U) = species uncommon in area, (US) =species uncommon in that season. Other abbreviations used include the following: ad = adult, alt = alternate, BBS = Breeding Bird Survey, Co. = County, $\cos =$ counties, f = female/s, Hwys. = Highways, imm = immature/s, m = male/s, m.ob. = many observers, MSU = Mississippi State University, NWR = National Wildlife Refuge, pl = plumage, pr = pair, Rd. = Road, S.L. = Sewage Lagoon, S.P. = State Park, and WMA = Wildlife Management Area. The list of sightings is followed by a key to observers' initials and a gazetteer of localities.

Contributions of records are welcome from anyone who makes observations of Mississippi birds. Only with the assistance of many individuals from throughout the state over a period of years can we come to understand the dynamics of the bird populations of Mississippi. Contributors should submit records on 3" x 5" cards or similar-sized slips of paper with one record per

card including the following information: species, number seen, date (including year), location (state, county, and specific location), observer(s), and details and significance of the observation. Very unusual records should be accompanied by full details including description of bird, details of observation, and explanation of how similar species were eliminated. While records are welcome at any time, those received by 15 March, 15 June, 15 August, and 15 December will be submitted with the seasonal report to North American Birds (formerly known as Audubon Field Notes and American Birds), and will also be considered for use in *The Mississippi Kite*. Please send all records to:

Terence L. Schiefer Mississippi State University Department of Entomology P.O. Box 9775 Mississippi State, MS 39762-9775

BLACK-BELLIED WHISTLING-DUCK -- <u>6</u>, 18 Mar., Tupelo Water Treatment Facility, WP (R); <u>4</u>, 25 Apr., backwaters of Columbus Lake, Clay Co., SS (R); <u>2-4</u>, 2-3 May, 26 Jun., Columbus Lake, Lowndes Co., JO, TS, PM, FD, DD, MS (R); <u>6</u>, 26 Jun., Plymouth Bluff, PM (R)

FULVOUS WHISTLING-DUCK -- <u>1</u>, 1 Jun.-Aug., Seaman Rd. S.L., NB, LG, BJ (Ca) [Review List Species]

ROSS'S GOOSE -- <u>1</u>, 1 Jan., Loakfoma Lake, Noxubee Co., TS, MS (U); <u>1</u> ad, 3-4 Jan., Oktibbeha Co. Lake, TS (U); <u>1</u>, 7 Jan., Brooksville, JH, TS, MS (U); <u>1</u> ad, 1 imm, 15-17 Jan., Prairie Waters, Lowndes Co., JH, TS (U); <u>up to 9</u>, 25-27 Jan., Oktibbeha Co. Lake, TS (U); <u>7</u>, 18 Feb., Stan Tabor Rd., JH (U)

GREATER WHITE-FRONTED GOOSE -- <u>1</u>, 20 May-Aug., Oktibbeha Co. Lake, TS, JH (RS)

NORTHERN SHOVELER -- <u>1</u> m, 19 May-Aug., West Point S.L., TS (RS); <u>1</u> m, 24 May, Stan Tabor Rd., JH (L)

GREEN-WINGED TEAL -- 1 m, 22 Apr., Stan Tabor Rd., TS (L)

RING-NECKED DUCK -- <u>1</u> m, 19 Jul.-Aug., Stan Tabor Rd., JH (RS)

LESSER SCAUP -- 1 m, 6 Jun.-27 Jul., West Point S.L., TS (RS)

COMMON MERGANSER -- <u>5</u>, 31 Jan., Sardis Lake dam, Panola Co., HM, RH (R)

RED-BREASTED MERGANSER -- <u>1</u>, 23 Apr., Yazoo River, Sunflower Co., SD (U)

RUDDY DUCK -- <u>up to 4</u> m, <u>1</u> f, 6 Jun.-28 Jul., West Point S.L., TS, MS, JH (RS)

INCA DOVE -- <u>2-5</u>, 19-23 Feb., Madden residence, Gulfport, NM, JMa (U); <u>1</u>, 2 May, King residence, Brookhaven, CK (R); <u>1</u> pr, 20 Jul.-Aug., Seaman Rd. S.L., Jackson Co., NB, NM, BJ, m.ob. (1st nesting at Seaman Rd. S.L.)

COMMON GROUND-DOVE -- <u>1</u>, 14 Jun., near Prairie Point, NG (R)

WHITE-WINGED DOVE -- <u>1</u>, 7 Jan., near intersection of Hwys. 3 and 4, Tunica Co., AB (R); <u>nesting pair with 2 fledglings</u>, 25 Feb.-

27 Mar., Jacobson residence, Pascagoula, LJ (1st photographic evidence of nesting in Mississippi)

BLACK-BILLED CUCKOO -- <u>1</u>, 3 May, near Waterford, HM, RH (R); <u>1</u>, 6 May, Columbus, JO, PM (R); <u>1</u>, 8 May, P.D. Fulgham Rd., Oktibbeha Co., TS, MS (R); <u>1</u>, 10 May, near Oxford, JHo (R)

RUFOUS HUMMINGBIRD -- <u>1</u> ad f, 15 Feb.-4 Mar., Boykin residence, West Point, SB, TS, JH, HM, m.ob. (R)

YELLOW RAIL -- <u>3</u>, 4 Feb., Devil's Swamp, Hancock Co., MW (R)

KING RAIL -- <u>1</u>, 21 Jan., Pearl River WMA, Madison Co., LT (U); <u>3</u>, 24 Apr., Pipeline Rd., Madison Co., JHo, HM, JR, NL (U)

VIRGINIA RAIL -- 2, 10 Jan.-2 Mar., Starkville S.L., TS (RS)

SORA -- <u>1</u>, 10-31 Jan., Starkville S.L., TS, MS (RS); <u>1</u>, 13 May, MSU North Farm, Oktibbeha Co., JH (L)

PURPLE GALLINULE -- <u>4</u>, 7 Apr., Pipeline Rd., Madison Co., JHo, MSi, KH, m.ob. (U); <u>up to 6</u>, 22 Apr.-Aug., Loakfoma Lake, Noxubee Co., TS, MS, ND, WP (R); <u>up to 4</u>, 27 Apr.-Aug., Bluff Lake, Noxubee and Oktibbeha cos., TS, MS, JH, JHi, LM, RP (R)

COMMON GALLINULE -- <u>1-2</u>, 8 Mar.-Aug., Bluff Lake, Noxubee Co., TS, MS, JH, LM, RP (R, E); <u>5</u>, 7 Apr., Pipeline Rd., Madison Co., JHo, JR, AB (U); <u>up to 6</u>, 22 Apr.-Aug., Loakfoma Lake, Noxubee Co., TS, MS, JH, ND, WP (R)

SANDHILL CRANE -- <u>up to 65</u>, 4-28 Jan., near McLeod, Noxubee Co., PM, JO, JH, TS, MS, m.ob. (R)

BLACK-NECKED STILT -- <u>1</u>, 24 Jul., West Point S.L., TS, MS, JH (R)

AMERICAN AVOCET -- <u>58</u>, 23 Apr., Leflore Co., SD (U); <u>6</u>, 12-13 May, Tupelo, WP (R); <u>12</u>, 17 Jul., Oktibbeha Co. Lake, TS, MS, JH (R, N)

SEMIPALMATED PLOVER -- 2, 14 Jul., Stan Tabor Rd., TS (E)

UPLAND SANDPIPER -- 1, 15 May, Kiln, HC (U)

WHIMBREL -- 1, 12 May, Oktibbeha Co. Lake, TS, MS, JH (R)

STILT SANDPIPER -- <u>21</u>, 23 Apr., Sunflower Co., SD (U); <u>2</u>, 12 May, Oktibbeha Co. Lake, TS, MS, JH (RS)

DUNLIN -- <u>467</u>, 23 Apr., Sunflower Co., SD (N); <u>2</u>, 7 May, Stan Tabor Rd., JH, JO, PM (RS); <u>4</u>, 7 May, near Brooksville, JH, JO, PM (RS)

LEAST SANDPIPER -- $\underline{707}$, 23 Apr., Leflore Co., SD (N); $\underline{1}$, 28 May, Stan Tabor Rd., JH (L)

WHITE-RUMPED SANDPIPER -- <u>6</u>, 23 Apr., Sunflower Co., SD (U)

PECTORAL SANDPIPER -- <u>8</u>, 18 Feb., near McLeod, Noxubee Co., JH (E); <u>10</u>, 19 Feb., Tupelo Water Treatment Facility, WP (E)

SEMIPALMATED SANDPIPER -- <u>200</u>, 18 May, Oktibbeha Co. Lake, TS (N); <u>5</u>, 11 Jun., Oktibbeha Co. Lake, TS (L)

SHORT-BILLED DOWITCHER -- <u>3</u>, 23 Apr., Sunflower Co., SD (U); <u>26</u> hendersoni, 12 May, Oktibbeha Co. Lake, TS, MS, JH (RS, N)

LONG-BILLED DOWITCHER -- <u>4</u>, 7 Apr., Stan Tabor Rd., TS (RS); <u>3</u>, 16-22 Apr., Stan Tabor Rd., JH, TS (RS); <u>255</u>, 23 Apr., Sunflower Co., SD (U, N); <u>1</u>, 7 May, near Brooksville, JH, JO, PM (RS, L)

SPOTTED SANDPIPER -- <u>2</u>, 4 Feb., Catalpa Creek bottoms, Lowndes Co., PM, JO (RS); <u>1</u>, 9 Jul., Oktibbeha Co. Lake, TS (E); <u>1</u>, 9 Jul., near McLeod, Noxubee Co., JH (E)

LESSER YELLOWLEGS -- 2, 3 Jan., Catalpa Creek bottoms, Lowndes Co., TS (RS)

WILSON'S PHALAROPE -- <u>1</u> m, 23 Apr., Sunflower Co., SD (R); <u>1</u> f, 28 Apr., Stan Tabor Rd., JH (R); <u>12</u>, 4-7 May, Tupelo, WP, m.ob. (R); <u>1</u> m, 20 May, Oktibbeha Co. Lake, TS (R, L)

RED-NECKED PHALAROPE -- $\underline{1}$ alt pl f, 13 May, West Ship Island, LG (R)

LAUGHING GULL -- <u>1</u> ad, 15 Apr., Bluff Lake, Noxubee Co., JMu, TS (R, E)

FRANKLIN'S GULL -- 1, 18 Mar., Moses Pier, Gulfport, HC (Ca)

CALIFORNIA GULL -- <u>1</u>, 1-8 Jan. (continued from 2016), Enid Lake spillway, Yalobusha Co., JR, AB, HM, WP, m.ob. (Ac) [Review List Species] LESSER BLACK-BACKED GULL -- <u>1</u> ad, 1 Jan.-11 Mar. (continued from 4 Dec. 2016), Lower Sardis Lake, Panola Co., JR, HM, RH, RB (R)

SOOTY TERN -- <u>1</u> ad, 1 imm, 21 Jun., Moses Pier, Gulfport, HC (Ca); <u>1</u> ad, 22 Jun., Biloxi, HC (Ca); <u>1</u> imm, 22 Jun., Wiggins, KJ (Ca); <u>1</u> ad, 24 Jun., Waveland, HC (Ca)

BRIDLED TERN -- <u>1</u>, 22 Jun., Broadwater Marina, Biloxi, HC, JL (Ac); <u>1</u>, 25 Jun., Pass Christian pier, KT (Ac) [Review List Species]

LEAST TERN -- 10, 12 May, Oktibbeha Co. Lake, TS, MS, JH (U)

COMMON TERN -- <u>1</u>, 8 Apr., West Ship Island, JHo, HM, JR, AB (U); <u>4</u>, 12 May, Oktibbeha Co. Lake, TS, MS, JH (U)

RED-THROATED LOON -- <u>1</u>, 19 Mar., Bay Springs Lake, Tishomingo Co., WP (R)

PACIFIC LOON -- <u>1</u>, 19 Mar., Bay Springs Lake, Tishomingo Co., WP (R)

COMMON LOON -- <u>1</u>, 3-11 Jan., Columbus, TS, MS, JO (US); <u>1</u>, 13 Jan., Columbus Lake, Lowndes Co., JO (US)

WOOD STORK -- <u>1</u>, 8 Jun.-Aug., Oktibbeha Co. Lake, TS (U); <u>up</u> to 130, 23 Jun.-19 Jul., Brooksville, JH, TS, MS (U); <u>up to 115</u>, 23 Jun.-29 Jul., east of Macon, JH, TS, LM, RP (U); <u>up to 40</u>, 3-14 Jul., Bluff Lake, Noxubee Co., WP, JH, TS, DF, TO (U); <u>40</u>, 4 Jul., near Brooksville, JH (U); <u>up to 3000</u>, 30 Jul.-Aug., St. Catherine Creek NWR, Adams Co., MSt, BS, CK (U, N)

BROWN BOOBY -- <u>1</u>, 26-29 Apr., Lake Bill Waller, Marion Co., ST, HH, LB, HC (Ac); <u>1</u>, 27 May, Sand Island, Jackson Co., LJ (Ac) [Review List Species]

NEOTROPIC CORMORANT -- <u>1</u>, 25 Mar., Hussey Sod Farm, Mooreville, WP (R); <u>1</u>, 21 Apr., near Morgan City, SD (U); <u>1</u> ad, 30 Apr., Ross Barnett Reservoir, Madison Co., AB (R); <u>up to 3000</u>, 30 Jul.-Aug., St. Catherine Creek NWR, Adams Co., MSt, BS, CK (U, N)

ANHINGA -- <u>up to 14</u>, 11 Mar.-Aug., Noxubee NWR, Noxubee, Oktibbeha, and Winston cos., JH, TS, MS, m.ob. (U nesting species); <u>1</u>, 22 Apr., 7 Jun., Stan Tabor Rd., TS, MS, JH, JHi (U); <u>1</u>, 28 Apr.-13 Jul., Columbus Lake, Lowndes and Clay cos., TS, MS (U); <u>3</u>, 8 May, Plymouth Bluff, PM (U); <u>1</u>, 10 May, Columbus River Walk, PM (U)

AMERICAN BITTERN -- <u>1</u>, 27 Apr., near Brooksville, TS, MS (U)

LEAST BITTERN -- <u>5</u>, 15 May, Pipeline Rd., Madison Co., PM, JO (U)

TRICOLORED HERON -- $\underline{1}$ ad, 7-9 Jun., Oktibbeha Co. Lake, TS, JH, MS (R)

BLACK-CROWNED NIGHT-HERON -- <u>up to 62</u>, 4 Jan.-16 Apr., Stan Tabor Rd., JH, TS, MS, PM, JO, LT (RS); <u>up to 16</u>, 27 Apr.-8 Jul., Bluff Lake, Noxubee Co., JH, TS, MS, MM, JHi, DF (U); <u>up</u> to 12, 23 Jun.-19 Jul., Brooksville, JH, TS (U); <u>1</u>, 2 Jul., Paulette Rd., Noxubee Co., JH (U) YELLOW-CROWNED NIGHT-HERON -- $\underline{1}$, 17 Apr., Plymouth Bluff, JO (U); $\underline{1}$ imm, 8 Jul., John W. Starr Forest, Winston Co., TS (U)

WHITE IBIS -- 7 ad, 10 Mar., Bluff Lake, Noxubee Co., TS (E)

GLOSSY IBIS -- 1, 18-19 May, Oktibbeha Co. Lake, TS, MS (R, L)

WHITE-FACED IBIS -- 1, 18 May, Oktibbeha Co. Lake, TS, MS (R, L)

ROSEATE SPOONBILL -- <u>1</u> imm, 12-26 Jun., Oktibbeha Co. Lake, TS (R); <u>up to 500</u>, 30 Jul.-Aug., St. Catherine Creek NWR, Adams Co., MSt, BS, CK (R, N)

OSPREY -- <u>1</u>, 1 Jan., Browning Creek Lake, Oktibbeha Co., TS, MS (RS); <u>up to 3</u>, 28 Feb.-13 Jul., Columbus Lake, Lowndes Co., TS (R nesting species); <u>1</u>, 25 Apr., backwaters of Columbus Lake, Lowndes Co., SS (R nesting species)

SWALLOW-TAILED KITE -- <u>1</u>, 5 Jul., Camp McCain, Grenada Co., MWi (R); <u>2</u>, 18 Jul., Lefleur's Bluff S.P., Hinds Co., NW (R); <u>2</u>, 21 Jul., Newton Co., JM (R)

MISSISSIPPI KITE -- <u>150+</u>, 25 May, Toby Tuby Creek, Oxford, JR (N)

BALD EAGLE -- <u>up to 4</u>, 27 Jan.-26 Apr., Noxubee NWR, Noxubee Co., LC, m.ob. (R nesting species); <u>2</u>, 1 Mar.-21 May, Oktibbeha Co. Lake, TS (R nesting species); <u>up to 3</u>, 10 Mar., Columbus, DP, JP (R nesting species); <u>1</u> pr with <u>1</u> eaglet, 24 Apr., Seabrook Rd., Tunica Co., RB (R nesting species) GOLDEN EAGLE -- <u>1</u> ad, 6-7 Jan., Noxubee NWR, Winston Co., SR (R) [Review List Species]

MERLIN -- <u>1</u> f/imm, 1 Jan., MSU South Farm, Oktibbeha Co., TS, MS (R); <u>1</u> f/imm, 27 Jan., MSU South Farm, Oktibbeha Co., TS (R); <u>1</u> f/imm, 29 Apr., Stan Tabor Rd., TS (R, L)

PEREGRINE FALCON -- <u>1</u>, 28 Jan., Coldwater River NWR, Tallahatchie Co., HM, JR, JHo (R); <u>1</u>, 23 Apr., Prairie Waters, Lowndes Co., TS, MS (R)

WILLOW FLYCATCHER -- <u>1</u>, 14 May, near Starkville, TS, MS (R, E); <u>1</u>, 24 May-30 Jun., Stan Tabor Rd., JH, TS, MS, JHi, HC (R); <u>1</u>, 10 Jun.-19 Jul., McLeod, Noxubee Co., JH, TS (R)

LEAST FLYCATCHER -- 1, 13 May, Rowan Oak, Oxford, JHo (U)

VERMILION FLYCATCHER -- $\underline{1}$ m, 10 May, near Quitman, Clarke Co., MD (R, RS)

ASH-THROATED FLYCATCHER -- <u>1</u>, 14 Mar., Logtown, Hancock Co., HW (Ca) [Review List Species]

TROPICAL KINGBIRD -- <u>1</u>, 1 Jan.-22 Feb., Bay St. Louis, HW, JL, HC, m.ob. (Ac); <u>1</u>, 9 Jun., Point Park, Pascagoula, LJ, BJ (Ac); <u>1</u>, 23 Jun., Singing River Island, Jackson Co., BJ (Ac) [Review List Species]

COUCH'S KINGBIRD -- <u>1</u>, 1-3 Jan. (continued from 30 Nov. 2016), Money, PM, JO (Ac) [Review List Species]

WESTERN KINGBIRD -- $\underline{3}$, 4 Apr., Pascagoula, HC (R); $\underline{1}$, 16 Jun., Verona, WP (R); $\underline{1}$ pr, 7 May, Warfield Point Park, Greenville, DB (R)

GRAY KINGBIRD -- <u>1</u>, 14 Apr., Belle Fontaine Beach, Jackson Co., HC (Ca) [Review List Species]

SCISSOR-TAILED FLYCATCHER -- <u>1</u>, 13 May, Biloxi, HC (R); <u>1</u>, 20 May, near Prairie Point, NG (R); <u>up to 2</u> ad, <u>3</u> imm, 26 May-Aug., near Starkville, RS, WP, JH, TS, m.ob. (R); <u>up to 2</u> ad, <u>3</u> imm, 10 Jun.-19 Jul., Paulette Rd., Noxubee Co., JH, TS, LM, RP (R); <u>1</u>, 18 Jun., Cockrum BBS Route, Tate Co., JHo (R); <u>1</u> pr, 2 Jul., Black Swamp Mitigation Bank, Monroe Co., WP (R)

WHITE-EYED VIREO -- <u>1</u>, 24 Feb., Noxubee NWR, Noxubee Co., TS (RS)

PHILADELPHIA VIREO -- <u>1-3</u>, 1-2, 7 May, Columbus, PM, JO, JH (US)

WARBLING VIREO -- <u>1</u>, 18 Apr., 2 May, Columbus Lake, Lowndes Co., JO (U); <u>1</u>, 23 Apr.-6 Jun., Columbus Lake, Clay Co., TS, MS (R nesting species); <u>1</u>, 7 May, Natchez Trace Parkway, Choctaw Co., TS, MS (U); <u>1</u>, 11 May, Oktibbeha Co. Lake, MS (U)

BLACK-WHISKERED VIREO -- <u>1</u>, 24 Apr., Singing River Island, Jackson Co., JR, JHo, HM, NL (Ca) [Review List Species]

HORNED LARK -- 1, 6 May, Seaman Rd. S.L., Jackson Co., NB, WP, m.ob. (R; 1st photographic evidence on the Mississippi Gulf Coast)

CAVE SWALLOW -- <u>1</u>, 30 Apr., Seaman Rd. S.L., Jackson Co., SM (R)

RED-BREASTED NUTHATCH -- <u>1</u>, 7 May, Jeff Busby Park, Choctaw Co., MS, TS (L)

GRAY CATBIRD -- <u>1-2</u>, 13 Jan.-28 Mar., Columbus Lake, Lowndes Co., JO, JH, TS (RS); <u>1</u>, 23 Feb., Louisville S.L., TS (RS); <u>1</u>, 3 Mar., White's Slough, Lowndes Co., JO (RS); <u>1</u>, 31 Mar., Bigbee Valley, Noxubee Co., JH (RS)

SPRAGUE'S PIPIT -- <u>1</u>, 1-28 Jan. (continued from 9 Dec. 2016), Holly Grove Rd., Panola Co., JR, HM, JHo, AB (Ca); <u>1</u>, 31 Jan., Buck Island Rd., Tunica Co., HM, RH (Ca) [Review List Species]

BACHMAN'S SPARROW -- <u>2-4</u>, 8 Apr.-6 May, Noxubee NWR, Winston Co., JH, PM, JO (U)

LARK SPARROW -- $\underline{3}$, 7 Apr.-23 Jul., Stan Tabor Rd., TS, MS, JH, JO, PM, JHi (U); $\underline{4-6}$, 10 Apr.-26 Jul., MSU North Farm, Oktibbeha Co., TS, MS, JH, MM, m.ob. (U); $\underline{2}$, 14 Apr.-24 May, Black Prairie WMA, Lowndes Co., JH (U); $\underline{3}$, 20 Apr.-10 May, Prairie Wildlife, Clay Co., TS (U); $\underline{1}$, 28 Apr., Douglas Rd., Noxubee Co., JH (U); $\underline{1}$, 1 May, Gilmer-Wilburn Rd., Lowndes Co., PM, JO (U); $\underline{2}$, 11 May-4 Jun., Harris Rd., Oktibbeha Co., TS, JH, m.ob. (U); $\underline{2-6}$, 20 May-4 Jul., Fox Chase BBS Route, Noxubee Co., NG (U); $\underline{5}$, 4 Jun., Macon BBS Route, Noxubee Co., TS, MS (U); $\underline{2}$, 10 Jun.-2 Jul., Paulette Rd., Noxubee Co., JH (U); $\underline{2}$, 9 Jul., Baldwyn Rd., Noxubee Co., JH (U); $\underline{1}$, 29 Jul., Greenbrier Rd., Noxubee Co., JH (U)

GRASSHOPPER SPARROW -- <u>1-3</u>, 20 Apr.-10 May, near West Point, TS (R, E); <u>2</u>, 6 May, Buck Island Rd., Tunica Co., HM, JHi (R)

HENSLOW'S SPARROW -- <u>1</u>, 4 Mar., A&D Turf Farm, Lafayette Co., GK, JHo, JR, HM, WP (R)

NELSON'S SPARROW -- <u>1</u>, 8-15 Jan., Stan Tabor Rd., JO, PM, LT, JH, m.ob. (R)

BALTIMORE ORIOLE -- <u>1</u>, 13 May, Oktoc, Oktibbeha Co., LBo, FB (L); <u>1</u>, 1 Jul., Plymouth Bluff, DP, MS, PM, JO (RS)

SHINY COWBIRD -- <u>1</u>, 8 May-5 Jun., Ansley, Hancock Co., NM, NB, LG, HC (Ac) [Review List Species]

BRONZED COWBIRD -- 1 m, 26 Apr., King residence, Brookhaven, CK (R)

LOUISIANA WATERTHRUSH -- <u>1</u>, 10 Mar., near Adaton, Oktibbeha Co., TS, MS (E)

NORTHERN WATERTHRUSH -- <u>1</u>, 13 May, near Starkville, TS (L)

GOLDEN-WINGED WARBLER -- <u>1</u>, 29 Apr., Rowan Oak, Oxford, JHo (U)

SWAINSON'S WARBLER -- <u>1</u>, 8-14 Apr., Bright Rd., Choctaw Co., TS, MS (U); <u>2</u>, 8 Apr.-7 May, Natchez Trace Parkway, Choctaw Co., TS, MS (U); <u>4</u>, 8 Apr.-8 Jul., Noxubee NWR, Noxubee, Oktibbeha, and Winston cos., TS (U); <u>1-4</u>, 9 Apr.-13 Jun., Moore's Creek Rd., Lowndes Co., JO, PM, TS, MS, DPr (U);

<u>1-4</u>, 16 Apr.-26 Jun., Plymouth Bluff, PM, JO, TS, MS (U); <u>2</u>, 24 Apr.-12 May, Section Line Rd., Lowndes Co., PM, JO, TS, MS, JH (U); <u>1</u>, 25 Apr., Harrell Rd., Oktibbeha Co., TS, MS (U); <u>1</u>, 26 Apr., P.D. Fulgham Rd., Oktibbeha Co., TS, MS (U); <u>4</u>, 28 Apr., Old West Point Rd., Lowndes Co., TS, MS (U); <u>1</u>, 30 Apr., Wade Rd., Oktibbeha Co., TS, MS (U); <u>2</u>, 30 Apr.-14 May, Polly Bell Rd., Oktibbeha Co., TS, MS (U); <u>2</u>, 9-13 May, Brown Rd., Oktibbeha Co., TS, MS (U); <u>1</u>, 13 May, Self Creek Rd., Oktibbeha Co., TS, MS (U); <u>1</u>, 13 May, Harris Rd., Oktibbeha Co., JH (U)

TENNESSEE WARBLER -- 1, 15 May, Starkville, JH (L)

NASHVILLE WARBLER -- 1, 6 May, Columbus, PM (U)

MOURNING WARBLER -- <u>1</u>, 13 May, Rowan Oak, Oxford, JHo, JR, GK (Ca) [Review List Species]

CAPE MAY WARBLER -- $\underline{1}$ m, 21 Apr., Starkville, JH (R); $\underline{1}$ m, 1 May, Columbus, JO, PM (R); $\underline{1}$ ad m, 3 May, near Oxford, AB (R)

CERULEAN WARBLER -- <u>1</u> m, 17, 29 Apr., 7 May, Jeff Busby Park, Choctaw Co., MS, TS (U)

BLACKBURNIAN WARBLER -- <u>1</u>, 19 May, near Adaton, Oktibbeha Co., TS (L)

BLACK-THROATED BLUE WARBLER -- <u>1</u>, 22 Apr., West Ship Island, PM, JO (Ca) [Review List Species]

PALM WARBLER -- <u>1</u>, 14 Jan., Noxubee NWR, Noxubee Co., MS (US); <u>3</u>, 28 Jan., near Bent Oak, Lowndes Co., PM (US); <u>2-4</u>, 4-12 Mar., McLeod, Noxubee Co., TS, MS, JH (US)

BLACK-THROATED GREEN WARBLER -- <u>1</u>, 18 Mar., Noxubee NWR, Oktibbeha Co., CM (E); <u>2</u>, 26 Mar., Nettleton Hunting and Fishing Club, Monroe Co., WP (E)

WILSON'S WARBLER -- <u>1</u> m, 8 May, near Adaton, Oktibbeha Co., TS, MS, JH (RS)

INDIGO BUNTING -- 1, 24 Mar., Starkville, JH (E)

PAINTED BUNTING -- <u>1-5</u>, 22 Apr.-9 Jul., McLeod, Noxubee Co., TS, MS, JH (U nesting species); <u>1</u> f/imm, 28 Apr., near Columbus, TS (U nesting species); <u>2-5</u>, 28 Apr.-31 Jul., near Starkville, TS, JH, m.ob. (U nesting species); <u>1-4</u>, 9-10, 21 May, Prairie Wildlife, Clay Co., TS, PM (U nesting species); <u>1</u> ad m, 11 May, near Louisville, JH (U nesting species); <u>1</u> ad m, 24 May, Black Prairie WMA, Lowndes Co., JH (U nesting species); <u>2</u>, 4 Jun., Macon BBS Route, Noxubee Co., TS, MS (U nesting species); <u>2</u>, 10 Jun., Stan Tabor Rd., JH, HC (U nesting species); <u>1</u>, 14 Jun., Fox Chase BBS Route, Noxubee Co., NG (U nesting species); <u>1</u>, 9 Jul., X-Prairie, Noxubee Co., JH (U nesting species); <u>1</u>, 9 Jul., near Brooksville, JH (U nesting species)

DICKCISSEL -- <u>1</u>, 10 Feb., Money, JR (RS); <u>3</u>, 21 Apr., near Prairie Point, JH (E)

CONTRIBUTORS

Larry Basden, Andy Bell, Debra Bell, Florence Box, Larry Box (LBo), Ned Boyajian, Sandra Boykin, Robert Briscoe, Holly Cox,

Lawrence Croft, Debbie Dailey, Frank Dailey, Mike Davis, Stephen Dinsmore, Nancy Donald, Duncan Fraser, Neil Gilbert, Libby Graves, Ken Hackman, Rob Harbin, Jeffrey Harris, Jeffrey Hill (JHi), Jason Hoeksema (JHo), Heath Hulon, Lucy Jacobson, Brian Johnston, Kim Jones, Chris King, Gene Knight, June Ladner, Nick Lund, Paul Mack, John Madden (JMa), Nancy Madden, Cody Massery, Lori McDonald, Joe McGee, Sharon Milligan, Hal Mitchell, Marlee Morris, Joe Mulrooney (JMu), Jimmy Osborne, Tina Overstree, Dianne Patterson, Jim Patterson, Wayne Patterson, Rhonda Plitt, Doris Proctor (DPr), J.R. Rigby, Scott Rush, Marion Schiefer, Terence Schiefer, Mike Sileo (MSi), Robert Stewart, Bill Stripling, Mary Stripling (MSt), Shirley Swoope, Steven Tatum, Lauren Thead, Kitty Tripp, Harold Weber, Mark Williams (MWi), Nick Winstead, Mark Woodrey

KEY TO LOCALITIES

Localities not listed are indexed on the "Official Highway Map of Mississippi" or the county is listed in the main text.

Plymouth Bluff = Lowndes Co.; Stan Tabor Rd. = Noxubee Co.

BRIEF FIELD NOTES



CLAPPER RAILS ALLOPREENING

Brian Johnston - 1506 Woodhaven St., Pascagoula, MS 39581.

A few years ago, the City of Pascagoula, Mississippi, built the Magnolia Birding Pier a few blocks south of downtown Pascagoula. It consists of a covered pier projecting into a small inlet or bayou off the Pascagoula River.

During the summer of 2017, Clapper Rails (*Rallus crepitans*) were reliable there from around sunset to dusk. On the evening of 17 June 2017, I was birding on the covered end of the pier. After a few minutes, a Clapper Rail came out of the marsh grass onto the narrow mud bank ~30-40 ft from me. This Clapper Rail moved methodically down the bank pecking and feeding for a few minutes, then stopped and began preening itself.

Within a couple minutes, a second Clapper Rail came out of the marsh grass and eased up to the first bird, which was still preening. In the nice light and great vantage point, I started snapping pictures of the two birds who appeared oblivious to me. I was wondering if this was a mated pair or a parent with a juvenile, and guessed it was a mated pair because both of them looked like adult birds.

When the second rail walked up to the first, the latter, which had been preening itself, started preening the second rail (Figure 1). This lasted for \sim 5 min. I know of no other instances of Clapper Rails allopreening.



Figure 1. Clapper Rails allopreening at Magnolia Birding Pier, Pascagoula, Mississippi, 17 June 2017.

KILLDEER FOSSIL NEST

George Phillips¹ and James Starnes² - ¹Mississippi Museum of Natural Science, 2148 Riverside Dr., Jackson, MS 39202; ²Mississippi Office of Geology, 700 North State St., Jackson, MS 39202.

On 14 April 2017, a Killdeer (*Charadrius vociferus*) nest was found near Pontotoc, Mississippi (Figure 1). The nest was in a bare area along the margin of a flat commercial lot behind an ALFA Insurance building undergoing construction. The nest was composed chiefly of fragmentary shells of a small Cretaceous oyster called *Ambigostrea tecticosta* (Gabb), with minor



Figure 1. Killdeer nest near Pontotoc, Mississippi, composed primarily of fossil oysters.

components of other marine macroinvertebrate fossils, namely echinoids. The bird(s) retrieved the pieces of fossil shells from the bare area, which was a featureless, weathered exposure of a soft, sandy limestone. The limestone had disintegrated (since the lot was scraped ~ 10 years ago) to an even softer, fine, sandy, limey sediment rich with fragmentary fossils.

UPLAND SANDPIPER SEEKING CAMOUFLAGE

Holly Cox - 183 Keesler Circle, Biloxi, MS 39530.

On 15 May 2017 at the Hancock County Arena at Kiln, Mississippi, I watched an Upland Sandpiper (*Bartramia* *longicauda*) feeding in a field. It was feeding over green grass and then went to a patch of dead grass and hunkered down to blend in (Figure 1). When I looked up to see what it was watching, I saw a Swallow-tailed Kite flying low above.



Figure 1. Upland Sandpiper foraging in green grass (A), and seeking camouflage while crouching in alert position in dead grass (B), Kiln, Mississippi.

LEUCISTIC SEMIPALMATED SANDPIPER

Wayne Patterson - 283A County Road 501, Shannon, MS 38868.

On 5-6 August 2016 I found an almost all-white sandpiper (Figure 1) at the Tupelo Water Treatment Ponds, Lee County, Mississippi. Some of the bird's feathers showed tan to light brown edging, and it appeared larger than nearby Least Sandpipers (*Calidris minutilla*). The bird's rounded head and short, stubby bill indicated it was a probable Semipalmated Sandpiper (*Calidris pusilla*). A second photo (Figure 2) showing webbing between its toes confirmed the bird was a Semipalmated Sandpiper.



Figure 1. Leucistic Semipalmated Sandpiper with Least Sandpipers. Tupelo Water Treatment Ponds, Mississippi, early August 2016.



Figure 2. Leucistic Semipalmated Sandpiper showing webbing between toes. Tupelo Water Treatment Ponds, Mississippi, early August 2016.

Avian Predators at a Least Tern Colony During Tropical Storm Cindy

Holly Cox - 183 Keesler Circle, Biloxi, MS 39530.

On 22 June 2017, during Tropical Storm Cindy, I observed avian predators take fledgling Least Terns (*Sternula antillarum*) at a nesting colony near Broadwater Marina, Biloxi, Mississippi. I saw 16 Magnificent Frigatebirds (*Fregata magnificens*) circling around the colony. During my brief visit, one immature frigatebird caught a fledgling Least Tern from the ground and flew away with it while being harassed by adult terns (Figure 1). I also found an immature Laughing Gull (*Leucophaeus atricilla*) in the process of swallowing a Least Tern fledgling (Figure 2).



Figure 1. Magnificent Frigatebirds, one with Least Tern fledgling, raiding Least Tern nesting colony, Biloxi, Mississippi, 22 June 2017.



Figure 2. Laughing Gull with Least Tern fledgling, Biloxi, Mississippi, 22 June 2017.

AMERICAN GOLDFINCH EATING ALGAE

Nicholas A. Winstead - Mississippi Museum of Natural Science, 2148 Riverside Dr., Jackson, MS 39202.

On 24 January 2017, I was birding on the grounds of the Pascagoula River Audubon Center at 5107 Arthur St., Moss Point, Mississippi. There were many American Goldfinches (*Spinus tristis*) on the grounds and feeding at the seed feeders. I approached the upper portion of an inlet of Rhodes Bayou where the water was still, and growths of algae were at the surface. I observed an American Goldfinch, possibly an adult female, land on a limb that had fallen into the water within a patch of algae. For ~5 min, I watched the bird move along the limb, probe the algal patch, and withdraw and ingest strands of algae. The patch of algae was green, but each strand the bird pulled out appeared brown. I do not know the type of algae that was being consumed. American Goldfinches

107

are mainly granivorous, but have been observed feeding on algae elsewhere (Dorsey 1963, DiGioia 1974, Kilham 1980).

LITERATURE CITED

- DiGioia, H.G. 1974. American Goldfinches eating algae. The Oriole 39:47.
- Dorsey, G.A. 1963. Notes on the food of the goldfinch. The Oriole 28:72-73.
- Kilham, L. 1980. Goldfinches feeding on filamentous algae. The Oriole 45:48.

THANK YOU TO THE 2017 REVIEWERS OF *THE MISSISSIPPI KITE*

Nicholas A. Winstead - Mississippi Museum of Natural Science, 2148 Riverside Dr., Jackson, MS 39202.

The Mississippi Kite has benefitted from the keen eye and constructive review of many people. The reviewers listed below have volunteered their expertise during 2017 to help improve the quality of articles submitted to *The Mississippi Kite*, and I am grateful for their help (those whose names are in bold reviewed two or more articles).

Sheena Feist, Nicole Hodges, Jason Hoeksema, Jerome Jackson, Bob Jones, Gene Knight, Tom Mann, Joe McGee, and J.R. Rigby.

THE MISSISSIPPI KITE

(ISSN 0737-0393)

Mississippi Ornithological Society Organized 30 April 1955

OFFICERS

J.R. Rigby (Oxford), President

Hal Mitchell (Southaven), Vice President

Holly Cox (Biloxi), Secretary

Wayne Patterson (Shannon), Treasurer

Gene and Shannon Knight (Oxford), Editors, MOS Newsletter

Nick Winstead (Jackson), Editor, The Mississippi Kite

Mississippi Ornithological Society Memberships

Honorary	. No dues	Junior (under age	\$5\$5		
Library Subscriptions\$15		Student (age 15 a	Student (age 15 and over) \$10		
Family	\$35	Individual	\$25		
Life	\$350	Sustaining	\$50		
Dues can be paid to the Treasurer (Wayne Patterson, 238A CR 501,					
Shannon, MS 38868) or online (www.missbird.org).					