

# The Chat

Vol. 86

Winter 2022

No. 1



**The Quarterly Bulletin of the Carolina Bird Club, Inc.  
The Ornithological Society of the Carolinas**

# THE CHAT

ISSN No. 0009-1987

Quarterly Bulletin of Carolina Bird Club, Inc.

1909 Lakepark Drive, Raleigh NC 27612

Vol. 86

Winter 2022

No. 1

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THE CHAT is published quarterly by the Carolina Bird Club, Inc., 9 Quincy Place, Pinehurst NC 28374. Subscription price \$30 per year.

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## General Field Notes

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Cover: Broad-tailed Hummingbird by Bill Hilton Jr.

# First Record of Broad-tailed Hummingbird (*Selasphorus platycercus*) in South Carolina

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On the morning of 20 September 2021 we deployed several 2 m x 12 m x 30 mm mist nets as part of our general bird banding program at Hilton Pond Center for Piedmont Natural History (York, South Carolina). During the 9 a.m. check we noticed a hummingbird in a top net shelf near several sugar water feeders. When we extracted the hummingbird, we saw it was slightly larger than a typical female Ruby-throated Hummingbird (RTHU), the breeding species we typically band at the Center. We also immediately noticed the wing was rather long, and the #10 (outermost) primary feather was straight and with a thin vane on the leading edge. This was quite different from the configuration of a Ruby-throated female's wider, slightly curved #10.

Still thinking this was a female hummingbird of some sort, we looked at the gorget and were surprised to see three metallic feathers, one red, one green, and one red-and-green. In RTHU only males have iridescent red feathers, so our suspicion was growing.

Our attention then went to the bird's tail feathers (rectrices), which had rufous bases. This absolutely ruled out Ruby-throated Hummingbird and led us to suspect one of the western vagrant *Selasphorus* hummingbirds that, with increasing regularity over the past three decades or so, have been showing up during non-breeding season in the Eastern United States. These include Rufous Hummingbird (*S. rufus*, which now occurs every winter somewhere in the Carolinas); Allen's Hummingbird (*S. sasin*, which strongly resembles *S. rufus* but is much less common in the Carolinas); Calliope Hummingbird (*S. calliope*, a smaller species that appears rarely in the East); and Broad-tailed Hummingbird (*S. platycercus*). We banded two vagrant Rufous Hummingbirds at Hilton Pond Center in November 2001 and September 2002, but the new capture's long wings, narrow outer primary feathers, and fully rounded rectrices suggested a different *Selasphorus* species.

When encountering a *Selasphorus* hummingbird, one definitive way to determine species is through measurements. We took several, using criteria described in Pyle's *Identification Guide to North American Birds* (1997). The bird's weight was 3.50 grams, about the same as a typical female RTHU, so this measure was not diagnostic. However, compared to all four *Selasphorus* species, our hummingbird's measurements of a 51.1 mm wing chord, 31.0 mm tail length, and 20.1 mm culmen (top ridge of exposed bill length) each indicated the bird in hand must be a Broad-tailed Hummingbird (BTHU), a species that breeds in the Rocky Mountains and had never been reported from South Carolina.

To verify the bird's gender we needed to age it, using a hand lens to examine its upper mandible. In young hummingbirds, the bill shows many tiny corrugations or

etchings that fill in and smooth out as the bird ages. Our bird had a smooth bill with very few corrugations near the base, indicating it was an adult that had to have hatched out before the 2021 calendar year. Thus, as an adult bird, it had to be female, despite its three metallic gorget feathers; adult male Broad-tailed Hummingbirds resemble adult male Ruby-throated Hummingbirds, complete with full red gorgets (Immature male RTHU may have one or more metallic red throat feathers).

Despite its superficial similarity to an adult male RTHU, an adult male Broad-tailed Hummingbird has a gorget that's a bit rosier than ruby, has long wings, is somewhat larger, and has rufous in the rectrices. In addition, an adult male Ruby-throat has a forked tail, while the Broad-tailed's name is derived from a tail configuration that is rounded in all age and sex classes. (Female and immature male RTHU have rounded tails.) The #10 primary in an adult male BTHU has a flipped-up tip, an in-hand characteristic that also differentiates it from an adult male RTHU.

In dorsal view our adult female Broad-tailed Hummingbird looked very much like an adult female Ruby-throat, except the long wings again stood out. There was no brown edging to the bird's back feathers, another sign that would have indicated an immature hatch-year individual.

Ventrally the BTHU looked even less RTHU-like, with rusty flanks, rufous in the tail, and those metallic gorget feathers. As in female and immature Ruby-throats, female and immature male Broad-tailed Hummingbirds have white tips on the outer three rectrices.

After banding the new capture and taking photos needed to document a new state species, we inserted the bird's bill into one of our sugar water feeders and watched as she drank her fill. We have not observed her since banding and release.

There is one photographic account for Broad-tailed Hummingbird in December 2001 from North Carolina (Campbell 2003) and several records from Georgia. eBird shows the species has been encountered numerous times along the central Gulf Coast outside of breeding season.

## References

- Campbell, Susan. 2003. First Broad-tailed Hummingbird (*Selasphorus platycercus*) Record for North Carolina.
- Pyle, Peter. 1997. Identification Guide to North American Birds. Part I. Bolinas, CA. Slate Creek Press.



Gorget of adult female Broad-tailed Hummingbird, showing three metallic feathers.





Right wing of adult female Broad-tailed Hummingbird, showing long, straight outermost primary feather (#10) with narrow leading vane.



Lateral view of adult female Broad-tailed hummingbird showing wings extending nearly to tip of the tail.



Dorsal view of adult female Broad-tailed Hummingbird, showing no buffy feather edges that (in September) would suggest an immature individual.





Ventral view of adult female Broad-tailed Hummingbird.



Bill of adult female Broad-tailed Hummingbird, showing smoothness along its length. Immature birds have some degree of etchings or corrugations that smooth out over several months.

All photos by Bill Hilton, Jr.



# Vegetative Nest Sites, Nest Survival, and Nest Fate of Birds within the Central Business District of Rockingham, North Carolina

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## Abstract

I assessed vegetative nest sites, nest survival, and nest fate of birds within the central business district (25-block plot: 42.4 ha) of Rockingham (~9000 population) in south-central North Carolina. I documented 324 nests of 16 avian species in 1994. Most nests were built in native trees and exotic shrubs. Nest survival in platform or open-cup nests for the eight most numerous species (seven native, one exotic) was low, regardless of whether nests were clustered at low heights (Brown Thrasher, Northern Mockingbird, House Finch, Northern Cardinal) or built at greater heights (Mourning Dove, Gray Catbird, American Robin, Common Grackle). Nest fate throughout the breeding season did not vary, regardless of nest height, landscape element, origin, substrate type, or foliage type. This study demonstrates that nest records amplify relationships with vegetative habitat and elements of the landscape matrix in urban environments.

## Introduction

In southeastern North America, no breeding bird censuses other than in large urban areas had been conducted in a town, and none from a central business district until McNair (2021) conducted such a census in downtown Rockingham, North Carolina in 1994. The focus was on biotic homogenization of two functional guilds - suburban adapters and urban invaders (Marzluff and Rodewald 2008) - within this urban landscape. Suburban adapters (e.g., American Robin [*Turdus migratorius*]) are typically adapted to diverse, young, edge, and disturbed habitats (Marzluff and Rodewald 2008). Urban invaders include House Finch (*Haemorrhous mexicanus*) populations in eastern North America (Badyaev et al. 2012). The investigation included the relationship of species richness and the number of nest records to an estimate of the amount of vegetation within city blocks of a 25-block study plot. However, McNair (2021) did not document other breeding parameters centered around nest records within the context of vegetative habitat and elements of the landscape matrix.

Consequently, I asked the following three questions: 1) How has avian species use of nest sites depended on native or exotic vegetation; I expected most nest sites in trees to be of native species and most nest sites in shrubs to be of exotic species, following the conventional pattern of many urban landscapes where the majority of trees are native and the majority of shrubs are exotic (Burghardt et al. 2008), 2) How have different elements (e.g., solitary trees and shrubs, hedgerows) of the landscape matrix accounted for

variation in avian species use of vegetative nest sites; I expected avian species to follow the general pattern of nest site use in different elements of urban environments as documented in southeastern North America by the Birds of North America species accounts, and 3) What are the patterns of nest survival and nest fate for avian species breeding in vegetation; I had a neutral expectation for both in downtown Rockingham because of mixed results from studies conducted in urban environments (Borgmann and Rodewald 2004, Chamberlain et al. 2009, Stinson and Pejchar 2018).

## Methods

### Field Site Description

Rockingham, North Carolina, the county seat of Richmond County, was founded in 1774 at Cole's Hill (Hutchinson 1998), a bluff rising between Hitchcock and Falling Creeks, along the contact zone (Fall Line) where the Piedmont meets the Sandhills, a subregion of the Coastal Plain. The 25-block study plot (42.4 ha) is centered on the ancient location of Cole's Hill, which comprises the central business district of Rockingham. The plot is largely comprised of buildings and other sealed surfaces, with smaller areas of a mixture of remnant native and planted exotic vegetation including lawns, and excludes town blocks of adjacent residential areas. The plot does not contain riparian or other aquatic habitats, forests, woodlands, farmland, parks, cemeteries, allotment gardens, or industrial areas. The plot contained one nest box in one block and isolated snags were present in about five blocks. A full description and map of the study plot is provided in McNair (2021).

### Vegetation

Species nomenclature for scientific names, authorities, and common names follows Weakley (2015). Several other sources were consulted for nomenclature of some non-naturalized exotic species (Lance 2004, ITIS 2020, USDA-NRCS 2020). Definitions of trees, shrubs, and vines follow Radford, Ahles, and Bell (1968), Lance (2004), and Weakley (2015). A tree was defined as a woody perennial, usually with a solitary trunk or main stem, growing at maturity to over a height of 4.6-6.1 m; a shrub as a woody perennial lacking a central trunk and usually branching from the base with several main stems, growing at maturity to heights reaching 7.6-9.1 m although usually much lower; and a vine as a plant which climbs by tendrils or other means, or which trails or creeps along the ground.

Downtown Rockingham contains a mixture of cropped (maintained) remnant native vegetation and exotic vascular plants. Plants herein even if curbside plantings or cultivars are considered native species if their original range includes Rockingham; this definition excludes species naturalized beyond their original ranges by aid of cultivation such as Pecan (*Carya illinoensis*). I consulted Weakley (2015), supplemented by several other sources (e.g., Sorrie 2011) to determine the original range of native species that occurred naturally without cultivation in North Carolina. Most exotic plants in Rockingham are of species originally from eastern Asia, although some are from other regions or continents.

Plantings on properties in the central business district usually adhered to recommendations of regulations by the City of Rockingham (2020). The landscape matrix of all vascular plant species within the study area was categorized into five

elements: espaliers and trellises, solitary trees or shrubs (usually spaced at least 1.3-1.5 m apart), hedgerows (a row of closely spaced shrubs and/or low-growing trees with an occasional tall tree, which may include exotic species and remnant native vegetation), tree rows, and woodlots (as distinct from larger woodlands) which is the most complex element. The tallest tree within the study plot was a 30-m Willow Oak (*Quercus phellos*).

### Vegetation Index

I developed a vegetation index for the diverse mixture of remnant native vegetation and landscaped plantings by overlaying an acetate grid of mylar squares on magnified aerial photographs from 1993 of each of the 25 blocks at a scale of 1:840 (2.54 cm:21.336 m; original measurements: 1 in:70 ft). This vegetation index relied upon estimation of the spatial coverage of vascular plants from each of the five landscape elements within each block. I verified this effort for one of these elements (espaliers and trellises) by an estimation of its spatial coverage based on field measurements. I excluded measurements of any exaggerated images of vascular plants. If vegetation filled at least 50% of a mylar square, I scored it as one square. This index excluded plants less than 1 m tall and ground vegetation, including lawns, where birds did not nest. For all blocks combined, the proportion and presence of vegetation represented from each of the five landscape elements was as follows: espaliers and trellises, 0.02 (six blocks); solitary trees and shrubs, 0.484 (25 blocks); hedgerows, 0.123 (17 blocks); tree rows, 0.078 (six blocks); and woodlots, 0.313 (six blocks).

### Avian Surveys

Species nomenclature for scientific names, authorities, and common names follows Chesser et al. (2019). I conducted intensive nest searches on 94 days from 27 March to 18 September 1994; field effort was concentrated from April through July (236.75 of 252.25 hr; 94%). I recorded the plant species that contained the nest, nest substrate (tree, shrub, and/or vine), nest height, and substrate height. Most effort was devoted to obtaining information from platform or open-cup breeding species rather than cavity-nesting species. The latter's nests were generally inaccessible. Eight (seven residents, one migrant) of the 16 avian species accounted for 294 of the 307 observations (95.8%). The eight most numerous species (see Results) nesting in vegetation were multiple-brooded, except for Common Grackle (*Quiscalus quiscula*), which is usually single-brooded (Peer and Bollinger 1997).

### Data Analysis

Vegetative nest sites: I compared the number of observed nests to calculation of the number of expected nests (Pearson's chi-square test of independence) for the eight most numerous species that used platform (Mourning Dove [*Zenaida macroura*]) or open-cup nests, after adjustment for their different proportions of nests in two landscape elements (solitary trees and shrubs: 0.637; hedgerows: 0.363). Eight more avian species that used vegetative nest sites were excluded because they accounted for only 13 observations. The other three landscape elements were also excluded because even when combined more than 20% of expected values <5. I then performed post-hoc Pearson's chi-square tests with Yates' correction (all expected values >5), testing pairwise comparisons of values of one species against the sum of values of the other seven; I reduced experiment-wide Type

1 error with the Bonferroni correction ( $P = 0.05/8$ , so  $\alpha = 0.0062$ ). I used Kruskal-Wallis test with the same Bonferroni correction to examine for any differences in nest height and substrate height among the eight species. I then used post-hoc non-parametric Mann-Whitney U-tests to examine differences among nest height and substrate height for all species pairwise-comparisons of these eight species with the Bonferroni correction ( $P = 0.05/28$ , so  $\alpha = 0.0018$ ).

Nest survival: Nest survival is the probability that a nest fledges at least one young. I usually recorded nest contents at least twice per week, but when possible, checked nests from a distance using binoculars. I considered nests to have been depredated if found empty and it was impossible that the young could have fledged, based on the stage of their development on the previous visit. Nest survival was verified in some cases by searching the surrounding area for fledglings or adult birds carrying food. I used 218 of 324 open-cup nests (67.3%) for nest survival analysis.

I used the exposure-days method of Mayfield (1961, 1975) to measure mean nest survival for Mourning Dove and seven species of passerines that built open cup nests in vegetation. I terminated the exposure period for nests with uncertain fate with the last observed active date, and for nests with known fate with the midpoint between last observed active date and first observed inactive date (Manolis et al. 2000). After periodically monitoring active nests and recording the stage and fate of eggs and nestlings, I calculated mean nest survival using the combined length of the incubation and nestling periods taken from the Birds of North America species accounts (Mourning Dove: 28 days, Otis et al. 2008; American Robin: 26 days, Vanderhoff et al. 2016; Gray Catbird (*Dumetella carolinensis*): 23.5 days, Smith et al. 2011; Brown Thrasher (*Toxostoma rufum*): 24 days, Cavitt and Haas 2014; Northern Mockingbird (*Mimus polyglottos*): 24.5 days, Farnsworth et al. 2011; House Finch: 29.5 days, Badyaev et al. 2012; Common Grackle: 27 days, Peer and Bollinger 1997; Northern Cardinal (*Cardinalis cardinalis*): 22 days, Halkin and Linville 1999). Following Mayfield (1975), I did not document any significant differences in mean nest survival between the incubation and nestling periods for each species ( $P$  for all Pearson's chi-square tests  $\geq 0.25$ ), except American Robin ( $P = 0.047$ ). I still combined the two periods for American Robin since the difference in mean nest survival between separate and combined calculations was only 0.02. Thereafter, I used the method of Johnson (1979) to calculate the standard error and 95% confidence intervals of mean nest survival for all eight species.

Nest fate: I used non-parametric tests to assess any differences in nest fate (failure, success, uncertain); removal of uncertain fates produced similar results, so I used the full data set ( $n = 214$ ) for the above eight species (Manolis et al. 2000). First, I used Kruskal-Wallis test with the Bonferroni correction ( $0.05/3$ , so  $\alpha = 0.017$ ) to examine for any differences in nest fate by nest height; all three fate groups had a distribution with the same shape. Second, I used the chi-square test to examine for any differences in nest fate by date of initiation of incubation. I compressed the date of initiation of incubation to six time periods (late March-early April, late April, early May, late May, June, July-September) to meet sample size requirements (every expected cell  $\geq 5$ ). Third, I used separate chi-square tests to examine for any differences in nest fate across all open-cup nesting species by four vegetative characteristics at nest sites (landscape element, origin



[native or exotic], substrate type, foliage type). For nest-site landscape element, I compressed three of the five categories (espaliers and trellises, tree rows, woodlots) into one category to meet sample size requirements; I also used a separate chi-square test on just the two main categories (solitary trees and shrubs, hedgerows) because of the disparate nature of the compressed category. For nest site origin, I removed two unknown cases. For nest site substrate type, I merged the two hybrid categories containing vines (tree-vine, shrub-vine) with vines to form one category. For nest site foliage, I used four types (deciduous, tardily deciduous-subevergreen, evergreen, mixed deciduous-evergreen) and removed one unrecorded case. Finally, I performed a chi-square test to examine for any differences in nest fate for the comparison of the two most numerous landscape elements (solitary trees and shrubs, hedgerows) and substrate types (trees, shrubs). All analyses were performed with statistical software available in McDonald (2014) and Real Statistics Using Excel (2019).

## Results

### Vegetative Nest Sites

Species composition: Sixteen avian species nested in native and exotic trees, shrubs, vines, or a combination of these three nest site substrates, representing 30 native and 35 exotic plant species (Appendix 1). The number of native plants (180; 50.7%) and of nests built in native plants slightly exceeded the number of exotic plants (175; 49.3%) and of nests built in exotic plants that were used to support 303 nests (Table 1). One hundred ninety-seven nests were built in trees (65%) and 59 in shrubs (19.5%). Over twice the number of nests in trees were built in native plants (especially Water [*Quercus nigra*] and Willow oaks) compared to exotic plants, even though the number of native species used (25; 58%) was not much greater than exotic tree species (18). In contrast, all nests in shrubs were built in 12 exotic species (especially Chinese Holly [*Ilex cornuta*] and Japanese Rose [*Rosa multiflora*]). The remaining number of nests (47; 15.5%) were built in vines or a combination of the three nest site substrates (Table 1). Vines, alone or tangled among trees and shrubs (especially the native Common Greenbriar [*Smilax rotundifolia*] and exotic Japanese Honeysuckle [*Lonicera japonica*]), were incorporated as support for 39 of the 303 nests (12.9%). I identified an additional 14 native (10 trees and shrubs, four vines) and 44 exotic species (41 trees and shrubs, three vines) in which I did not detect an avian nest on the study plot.

Landscape elements: Solitary trees and shrubs (55%) and hedgerows (30%) were the two major elements of the landscape matrix that contained nests by 16 breeding species on the study plot in 1994. Two of the eight most numerous species had strong associations for landscape elements ( $\chi^2_7 = 46.6$ ,  $P < 0.001$ ; Figure 1), American Robin for solitary trees (and shrubs) ( $\chi^2 = 13.2$ ,  $P < 0.001$ ) and Gray Catbird for hedgerows ( $\chi^2 = 16.9$ ,  $P < 0.001$ ). House Finch only built nests in two landscape elements (solitary trees and shrubs, espaliers and trellises), the most restricted use by any of the eight species.

Nest and substrate heights: Differences in median nest height ( $n = 295$ ) and substrate height ( $n = 290$ ) among eight avian species were highly significant ( $H = 123.62$  and  $123.54$ , respectively,  $df = 7$ ,  $P < 0.001$ ). Four species (Brown Thrasher, Northern Mockingbird, House Finch, Northern Cardinal) were clustered at low heights, whereas the other four (Mourning Dove, Gray Catbird, American Robin, Common Grackle) were

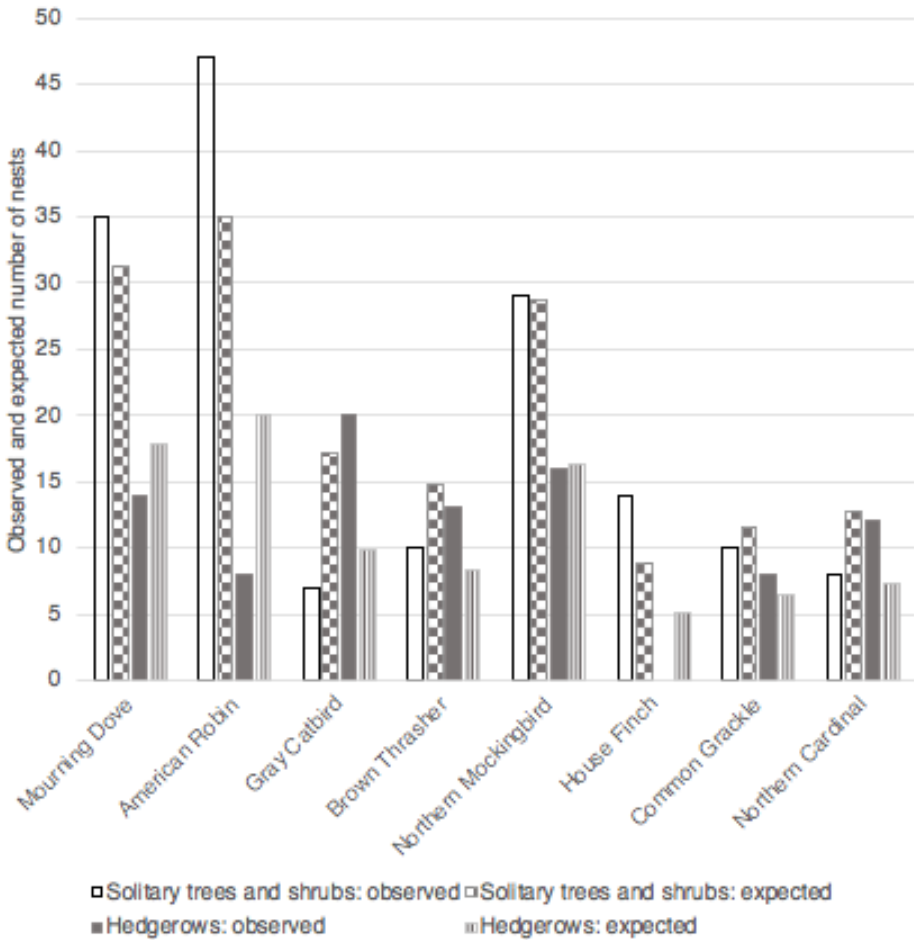


Figure 1. The number of observed and expected nests at two elements (solitary trees and shrubs, hedgerows) of the landscape matrix for eight avian species on the study plot in downtown Rockingham, NC, in 1994.

at greater heights (Figure 2a, b). American Robin nested at the greatest height and in the tallest vegetation, Brown Thrasher at the lowest height and in the shortest vegetation.

Median nest heights of the four species clustered at low heights were not significantly different from each other or from Gray Catbird but were significantly lower than the other three species (post-hoc Mann-Whitney U tests, all  $P < 0.001$ ; Figure 2a). The median nest height of American Robin was significantly greater than Mourning Dove and Gray Catbird (all  $P < 0.001$ ), but all other pairwise comparisons among the four species with greater median nest heights were not significant.

Differences in median substrate heights paralleled results on nest heights, with the following exceptions (Figure 2b). The median substrate height of Gray Catbird was significantly greater than Brown Thrasher, Northern Mockingbird, and Northern Cardinal (all  $P < 0.001$ ), but not House Finch; likewise, the median substrate height of Common Grackle was not significantly greater compared to House Finch. Finally, the median substrate height of American Robin was significantly greater than Gray Catbird and Common Grackle (all  $P < 0.001$ ), but not Mourning Dove.

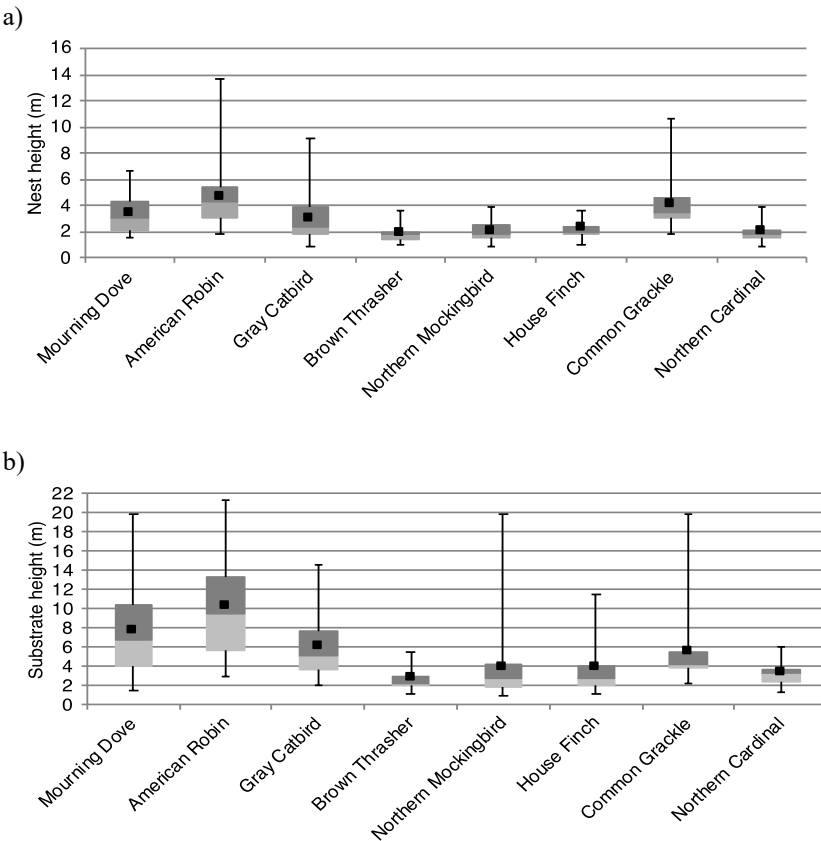


Figure 2. Box-and-whisker plots that display the median, Q1-Q3, and min-max values of nest heights (m) (Figure 2a) and substrate heights (m) (Figure 2b), respectively, at vegetative nest sites for eight avian species on the study plot in downtown Rockingham, NC, in 1994. Small solid black squares represent the mean value for each species.

with values of the four species nesting at low heights. Common Grackles usually nested close to the top of vegetation, which was particularly pronounced in an American Holly (*Ilex opaca*) tree row which contained the only semi-colony within the study plot.

Table 1. Number of nests in native, exotic, and mixed vegetation by nest site substrate.

Nest Site Substrate	Native	Exotic	Mixed <sup>a</sup>	Unknown	Total
Tree	137	59	0	1	197
Tree/shrub	0	2	6	0	8
Tree/shrub/vine	0	0	1	0	1
Tree/vine	8	7	8	0	23
Shrub	0	57	0	2	59
Shrub/vine	0	2	3	0	5
Vine	2	6	2	0	10
TOTAL	147	133	20	3	303

<sup>a</sup> Mixture of native and exotic vegetation.

### Nest Survival

Mean nest survival for Mourning Dove and seven species of passerines that used open-cup nests in vegetation was low, ranging from 0.24 (American Robin) to 0.39 (Gray Catbird, House Finch; Table 2). No significant differences in nest survival were documented between any of the eight species; 95% confidence intervals were wide, especially at the upper end which were over 0.50 except for Mourning Dove and American Robin (Table 2). Infrequent visits to some nests contributed to a high proportion of uncertain fates for all eight species, ranging from 19.5% (American Robin) to 37.5% (Northern Cardinal).

### Nest Fate

Median nest heights across all eight species between nests that failed, were successful, or whose fate was uncertain ( $n = 111, 48,$  and  $55$ , respectively) were significantly different (Kruskal-Wallis  $H = 6.53$ ,  $df = 2$ ,  $P = 0.04$ ); nests of uncertain fate were located higher in vegetation than successful nests ( $3.05$  m vs  $1.98$  m; Mann-Whitney  $U = 928$ ,  $P = 0.01$ ). The fate of nests by date of initiation of incubation across all eight species from late March to early September was not significantly different ( $\chi^2 = 7.64$ ,  $df = 10$ ,  $P = 0.66$ ). Among vegetative characteristics at nest sites, nest fate by origin, substrate type, and foliage type was not significant ( $\chi^2 = 1.74$ ,  $df = 4$ ,  $P = 0.78$ ;  $\chi^2 = 7.75$ ,  $df = 6$ ,  $P = 0.26$ ;  $\chi^2 = 8.85$ ,  $df = 4$ ,  $P = 0.06$ ), respectively. Nest fate by landscape element was significant ( $\chi^2 = 14.52$ ,  $df = 4$ ,  $P = 0.006$ ), but when the disparate compressed category was removed, nest fate between solitary trees and shrubs compared to hedgerows was not significant ( $\chi^2 = 3.60$ ,  $n = 183$ ,  $df = 2$ ,  $P = 0.17$ ); examination of individual cells in the former analysis revealed that the difference could primarily be attributed to House Finches nesting in espaliers and trellises and higher success than expected for Common Grackles nesting at their semi-colony in a tree row. Finally, nest fate for the comparison of the two most numerous landscape elements (solitary trees and



shrubs, hedgerows) and substrate types (trees, shrubs) was not significant ( $\chi^2 = 3.10$ ,  $n = 161$ ,  $df = 6$ ,  $P = 0.80$ ).

Table 2. Nest survival of Mourning Dove and seven species of passerines that used open-cup nests in vegetation on the Rockingham study plot in 1994.

Common Name (Scientific Name)	Sample Size	Fate		Total Exposure- Days	Mayfield Nest Survival: Mean ( $\pm$ 95% CI)
		Uncertain	Known		
Mourning Dove ( <i>Zenaida macroura</i> )	48	12	36	603	0.25 (0.15, 0.42)
American Robin ( <i>Turdus migratorius</i> )	41	8	33	448	0.24 (0.13, 0.43)
Gray Catbird ( <i>Dumetella carolinensis</i> )	18	4	14	181	0.39 (0.19, 0.79)
Northern Mockingbird ( <i>Mimus polyglottos</i> )	38	10	28	429	0.35 (0.21, 0.57)
Brown Thrasher ( <i>Toxostoma rufum</i> )	22	7	15	248	0.37 (0.20, 0.69)
House Finch ( <i>Haemorhous mexicanus</i> )	19	4	15	285	0.39 (0.20, 0.72)
Common Grackle ( <i>Quiscalus quiscula</i> )	16	5	11	156	0.29 (0.11, 0.73)
Northern Cardinal ( <i>Cardinalis cardinalis</i> )	16	6	10	156	0.27 (0.11, 0.64)

Discussion

The diverse mixture of landscaped plantings and remnant native vegetation in downtown Rockingham in 1994 supported a breeding avifauna dominated by seven native and one exotic species. As expected (Burghardt 2008), these species nested in native trees and exotic shrubs distributed among five elements of the landscape matrix. The NC Forest Service (2020) publishes a recommended list of street trees for North Carolina (five species each of native and exotic plants accounted for 33% and 37%, respectively, of individual trees used as nest sites in this study). The list of suitable trees documented in this study is generally more useful as a guide for plantings in south-central NC, but full information is now available in the North Carolina Gardener Toolbox (North Carolina State Extension 2021). Although only ~21% of shrubs compared to trees were used as nest-sites in downtown Rockingham, planting of shrubs is encouraged by the City of Rockingham (2020) which has regulations that specify the proportion of land to be landscaped. The breeding bird avifauna dependent on vegetation in downtown Rockingham could be improved by additional plantings of landscaped trees and shrubs and less cropping of remnant native vegetation, although increasing tree cover (Ibáñez-Álamo et al. 2019; cf., Morelli et al. 2018) is less important now because of the collapse of the local American Robin and Common Grackle breeding populations (McNair 2021). Enhancement of or creation of hedgerows for Gray Catbirds, especially in blocks with a

low amount and proportion of vegetation, is one way the urban landscape of downtown Rockingham could be improved.

Plantings of more native shrubs with replacement of some lawns and reduction of impervious surfaces has been identified as one of the most important challenges for small-scale bird conservation on commercial and non-commercial properties in central business districts (Snep et al. 2016, Ibáñez-Álamo et al. 2019; cf., Borgmann and Rodewald 2004). Nelson et al. (2017) found that nest survival was typically neutral even for birds that preferred nesting in exotic vegetation, but Stinson and Pejchar (2018) stated the probability of a significant decrease in nest survival (and productivity) was higher for birds using exotic shrubs. Certain exotic shrubs such as Japanese Rose, which was frequently used in Rockingham, increased the risk of nest predation for Northern Cardinals in Illinois (Rodewald et al. 2009). However, Northern Cardinals and Gray Catbirds have nested in other shrubs in Illinois and have shown positive responses to exotic vegetation (Schneider and Miller 2014). Favored exotic shrubs for nest sites at Rockingham, such as solitary Chinese Holly, in clumps (cf., Rousseau et al. 2015, Rega-Brodsky and Nilon 2016), or as a hedge (Filliater et al. 1994, Burghardt et al. 2008, McCuster et al. 2010, Schlossberg and King 2010, Meyer et al. 2015, Nelson et al. 2017) should not be discouraged until plantings of favorable native shrubs are established.

This study demonstrated that two native open-cup nesting species (American Robin, Gray Catbird) used particular elements of the landscape matrix in which to build nests, which conforms with documented habitat and nest-site preferences of these two species (Pitts 1984, Smith et al. 2011, Vanderhoff et al. 2016). These two species, plus the other six most numerous species, regardless of differences in their abundance and distribution within the study plot (McNair 2021), used appropriate nest-site types (e.g., shrubs and short trees for Northern Mockingbird, Farnsworth et al. 2011). The eight species also generally built nests at expected heights in suitable substrates (op. cit.), including higher nest heights of American Robin and Common Grackle that are usually found in urbanized environments as opposed to natural habitats (Savard and Falls 1981).

Nonetheless, vegetative characteristics for elements of the landscape matrix, origin, substrate type, and foliage appeared to have little influence on nest outcomes for open-cup nesting species whose nest survival was apparently low across the breeding season in 1994. Improving the frequency of examination of nest contents, especially of nests located at greater heights will increase sample sizes, reduce the proportion of uncertain fates, and increase precision (reduce wide confidence intervals) for estimates of nest survival. Nest survival of 41% for three species (American Robin, Gray Catbird, Northern Cardinal) at vacant lots in Baltimore, Maryland (Rega-Brodsky and Nilon 2016) was higher compared to Rockingham; nest survival was also higher for Northern Mockingbirds in urbanized environments of Gainesville, Florida (Stracey and Robinson 2012). In contrast, nest survival of Gray Catbirds at two of three suburban sites in Maryland (metropolitan areas of Washington, DC) was low (Balogh et al. 2011). Balogh et al. (2011) concluded that predation pressure was the ecological driver for these two population sinks. A large suite of predators (native and exotic terrestrial mammals, native avian predators, native snakes) plus cropping of vegetation during the breeding season was likely responsible for apparent low nest survival in downtown Rockingham.

However, additional data beyond one year are required to determine whether downtown Rockingham is a population sink for nesting birds.

Badyaev et al. (2012) stated the exotic House Finch does not seem to compete with any native species for nest-sites. Over half of House Finch nests in vegetation in downtown Rockingham were built in espaliers and trellises, even though this landscape element comprised only a very small proportion of the vegetation. The only other species to use this landscape element for their nests was Northern Mockingbird. House Finches also nested along streets in solitary Crape-myrtle (*Lagerstroemia indica*), which mockingbirds occasionally used. Potential competitive effects between House Finches and Northern Mockingbirds among nest sites and elements of the landscape matrix in urban areas of southeastern North America, where mockingbirds are increasing (Hanauer et al. 2010, Stracey and Robinson 2012), need to be more fully investigated.

### Acknowledgments

I thank A.J. Erskine, F.C. James, and M.W. Strohbach for their reviews of a penultimate version of the manuscript, and S. Shultz for review of the submitted manuscript.

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Appendix 1. List of native and exotic plants (trees, shrubs, vines) used as nest sites by 16 avian species in downtown Rockingham in 1994.		
Scientific Name (Common Name)	Nest Site Substrate <sup>a</sup>	Number
<b>Native Species (n = 30)<sup>b</sup></b>		
<i>Acer rubrum</i> L. (Red Maple)	T	2
<i>Betula nigra</i> L. (River Birch)	T	2
<i>Campsis radicans</i> (L.) Seemann ex Bureau (Trumpet-creeper)	V	2
<i>Celtis laevigata</i> Willdenow (Sugarberry)	T	14
<i>Cercis canadensis</i> L. (Eastern Redbud)	T	6
<i>Chamaecyparis thyoides</i> (L.) Britton, Sterns, & Poggenburg (Atlantic White Cedar)	T	3
<i>Cornus florida</i> L. (Flowering Dogwood)	T	10
<i>Crataegus</i> L. 1753 (Hawthorn)	T	1
<i>Ilex opaca</i> Aiton (American Holly)	T	18
<i>Juglans nigra</i> L. (Black Walnut)	T	1
<i>Juniperus virginiana</i> L. (Eastern Red Cedar)	T	9
<i>Liriodendron tulipifera</i> L. (Tulip-tree)	T	2
<i>Malus coronaria</i> (L.) P. Miller (Wild Crabapple)	T	2
<i>Morella cerifera</i> L. (Common Wax-myrtle)	T	1
<i>Morus rubra</i> L. (Red Mulberry)	T	4
<i>Muscadinia rotundifolia</i> Michaux (Muscadine)	V	6
<i>Parthenocissus quinquefolia</i> (L.) Planchon (Virginia-creeper)	V	1
<i>Pinus taeda</i> L. (Loblolly Pine)	T	13
<i>Pinus virginiana</i> P. Miller (Virginia Pine)	T	1
<i>Platanus occidentalis</i> L. (American Sycamore)	T	1
<i>Populus deltoides</i> Bartram ex Marshall (Eastern Cottonwood)	T	2
<i>Prunus serotina</i> Ehrhart (Wild Black Cherry)	T	2
<i>Quercus nigra</i> L. (Water Oak)	T	27
<i>Quercus phellos</i> L. (Willow Oak)	T	28
<i>Salix nigra</i> Marshall (Black Willow)	T	1
<i>Sassafras albidum</i> (Nuttall) Nees (Sassafras)	T	2
<i>Smilax bona-nox</i> L. (Catbrier)	V	1
<i>Smilax rotundifolia</i> L. (Common Greenbrier)	V	12
<i>Ulmus alata</i> Michaux (Winged Elm)	T	1
<i>Ulmus americana</i> L. (American Elm)	T	5
Subtotal	T=25; V=5	180
<b>Exotic Species (n = 35)<sup>c</sup></b>		
<i>Acer saccharum</i> Marshall (Sugar Maple)	T	3
<i>Ailanthus altissima</i> (P. Miller) Swingle (Tree-of-Heaven)	T	9
<i>Albizia julibrissis</i> Durazzini (Mimosa)	T	3
<i>Araucaria araucana</i> (Molina) K. Koch (Monkeypuzzle Tree)	T	2
<i>Carya illinoensis</i> (Wangenheim) K. Koch (Pecan)	T	8
<i>Cedrus deodara</i> (Roxburgh ex D. Don) G. Don (Deodar Cedar)	T	3
<i>Clematis terniflora</i> A.P. de Candolle (Yam-leaved Clematis)	V	4
<i>Deutzia scabra</i> Thunberg (Roughleaf Deutzia)	S	1
<i>Elaeagnus pungens</i> Thunberg (Thorny-olive)	S	2
<i>Ginkgo biloba</i> L. (Ginkgo)	T	2
<i>Hedera helix</i> L. (English Ivy)	V	4

<i>Ilex cornuta</i> Lindley (Chinese Holly)	S	25
<i>Ilex crenata</i> Thunberg (Japanese Holly)	S	4
<i>Lagerstroemia indica</i> L. (Crape-myrtle)	T	12
<i>Ligustrum japonicum</i> Thunberg (Japanese Privet)	S	4
<i>Ligustrum sinense</i> Loureiro (Chinese Privet)	S	7
<i>Lonicera fragrantissima</i> Lindley & Paxton (Sweet-breath-of-spring)	S	3
<i>Lonicera japonica</i> Thunberg (Japanese Honeysuckle)	V	16
<i>Magnolia grandiflora</i> L. (Southern Magnolia)	T	6
<i>Magnolia × soulangeana</i> Soulange-Bodin (Saucer Magnolia)	T	4
<i>Paulownia tomentosa</i> (Thunb.) Siebold & Zucc. ex Steud. (Princesstree)	T	2
<i>Photinia</i> Lindley 1821 (Photinia)	S	1
<i>Photinia glabra</i> (Thunberg) Maxim. (Japanese Photinia)	S	3
<i>Populus</i> L. 1753 (Poplar)	T	2
<i>Prunus caroliniana</i> (P. Miller) Aiton (Carolina Laurel Cherry)	T	1
<i>Pueraria montana</i> (Loureiro) Merrill (Kudzu)	V	2
<i>Pyracantha</i> M.J. Roemer 1847 (Firethorn)	S	5
<i>Pyracantha koidzumii</i> (Hayata) Rehder (Formosan Firethorn)	S	2
<i>Pyrus calleryana</i> Decaisne (Bradford Pear)	T	3
<i>Quercus palustris</i> Muenchausen (Pin Oak)	T	1
<i>Quercus virginiana</i> P. Miller (Live Oak)	T	10
<i>Rosa multiflora</i> Thunberg ex Murray (Multiflora Rose)	S	15
<i>Tsuga canadensis</i> (L.) Carrière (Eastern Hemlock)	T	1
<i>Wisteria sinensis</i> (Sims) A.P. de Candolle (Chinese Wisteria)	V	4
<i>Zelkova serrata</i> Thunberg (Zelkova)	T	1
Subtotal	T=18; S=12; V=5	175
TOTAL	T=43; S=12; V=10	355

<sup>a</sup> T=Tree; S=Shrub; V=Vine. See text for full definitions.

<sup>b</sup> See text for full explanation.

<sup>c</sup> See text for full explanation.



## 2021 Annual Report of the North Carolina Bird Records Committee

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Steven Shultz <sup>1</sup>, Chair, Lucas Bobay, C. Wilson Cook, J. Edward Corey  
Henry E. Link, Martina A. Nordstrand, Joshua L. Southern,  
Z. Taylor Piephoff, Jeffrey S. Pippen

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The make-up of the 2021 North Carolina Bird Records Committee (NCBRC) included additions of Lucas Bobay, Josh Southern, and Jeffrey S. Pippen as voting members, and the retention of Richard J. Davis and Harry E. LeGrand Jr. in advisory capacities. Jan J. Hansen, Nathan A. Swick, and Andrew K. Thornton rotated off the Committee for at least a one-year hiatus.

**Accepted as Valid.** The following reports were judged to be acceptable.

**Hammond's Flycatcher** (*Empidonax hammondi*) (20-23). An *Empidonax* flycatcher identified as Hammond's Flycatcher was captured on private property in *Randolph* County and banded by John Gerwin, et al, of the North Carolina Museum of Natural Sciences on 12 December 2020. The NCBRC considered the record and voted to accept the record 7-1 (Inadequately Documented), with 1 abstention. But because the report received 2 non-acceptance votes, it required review from outside the committee and subsequent recirculation with these outside opinions or any additional comments or photos from other observers. During the period in which the report was circulated for outside review, a detailed sight report with photographs was received from Derb Carter. Upon second ballot, the NCBRC reviewed and accepted (6 Accept, 3 Abstain) the report. This represents a 1<sup>st</sup> state record and, by virtue of photos, places Hammond's Flycatcher on the Definitive List.



*Hammond's Flycatcher,*  
9 January 2021,  
Randolph County, NC.  
Photograph by Derb  
Carter.

**Common Raven** (*Corvus corax*) (21-05) The NCBRC reviewed multiple eBird reports of a Common Raven seen and photographed at Oregon Inlet and Cape Hatteras in *Dare* County between 17-24 April 2021. While common in the mountains and uncommon in the piedmont, this is the first documented record of the species along the immediate coast in nearly 90 years! Observers noted that the bird displayed a broken primary feather that allowed for confirmation that a single bird was responsible for sightings in both locations. The reports were accepted unanimously (9-0).

**Yellow-green Vireo** (*Vireo flavoviridis*) (21-06) The NCBRC reviewed and unanimously accepted (9-0) eBird reports of a Yellow-green Vireo from Nags Head Woods Ecological Preserve in *Dare* County from 14-15 May 2021. Committee members lamented the lack of submitted documentation outside of eBird reports, for such a rare bird, resulting in a somewhat unsatisfying way to add this species to the NC list. This represents a 1<sup>st</sup> state record and, by virtue of photos, places Yellow-green Vireo on the Definitive List.



*Yellow-Green Vireo,  
15 May 2021,  
Dare County, NC.  
Photo by Jeff Lewis.*

**Magnificent Frigatebird** (*Fregata magnificens*) (21-09) The NCBRC unanimously accepted (9-0) an eBird report with photographs from Nathaniel Axtell of a female Magnificent Frigatebird from *Transylvania* County on 8 January 2021. This may be the only report of Magnificent Frigatebird from the state found during a snow shower!

**Painted Bunting** (*Passerina ciris*) (21-11) The NCBRC unanimously accepted (9-0) an eBird report with photographs from Emilie Travis of a non-adult Painted Bunting from *Graham* County on 13 May 2021. While a breeder along the coast, this species is very rarely encountered in the mountains.

**Townsend's Solitaire** (*Myadestes townsendi*) (21-13) The NCBRC reviewed and accepted (6 Accept, 3 Abstain) an eBird report with photographs of a Townsend's Solitaire from Clingman's Dome Swain County on 10 October 2021. While details were scant, committee members felt that the photographs, while distant, were diagnostic. This represents the 2<sup>nd</sup> accepted record for the state, both from the mountain region.

**Not Accepted.** The following reports were judged to be not accepted.

**Bohemian Waxwing** (*Bombycilla garrulus*) (21-01) A sight report of twelve Bohemian Waxwings from the northern Coastal Plain was not accepted by a vote of 0-9 (6 Unacceptable Sighting, 3 Inadequately Documented). Committee members felt this report pertained to the common Cedar Waxwing (*Bombycilla cedrorum*).

**Clark's Grebe** (*Aechmophorus clarkii*) (21-02) A report with photograph of a deceased bird from the central coast was not accepted by the committee by a vote of 0-9 (5 Inadequately Documented, 4 Unacceptable Sighting). Some committee members noted the difficulty in identifying the partially decomposed remains, while others identified the bird as a Red-throated Loon (*Gavia stellata*).

**Lazuli Bunting** (*Passerina amoena*) (21-03) A spring sight report from the northern mountains was not accepted by the committee on a vote of 3-6 (5 Inadequately Documented, 1 Unacceptable Sighting). Committee members felt that the report, while compelling, ultimately failed to provide the level of detail needed to accept.

**Tricolored Blackbird** (*Agelaius tricolor*) (21-04) A late winter sight report from the central piedmont was not accepted by the committee on a vote of 0-9 (7 Unacceptable Sighting, 2 Inadequately Documented). Committee members felt this report pertained to the expected Red-winged Blackbird (*Agelaius phoeniceus*). Tricolored Blackbird is essentially a sedentary species restricted to the Pacific Coast from Washington through Baja California Norte.

**White-tailed Tropicbird** (*Phaethon lepturus*) (21-08) The NCBRC reviewed an eBird report from Coquina Beach Dare County on 9 December 2020 of a White-tailed Tropicbird. The report received an equal number of votes, 4-4 (Inadequately Documented ) with one abstention, on the first ballot. The report was not accepted on the second ballot 3-6 (3 Accept, 3 Inadequately Documented, 3 Abstain).

**Bell's Vireo** (*Vireo bellii*) (21-10) A December 2020 sight report from the southern mountains was not accepted by the committee on a vote of 3-6 (5 Inadequately Documented, 1 Unacceptable Sighting). Committee members felt this report could have been correct but did not adequately eliminate more expected species.

**Painted Redstart** (*Myioborus pictus*) (21-12) A fall sight report from the piedmont was not accepted by the committee 1-8 (1 Accept, 3 Unacceptable Sighting, 2 Inadequately Documented, 3 Abstain). Committee members felt this report did not adequately eliminate more likely species, and that the scant detail did not serve to document what would be a 2<sup>nd</sup> record of this species for the state.

### Summary

With this round of voting, Yellow-green Vireo and Hammond's Flycatcher are added to the Definitive List.

Due to the split of Mew Gull into Common Gull (*Larus canus*) and Short-billed Gull (*Larus brachyrhynchus*) (62<sup>nd</sup> Supplement, July 2021, AOU Check-list of North American Birds), Common Gull replaces Mew Gull on the Definitive list, and Short-billed Gull, based on a single sight report, is added to the Provisional list.

The total number of accepted species from North Carolina is now **493** of which 479 are Definitive, two are considered Not Established, and 12 are Provisional. The full lists may be found at [www.carolinabirdclub.org/brc/](http://www.carolinabirdclub.org/brc/)

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# BRIEFS FOR THE FILES

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(All dates Fall 2021, unless otherwise noted)

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*Briefs for the Files is a seasonal collection of uncommon-to-rare or unusual North and South Carolina bird sightings and events which do not necessarily require a more detailed Field Note or article. Reports of your sightings are due the 20th of the month after the end of the previous season.*

<i>Winter</i>	<i>December 1–February 28</i>	<i>due March 20</i>
<i>Spring</i>	<i>March 1–May 31</i>	<i>due June 20</i>
<i>Summer</i>	<i>June 1–July 31</i>	<i>due August 20</i>
<i>Fall</i>	<i>August 1–November 30</i>	<i>due December 20</i>

*Reports may be submitted in any format, but I prefer that you use email, list multiple sightings in taxonomic order (rather than by date or location) and type your report directly into the body of the email. If your sightings are in a file, please copy-and-paste the text into the body of the email, rather than sending an attachment.*

*Suitable reports for the Briefs include any sightings you feel are unusual, rare, noteworthy, or just plain interesting to you in any way! It is my responsibility to decide which reports merit inclusion in the Briefs.*

*Please be sure to include details of any rare or hard-to-identify birds.*

*I rely in part on sightings reported in Carolinabirds. Please don't, however, rely on me to pick up your sightings from Carolinabirds. Instead, please also send your sightings directly to me as described above.*

*If I feel that your sighting warrants a Field Note, I will contact either you or the appropriate state Field Notes editor. You may, of course, submit your Field Note directly to the editor without going through me.*

Abbreviations: **BRC** – Bird Records Committee, **BRP** – Blue Ridge Parkway, **et al.** – and others, **Ft** – Fort, **Ln** – Lane, **m. obs.** – multiple observers, **NC** – North Carolina, **NWR** – National Wildlife Refuge, **Rd** – Road, **SC** – South Carolina, **SP** – State Park, **WMA** – Wildlife Management Area, **WTP** – Water Treatment Plant

*All italicized place names are counties.*

**Black-bellied Whistling-Duck:** A total of 17, 14 adults and three chicks were seen on private land in southeastern *Hyde* NC, where breeding was first confirmed in late July, 9 Aug (Matt Janson). Farthest inland was one at Lake Twitty *Union* NC 9-10 Aug (Dennis Kent, m. obs.) and three in the Horsepen Creek arm of Lake Brandt *Guilford* NC 17 Aug (Henry Link, m. obs.).

**Snow Goose:** Six in flight over Bear Island WMA *Colleton* SC 16 Oct (Rose & Tony Johnson) were somewhat early for a site so far south.

**Ross's Goose:** Sightings included one at the pond along US-64 near the border of *Tyrrell* and *Washington* NC 8-13 Nov (Chris Gearhart, m. obs.), two at a small pond near Mid-Pines Rd *Wake* NC 23-27 Nov (Phil Doerr, Dale Lambert, m. obs.), and three at Ecusta Pond *Transylvania* NC 20 Nov (Nathaniel Axtell, m. obs.).

**Eurasian Wigeon:** One had returned to Pea Island NWR *Dare* NC by 1 Oct (Greg Hudson).

**American Wigeon:** A drake on New Field Pond at Pea Island NWR *Dare* NC 29 Aug (Laura Jenkins) was somewhat early.

**Ring-necked Duck:** The pair seen intermittently through the summer in the Bluff Unit of Santee NWR *Clarendon* SC continued through at least 3 Sep (Ron Ahle). A drake continued at New River SP *Ashe* NC from 25 Jun (Joseph Johnson) through 15 Aug (Richard Gray).

**Common Eider:** Two hens apparently spent the entire summer around Beaufort Harbor *Carteret* NC, seen from late spring through 16 Jul and again 13 Sep (Caleb Bronsink).

**Surf Scoter:** Several inland sightings were made in November including two on Lake Junaluska *Haywood* NC 3 Nov (Vince Kloster), one on Lake Hickory *Alexander* and *Catawba* NC 4 Nov (Caroline Martin), one at the Goldsboro WTP *Wayne* NC 7 Nov (Ricky Davis), one at Milliken Arboretum *Spartanburg* SC 15 Nov (Louise Ridlon), and two on Lake Hartwell *Pickens* SC 29 Nov (Kevin Kubach).

**White-winged Scoter:** Two on the White Oak Creek arm of Jordan Lake *Chatham* NC 10 Nov (Margaretta Yarborough) was the only inland report made this fall.

**Black Scoter:** Inland sightings included four hens on Lake Hickory *Alexander* and *Catawba* NC 4 Nov (Dwayne Martin, Lori Owenby, m. obs.), one hen on Lake Norman *Mecklenburg* NC 21 Nov (Jeff Lemons, et al.), and two hens on Lake Hartwell *Anderson* SC 24 Nov (Steve Patterson).

**Long-tailed Duck:** Three on Lake Townsend *Guilford* NC 27 Nov (Henry Link, m. obs.) were unusual for the Piedmont region.

**Common Merganser:** Several sightings of family groups of female/immature-type birds provided more evidence of breeding along rivers in the NC mountains—six on Shelton Laurel Creek in *Madison* NC 16 Aug (Lance Jessee), four on the Watauga River near Valle Crucis *Watauga* NC 5 Sep (Maxwell Ramey, m. obs.), ten on the North Toe River in Spruce Pine *Mitchell* NC 18 Sep (Thomas McNeil), 16 on the Oconaluftee River in *Swain* NC 7 Oct (Lauren Vaughn, m. obs.), and six on Lake Junaluska *Haywood* NC 3-5 Nov (Timothy Carstens, m. obs.).

**Red-breasted Merganser:** One in the South Cove arm of Lake Keowee *Oconee* SC 24 Aug through 6 Sep (Stephen Schutt, m. obs.) was rather early for an inland site.

**Horned Grebe:** One near the dam on Thurmond Reservoir *Abbeville* SC 18 Aug (Steve Patterson, Scott Harris) and 3 Sep (Matthew Campbell, et al.) was rather early.

**Eared Grebe:** Two were seen at the Goldsboro WTP *Wayne* NC 2-8 Nov (Eric Dean, m. obs.). WTPs seem to attract this species more than any other type of site in the Carolinas.

**White-winged Dove:** One visited a yard with feeders in North Myrtle Beach *Horry* SC that has intermittently hosted this species since 2013, this year 21 Aug, 20 Sep, and 30 Oct (Deb Winter). Two were photographed on powerlines in Folly Beach *Charleston* SC 31 Oct (Michael Harhold). Individuals were seen at seven other sites this fall, all along the coast, from 24 Oct through 16 Nov (m. obs.).

**Yellow-billed Cuckoo:** An adult seen feeding two juveniles at Anderson Point Park *Wake* NC 26 Sep (Marc Ribaud) provided a rather late breeding report. Latest to depart this fall was one at River Park North in Greenville *Pitt* NC 14 Nov (Trevor Sleight), one captured at a banding station on East Kiawah Island *Charleston* SC 14 Nov (Josh Lefever, Nathaniel Watkins), and a moribund individual found in a yard in Sneads Ferry *Onslow* NC 29 Nov (Gilbert Grant).

**Black-billed Cuckoo:** Latest to depart this fall was one seen on Bulls Island at Cape Romain NWR *Charleston* SC during a shorebird survey 26 Oct (Josh Lefever, David McLean, Nathaniel Watkins).

**Lesser Nighthawk:** Pending review by the NC BRC is the report of a Lesser Nighthawk seen in flight around the causeway to Figure Eight Island *New Hanover* NC 25 Nov and 16 Dec (Derb Carter). If accepted, the report would provide the second record of this species in NC, the first a moribund bird in Carteret in Dec 1998.

**Chimney Swift:** One photographed along the Pitt St Causeway *Charleston* SC 7 Nov (Pam Ford, Craig Watson) was late.

**Ruby-throated Hummingbird:** Two, an adult male and a female, photographed in a yard in Burlington *Alamance* NC 5 Nov (Rhonda Weiss) were rather late for a site in the Piedmont.



**Rufous Hummingbird:** A female, likely one of the two that wintered at the park last year, returned to the Bean Tract of Riverbend Park *Catawba* NC by 17 Aug (Dwayne Martin).

**Broad-tailed Hummingbird:** Pending review by the SC BRC is the report with photographs and measurements of an apparent Broad-tailed Hummingbird mist-netted during a banding operation at Hilton Pond *York* SC 20 Sep (Bill Hilton Jr.). If accepted, the report would provide SC with its first record of this vagrant from the American west.

**Clapper Rail:** One photographed in a parking lot in Apex *Wake* NC 20 Sep (Natalie Barbour, m. obs.) and a moribund individual photographed in southern *Cumberland* NC 14 Nov (Jarrett Stephens) were likely forced down by inclement weather while migrating.

**Virginia Rail:** Individuals on private property in *Lincoln* NC 9 Sep (Jeff Turner) and along the Cottonwood Trail *Spartanburg* SC 23 Oct (Simon Harvey, m. obs.) were firsts for those counties.

**Sora:** Individuals in Holly Springs *Wake* NC 9-13 Nov (Lawrence Zoller, m. obs.) and in a yard in northwestern *Richland* SC 14 Nov (Hilda Flamholtz) were somewhat late for those inland sites.

**Common Gallinule:** One photographed on a small pond in Indian Trail *Union* NC 28 Nov (Chris Huffstickler, Dennis Kent, m. obs.) was a first for that county.

**American Avocet:** Inland sightings involved one at Lake Adger *Polk* NC 31 Aug (Cheryl Day), one on Shelley Lake *Wake* NC 2 Sep (Karen & Joe Bearden, m. obs.), and two in the Ellerbe Creek arm of Falls Lake *Durham* NC 8 Sep (Matt Lawing, Jim Capel).

**Black-bellied Plover:** 16 at the Super Sod farm along Hooper Ln *Henderson* NC following the passage of Tropical Storm Fred 18 Aug (Bill Hooker, Mike Resch) was a notable count for the mountain region. One amongst Killdeer in a field in southeastern *Union* NC 7 Nov (Martina Nordstrand) was a first for that county.

**American Golden-Plover:** One or more were seen at the Super Sod farm in *Orangeburg* SC 3-17 Sep (Carl & Cathy Miller, m. obs.) with a high count of three made on 17 Sep (John Cox). One photographed in South Mills *Camden* NC 26 Sep (Marie & Ron Furnish) was a first for that county. One photographed on Max Patch Bald *Madison* NC, at 4500 feet above sea level, 10 Oct (Charlotte Strickland) was very unusual for such a high elevation. A relatively large flock was seen in an agricultural area just north of Pageland *Chesterfield* SC 7-15 Nov (Greg Hays, Chris Huffstickler, Dennis Kent, m. obs.) with a high count of 18 on 8 Nov (Huffstickler, Martina Nordstrand). Nine also strayed into neighboring *Union* NC on 8 Nov (Huffstickler, Kent, Nordstrand). These sightings were the first of this species in either county. Individuals were also seen at several other sites scattered across the Carolinas, mostly September through mid-October.

**Pacific Golden-Plover:** Pending review by the NC BRC is the report with photographs of a Pacific Golden-Plover on the lawn next to the Oregon Inlet Fishing Center *Dare* NC 5-9 Aug (Audrey Whitlock, m. obs.). One wonders if this bird was the same individual seen around the Salt Pond at Cape Point through 30 Jul.



*Pacific Golden-Plover, Oregon Inlet Fishing Center, Dare County, NC, 6 Aug 2021.  
Photograph by Jeff Lewis.*

**Semipalmated Plover:** Sightings were made at multiple inland sites from late August through mid-September. A few of the higher inland counts were eight at Price Lake *Watauga* NC 31 Aug (Steve Dowlan), 12 along Hooper Ln *Henderson* NC 1 Sep (Kevin Burke), and four in *York* SC 6 Sep (Gretchen Locy, et al.).

**Upland Sandpiper:** Sightings were made 13 Aug through 12 Sep. High counts included four at the Beaufort Airport *Carteret* NC 19-20 Aug (Marty Wall, m. obs.), seven at Vandemark Sod *Nash* NC 22 Aug (Ricky Davis), four at the Manteo Airport *Dare* NC 28 Aug (Larry Chen, Sarah Toner), and two at Dalzell unit of Modern Turf *Sumter* SC 29 Aug (Matt Malin, m. obs.).

**Whimbrel:** One photographed at the Kathwood Ponds at Silver Bluff Audubon *Aiken* SC 9 Aug (Gip Young, et al.) was a great find for a site away from the coast.

**Long-billed Curlew:** Sightings included one on East Shackleford Banks *Carteret* NC intermittently throughout the period (m. obs.), one at Edingsville Beach *Colleton* SC 10

Aug (Cat Hahn), one at the Rachel Carson Reserve *Carteret* NC 10 Sep (John Fussell, Georgia Minnich), two on East Shackleford Banks 26 Sep (Fussell, et al.), up to four at the southern end of Edisto Island *Charleston* SC 20-23 Oct (Jeremy Ross, Keith Watson, m. obs.), and one at New River Inlet *Onslow* NC 17-18 Nov (John Lynch, m. obs.).

**Bar-tailed Godwit:** Pending review by the SC BRC is the report with photographs of an apparent Bar-tailed Godwit at the tidal lagoon at The Ocean Course (restricted access) on Kiawah Island *Charleston* SC 25 Oct (Josh Lefever, Nathaniel Watkins, et al.). The bird continued there into winter (m. obs.), though access to the site, a private golf club, proved challenging for most. The long-continuing individual on East Shackleford Banks *Carteret* NC was seen 19 Sep and 26 Sep (John Fussell, et al.).

**Hudsonian Godwit:** One photographed at Governors Island on Lake Norman *Lincoln* NC 25 Sep (Jeff Lemons, et al.) was a great find for an inland site and a first for the western NC Piedmont. Sightings made along the coast included two photographed in flight over North Pond at Pea Island NWR *Dare* NC 23 Sep (Jonathan Cooley), one at North Pond 10-12 Oct (Simon Thompson, m. obs.), one on South Pond at Pea Island NWR 30 Oct (Matthew Withrow, m. obs.), one at the northern end of Pawleys Island *Georgetown* SC 16 Nov (Byron Swift), and, probably the same individual, in neighboring Litchfield Beach 20-30 Nov (Paul Serridge, m. obs.).

**Marbled Godwit:** One at the upper end of Lake Wheeler *Wake* NC 2 Oct (Dale Lambert) was a great find for an inland site.

**Ruddy Turnstone:** Following the passage of Tropical Storm Fred, four were seen along Hooper Ln *Henderson* NC 18 Aug (James Poling), and one was seen in the Horsepen Creek arm of Lake Brandt *Guilford* NC 18 Aug (Henry Link, m. obs.). Six were seen at Buckhorn Reservoir *Wilson* NC 9 Sep (Ann Brice).

**Ruff:** One at New River Inlet *Onslow* NC 15 Sep (John Lynch) was the only one reported this fall.

**Stilt Sandpiper:** Five at Stegall Lake in Marshville *Union* NC 3 Aug (Dennis Kent, m. obs.) were notable for that area. Four at Lake Adger *Polk* NC 17 Aug (Bill Hooker, Mike Resch), one at the Bonsal Tailings Reservoir in *Anson* NC 23 Aug (Chris Huffstickler), and one at Parr Shoals Reservoir *Fairfield* SC 6 Sep (Debra & Steve Patterson) were firsts for those counties. One at Price Lake *Watauga* NC when drained 26 Aug through 1 Sep (Andrew Wolf, m. obs.) was a first for that county and the entire NC High Country.

**Sanderling:** Individuals at Price Lake *Watauga* NC when drained 1 Sep (Steve Dowlan, Will Bennett, m. obs.) and at Lake Ed Johnson *Spartanburg* SC 17-22 Sep (*vide* Paul Serridge) were firsts for those counties. Three along Hooper Ln *Henderson* NC 1 Sep (Vicky Burke, et al.) were notable for the mountain region.

**Dunlin:** One in southeastern *Union* NC 7 Nov (Martina Nordstrand) was a first for that county. One in *Pickens* SC 18 Nov (Kevin Kubach) and two at Coddle Creek Reservoir *Cabarrus* NC through 3 Dec (Randy McCarthy) were somewhat late for sites in the Piedmont.

**Baird's Sandpiper:** Sightings included one at Sandhill Turf *Montgomery* NC 23-24 Aug (Chris Huffstickler, m. obs.), two at Super Sod along Hooper Ln *Henderson* NC 1-3 Sep (Kevin Burke, m. obs.), one at Stegall Lake in Marshville *Union* NC 2-6 Sep (Martina Nordstrand, m. obs.), one in the Horsepen Creek arm of Lake Brandt *Guilford* NC 2-6 Sep (Paul Sumner, Matt Wangerin, m. obs.), one in the Ellerbe Creek arm of Falls Lake *Durham* NC 3-4 Sep (Bruce Young, m. obs.), one at Dobbins Farm *Anderson* SC 7-17 Sep (Jeff Tell, m. obs.), two at a small pond in *York* SC 12 Sep (Gretchen Locy), one at Salem Lake *Forsyth* NC 2-8 Oct (John Haire, m. obs.), and one on North Pond at Pea Island NWR *Dare* NC 10 Oct (Simon Thompson, et al.). The sightings in *Montgomery* NC, *Union* NC, and *York* SC were first for those counties.

**Least Sandpiper:** 35 along Hooper Ln *Henderson* NC 18 Aug (Mike Resch) and 33 at Price Lake *Watauga* NC when drained 31 Aug (Steve Dowlan) were good counts for the mountain region.

**White-rumped Sandpiper:** One at Sandhill Turf *Montgomery* NC 2 Sep (Martina Nordstrand) was a first for that county.

**Buff-breasted Sandpiper:** One seen and photographed in a campground in Pineola *Avery* NC, at 3660 feet above sea level, 3-6 Sep (Malia Kline, m. obs.) was very unusual for that high elevation and a first for that county. Other sightings this fall were more typical. Counts of two were made at several sod farms—at Sandhill Turf *Montgomery* NC 2 Sep (Martina Nordstrand), at Super Sod in *Orangeburg* SC 3-27 Sep (Matt Malin, Harold Donnelly, m. obs.), at Super Sod along Hooper Ln *Henderson* NC 21 Sep (Kevin Burke), and at Modern Turf in Rembert *Sumter* SC 28 Sep (Irvin Pitts, Mac Williams). Sightings away from sod farms included one at the Salt Pond at Cape Point *Dare* NC 29 Aug (Brad Benter) and 4 Sep (David Amini), two in the Ellerbe Creek arm of Falls Lake *Durham* NC 31 Aug (Ben Graham, et al.), one on East Kiawah Island *Charleston* SC 8-15 Sep (Josh Lefever, m. obs.), and one in Clemson *Pickens* SC 13 Sep (Steve Patterson).

**Western Sandpiper:** Two at Price Lake *Watauga* NC when drained 1 Sep (Steve Dowlan, Will Bennett, Guy McGrane), with one continuing through 7 Sep (m. obs.), were a first for that county and the entire NC High Country. Individuals at Salem Lake *Forsyth* NC 5-12 Oct (John Haire, m. obs.) and at Buckhorn Reservoir *Wilson* NC 7 Nov (Ricky Davis) were somewhat late for those sites away from the coast.

**Short-billed Dowitcher:** Inland sightings included one to two at Dobbins Farm *Anderson* SC 3-31 Aug (Brooks Garrett, George McHenry, m. obs.), one to five along Hooper Ln *Henderson* NC 18 Aug through 4 Sep (James Poling, m. obs.), seven in northeastern Greenville *Pitt* NC 1 Sep (Howard Vainright), eight at the upper end of Lake Wheeler *Wake* NC 3 Sep (Dale Lambert), one in *York* SC 6 Sep (Gretchen Locy, et al.), and six in

the Ellerbe Creek arm of Falls Lake *Durham* NC 28 Sep (Angie Holt). One at Price Lake *Watauga* NC when drained 1 Sep (Sheryl McNair, m. obs.) was especially unusual for the NC High Country.

**Willet:** One at the Modern Turf farm in Rembert *Sumter* SC 22 Aug (Shawn Smolen-Morton, Mac Williams) was a first for that county.

**Wilson's Phalarope:** Individuals were seen at Dobbins Farm *Anderson* SC 31 Jul through 6 Sep (Jeff Tell, m. obs.) and at Hemingway WTP *Williamsburg* SC 1-6 Sep (Jay Chandler, m. obs.).

**Red-necked Phalarope:** Inland sightings involved one at Lake Benson Park *Wake* NC 17 Aug (Marc Ribaud), one at Silver Bluff Audubon *Aiken* SC 31 Aug (Mary Jo Dawson), two in the Horsepen Creek arm of Lake Brandt *Guilford* NC 2-5 Sep (Paul Sumner, Matt Wangerin, m. obs.), and one at Hemingway WTP *Williamsburg* SC 16 Sep (Jay Chandler).

**Parasitic Jaeger:** Pending review by the SC BRC is the report of one on the Savannah River at Russell Dam *Abbeville* SC, following the passage of Tropical Storm Fred, 17 Aug (Matthew Campbell).

**Black-legged Kittiwake:** Pending review by the NC BRC is the report with photographs of an apparent immature Black-legged Kittiwake on Lake Hickory *Catawba* NC 2-3 Nov (Caroline Martin, m. obs.). If accepted, the report would provide the third record for the NC Piedmont. Interestingly, the second accepted Piedmont record came from the same site Nov 2017.

**Sabine's Gull:** Individuals were seen and photographed on two pelagic trips out of Hatteras *Dare* NC this fall—an adult in nearshore waters 28 Aug (Brian Patteson, Ed Corey, et al.) and an immature bird being harassed by an immature Long-tailed Jaeger 2 Oct (Patteson, Kate Sutherland, et al.).



*Sabine's Gull and Long-tailed Jaeger, off Hatteras, Dare County, NC, 2 Oct 2021. Photograph by Kate Sutherland.*

**Bonaparte's Gull:** One photographed on the beach in Emerald Isle *Carteret* NC 9 Aug (Jack Adams) was rather early.

**Franklin's Gull:** Individuals were seen at the Ocean Isle Beach WTP *Brunswick* NC 15-27 Nov (Bill Hooker, Taylor Piephoff, m. obs.) and at New River Inlet *Onslow* NC 20 Nov (John Lynch).

**Heermann's Gull:** Pending review by the SC BRC is the report with photographs of an apparent winter-plumaged-adult Heermann's Gull on the beach at Hilton Head Island *Beaufort* SC 30 Sep (Fred Fahmy). This sighting, SC's second, comes only three months after its first, a breeding-plumaged-adult photographed at nearby Hunting Island SP 21 Jun (Tammy Hester). Both reports, along with multiple reports from neighboring Tybee Inland Georgia 15 Feb intermittently through 17 Oct, all likely involve the same individual.

**California Gull:** One photographed at Cape Point *Dare* NC 29 Nov (Brian Patteson) was a great find.



*California Gull, Cape Point, Buxton, Dare County, NC, 29 Nov 2021. Photograph by Brian Patteson.*

**Herring Gull:** Four seen in flight near Brevard *Transylvania* NC 25 Nov (Nathaniel Axtell) was a notable count for the mountain region.

**Lesser Black-backed Gull:** Up to 1000 around the southern point of Ocracoke Island *Hyde* NC in mid-October (Peter Vankevich) was a notable concentration.

**Great Black-backed Gull:** One at Buckhorn Reservoir *Wilson* NC following the passage of Tropical Storm Fred 18 Aug (John Carter) was the inland-most report this fall.

**Sooty Tern:** Pending review by the SC BRC is the report of ten Sooty Terns on the Savannah River at Russell Dam *Abbeville* SC, following the passage of Tropical Storm Fred, 17 Aug (Matthew Campbell).

**Least Tern:** Individuals at Silver Bluff Audubon *Aiken* SC 13 Aug (Carol Eldridge, m. obs.) and in the Horsepen Creek arm of Lake Brandt *Guilford* NC, following the passage of Tropical Storm Fred, 19 Aug (Joe Donahue, m. obs.) were firsts for those counties.

**Gull-billed Tern:** 332 at Davis Impoundment *Carteret* NC, a traditional post-breeding gathering site for the species, 15 Aug (Amiel Hopkins, m. obs.) was a notable count.

**Caspian Tern:** 19 at Falls Lake in *Durham* NC 13 Oct (Lori White, et al.) was a notable count for the Piedmont in mid-October.

**Black Tern:** Five to six on Fishing Creek Lake *Chester* and *Lancaster* SC 15 Aug (Greg Hays) were a first for either county. 14 at Lake Wylie *York* SC 16 Aug (Chris Huffstickler) and 13 at Oak Hollow Lake *Guilford* NC 19 Aug (Andrew Thornton, m. obs.) were notable counts for those sites. Eight at Lake Julian *Buncombe* NC 31 Aug (Aaron Steed, John Koon) was a notable count for the mountain region.

**Black Skimmer:** 2000 at Midway Inlet, between Litchfield Beach and Pawleys Island, *Georgetown* SC 24 Nov (Paul Serridge) was a notable concentration.

**White-tailed Tropicbird:** A sub-adult was seen on a pelagic trip out of Hatteras *Dare* NC 20 Aug (Brian Patteson, Kate Sutherland, et al.).

**Red-throated Loon:** One on Jordan Lake *Chatham* NC 28 Nov (Jonathan Cantrell, Matt Spangler) was a good find inland.

**Northern Fulmar:** A light-morph individual seen and photographed on a pelagic trip out of Hatteras *Dare* NC 2 Oct (Brian Patteson, Kate Sutherland, et al.) was very early.

**Trindade Petrel:** A dark-morph individual was well seen on a pelagic trip out of Hatteras *Dare* NC 7 Aug (Brian Patteson, Kate Sutherland, et al.)

**Manx Shearwater:** One in flight off Southern Shores *Dare* NC 19 Nov (Jeff Lewis) was somewhat early for a from-shore sighting.



**Wood Stork:** Immature individuals in West Jefferson *Ashe* NC 7 Sep (Barbara Rowe) and in Marshall *Madison* NC 19 Sep (Steve Lambert) were unusual for the mountain region and firsts for those counties.

**Magnificent Frigatebird:** Two were seen and photographed in flight together over the southern end of Folly Island *Charleston* SC 22 Oct (Keenan Scott Freitas, Kristina Wheeler, et al.)

**Brown Booby:** This species was well-reported this fall. Sightings were made at two inland sites—on the Cooper River in southern *Berkeley* SC where an adult was seen and photographed 1 Aug (*vide* Craig Watson, Carl Miller, m. obs.) and on the Pee Dee River just south of Morrow Mountain SP *Montgomery* and *Stanly* NC where a juvenile bird was seen and photographed 12 Aug (*vide* Ben Graham), 27 Aug (Pam Palmer), and 6 Oct (Jon Carlsen). The latter sighting was reminiscent of a series of sightings along the Pee Dee and Catawba river systems in 2016 and 2020. Four, one adult and three juvenile birds, on an offshore tower 35 miles southeast of Hilton Head Island *Beaufort* SC 18 Sep (Christopher Brown, et al.) was a remarkable count for the Carolinas. Individuals were seen on pelagic trips out of Hatteras *Dare* NC 7 Aug and 28 Aug (Brian Patteson, et al.) and 12 miles off Cedar Island *Georgetown* SC 13 Aug (Wendy Allen). A subadult photographed resting on the beach at Cape Point *Dare* NC 29 Nov (Megan Baker, Michael Gosselin) was rather late.

**Great Cormorant:** One on Lake Townsend *Guilford* NC 28 Nov into winter (Ann Van Sant, Roberta Newton, Henry Link, m. obs.) was unusual for an inland site.

**American White Pelican:** Sightings began increasing in late September. Inland—most were two on Lake Keowee *Oconee* SC 19 Oct (Don Lenahan). 115 on the Pamlico River at the mouth of Broad Creek *Beaufort* NC 21 Oct (Kevin O’Kane) and 100 on the Neuse River at Fairfield Harbour *Craven* NC 20 Nov (Rob Tarkenton) were notable counts for those areas.

**Brown Pelican:** An immature bird photographed at Lake Wylie *York* SC 16 Aug (Chris Huffstickler, m. obs.) was unusual for an inland site.

**Great Blue Heron (white form):** A “Great White Heron” was seen and photographed at Harmon Field *Polk* NC 14-15 Nov (George Ivey, m. obs.)

**Snowy Egret:** Farthest inland this fall was one seen in flight over Hooper Ln *Henderson* NC 16 Sep (Mike Resch).

**Tricolored Heron:** Farthest inland this fall were one to two at Kevin Lofton Riverfront Park *Gaston* NC 19 Aug through 2 Sep (Lee Weber, m. obs.), one at Lake Thom-A-Lex Park *Davidson* NC 29 Aug (Zach Lance), and one in the Horsepen Creek arm of Lake Brandt *Guilford* NC 5 Sep through 15 Oct (Paul Sumner, Matt Wangerin, m. obs.).

**Reddish Egret:** Three on Portsmouth Island *Carteret* NC 15-16 Aug (Amiel Hopkins) and four on East Shackleford Banks *Carteret* NC 12 Sep and 26 Sep (John Fussell, et al.) were good counts for NC.

**Cattle Egret:** 1300+ at the Modern Turf farm in Rembert *Sumter* SC 22 Aug (Shawn Smolen-Morton, Mac Williams) was a notable count. One photographed in a cattle pasture in Bakersville *Mitchell* NC 31 Oct (John Britt) was unusual for that area of the mountains and a first for that county.

**Yellow-crowned Night-Heron:** A juvenile bird photographed near Sylva *Jackson* NC 4 Aug (Rebekkah LaBlue, Nate Watkins) was unusual for the southwestern mountains and a first for that county.

**Roseate Spoonbill:** The epic post-breeding dispersal that began in July continued into fall at sites across the Piedmont and coastal plain. A few of the higher counts at sites in the Piedmont included five at the upper end of Brier Creek Reservoir *Wake* NC 14 Aug (David Fischer), three to five at the upper end of Lake Fisher *Rowan* 21 Aug through 3 Oct (m. obs.), and three in the Horsepen Creek arm of Lake Brandt *Guilford* 21 Aug (Paul Sumner) through 10 Oct (Matt Wangerin). County firsts included one at Oak Valley Golf Club *Davie* NC 7-11 Aug (David & Susan Disher, m. obs.), three on Lake Surf *Moore* NC 16-19 Aug (m. obs.), two to three at Goat Island Park *Gaston* NC 21 Sep through 10 Oct (Steve Davria, m. obs.), one in flight over James City *Craven* NC 28 Sep (Ronnie Hewlette), and two at Kinston Nature Center *Lenoir* NC 25 Oct (Howard Vainright). High counts at sites along the coast included 17 at New River Inlet *Onslow* NC 31 Aug (John Lynch) and 28, a record high count for NC, at Twin Lakes in Sunset Beach *Brunswick* NC 26 Sep (Tony Lee). Farthest north along the coast were two at Pea Island NWR *Dare* NC 30 Sep through 12 Oct (Elizabeth Link, m. obs.). 100 on Dewees Island *Charleston* SC 7 Aug (Laura Caudill) was one of the higher counts made in SC.

**Swallow-tailed Kite:** Post-breeding dispersal continued into early fall with sightings far north and inland of the species' breeding grounds. One over Valle Crucis Community Park *Watauga* NC 20 Aug (David & Susan Disher) and ten along Tuttle Rd in *Stokes* NC 23 Aug (Tony & Cara Woods) were firsts for those counties. 13 over fields in Mills River *Henderson* NC 27 Aug (Kate Frost) provided a new record high count for a site in the mountain region. An immature bird video recorded in flight over Hartsville *Darlington* SC 12 Oct (Mac Williams) was very late to depart.

**Golden Eagle:** Individuals were seen at Caesars Head SP *Greenville* SC 3 Nov (Cheryl Day) and at Donnelley WMA *Colleton* SC 27 Nov (Peter Stangel)

**Northern Goshawk:** An immature bird was seen at Alligator River NWR *Dare* NC 11 Nov (Jeff Lewis).

**Mississippi Kite:** Post-breeding dispersal resulted in sightings at far-flung sites from late July to early September. Two observed hunting Ruby-throated Hummingbirds, one successfully, at Riverbend Park *Catawba* NC 17 Aug (Dwayne Martin, et al.) was an

interesting report. Four just southeast of Whittier *Jackson NC* 27 Aug (Timothy Carstens) were a first for that county.

**Snail Kite:** A GPS-tagged juvenile, originally tagged as a fledgling 10 Jun at Lake Kissimmee Florida, was tracked flying north through both states until the tag stopped transmitting near Broadwater Bridge Rd in Roseboro *Sampson NC* 2 Aug (*fide* Rob Fletcher). Fletcher says this bird flew continuously, only stopping between dawn and dusk, without any signs of foraging behavior north of Lake Jessup, Florida, 27 Jul through 2 Aug, and likely perished as a result.

**Broad-winged Hawk:** 2500 seen during a hawk-watch on Sassafras Mountain *Pickens SC* 25 Sep (Caroline Eastman) was a notable count.

**Merlin:** Nesting was suspected at two sites in the NC mountains in addition to the previously documented site at Land Harbor Lake— on the campus of Lees-McRae College in Banner Elk *Avery NC*, where a pair attempted nesting but failed in April (*fide* Alex Trifunovic) and three birds were seen together 23 Aug (Trifunovic) and at Mount Mitchell SP *Yancey NC* where a group of four birds, one adult and three juveniles, were seen 7 Aug (Clayton Gibb).

**Western Kingbird:** Three photographed in the same tree in the Ocean Park subdivision on Kiawah Island *Charleston SC* 29 Oct (Pam Ford, Carl & Cathy Miller, Craig Watson) was a remarkable sighting. Individuals were seen at six sites along or near the coast—on Edisto Island *Colleton SC* 9 Oct (Pam Ford, Craig Watson), along the Duck Park Boardwalk *Dare NC* 23 Oct (Audrey Whitlock, m. obs.), at Ft Moultrie *Charleston SC* 2-8 Nov (Michael Richmond, m. obs.), at White Oak Elementary School *Chowan NC* 18 Nov (Matt Janson), near Southport *Brunswick NC* 24 Nov (Ricky Davis), and along Goat Island Rd in *Clarendon SC* 30 Nov and 1 Dec (John Becker, Rebecca Jordan).

**Gray Kingbird:** Sightings involved one on a powerline in Emerald Isle *Carteret NC* 8 Aug (Christopher Esposito), two immature birds at Horsepen Point on Ocracoke Island *Hyde NC* 3 Oct (Michael Lipford, m. obs.), one on a powerline along US-264 near Mattamuskeet NWR *Hyde NC* 17 Oct (Jamie Adams), and one at Huntington Beach SP *Georgetown SC* 19 Oct (Ritch Lilly).

**Scissor-tailed Flycatcher:** Individuals were seen and photographed on Pawleys Island *Georgetown SC* 15-16 Oct (Julie Davis, m. obs.) and at Ocracoke Campground on Ocracoke Island *Hyde NC* 4 Nov (Lee Kimball, Tucker Scully).

**Olive-sided Flycatcher:** Individuals were found at about a dozen sites in the Piedmont and mountain region from late August through early October. One photographed along the Cottonwood Trail *Spartanburg SC* 7 Sep (Neil Owens) was a first for that county.

**Alder/Willow Flycatcher:** 30 “Traill’s Flycatchers” were mist-netted and banded at the regular fall banding operation on Kiawah Island *Charleston SC* 20 Aug through 7 Oct (Josh Lefever, Nathaniel Watkins, et al.). These species are hard to detect and

differentiate in fall when non-vocal, and this volume of captures implies at least one of these two species migrate more regularly along the coast than the field data suggests. This volume of captures is not unusual for this banding operation, however. In fact, this year's total was somewhat low compared to recent years—59 “Traill's Flycatchers” were banded during the 2017 Fall season (fide Aaron Given).

**Empidonax sp.:** One seen, photographed, and recorded calling at Lake Busbee in Conway *Horry* SC 17 Nov into winter (Steve & Barb Thomas, Paul Serridge, m. obs.) was likely a Least Flycatcher.

**Say's Phoebe:** Two were found this fall—one along Zion Church Rd in southeastern *Union* NC 10-16 Oct (Martina Nordstrand, m. obs.) and one along Howerton Rd in *Guilford* NC 16 Oct into winter (Jon Randolph, m. obs.). A one-and-a-half-hour overlap in sightings between the two sites on 16 Oct proved that the sites hosted different individuals. Both reports are pending review by the NC BRC—there are only two previous reports in NC outside of the coastal plain.

**Philadelphia Vireo:** One at Brumley Nature Preserve North *Orange* NC 30 Aug (Trenton Voytko) was somewhat early.

**Warbling Vireo:** Individual migrants were seen at six sites in the NC coastal plain 11 Sep to 11 Oct.

**Horned Lark:** 181 in the Dalzell unit of the Modern Turf farm in *Sumter* SC 4 Sep (Shawn Smolen-Morton, Mac Williams) was a notable count.

**Northern Rough-winged Swallow:** Two at Salem Lake *Forsyth* NC 15 Nov (John Haire) were somewhat late.

**Cave Swallow:** Two were seen on Figure Eight Island *New Hanover* NC 29 Nov (Derb Carter).

**Sedge Wren:** One at Valle Crucis Community Park *Watauga* NC 9-10 Oct (Steve Dowlan, m. obs.) was unusual for our northern mountains.

**Townsend's Solitaire:** The NCBRC accepted a report with photographs of a Townsend's Solitaire at Clingman's Dome *Swain* NC 10 Oct (Lexi Thomas). This is the second official record for NC, the first from a similar high-altitude site, Grandfather Mountain *Avery* NC, Sep-Oct 2015.

**Veery:** One mist-netted and banded on the west end of Kiawah Island *Charleston* SC 24 Aug (Ben Stalheim, Nathaniel Watkins, et al.) was somewhat early for a site along our southern coast.

**Swainson's Thrush:** One photographed in *Mitchell* NC 13-14 Nov (John Britt) was rather late for the mountain region.

**Lapland Longspur:** Individuals were seen and photographed at the Cedar Island Ferry Terminal *Carteret* NC 18 Oct (Ronnie Hewlette, Kevin O'Kane) and along Mid-Pines Rd in *Wake* NC 9-10 Nov (John Patten Moss, m. obs.).

**Thick-billed Longspur:** Pending review by the NC BRC is the report with photographs of an apparent Thick-billed Longspur around the southern end of the old Bonner Bridge at Oregon Inlet *Dare* NC 22 Oct (Phil Lehman, Richard Korpi) through 29 Oct (m. obs.). If accepted, the record would provide the first record of this species anywhere in the Carolinas.



*Thick-billed Longspur, southern end of old Bonner Bridge, Dare County, NC, 23 Oct 2021. Photograph by Martina Nordstrand.*

**Snow Bunting:** One hung around the jetty on the southern side of Oregon Inlet *Dare* NC for several weeks 10 Nov through 3 Dec (Rachael Veal, Jeff Lewis, Audrey Whitlock, m. obs.).

**Lark Sparrow:** A report of two immature birds in northwestern *Lincoln* NC 9 Sep (Jeff Turner) was interesting, suggestive of possible breeding in that area. Individuals were seen at over a dozen sites along the coast and in the Piedmont this fall, mostly late August and September. Counts of two were had in the grassy area in front of the Bodie Island

Lighthouse *Dare* NC 27 Aug (Trenton Voytko) and at the northern end of Pea Island NWR *Dare* NC 31 Aug through 3 Sep (Laura Jenkins, m. obs.). One near Ridgeville *Berkeley* SC 29 Sep (David McLean) was a first for that county. One returned to feeders in *Camden* NC for another winter by 9 Nov (James Harrison).

**Clay-colored Sparrow:** Individuals were seen at over a dozen sites this fall, most along the coast, mostly late September through late October. One near Brevard *Transylvania* NC 6 Sep (Michael Plauché, m. obs.) was somewhat early. Two were seen at Ft Moultrie *Charleston* SC 28-30 Sep (Elizabeth Anderegg, Craig Watson). One photographed at the Grassy Mine Overlook, at 5200 feet above sea level, along the BRP in *Jackson* NC 30 Sep (Todd Arcos) was unusual for such a high elevation site. Two were mist-netted and banded on Kiawah Island *Charleston* SC this fall—individuals on 27 Oct (Kandace Glanville, Ben Stalheim, et al.) and 16 Nov (Josh Lefever, Stalheim, et al.).

**Nelson's Sparrow:** One seen and photographed at Brookshire Park *Watauga* NC 7-12 Oct (Guy McGrane, m. obs.) was the only inland migrant reported this fall.

**Henslow's Sparrow:** One well-photographed along Hooper Ln *Henderson* NC 25 Oct (Vicky Burke) was a great find for the mountain region.

**Lincoln's Sparrow:** One photographed at the Biltmore Estate *Buncombe* NC 24 Sep (Casey Girard) was the first to arrive this fall. Individuals were mist-netted and banded on Kiawah Island *Charleston* SC 20 Oct, 24 Oct, and 9 Nov (Josh Lefever, Kandace Glanville, et al.).

**Yellow-breasted Chat:** One photographed at Charles and Ida Graham Park *Mecklenburg* NC 25 Nov (Andy Martin) was rather late for a site in the Piedmont.

**Yellow-headed Blackbird:** Two were reported this fall—a female along the Duck Park Boardwalk *Dare* NC 24-25 Sep (Jeff Lewis) and a first-year male on Ocracoke Island *Hyde* NC 26 Sep (Evangelyn Buckland) and 1 Oct (Sandy Bauers).

**Orchard Oriole:** A female/immature male photographed in a yard on Harbor Island *Beaufort* SC 16 Oct (Jenn Clementoni) was quite late. This species typically departs the Carolinas by mid-September.

**Bullock's Oriole:** An adult male visiting a feeder just southeast of Huntersville *Mecklenburg* NC 11 Nov into winter (Jeanie McCoy) was almost certainly the same individual that visited that feeder last winter, then an immature male.

**Northern Waterthrush:** Individuals seen at North River Preserve *Carteret* NC 14 Nov (John Fussell, Curtiss Merrick) and mist-netted and banded on East Kiawah Island *Charleston* SC 14 Nov (Josh Lefever, et al.) were somewhat late.

**Golden-winged Warbler x Blue-winged Warbler (F1 hybrid):** Individual “Brewster’s Warblers” were seen at Flat River Waterfowl Impoundment *Durham* NC 4 Sep (Will Bennett, Jon Bennett) and at Max Patch *Madison* NC 15 Oct (Clifton Avery).

**Swainson’s Warbler:** One mist-netted and banded on East Kiawah Island *Charleston* SC 14 Oct (Josh Lefever, et al.) was somewhat late.

**Tennessee Warbler:** Individuals at Lake Lure *Rutherford* NC 21 Nov (Mike Resch) and at Maplewood Cemetery in *Durham* NC, where photographed, 26 Nov (Ben Jesup) were quite late.

**Nashville Warbler:** This species was very well-reported this fall, with sightings at multiple sites across the region in September and October.

**Connecticut Warbler:** Sightings involved an adult at the Ridge Junction Overlook along the BRP in *Yancey* NC 29 Aug (Clifton Avery, et al.) and 5 Sep (Kirk Gardner), an adult male seen in a yard in *Clarendon* SC 18-19 Sep (Rebecca Jordan), an immature bird photographed at Horseshoe Road Preserve *Granville* NC 24 Sep (Mike Manetz), an adult female photographed in Waves *Dare* NC 27 Sep (Karen Lebing), and an immature bird seen along the Duck Park Boardwalk *Dare* NC 4 Oct (Jeff Lewis).

**Mourning Warbler:** Individuals were reported at five sites in the NC mountains this fall, 8 Sep through 15 Oct. Two were mist-netted and banded on Kiawah Island *Charleston* SC—immature individuals 10 Sep (Josh Lefever, et al.) and 13 Sep (Kandace Glanville, et al.).

**American Redstart:** An adult male seen along the Waynesville Greenway *Haywood* NC 16 Nov (Howard Browers) was rather late for the mountain region.

**Kirtland’s Warbler:** An immature bird was seen and photographed at Valle Crucis Community Park *Watauga* NC 30 Sep (*fide* Nate Swick) and 2-9 Oct (Max Ramey, m. obs.).

**Magnolia Warbler:** One at Pea Island NWR *Dare* NC 23 Aug (Greg Hays, Dennis Kent) was somewhat early for a site along the coast.

**Yellow Warbler:** One photographed in a yard in eastern *Randolph* NC 30 Nov (Ginger Walter) was quite late, especially for a site in the Piedmont region.

**Blackpoll Warbler:** One photographed at North River Preserve *Carteret* NC 24 Nov (Doug Racine) was quite late.

**Black-throated Blue Warbler:** An adult male seen near Weaverville *Buncombe* NC 8 Nov (Liz Skiles) was rather late for the mountain region.



**Yellow-rumped Warbler (western race):** An “Audubon’s Warbler” was seen around the southern end of the old Bonner Bridge at Oregon Inlet *Dare* NC 21 Nov through 4 Dec (Baxter Beamer, Martina Nordstrand, m. obs.).

**Black-throated Green Warbler:** A moribund bird found in downtown Raleigh *Wake* NC after a window-strike 5 Nov (*fide* John Gerwin) was rather late.

**Western Tanager:** A male returned to a yard in Columbia *Richland* SC for a second winter in a row 4 Nov (Alice Roberts Steinke). A female individual was photographed in a Juniper tree in Northlake *Anderson* SC 20 Nov (Daniel Cribb).

**Rose-breasted Grosbeak:** Individuals photographed in northeastern *Lexington* SC 21 Nov (Natalie Osborne Smith) and in southwestern *Mecklenburg* NC 24 Nov (Anthony Lombardino) were quite late.

**Blue Grosbeak:** Individuals lingered into November at a few sites along or near the coast. An adult male seen and audio-recorded along Lyle Creek in northeastern *Catawba* NC 25 Nov (Monroe Pannell) was quite late for a site in the Piedmont.

**Indigo Bunting:** An immature male photographed along the Duck Park Boardwalk *Dare* NC 20 Nov (Baxter Beamer, Martina Nordstrand) was late.

**Painted Bunting:** Farthest inland this fall was an adult female seen along Watchtower Rd in *Guilford* NC 10 Oct (Andrew Thornton).

**Dickcissel:** Individual migrants were reported at about two dozen sites from the mountains to the coast beginning in late August, but mostly mid-September through October.

# CAROLINA BIRD CLUB

[www.carolinabirdclub.org](http://www.carolinabirdclub.org)

The Carolina Bird Club is a non-profit organization which represents and supports the birding community in the Carolinas through its official website, publications, meetings, workshops, trips, and partnerships, whose mission is

- To promote the observation, enjoyment, and study of birds.
- To provide opportunities for birders to become acquainted, and to share information and experience.
- To maintain well-documented records of birds in the Carolinas.
- To support the protection and conservation of birds and their habitats and foster an appreciation and respect of natural resources.
- To promote educational opportunities in bird and nature study.
- To support research on birds of the Carolinas and their habitats.

Membership is open to all persons interested in the conservation, natural history, and study of wildlife with particular emphasis on birds. Dues, contributions, and bequests to the Club may be deductible from state and federal income and estate taxes to the extent allowable. Pay dues or make donations at <https://carolinabirdclub.org/dues>. Make change of address at <https://www.carolinabirdclub.org/members/profile>. Send correspondence regarding membership matters to the Headquarters Secretary. Answers to questions about the club might be found at <https://carolinabirdclub.org/about.html>.

## ANNUAL DUES

Individual or non-profit.....	\$30.00
Family.....	\$35.00
Student.....	\$15.00
Sustaining and businesses.....	\$30.00
Patron.....	\$50.00 and up
Life Membership (payable in four consecutive \$100 installments) .....	\$500.00
Associate Life Membership (in same household as life member).....	\$100.00

## ELECTED OFFICERS

President	Steve Tracy, Gastonia NC	StevePath1@aol.com
NC Vice-Presidents	Colleen Bockhahn, Clayton NC	
	Guy McGrane, Deep Gap NC	
SC Vice-President	Cathy Miller, Charleston SC	
Secretary	Karaleah Reichart, Raleigh NC	
Treasurer	Jared Miles, Charlotte NC	
NC Members-at-Large	Michael Clark, Durham NC	
	Betsy Kane, Washington NC	
	Julie Lee, Nebo NC	
	Barbara Reynolds, Asheville NC	
SC Members-at-Large	Richard Hayes, Charleston SC	
	Mac Williams, Hartsville SC	

## EX-OFFICIO EXECUTIVE COMMITTEE MEMBERS

Chat Editor	Steve Shultz, Apex, NC	<a href="mailto:chat@carolinabirdclub.org">chat@carolinabirdclub.org</a>
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Website Editor	Kent Fiala, Hillsborough, NC	<a href="mailto:webeditor@carolinabirdclub.org">webeditor@carolinabirdclub.org</a>
Immediate Past President	Lewis Burke, Columbia SC	

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