2013 Spring Migration Counts in North Carolina

Marilyn Westphal

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In stark contrast to the unusually warm 2012 spring season, when migrants began pouring into the Carolinas very early in the season, the cool, wet 2013 season resulted in many late migrants and late departing winter resident species. Although there was a record number of 22 counts from the state (7) from the mountains, 14 from the Piedmont, and 1 from the coast) including first timer Rockingham County, and the highest total species count (239) since 2005, the total birds per party-hour (68.34) was the lowest since 2001. Field or party-hours are determined by adding the total number of birds counted and dividing that number by the total time in the field of all groups or "parties" of participants in the count. "Parties" usually consist of 1 to 5 participants. Although some representatives of many neo-tropical migrant species had probably returned by late April, the cool, wet spring probably delayed the return of many migratory birds, accounting for the relatively low number of individual birds in spite of the highest number of count areas. Participation was also lower and even much lower than average for many count areas, and there were 52 fewer participants overall this year than last year. Perhaps the weather also affected enthusiasm. Extreme weather conditions, conflicting birding activities, and the limited number of participants in the mountains also required some mountain counts to turn to unconventional methods of completing counts. Some of these counts followed the Breeding Bird Survey method of allowing teams to select one day within a specific period, in this case usually 2 or 3 days of a specific date, to complete their sections. This method worked very well and allowed some counts to be completed that might otherwise have been impossible to do.

Some interesting species found this year included a Great Cormorant (Onslow County), an American Bittern (Forsyth County), an inland Little Blue Heron (Mecklenburg County), a Black-crowned Night-Heron (Greensboro), only one Peregrine Falcon in the mountains (Grandfather), an inland American Golden Plover (Henderson County), 3 Marbled Godwits (Onslow County), only one Black-billed Cuckoo this year (Falls Lake), only one Tennessee and Nashville Warbler this year (Buncombe and Henderson Counties), and the most unusual species, a lingering Common Redpoll (Rockingham County).

Most widespread species (found on every count) included Turkey Vulture, Mourning Dove, Chimney Swift, Ruby-throated Hummingbird, Downy Woodpecker, Pileated Woodpecker, Blue Jay, American Crow, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, Carolina Wren, Wood Thrush, American Robin, Gray Catbird, Chipping Sparrow, Northern Cardinal, and American Goldfinch. Once a rare species in North Carolina, Wild Turkeys were found in 21 of the 22 count areas this year. Wild Turkeys

have made a remarkable comeback since they were reintroduced in many areas of the state.

Six of the most widespread species were also among the most abundant in the state including our state bird the Northern Cardinal (3,340), which was the most abundant, along with Mourning Dove, American Crow, American Robin, Tufted Titmouse, and American Goldfinch. The other top ten most abundant, although not found in every count area, included European Starling (rare at higher elevation forests of the mountains), Common Grackle, Barn Swallow, and Canada Goose (once only a winter resident and migrant in North Carolina).

Details of individual counts including names of compilers and participants as well as count highlights and a list of species found exclusively on that count follow.

Count Area Details

Mountains

Transylvania County – count date May 2st, 124 species, 4,900 individuals, 23 participants in 11 parties, and 8 feeder-watchers, 67.00 party-hours.

Weather: Temperature 50-65°F, dense fog at high elevations, cloudy and windy everywhere, damp and chilly. No appreciable rain. Elevation ranges from 2100 to 5600 ft.

Compiler: Norma Siebenheller (sieb@citcom.net)

Participants: Marvin Barg, Michele Barg, Dick Blee, Sylvia Blee, Kristal Cooper, Jerry Griggs, Gary Harris, Kathy Harris, Richard Jackson, Carolyn Mills, Bill Moore, Janie Owens, Bill Seibenheller, Norma Seibenheller, Mark Simpson, Barrie Taylor, Bill Thomas, Shirl Thomas, Charlie Threatte, Linda Threatte, Connie Updyke, Marilyn Westphal, and Ruth Young. Feederwatchers: Howard Colby, Denise Daniels, Elizabeth Galloway, Jan Lee, Penny Longhurst, Sherry Minnich, Noel Thurmer, and Sam Woodruff

Exclusives: none

Notes: First, let us give ourselves a pat on the back for reaching the highest total of species ever recorded on this count - 124! We beat by one the previous high set in 1992. We also added one species to the cumulative checklist, the Northern Saw-whet Owl.

It may be surprising that such a high total was reached despite the fact that our early date of May 1st kept us from finding northern warblers such as Cape May, Wilson's and Magnolia, as well as Willow Flycatcher. It did allow, however, for the inclusion of late-staying sparrows, Rusty Blackbirds, and other similar winter birds that are often missed at a later date. What surprised us most was the very low number of waterfowl – no scaup, no Ring-necked Ducks, no American Coots. There was only one American Kestrel, a species that is disappearing from our summer landscape here and, incredibly, no Killdeer at all.

With a high count to celebrate I shouldn't be venting my frustrations, but it's hard not to when we had a Red-headed Woodpecker present from April 21 through April 29 – but not on May 1; when we'd seen two Sandhill Cranes just two days before the count; when Great Egrets, a Gadwall, 2 Common Loons and a pair of Ruddy Ducks with chicks were seen on May 2 at a pond that was scrutinized carefully the day before...but these things happen. We're happy with our results and with the picnic supper that capped off a very successful day.

Norma Siebenheller

Great Balsam and Plott Balsam Mountains IBA – count date centered around May 18th, 83 species, 3,523 individuals, 25 participants in 11 parties, 81.85 party-hours.

Weather: Very cool, wet, windy spring, but most participants selected best weather days possible in the count period. Elevation range from 3500 to 6100 feet.

Compiler: Marilyn Westphal (mjwestph@ret.unca.edu)

Participants: Tim Carstens, Nancy Casey, Robert Emmott, Tom Flagg, Jamie Harrelson, Beth Holley, Evan Jackson, Doug Johnston, Gail Lankford, Charlie Lankford, Nora Murdock, Bob Olthoff, Naomi Otterness, Jim Poling, Catherine Reid, Steve Semanchuk, Ray Sharpton, Mark Simpson, Emilie Travis, Tom Tribble, Lou Weber, Marilyn Westphal, Connie Wulkowicz, Stan Wulkowicz

Exclusives: none

Notes: The very cold, wet spring with frequent dense fog and high winds required some flexibility with the count date this year. What might be considered poor birding weather conditions at lower elevations often become impossible birding conditions on mountain ridges. Teams were allowed to select a date to survey within a few days on either side of May 18th and base their selection on weather conditions as much as possible. This system worked very well and allowed some teams to switch dates, even at the last minute, to allow for more favorable conditions. Weather should not be a critical factor in determining species presence/absence or abundance.

Although lessening daily weather conditions as a factor allowed for a more realistic count, and the consistently late date for this count allows for breeding species to return before the count, overall weather conditions during the spring season did affect return dates for a few species. Cedar Waxwings and Indigo Buntings delayed returning to the higher elevations until very late in May and even into June. Both of these species were in the top ten in abundance on the 2012 spring count when foliage emerged much earlier than usual, but as foliage emerged quite late this year abundance of both of these species declined greatly, from 107 Cedar Waxwings in 2012 to only 10 this year, and from 117 Indigo Buntings in 2012 to only 63 this year. At this writing in early July, however, both of these species are once again quite abundant at higher elevations

The top three most abundant species changed rankings this year when, for the first time, the most abundant species counted was Eastern Towhee (354). Rounding out the top ten most abundant species were Dark-eyed Junco (330), Chestnut-sided Warbler (314), Veery (171), Golden-crowned Kinglet (168), Blue-headed Vireo (164), American Robin (160), Black-throated Green Warbler (154), Canada Warbler (150), and Ovenbird (135).

Although Golden-crowned Kinglet numbers had been declining over the past several years, this year numbers bounced back, perhaps indicating that their populations are more cyclical or more dependent on conditions the previous breeding season. Thrush numbers also were higher than average, in general, with Veery, Hermit Thrush and Wood Thrush all recording the highest numbers on any of the eight counts conducted. The range of the Hermit Thrush has expanded in the count area as well. Once limited largely to the area from Devil's Courthouse to Richland Balsam, more are now being found farther east in the Black Balsam/Shining Rock area. Other species recording good numbers this year included Winter Wren (61), Common Yellowthroat (71), Least Flycatcher (36) and Alder Flycatcher (32). The Black Balsam/Shining Rock/Graveyard Fields areas with their extensive shrub and grass balds with wooded edges are ideal habitat for the latter three species where most of these birds are found.

Late migrants found included a couple of Yellow-rumped Warblers and a Bay-breasted Warbler along the Pisgah Ridge as well as a Cerulean Warbler, which may or may not have been a late migrant, in the Plott Balsam Mountains. The very controversial Black-capped/Carolina hybrid Chickadee numbers along the higher ridges of the Great Balsam Mountains and extending into the Pisgah Ridge also have increased in number. As has been true in recent years, all chickadee songs heard from Black Balsam Road to Richland Balsam were that of the Black-capped Chickadee, indicating either a range expansion of the Black-capped Chickadee or at least of the dominance of that song in hybrids and possibly even Carolina Chickadees. What is certain is that chickadee numbers have greatly increased in the spruce/fir zone of the Balsam Mountains since the 1960's when they were largely absent.

Once again many participants on this count considered this one of their favorite birding days of the year. Thanks again to all of them for a job well done.

Marilyn Westphal

Henderson County – count date centered around May 8th, 110 species, 2,382 individuals, 11 participants in 9 areas, 26.05 party-hours.

Weather: Torrential rains and flooding on the scheduled count date caused this count to be postponed a few days and required allowing teams to select a day to cover their area and sometimes cover another area the next day.

Compiler: Jim Neal (jlbjneal@gmail.com)

Participants: Barrie Cliff, Paulette Cliff, Nancy Cowal, Wayne Forsythe, Rich Leppingwell, John LoCurto, Barbara Neal, Jim Neal, Janie Owens, Mark Simpson, and Marilyn Westphal

Exclusives: American Golden-Plover, Nashville Warbler

Notes: The 2013 Spring Migration Count for Henderson County was conducted over an 8-day period as torrential rain and schedule conflicts caused changes to our plans. Two areas were counted on Saturday, May 4 with cloudy cold weather and temperatures between 45-48 degrees. The last area was counted on Saturday, May 11 with partly cloudy skies and temperatures in the mid 60's. The other 6 areas were counted during the week. Eleven (11) people worked nine areas in the county and found 110 species and 2,382 individual birds. The 110 species was the mean of the number normally seen with the previous low being 100 species in 2011 and the highest being 120 species in 2006. The 2,382 total birds were the sixth lowest in our 16 years collecting Spring Migration data. The lowest total birds was 2,015 in 1999, when we had 14 people covering only 8 areas and the highest was 3,904 in 2012 when we had 14 people covering 9 areas.

The heavy rain had both positive and negative impacts on our count. Flooding prevented counters from covering their entire area. However, this flooding caused migrating shorebirds to stop at the partially flooded sod farms on Hooper Lane resulting in three species being seen for the first time, and two for only the second time. The three first timers were an American Golden-Plover, a Short-billed Dowitcher and two Bonaparte's Gulls. The second timers were three Common Loons and fifteen Dunlin. All five of these birds are rare visitors to the mountains in the spring.

This year there were only 6 species with more than 100 birds seen, and none over 200. The Eastern Towhee was most numerous at 139, followed by the Song Sparrow 130, American Crow 128, Northern Cardinal and European Starling at 123 each, and the American Robin at 120. The Blue Jay, American Crow, Carolina Wren, American Robin, Eastern Towhee, Song Sparrow, and Northern Cardinal were found in all count areas. 21 species of warbler were seen, with the Northern Parula, Black-throated Green, Black-and-White, Ovenbird, and Hooded being the most plentiful.

The most unusual thing about this year's count was the torrential rain measuring over seven inches on Sunday May 5th, the day planned for the count forcing people to make other plans. Also, two of our counts had some additional assistance from six members of the Carolina Bird Club who helped at Fletcher Park and Jackson Park, and others joined in on parts of the trails. Overall, it was a job well done, and I want to thank all those who participated.

Jim Neal

Buncombe County – count date centered around May 11th, 120 species, 4,988 individuals, 25 participants in 9 parties, 64.00 party-hours.

Weather: Cool and wet, foggy most mornings.

Compiler: Doug Williams (dhwilliams2@gmail.com)

Participants: Nancy Casey, Robert Emmott, Jackson Evans, Doug Johnston, Gail Lankford, Herman Lankford, Nora Murdock, Len Pardue, Janie Owens, Len Pardue, Russell Roe, Steve Semanchuk, Mark Simpson, Liz Skiles, Tom Tribble, and Marilyn Westphal

Exclusives: Tennessee Warbler

Notes: none

Black Mountains IBA – count date centered around May 25th, 62 species, 1,594 individuals, 9 participants in 5 parties, 41.8 party-hours.

Weather: Cool, often foggy and windy although a couple of mornings were warm and sunny. Elevation range for this count is 3,000 to 6,684 ft. with most of the count area above 4,000 ft.

Compiler: Marilyn Westphal (mjwestph@ret.unca.edu)

Participants: Jackson Evans, Jamie Harrelson, Charlie Lankford, Gail Lankford, Nora Murdock, Jim Poling, Steve Semanchuk, Mark Simpson, and Marilyn Westphal

Exclusives: none

Notes: The Black Mountains include many of the highest mountain peaks in the Appalachian chain and the climate resembles more that of Canada than of the Carolinas. Spring normally arrives very late, which is the reason this count is always held the last weekend in May. This year the very cool, wet spring throughout the region resulted in even more extreme weather conditions in the rugged Black Mountains. Rangers at Mount Mitchell State Park said that it was the windiest spring they had ever experienced. The last day of freezing temperatures was May 30th and wet spring seasons generally mean persistent fog at high elevations. Because this situation creates difficult and even dangerous birding conditions and because attempting to bird under such extreme conditions produces false results, teams were allowed to select any day within a few days of the last weekend in May to cover their sections. Also, because of the shortage of participants for a variety of reasons, a couple of teams with more time flexibility were encouraged to cover another section on a different day in order to provide more complete coverage of the area.

Even with the late date of this count, the very late arrival of spring at these elevations means that some birds delay their return. As occurred in the Balsam Mountains count, Indigo Bunting and Cedar Waxwing numbers in the Black Mountains were quite low. In fact, record low numbers of Indigo Buntings (23) were found. As with the Balsam Mountains, however, both of those species at this writing are now quite abundant in the Black Mountains.

In general, warbler numbers were quite good this year. In fact, five of the top ten species in abundance were warblers. As occurred in the Balsam Mountains count, Golden-crowned Kinglets also bounced back strongly this year following two years of very low numbers and an overall decline in numbers since 2009. Top ten most abundant species this year included Blackthroated Green Warbler (170), Golden-crowned Kinglet (150), Dark-eyed Junco (146), Blue-headed Vireo (114), Black-throated Blue Warbler (99), Canada Warbler (83), Blackburnian Warbler (78), Winter Wren (67), Eastern Towhee (61), and Ovenbird (57).

An Alder Flycatcher and a Magnolia Warbler were found again this year as well as a Yellow-rumped Warbler suggesting attempted breeding in the area. Swainson's Thrushes also returned to the area for the 8th year suggesting

that breeding in the area has probably had some success. Hermit Thrushes also seem to be extending their range farther from the spruce/fir zone as some are now located as low as the 4,300 foot elevation where spruce trees are few and far between. Other interesting species found included three Northern Saw-whet Owls and a couple of Red Crossbills.

Many thanks once again to the intrepid participants who had to be very flexible and persistent in order to complete their sections.

Marilyn Westphal

Grandfather Mountain IBA - count date May 17th, 72 species, 1,076 individuals, 5 participants in 4 parties, 42.25 party-hours.

Weather: Temperature 48-74° F, mostly cloudy, wind 5-20mph with windier conditions at higher elevations.

Compiler: Jesse Pope (highcountrybirder@yahoo.com)

Participants: Robin Diaz, Guy McGrane, Jesse Pope, Mickey Shortt, and

Jeri Smart

Exclusives: Peregrine Falcon

Notes: none

Hanging Rock State Park IBA – count date May 12th, 72 species, 568 individuals, 19 participants, 20.50 party-hours.

Weather: 50-65°, mostly sunny, elevation range from 1200-2400 ft.

Compiler: Phil Dickinson (pdickins@triad.rr.com)

Participants: Tommie Castleman, Jean Chamberlain, Sarah Clark, Nita Colvin, Phil Crisp, Carol Cunningham, Phil Dickinson, Nathan Gatto, Brent Gearhart, Carol Gearhart, Bill Gifford, Elaine Hammond, John Hammond, Theresa McGowan, Heather Moir, Ron Morris, Jeremy Reiskind, Sue Rupp, Shelley Rutkin

Exclusives: none

Notes: This count held in 2001 and 2002, resumed in 2009 as part of Audubon Society of Forsyth County's IBA commitment. Six teams covered different routes. The 74 species was a record high, but the 588 individuals was a decline from recent counts. In 2012, along the Indian Creek Trail, we had a first record of Swainson's Warbler for Stokes County. This year there were two along the trail at separate locations. Our county record in 2013 was a Common Loon on Hanging Rock Lake. Other new species for the count since its resumption in 2009 were Veery, Blackburnian Warbler, Summer Tanager, Dark-eyed (Slate-colored) Junco, Eastern Meadowlark and Purple Finch. The cool, wet spring likely was a factor for the late presence of four juncos and the finch, as well as a Ruby-crowned Kinglet and some lingering migrants. Red-eved Vireo again was the most common species, but the total of 69 was down 38% from 2011 and 2012. A count of 13 Blue-headed Vireos was unusually high, however, and a Yellow-throated Vireo also was present. Although seven Wood Thrush was better than in the previous two years, only one was actually within park boundaries. Where were the crows (only two)?

Phil Dickinson

Piedmont

Iredell County – count date April 28th, 79 species, 1,042 individuals, 4 participants, 8.00 party-hours.

Weather: 50 - 52° F. Foggy with persistent rain. Count area: Circle centered on South Yadkin River Bridge - Chipley Ford Road in Northern Iredell County.

Compiler: Garnet Underwood (guwood@gmail.com)

Participants: Cynthia Dickerson, Larry Marlin, Garnet Underwood, and Ron Underwood

Exclusives: none

Notes: Cynthia Dickerson, Larry Marlin, Ron and Garnet Underwood braved the bad weather in one vehicle for our county's Spring Migration Count. Weather was unseasonably cool and foggy, with persistent rain which kept our raptor and warbler sightings unusually low. Best sightings were female Bufflehead on a farm pond, Solitary and Spotted Sandpipers, Redbreasted Nuthatches, and Vesper Sparrows.

Garnet Underwood

Mecklenburg County – count date April 27th, 130 species, 1,617 individuals, 28 participants in 10 parties, 85.25 party-hours.

Weather: Rainy

Compiler: Jeff Lemons (birdsalot@gmail.com)

Participants: Larry Barden, Louise Barden, Robert Bustle, Ron Clark, Susan Ellerman, Jan Fowler, Phil Fowler, Sharon Freedman, Bill Gifford, Lucy Gifford, Robert Gilson and family, Jim Guyton, Christy Hill, Bob Haussler, Ken Kneidel, Jeff Lemons, Jill Palmer, Taylor Piephoff, Tammy Sanders, Tom Sanders, John Scavetto, Don Seriff, Will Stuart, Steve Tracy, Judy Walker, David Wright, and Marcia Wright

Exclusives: Little Blue Heron, Brewer's Blackbird

Notes: Following up last year's record 145 Count Day / 154 Count Week totals, 28 Birders in ten groups recorded 130 species on a wet and rainy Count Day. In 2012, the count benefitted by a stalled front over Charlotte for a few days on both sides of Count Day that backed up a lot of birds in the region. This year a front moved through on count day providing a chance of rain all morning and a near constant downpour over the entire circle all afternoon. Despite the less than ideal counting conditions, all groups stayed in the field covering their sections until the Tally Up Dinner at Wing Haven. While no group provided any large numbers, the group as a whole filled in many of the missing gaps on the list.

Some highlights from the count included a group of four Caspian Terns on the Catawba River, Chuck-wills-widow and a Marsh Wren on the same golf course pond for the last 3 or 4 years, 23 species of warblers, Vesper, Grasshopper and White-crowned Sparrows, Willow Flycatcher, Horned Lark, and a single Brewer's Blackbird reported from Pineville that was not photographed or relocated.

Many thanks again to all the intrepid Birders that hung in there in the rain for another great count.

Jeff Lemons

Forsyth County – count date May 4th, 136 species, 5,876 individuals, 57 participants in 14 parties, 108.00 party-hours.

Weather: 54-61° F, average windspeed 16.9 mph, overcast skies.

Compiler: Ron Morris (ronmorris@triad.rr.com)

Participants: Don Adamick, Jennifer Bailey, Kay Bergey, Kim Brand, Becky Clark, Brendan Conway, Mike Conway, Phil Crisp, Carol Cunningham, Doug Demarest, Phil Dickinson, David Disher, Susan Disher, Cynthia Donaldson, Kerry Eckhardt, Allison Gagnon, Nathan Gatto, Carol Gearhart, Brent Gearhart, Gardner Gidley, Margaret Gidley, Bill Gifford, Sven Halling, Bill Hammond, Elaine Hammond, John Hammond, Susan Hammond, Marbry Hopkins, Royce Hough, Bill Jackson, Kitty Jensen, Susan Jones, Ray Kandt, Don Kautz, Doug Lyles, Jim Martin, Craig McCleary, Jane McCleary, Laura McGowen, Theresa McGowen, Tom McKay, Heather Moir, Ron Morris, Ann Newsome, Jeremy Reiskind, Ann Robertson, Chester Robertson, Rob Rodgers, Shelley Rutkin, Gene Schepker, Lois Schneider, David Shuford, Miles Silman, Bill Sugg, Chuck Thompson, Cindy Thompson, and Gray Tuttle

Exclusives: American Bittern

Notes: A big team braved a very uncomfortable day with unseasonably chilly and windy conditions and was rewarded with total of 136 species - the best in 21 years. Add to that a very intriguing grebe identified to genus Aechmophorus (Western or Clark's) on count day and 8 additional species during the count week. Unfortunately, the grebe could not be found later for closer scrutiny.

The total of 5,876 birds was down from last year's record 7,670, but still above average for Forsyth County. Records are for the years 1992 to 2013. Other highlights include an American Bittern that stayed around for three weeks, 3 Caspian Terns, the first spring count records for Bald Eagle, Northern Harrier, Red-breasted Nuthatch and Horned Larks. Historical high counts included Wild Turkey, Black Vulture, Northern Rough-winged Swallow, House Wren, Hermit Thrush, American Pipit, and Chipping Sparrow.

Record low counts were recorded for Purple Martin, Wood Thrush, and Rose-breasted Grosbeak. While we had good diversity of warblers with 23 species, most were low in numbers of individuals, with only one or two each of 10 species. A few winter birds late in departing that helped the species count included a Hooded Merganser, White-crowned Sparrow and Pine Siskin.

Ron Morris

Rockingham County - - count date May 13th, 112 species, 1,512 individuals, 2 participants in 2 parties, 16.25 party-hours.

Weather: Clear skies, light winds and temps 31-66°F. Compiler: Brian Bockhahn (birdranger248@gmail.com)

Participants: Brian Bockhahn and Martin Wall

Exclusives: Common Redpoll

Notes: The first Rockingham County Spring Bird Count was held as a test run on May 13, 2013. Two observers tallied an amazing 112 species and 1,512 birds.

From the rare list: a single male Common Merganser flying over Mayo Mountain ponds; one American Woodcock enjoying the cold dawn; a Least Flycatcher with a warbler flock; a single Common Raven over Cedar Mountain; Gray-cheeked, Hermit, Veery and many Swainson's Thrushes in a dawn singing fallout; 21 warbler species including Canada, Cape May, Blackburnian and Blackpoll; both Savannah and Grasshopper Sparrow; and a single Common Redpoll seen and heard at first light over the Mayo Mountain ponds. Seven count week birds were also recorded including a Common Nighthawk and a Black-billed Cuckoo seen and heard during a fishing derby at Mayo River State Park. Misses include Sharp-shinned Hawk, Belted Kingfisher, Red-headed and Hairy Woodpecker and White-throated Sparrow.

Many thanks to everyone who volunteered to count.

Brian Bockhahn

Greensboro – count date May 4th, 125 species, 7,212 individuals, 35 participants, 96.50 party-hours.

Weather: 47-61°F, winds from east 15-25 mph with higher gusts. Cloudy in a.m., changing to partly cloudy in early afternoon.

Compiler: Elizabeth Link (elzlink@yahoo.com)

Participants: Nancy Adamson, Carolyn Allen, David Bailey, Joyce Bartlett, Diana Bowman, Jim Buchanan, Frank Cashwell, Sue Cole, Scott DePue, Jim Eldrett, Lisa Hayes, Craig Lawrence, Jane Lawrence, Elizabeth Link, Henry Link, Clarence Mattocks, Ron Morris, Lynn Moseley, Jean Murdick, Lane Oldham, Dierdre Poe, Rob Rachlan, Danny Royster, Wallace Sills, Lou Skrabec, Jim Strickland, Lauren Spence, Ann Stieghner, Jim Stimson, Emily Talbert, Jonathan Thielen, Emily Tyler, Ann Walter-Fromson, Melissa Whitmire, and Peggy Young.

Exclusives: Ring-necked Duck, Black-crowned Night-Heron, Pectoral Sandpiper

Notes: The weather conditions in Greensboro on May 4th felt closer to a Christmas Count than a Spring Count, with cool temperatures, cloudy skies, and steady winds. Strong winds from the northeast for the week before the count held back migrants. A front moved through the area the night before the count, bringing the wind around to the east for count day. Birds did not begin moving until count night, and then flooded the area with migrants in the days after the count. Among these were some unusual species from the coast, including Red-necked Phalarope; Common, Forster's, and Caspian Terns; and

Laughing Gull. This gave us an unusually high number of Count Week species (15).

Our number of participants was average, but the number of party-hours was below the average of 135. The number of species on Count Day was right at our average for the last 10 years, as was the number of individuals. The count day birds were marked by the absence of some warbler species that are usually present, such as Blackpoll and Chestnut-sided, which showed up the day after the count, and Magnolia, which was not seen during the count period. Unusual was the sighting of 2 Blue-winged Warblers. Also unusual were the continued presence of northern birds from the winter, such as Pine Siskin, Purple Finch, Swamp Sparrow, White-crowned Sparrow, and a single Rusty Blackbird. A Horned Grebe and Ring-necked Duck were also unusually late. An immature Black-crowned Night-Heron, which arrived the week before the count and stayed for several weeks, was a first for our count.

Elizabeth Link

Southern Pines – count date April 28th, 129 species, 5,123 individuals, 20 participants in 10 parties, 58.30 party-hours.

Compiler: Susan Campbell (susan@ncaves.com)

Participants: Jennifer Archambault, Doreen Blanchette, Carol Bowman, J. H. Carter III, Gabriella Garrison, Scott Hartley, Tom Howard, Wayne Irvin, Charlie Jones, Linda Jones, David McCloy, Carolyn McDermott, Bill Mullin, Dan Pieroni, Bruce Sorrie, Lowell Strine, Susan Strine, Rick Studenmund, David Williamson, and Nancy Williamson

Exclusives: Lark Sparrow

Notes: There were lots of lingering winter birds in spite of the recent spring weather, especially at Lake Surf! Horned Grebe was new for the count as was Northern Shoveler, Bonaparte's and Herring Gull. We did not expect to find Rusty Blackbirds, but also did not expect to not find any Solitary Sandpipers, Acadian Flycatchers, or Rose-breasted Grosbeaks. Even more surprising was finding more Pine Siskins than American Goldfinches!

Migrant activity was slow for most groups. Rainy conditions (off and on showers) probably resulted in lower observer effort and almost certainly affected our ability to get owls to call. But the conditions were not really that bad for counting. At least there were no significant winds. Considering the lower number of participants this spring we did fairly well.

Susan Campbell

Chapel Hill – count date May 11th, 120 species, 5,643 individuals, 31 field observers and 2 feeder watchers, 96.00 party-hours.

Weather: Low 68°F, high 80°F; wind SW 10-15 mph; mostly cloudy, no rain.

Compiler: Will Cook (cwcook@duke.edu)

Participants: Will Cook, Kent Fiala, Jill Froning, Caroline Gilmore, Maurice Graves, Andrii Gryganskyi, Perry Haaland, Sally Haskins, Bo Howes, Gene Kingsley, Mary Kosiewski, Fay-wei Li, Yu-Hsuan Liu, Ken

Lundstrom, Marty McClelland, David Murdock, Shia Northrup, Natalia Ocampo-Penuela, Lynn Ogden, Deane Paul, Toni Rexrode, Frances Sample, Doug Shadwick, Darryl Spancake, Sylvia Stanat, Shelley Theye, Pam Timmons, Mike Tove, Ginger Travis, Camille Truong, and Scott Winton.

Exclusives: none

Notes: The Chapel Hill spring count on Saturday May 11 found 120 species, 4 below the 10-year average of 124 species. We were very short-handed this count and observer effort was the lowest in decades, with only 96 party-hours (average 140.8), so taking this into consideration it was actually not a bad species total.

The number of individual birds counted was an extremely low 5,643 (average 10,276), the lowest since 1974. This was not just due to low number of party-hours, since the number of birds per party-hour was also quite low at 58.8 (average 72.7), the lowest since 1999.

Some great rarities were found: Ginger Travis and Marty McClelland canoed University Lake and found 5 Hooded Mergansers, a pair with 3 young, a nice find of a rare breeder in the area. During count week Ginger heard a King Rail on the upper reaches of Jordan Lake, but she wasn't able to cover this on count day. Kent Fiala had a shocker for the small pond at Sandy Creek, a city park in Durham - a breeding-plumaged Common Loon! Two weeks before in the same small pond he found breeding-plumaged Horned Grebes, but these had moved on. Scott Winton tromped around in the wetlands at the Little Creek impoundment and managed to photograph a Marsh Wren and see a Sedge Wren, as well as document the now annual Yellow-crowned Night-Herons. Some other good finds included 3 American Woodcocks (Doug Shadwick), 2 Chuck-will's-widows (recorded by Gene Kingsley), and a count week Common Nighthawk (Will Cook).

The wintering Pine Siskins were also still hanging around in good numbers, with 72 our highest since 1987 (average 3). Others well above average were Hooded Merganser 5 (average 2) Cooper's Hawk 5 (average 3), Yellow-billed Cuckoo 29 (average 14), and Blackpoll Warbler 14 (average 7).

We set one record low this year, continuing the long term trend for the same species that set a record low last year - Wood Thrush (36, average 89). There were too many other birds seen in remarkably low numbers to list them all, but some of the poorest showings were Mallard (7, average 74, lowest since 1974), Green Heron (2, average 11, lowest since 1972), Killdeer (15, average 35, lowest since 1978), Mourning Dove (131, average 253, lowest since 1974), Chimney Swift (33, average 324, lowest since 1974), Eastern Kingbird (16, average 34, lowest since 1974), White-eyed Vireo (17, average 33, lowest since 1968), Red-eyed Vireo (148, average 261, lowest since 1974), Blue Jay (92, average 175, lowest since 1974), American Crow (152, average 283, lowest since 1975), Carolina Chickadee (143, average 287, lowest since 1975), American Robin (150, average 277, lowest since 1975), Gray Catbird (32, average 96, lowest since 1977), Northern Mockingbird (110, average 187, lowest since 1975), Brown Thrasher (33, average 69, lowest since 1973), European Starling (116, average 217, lowest since 1974), Yellow-throated

Warbler (12, average 23, lowest since 1974), Yellow-breasted Chat (26, average 39, lowest since 1974), Eastern Towhee (79, average 247, lowest since 1974), Red-winged Blackbird (39, average 98, lowest since 1972), American Goldfinch (147, average 395, lowest since 1971). The biggest miss was Cliff Swallow.

Team honors: Pam Timmons and Perry Haaland, covering the Dairyland Road area, and Doug Shadwick, covering the upper reaches of Jordan Lake, tied for the top species count with 78, edging out Scott Winton with 77. Pam and Perry counted the most individual birds, 708.

Thanks to all 31 field counters and two feeder watchers for your participation!

Charles W. "Will" Cook

Jordan Lake – count date May 5th, 120 species, 8,138 individuals, 40 participants in 18 parties, 106.27 party-hours.

Weather: Cool, overcast day, with temperatures ranging from 52°F in the morning to 57°F in the afternoon. Winds were calm to 15 mph with gusts to 20 mph. At least there was no precipitation.

Compiler: Norm Budnitz (nbudnitz@gmail.com)

Participants: Elizabeth Bishop, Todd Bishop, Stephen Buczynski, Norm Budnitz, Carl Chelette, Carol Chelette, Barbara Coffman, Patrick Coin, Tom Driscoll, Perry Haaland, Loren Hintz, Bo Howes, Julia Huff-Jerome, Gene Kingsley, Sasha Konkel, Mark Kosiewski, Tom Krakauer, Jennifer Maher, Beth Mancuso, Marty McClelland, Frank McKeever, Steve McMurray, Melinda Meade, Kyle Mills, Mickey Mills, Robin Moran, Judy Murray, Bob Rybczynski, Frances Sample, Doug Shadwick, Jenny Stanley, Brian Strong, Pam Timmons, Ginger Travis, Andy Upshaw, David Van Ness, Millicent Van Ness, Margaret Vimmerstedt, Rouse Wilson and Joe Zellers

Exclusives: none

Notes: Forty observers (low compared to our 10-year average: 45) in only 18 parties participated. This meant that in some parts of the count circle that normally get covered, the birds were left to observe themselves. We did tally 8,138 individual birds (avg. 7,988) and 120 species (avg. 124) in 106 party hours (avg. 129). Some of the highlights, more or less in phylogenetic order include:

Horned Grebe, 2—Perry Haaland and Pam Timmons

Forster's Tern, 1—Tom Krakauer.

Blue-winged Warbler, 1--Elizabeth & Todd Bishop, David & Millicent Van Ness

Bay-breasted Warbler, 1—Carol and Carl Chelette

White-crowned Sparrow, 1-Melinda Meade

And of extra special note: Swainson's Warbler, 1—Mark Kosiewski and Sasha Konkel. This normally is a particularly difficult bird to identify and even more difficult to get past a skeptical compiler. But Mark was able to capture a grainy, but good enough video with his smart phone that shows the

bird singing! Swainson's has only been reported for our count two other times, in 2002 and 1984.

We didn't have many new records, but we did have a few: Horned Grebe, 2 (we have had 1 each in several spring counts in the past 10 years); Northern Rough-winged Swallow, 187 (previous high was 155 in 2012); Barn Swallow, 542 (382 in 1990); Pine Siskin, 32 (25 in 1990). The swallows were estimated by Tom Krakauer as part of a very large number of various swallow species coursing over the lake off Ebenezer Point.

A few notable misses this year were American Coot (Will Cook was not able to cover Harris Lake), Loggerhead Shrike (the pair on Pea Ridge Rd. were nowhere to be found), Blackpoll Warbler, and Rose-breasted Grosbeak. The latter two were probably just missed rather than being completely absent.

Tom Driscoll and Frances Sample found the largest number of species (82) of any party this year. Doug Shadwick and Bob Rybczynski weren't far behind with 78.

On a sad note, we lost Phil Warren when he passed away earlier this year. Phil had been a stalwart counter for us, both spring and Christmas, since he moved to our area in 2006. When no one else could find them, Phil always seemed to be able to get out early and report all three owl species. But we'll miss him for more than his owls; he was also a very good friend.

Norm Budnitz

Durham – count date April 28th, 119 species, 5,290 individuals, 15 participants in 9 parties, 56.25 party-hours.

Compiler: Mike Schultz (ross.gull@frontier.com)

Participants: Norm Budnitz, Will Cook, Tom Driscoll, Paul Glass, Eric Goldman, Robert Howes, Gene Kingsley, Tom Krakauer, Mark Kosiewski, Brian Murphy, Doug Shadwick, Lois Schultz, Michael Schultz, Edith Tatum and Scott Winton

Exclusives: none

Notes: There were no significant trends this year. All numbers were lower than average largely because of the poor turnout of observers. Despite the low number of observers, one puzzling high count was 13 Pileated Woodpeckers.

Mike Schultz

Wake County – count date May 11th, 110 species, 3,147 individuals, 23 participants in 13 parties, 44.00 party-hours.

Weather: 65-85° F, winds calm at 5-10 mph, partly cloudy 50-75% cloud cover.

Compiler: John Connors (john.connors@ncmail.net)

Participants: Julie Angerman, Joe Bearden, Karen Bearden, John Connors, Camille Demai, Lena Gallitano, Eric Goldman, Dan Harvey, Sue Harvey, Ann Hibbits, John Hibbits, Lily Ivanov, Mark Johns, Sam Jolly, Will Kimler, Ann Latimer, Gerry Luginbuhl, Geraldine Meunier, Jim Mulholland, Karen Polk, Mike Rowe, Clyde Smith, and Kari Wouk

Exclusives: none

Notes: Nice weather throughout the day. Temperatures ranged from 65-85 F with calm winds and partly cloudy skies. Due to difficulties in recruiting observers Falls Lake, and Walnut Creek were not included in this year's count. In addition Lake Johnson, Schenck Forest, Prairie Ridge and Umstead State Park had limited coverage... only about 1-2 hours per site.

Some interesting observations include:

Horned Grebe (1) at Lake Lynn; Great Egret (6) at Lake Wheeler; Osprey (2) at Umstead State Park. Only one Loggerhead Shrike was found this year, near Schenck Forest. A Warbling Vireo (1) returned to its territory at Shelley Lake for the second year. Tree Swallows were nesting in a Wood Duck box along Crabtree Creek; Gray-cheeked Thrush (1) was an unusal find at Lake Raleigh; 19 species of warbler were found including: Yellow (4), Magnolia (1), Black-throated Blue (12), Black-throated Green (3), Black-and-white (5), American Redstart (18), and Northern Waterthrush (3). Prolonged cool and wet weather seemed to delay migration this year.

A seed tree harvest of timber at Schenck Forest has produced good second-growth habitat which attracted Prairie Warbler (1) and Yellow-breasted Chat (1). Most wheat at Mid-Pines had not yet been harvested which resulted in a large flock of Bobolink (147) visiting the site. Grasshopper Sparrow (2) were singing on territory at Mid-Pine. Field Sparrow (2) numbers remain low. Finally, after a large irruption year, a good number of Pine Siskins (35) were still visiting area feeders.

Significant misses include: Bobwhite and Nightjars were not found.

Cliff Swallows continue nesting in Wake County along Neuse River bridges, and have colonized bridges adjacent to Anderson Point and now at Lake Wheeler.

Great Blue Heron colonies continue to thrive; a new colony is easily visible at Shelley Lake. Great Egret populations continue and nesting is now documented in the area.

Purple Martin colony at University Club is near capacity; and at least two pairs have formed at Prairie Ridge site.

Meadow habitat at Prairie Ridge and Anderson Point are well established; Field Sparrow have begun using both sites, and Meadowlark are well established at Prairie Ridge.

Green Heron, Yellow-billed Cuckoo and Wood Thrush numbers are worrisome.

John Connors

Falls Lake – count date April 25th, 118 species, 4,644 individuals, 22 participants in 11 parties, 67.25 party-hours.

Weather: Temperature 55-69°F, wind 5-7mph, cloudy in morning, mostly clear in afternoon.

Compiler: Brian Bockhahn (birdranger248@gmail.com)

Participants: Herb Amyx, Pat Amyx, Karen Bearden, Brian Bockhahn, Amy Corbally, Ed Corey, Lena Gallitano, Chris Hill, Rebecca Knight, David Langdon, Hannah Lee, Scott Letchworth, Bill Meyer, Deborah Robertson,

Katherine Scheip, Joshua Sims, Jeri Smart, Josh Southern, Sterling Southern, Deck Stapleton, Patti Tice, and Amalie Tuffin

Exclusives: Black-billed Cuckoo

Notes: The Ninth Falls Lake Spring Bird Count was held on April 25, 2013 under clearing skies, light winds and temperatures ranging from 55-69. A record 22 observers tallied our third highest 118 species and 4,078 total birds.

FIRST RECORDS: Three Common Mergansers were photographed at Holly Point, a Black-billed Cuckoo was singing pre-dawn at the north end of Beaverdam Lake, an American Kestrel was perched along Camp Kanata Road.

SECOND RECORDS: One Blue-winged Teal at Rollingview; Two parties reported single Dark-eyed Juncos at Rollingview and Blue Jay Point.

THIRD RECORDS: American Woodcock at Beaverdam Recreation Area.
OTHER GOODIES: Red-breasted Merganser, Bank Swallow,
Loggerhead Shrike and four parties reporting Pine Siskin.

MISSES: Coopers Hawk, Yellow-billed Cuckoo and Eastern Screech-Owl for the fourth time. Great Horned Owl was missed for the second time, owing to the windy cool conditions at night.

Many thanks to everyone who volunteered to count!

Year	Total Species	Total Individuals	Participants
2004	100	1897	7
2005	99	2899	7
2006	112	4083	13
2007	120	5281	19
2008	115	5209	16
2009	110	3923	19
2010	107	2856	9
2011	121	5621	10
2012	115	4367	18
2013	118	4644	22
Average	111.7	4078	14

FALLS LAKE SPRING COUNTS

Brian Bockhahn

Kerr Lake – count date April 26th, 117 species, 4,360 individuals, 15 participants in 7 parties, 63.00 party-hours.

Weather: Temperature 37-68°F, wind 5mph, clear in the morning, partly cloudy in the afternoon.

Compiler: Brian Bockhahn (birdranger248@gmail.com)

Participants: Jeff Blalock, Brian Bockhahn, Paul Glass, Bill Lindenmuth, Joyce Lindenmuth, Adam D'Onofrio, Bryce Fleming, Lori Fleming, Jerry Klingenburg, Fred Lobdell, Grace McCrowell, Paul Scharf, Clyde Smith and Deck Stapleton

Exclusives: none

Notes: The TENTH Kerr Lake Spring Bird Count was held on April 26, 2013 with mostly clear skies, light winds and temps 37-68 degrees. 15 observers tallied an amazing 117 species and 4,360 birds.

NEW TO SPRING CHECKLIST: Swainson's Warbler singing along a creek bottom in area 4 pre-dawn was new to the lake and county list; and a single Dark-eyed Junco at Kimball Point was a first for the spring count!

SECOND RECORDS: a single Blue-winged Teal at Henderson Point; a breeding plumage Red-throated Loon above the dam; a Horned Grebe at County Line; a Northern Harrier at Henderson Point

THIRD RECORDS: Two parties reporting Red-breasted Nuthatch and two parties also finding Pine Siskins.

Other good finds include Red-breasted Merganser and Lesser Yellowlegs. MISSES: misses include Cooper's Hawk for the third time, Rock Pigeon for the second time, Eastern Wood-Pewee for the second time and Acadian Flycatcher for the first time!

Many thanks to everyone who volunteered to count!

Year	Total Species	Total Individuals	Participants
2004	111	2209	4
2005	117	3671	7
2006	118	3852	9
2007	124	4979	10
2008	129	4384	14
2009	121	4266	15
2010	118	3863	15
2011	111	3109	12
2012	120	3421	12
2013	117	4360	15
Average	118.6	3811.4	11.3

KERR LAKE SPRING COUNTS

Brian Bockhahn

Raven Rock State Park – count date April 27th, 127 species, 5,295 individuals, 20 participants in 10 parties regular, 2 participants in 2 parties owling, 81.41 party-hours.

Weather: Temperature - 53° - 72° F.; Wind Southeast, 0-5 mph.; Water open. A.M. partly cloudy; P.M. partly sunny. Count circle center at junction of NC 210 and SR 1434.

Compiler: Erik R. Thomas (erthomas@ncsu.edu)

Participants: David Brown, Hannah Davidson, Jeffrey Davidson, David DuMond, Jabari Farar, Tom Howard, Paul Hubert, Mi Jung Kim, Prudence Mainor, Tim McGreal, Jeff Mielke, Danny Nielsen, Henry Reese, Karin Reese, Kevin Reese, Mitch Reese, Sunny Sawyer, William "Bill" Stanley, Erik Thomas and Amber Williams

Exclusives: none

Notes: The total of 127 species was easily a new record for this count. Unusual finds included Yellow-crowned Night-Herons and a Blackburnian Warbler by Paul Hubert and a Cerulean Warbler (second year in a row) by Jeff Davidson et al. The large number of American Redstarts was due to having a counter, Paul Hubert, cover the Cape Fear River by kayak.

Erik R. Thomas

Roanoke Rapids – count date April 30th, 82 species, 821 individuals, 4 participants in 1 party, 8.00 party-hours.

Weather: No information.

Compiler: Fred Lobdell (fplobdell@embargmail.com)

Participants: Ann Brice, Fred Lobdell, Jeremy Reiskind, and Paul Scharf

Exclusives: none

Notes: Only the second year for this count in recent years and it is continuing to build on participation.

Fred Lobdell

I ICU LOUGEI

Coast

Onslow County – count date April 26th, 162 species, 9,230 individuals, 17 participants in 8 parties, 49.50 party-hours.

Weather: High temperature 72°F, mostly sunny, winds ENE at 6 mph with gusts to 14 mph.

Compiler: Andy Webb (andywebb2008@live.com)

Participants: James Abbott, Rich Boyd, Susan Boyd, Jim Craig, John Deluca, Wade Fuller, John Fussell, Al Gamanche, Buddy Garrett, Barb Gould, Gil Grant, Liz Lathrop, Guy McGrane, Jim O'Donnell, Laura O'Donnell, Tim Trott, and Andy Webb

Exclusives: American Wigeon, American Black Duck, Northern Gannet, Great Cormorant, Brown Pelican, Tricolored Heron, Cattle Egret, White Ibis, Clapper Rail, Virginia Rail, Sora, Black-bellied Plover, Wilson's Plover, Semi-palmated Plover, Piping Plover, American Oystercatcher, Black-necked Stilt, Willet, Whimbrel, Marbled Godwit, Ruddy Turnstone, Sanderling, Stilt Sandpiper, Laughing Gull, Lesser Black-backed Gull, Great Black-backed Gull, Least Tern, Gull-billed Tern, Common Tern, Royal Tern, Sandwich Tern, Black Skimmer, Parasitic Jaeger, Nelson's Sparrow, Seaside Sparrow, Painted Bunting, Boat-tailed Grackle

Notes: The one species that was new to the count were eight Sedge Wrens found by John Fussell along the causeway to Permuda Island. The Sedge Wrens are not unusual to Onslow County. The count is normally done the first or second week in May so the early count date may account for this being the first report of this species on count day as they are usually gone by the first week in May. Other good finds included two Parasitic Jaegers located off the Seaview Pier at North Topsail by John Fussell, a Virginia Rail found by Gil

Grant, an Anhinga found by John Fussell, and two Horned Grebe found by Jim & Laura O'Donnell and Guy McGrane.

The most abundant species on the count was Laughing Gull (1,279) which is not uncommon. We had many species with count highs. Some of the notable count highs were Baltimore Oriole (4), Yellow-rumped Warbler (23), Cliff Swallow (50), Greater Yellow-legs (179), and Black Skimmer (125).

Some notable misses were Blue-headed Vireo (for the 4th year now), Black Vulture, and Spotted Sandpiper. Some notable count lows were House Sparrow (22), Indigo Bunting (8), and Northern Bobwhite (3).

All in all it was a great day to be birding with a great team of birders. The temperatures were about normal with a high temp of 72 degrees for the day. It seemed much warmer than that maybe because of the cold temperatures in the weeks preceding. It was mostly sunny with winds out of the East Northeast sustained about 6 miles per hour with occasional gusts to 14 miles per hour, and the average humidity of 58 percent.

Thanks for counting. Andy Webb

7.00

34.00

0.00

18.00

<u>72.75</u>

Onslow

total

302.00

3975.80

9.00

631.85

286.00

3309.4<u>5</u>

Table 1. Summary of party hours and miles

	nirs

			party-	ilouis			
	total	on foot	by car	by bike	boat	night	feeder watch
Transylvania	67.00	11.00	56.00				24.00
Balsam Mtns	81.85	56.85	25.00			1.50	
Henderson	26.05	7.25	18.75				
Buncombe	64.00	24.50	39.50			1.50	
Black Mtns	41.80	37.05	4.75			1.50	
Grandfather	42.25						
Hanging Rock	20.50	18.00	2.50				
Iredell	8.00	0.00	8.00				
Mecklenburg	85.25	71.75	13.50			0.50	
Forsyth	108.00	104.00	4.00			2.00	
Rockingham	16.25	12.00	4.25			3.00	
Greensboro	96.50	81.50	15.00				0.50
Southern Pines	58.30	22.75	35.55		0.50	0.00	3.50
Chapel Hill	96.00	85.00	7.50		3.50	6.83	5.25
Jordan Lake	106.27	81.22	17.55		7.50	0.50	
Durham	56.25	52.25	4.00			1.25	
Wake	44.00	38.00	6.00			0.50	0.00
Falls Lake	67.25	60.00	7.25			4.00	2.00
Kerr Lake	63.00	53.25	9.75 31.33		14.25	3.50 2.70	1.50
Raven Rock	81.41	35.83			14.25	2.70	
Roanoke Rapids Onslow	8.00 49.50	5.00 22.00	3.00 25.25		2.25	3.50	
total	1287.43	879.20	338.43	0.00	27.50	32.78	36.25
			party-	miles			
	total	on foot	by car	by bike	boat	night	
Transylvania	290.00	12.00	278.00	•		4.00	
Balsam Mtns	233.30	50.50	182.80			2.00	
Henderson	196.50	7.25	189.25				
Buncombe	296.30	18.50	277.30			5.00	
Black Mtns	74.55	39.55	35.00			6.00	
Grandfather	45.60	12.90	32.70				
Hanging Rock	21.20	16.70	4.50				
Iredell	25.00	0.00	25.00				
Mecklenburg	320.00	39.50	280.50			2.00	
Forsyth	154.00	57.00	97.00			1.75	
Rockingham	28.00	8.00	20.00			1.50	
Greensboro	355.60	52.60	303.00				
Southern Pines	321.75	15.75	306.00			2.50	
Chapel Hill	177.25	57.25	116.00		4.00	1.50	
Jordan Lake	190.80	55.80	127.50		7.50		
Durham	76.90	45.50	31.40			4.00	
Wake	89.50	26.50	63.00			4.00	
Falls Lake	141.30	47.80	93.50			14.00 2.00	
Kerr Lake							
	142.25	33.25	109.00		15 50		
Raven Rock Roanoke Rapids	142.25 466.00 28.00	33.25 23.50 3.00	427.00 25.00		15.50	8.50	

Table 2. 2013 Spring Counts in North Carolina

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Bals									_											∞				_	
Trans				13					17						2				15	77	4				7
Species	Horned Grebe	Aechmophorus sp.	Northern Gannet	Cormorant	Great Cormorant	Anhinga	Brown Pelican	American Bittern	Great Blue Heron	Great Egret	Snowy Egret	Little Blue Heron	Tricolored Heron	Cattle Egret	Green Heron	Black-crowned Night- Heron	rellow-crowned Night-Heron	White Ibis	Black Vulture	Turkey Vulture	Osprey	Bald Eagle	Northern Harrier	Sharp-shinned Hawk	Cooper's Hawk

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coast		20 0.14	0.01	.18 0.06			0.08		0.02	0.08	0.00 0.08	2.24	0.14		1.64	0.04	0.30 0.75	0.38	0.12		60.0		0.81	0.01 1.07	0.55
pied						0					0			0											
mtns		0.0	0.1	0.0	0.01	0.0								0.00			0.04			0.0	0.04	0.0		0.07	
total	4	204	42	179	48	_	4		_	4	∞	7	7	_	81	7	322	19	9	117	95	188	40	83	27
Onsl		7		က			4		_	4	4	17	7		81	7	37	19	9			179	40	23	27
RoRa				က	7												က			7	_				
RaRo	_	26	_	19	-												8			6	7			က	
Kerr		∞		12													56			4				_	
Falls		13	_	4	7												21			4	_				
Wake		21		∞	_												7			16	6				
Durh	7	15		∞													2			ო	က				
Jord		6		54													24			4	4				
ChHI		33	_	16				Š									15			6	4				
SoPi		2		က	2						7						19			6				-	
Grbr	_	21	_	28	7												=			4	20			4	
Rock		2	4	∞													6			4	4				
Fors		∞	_	13	_						_						22			20	15	_		7	
Meck		က		7	_						_						15			က	2				
Ired		7		_													22			က	4				
Hang		4		~																					
Grdfr			∞			_																			
BI Mts			2																						
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Bals		_	7	က																					
Trans		6	7	2	_										_					က	7				
Species	<i>Accipiter</i> sp. Red-shouldered	Hawk	Broad-winged Hawk	Red-tailed Hawk	American Kestrel	Peregrine Falcon	Clapper Rail	King Rail	Virginia Rail	Sora	American Coot	Black-bellied Plover	Wilson's Plover	Plover	Semipalmated Plover	Piping Plover	Killdeer American	Oystercatcher	Black-necked Stilt	Spotted Sandpiper	Solitary Sandpiper	Greater Yellowlegs	Willet	Lesser Yellowlegs	Whimbrel

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Onsl RoRa RaRo Kerr Falls Wake Durh Jord ChHl ChHl Rora Roll Rora R	
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RoRa RaRo Kerr Falls Vake Durh Jord ChHI RoRa © © © Chylicida	34
RaRo E Kerr SE Falls - Wake - Durh - Jord - ChHI -	
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Falls Wake Durh Jord ChHI ChHI Durh ChHI Durh ChHI Durh ChHI Durh ChHI	
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Species Marbled Godwit Ruddy Turnstone Sanderling Bountlin Stift Sanderling Dunlin Stift Sanderling Dunlin Stift Sanderling Bont-billed Dowitcher Wilson's Snipe American Woodcock Red-necked Dowitcher Wilson's Snipe American Woodcock Red-necked Dowitcher Singen Bonaparte's Gull Laughing Gull Herring Gull Herring Gull Grad Black-backed Gull Grad Black-backed Gull Grad Black-backed Gull Grad Black-backed Gull Special Brack-backed Gull Special	Common Tern Forster's Tern

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coast	7.37	1.45	2.53	0.02	1.94	0.02	4.83	0.12		90.0					0.57	0.02	0.40	0.08	90.0	0.16	0.28			90.0
					0.70	0.00	1.74	0.08	0.00	0.01	0.03	0.08		0.01	90.0	0.05	1.06	0.13	0.07	0.17	0.86		0.00	0.24
pied					0.18		0.99	0.01			0.01	0.04	0.02			0.01	0.44	0.23	0.03		0.24		0.04	0.17
mtns					0			0			0	0	0					0	0				0	
total	365	72	125	-	780	က	. 4	82	-	6	33	86	∞	∞	83	48	1116	201	7	160	863		15	275
Onsl	365	72	125	_	96	_	239	9		က	_				28	_	20	4	က	∞	4			က
RoRa					2		61	_				7					∞	7	က	2	4			_
RaRo					17	_	230	6		_	2	4			15	ω	4		2	2	89		_	12
Kerr							82	7		_	12	20			6	12	18	9	7	9	22			6
Falls					17		83		_			4			_	7	23	∞	7	23	53			17
Wake					74		28	က				4					99	7	6	က	62			23
Durh					9		118	10			9	9					28	15	7	26	75			4
Jord					7		149	7				7			7		131	9	4	19	11			17
ChHI					52		131	29		C.	_	16		Š	7	9	33	25	4	15	119			28
SoPi					12		248	~		7	_			7	17	7	26	6	က	31	29			12
Grbr					247		152					7					151	∞	7	က	64			16
Rock					9		09	9	Š	_	_	က		C	4	6	25	7			12			2
Fors					99		95			_		9			_	_	299	က	œ	_	71			23
Meck					109		09	က			_	က			7		20	7	4	7	12			4
Ired					4	_	25				7	~			7		4	7	_	~	œ			-
Hang							7	~									7	4			7			4
Grdfr							12					က					22	-						7
BI Mts							7					က	က				13	က						_
Bunc					8		120	_			_	4	-				20	6	_		25		4	4
Hend					9		74	7									4	6	7		25			7
Bals							22					က	7				17	7			2		∞	12
Trans					22		26				7		7	-		7	22	47	9		24		7	10
Species	Royal Tern	Sandwich Tern	Black Skimmer	Parasitic Jaeger	Rock Pigeon Eurasian Collared-	Dove	Mourning Dove	Yellow-billed Cuckoo	Black-billed Cuckoo	Eastern Screech-Owl	Great Horned Owl	Barred Owl	Owl	Common Nighthawk	Chuck-will's-widow Eastern Whip-poor-	will	Chimney Swift Ruby-throated	Hummingbird	Belted Kingfisher Red-headed	Woodpecker	Woodpecker	Yellow-bellied	Sapsucker	Downy Woodpecker

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coast	0.05 0.06	0.01 0.02	0.14 0.06	0.13 0.16	0.08 0.28	0.13 0.02		0.00	.35	0.73 1.92	0.43 0.61	.02	0.32 1.15	0.09 0.06	0.03	0.00	1.19 0.28		0.97 0.48	2.40 2.04	0.35 0.46	0.02	0.05	.02	0.92 3.37
pied	0.16	0.00	0.12				0.10	0.10			0.05	J					1.24	0.01				0.17	0	0	0.17
mtns																									
total	107	9	165	199	133	138	33	37	486		•	17		63	206	က	•	4		` '	3 339	7	48	16	7 1046
Onsl	က	_	က	∞	4	_				95	30		22	က			4		24	101	23				167
RoRa			7	_						2	10	7	4				∞			•••	7			7	10
RaRo	_		9	4	4	4			8	93	28	∞	38	2	4		112		120	236	21		38		77
Kerr	_		œ	8					13	28	64		29	8	4		133		100	193	26				4
Falls	∞		œ	Ξ	2	7			25	09	22	-	31	10	∞		91		46	122	40				2
Wake	2		6	7	က	21			27	37	24	_	7	_		_	22		4	84	40				34
Durh	7		7	13	-	က			29	36	10		42	6	-		155		62	198	12				13
Jord	9		2	16	9	2			43	29	4		23	16	_		125		11	326	48				183
ChHI	7		12	12	29	63			42	49	16		17	9	_		148		95	152	24				61
SoPi	2	6	54	16	6				15	192	92	2	38	7	2		33		82	249	15		_	_	92
Grbr	2		19	~	_	_			20	21	13		4	Š	~		99		85	288	21	7	œ		307
Rock			_	7	4	7		_	20	4	က		9	6	~		72		23	47	7	_			Š
Fors	ო		13	က	4	_			31	19	19		15		_	_	49		102	160	34	7		7	က
Meck	7		_	4		7			13	9	∞		4		_		12		5	38	15	4	_		12
Ired			က	7					က		_						_		2	31	10				9
Hang	7			9		7			4	5			7	~	5		69		9	7		2			
Grdfr	9		က	က	4				2						30		12		16	37		9			
BI Mts	13			4	9	7	_		7						4		56		2	36		∞			
Bunc	6		4	8	48	7			61	4	9		က	∞	74	_	141	4	98	161	_	15			4
Hend	7		7	4	7	4			56	~	2		9		16		30		82	128					27
Bals	20		4	13	=======================================	7	32	36	13	7					164		61		33	20		19			
Trans	ო		17	23	7	7			20	7	7		4		29		88		112	367		4			28
Species	Hairy Woodpecker Red-cockaded	Woodpecker	Northern Flicker	Pileated Woodpecker	Eastern Wood-Pewee	Acadian Flycatcher	Alder Flycatcher	Least Flycatcher	Eastern Phoebe Great Crested	Flycatcher	Eastern Kingbird	Loggerhead Shrike	White-eyed Vireo	Yellow-throated Vireo	Blue-headed Vireo	Warbling Vireo	Red-eyed Vireo	Vireo sp.	Blue Jay	American Crow	Fish Crow	Common Raven	Crow sp.	Horned Lark	Purple Martin

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coast	1.74	0.24		1.01	4.08	0.65			1.19			0.04	0.40		1.41	0.02		0.16	0.08	0.95				0.59
coast	0.44	0.87	0.01	0.72	1.84	1.23			1.85	0	0.0	0.24	0.43		1.81	0.15				1.22			0.04	1.37 0.59
pied	0.71	0.43			1.03	0.95	0.12	0.01	1.26	7 3 7	5	0.26	0.03	0.14	1.18	0.21	0.50			0.24	7	7	0.03	0.58
mtns	729	940	7	969	2204	1463	0	2	4	7	t.	308	410	49	2096	70	173	6		1224		282	47	1456
total			_				4	ų)	9 2144		5			4		207	1				č	Ϋ́	4	
Onsl	86	12		20	3 202	32			59			7	20		70	_		∞	4	47				5 29
RoRa	2			∞	16	e			4			9			9 6					∞				2 22
RaRo		23			90	77			164			9	13		139	4				73			2	142
Kerr	13	71		. 36	47	82			164	_	r	7	25		. 85					10			7	102
Falls	44	82	_	114	62	112			150	c	1	18	42		114	_				125			4	75
Wake	7	40		20	87	88			82			19	23		104	2				52				78
Durh	28	22		18	91	120			191			2	27		134	10			_	205			∞	43
Jord	78	187		352	545	124			222			78	4		216	က				127			_	165
ChHI	7	35			26	143			208			36	4		286	4		_	-	128				174
SoPi	3	35			128	20			158	ď)	19	69		137	7				83			က	134
Grbr	199	145	2	7	148	120			108	Š	3	32	31		166	25				8			က	165
Rock	-	4			69	7			8			4	7		59	က				9				36
Fors	17	100	_	09	222	115			141	-	-	27	30		162	45				69			9	69
Meck	2	15		30	30	19			15			7	2		34	7	_		-	23			က	6
Ired		7			09	10			6	_	٢	2			10					7				15
Hang					∞	78			35			က			16					4			~	4
Grdfr	30	7			9	13			15	23	3	2		0	က	က	24				Ļ	1		က
BI Mts						œ			16	7	F	2		20	2		29					001		
Bunc	28	45			146	8			145	5	2	17	6	4	164	13	∞			27	, L	<u>0</u>		20
Hend	12	23			30	4			28			10			82	16				4			_	22
Bals		_				32	36	2	54	7	2	19		16	7	2	61				0	80	_	_
Trans	145	89			164	124	4		17	_	r	53			123	39	12			37	1	_	6	92
	Tree Swallow Northern Rough-	winged Swallow 68	Bank Swallow	Cliff Swallow	Barn Swallow	Carolina Chickadee Black-canned	Chickadee	chickadee sp.	Tufted Titmouse	Red-breasted	-breasted	Nuthatch	Brown-headed Nuthatch	Brown Creeper	Carolina Wren	House Wren	Winter Wren	Sedge Wren	Marsh Wren	Blue-gray Gnatcatcher	Golden-crowned	vinglet -crowned	Kinglet	Eastern Bluebird
Species	Tree	>	Bank	Cliff S	Barn	Carol		chick	Tuffe	Red-L	White	ے ر	Brow	Brown	Carol	Hous	Winte	Sedg	Mars	Blue	Golde	Ruby.	, *	Easte

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coast	7	0	2	_	5 0.02	0 0.61	0 0.46	8 2.32	6 0.26	7 4.16	7	2 0.08	9 0.18	1 0.32		2	0	2 0.02	3 0.32	1 0.14			2 0.02	7 0.40	5 0.06
pied	0.02	0.00	0.05	0.0	0.25	2.00	0.40	1.28	0.36	2.17	0.0	1.32	0.59	0.01	0.02	0.05	0.0	0.22	0.23	0.01			0.02	0.57	0.25
	0.79		0.02	0.18	0.34	2.87	0.70	0.36	0.28	1.17		0.42	1.19	0.13	0.09	0.01	0.00	0.63		0.03	0.00	0.00	0.00	0.33	0.77
mtns	285	က	6	9/	340	2804	618	1383	32	2545	72	1327	20	22	96	46	2	16	222	53	_	_	<u>6</u>	640	92
total	7		7	-	1	•••		115 13		206 25	•		6		0,	7			16 2	7			<u>_</u>	20 6	
Onsl					4			27 1			0			_					~					10 2	•
RoRa					_						_														
RaRo					0	131		204					53		23	7			89	2			7	25	
Kerr					26	36	12	9/	2	29		48	74	_	_	4		15	7	_			_	4	17
Falls				_	12			63				20		~	2			4	7				_	28	36
Wake		_	က		10	78	21	22	26	125	CW	115	7		2	က		2	4					26	_
Durh				_	29	64	4	35	24	89		87	53	-	2	16		18	21				_	90	=
Jord	_				26	99	25	103	35	137		35	120	7	2	7	_	20	31	_			_	43	4
ChHI	_		4		36	150	32	110	33	116		66	81	_	œ	4		0	34				က	86	39
SoPi				_	4	79	39	160	45	125		178	53		_			28	4				_	32	13
Grbr	က	_	Š	Š	13	397	9/	124	38	488		279	4	Š	_	က	7	10	က					36	က
Rock	7	_	53	_	19	4	2	30	7	45		53	27	-	∞	9		7	_					17	18
Fors	œ		9	9	19	584	74	96	38	273	30	1 14	10	7	7	_		4	7				7	42	2
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Hang	_		_		7	က	7	2	~	က		10	Ξ	7	4			22		7					28
Grdfr	28			4	7	81	22	_		33		Ξ	6		~			10						က	2
BI Mts	48		က	31	_	46	54		~			5	22	~	7			8						7	က
Bunc	17		က	4	51	311	48	25	22	122		9/	131	21	2			89			_		-	2	100
Hend					10	120	6	36	30	123			12	7	4	_		16				_		6	24
Bals	171			23	26	160	98		9	9		10	135	-				45						71	15
Trans	2			-	19	264	40	56	37	115		25	22	တ	15	7	_	35		7				54	06
Species	Veery	Gray-cheeked Thrush	Swainson's Thrush	Hermit Thrush	Wood Thrush	American Robin	Gray Catbird	Northern Mockingbird 26	Brown Thrasher	European Starling	American Pipit	Cedar Waxwing	Ovenbird	Worm-eating Warbler	Waterthrush	Northern Waterthrush	Blue-winged Warbler Black-and-white	Warbler	Prothonotary Warbler	Swainson's Warbler	Tennessee Warbler	Nashville Warbler	Kentucky Warbler	Yellowthroat	Hooded Warbler

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coast	80	_	0	7 0.40	_	0	0	7 0.02	0	8	2 0.02	8	3 0.73	1 0.46	7 0.30	6 1.03	N	0	7 0.28		69.0 0	1 0.04	3 0.55	3 0.04
pied	0.28	0.0	0.00	0.57	0.01	0.00	0.00	0.07	0.00	0.02	0.22	0.02	0.83	1.01	0.27	0.26	0.02	0.00	0.17		0.80	0.01	1.43	0.23
mtns	0.15	0.01	0.03	0.33	0.02	0.00	0.53	0.08	1.29	0.04	1.06	0.05	0.07	0.20	0.03		1.40	1.08	0.03		3.08		0.56	0.14
total	303	7	7	642	4	7	185	68	445	33	229	32	801	066	564	283	499	373	177	_	1811	∞	1496	256
Onsl				20				_			_		36	23	15	51			4		34	7	27	7
RoRa				ო									က	12		7			2				21	_
RaRo	96		_	92	_		_	-	_		21	_	29	117	42	21			17		26		134	7
Kerr	1			36				ω			2	က	61	134	34	22	_		5		37		179	21
Falls	2			36				7			2		141	82	32	27			_		47		119	20
Wake	18			56	_			4		_	12		20	12	7	_	က		_		28		37	7
	9			63				6			21	_	88	86	31	37	_		25		77		69	38
Durh	41			68	_	_		9	_		25	7	126	90	29	49	_		32		92		186	12
Jord	53			69	2			_		4	22		88	6	12	13			56		62		129 1	2
ChHI	3 &			28				4		_	2		299	92	16	7			9		2 06	9	174 1	13
SoPi	9	_		32 2				e e	CW	CW	28	_	18	74 7	_	14	_		က		3 98		.1 99	25 1
Grbr	12 (` _		19 3	_				Đ			•	15	cw 7	, V	12	` ຕ						36 6	16 2
Rock					_			2		7	7		18 1	152 c	Ö			_	2 9		110 11		116 3	
Fors	9	7		31	_			12	_	_	37	_		-		4	9		12		-		•	2 18
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Ired													9			_	_		7		~		7	=
Hang	4			_			_			7	2		92	=			19				13		15	2
Grdfr	_				7		13	7	27		4			∞			1	22			29		2	
BI Mts				9	_		78		39		66			_			170	83			2 61		7	
Bunc	32		0	13	4		47	15	33	∞	21	က	7	6	4		22	9	က		192		62	16
Hend	2	7		15			_	9	4	က	_	_	7	4	7		17	_	7		139		35	7
Bals	4		~	17		_	33		314		120			7	_		154	150			354		7	2
Trans	8			63		L	6	9	23	~	43	1	က	32	4	_	22	18	4		241		99	15
Species	American Redstart	Cape May Warbler	Cerulean Warbler	Northern Parula	Magnolia Warbler	Bay-breasted Warbler	Blackburnian Warbler	Yellow Warbler Chestnut-sided	Warbler	Blackpoll Warbler Black-throated Blue	Warbler	Palm Warbler	Pine Warbler Yellow-rumped	Warbler Yellow-throated	Warbler	Prairie Warbler Black-throated Green	Warbler	Canada Warbler	Yellow-breasted Chat	warbler sp.	Eastern Towhee	Bachman's Sparrow	Chipping Sparrow	Field Sparrow

									_	T		_	.0											
coast			0.46		0.02	0.26	0.02	0.06	0.34			0.79		2.12		0.57	0.16	0.42	0.02	1.96	0.51			2.73
	0.01	0.00	0.10	0.05			0.25	0.08	1.36	0.01	0.02	0.45	0.17	3.02	0.01	0.28	0.71		0.30	0.88	0.43	0.02	0.00	2.31
pied			0.02				1.95	0.01	0.08	0.08	2.00	0.01	0.53	1.55	0.39	0.03	0.84		0.31	0.85	0.16	0.04		0.84
mtns			7	2		ω.	895	ω.	1259	(0			®	40			ις	_	œ	1179		0		
total	2	4	3 117	42	_	3 13	88	92		36	705	9 442	338	3340	146	3 286	935	1 21	378		5 465	30	_	5 2492
Onsl			23		_	13	_	က	17			39		2 105		28	00	2		97	2 25			135
RoRa			3					_	6		0	(0	~	4 32		2			3	(0	12			09 6
RaRo			3 13	က			9	_	4 95		16	99 (18	4 244		27	31		26	3 26	49			2 199
Kerr			13	2				9	44		_	30	12	6 184		19	30			4 98	17			132
Falls			4				7	တ	66		7	51	12	9 176	2	15	12		_	154	19			99
Wake			7	2			4	_	3			22	4	4 169	_	16	. 29		147	3 19	17			4 66
Durh			18	7			12	40	398			33	9	264		21	97			133	71			194
Jord			4				4		106	_		9/	29	305		37	93		20	39	4			315
ChHI			9				29	_	2			77	28	330	_	22	150		4	39	18			187
SoPi		4	∞	7			က	ო	21			39		212	_	22	13			62	80	16		<u>4</u>
Grbr			7	_			88	7	107	Ş		4	6	347	-	4	49		32	82	19	_		250
Rock			-	-			-					2	59	90	4	4	75			6	6			47
Fors			7	2			45	2	139	က		က	∞	309	7	∞	65			87	25			268
Meck	-		7	7			6	7	32	4		4	-	43	-	12	∞			25	15		-	4
Ired	4		7	18			0		28	7		_		59		9	_		22	16	21			86
Hang											4	_	œ	23		4	∞				_			12
Grdfr							30				101		တ	7	17					10				4
BI Mts							9				146		9	~	4		23							
Bunc							269				71		92	175	36		-			103	4			104
Hend			4	_			130		4	6	7		19	123	2	2	22		86	20	8			24
Bals							25				330		43	17	52		63			_				
Trans			7				211	3	22	17	27	T	17	185	19	Н	29		6	129	21	13		106
Species	Vesper Sparrow	Lark Sparrow	Savannah Sparrow Grasshopper	Sparrow	Nelson's Sparrow	Seaside Sparrow	Song Sparrow	Swamp Sparrow White-throated	Sparrow	White-crowned Sparrow	Dark-eyed Junco	Summer Tanager	Scarlet Tanager	Northern Cardinal Rose-breasted	Grosbeak	Blue Grosbeak	Indigo Bunting	Painted Bunting	Bobolink	Red-winged Blackbird 129	Eastern Meadowlark	Rusty Blackbird	Brewer's Blackbird	Common Grackle

Species	Trans	Bals	Hend	Bunc	BI Mts	Grdfr	Hang	Ired	Meck	Fors	Rock	Grbr	SoPi	ChHI	Jord	Durh	Wake	Falls	RaRo	RoRa	Onsl	total	mtns	pied	coast	
Boat-tailed Grackle Brown-headed																					_	173 1	173		ю.	3.49
Cowbird	36		10	36		က	က	27	16	9/	5	63	26	73	194	95	28	6/	1	129	20 7	47 10	1055	0.26	1.03 0.	0.95
Orchard Oriole	∞		က	2					9	19	4	16	4	12	78	23	17	6	27	18	,	18 2	263	0.05	0.26 0.	0.36
Baltimore Oriole	က		7	6						œ	Š	4		_		_			_		_	4	8	0.04	0.02 0.	0.08
Purple Finch	_						-					Š	7										4	0.01	0.00	
House Finch	39	7	37	48		က	-	2	8	9	7	109	21	69	92	35	22	25	9	20	8	34 7	732	0.38	0.64 0.	0.69
Red Crossbill		_		က	7																		9	0.02		
Common Redpoll											_												_		0.00	
Pine Siskin	20	က	_	4	70	13			_	-	7	20	185	72	32	89	35	18	7			2	536	0.26	0.50	
American Goldfinch	285	35	9	181	က	18	ဝ	301	17	270	30	288	166	147	210	112	49	122	96	09	7	4 24	2468	1.74	2.09 0.	0.08
House Sparrow	9		7	4				_	4	4	2	77	6	45	6	21	8	27	о О	49	4	22 2	280	90.0	0.26 0.	0.44
total species	124	83	110	120	62	72	72	79	130	136	112	125	129	120	120	119	110	118	117 1	127 8	82 1	162 2	239			
total individuals	4900	4900 3523	2382	4988	1594	1076	268	1042	1617	2877	1512	7212	5123	5643	8138	5290	3147 4	4644 4	4360 5	5295 8	821 92	9230 87982		55.41	66.77186.5	3.5
# participants	23	25	Ξ	16	0	2	19	4	28	22	7	35	70	31	40	15	23	22	4	20	4	17 4	440			
cw: count week																										

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Raven Rock Roanoke Rapids	Onslow County	mountains	piedmont	coast			
RaRo RoRa	Onsl	mtns	pied	coast			
Forsyth County Greensboro	Southern Pines	Chapel Hill	Jordan Lake	Durham	Wake County	Falls Lake	Kerr Lake
Fors Grbr	SoPi	ChHI	Jord	Durh	Wake	Falls	Kerr
Transylvania County Balsam Mountains	Henderson County	Buncombe County	Black Mountains	Grandfather Mountain	Hanging Rock	Iredell County	Mecklenburg County
Trans Bals	Hend	Bunc	Bl Mt	Grdfr	Hang	Ired	Meck

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