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ON THE COVER

Ring-billed Gull

Ring-billed Gull remains a very common species in Connecticut, but as the results of the 2016-17 Christmas Bird Counts reveal, it continues to decline as a wintering species. Paul Carrier captured the grace of this under-appreciated larid in his cover artwork.

THE 2016-17 CONNECTICUT CHRISTMAS BIRD COUNT

By Stephen P. Broker

In the journal *Bird-Lore*, Volume 2, Number 6 (December 1900), editor Frank M. Chapman proposed “a Christmas bird-census, and we hope that all our readers who have the opportunity will aid us in making it a success by spending a portion of Christmas Day with the birds and sending a report of their ‘hunt’ to *Bird-Lore* before they retire that night.” Today’s veteran Christmas Bird Count participants know that the first CBC was judged a great success, with thirteen U.S. states and two Canadian provinces taking part in the count. Results of the various counts were published in a subsequent issue of *Bird-Lore*, and it was resolved to hold a second bird count in the following year. The concept of finding, identifying, and counting birds on or around Christmas Day caught on quickly, and momentum for this early manifestation of “citizen science” grew steadily through the 1900s, 1910s, 1920s, and 1930s. In time, the guidelines for conducting Christmas Bird Counts were formalized (a 15-mile diameter count circle, adequate participation and hours spent in the field, corroborating evidence for rare species observed). The first CBC has morphed steadily into an annual national and international population census of early winter birds, allowing for the collection of data on changing bird populations and their geographic distributions.

This is the 117th year that a Christmas Bird Count has been conducted in North America and beyond. The State of Connecticut has participated during all 117 years, beginning with the field efforts of Frank Bruen and R.W. Ford in Bristol (they reported 7 species and 68 individuals on Christmas Day, 1900; 2 additional species reported on December 9, 13, and 23) and George P. Ells in Norwalk (5 species and 45 individuals total on Christmas Day). The results of the first count were published in *Bird-Lore*, Volume 3, Number 1, January-February 1901. Now more than a century later, we have this count year held 20 separate Christmas Bird

Counts entirely in the state or extending into adjacent New York or Rhode Island, each carried out during a twenty-four hour period between the established dates of December 14 and January 5. Most interestingly, the newest count was a reintroduction of Connecticut's first CBC, held in the Bristol area through the organizational efforts of compiler Jack Swatt. (See the article by Jack also published in this issue of *The Connecticut Warbler*.) The Bristol CBC and the second year of the Guilford-Long Island Sound CBC now join with longer running counts to give us seven Connecticut counts in the northern part of the state, five mid-state counts, and eight coastal counts. In total, they represent a major portion of the state being surveyed for early winter birds. National Audubon Society has published the results of the complete 2016-2017 CBC season for more than 2,500 national and international Christmas Bird Counts tallying some 56 million birds.

The Connecticut CBCs consist of Barkhamsted, Bristol, Edwin Way Teale-Trailwood, Hartford, Litchfield Hills, Lakeville-Sharon, and Storrs in the northern portion of the state, Oxford, Pawling, NY/Hidden Valley, CT, Quinnipiac Valley, Salmon River, and Woodbury-Roxbury mid-state, and Greenwich-Stamford, Guilford-Long Island Sound, Napatree RI/NY/CT, New Haven, New London, Old Lyme-Saybrook, Stratford-Milford, and Westport along the Long Island Sound coastline. Each year, the results of these counts are entered into Excel Spreadsheets, and total results are tabulated for the three geographic regions of the state and for the statewide total. The table that is published here does not show the regional totals, but they are used in the writing of this narrative summarizing the combined Connecticut Christmas Bird Count.

This year's results are compared with those of the last thirty years, and an effort is made to identify trends in changing early winter bird populations for each of the 262 species recorded on Connecticut CBCs during this three-decade time period. A standardized way for recognizing changing population trends using CBC data is to express numbers

using birds counted per 100 party hours or per total party hours. I do not use such an approach here, instead relying on the actual numbers of birds counted statewide. The last thirty years of CBCs have seen fairly steady numbers of field observers and total party hours throughout. Most Connecticut counts have been held for at least thirty years, with few exceptions. With no mathematical manipulations of birds counted based on party hours, it still is entirely possible to discern overall trends of increasing or decreasing populations with legitimacy, so I leave it to others to develop formulas for working with the raw numbers. Ideally, a combination of Christmas Bird Count, Summer Bird Count, breeding bird surveys, breeding bird atlases, and field studies of individual species are required to pin down population trends over long periods of time. The CBC data are part of a larger body of evidence.

As such, here are the results and comments on the 2016-2017 Connecticut Christmas Bird Count, based on a 30-year analysis. A total of 323,307 individuals were tallied this year, comprising 170 species seen on count days and an additional eight count week (or count period) species, seen within three days before or three days following designated count days. The count week birds were Pink-footed Goose and Ross's Goose in the Greenwich-Stamford count circle, Yellow-crowned Night-Heron at Stratford-Milford, Osprey and Snowy Owl at New Haven, Sandhill Crane at Westport, Black-headed Gull at Napatree, and Wilson's Warbler at Woodbury-Roxbury. (If count compilers provide the locations of observed rarities, more specific information can be given for where they were seen.) Our CBC participants included 711 field observers and 93 feeder watchers, for a combined total of 804 observers, and we devoted some 1840 total party hours and covered nearly 7,800 total party miles in the process.

One species occurred for the first time on a Connecticut Christmas Bird Count: Pink-footed Goose count week at Greenwich-Stamford. Five count day and four count week species were rarities on this year's count, defined as having

been seen six or fewer times in the last 30 years (# indicates how many years observed during this time span). They are Ross's Goose count week at Greenwich-Stamford (2 times), Pacific Loon at New London (6 times), Eared Grebe at New London (4 times), Yellow-crowned Night-Heron count week at Stratford-Milford (5 times), Sandhill Crane count week at Westport (5 times), Common Murre at New London (3 times), Blue-headed Vireo at New London (5 times), and Wilson's Warbler count week at Woodbury-Roxbury (6 times).

Eighteen bird species were recorded in 30-year high numbers (expressed as this year's total/previous 30-year high): Cackling Goose (13/6), Wood Duck (234/204), Eurasian Wigeon (7/7), Mallard (15,286/15,146), Northern Shoveler (35/29), Black Scoter (197/156), Bufflehead (2,472/2,371), Black Vulture (330/245), Merlin (36/36), Peregrine Falcon (32/30), Sanderling (969/967), Common Murre (3/1), Barred Owl (70/70), Red-headed Woodpecker (10/10), Red-bellied Woodpecker (1,714/1,613), Pileated Woodpecker (172/158), Nashville Warbler (4/2), and Dark-eyed Junco (17,846/17,754). Most notable of these increases are a



Russ Smiley photo
A Pacific Loon, a significant rarity found Dec. 28, 2016 in Mystic, remained for the New London CBC.



Bruce Finnan photo (red-bellied)
Hank Golet photo (red-headed)

Both the increasingly abundant Red-bellied Woodpecker and historically rare Red-headed Woodpecker appeared in relatively good numbers on the 2016-17 Christmas Bird Counts.



116% jump in record high Cackling Goose numbers, 100% increase from the previous high in Nashville Warblers, 35% increase in Black Vultures, 26% increase in Black Scoters, 21% increase in Northern Shovelers, 14% increase in Wood Ducks, 9% increase in Pileated Woodpeckers, and 6% increase in Red-bellied Woodpeckers. These numbers do not of themselves indicate increasing population trends; they simply show the dozen or so species that were very well represented on this year's counts. Wood Ducks and Northern Shovelers have had their best CBC counts in the most recent back-to-back years. Closer examination of the last 30 years of results indicates that Bufflehead numbers have been trending upward, Black Vultures have increased dramatically since one was recorded on the 1989-90 CBC, Merlins and Peregrine Falcons have seen steady increases in numbers, with peregrine resurgence supported as well by state breeding bird records from the late 1990s through this year, Sanderlings appear to be on the upswing, Red-bellied Woodpeckers have increased in numbers dramatically over more than 30 years, and Pileated Woodpeckers have increased in early winter over the last 7 years. More follows on these apparent trends in the section describing this year's observed birds following American Ornithologists' Union (AOU) Check-List order.

In contrast, only two species were recorded in 30-year record low numbers: Ring-billed Gull (9,538/11,163) and Herring Gull (8,323/9,343). Ring-billed Gulls dropped 15% below their previous record low count, while Herring Gulls fell off 11%. As will be noted later in this article, each of these gull species has been undergoing long-term population declines in early winter Connecticut populations, Ring-billed Gulls declining for the past eight years, Herring Gulls undergoing significant population declines over the last 30 years.

Some 32 species of birds were generally on the high side in this year's Christmas Bird Count. They include: waterfowl (Snow Goose, Brant, Gadwall, Blue-winged Teal, Northern Pintail, Long-tailed Duck, Hooded Merganser); one gallinaceous species (Wild Turkey); Red-throated

and Common loons; Northern Gannet; Double-crested Cormorant; diurnal raptors (Bald Eagle, Northern Harrier, Cooper's Hawk, Red-shouldered Hawk); Mourning Dove; nocturnal raptors (Long-eared Owl, Northern Saw-whet Owl); corvids (Fish Crow, Common Raven); Horned Lark; Tufted Titmouse; American Pipit; sparrows (Eastern Towhee, Fox Sparrow); icterids (Red-winged Blackbird, Rusty Blackbird!, Common Grackle), and Red Crossbill. A few of these species have been increasing noticeably in early winter numbers over a period of years, as is discussed below. Others, particularly the flocking birds, have shown wildly fluctuating numbers from year to year due to weather conditions, food availability, and other factors.

Balancing the above species recorded this year in generally high numbers are 32 species counted on the low side. Among these are: waterfowl (Green-winged Teal, Canvasback, Ring-necked Duck, Greater Scaup, Red-breasted Merganser); gallinaceous birds (Ring-necked Pheasant, Ruffed Grouse); Horned Grebe; American Kestrel; sandpipers



Mark Szantyr photo
Slate-colored Juncos were reported in record numbers statewide on the 2016-17 Christmas Bird Counts.

(Ruddy Turnstone, Red Knot – one counted in the last 21 years, Purple Sandpiper, Wilson’s Snipe); larids (Bonaparte’s Gull, Great Black-backed Gull); Monk Parakeet; nocturnal raptors (Barn Owl – none counted for 6 years, Great Horned Owl); Black-capped Chickadee; Brown Creeper; kinglets (Golden-crowned, and Ruby-crowned); Northern Mockingbird; European Starling; Yellow-rumped Warbler; sparrows (American Tree Sparrow, Field Sparrow, Seaside Sparrow – none counted in 5 years); Eastern Meadowlark; and finches (Purple Finch, House Finch). Again, some of the above species are in downward long-term decline, while others were on the downswing of normally fluctuating numbers. Again, there is more to follow on this.

Severe weather conditions were less an influence on this year’s CBC than has been the case in past years, with some exceptions. Two counts were held on Saturday, December 17: Woodbury-Roxbury and New Haven. Each count was conducted under fairly mild late fall-early winter temperatures, which ranged from 24 to 36 degrees Fahrenheit. Winds at Woodbury-Roxbury were variable but light, while snow depth ranged from a challenging 1 to 8 inches. Still water was frozen, and moving water was partly frozen. Under cloudy skies throughout the day, morning hours saw heavy snow fall, and the afternoon brought more light snow trending into rain. New Haven also experienced daylong cloudy skies and one to five inches of snow, with heavy snow and rain in the morning and the cessation of snow but continued light rain in the afternoon. Still water was partly open under coastal influence, and moving water partly frozen. Compiler Chris Loscalzo wrote, “the 117th annual count was held under difficult conditions, to say the least. Hours of steady snowfall resulted in the accumulation of four to five inches of snow on the ground. Several hours of rain turned that snow into slush and ice. And, that was just the weather before noon!” However, “birders did take advantage of better weather conditions in the afternoon.”

Ten CBCs were held on Sunday, December 18: four in the



Bruce Finnan photo
Northern Mockingbirds continued their recent decline overall on Connecticut’s Christmas Bird Counts.

north, three mid-state, and three coastal. The northern counts (Hartford, Litchfield Hills, Lakeville-Sharon, and Storrs) ranged in temperature from the low thirties to low to mid-50s, with still water frozen or partly open, moving water open to partly frozen. Light to heavy rain prevailed during the morning, and only Lakeville-Sharon got respite from afternoon precipitation. Litchfield Hills compiler Ray Belding noted, “The day was pretty miserable and not particularly conducive to counting birds. Fog and rain prevailed during the morning and mostly rain during the afternoon hours. Most of the teams didn’t go for owls due to the weather, although one team did have a record owling morning.” Mid-state counts (Oxford, Quinnipiac Valley, and Salmon River) were warmer as would be expected being at lower elevations and closer to the coast. Temperatures ranged from a low of 40 degrees F. to a high of 56 degrees F.. Wind gusts were particularly evident at Salmon River. Quinnipiac Valley dealt with some inches of snow cover, the other counts did not. Most still and moving water was open. Only Oxford had periods of morning light rain, while all three counts had areas risking abbreviation by light to heavy afternoon rains. The coastal counts (Greenwich-Stamford, Napatree, and Westport) varied in morning temperatures,

Greenwich-Stamford with a low of 29 degrees F., Napatree with a low of 40 degrees F.. Afternoons brought a rise of 10 to 20 degrees, Napatree and Westport benefitting the most with warmer conditions. Wind gusts were evident, and snow depth was as much as 3 inches. Stillwater was partly frozen, moving water open. Light rain continued through the day at these coastal counts.

Barkhamsted and Stratford-Milford continued their synchrony post-Christmas Day, counts being held on Monday, December 26. A cold front had brought in some chill, so the northern Barkhamsted circle experienced a range of 16 to 41 degrees F. through the day, while coastal Stratford-Milford offered 27 to 42 degree temperature conditions. Winds gusted more heavily along the coast. No snow remained on the ground. Each count experienced light rain in the morning, with light rain continuing along the coast in the afternoon.

Bristol, Guilford-Long Island Sound, and New London held their counts on Saturday, December 31, when neither rain nor snow fell but strong wind gusts made birding somewhat more difficult. The Bristol count circle saw partly clear skies in the morning, the afternoon clouding over more completely. Open ground ranged from no snow cover to as much as 6 inches of snow. Continued colder temperatures had produced partly frozen still and moving water. Cloudy skies prevailed through the day at Guilford-Long Island Sound, while further east New London enjoyed clear morning skies.

On Sunday, January 1, Pawling/Hidden Valley temperatures ranged from 23 to 44 degrees F., with moderate wind speeds, no snow on the ground, and partly open still and moving water. Clear morning skies gave way to cloudiness later in the day but no precipitation. Old Lyme-Saybrook also held its count, with temperatures of 35 to 49 degrees F. and occasional wind gusts to 25 miles per hour, but again no precipitation. Coastal waters were open.

The Edwin Way Teale, Trail Wood CBC completed Connecticut's CBC season on Monday, January 2. This northern count was held under initially cold conditions of 20 degrees F., but the day was essentially wind free. A few inches of snow covered portion of the count circle, and cloudy skies and rain throughout the day, including light snow in the afternoon, made for challenging conditions.

A Run-Through in Check-List Order. Let's review the 2016-17 statewide results for Connecticut Christmas Bird Counts, following American Ornithologists' Union Check-List order, which we know to be a shifting sea of phylogenetic relationships.

Waterfowl. Pink-footed Goose, Greater White-fronted Goose, and Ross's Goose were significant rarities found at Greenwich-Stamford during the count period. The Pink-footed Goose was at Greenwich Harbor/Grass Island and had been seen and photographed by numerous birders prior to the count. The Ross's Goose was seen and photographed at Holly Pond in Stamford. Hartford also located a Greater White-fronted Goose during count period, but Quinnipiac Valley was the only count to record one on count day. Lakeville-Sharon had an impressive total of 101 Snow Geese, accounting for more than 70% of the Snow Geese reported throughout the state. The blue morph is rare in Connecticut during CBC season, and again none were spotted this year. Cackling Geese were seen in eight different count circles, resulting in a record high statewide total. Canada Geese tend to maintain fairly steady numbers from year to year, in spite of what the golfing community may feel, and step to avoid. Brant continue their fifteen-year trend of much higher numbers along the Long Island Sound coastline. In contrast, Mute Swan numbers have dropped 50-100% over the last five years or so, whether from human control measures or due to other recessionary causes. Two Trumpeter Swans at Greenwich-Stamford would have made for an important addition to the all-time Connecticut CBC species list, but for their clipped wings. Too bad the wild pair of Trumpeters that spent time several years ago between Konold's Pond in

Woodbridge and Long Island, NY had their pair bond come to an end when one member was shot.

Among the dabblers, four Muscovy Ducks at Guilford-Long Island Sound were exotic escapees. Five count circles recorded new high numbers of Wood Ducks, marking the second consecutive year that the early winter Wood Duck population has been all but off the charts. Compare this year's 234 with the 25 to 75 counted in most previous years. Gadwall continues its elevated numbers of recent years. Four coastal counts recorded Eurasian Wigeons for a new record high total of 7 individuals. We seem to count about 100 American Wigeons for every Eurasian Wigeon seen. American Black Ducks have been in steady decline from numbers of the 1980s and earlier, while this year saw record high numbers of Mallards. Duck hybrid fanciers enjoyed the Mallard x American Wigeon hybrid located at Stratford-Milford. Blue-winged Teal are rarities on the Connecticut CBC, so two seen at Greenwich-Stamford and one at Stratford-Milford were excellent finds. Thirty-five Northern Shovelers found mostly along the coast were unprecedented. Hartford recorded the only inland shoveler. The last three years have seen record high numbers of Northern Pintails. In contrast, Green-winged Teals were in shorter supply. This year's thirteen Canvasbacks continue the dramatically lower numbers and steady declines of past years. Consider that more than 1,800 were counted in 1987-88. Greenwich-Stamford and New Haven combined for three Redheads on the coast.

Among diving ducks, Ring-necked Ducks were on the low side, as were Greater Scaup (2,500+). Gone are the days of rafts of 13,000 to 17,000 scaup on the coast. Napatree provides most of the Common Eider action, but New London (in its New York waters) contributed amply this year. Harlequin Duck at Westport was a highly notable find. Scoter species were well represented, with record high numbers of Black Scoters, again due to the birds at Napatree. Long-tailed Ducks were fairly abundant, aided by rafts off Westport and New London. Buffleheads again totaled record high numbers. Many birders saw and photographed the

drake Barrow's Goldeneye at Tuxis Island and Gull Rock, Madison in the Guilford-Long Island Sound count circle. Hooded Mergansers maintained their high numbers of recent years, while Common Merganser numbers tend to fluctuate from year to year. Red-breasted Mergansers saw their lowest total in nine years. Ruddy Dicks vary dramatically from year to year but have increased their early winter numbers significantly over the past 20 years.

Phasianids to Bitterns and Herons. Ring-necked Pheasant populations continue to be dependent on annual introductions by hunt clubs, and this year nine count circles located a paltry (not poultry) total of 35 survivors, the greatest number occurring at Napatree. Must be providential. Ruffed Grouse is found in mixed deciduous – coniferous and deciduous forests. From the early 1960s to the mid-1980s we were counting 50-250 grouse on the statewide CBC. This year's total of 1 grouse at Salmon River is indicative of the dramatic decline in Ruffed Grouse numbers



*Al Collins photo
A boat trip off Stamford produced a real gem, a Black-legged Kittiwake, for the Greenwich-Stamford CBC.*

in Connecticut. Northern New England states are faring much better with grouse these days. While grouse have been in steep decline, Wild Turkeys have been ascendant. The 1,767 counted in 2016-17 represent the highest CBC total in 11 years. No Northern Bobwhite has been reported in the last six years of Connecticut counts.

Loons are doing very well in early winter coastal waters, with third highest totals of both Red-throated Loon and Common Loon this year. Barkhamsted, Litchfield Hills, and Storrs reported Common Loon count day or count week in the northern part of the state. A Pacific Loon at Enders Island Sea Chapel, Stonington (New London CBC) was one of the statewide count highlights. Horned Grebe numbers were low. Red-necked Grebe was found at three coastal counts. Napatree again contributed the vast majority of Northern Gannets. While Double-crested Cormorants were well represented this year, Great Cormorants continue in reduced numbers for the past decade. Great Cormorants used to outnumber Double-crested by 2, 3, 4, or 5 to 1 in earlier years. Napatree (count day) and Stratford-Milford (count week) were the only counts finding the rare and elusive American Bittern. Great Blue Herons were low mid-state and in average numbers elsewhere, while the only Great Egret of the count was found at New London. One Snowy Egret at Napatree was of note. Black-crowned Night-Herons again made it into double digits statewide, and the only Yellow-crowned Night-Heron was listed as count week at Stratford-Milford.

New World Vultures to Rallids and Cranes. Black Vultures continue their range expansion northward, with a record high of 330 counted this year, a 35% increase over last year's record high. Turkey Vultures still outnumber Black Vultures in early winter, but much less so than before. New Haven had a count week Osprey. One to three Osprey are reported in most years. A Golden Eagle at Litchfield Hills was a great find. Northern Harriers were well represented this year. Among the accipiters, Sharp-shinned Hawk was distributed throughout the state in average numbers, and counts of

Cooper's Hawk continued to reflect higher numbers of this species. The difficult to find Northern Goshawk was viewed at Lakeville-Sharon (2 individuals) and Napatree (1). Bald Eagles continue their strong comeback from the past century's organochlorine poisoning, with 154 individuals counted this year, the second highest ever. Red-shouldered Hawks saw their greatest increase in numbers on three northern counts. This year's total is the second highest and is consistent with increasing numbers throughout the state over the last seven years. There were no Broad-winged Hawks to fuss about this year. Red-tails remain fairly constant in their numbers. Three counts recorded Rough-legged Hawk, including 3 seen at Pawling/Hidden Valley. Speaking of rare and elusive marsh birds, 2 Clapper Rails at Old Lyme-Saybrook and 1 at Westport made for a somewhat smaller representation this year. The 7 Virginia Rails found on the coast continue to support the perception of a gradual decline in their CBC numbers, although it requires a combination of hard work and luck to detect them in early winter. Sorry, no Sora this year. American Coot goes through major swings in numbers on the CBC as Connecticut is near the northern winter distributional limits of this gregarious rallid. A Sandhill Crane reported count week at Westport was new to this count and rare for the state. Cranes nesting just above the Connecticut-Massachusetts border in the western parts of the states likely will lead to more Connecticut CBC reports in upcoming years.

Shorebirds to Gulls. Black-bellied Plovers are more difficult to find in recent Christmas count years, and Killdeer have been experiencing a four-year decline in CT CBC numbers. A Spotted Sandpiper at New London was extra special for a Connecticut CBC. One was reported at Westport in 1965-66, with single birds also at New London in 1972-73 and 1987-88, at New Haven in 1973-74, and at Stratford-Milford in 2005-06. Nice find, New London! Ruddy Turnstones have been more difficult to locate over the most recent 6 years. This year was no exception. On the other hand, Sanderlings were at record high numbers along the coast. Purple Sandpiper is found best on rocky coastlines and outcrops, its numbers

recorded dependent in part on seeking out these habitats. Fewer boat expeditions on count day lead to fewer sightings of these handsome sandpipers. Wilson's Snipe also has seen better yesteryears, with a 30-year high of 38 in 1988-89. Only 8 were counted this year along the coastal. It was an average year for American Woodcock, and average is good in this instance.

The New London pelagic CBC team riding the New London-Orient Point ferry was treated to 3 Common Murres on the return trip in Connecticut waters. This rafting threesome was photographed well from starboard side of the ferry as the ferry passed very close by. Single Common Murres were reported in 2011-12 and again in 2013-14, each time also at New London. Greenwich-Stamford, Napatree, and New London reported Razorbills for a total of 17 individuals. A Black-legged Kittiwake at Greenwich-Stamford was noteworthy. We have seen reduced numbers of Bonaparte's Gulls over the past 8 count years. The 11 counted this year pale in comparison with nearly 7,000 in 1993-94 or the 2,200 in 1992-93. This small gull winters along the Atlantic coast from Massachusetts to Florida, and its presence on our CT CBC is dependent on shifting food supply. It would make an interesting exercise to look at their numbers over time on coastal CBCs south of Connecticut. Five Laughing Gulls at New Haven were rare for this count. As noted above, Ring-billed Gulls were in record low numbers this year, and Herring Gulls also were generally in short supply. Closed landfills around the state are the main reason for the drop in these species' numbers. Five Iceland Gulls were seen on coastal counts, and Bristol added a sixth to the statewide total. Westport found 3 Lesser Black-backed Gulls, while New Haven identified one. Glaucous Gull was found count day at Napatree and count week at New London. It comes as no surprise that Great Black-backed Gulls also continue their lower CBC numbers over the past 12 years.

Columbids to Falcons and Parrots (sigh). Rock Pigeons maintained their somewhat lower numbers of recent years (with record low numbers in New Haven), while Mourning

Doves achieved their highest numbers in 9 years. Barn Owls have not been reported for 6 years. The New Haven Landfill/Transfer Station apparently has not supported a nesting pair of Barn Owls since the early 1990s. Nesting formerly took place in the old incinerator building, now leveled and filled in. Say a fond goodbye to Barn Owls formerly at Milford jai alai, also. Among the typical owls, Great Horned Owls were in low numbers, while Snowy Owl made count week appearances at Hartford and New Haven. Seventy Barred Owls statewide tied the previous 30-year high count. Fifteen statewide Long-eared Owls made for the highest total of this species in 21 years. A roost of five Long-eared Owls found count day in Stratford-Milford contributed to this total. Two Short-eared Owls were discovered at Napatree, with a count week Short-eared Owl at Stratford-Milford. The nearly 50 Northern Saw-whet Owls marked the third highest total in a 30-year time span. A record high of 78 Saw-whets was achieved in 2001-02. Alas, no Rufous Hummingbirds were found during the count season. With substantial open water, one would have expected more Belted Kingfishers being reported.

Red-headed Woodpecker is another species of predominantly southern distribution that checked in at record high numbers, the 5 at Old Lyme-Saybrook suggesting a family unit. What can be said about Red-bellied Woodpecker that hasn't been said before? Follow the wood chips as they fly: 1954-55 (1 Red-bellied reported); 1975-76 (27); 1985-86 (144); 1988-89 (249); 1992-93 (458); 1997-98 (811); 2001-02 (1,092); 2016-17 (1,714). Declare it a publically traded company (companies are individuals, after all), and invest in stock. Call it Billbook if you must; this is a winner. Yellow-bellied Sapsuckers also have advanced in numbers for the past 10 years, another interesting instance of a southern winterer pushing northward. The *AOU Check-List of North American Birds* (Seventh Edition) states that Yellow-bellied Sapsucker rarely winters farther north than southern New England. The times they are a-changin'. Downy and Hairy woodpeckers and Northern Flickers provided no surprises this year, but Pileated Woodpeckers set a new 30-year high total at 172

individuals, with new northern, mid-state, and coastal totals as well.

American Kestrels continue to be scarce on Connecticut CBCs, just 13 being reported this year. The 30-year high count is 80 kestrels seen in 1991-92. Looking back further in Connecticut CBC records, one finds that 203 kestrels were counted in 1977-78. *Birds of North America* states that "Breeding Bird Surveys detected significant increases (1966-96) in Midwest and central U.S. and significant decreases in southern New England." The various negative effects of human activity pertaining to kestrel populations include shooting or trapping, pesticides, collisions, and degradation of habitat. The last listed is the most likely cause of declines in kestrels on Connecticut CBCs. The importance of the efforts of a few individuals in the state to set up kestrel nest boxes cannot be overstated. Many thanks to our several "activist" birders. Good news certainly applies to the status of Peregrine Falcons, whose nesting pairs continue to rise in Connecticut and whose CBC numbers this year achieved a new record high of 32 individuals. Along with Ospreys and Bald Eagles, peregrines are a great continuing success story for avian conservation. Introduced Monk Parakeets are not on a similar trajectory, as they were counted in lowest numbers in 23 years. So much for the greening of America.

New World Flycatchers to Corvids and Wrens. The only flycatchers reported this year were single Eastern Phoebes located at Salmon River, Greenwich-Stamford, and Napatree. A Blue-headed Vireo at New London was a rare find, a feat now accomplished five times in the last 18 years. At least one Northern Shrike tends to be seen each year, but not so this time around. Consider the 67 shrikes reported in 1995-96. Loggerhead Shrike was last sighted in Connecticut during the 1984-85 CBC season. Among corvids, Fish Crows and Common Ravens were fairly abundant. The 66 Fish Crows recorded on the Storrs CBC were a record high for this northern count. Three coastal counts found record high numbers of ravens. Horned Larks (2,092 statewide) also were abundant. No swallows (Tree, Northern Rough-winged,

Cave) were spotted foraging for late lingering flying insects. Black-capped Chickadees and Tufted Titmice seem to be going in opposite directions, with chickadees generally lower on the radar for the past 9 years or so and titmice squeaking (please, not squawking) to their highest totals in 15 years and second highest in 30 years. Both nuthatch species were in expected numbers, White-breasted outnumbering Red-breasted by 20:1, while Brown Creepers were close to a new 30-year low. House Wrens were an uncommon miss this year. Winter Wrens were in somewhat below average numbers, Marsh Wrens did less well in early winter localities that were affected by heavy snow cover, and Carolina Wrens are in the second year of greatly diminished and recovering populations following the heavy winter snow storms of 2015.

Kinglets to Parulid Warblers. Both kinglet species were comparatively scarce this year, with Golden-crowned second lowest in 30 years (a record low 9 at Barkhamsted!) and Ruby-crowned also generally low. There were no thrush rarities this year as there were in 2015-16 when a Townsend's Solitaire was seen in Greenwich by many observers during an east coast stay extending for some two months. Eastern Bluebirds were at 75% strength when compared with the results of a year ago, yet the 165 bluebirds counted at Barkhamsted were a record high for this northern count. American Robins are another flocking species whose numbers range wildly from year to year. This was not a big early winter for robins. Few Gray Catbirds were seen at northern and mid-state circles, and their numbers were low on coastal counts, also. Quinnipiac Valley recorded the only non-coastal Brown Thrasher. High numbers of European Starlings at Pawling/Hidden Valley were an anomaly, as this species introduced from Europe in the 19th century has been dropping precipitously over the course of the last 20 years. American Pipits have enjoyed higher numbers for 8 to 15 years. (And now a tip of the hat to Bob and Linda Dixon of Sterling, Connecticut for allowing me to adopt the affectionate, now exclusively indoor cat they rescued from a feral state and named Pipit. That has little bearing on the present Christmas Bird Count article, except that it serves

as a reminder to all to keep their cats indoors at all times.) Cedar Waxwings occurred in below average numbers this year. This was not the exceptional year for wood-warblers that we enjoyed last year. Still, an Orange-crowned Warbler was found at East Haven's Ora Avenue-Proto Drive during New Haven's count week but was not relocated on count day. Two Orange-crowned Warblers were found at Stratford-Milford, and one was found at New London. The Nashville Warbler also seen at East Haven's Ora-Proto Drive during count week was relocated on count day and was one of a remarkable three Nashvilles in New Haven's circle. Westport added a fourth Nashville Warbler to the coastal and statewide total. New London reported the only Common Yellowthroat. Palm Warblers were bobbing their tails at New Haven (2) and Old Lyme-Saybrook (1). Yellow-rumped Warblers have been in highly variable numbers over the last three decades, and this year's total of 81 Yellow-rumps was very low. One of the best birds of the season was a count week Wilson's Warbler at Woodbury-Roxbury. Greenwich-Stamford and New Haven reported single Yellow-breasted Chats, always a great species to locate during the bird count.

Emberizids. A sharp-tailed sparrow species at Napatree could not be pinned down as either a Saltmarsh or a Nelson's Sparrow. American Tree Sparrows continue their low numbers of recent years. Chipping Sparrows were identified on 8 counts around the state. Edwin Way Teale, Trail Wood's Clay-colored Sparrow was an exceptional find. Field Sparrows bounced back slightly from the last dozen years of falling numbers, and Fox Sparrows again were well represented. The wonderful winter species Dark-eyed Junco achieved record high numbers this year. White-crowned and White-throated Sparrows maintained reasonably good numbers, as did Savannah Sparrows. Coastal 'Ipswich' Sparrows were at Old Lyme-Saybrook (5) and Stratford-Milford (2). Hartford had the only Lincoln's Sparrow. Eastern Towhees showed up in high numbers for the second year in a row.

Northern Cardinal to Baltimore Oriole. Northern Cardinals

appear to maintain steady numbers annually, and they did so again this year. Consistent numbers annually do not apply for Red-winged Blackbirds, Common Grackles, and Brown-headed Cowbirds. They fluctuate to the extreme from year to year. This was a good year to see Red-wings flying into evening roosts, a great year for grackles, and an average year for cowbirds. Small numbers of Eastern Meadowlarks at Salmon River (1 seen here in an annually productive field), Woodbury-Roxbury (CW), Napatree (2), and New London (4) pale in comparison with the 144 counted in 1991-92 or the 179 in 1992-93. Rusty Blackbirds were a surprise again this year with 240 statewide, the second highest statewide total in 30 years. "Rusty Blackbirds have declined alarmingly (85-95%) in numbers over the past 40 years (1970-2010)" according to *Birds of North America*. Baltimore Orioles were represented at Napatree count week and New Haven count day.

Winter Finches to House Sparrow. House Finch has not recovered from the 60% reduction in its populations in the eastern United States since the early to mid-1990s, caused by mycoplasmal eye infections (conjunctivitis). Purple Finch was shown to have one of the largest declines in breeding populations in Massachusetts from the Massachusetts Breeding Bird Atlas 1 of the 1970s to Mass BBA2, a five-year follow-up survey completed in 2011. Connecticut's CBC Purple Finch CBC count was low again this year. Napatree reported 25 Red Crossbills, the only ones on this year's CBC, and Lakeville-Sharon had 9 Common Redpolls, making this yet another lackluster year for winter finches. Pine Siskins also were non-irruptive during the count period. American Goldfinches were in average numbers, and 17 Evening Grosbeaks in northern Connecticut (6 at Litchfield Hills, 11 at Lakeville-Sharon) continue to reflect a major shift in its wintering populations away from the state since the late 1980s. Evening Grosbeak is described in *Birds of North America* as "an irruptive migrant across much of its range". Its breeding range extended eastward dramatically during historic times, but it displays highly irruptive winter migrations that are dependent on the availability of food

(spruce budworm and other insects, box elder and other tree seeds). *BNA* calls for additional studies of the Evening Grosbeak life history to better understand its changing population distributions and its diminished numbers in our region. Rounding out the AOU Check-List order, House Sparrows fell 20% from their count of last year.

Acknowledgements. We are indebted to the following Connecticut Christmas Bird Count compilers, who once again are responsible for the success of this year's count. Sponsoring bird clubs also are listed.

Northern Counts – Lakeville-Sharon (Sean Grace, Robert Moeller/Audubon Sharon); Litchfield Hills (Raymond Belding/Litchfield Hills Audubon Society); Barkhamsted (David Tripp, Jr./Litchfield Hills Audubon Society); Bristol (Jack Swatt); Hartford (Jay Kaplan, Stephen Davis/Hartford Audubon Society); Storrs (Steve Morytko/Natchaug Ornithological Society); Edwin Way Teale – Trail Wood (Susan Harrington/Natchaug Ornithological Society).

Mid-State Counts – Pawling, NY/Hidden Valley, CT (Carena Pooth, Angela Dimmitt/Ralph T. Waterman Bird Club); Woodbury-Roxbury (Ken Elkins/Western Connecticut Bird Club); Oxford (Roy Harvey/Naugatuck Valley Audubon Society); Quinnipiac Valley (Melissa Baston, Corrie Folsom-O'Keefe/ | Quinnipiac Valley Audubon Society); Salmon River (Joseph Morin/Mattabesec Audubon Society).

Coastal Counts – Greenwich-Stamford (Cynthia Ehlinger, Brian O'Toole/Audubon Greenwich); Westport (Mardi Dickinson, Townsend Dickinson/Connecticut Audubon Society, Birdcraft Museum); Stratford-Milford (Steve Mayo/"a fun group of volunteers"); New Haven (Christopher Loscalzo/New Haven Bird Club); Guilford-Long Island Sound (Tom Kelly, Lorrie Shaw/Menunkatuck Audubon Society); Old Lyme-Saybrook (Barbara Hawes/Potapaug Audubon Society); New London (Robert Dewire); Napatree, RI/NY/CT (Shai Mitra, Glenn Williams).

Steve Broker
Cheshire, CT

Connecticut Christmas Bird Count Totals for 2016-2017

Count Week (or Count Period) species (CW) are recorded during three days before count day or three days following count day, but not on count day.
High Counts (large italics XX) are those being or exceeding the highest count of the previous 29 years of individual or the statewide Connecticut CBCs.
Low Counts (bold XX) are those being or fewer than the lowest count of the previous 29 years of individual or the statewide Connecticut CBCs.
New Species (underlined XX) are those never recorded in the previous 29 years of an individual or the statewide Connecticut CBCs.
Rare Species (inside box) are those seen 6 or fewer times in the last 30 years of an individual or the statewide Connecticut CBC.

SPECIES	Northern Counts			Midstate Counts					Coastal Counts					State Total				
	BA 12/26/16	EW 12/31/16	HA 01/02/17	LS 12/18/16	ST 12/18/16	OX 12/18/16	PA 11/17	OV 12/18/16	SR 12/18/16	WR 12/17/16	GL 12/31/16	GS 12/18/16	NA 12/18/16	NH 12/17/16	NL 12/31/16	OL 11/17	SM 12/26/16	WE 12/18/16
Pink-footed Goose																		
Greater White-fronted Goose																		
Graylag Goose (Domestic type)																		
Show Goose																		
Ross's Goose																		
Blair's Goose																		
Canada Goose	118	1220	2566	6297	2348	2	2594	883	9									
Mute Swan																		
Trumpeter Swan (clipped wings)																		
Muscovy Duck																		
Wood Duck																		
Gadwall																		
Eurasian Wigeon																		
American Goldeneye																		
American Black Duck	129	10	26	159	3	75	57	13										
Mallard	365	272	334	851	600	393	299	1										
Mallard (Domestic Type)																		
Mallard Hybrid																		
Mallard X American Wigeon Hybrid																		
Blue-winged Teal																		
Northern Shoveler																		
Northern Pintail																		
Ring-necked Teal (American)																		
Canvasback																		
Redhead																		
Ring-necked Duck	3																	
Greater Scaup																		
Lesser Scaup																		
Greater/lesser Scaup																		
Common Eider																		
Hooded Merganser																		
Surf Scoter																		
White-winged Scoter																		
Black Scoter																		
scoter, species																		
Long-tailed Duck																		
Bufflehead																		
Common Goldeneye	1																	
Common Goldeneye (Lake Type)																		
Hooded Merganser	66	14	18	70	83	202	64											
Common Merganser	87	17	19	217	67	65	118											
Red-breasted Merganser																		
Ruddy Duck																		
duck, sp.																		

RESTARTING THE BRISTOL CBC

What Has Changed Since 1931

By Jack Swatt

Whenever I looked at the map of Connecticut Christmas Bird Count circles, I always noticed a gap right around the city of Bristol. I had known that Bristol was one of the original Christmas Bird Counts when they were started in 1900. Curiosity led me to researching it further on the Audubon CBC Website. There, I was able to find out that it ran from 1900 to 1931, but became somewhat intermittent toward the later years. The website provided links to the editions of *Birdlore*, which published the early accounts, and I was also able to download an Excel file of all the data recorded over those years (Figure 1). Seeing that there was valuable information already recorded for this area, this past year I undertook getting the Bristol CBC restarted. After several months of preparation and recruitment, on Dec. 31, 2016, thirty-seven field observers and five feeder-watchers took part in the first Bristol CBC in 85 years. Comparing the data from the new count to the historical data led me to investigate not only changes in the bird population through time, but also how the count itself has changed over time.

A total of 64 species were recorded in our count circle that day. It is not surprising that 37 of the 64 species on count day and three of the four count week species were new to the count. Many of the new species were the result of the obvious range expansions of many southern birds into Connecticut, including now common birds such as Northern Cardinal, Tufted Titmouse, Red-bellied Woodpecker, Fish Crow, Carolina Wren and Northern Mockingbird. Gulls were not recorded on any previous Bristol CBC, but their inland incursion, due in part to the availability of human handouts at fast food restaurants, resulted in four gull species being observed over count week. The change in habitat from farmland to regenerated forests most likely led to Common Raven, Barred Owl, Pileated Woodpecker and Yellow-bellied Sapsucker be-



Bruce Finnan photo
This adult Iceland Gull at Lakewood Park in Waterbury was one of the highlights of the re-started Bristol Christmas Bird Count.

ing prevalent in the area. Conservation success stories were also well represented on the count with Bald Eagle, Peregrine Falcon, Wild Turkey and Great Blue Heron. Conversely, some species routinely encountered in the past were notably absent from this year's count. The high counts of 16 Northern Bobwhites, nine Ruffed Grouse and six Eastern Meadowlarks will surely stand unchallenged. The changes that occurred over the 85-year gap in data clearly showed how the birds responded to man's changing environment.

The way the birds were recorded and taxonomy changes have also negated some of the data for comparison. The split of Winter Wrens into Pacific and Winter Wrens caused the earlier sightings of Winter Wrens to be categorized as "Pacific/Winter Wren". Towhees have been lumped and split again, but previous towhee observations are now "Towhee sp." I thought there would be more examples of changes in taxonomy to account for the frequent sightings of sparrow sp., redpoll sp. and Spinus sp. included in the early data. However, in reviewing the AOU checklists for that time period, I could not find any specific changes that would account for them. Going back to the original CBC reports showed that the submissions were just not specific enough ("Juncos", "Redpolls", and "Goldfinch") to put them into data for the

SPECIES	1900	1901	1902	1903	1904	1905	1906	1907	1908	1910	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1931	
Canada Goose											3														100	
American Black Duck																										14
Mallard																										1
Northern Pintail																										
Northern Bobwhite			6		16																					
Ring-necked Pheasant																										
Ruffed Grouse				9	3	7																2	3	2	7	1
Northern Harrier				2	1																					
Sharp-shinned Hawk																1										
Red-tailed Hawk				1																						1
Eastern Screech-Owl																										
Screech-Owl sp.																										
owl sp.																										
Downy Woodpecker	1	1	5	6	6	6	1	1	1	1	1	3	1	2	4	2	1	1	1	1	1	1	1	1	3	1
Hairy Woodpecker			2	2																						1
Northern Flicker																										1
Northern Flicker																										1
American Kestrel				1	1																					
Merlin				1																						
Northern Shrike			1		3																					1
Blue Jay	20	5	31	29	6	10	11	5	11	9	45	15	25	41	19	5	5	41	33	13	13	9	14	5	5	
American Crow			64		11																					5
crow sp.			25	4	233		10	2	3	6	5	9	7	18	38	10	8	15	26	14	6	4	3	5	15	
Black-capped Chickadee																										
chickadee sp.			3	8	43	72	11	48	11	15	5	16	23		25	4	2	3	3	8	2	2	2	17	4	
Red-breasted Nuthatch			1	2																						
White-breasted Nuthatch			2	7	27	5	4	5	2	2	4	2	4	3	2	5	3	3	1	2	8	3	3	3	1	
nuthatch sp.																										3
Brown Creeper			1	2	3	1																				3
Pacific/Winter Wren			1	1	1																					3
Golden-crowned Kinglet			8	7	12	6	2																			4
Ruby-crowned Kinglet																										2
Bluebird sp.			2	3																						1
American Robin																										1
American Starling			6	12	1	49	69	40	10	7	75	8	18	28	38	13	2	67	12	56	72	12	31	34	30	
American Tree Sparrow																										3

SPECIES	1900	1901	1902	1903	1904	1905	1906	1907	1908	1910	1913	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1931	
White-throated Sparrow																										4
Song Sparrow	4	3	1		2	1			1	1	1	2	2	1	2	1										4
townie sp.																										
sparrow sp.			8	1	9	8	4		46	2	14	8	13													2
Red-winged Blackbird																										1
Western/Eastern Meadowlark																										
Rusty Blackbird																										
Pine Grosbeak					6																					
Pine Grosbeak							9						2													
White-winged Crossbill																										
redpoll sp.							40		175			100	179													1
Pine Siskin																										1
American Goldfinch	9	50	29		59	6	1	1	1	3	10	25	20	182												1
Spinus sp.																										1

specific species.

Going back and reviewing the original reports in *Birdlore* led me to realize that the greatest change over the years was in the way that the counts were conducted. From the earliest “Christmas Bird Census,” as they were originally called, *Birdlore* readers were simply encouraged to submit their bird observations on Christmas day with notations about the temperature and weather. Eventually, there was an attempt to standardize the reporting and listing the distances traveled. The Bristol censuses all occurred within the city of Bristol and ranged from 5 to 14 miles walking. On two occasions they also traveled by car for 2 or 10 miles, stopping at various locations. The number of participants ranged from one to five. Knowing this made the sighting of three Northern Shrikes on the 1905 count seem that much more incredible. I could not find any references to optics, but I could only imagine that if binoculars were available, the quality would be far less than the advanced optics we use today. The Bristol counts stopped before the establishment of the 7.5 mile radius count circle, which further standardized the data collection, but the older data is still relevant to current counts since the data is broken down into numbers per party-hour to use for analysis.

The one thing I did notice, which was consistent between then and now, is that the popularity of the Christmas Bird Count is continually increasing. Each year in the early censuses, the summary noted that more participants had submitted reports than the previous year. From the original 25 censuses and 27 participants in 1900, the Christmas Bird Count has grown to 2,505 count circles and 76,669 participants in the 116th count (2015). It has also expanded outside the United States to Canada, Central and South America, and the Pacific Islands. I was very happy to be able to continue that trend and add another circle to the 117th CBC, and make the historical Bristol CBC data much more meaningful.

NEW RESEARCH ON SALTMARSH SPARROW MIGRATION IN CONNECTICUT AND ELSEWHERE

By Chris S. Elphick and Michael Soares

Saltmarsh Sparrows are highly specialized residents of tidal marshes. They are not uncommon in Connecticut marshes but can be hard to find as their song is quiet and rarely given, and they tend to stay hidden low in the marsh grasses. Their nests, small cups woven into the grass, are hard to see, even from a few feet away. Nonetheless, the species provides an indicator of changes that are happening in tidal marshes along the Atlantic coast. Sea level rise and coastal development are significantly altering marshes, causing vegetation change and wetter conditions (Field et al. 2016). Saltmarsh Sparrows have shown a steady population decline since at least the 1990s (Correll et al. 2017), and evidence suggests that they face possible extirpation from Connecticut, and perhaps much of their range, within as little as 50 years (Field et al. 2017). Other marsh-dependent species, including migratory birds that use marshes as stop-over sites, share this challenge.

In 2014, our research group at the University of Connecticut began a collaboration with the United States Fish and Wildlife Service (USFWS) and the University of New Hampshire to better understand migration patterns in Saltmarsh Sparrows. This project involved attaching small “nanotag” transmitters to birds just prior to migration, and taking advantage of a network of receiver towers along the coast to detect the birds as they moved south. In 2015, with the cooperation of the Connecticut Department of Energy and Environmental Protection and Audubon Connecticut we erected two towers of our own – the first on the Connecticut coast. In doing so, we joined a large network managed by the Motus Wildlife Tracking System (motus-wts.org), a program of Bird Studies Canada in partnership with collaborating researchers

and organizations. This network is centered in eastern North America, but has expanded to include outposts on the Pacific Coast, in South America, and in Europe, and aims to encourage collaborative research on animal movements across vast landscapes. By adding towers in coastal Connecticut, we hoped to improve our ability to understand migration patterns in Saltmarsh Sparrows. In particular, our project aims to determine exactly when birds depart for the wintering grounds, the time and routes they take to travel between sites, and where and for how long they stop-over en route.

Our work in Connecticut is just one small part of a larger project on Saltmarsh Sparrows. Working with our partners we have been attaching transmitters to sparrows during fall at coastal National Wildlife Refuges (NWR) in Maine (Rachel Carson NWR), Massachusetts (Parker River NWR), and Rhode Island (Sachuest Point NWR). The transmitters rely on radio telemetry, which biologists have been using for several decades to track animal movements. The method functions as an FM radio does: a receiver, using an antenna, picks up radio waves emitted by a transmitter. Instead of music, the small and lightweight transmitters fitted to birds emit a brief signal, and each tag has a unique signature. If signals are emitted within range of a receiver, they can be detected and the time of occurrence recorded. When these records are compared to registered nanotags in the central database that is managed by Motus, each detection can be connected to a specific bird, allowing researchers to build a map of each individual's movements.

Although radio telemetry has been around for a long time, studying long distance migration in small birds has been difficult until recently. As technology has advanced, transmitter sizes have become smaller, making it possible to use them on smaller birds. (Strict regulatory guidelines limit the size of transmitters to no more than 3% of a bird's body weight – for context, this is far less than the weight gain that migratory birds undergo when preparing for migration). Receiver technology has also improved such that it is relatively inexpensive to build solar-powered receivers that can provide

round-the-clock coverage at sites where birds are expected to occur. Most importantly, by getting researchers that are using these methods to cooperate such that everyone with a tower can collect data for anyone with a tagged animal, Motus has made it possible for lots of small projects to achieve the benefits of one large one. By February 2017, there were over 350 receivers throughout North America, all of which can detect a transmitter from any of the dozens of different studies that use the technology.

For our sparrow study, this network is especially useful as many of the receivers are on the coast, where Saltmarsh Sparrows spend their lives. The detection range of each tower, however, is limited to no more than a few miles and, prior to 2015, there were few towers south of Rhode Island, creating big gaps in coverage. To fill the gap along the Connecticut coast, we installed a receiver tower at Stratford Point in Stratford, which began operation on Aug. 7, 2015, and a second at Hammonasset State State Park in Madison, which was activated on Oct. 1, 2015. Both sites were chosen because of their large tidal marsh complexes that are known to support Saltmarsh Sparrows during migration. Both receiver towers operated until Jan. 29, 2016, when we shut them down for maintenance. In the spring of 2016, we reactivated the towers and have been running them ever since.

Most sparrows are tagged in late September and early October. The small batteries that power the transmitters rarely last for more than two months, so we deploy tags as close to migratory departure as possible to ensure that they provide data throughout the migration period (larger species, such as terns, can carry tags with larger batteries, which last longer). Both of our Connecticut towers have detected sparrows banded at breeding sites farther north, with all detections during the second half of October. In one case, data collected by the USFWS showed that a number of tagged sparrows that left Rachel Carson NWR in Wells, Maine were detected by a tower on Block Island the next night. Three of those birds were detected again the following night at Hammonasset, with a fourth at Stratford Point (B. Benvenuti et al. un-



Photo by Chris Elphick
Antenna array attached to nanotag receiver at Hammonasset
Beach State Park.

published data). To date, about half of the birds we have tagged have been detected by at least one tower south of the original capture site, with multiple detections in New Jersey and Maryland. Many birds were detected at multiple towers, and one bird was detected at 11 different receivers before reaching its southernmost location in Virginia (B. Benvenuti et al. unpublished data). To watch an animation of the migration tracks of these birds, go to <http://motus.org/data/viewtracks.jsp>.

The lack of detections south of Virginia can be explained by the lack of receiver towers, rather than this being the end point of the birds' migration. From our banding studies, we know that Saltmarsh Sparrows from Connecticut and Rhode Island winter from South Carolina to Florida (Borowske 2015), and as the receiver network grows, and gaps in coverage decrease, we anticipate that much more detailed information will become available.

In addition to what we are learning about Saltmarsh Sparrows, the Connecticut towers are providing data on a wide range of other species being studied by other researchers. For example, in 2015 detections included American Woodcock and Blackpoll Warbler at both sites, Semipalmated Plover and Yellow-rumped Warblers at Stratford Point, and Merlin, Bicknell's Thrush, and Ipswich Sparrow at Hammonasset.

Acknowledgements

Many people have contributed to our research on Saltmarsh Sparrow migration. Nanotag work has been funded by grants from the U.S. Fish and Wildlife Service, Region 5, Division of Natural Resources, National Wildlife Refuge System, and we especially thank our collaborators at the USFWS (Nick Ernst, Nancy Pau, Kate O'Brien, Adam Smith, and Kris Vagos) and the University of New Hampshire (Bri Benvenuti and Adri-



Photo by Chris Elphick
Saltmarsh Sparrow with nanotag. Left: transmitter sits underneath the feathers on the bird's back, transmitting wire trails below tail. Right: Close-up, with back feathers parted to show the tag.

enne Kovach). Installation of towers in Connecticut would have been impossible without the support of Audubon Connecticut (especially Patrick Comins) and the Connecticut DEEP (especially Min Huang, Ann Kilpatrick, and William Matioli). Frank Mantlik's ladder loan also provided crucial support. For critical assistance with receiver and tower construction, we thank Pamela Loring (University of Massachusetts) and, especially, John Brzustowski (Acadia University, Motus) for regular technical support and data management and analysis. Finally, all of our work on tidal marsh birds is done through collaboration with other members of the Salt-marsh Habitat and Avian Research Program (SHARP; www.tidalmarshbirds.org).

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CONNECTICUT FIELD NOTES

Winter Season, Dec. 1, 2016 through Feb. 28, 2017

By Greg Hanisek and Frank Mantlik

A season of unremarkable weather produced another remarkable array of rare geese. While the flight of northern finches was minimal over all, a long-awaited major influx of Evening Grosbeaks proved exciting. Of special note were a Pacific Loon, two Eared Grebes, an Ash-throated Flycatcher and a Western Tanager. For more information on the season, see the Christmas Bird Count summary elsewhere in this issue.

A nice collection of rare geese included single **Pink-footed Geese** Dec. 11-16 at Grass Island in Greenwich (SMr, CE et al.), Jan. 5 at Fairfield County Hunt Club in Westport (JTe et al.), and Jan. 15 through season's end at Donald W. Barnes Boat Launch in Enfield (BA et al.). At least six **Greater White-fronted Geese** were reported for the season (various observers). A flock of about 200 Snow Geese passed over Sharon on Dec. 10 (DF). A strong cold front on Dec. 15 brought 100 over Westport (JTe) and 110 over Greenwich (SMr). A **Ross's Goose** was found Dec. 14 at Squantz Pond in New Fairfield (fide AD). Another, first seen at Holly Pond in Stamford on Dec. 19 (PDu), produced a few January sightings in coastal Fairfield County before settling in to roost at Bulkley Pond and the vicinity of Fairfield County Hunt Club in Westport Jan. 15-23 (SMr, Jte, FM et al.). It then relocated to the Sherwood Island State Park area from Jan. 29 into the spring season (JF et al.). A **Black Brant**, the state's third of this western form, was found Feb. 5 in Groton by the observer who also found the other two (NB). Two **Barnacle Geese** found Feb. 5 along with the Enfield Pink-footed Goose were present through the season (PCi, JM et al.). There were about 12 reports of Cackling Goose, a species that continues to present identification problems.

Wood Ducks were back in full force by Feb. 20, when 20 were at Brownstone Quarry in Portland (LN). **Eurasian Wigeons**



Bruce Finnan photo

This female Blue-winged Teal was an unusual over-wintering individual at the Birdseye Boat Launch in Stratford.

were reported from eight locations, all coastal. A rare hybrid American Wigeon X Mallard male was present on Wooster Pond, Stratford, Dec. 14-23 (RS, FM). Rare in winter, a female Blue-winged Teal lingered in Stratford through Jan. 10 (FM et al.). The usually scarce Redhead was reported from nine locations, all in small numbers, with a high of five on Jan. 15 at South Cove in Old Saybrook (RS). The high count of Ring-necked Ducks was an impressive 352 at Lake Mamasasco in Ridgefield on Dec. 31 (AW). A flock of 200 was on Saugatuck Reservoir in Weston/Redding on Jan. 14 (FM). A female **Tufted Duck**, first seen Jan. 18 at Captain's Cove Marina

in Bridgeport, remained through Feb. 11 (MWa et al.). A male **Harlequin Duck** was discovered Dec. 6 at Penfield Reef in Fairfield and remained through at least Dec. 29 (FM et al.). Four reports of single **Barrow's Goldeneyes** were from the Suffield-Enfield area on the Connecticut River throughout the season (PDe et al.); from Dec. 28 through the season at Tuxis Island in Madison (HS et al.), on Jan. 7 in East Haven (SB), and Feb. 15-18 at Hammonasset Beach State Park in Madison (hereafter HBSP - FM et al.). The now annual wintering extravaganza of Common Mergansers at Lake Waramaug in New Preston topped out at 3700 on Dec. 13 (RB). Laurel

Reservoir in Stamford held 2500 on Dec. 18 (SMr). Good inland counts of 150 Ruddy Ducks came from Pistapaug Pond in Wallingford on Dec. 21 (MM) and Broad Brook Reservoir in Cheshire on Dec. 5 (SB). A major concentration of 350 was at North Cove, Old Saybrook, on Dec. 27 (DR).

Inland sightings of Red-throated Loons usually occur during migration, so a mid-winter report Jan. 29 at Bantam Lake in Litchfield was unexpected (MD). A **Pacific Loon** ended 2016 and got 2017 off to a good start from

Dec. 28 to Jan. 2 at Enders Island in Mystic (RS et al.). A sea watch off Shippan Point, Stamford, during a Jan. 24 nor'easter produced 11 Common Loons, 126 Red-throated Loons, five Red-necked Grebes and a Northern Gannet (PDU). An **Eared Grebe** found Jan. 16 at Stratford Point remained to at least Jan. 21 (PCo et al.), then was relocated at Fort Hale Park in New Haven on Sept. 25 (AD, NB et al.), remaining through the season and well into April. Another appeared on Feb. 21 in Stonington and remained into spring (RDe et



Elizabeth Jaffin photo

This Yellow-crowned Night Heron was unusually late on Jan. 1 at Milford Point.

al.).

Great Cormorants are scattered through Long Island Sound in winter, but the biggest concentration is in the lower Connecticut River, where an eagle tour boat out of Essex recorded 40+ on Feb. 5 (BY). The three reports of American Bittern were all coastal, as expected in winter. Three Great Blue Herons were standing on nests at Kono's Pond in Woodbridge as early as Feb. 26 (CL). Apparently the latest wintering Great Egret was Jan. 10 at Groton-New London Airport (GW). That's because one in New Milford on Feb. 18 (CM) and two in Stratford on Feb. 19 (DC) seemed more like a flurry of early spring arrivals. A late Yellow-crowned Night-Heron was at Milford Point on Jan. 1 (EJ).

A roost in New Milford held 46 Black Vultures on Dec. 16 (AD). A Golden Eagle was present Dec. 3-4 in Sharon (GH, FN), and singles were reported from Norwich on Jan. 14 (Dpr), Cobble Road in Canaan on Jan. 29 (CP) and Old Saybrook on Feb. 17 (JHi). Eagle boat tours out of Essex in early February produced counts of 20

to 25 Bald Eagles (BY, JC). **Sandhill Cranes** can now show up anywhere, and almost any time. A flock of four flew over Greenwich on Dec. 10 (DW), and one was a flyby on Dec. 20 at Sherwood Island State Park in Westport (TG). A moderate flight of Rough-legged Hawks produced reports from about 10 locations, including cooperative ones in Southbury and Old Saybrook (m.ob.). The season's first American Oystercatcher appeared Feb. 18 at Eastern Point in Groton (MS). Two Semipalmated Plovers present at Greenwich Point through the end of the season represented a first overwintering record for the state (LC et al.). A very late Spotted Sandpiper turned up at Groton-New London Airport on Dec. 31 (TC). Two Long-billed Dowitchers, a species known to linger late into the year, remained at Shell Beach in Guilford through at least Dec. 11 (CL et al.). American Woodcock, historically scarce in winter, was present at several coastal locations throughout the season, and presumed returning migrants were noted inland by mid-February with reports from Southbury,



Paul Fusco photo
This Short-eared Owl performed often during daylight hours for visitors to Southbury Training School on Cassidy Road in Southbury.

Shelton and Litchfield Feb. 22-23 (RS, BN, JK).

At least three **Common Murres** wintered along the New London-Orient, N.Y., ferry route (FM, m.ob.). Widespread reports of Razor-bills throughout Long Island

Sound included 11, not necessarily all different individuals, on Jan. 20 off Stamford (PDU) and three the same day off Greenwich (SMU). During the Jan. 24 nor'easter, five flew by Shippan Point, Stamford (PDU), and trips on the New London-Orient,



Pat Tamborra photo
Dickcissels sometimes make winter visits to feeders, but it's not often that two show up like these in Salem on Jan. 14.

N.Y., ferries were productive with up to six seen on some crossings (FM et al.). A boat trip on the Greenwich-Stamford CBC on Dec. 18 yielded a Long Island Sound rarity, a **Black-legged Kittiwake**, off Stamford (PDu, AC). Another was reported from the Bridgeport ferry on Dec. 23 (KM). The first spring movement of Bonaparte's Gulls consisted of 120 on Feb. 26 at HBSP (MK, GH et al.). A **Black-headed Gull** found Dec. 20 at Stonington Point was seen throughout the season (RS et al.). Late Laughing Gulls were in New Haven Dec. 17 (JOs) and West Haven Dec. 26 (JHa). The closing of the state's landfills has not stopped uncommon gulls from staking out other wintering locations. More than 20 Iceland Gulls for the season included an adult in Madison that returned for the sixth straight year (KM). Glaucous Gulls were also well reported with about a dozen for the season.

At least one **Snowy Owl** circulated through the Stratford-Milford area during December (FM, FG et al.); it unfortunately weakened and eventually died. Another one paid a visit to downtown

Hartford on Dec. 21 (BA). The last report, far inland, was in Colebrook on Dec. 26 (CH). Short-eared Owls were reported from seven locations, the most cooperative being one performing consistently during daylight hours throughout February at an agricultural area in Southbury (FN, CF et al.). Long-eared Owls at several roosts were available for a large number of birders to see, and to their credit care was taken to limit disturbance. The recent extraordinary presence of Red-headed Woodpeckers included two each wintering at the Partrick Wetlands in Westport (TG et al.) and Blood Street in Lyme (JG). Singles wintered at at least five other locations (m.ob.).

An Eastern Phoebe Feb. 25 in Lyme was apparently the first spring arrival (JG). A seasonal highlight, and one falling in a very consistent window of occurrence, was an **Ash-throated Flycatcher** that performed for numerous observers from Dec. 4 -10 at Hammonasset Beach State Park in Madison (TA, MK et al.). Northern Shrikes were found Dec. 31 at Aton Forest in Norfolk (JA); Jan. 6-Feb. 14 in Morris (BD et al.); and

Feb. 20-26 in Ashford (SMo et al.). The only lingering Blue-headed Vireo was in West Mystic on Dec. 31 (JRe). A Tree Swallow Feb. 20 at Greenwich Point represented a very early spring arrival (MP). At the Benedict Pond area in Norfolk and Colebrook an abundant crop of cones on the Eastern White Pines held an extraordinary concentration of Red-breasted Nuthatches, including 43 in a small area on Dec. 3 (FZ).

A handful of late warblers included an unusual showing by Nashville Warblers: Dec. 5 at Silver Sands State Park in Milford (SS), with possibly the same one Dec. 10 at nearby Walnut Beach (JOs); Dec. 12-Feb. 22 at a Norwalk feeder (LF); Dec. 18 at Pine Creek in Fairfield (PL); and three on the New Haven CBC. An Ovenbird, a species with a history of occasional overwintering, appeared in a Westport yard Dec. 30 and remained to Feb. 3 (TG et al.). Another was found at the Yale Medical School in New Haven on Jan. 5 (ALi). Other lingering warblers included an American Redstart Dec. 2 at Sparkle Lake in Groton (DPe), a Western Palm Warbler Dec. 10-Jan. 6 in

Stratford (FM), a Wilson's Warbler Dec. 13 on River Road, Southbury (RN), and a Yellow-breasted Chat Dec. 17 in North Branford (FG). In addition to Yellow-rumped Warblers, multiple reports were logged for Orange-crowned Warbler, nine; and Pine Warbler, five.

The only **Clay-colored Sparrow** reported was one that wintered at Quinebaug Valley Fish Hatchery in Plainfield after arriving there in November (RDi). A late Lincoln's Sparrow was a good find in Hartford on Dec. 18 (JTr). An adult male **Western Tanager** at an Eastford feeder Dec. 17-29 was a seasonal highlight (JBe). The only Dickcissel report came from Madison on Jan. 28 (CI). Eastern Meadowlark reports were typically scarce, with two at Huntington State Park in Redding on Jan. 21 (CP) and three at Cassidy Road in Southbury throughout February (FN, ALe). A **Yellow-headed Blackbird** lived things up Feb. 25 in Old Saybrook (JS). An excellent mid-winter count of 55 Rusty Blackbirds visited an Old Saybrook feeder on Jan. 8 (JS).

The Benedict and Doolittle Pond area continued to host Red Crossbills, which first appeared there in September. About 30 were seen there on Dec. 4 (FZ). The only report of White-winged Crossbill was one on Jan. 9 in Hartland (PCa). For the first time in many years, Evening Grosbeaks stationed themselves at multiple locations. Some were at Sharon Audubon in Sharon starting in early December, with 20 there on Dec. 11 (CL, MV et al.), but the hot spot was the Undermountain Road area at Canaan Mountain where counts of 50 to 60 were recorded in January (m.ob.). A few even made it close to the coast, such as three at a Fairfield feeder on Dec. 4 (MWi).

Observers: John Anderson, Tim Antanaitis, Bill Asteriades, Bill Banks, Larry Bausher, Joe Bear (JBr), Joe Beaudoin (JBe), Ray Belding, Nick Bonomo, Steve Broker, Donna Caporaso, Paul Carrier (PCa), Mona Cavallero, Paul Cianfaglione (PCi), Carolyn Cimino, Lynnette Clemens, Al Collins, Patrick Comins (PCo), Jerry Connolly, Ti Crossman, Paul Desjardins (PDe), Buzz Devine, Robert Dewire

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PHOTO CHALLENGE

By Greg Hanisek

I've been in the position over several decades to field many questions about a bird's identity. Some of these queries are accompanied by a frustrated assertion that, "It's not in the books." It's always in the books, with very rare exceptions. I'm not going to go through the usual step-by-step elimination of various North American contenders here, because this one really isn't in the books. At least not the books a person living in Connecticut is likely to consult. The finch-like bill and body type won't get you to any plumage matching this in a North American field guide, but you might find one in a pet store. Even that isn't a sure bet, because this bird most closely matches a wild-type Canary, sometimes known as Atlantic Canary (*Serinus canaria*).

This species, closely related to a widespread European species known as the Serin (*Serinus serinus*), is restricted to Madeira and some of the Canary Islands. It is the source of the domestic Canaries found in pet stores, but most of those now exhibit more showy plumage through selective breeding.

This one was photographed in January by Jim Zipp at his feeders in Hamden, and it's anybody's guess where it came



from. Bill McGrath of Parrots & Co, a pet store in Stamford, offered a primer on domestic Canaries noting: "As cage birds canaries are divided into three types: *Song canaries* - bred for unique song, song quality and specific pattern; *Type canaries* - bred for body profile and conformation; and *Color-bred canaries* - bred to create distinct color mutations, primarily red varieties. European breeders, especially in Spain and Germany, often introduce the wild Serin into their flock to improve conformation and body carriage of certain 'type canaries' (particularly Gloster or Fife Canaries). This may be a surviving escapee from a group of birds imported from Europe for a canary breeder that thought it was a variegated Gloster or Fife."

Of course non-native birds can get here by illegitimate means as well, which was probably the case with species such as Chestnut Bulbul and Great Tit that have been found in Connecticut. If you find a bird that really isn't in the books, it's probably an exotic of unknown origin.



Photo Challenge No. 98

THE CONNECTICUT WARBLER

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Illustrations and photographs are needed and welcome. Line art of Connecticut and regional birds should be submitted as good quality prints or in original form. All submitted materials will be returned. We can use good quality photographs of birds unaccompanied by an article but with caption including species, date, locality, and other pertinent information.

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