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# 2021 ATLANTIC FLYWAY REVIEW

## Fall Migration

### NORTHEAST REGION

#### **Braddock Bay Bird Observatory**

Kaiser-Manitou Beach Banding Station

Rochester, Monroe County, New York

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Braddock Bay Bird Observatory is situated on the south shore of Lake Ontario midway between the eastern and western ends of the lake. The early successional site is dominated by fruiting woody plants – primarily dogwood, viburnum, and honeysuckle – along with a mixed wet forest until recently dominated by ash, and a field of grasses and goldenrod. The 36th consecutive year of fall migration monitoring at the Kaiser-Manitou Beach banding station was carried out for 65 days beginning 15 Aug and ending on 31 Oct 2021. Eight days were entirely lost to inclement weather and another five days to lack of a Bander In Charge.

Three thousand four hundred eighty one birds of 79 species were banded, falling short of Fall 2020's total by 998 birds. Note that these numbers do not include our late July banding during the Yellow Warbler migration. There were no new species this season; our fall cumulative total stands at 128 species, with two additional hybrid forms and one intergrade form.

Constant effort-mist netting was carried out using 32 nets. Included in the total were six double-high assemblies. A total of 9,549.75 net hours of banding resulted in a capture rate of 36.5 birds per 100 net hours, compared with 40.8 birds per 100 net hours in Fall 2020 and 22.3 birds per 100 net hours in Fall 2019.

We recaptured 870 individual birds a total of 1,358 times; 670 birds were captured after their initial banding day. Of these recaptures, 27 returned from a previous season, including one Blackpoll

Warbler originally banded as an After-Hatching year bird in Fall 2020. Of the returning birds 59.3% had originally been banded as Hatch Year birds. The oldest of the returning birds was a Blue Jay in its 13<sup>th</sup> year.

There were no foreign recaps this season, but we received reports that four of our banded birds were found elsewhere. A Blue Jay banded on 16 May 2020 was found dead on 24 July 2021 in Brighton, ON. The remaining three re-encounters were not part of our passerine migration banding programs, but two especially deserve special note as they were originally banded two decades ago. A Red-tailed Hawk banded 23 Apr 2001 was found dead on 1 Jun 2021 in Wayne County, NY, and a Bald Eagle banded 12 Apr 2002 was found dead on 4 Nov 2021 in Anderson County TN. The final re-encounter was Northern Saw-whet Owl banded 22 Oct 2021, and recaptured and released on 6 Nov 2021 near Carsonville, PA.

We deployed Lotek nanotags registered with the Motus Wildlife Tracking System on 20 Swainson's Thrushes, eight Hermit Thrushes, and 19 Blackpoll Warblers. sixty four percent of the tags were detected at other towers. Our local tower detected five Common Nighthawks, one Semipalmated Sandpiper, three Black Terns, four White-throated Sparrows, one Cerulean Warbler, and two Blackpoll Warblers tagged elsewhere.

We were grateful to return to a more normal protocol; while we were still masked and distanced, we were back indoors. This season saw a return to more normal bird numbers as well, but the last half of October – often our busiest time – fizzled. We saw record-high numbers of Veery and Tennessee Warbler, and Brown Thrasher tied its high count. Cedar Waxwing was missing for the first time since 1989.

Many thanks to our fantastic crew of volunteers and to our partners - the Genesee Land Trust and the NYS Department of Environmental Conservation.

## Wing Island Banding Station

Brewster, Barnstable County, Massachusetts

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Cape Cod Museum of Natural History

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**Banders:** *Sue Finnegan, Mike Babcock, Gretchen Putonen*

The Wing Island Bird Banding station is affiliated with the Cape Cod Museum of Natural History in Brewster, MA. It is located on a tidal island located behind the museum. Wing Island consists of 49.37ha with 4.6ha of Cape Cod Bay Beach, 13.15ha of upland (mainly pitch pine and oak trees and 4.05ha acre meadow), and 31.57ha of tidal saltwater marshland. The banding station was opened in 2000 by Master Bander Sue Finnegan.

Our 22nd fall season began on 01 Aug and ended on 20 Nov. Nets were operated for 51 days. We lost close to two weeks in October due to a nor'easter and sustained high winds. A range of 19-35 nets were used culminating in a total of 6,472.25 net hours for a capture rate of 51 birds/100net-hours (netted birds). We banded 2,246 new birds, recaptured 871 birds, and had 66 returns of the following species; 10Y - Common Yellowthroat (1), Song Sparrow (1); 8Y- Common Yellowthroat; A7Y- Gray Catbird; 6Y- Black-capped Chickadee (1), Carolina Wren(1); A5Y- Gray Catbird (1); 5Y- Gray Catbird (1), Black-capped Chickadee (2); A4Y- Song Sparrow; 4Y- Gray Catbird (2), Swamp Sparrow (2), American Goldfinch (1); ATY: Gray Catbird (1), Song Sparrow (1). The rest of the birds were three years or younger.

Our best day was 29 Aug with 151 birds of 15 species netted. We had the most species diversity on 27 Sep with 22 species banded.

We had one new species for our station this year, a Nelson's Sparrow. We also captured our first fall Common Grackle, our 2nd fall Blackburnian, and our 5th fall Bay-breasted Warbler. Another highlight was banding our 55,000th bird, a Blackpoll Warbler on 14 Oct. We had a higher-than-average number of Blackpoll Warbler (111: ave  $38.2 \pm 65.2$ ) and Connecticut Warbler (4: ave  $1.2 \pm 2.3$ ), this was the highest we have ever caught in a year. We have Oct. - Dec.

seen a marked decline in both Red-eyed Vireos and Myrtle Warblers over the past five years.

We captured two Gray Catbirds with tumors on their wings and three HY Song Sparrows with leucism. The legs and feet of a Hermit Thrush had avian pox and the right middle claw of a Tufted Titmouse was missing, presumably from pox. We captured a Magnolia Warbler with a beak deformity- the lower mandible was overgrown, and the upper mandible had the tip broken off.

A Song Sparrow we banded on 8 Oct was photographed with the band visible as it foraged on the ground in Eastham, MA, on 26 Dec. A Gray Catbird banded by our station on 29 Aug was recaptured on 16 May 2022 by Manomet Bird Observatory.

One HY F Rufous Hummingbird was banded this fall in Brookline, MA, on 30 Oct and last seen on 3 Jan. 2022.

Many thanks to the French Foundation and the Cape Cod Bird Club for monetary support. A big thank you to the many volunteers who helped this fall season, especially Keelin Miller (who also enters all the data), Alex Burdo, Amy O'Neil, and Lauren Grimes.

## Albany Pine Bush Karner Barrens East (AKBE)

Albany, Albany County, New York

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**Banders:** *Neil Gifford, Amanda Dillon, Steven Campbell, Ph.D*

2021 was the 14th season of autumn migration bird banding at the AKBE station. Banding was initiated in 2007 to evaluate the site as a migratory stopover (Kirchman et al. 2011) and has continued annually as part of our long-term ecosystem restoration monitoring program.

The 3,400-acre (1,376 ha) Albany Pine Bush Preserve supports one of the best remaining global

examples of an inland pitch pine-scrub oak barrens (<https://guides.nynhp.org/pitch-pine-scrub-oak-barrens>). The banding station consists of 20 nets within approximately 35 acres. Seventeen nets are within open-canopied barrens, two nets are within closed canopy pitch pine-oak forest, and one is at the transition between barrens and successional northern sandplain grassland. The vegetation in and around the banding station is actively managed with prescribed fire and other tools, by the Albany Pine Bush Preserve Commission (APBPC).

The 2021 fall migration banding season appeared typical, starting with warblers and other insectivores and transitioning to thrushes, vireos and more cold tolerant warblers (e.g. MYWA, PAWA), finishing with kinglets and sparrows (LISP, WTSP, DEJU, FOSP). The most notable capture in 2021 was a WAVI on 9/10; this represents the first capture of this species during fall migration. Lastly, please note that we have been operating MAPS stations during the breeding season since 2012 and conducting other species-specific banding projects (PRAW, EATO, EWPW, NSWO) in the preserve, processing 11,019 individuals (16 foreign recaptures) since 2007. Consequently, returns and repeats listed, are often “local” birds, recaptured during fall banding.

Funding is provided by the New York State Environmental Protection Fund with the support of the New York State Department of Environmental Conservation, a Northeast Association of Fish & Wildlife Agencies Regional Conservation Needs grant, a Wildfire Risk Reduction grant from the USDA Forest Service, and a grant from the Friends of the Pine Bush Community. The APBPC also thanks the many volunteers who gift their time and talent to assisting our efforts. We could not do this work without them.

### **Manomet Observatory**

Plymouth, Plymouth County, Massachusetts

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**Banders:** *Megan Gray, Sarah Duff, Amy Hogan, Lauren Michael*

This is the 53<sup>rd</sup> official year of fall banding at Manomet. For another season, the banding team erected 50 nets through our coastal scrub forest

to build upon our standardized dataset of bird migration along the east coast. A warm, humid summer and a bumper crop of Black Cherry (*Prunus serotina*), Virginia Creeper (*Parthenocissus quinquefolia*) and Common Juniper (*Juniperus communis*) berries kept the frugivorous birds well fed on the property throughout the season. As a result, our total of 625 new Gray Catbirds (the highest total banded since 2004) exceeded the previous ten-year average for our station by 25%. The busiest days were 27 Sep (125 birds handled, 85 new bandings), 6 Oct (100/58) and 20 Sep (95/51). Unusual species included a Cerulean Warbler on 2 Oct, a Scarlet Tanager on 28 Sep and an Eastern White-crowned Sparrow on 27 Sep. The Cerulean was only our s banded in over 50 years. Myrtle Warbler numbers continue to decline at our station, though the 104 captured represented a slight increase from the last five years.

Notable returns to our station included a 7-year-old Gray Catbird, a 6-year-old Song Sparrow, and a Blue Jay and White-breasted Nuthatch that were both at least five years old. We had two foreign recaptures: a Myrtle Warbler we captured on 22 Oct was originally banded on South Monomoy Island on 8 Oct, and a Golden-crowned Kinglet captured on 9 Nov of unknown origin. Three nights of effort netted 8 Northern Saw-whet Owls (not included in our standardized netting stats above).

As always, we are indebted to the many Manomet donors and volunteers as well as the Dorr Foundation for helping ensure our banding station will operate for yet another 53 years.

## **MID-ATLANTIC REGION**

### **Foreman’s Branch Bird Observatory**

Chestertown, Kent County, Maryland

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**Banders:** *Jim Gruber, Maren Gimpel, Madelaina Ondo, Laura Porter*

2021 marked FBBO's 24<sup>th</sup> year of banding. The station has nets in a mix of habitats including fallow fields, second growth forests, mature woodlands and over a lake. The habitat has remained mostly the same over the years.

Fall 2021 was average in terms of total birds banded, but below average number of species banded and in birds per 100/nh.

Species caught in record high numbers that were also 2SD above average included Solitary Sandpiper, Eastern Wood-pewee, White-throated Sparrow, and Red-eyed Vireo. Record highs that were not 2SD above average included Traill's Flycatcher and Carolina Wren.

Species caught in near-record or record lows included Ruby-throated Hummingbird, Orchard Oriole, Common Grackle, House Finch, American Goldfinch, White-crowned Sparrow, Chipping Sparrow, Cedar Waxwing and Yellow-rumped Warbler though none of these were 2 SD below our long-term average.

Returns of note included Blue Grosbeak #2571-64824 banded as SY-F on 7 May 2012 and recaptured on 8 Sep 2021 when she was ten years and three months old, which set a new longevity record for the species.

Three Northern Saw-whet Owls were our only foreign recaps for the season. The first was banded at Long Point Bird observatory 22 Oct 2020 and netted by us 11 Nov 21. The second was an owl banded at Hilliardton, Ontario in October 2021 and netted here on Nov 1 2022. The last bird was banded 3 Nov 2021 in Danielsville, PA and found itself in our nets just a week later on 10 Nov 21.

Standout captures of the fall included our 17<sup>th</sup> ever Eastern Whip-poor-will on 5 Sep 2021; 18<sup>th</sup> ever Summer Tanager on 16 Sep 2021. We also banded 7 Lesser Yellowlegs during the fall season (usually we band none).

One recovery of note was Gray Catbird #2891-78124 banded 11 Oct 2021 that was killed by a cat on 29 Dec 2021 in St. Augustine, FL, 1,155.51 km south of FBBO.

Collaborative research projects included deploying radio tags on behalf of Luke DeGroot of Powdermill Avian Research Center who is studying effects of glass collisions on birds; collecting ticks for Dr. Holly Gaff at Old Dominion University; and collecting fecal samples of Blackpoll Warblers from Dr. Brian Trevelline of Cornell University.

We are most grateful to Dr. Henry F. Sears for his years of support as well as to 14 volunteers who gave 744 hours of their time.

### **Meadowlands Bird Banding Station**

Lyndhurst, Bergen County, New Jersey

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**Banders:** *Cailin O'Connor (Master Bander), Drew McQuade, Erica Mueller*

The Meadowlands Bird Banding Station historically operated under a different banding team from 2008-2015. The station was reopened in the fall of 2019 as a migratory and MAPS banding station on roughly half of the footprint of the original banding site and was expanded to include most of the original site in the summer of 2021. The expanded banding site contains saltmarsh, mudflat, and mid-successional shrub/scrub habitats, along with a capped landfill historically used for dumping industrial waste. One portion of the station follows a narrow strip of land between a tidal marsh and an impoundment, while the landfill is mid-successional habitat dominated by mugwort and *Phragmites* with sparse Eastern Cottonwood stands. The sites have undergone some ecological restoration efforts in the past.

The Meadowlands Bird Banding Station operated 20 mist nets in total during the fall 2021 season, opening an average of 10 mist nets per day on a rotating basis for 21 banding days from 6 Sep 28, 28 Oct 2021. In total, 923 individuals of 50 species were banded for the season, bringing the total species count in fall to 70 species since reopening the station in 2019. The top ten species banded this season were: Yellow-rumped Warbler (n=143), Common Yellowthroat (n=133), Song Sparrow (n=96), White-throated Sparrow (n=83), Swamp Sparrow (n=75), Savannah Sparrow (n=52),

Yellow Palm Warbler (n=50), Ruby-crowned Kinglet (n=43), Gray Catbird (n=38), and Traill's Flycatcher (n=29). There were 17 recaptures this season of which twelve were repeats and five were returns.

New species encountered this season included Brown Creeper; seven were banded in total. Fall 2021 included the station's first Yellow-bellied Sapsucker and Pine Warbler, as well as our second ever Yellow-breasted Chat and third instance each of Swainson's Thrush, Vesper Sparrow, and Eastern Towhee. One Connecticut Warbler was banded, which is the norm for each fall season the station has operated.

In August, a dual mode Motus tower was installed for a pilot project to track migratory movements of songbirds. Nineteen Lotek nanotags were affixed to Song Sparrows (n=12) and Gray Catbirds (n=7), the first nanotags deployed by the station. Twelve of the birds, five sparrows and all catbirds, were successfully tracked. An additional nanotagged sparrow was discovered deceased in Maine in the summer of 2022 and reported back to us.

Thank you to New Jersey Sports and Exposition Authority for use of their land for the banding station and Motus tower, and to our volunteers and interns for the season, especially Joseph Affinito, Olivia Haas, Jenine Sarni, Michelle Mierzwinski, Ken Wilson and Lloyd Crawford. Thank you to Kean University and Bergen County Audubon Society for their financial support and Willistown Conservation Trust for their expertise.

### **Mt. Nebo Banding Station**

Oakland, Garret County, Maryland

*Connie Skipper*, [connieskipper@hohnet.com](mailto:connieskipper@hohnet.com)

This was the 21<sup>st</sup> season of banding at Mt. Nebo WMA. It is an old field formerly planted with berry-producing shrubs (autumn olive and Tartarian honeysuckle) that have become invasive. The shrubs have been maintained in hedgerows with grasses between the hedgerows or planted with foxtail millet, brown top millet, white millet, or corn. The natural food source was mediocre. There were few black cherries, a few elderberries,

and a poor apple crop. Pokeberries, thorn berries, and multiflora rose hips were plentiful. The ornamental crabapple/cherry trees were loaded, as usual, and attracted many species. The field is surrounded by deciduous forest.

The station was open 31 days from 23 Aug through Nov1. A total of 1,047 birds were banded of 63 species. The station effort was 2,137 net hours with a capture rate of 49 birds/100 nh. No new species were added to the station total of 101.

The overall percentage of hatching year birds banded this year (using known age birds only) was 73%, compared with 70% in 2020 and 79% in 2019.

The top ten list had no surprises. The top three species banded were Song Sparrows (16% of the total), Gray Catbirds (14%) and Ruby-crowned Kinglets (9%). The remaining top ten species in descending order were Indigo Bunting, White-throated Sparrow, Common Yellowthroat, Eastern Towhee, Ovenbird, Swamp Sparrow, and Swainson's Thrush.

The highest daily catch occurred on 23 Aug with 76 birds of 15 species. Song Sparrows were 21% of that total. The next best day was 25 Aug with 58 birds of 15 species. Gray Catbirds were 24% of that total. 30 Sep had the most species at 19.

This was an average year for number of birds banded. Song Sparrows (167) were almost twice the average of 87. Gray Catbirds (149) were average. Ruby-crowned Kinglets (96) were nearly twice the average of 56. Lincoln's Sparrows (22) had the second highest number banded at this station. Winter Wrens (10) were nearly twice the average of six. Indigo Buntings (93) were nearly twice the average of 48. Warblers overall were low in numbers as were Purple Finches. Only five Purple Finches were banded, average being 29.

A Brewster's Warbler was banded on 20 Sep. This was the second Brewster's in our 21 years at Mt. Nebo WMA.

The station had 244 recaptures of 179 individuals of 22 species. There were 27 returns. There were no foreign recaptures.

The station had 17 visitors, including the Wildlife Technology and Habitat class from Garrett College. Thanks to the volunteers who tended nets and helped clear net lanes and also to the Mt. Nebo WMA staff who helped clear net lanes and permit banding on this site.

### **Powdermill Avian Research Center**

Rector, Westmoreland County, Pennsylvania  
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**Banders**— *Annie Lindsay, Mary Shidel, Luke DeGroot, Mallory Sarver, Shaina Kenny, Kevin Perozeni, Kevin Chumpitaz Trujillo*

Powdermill's banding station opened in 1961 and has been running continuously year-round since then. The spring season begins in early April and continues through 31 May. Fall begins around the second week of August and continues through 31 Oct (and sometimes into early November). Powdermill Avian Research Center (PARC) is a long-term bird monitoring station operated and supported by the Carnegie Museum of Natural History.

Powdermill operates 63 nets during the spring migration seasons and 67 nets in the fall. The nets are grouped together into various net-lanes, and they're spread across a 10-hectare banding area. The habitat is mostly early successional or transitional and is quite shrubby. There are four ponds in the banding area. One of the ponds usually dries up during late summer and into fall. Two ponds are relatively shallow, and the biggest one remains full and is roughly 4.5 m. The banding area is surrounded forest and sits at the foot of the Laurel Ridge, bordering Forbes State Forest.

The fall 2021 banding season was unseasonably warm. The summer weather persisted later into the fall than normal and as a result the leaves changed colors and trees defoliated significantly later than in normal years. Capture rate was low, likely due to having to close the nets early due to

warm temperatures, and we suspect wind patterns were not conducive to pushing migrating birds over southwestern Pennsylvania.

Noteworthy high counts (above average  $\pm 2$  SDs): Barn Swallow (n=4), Common Grackle (n=3), Louisiana Waterthrush (n=6), Rusty Blackbird (n=3), Red-winged Blackbird (n=9).

Noteworthy low counts (below average  $\pm 2$  SDs): American Goldfinch (n=68), Common Yellowthroat (n=119).

Notable captures:

- A hatch-year, undetermined sex Clay-colored Sparrow banded on October 2, 2021 is only the 6<sup>th</sup> in Powdermill's banding history.
- PARC caught its 800,000<sup>th</sup> banding record on 6 Aug 2021, a hatch-year (FPF) Cedar Waxwing with an orange terminal tail band, indicative of a honeysuckle berry diet as a nestling.

Foreign recaptures in 2021:

- HY (FCF) female Ruby-crowned Kinglet banded on 28 Sep, 2021 in Toronto and recaptured at Powdermill on 27 Oct, 2021
- AHY (DCB) male Ruby-crowned Kinglet banded on 29 Sep, 2021 in Quebec and recaptured at Powdermill on 14 October 2021
- AHY (DCB) male Hooded Warbler possibly banded in New York and recaptured at Powdermill on 9 Sep, 2021 but we are awaiting confirmation from the BBL

Foreign recoveries in 2021 (banded elsewhere and encountered at Powdermill):

- HY (FCF) of undetermined sex American Redstart banded at Powdermill on 4 Sep, 2020 was recaptured at Cabot Head Provincial Nature Reserve, Ontario on 2 Sep, 2021

We hosted an in-person "Ageing Birds via Molt" workshop in September 2021.

PARC's banding crew facilitated several in-house research projects, and collaborated with and hosted

outside researchers to collect the following data:

- Tracking migrating songbird movement and stopover length in the area immediately surrounding PARC
- “Behavioral responses of migrating songbirds of perceived risk of predation” – a University of Maryland PhD student’s dissertation project designed to study behavioral responses of Gray Catbirds exposed to predators (Cooper’s Hawk) and non-predators (rabbit), and to cats to determine whether catbirds recognize cats as predators and whether they change their stopover behavior or stopover habitat usage post-exposure
- Partnered with the American Bird Conservancy to test avian perception of glass, an ongoing, multi-year project
- Collected feathers for the Bird Genoscape Project
- Collected blood, feathers, and fecal samples from migrating Swainson’s Thrushes and Hermit Thrushes for a postdoc (Great Hollow Nature Preserve and Ecological Research Center) project “Assessing fuel use and diet during stopovers in migratory birds”

Publications:

*NABB* 46:68-72 Lindsay, A.M. and B.D. Ankney. 2021. Save your breath: Using an air compressor system to part feathers during bird banding.

We thank our banding crew and the staff of Powdermill Nature Reserve. Our many dedicated volunteers are invaluable, and we could not do the work we do at Powdermill without their help. Powdermill’s bird banding operation is funded through the generosity of the Colcom Foundation, the Laurel Foundation, and numerous private donors who have supported Powdermill Avian Research Center since its inception.

## **Rushton Woods Banding Station**

Newtown Square, Bucks County, Pennsylvania

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**Banders:** *Lisa Kiziuk, Blake Goll, Michelle Eshleman, Doris McGovern*

This was the 12<sup>th</sup> consecutive year of fall migration banding at Rushton Woods Banding Station (RWBS). We operated 15 nets, 3-days a week, from 31 Aug through 28 Oct, 2021.

RWBS is located on an 8634.8ha preserve that is a matrix of mature deciduous forest, meadows, early to late successional shrub-scrub hedge rows, and 2.43ha of organic agriculture owned and managed by Willistown Conservation Trust. Songbird migration and NSWO banding take place in the hedge rows, while a MAPS station is operated in the mature forest.

The banding season was reduced by losing four days to rain, which gave us 23 days of operation and a total of 1,331.7 hours of effort. Otherwise, weather and temperatures were normal.

We banded 1,372 birds of 61 species with a capture rate of 103 birds/100nh, with an additional 168 repeats, and 7 returns. A Cooper’s Hawk caught on September 30 was a station first, bringing the cumulative fall total to 89 species.

The largest single-day catch was on 14 Sep, with 129 new birds and 12 repeats of 24 species. Our most species-rich day was 7 Oct, with 61 new birds of 27 species. Notable captures include our largest number of Gray Catbird (576; average 228), of which 96% were hatch-year (HY). We also had our highest total catch of Red-eyed Vireo (27; average 3). Yellow-rumped Warbler (Myrtle) was absent for the first time ever during the fall. However, American Woodcock and Yellow-billed Cuckoo were caught for just the second time. One hatch-year (HY) female American Redstart was caught twice in ten days and gained 27% of its body weight in that time. In addition, one Worm-eating Warbler was captured twice, 27 days apart.

During the MAPS season, we had a returning male Veery that was originally banded as After-Second-Year (ASY) in 2011, making him at least 12 years

old and the oldest known age of a songbird at RWBS.

Both number of new birds and capture rate were the second highest for our station. This was also the fifth consecutive year that capture rates have increased and with continuing habitat management, we hope to see this upward trend continue over time.

We hosted more than 100 visitors to the station this spring including classes from three universities, students from local elementary and high schools, and many members of the public. We continue to collaborate with Drexel University as a study site and the University of Pennsylvania graduate research projects. Annual songbird banding reports can be found at: <https://wctrust.org/research/>.

Thanks to all the dedicated volunteers who gave their time, in some cases for many years, in contributing to the long-term data collection at Rushton Woods Banding Station.

### **Island Beach State Park**

Seaside Heights, Ocean County, New Jersey

**Ted Hicks**, [TedHicks61@gmail.com](mailto:TedHicks61@gmail.com)

Banders: *Robert P. Yunick, Edwin (Ted) A. Hicks*

Island Beach State Park has hosted a fall migration banding station going back to at least the mid-1960s with a vibrant banding program in place for decades thereafter. Spring banding at Island Beach began in 1987.

The Park is a narrow barrier island containing an extensive shoreline along Barnegat Bay to the West and the Atlantic Ocean to the East. The habitat consists of dense maritime forests, intermediate scrub brush consisting of a variety of shrubbery, stunted cedar, cat briar, rolling sand dunes, and tidal marshes.

Bird numbers at this location during migration are heavily influenced by weather conditions, and in the fall, it takes a cold front with sweeping overnight north or northwest winds to bring birds to the Park. The station was operated from 13 Oct through 20 Oct. Favorable overnight weather patterns occurred on four nights bringing good flights to the Park the following days.

Two banders operated each day from first light until bird activity declined for the day. The mix of bird species and numbers per species were typical for fall at this station with 1,014 birds banded of 37 species. Song Sparrows were the most numerous species (324) followed by White-throated Sparrow (143), Myrtle Warbler (135), and Golden-crowned Kinglet (110).

Two species were banded that either are new to the station or exceedingly rare: Yellow-throated Warbler and Blue Grosbeak. An exciting moment was when a Merlin and Sharp-shinned Hawk were captured in the same net about two feet apart.

No foreign or return recaptures were encountered, but we did re-trap 34 birds banded during the session. To date none of the banded birds from this session have been re-encountered.

We would like to acknowledge the strong support of Island Beach State Park Naturalist Kelly Scott. We cannot overstate how appreciative we are for her arranging to help clear net lanes as well as her pleasant visits, knowledge of the Park history and local flora and fauna. Of course, our appreciation is extended to the Park and NY DEP as well.

### **SOUTHEAST REGION**

#### **Kiawah Island Banding Station (KIBS)**

##### **Captain Sams Site**

Kiawah Island, Charleston County, SC

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**Banders:** *Kristin Attinger, Josh Lefever, Nate Watkins, Kandace Glanville, Ben Stalheim*

This was the 13th consecutive year of fall migration banding at the Captain Sams site with banding occurring daily during the last 10 years.

Kiawah Island is an 3,237.49ha barrier island and residential and resort community located approximately 32.19km miles southeast of Charleston, South Carolina. The banding site is situated at the extreme western end of the island



in secondary dune scrub/shrub and high marsh with wax-myrtle, sea ox-eye, and marsh-elder being the dominant plant species. August started off relatively slow with the typical hot and humid weather. The heat and humidity continued through September but that did not seem to slow down migration. Steady migration continued through October before experiencing a sharp decline over most of November. For the second year in a row, tropical weather did not affect the banding station.

Nets were opened for a total of 103 days from 15 August - 30 November. There were only 5 days when banding did not occur because of rain (9 Sep, 20 Sep, 21 Sep, 6 Nov, 7 Nov). We banded 4,704 new birds of 94 different species. The most commonly banded species were Common Yellowthroats (1,077), Gray Catbirds (959) and Yellow-rumped Warbler (688). Those three species combined made up 58% of all the birds banded this season. After a down year last year, Common Yellowthroats regained the number one spot this year after exhibiting a 22.4% increase from last fall. However, Common Yellowthroats were still down 4.4% compared to the 10-year average. Gray Catbirds increased 6.9% from last year, and 24.8% over the 10-year average. The 959 Gray Catbirds banded this year was the second highest total over the past 13 years. After several years of steady declines in Yellow-rumped Warbler numbers, they rebounded nicely with a 35.2% increase from last year. However, their numbers were still down 7.8% on the 10-year average.

Several species exhibited record high numbers this season: Mourning Dove (9), Eastern Screech-Owl (4), Tree Swallow (62), Tufted Titmouse (6), House Finch (20), Savannah Sparrow (4), Canada Warbler (2), and Rose-breasted Grosbeak (3). Alternatively, we had a few species that had record low numbers: Magnolia Warbler (4) and Northern Cardinal (20).

The overall effort increased from 13,734.0 net-hours in 2020 to 15,023.9 net-hours this year despite banding on one less day. The more favorable weather we experienced over the course of the season allowed us to keep our nets open longer each day. We banded 138 more birds

this year compared to last year, and 138 birds more than the average for the previous 10 years. Interestingly, the 10-year average is the same as the total number of birds banded last year. The overall capture rate was 40.8 birds/100 net-hours. The capture rate decreased slightly by 0.9 birds/100 net-hours compared to last year but was 8.7 birds/100 net-hours lower than the 10-year average of 49.5 birds/100 net-hours. Our capture rate has decreased every year starting in 2012 with exception to 2017 and 2019 when we experienced small increases from the previous year. The capture rate of recaptures is very consistent from year to year; therefore, all decreases in the total capture rate can be attributed to new birds. The capture rate of recaptures this fall was 9.5 birds/100 net-hours.

We had 1,429 recaptures which is much higher compared to the 1,166 recaptures from last year. Recaptures can be divided into 3 categories: repeats (birds recaptured in the same season in which they were banded), returns (birds recaptured in a different season in which they were banded), and foreign recaptures (birds recaptured that were banded elsewhere). We had 1,191 repeats, 238 returns, and 1 foreign recapture. The foreign recapture was a Tree Swallow that was originally banded as a nestling in Ontario, Canada on 10 Jun 2021. We also had a recovery of a young Mourning Dove that we banded on 22 Aug. This bird was shot by a hunter on 16 Sep in Grover, SC which is about 72.42 km north of Kiawah Island.

There were 13 days this fall when over 100 birds were banded compared to only 9 days last fall. The best day of the season was on 24 September when we banded 196 birds and had 10 recaptures. The next two busiest days occurred 10 and 17 September when 180 and 144 birds were banded, respectively. Because of the lack of strong, fast moving cold fronts, we never experienced any extremely busy days like we do in most years. Instead, favorable winds associated with smaller low-pressure systems ("cold fronts") created good migration conditions spread over a longer period of time.

We captured one species that has never been banded at the Captain Sams site during the fall: White Ibis. A flock of White Ibis had been feeding in the marsh near the banding table for several days at the beginning of November. We noticed that these birds were not bothered by our presence and would not flush if we were nearby. We came up with a plan to attempt to catch them and were successful.

Some other rare and notable species that were banded this fall include: Black-billed Cuckoo (1; previous), Eastern Whip-poor-will (1, 4 previous), Clapper Rail (1, 1 previous), Red-shouldered Hawk (1, 1 previous), Winter Wren (2, 4 previous), Eastern Bluebird (1, 2 previous), Fox Sparrow (1, 1 previous), Lincoln's Sparrow (1, 2 previous), Red-winged Blackbird (1, 2 previous), Louisiana Waterthrush (1, 4 previous), Mourning Warbler (1, 3 previous), and Canada Warbler (2, 3 previous).

Species notably absent this year included: Common Ground Dove, Yellow-bellied Flycatcher, American Goldfinch, Swainson's Warbler, Blackpoll Warbler, Yellow-throated Warbler, and Wilson's Warbler. After a record high of 19 last fall, no Blackpoll Warbler were captured. This is only the 2<sup>nd</sup> fall since 2012 where that has occurred.

Without the cooperation of many people and entities, this work would not be possible. The success of this project relies on their commitment, and I am in a debt of gratitude to everyone involved. I'd like to thank my team of banding assistants (listed above). I'd like to acknowledge the Town of Kiawah Island for providing funding for equipment and banding assistant stipends and housing, the Kiawah Island Conservancy for providing funding for the housing of the banding assistants, and the Kiawah Partners and the Bear Island Holding Trust for allowing access to their property for banding. I would like to thank the many volunteers that donated their time to come out and help.

## **Kiawah Island Banding Station (KIBS)**

### **Little Bear Site**

Kiawah Island, Charleston County, South Carolina

**Aaron Given**, [agiven@kiawahisland.org](mailto:agiven@kiawahisland.org)

Town of Kiawah Island

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[www.kiawahislandbanding.blogspot.com](http://www.kiawahislandbanding.blogspot.com)

**Banders:** *Kristin Attinger, Josh Lefever, Nate Watkins, Kandace Glanville, Ben Stalheim*

This was the 7th season for the Little Bear site which we initiated during the fall of 2015. Kiawah Island is an 3,237.49ha barrier island and residential/resort community located approximately 32.19km southeast of Charleston, South Carolina. The banding site is situated at the extreme eastern end of the island in secondary dune scrub/shrub and ephemeral brackish wetlands with wax-myrtle, sea ox-eye, and marsh-elder being the dominant plant species. August started off relatively slow with the typical hot and humid weather. The heat and humidity continued through September but that did not seem to slow down migration. Steady migration continued through October before experiencing a sharp decline over most of November. For the second year in a row, tropical weather did not affect the banding station.

Nets were opened for a total of 78 days from 21 August - 15 November. Little Bear opened three days earlier than last year but only one day earlier than normal. There were nine days cancelled due to bad weather (rain and/or wind). Because the habitat at Little Bear is more open than at Captain Sams, wind has a much bigger effect on the operation of the nets there. As a result, three days were cancelled due to wind alone (29 Oct, 4 Nov, 5 Nov) with the other 6 due to rain (9 Sep, 20 Sep, 21 Sep, 25 Oct, 6 Nov, 7 Nov).

We banded 3,103 new birds of 79 different species. The most commonly banded species were Gray Catbirds (752), Common Yellowthroat (645), and Palm Warblers (249). Those three species combined made up 53% of all the birds banded this season. Gray Catbird numbers exhibited a 32.4% increase compared to last fall and 16.2% increase

over the last six years. Common Yellowthroat were up by 21.5% compared to last year but slightly down (0.9%) compared to the average of the last 6 years. After a down year in 2020, Palm Warblers made a big comeback with a 70.5% increase from last fall. This year's numbers were also up 19.1% over the 6-year average. Yellow-rumped Warblers increased by 12.8% this year compared to last but are still down 23% over the last 6 years. At Little Bear, the long-term negative trend for Yellow-rumped Warblers can partly be attributed to saltwater intrusion that killed many of the mature wax myrtles in 2015 and 2016. It is encouraging to see Yellow-rumped Warbler number continue to increase over the last couple of years. Hopefully, this is a sign that the wax myrtles are beginning to rebound.

Several species exhibited record high numbers this season: Green Heron (3), Cooper's Hawk (2), Downy Woodpecker (7), Eastern Kingbird (7), House Wren (97), Bobolink (2), Worm-eating Warbler (5), Prothonotary Warbler (9), Black-and-white Warbler (20), and Pine Warbler (3). Species that had record low numbers included: Eastern Screech-Owl (1), "Traill's" Flycatcher (12), Swainson's Thrush (15), Northern Mockingbird (6), and Song Sparrow (16).

We logged 8,332.6 net-hours out at Little Bear this fall, a moderate increase from the 7836.82 net-hours in 2020. More favorable weather conditions this fall allowed the nets to be kept open longer each day. Last year, excessive heat and/or wind caused the nets to be shut down earlier in the morning. This was also the first full season with the three new nets that were added in September last year.

We banded 470 more birds this year compared to last year and 95.5 birds more than the 6-year average. Little Bear's capture rate increased 10.5% from 40.1 birds/100 net-hours in 2020 to 44.3 in 2021. Alternatively, the capture rate decreased 21.2% compared to the 6-year average. Again, the wax myrtle die-off due to saltwater intrusion after 2017 appears to have severely affected capture rates and maybe the uptick in capture rate this year means the habitat is starting to recovery a bit.

A substantial decrease in the number of recaptures occurred each year from 2016-2019. Last year the number of recaptures had increased from 460 in 2019 to 508 in 2020. The number of recaptures increased again this year with a total of 588, however the capture rate remained very similar and only increased by 0.6 recaptures/100 net-hours. Recaptures can be divided into 3 categories: repeats (birds recaptured in the same season in which they were banded), returns (birds recaptured in a different season in which they were banded), and foreign recaptures (birds recaptured that were banded elsewhere). We had 485 repeats, 103 returns, and 0 foreign recapture.

There were 5 days when over 100 birds were banded. The best day of the season was on 10 October when we banded 140 birds and had 9 recaptures. The next two busiest days occurred 17 October and 24 September when 123 and 112 birds were banded, respectively.

We captured five species never banded at Little Bear during the fall: Barn Swallow (1), Red-bellied Woodpecker (2), Merlin (1), Great Crested Flycatcher (1), Brown Creeper (2). Barn Swallow, Red-bellied Woodpecker, and Merlin have never been banded at either site during the fall before. I was surprised to see that Little Bear had never captured a Great Crested Flycatcher before considering Captain Sams has banded 55 of them. Some other rare and notable species banded included: Green Heron (3; 2 previous), Least Flycatcher (1; 5 previous), Tufted Titmouse (18; 31 previous), Blue Jay (1; 1 previous), Lincoln's Sparrow (2; 5 previous), Bobolink (2, 3 previous), Louisiana Waterthrush (1, 1 previous), Swainson's Warbler (1, 3 previous), Mourning Warbler (1, 3 previous), and Wilson's Warbler (1, 1 previous). Species notably absent: Marsh Wren. After banding 2 each of Chuck-will's-widow and Eastern Whip-poor-will last year, neither species was captured even though both were present around the banding the site.

Without the cooperation of many people and entities, this work would not be possible. The success of this project relies on their commitment, and I am in a debt of gratitude to everyone involved.

I would like to thank my team of banding assistants (listed above). I would like to acknowledge the Town of Kiawah Island for providing funding for equipment and banding assistant stipends, the Kiawah Island Conservancy for providing funding for the housing of the banding assistants, and the Kiawah Partners and the Bear Island Holding Trust for allowing access to their property for banding. I'd like to thank the many volunteers that donated their time to come out and help.

### **Sullivan's Island Bird Banding Station**

Sullivan's Island, Charleston County,  
South Carolina

**Sarah Harper**, [sullivanislandbirds@gmail.com](mailto:sullivanislandbirds@gmail.com)  
<https://www.facebook.com/sullivanislandbirds>

The Sullivan's Island Bird Banding Station is located in Sullivan's Island, South Carolina. The station's Facebook Page is "Sullivan's Island Bird Banding Station." Sarah Harper is the compiler and her email address is [sullivanislandbirds@gmail.com](mailto:sullivanislandbirds@gmail.com). Sarah Harper is the master bander for the station. She is assisted each season by a group of about 8 to 10 trained volunteers.

SIBBS operated during Fall 2015, Spring 2016, and Fall 2016 seasons. The station resumed banding activities under Sarah Harper in Spring of 2020 and continues to operate for Spring, Fall, and Winter banding seasons. The banding station is located within a 60.7ha conservation easement known as the Protected Land. The station habitat mainly includes early successional scrubland dominated by myrtles, cedars, cherry laurels and shrubby oaks. Eight net lanes are operated in the scrubland habitat. Three net lanes are operated in mid-successional maritime forest habitat dominated by live oaks.

The Sullivan's Island Bird Banding Station's Fall 2021 season commenced on 1 Jul and ended on 17 Nov with a total of 41 days of banding. A total of 934 new bands were issued this season across 41 different species. Highlights of this season's captures include a Louisiana Waterthrush, 12 Painted Buntings, and two Prothonotary Warblers. The capture rate for Fall 2021 (101.4 birds/100 net-hr) was slightly higher than the capture rate Oct. - Dec.

in Fall 2020 (64.4 birds/100 net-hr). As expected, the Fall 2021 capture rate was significantly higher than the Spring 2021 capture rate (25.7 birds/100 net-hr).

There were 44 recaptures in Fall 2021, including 40 repeats, 3 returns, and one foreign recapture. The returns included a Painted Bunting that was originally banded on 21 Apr, 2020. The bird was subsequently recaptured on 21 Apr 2021 and 27 Sep 2021. There was one foreign recapture of a Gray Catbird on 20 Oct 2021 that was originally banded at the Kiawah Island Bird Banding Station on 10 Oct 2017. This recapture indicates that the Gray Catbird was utilizing the same coastal migration route in subsequent years with very precise timing! A total of 41 species were banded in Fall 2021. The total number of species banded to date at the Sullivan's Island Bird Banding Station is 69.

The Sullivan's Island Bird Banding Station would like to thank all of its loyal volunteers for their help! Operation of the station would not be possible without the regular assistance of trained volunteers that help with extraction as well as net set-up and take-down. The station is close to a public beach, so all of the equipment, including nets and poles, has to be taken down, packed up and hauled out (or stashed) at the end of each banding day! The Sullivan's Island Bird Banding Station is owned by the nonprofit Carolina Avian Research Program and is funded by the generosity of small private donors.

### **Jekyll Island Banding Station (JIBS)**

Jekyll Island, Glynn County, Georgia  
**Evan Pitman**, [westernpalm@gmail.com](mailto:westernpalm@gmail.com);  
**Heather Pitman**, [catsflute@aol.com](mailto:catsflute@aol.com)

[www.facebook.com/JekyllIslandBandingStation](https://www.facebook.com/JekyllIslandBandingStation)

**Banders:** *Evan Pitman, Heather Pitman, Charlie Muise, Allan Muise, Betsy Rogers*

The Jekyll Island Banding Station has been in continuous operation since 1978 marking 2021 as our 44th year of banding. The primary habitat at the banding station has consisted of dynamic dune scrub in the same location for more than 30 years. Shifts in the vegetation as the island moves further southeast and erodes from the southwest are

significant. Effects from hurricanes and tropical storms surges have also caused changes in the area which we operate.

Our capture rate this year was low for most of the season. We had only had three days with over 100 birds per 100 net-hours (8 Oct, 10 Oct and 11 Oct). The overall rate of 56.7 b/100 nh was down nearly 20% from last year's rate of 68.8 b/100 nh. The daily capture rate was below 30 b/100 nh for eleven out of twenty-eight days banded, the lowest of which was just 3.0 b/100 nh on 22 October. That day also represented the lowest number of birds banded in a day with just two individuals captured during 61 net-hours of effort. We were able to band every day except 28 Oct, when we were rained out. Most days the temperature was in the upper 70's to low 80's with relatively high humidity.

The top species this year was the Common Yellowthroat with 224 banded, followed by Western Palm Warbler with 193, and Gray Catbird with 154. The total number of species banded this season was 45, which is on the lower end of the number expected, but within the normal range. No new species were encountered this season, but a Canada Warbler was banded at JIBS for the first time since 1998. Only 28 Myrtle Warblers were banded this year, which is about half as many as in 2020, and just a quarter of the total banded in 2019 despite the banding season lasting through the end of October in all three years. This decrease can possibly be attributed to weather patterns that may cause migration to shift earlier or later in the season and the majority of Myrtle Warblers could have arrived after the end of the 2021 banding season.

A few notable returns this year included a White-eyed Vireo banded as a Hatch-Year in 2015, which has been encountered at least once during banding operations every year since except for 2016 and 2020. A Myrtle Warbler banded on 24 Oct 2019 returned this year on 30 Oct, indicating that it passes through the area in the latter part of October on its journey south, or perhaps that it arrives around that time to spend the winter on Jekyll. Several resident Northern Cardinals, Carolina Wrens, and an Eastern Towhee returned this year, all of

which were banded during fall migration one to three years prior, but one particularly noteworthy individual was a Northern Mockingbird banded in 2013. This bird has been handled about ten times through the years since it was banded, and it seems to be doing well likely subsisting on berries from Buckthorn (*Sideroxylon tenax*) and Pepper-vine (*Ampelopsis arborea*), as well as other food sources on the south end.

### **Cape Florida Banding Station**

Key Biscayne, Miami-Dade County, Florida

**Michelle Davis**, [capefloridabanding@tropicalaudubon.org](mailto:capefloridabanding@tropicalaudubon.org)

[www.capefloridabandingstation.wordpress.com](http://www.capefloridabandingstation.wordpress.com)

**Banders:** *Miriam Avello, Michelle Davis,*

*Elizabeth Golden, Marc Kramer, Steffanie*

*Munguia, Mario Porcelli*

The Cape Florida Banding Station (CFBS) has now become a flagship program of the Tropical Audubon Society. This, along with a generous grant from the Batchelor Foundation, has allowed CFBS to continue in its 20<sup>th</sup> year of fall migration banding in Bill Baggs Cape Florida State Park (BBCFSP). This park is on the southern tip of a largely developed barrier island just off the coast of Miami. Mist nets are set in a restored tropical hardwood hammock that is the result of a multi-million dollar effort to return native vegetation to the park following Hurricane Andrew in 1992.

We started banding on 15 August 2021 and closed for the season on 7 November for a total of 84 days with nets open. We only lost one day to bad weather, although several mornings throughout the season were cut short by rain. We used a total of 23 nets, all in the same locations as during spring and the previous three fall field seasons. Standard protocols to reduce the chance of spreading COVID-19 were continued, although the mandatory wearing of masks in the banding area was relaxed since all the volunteers were vaccinated. We had no interruptions in the banding schedule due to COVID-19 exposures or infections.

Fall 2021 was mostly dry with some notable heavy rain events spread throughout the season, despite a lack of tropical storm activity. No substantial fronts passed completely through the region, although the humidity broke by October. Northeasterly and easterly winds dominated during the peak of migration in late September and first half of October, and this likely contributed to a below-average capture rate for the season. Passage of a weak dissipating front on 12 October brought the biggest single-day movement with 151 birds of 16 species banded. Winds then returned to the east or northeast for the rest of October, and a stronger front in early November brought in a few straggling late migrants.

The total number of species captured in 2021 was 52, similar to the 54 species seen in 2020, but much lower than the 61 to 62 species captured during recent previous seasons. The lack of species diversity in 2021 was likely a function of the overall lower numbers of captures, rather than synoptic weather patterns as in 2020. The most unusual species was the fifth Ruby-crowned Kinglet for the station, banded on 10 October 2021. This species is a widespread winter visitor to the southern United States, but in recent years they rarely make it as far south as the tip of Florida. The Wilson's Warbler banded on 10 October 2021 was the fifth capture since the station opened in 2002. Other infrequently encountered species were a Canada Warbler banded on 30 August 2021 and a Blackburnian Warbler from 8 October; both species have been banded fewer than 12 times since 2002. No new species for the station were banded in 2021.

The overall numbers of individuals banded across the most abundant species were nearly average in 2021 compared to the previous years. In contrast to the records set for four of the top 10 species in 2020, no new records for numbers were set in 2021. Ovenbird was the most abundant species banded at the CFBS in 2021 with 280 captures, very close to the 16-year average of 280.8 per year. Black-throated Blue Warblers were a close second with 276 captures in 2021, lower than the 16-year average of 331.1 captures. American

Redstarts rounded out the top three species with 235 captured in 2021, well below the record of 368 banded in 2020 but close to the 16-year average of 226.6 captures. Numbers of two record-breaking species in 2020 returned to average this fall: 112 Black-and-white Warblers were banded in 2021 compared to an annual average of 115.8 and high of 197 in 2020, and 95 Worm-eating Warblers compared to an average of 114.4 and high of 192 in 2020. Painted Buntings rounded out the top ten with 51 captures in 2021, close to the record high of 55 birds in 2015 and much higher than the average of 29.9 birds per year. Other species with a strong showing in 2021 included 198 Gray Catbirds and 4 Louisiana Waterthrushes.

We captured 17 returning birds of 7 species, with Ovenbirds making up the majority. The restored hammocks of BBCFSP have proven over the years to be a consistently good wintering site for Ovenbirds, with one individual captured this season returning since 2015. Three Gray Catbirds and one Black-and-white Warbler were also originally banded in Spring 2021 and recaptured as they were returning for the winter. Resident breeding Northern Cardinal returns were very low in 2021, with only 2 captured. However, the number of new captures (14) rebounded considerably this year from the record low of 4 new bandings in 2020, and almost all of these birds were juveniles. This suggests that in 2021 cardinals may have recovered from a poor 2020 breeding season. No foreign recoveries were captured this fall, but a Gray Catbird banded at CFBS on 23 October 2018 was found in Ft Lauderdale on 30 January 2021, when it died at the South Florida Wildlife Center.

One hundred fifty-six individuals of 22 species were recaptured within-season. The average length of time between first and last capture was 4.5 days for all species combined (less resident species and known or likely wintering individuals), and an average of all recaptured birds showed a 3.3% gain over original body weight (OBW). Birds that gained weight (56.8%) had an average overall weight gain of 8.5% OBW, while the average loss (36.8% of total recaptures) was 4.3% OBW and 6.4 % of migrant recaptures neither gained nor lost

weight. In general, the average stopover time was the median in 2021 of all of the last nine years, and the average weight gain was slightly above the median but fairly close to last year. The average increase for the birds who gained weight and the decrease for the birds who lost weight returned to closer to the historical values after diverging in 2020 when a greater percentage of birds gained weight but not as much weight as in most years. Some of the between-year variance in overall weight gains vs losses is probably influenced by some factors outside of the Cape Florida region such as species composition and the experience of individuals prior to arrival. The 2020 fall migration season likely featured an unusual number of overwater migrants pushed ashore due to weather conditions; this was reflected in high counts last year for certain species.

CFBS increased media exposure in 2021, including an interview with the local NPR station and articles in the Miami Herald and the Miami Community newspaper. One webinar, three video presentations and one in-person presentation were given in 2021, reaching around 150 members of the general public.

Our new partnership with Tropical Audubon Society is allowing the Cape Florida Banding Station to continue fall banding and expand our outreach to the community by providing fundraising and logistical support. This project would also not be possible without the assistance of our dedicated volunteer extractors and banders-in-training for the Fall 2021 season. Special thanks go to Robin Diaz, data entry master and all-around repository of knowledge and to Bill Baggs Cape Florida State Park for continuing to support the project.

## CANADIAN REGION

### McGill Bird Observatory

Ste-Anne-de-Bellevue, Quebec

**Marcel A. Gahbauer** (Executive Director, [marcel@migrationresearch.org](mailto:marcel@migrationresearch.org)),

**Barbara Frei**

(Director, [mbo@migrationresearch.org](mailto:mbo@migrationresearch.org))

**Simon Duval** (Bander-in-charge, [simon@migrationresearch.org](mailto:simon@migrationresearch.org))

**Cindy Bouchard** (Project manager, [mbo@migrationresearch.org](mailto:mbo@migrationresearch.org))

McGill University

<http://www.migrationresearch.org/mbo.html>

McGill Bird Observatory (MBO) in Montreal is a full member of the Canadian Migration Monitoring Network, and the only station in Quebec to conduct standardized spring and fall migration banding programs. MBO is operated by the Migration Research Foundation (MRF), a non-profit organization dedicated to the study of wildlife movements, especially as they relate to population monitoring and conservation.

In 2021, MBO operated its 17<sup>th</sup> full Fall Migration Monitoring Program (FMMP), covering the 14-week period from 1 August through 6 November. A one-hour census trail was walked daily, and nets were open for five hours beginning at sunrise except when limited by inclement weather. Five days were lost entirely and an additional 15 days were partly shortened due to rain and/or high winds. This resulted in a banding effort of 6,951 net-hours, above the average of 5,977. Typically, all 16 nets were operated daily this fall. All nets are 12-m Avinet passerine nets, on standard 3-m poles. This fall, bander-in-charge duties were primarily handled by Simon Duval and Ana Morales.

The total of 3,644 individuals banded during FMMP 2021 was below the long-term average of 3,699 for the season despite being the best total since 2014. The 83 species banded is well above the mean of 78 while the 144 species observed is the lowest total since 2010.

White-throated Sparrow took the number one spot this fall with 476 individuals banded, while Ruby-crowned Kinglet came in second with 363 individuals banded. White-throated Sparrow has been the most banded species in six of the last eight years. In third place this year we had Swainson's Thrush with 297 individuals, the second best fall season for this species. A new species was banded

this fall, a Tufted Titmouse, and thus the site total is now at 130 species.

As usual, our peak period extended roughly from mid-September to mid-October, and our ninth week ( 26 Sep - 2 Oct) was the busiest, with 435 individuals banded including 105 Ruby-crowned Kinglets, 100 White-throated Sparrows, 48 Swainson's Thrushes and 21 Dark-eyed Juncos. Overall, we observed and counted over 72,011 birds. Once again, diversity was on the menu; on 33 days the daily estimated total was at least 50 species, including 9 days with more than 60. The site total still stands at 223 species.

Although not included in our Fall Migration Monitoring Program totals, we also operated our

Northern Saw-whet Owl program, during which we banded 322 Northern Saw-whet Owls, and one Barred Owl. We generally band around 200 Northern Saw-whet Owls per fall and the previous record was 272 individuals in 2015. Ariane Chénard was the banded-in-charge for this program.

As always, other research activities and education programs were integrated with the banding program, as an example, we collaborated with researchers by collecting ticks and louse flies found on birds. We provided ongoing training to more than 60 volunteers this fall, and collected more photos to augment the ever-growing Piranga online photo library (<http://www.natureinstruct.org/piranga/>).



Ruby crowned Kinglet  
Can Stock Studios



White throated Sparrow  
RJP Photo



FALL 2021		NORTHEAST REGION					MID-ATLANTIC REGION				
Summary Statistics	Braddock Bay	Wing Island	Albany Bush	Manomet Observatory	Foreman's Branch	Meadowlands	Mt. Nebo	Powdermill	Rushton Woods	Island Beach	
# of Birds Banded	3,481	2,246	552	1,690	10,225	923	1,047	4,736	1,372	1,014	
# of Repeats	643	871	29	1,106	2,122	12	244	2,146	168	34	
# of Returns	27	66	18	58	297	5	27		7	0	
# of Foreign	0	0	0	2	3	0	0		0	0	
# of Species	79	72	61	67	112	50	63	107	61	37	
Effort (net-hours)	9,549.75	6,472.25	1,400	19,098	42,287	630	2,137		1,332	280	
Capture Rate	36.5	51	43.1	15	22.6	147	49		103	362	
# of Nets	32	19-35	20	50	93	10	14 - 19	67	15	8	
Dates of Operation	8/15-10/31	8/1-11/20	9/3-10/29	8/15-11/15	8/1-11/30	9/6-10/28	8/23-11/1	8/3-10/31	8/31-10/28	10/13-10/20	
# of Days Operated	65	51	14	56	109	21	31	63	23	8	
Top 10 Species Banded	1	WTSP (565)	GRCA (842)	MAWA (59)	GRCA (625)	WTSP (2,509)	MYWA (143)	SOSP (167)	SWTH (464)	GRCA (576)	SOSP (324)
	2	BLPW (513)	MYWA (427)	WTSP (47)	BLPW (242)	SOSP (1,044)	COYE (133)	GRCA (149)	RCKI (361)	WTSP (84)	WTSP (143)
	3	RCKI(416)	SOSP (167)	MYWA (34)	MYWA (104)	INBU (549)	SOSP (96)	RCKI(96)	GRCA (295)	AMGO (65)	MYWA (135)
	4	SWTH (331)	BLPW (111)	RCKI(29)	WTSP (75)	COYE (515)	WTSP (83)	INBU (93)	MYWA (257)	COYE (49)	GCKI (110)
	5	GRCA (194)	AMGO (73)	NAWA (27)	NOCA (68)	GRCA (492)	SWSP (75)	WTSP (75)	MAWA (229)	SOSP (46)	SWSP (92)
	6	MAWA (192)	COYE (67)	SOSP (24)	TUTI (66)	RCKI (412)	SAVS (62)	COYE (50)	REVI (194)	WOTH (46)	RCKI (44)
	7	GCKI (127)	SWSP (49)	TEWA (22)	BRCR (42)	SOSP (379)	YPWA (50)	EATO (33)	RTHU (191)	SWTH (39)	BRCR (42)
	8	HETH (95)	NOCA (47)	BBWA/BTNW (20)	BCCH (30)	SCJU (354)	RCKI (43)	OVEN (32)	SOSP (190)	AMRE (36)	SCJU (35)
	9	BTBW (68)	TUTI (43)	CHSP (18)	AMRE (28)	HETH (300)	GRCA (38)	SWSP (29)	WTSP (164)	BTBW (34)	GRCA (13)
	10	MYWA (67)	BCCH (40)	CSWA (17)	GCKI / SOSP (27)	REVI (232)	TRFL (29)	SWTH (24)	AMRE (158)	AMRO (30)	COYE (13)

FALL 2021	SOUTHEAST REGION					CANADIAN REGION				
	Kiawah Island-Captain Sams	Kiawah Island-Little Bear	Sullivan's Island	Jekyll Island	Cape Florida	Magill Bird Observatory				
Summary Statistics										
# of Birds Banded	4,704	3,103	934	923	1,759	3,644				
# of Repeats	1,191	485	40	30	156	-				
# of Returns	238	103	3	26	17	-				
# of Foreign	1	0	1	0	0	-				
# of Species	94	79	41	45	52	83				
Effort (net-hours)	15,023.90	8,332.60	915	1,627.00	10,755.25	6,951.00				
Capture Rate	40.8	44.3	101.4	56.7	19	52.4				
# of Nets	30	23	8	17	25	16				
Dates of Operation	8/15-11/30	8/21-11-15	7/1-11/17	10/3-10/31	8/15-11/7	8/1-11/6				
# of Days Operated	103	78	41	28	84	98				
Top 10 Species Banded	1	COYE (1,077)	GRCA (752)	GRCA (370)	COYE (224)	OVEN (280)	WTSP (476)			
	2	GRCA (959)	COYE (645)	MYWA (225)	WPWA (193)	BTBW (276)	RCKI (363)			
	3	MYWA (688)	PAWA (249)	COYE (94)	GRCA (154)	AMRE (235)	SWTH (297)			
	4	AMRE (202)	MYWA (194)	REVI (26)	BTBW (64)	GRCA (198)	AMRE (233)			
	5	REVI (195)	PABU (142)	AMRE (24)	PABU (55)	COYE (120)	MAWA (225)			
	6	PAWA (142)	AMRE (115)	NOCA (23)	NOCA (41)	BAWW (112)	AMRO (198)			
	7	BTBW (124)	HOWR (97)	WPWA (19)	MYWA (28)	WEWA (95)	HETH (145)			
	8	PABU (116)	REVI (89)	PRAW (15)	AMRE (26)	NOWA (76)	REVI (137)			
	9	NOWA (113)	NOWA (83)	PABU (12)	HOWR (25)	NOPA (52)	SOSP (89)			
	10	RCKI (101)	PRAW (69)	RCKI (12)	WEVI (14)	PABU (51)	GRKI (88)			