

## **Williamsburg Bird Club**

Wednesday, July 15, 2020

Conducted via Zoom; Invited by Dean Shostak and presided by Cheryl Jacobson; 7pm

**Attendance:** 57 locations. Some had 2 viewers so probably a total of 60 – 65.

**President's Remarks:** President Cheryl Jacobson welcomed everyone.

She reminded us that Heather Kenney has invited us to her defense of her thesis on her study of the effect of noise pollution on Bluebirds on July 22<sup>nd</sup> at 3 pm via Zoom. Cheryl reminded us that Heather was one of our club's research grant recipients and urged us to support her. Cheryl will email us the link the day before.

**Tory Gussman – Co-Vice President, Programs:** Tory reported that our August 19<sup>th</sup> membership meeting speaker via Zoom will be Matt Bright from Earth Sangha which is a nonprofit charity run largely by volunteers in northern Virginia devoted to restoring native forests and meadows, stabilizing streams and controlling invasive alien plants. They also run a wild plant nursery. Also, on the island of Hispaniola, along the Dominican Republic – Haiti border, they are helping to propagate local native trees, conserve tropical forest, and promote sustainable agroecological practices. Matt will talk about the relationship about the relationship of native plants and birds. The charity views its mission as a form of socially engaged Buddhism.

**Purple Martin Project Update:** Cheryl reminded us that we can still make contributions to the Geoff Giles Memorial Fund that will support one Nature Camp Scholarship and the Purple Martin Project. Cheryl has ordered the supplies for a Purple Martin set-up to be installed at Chickahominy Park. Once the supplies have arrived, she would welcome volunteers to help dig the hole and mount the pole. The site is in an unmown meadow near a body of water with lots of mosquitoes and dragonflies. She'd like to have that done this year so gourds can be attached next year. She is still awaiting approval from the ground's crew at NQP to install a second Purple Martin house. Michael Wilcox has approved the project. She reported that there have been no martins this year at the York River State Park installation. One of the three set-ups at Ford's Colony is very active. George Martin reported that martin gourds at Williamsburg West have been taken over by Bluebirds this year and last year.

**Program – Nick Newberry:** Tory introduced Nick who graduated from W&M in 2017. He was one of our ornithology grant recipients and now works as an environmental scientist for a local consulting firm. As an undergraduate, his experience with the Alaska Dept. of Fish and Game studying the migration of Olive-sided Flycatchers stimulated his interest in migration tracking. Nick's presentation was *Tracking Bird Migration from Home: A Dive into the Vast World of Online Bird Migration Resources*.

The first record of banding comes from John James Audubon who in 1803 described tying 'silver string' (probably wire) around the legs of 5 Eastern Phoebe nestlings and found 2 of the banded phoebes nesting in the same area a year later. Since then, 60 million birds have been banded and of those, 4 million reencountered. Methods of tracking birds have also evolved a great deal. Nick reported that every autumn, even with bird populations declining, about 4 billion birds move south from Canada into the US and 4.7 billion leave the US to head to the tropics. In Virginia there are 3 different types of migrants: birds that breed in VA and then fly further south for the winter; birds that breed further north

and migrate to VA to spend the winter; and migrants that fly through VA stopping only to rest and eat. There are two ways to gather data about these migrants. One requires attaching tracking devices and the other observing and identifying the species while noting how many, when and where, and submitting the data to sites like eBird.

Nick described four main ways birds are currently tracked. Banding involves a metal band sporting a number that is unique to the individual bird that is stored in a data base curated by US Geological Survey. More detail may be added by a colored band that tells where the bird was banded. Yet another form of band is a leg flag with a code that can inform the observer as to the exact identity of that bird without requiring capturing it. Nick reported how rewarding spotting and submitting bird band data to the Bird Banding Laboratory at their website <https://www.pwrc.usgs.gov/BBL/bblretrv/> can be as one receives a certificate of appreciation including info about the bird. He discovered that a Ring-billed Gull he found in Richmond had flown 1,140 miles from where it was banded in western Minnesota. He urged us to keep our eyes open for Royal and Common Terns and Laughing Gulls that are being banded on their new nesting grounds at Fort Wool.

The second way birds are tracked is through radio telemetry, wherein the bird carries a small light-weight nanotag transmitter that emits a radio frequency specific for that bird. The main drawback has been that they can be tracked from a distance of only 1 to 2 miles. Until recently it has been useful only for researching how a bird uses its breeding territory. But now Motus (Latin for movement) towers that have receivers for picking up a signal from a tagged individual that flies within a few kilometers of a tower have been erected along migratory routes. Some Motus towers can be found locally at Back Bay National Wildlife Refuge, Fisherman's Island and Craney Island. The Center for Conservation Biology at W&M has been using the Motus network to track the migration of the Ipswich Sparrow, a subspecies of the Savannah Sparrow that nests only on Sable Island off Nova Scotia and winters along the Atlantic coast, and can be found on Virginia dunes. More info about Motus Wildlife Tracking System can be found at <https://motus.org/>

The third is satellite GPS tracking, which requires the bird wearing a big backpack with antenna and solar panels. The size of it limits its use to only big birds. The CCB at W&M have collected a lot of valuable data from whimbrels who've carried these packs for years. Nick told us about Project SNOWstorm that attaches transmitters that use the cellular phone network to record information. Each Snowy Owl is named, and if you go to <https://www.projectsnowstorm.org/tracking-snowy-owls/> and click on 'owls', you can choose specific owls and read their life stories that Nick claimed often resembles the drama of soap operas.

The fourth is geolocation. Nick has had personal experience with Olive-sided Flycatchers who wore on their backs a unit that has a diode that tracks light and records when the sun rises and sets daily. Factoring in the time of the year, the researcher can therefore determine where that bird is. The unit is too small to transmit the data to a satellite so the bird has to be recaptured. The data isn't as precise as GPS but the big advantage is that it can be used on smaller birds. The Olive-sided Flycatcher migrates from Alaska to Peru covering 12-14,000 miles per year. Tracking them has shown that every fall they migrate down the central part of our country and then return following the west coast as they follow the food source and prevailing winds. Despite their nesting grounds remaining adequate, their population is in decline. The geolocators are helping scientists determine where they may be having trouble refueling during migration and can inform important conservation decisions for this species and others.

Nick noted that fall migration is just about to begin. Purple Martins are one of the first to migrate and will be starting to form their huge communal roosts in the next couple of weeks. He showed us how we can track migration in real time via BirdCast that uses US weather surveillance radar. When planning a field trip, one can use the site, <https://birdcast.info/>, the night before to see if heavy migration is predicted for your area.

Nick also recommended eBird Science at <https://ebird.org/science>, where one can view interactive maps of the species of one's choice that capture the range and abundance of that bird by season more accurately than those in field guides. These maps are made possible by birders like us submitting observations to eBird.

Real cutting edge in tracking involves the International Space Station. New technology is allowing solar powered units to work on smaller birds and transmit data to a dedicated antenna on the ISS that collects info on the bird's location, altitude, body temperature, external temperature and the bird's velocity. This will allow tracking birds more accurately allowing scientists to better understand bird declines and general bird biology.

Migration is fraught with considerable danger and Nick pointed out that birds hitting our windows is a big one. He described many ways of treating our windows to improve the visibility of windows to birds and said he'd be happy to consult with anyone having trouble to figure out a solution. He has had experience treating windows on the W&M campus that has led to saving hundreds of birds. Nick can be reached at [nickenew1@gmail.com](mailto:nickenew1@gmail.com).

With the pandemic keeping us closer to home, we are grateful to Nick for giving us a lot to think about and explore.

**Newsletter (The Flyer) – Mary Ellen Hodges Vice President/Editor:** Mary Ellen thanked everyone who'd submitted articles during the pandemic lockdown. Deadline for submissions to the August *Flyer* is Tuesday, July 28. This issue will include the membership form.

**Bird Walks & Field Trips:** These activities remain on hold during the pandemic as there is general consensus that they cannot be conducted safely.

**Hawk Watch – Nancy Barnhart Records/Liaison to CVWO:** Nancy reported that it was a record year for total numbers but raptor species of concern (ex. Sharp-shinned Hawks, Northern Harriers, Red -tailed Hawks) were in decline following a consistent pattern of the last few years. A final report from Hawk Migration Association of North America will be available soon. CVWO has hired a highly regarded hawk watcher to begin in September as well as two other seasonal workers. CVWO is working hard to maintain safe social distancing on the hawk watch platform.

There was some general discussion about bird sightings and success and failure of nest boxes as well as plants members are growing that attract birds.

Cheryl adjourned the meeting at 8:30 pm.

Respectfully submitted,  
Cathy Millar, Secretary Williamsburg Bird Club  
July 18, 2020

