# **2019 MAPS Year-End Recap**

We banded a total of 93 birds/22 species during the 2019 season which is slightly below the average of 100 bandings/24 species per season for the previous 15 years (we went to our current 14-net protocol in 2004). This brings the station's total since 1990 to 3,196 bird bandings of 66 species.

The station's Top Five migrant species continues to be Wood Thrush/520 bandings since 1990, Red-eyed Vireo/401, Acadian Flycatcher/393, Ovenbird/235 and Common Yellowthroat/170. The station's Top Five resident species continues to be Carolina Wren/206, Northern Cardinal/193, Tufted Titmouse/158, Downy Woodpecker/99 and Carolina Chickadee/61. We expect that within the next two years, the Acadian Flycatcher may replace the Red-eyed Vireo as the 2nd most frequently banded migrant species.

**Banding Highlights:**

We banded Wood Thrush/23 which is the most in any one season since we went to our current 14-net protocol in 2004. The previous high was Wood Thrush/22 in 2015. Under an earlier protocol when we used 17-nets, we banded Wood Thrush/34 in 2002, 31 in 2003 and 26 in 2000. Because of long-term declines in Wood Thrush populations throughout their range, the American Bird Conservancy has placed the Wood Thrush on the "United States Watchlist of Birds of Conservation Concern." Jug Bay however has defied the norm and is providing a breeding habitat that has resulted in a positive trend line over time for its Wood Thrush population.

We banded two adult Yellow-throated Vireos. While probably present in small numbers each breeding season, we rarely catch them in our nets. From 1990-2018, we had only banded a total of six.

We banded a Great-crested Flycatcher, the station's 5th since 1990 and 4th since 2004 under our current 14-net protocol.

We banded a Northern Parula, only our 4th since 2004 and the 39th since 1990. In the early years of our effort, from bandings and regular visual and/or aural observations, we knew that the Northern Parula was probably a regular breeder within our study area. Since around 2003 however, Northern Parula bandings in our core study area (nets 1-11) have dropped significantly suggesting they may only be irregular breeders. This 2019 banding is significant in that the Parula was a hatch- year bird meaning it was born this breeding season, probably within our study area. This is only the 4th hatch-year Northern Parula we have banded since 1990.

We banded American Robin/6. While the robin is seemingly ubiquitous, we had not banded a single one between 1990-2009. Since 2010, we have now banded American Robins/36. The obvious question is - why?

**Productivity**:

One key aspect of the MAPS Program is to monitor avian productivity of select species by monitoring how many hatch-year birds they produce per breeding season. Since 2004, hatch year birds on average account for about 26% of our bandings. This year we banded 33 hatch-year birds of 11 species. They accounted for about 35% of our bandings with Downy Woodpecker/5, Carolina Wren/6 and Wood Thrush/8 accounting for the majority of the hatch-year bandings. None of the aforementioned was a record-setting number.

**Survivorship**:

Another key aspect of the MAPS effort is monitoring survivorship. By recapturing birds in years after they were initially banded, we obtain survivorship data. The mortality rate for the species that we band is quite high. Estimates of mortality of species during their first year range from 50-70%. Most of these species probably don't make it past 2-3 years old. While there are many avian monitoring efforts, MAPS is one of the few that can provide avian researchers with survivorship data and Jug Bay's 30-year data set is highly unique and valued. This year we recaptured 31 individual birds of 11 species that had been banded either earlier this season or were banded in previous years. Notable recaptures include the following:

Eastern Wood-Pewee/2560-66064 was banded on 3 June 2012 as an adult and recaptured 2X in 2016 and 1X in 2019. This bird is at least 8 years old.

Ovenbird/0900-27912 was banded on 12 June 2012 as an adult and recaptured 1X in 2014 and 2017 and 2X in 2019. This bird is at least 8 years one month old.

Red-eyed Vireo/0900-27955 was banded on 6 July 2014 as an adult and recaptured 1X in 2015 and 1X in 2019. This bird is at least 6 years old.

Since 1990, we have documented 39 of our banded birds of ten species that have survived with a minimum age of at least 6 years old at their last recapture. Our oldest bird was a Red-eyed Vireo that was at least 10 years 11 months old at its last recapture in 2013. Interestingly, of those 39 birds on our "old age" list, 20 of them were Red-eye Vireos. Put another way, 5% of all the Red-eyed Vireos we have banded over the years have survived to be at least 6 years old at the time of their recapture. This is somewhat remarkable given that every year, the Red-eyed Vireo travels over 6,000 miles to/from its wintering grounds in the Amazon. That's pretty sturdy/resilient for a bird that weighs about 17-18 grams - the equivalent of three nickels and a penny!! Of these 39 "old age" birds, we were able to sex 32 of them and they were equally split between male and female.

*—Sandy Teliak (FOJB Volunteer)*