

Connecting People, Birds and Land

## **Chatfield Banding Station Report, Spring 2019**

## Prepared by Meredith McBurney Bander, Chatfield Station, Bird Conservancy of the Rockies, 9/2019

*Introduction:* Each spring, Bird Conservancy of the Rockies partners with Denver Audubon to run a banding station near the Discovery Pavilion/Audubon Center at the south end of Chatfield State Park. This station has been in its current location since 2006.

Banding stations are placed in sites where birds congregate in large numbers during migration. These stopovers generally have excellent habitat that offers food and a safe place to rest. Scientists set up a series of mist nets to harmlessly trap birds. When a bird is removed from the net, its leg is fitted with a small metal band, and the bird is weighed and measured to evaluate its condition. Each band has a unique number on it so that if the bird is recaptured or found later, scientists will know when and where it was banded.

Banding stations also serve as outdoor classrooms to enhance the public's appreciation of birds. The stations provide valuable opportunities for volunteers and students to gain experience in scientific field techniques.

*Headline for 2019 - Lots of Birds:* We caught 1159 individual birds this spring at Chatfield, over 40% more than the next highest year, 2009.

## **Total Individual Birds Caught, 2008-2019**



What do we know that can help us understand why we caught more birds this spring? Here are some thoughts:

**Record number caught at Barr Station last fall:** We caught 1902 birds last fall at our Barr Lake Station, the highest number in at least a decade, suggesting that the migrants coming through had a great breeding season. Although the mix of species migrating through the front range is different in fall and spring, it is not surprising that a good fall migration might mean a good spring season as well.

Very high numbers of a few species: A couple of species accounted for the majority of the



increase. Foremost was the 271 Yellow-rumped Warblers. (Yellow-rumpeds are highly variable at Chatfield from year to year. Our next highest year was 114 in 2009, but we caught zero in 2017.) It was also one of the species that led to the high numbers at Barr last fall.

Next in terms of high numbers was 88 Dusky Flycatchers; we normally catch about 16. Three other species were well above normal - Blue-gray Gnatcatcher, Virginia's Warbler and Lincoln's Sparrow - but they did not have as big an impact on the total numbers.

This Yellow-rumped Warbler, caught on May 3, is of the Myrtle population (easily identified here by the white throat that wraps around onto sides of neck). Photo by Rob Raker

Our breeding birds were at usual levels: The four most common migrating passerines that breed at Chatfield are House Wrens, Yellow Warblers, Gray Catbirds, and Yellow-breasted Chats. All were within normal range in terms of numbers, as were Spotted Towhees, some of which migrate and some of which may not. So none of them had an impact on this being a really big season.



Yellow Warbler at Chatfield shows off her aluminum band. Photo by Rob Raker.

*The perfect storms:* The weather, which included several storms and no really high temperatures, was likely a major factor. The cooler overall days meant birds were active longer



Imagine what a migrating bird experiences when confronted with this habitat on his stopover at Chatfield on April 30! Photo by Meredith McBurney.

each morning. The storms brought migrating birds down that otherwise might have moved through without stopping and then kept birds around while they waited for the storms to pass and the late snow in the mountains to melt.

Specifically, about half of the Yellow-rumpeds and Duskys were caught on four days -5/10 and 5/22 for the Duskys and 4/30 and 5/1 for the Yellow-rumpeds. There were storms big enough that we could not open on the days preceding these big days. So, to some extent the large numbers of these species had everything to do with the weather. Were it not for the storms, most of these birds would not have stopped at our little banding station, and we would likely not be talking about the biggest season ever.

Good news, bad news: Catching large numbers of individual species provides us with a wonderful learning experience. Because differences in age and sex in many species are relative – e.g. more or less color, more or less wear on flight feathers – we become much better at identification when we can compare and contrast, often with different ages and/or sexes in the hand at the same time.



Three young males and a female! Alison Hazel, Meredith McBurney and Santi Tabares show off the 11 a.m. Bullock's Oriole catch on May 18.

But, the excitement of the high number of birds after the storms was tempered by the problems that the cold, wet, sometimes violent weather created for the birds. Not only does it slow down their migration, particularly problematic in the spring when their goal is to reach their breeding grounds as soon as possible, but it cause damage. Many birders noted dead or injured birds, nest failures, etc. In the hand, we noticed other negative impacts, particularly in some species, like Virginia's Warblers and Dusky Flycatchers, whose arrival at Chatfield spanned the good weather early on and the storms somewhat later. Many of the later birds had more severely worn flight and tail feathers, and some even had body feathers that had dried but remained matted together rather than fluffy. We found Dusky and other Empidonax Flycatchers with little holes in their wing feathers almost certainly caused by hail and/or heavy rain.

Most interesting bird: An unusual non-occurrence in a year with numerous storms is that we did not catch any truly rare birds – birds that might have been thrown off course due to weather conditions. But the closest we came to a rare bird was really very interesting - We called it an Eastern Phoebe when we caught it on April 30, only the third ever caught at Chatfield. Photographer Rob Raker took some great photos of the same bird (note the band) enjoying a meal on May 31, and he began an e-Bird inquiry into whether it might be a Black/Eastern Phoebe hybrid.



(We have never caught a Black Phoebe, and certainly never a hybrid!) Discussions with some experts led to it being listed in e-Birds as a hybrid.

**Best Bird Story:** Sometimes a very common bird can provide the most interesting experience of the season. My absolutely favorite bird was an American Robin, caught on May 13, day after Mother's Day, who should get an award for the best bird mom of all time! As I removed her from the net, I saw that she had a brood patch that was declining, indicating that her young had probably hatched. We then realized that she had a plump and juicy earth worm hanging out of her mouth, which she was not eating; we figured she was on her way back to the nest to feed her

young. All good mothering behavior! But here's the kicker - she was missing most of one foot due to a long ago injury. So, this lady managed to grow up, find a mate, hatch eggs and was now feeding young all with one foot! What strong maternal instincts!!

## Educating the Next Generation of Bird Enthusiasts:

A primary purpose of the Chatfield banding station is to educate young people about the importance of conserving birds and their habitats. School groups visited the station every weekday morning. A total of 344 students from local schools attended field trips; the youngest were preschoolers getting their first introduction to birds, the oldest were university students, many of whom are planning careers in biology. Additionally, almost 1000 other visitors experienced the banding station activities this year. We combine the sheer joy of seeing birds up close and personal with the science that allows us to understand how best to conserve birds.



Students are excited to see a Downy Woodpecker and Green-tailed Towhee up close! Photos by Susan Rosine.