



Barr Lake Banding Station Report, Fall 2019

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Introduction: Bird Conservancy of the Rockies has run a fall banding station at Barr Lake for 32 years, banding its first fall migrants in 1987. We are pleased to offer this report on the 2019 season.

If you were a migrating bird, where in this landscape would you stop to refuel?



Banding stations are placed in sites where birds congregate in large numbers during migration. These stopovers generally have excellent habitat that offers food, water and a safe place to rest. This photo, taken by Francis Commercon, a human who flew into the area with the benefit of an airplane, illustrates why Barr Lake is a prime stopover point for birds migrating along the front range.

Our Education Programs

Inspiring the next generation: A primary goal of our banding stations - these outdoor classrooms - is to help kids of all ages learn to appreciate birds and the need to protect them for future generations. This fall, 795 students visited Barr Lake on a school field trip program, which included educating students on the challenges birds face during migration, how to identify birds using field marks, and the banding process. Students learn why it is important to collect scientific data and how it contributes to bird conservation. Another 897 students from around the country connected with us through live, interactive broadcasts, including a real-time Q&A, as part of the Scientists in Action program sponsored by the Denver Museum of Nature and Science. Adults and families visited on weekends and early mornings, allowing us to reach another 522 individuals, for a total of 2,214 people this season.



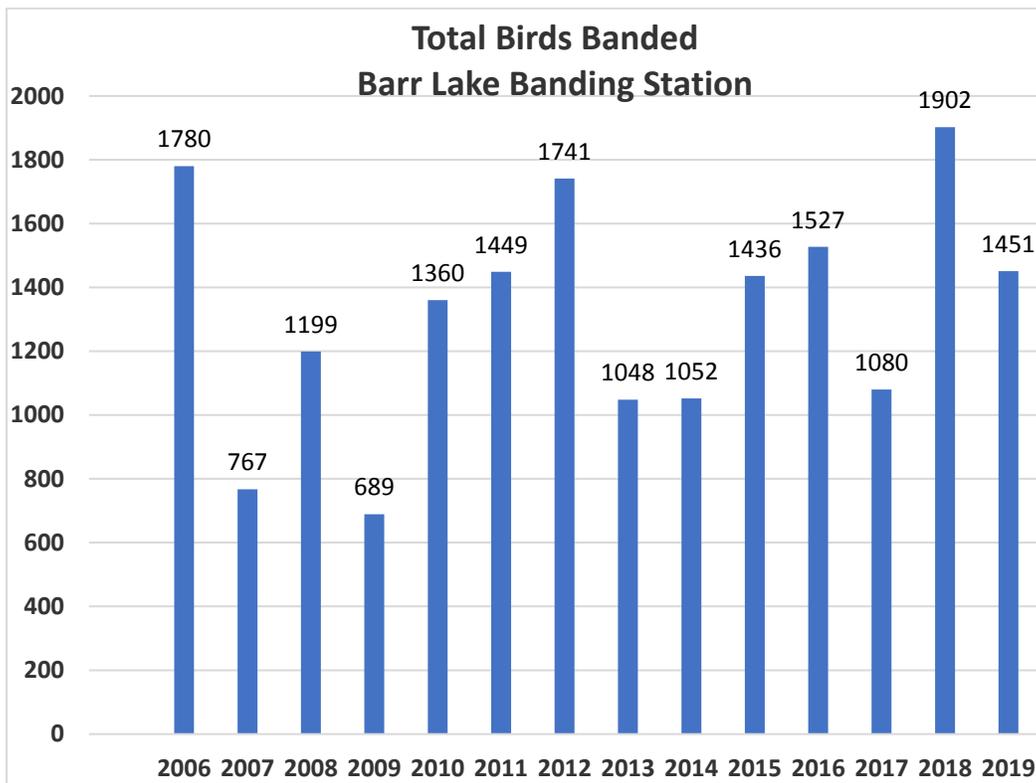
Training our future scientists: Each season, Bird Conservancy provides a unique educational experience for a few highly motivated students who are interested in careers in biology and exhibit a strong interest in birds. They and their parents commit to volunteering weekly during the banding season, and they have an opportunity to acquire bird banding skills while still in high school. Santiago Tabares, the 16-year-old behind the camera in the above photo, has volunteered one morning every weekend, spring and fall, for the past three seasons.



Francis Commercon and Megan Miller, both “graduates” of this program, have recently graduated from CSU with degrees in Wildlife Biology. Francis is currently studying bird conservation in China as a Fulbright Scholar, but on a visit home this fall he visited the banding station. Megan continues to volunteer at Barr and has been mentoring Owen Flanagan, a 12-year-old who joined the program this fall. Francis, Megan and Owen discuss the Wilson’s Warbler Megan is holding in the photo to the left.

What can we learn from banding?

At banding stations, scientists set up a series of mist nets to harmlessly trap birds. After a bird is removed from the net, it is identified and a small metal band is placed on its leg. Then, its age and sex are determined and it 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. In 2019, we captured 1,451 individual birds, slightly above the average number caught over the past 14 years:



The 1,451 birds included 64 species; a full list is included at the end of this report.

Here are some examples of important things we can learn from having a bird in the hand:

Info from recaptures: It is actually quite rare to recapture a bird that was banded elsewhere, so we were thrilled when we caught this Wilson's Warbler on September 1. We knew right away from the band number that the bird was not "ours".

We reported the information to the Bird Banding Lab (at www.reportband.gov), and learned within minutes that this WIWA had been banded on August 27, 2018, at a banding station near Fountain, Colorado. It appears the bird was following the same pathway that he had a year ago as he migrated from his breeding grounds, likely in Alaska or Western Canada, to his wintering home in Central America!

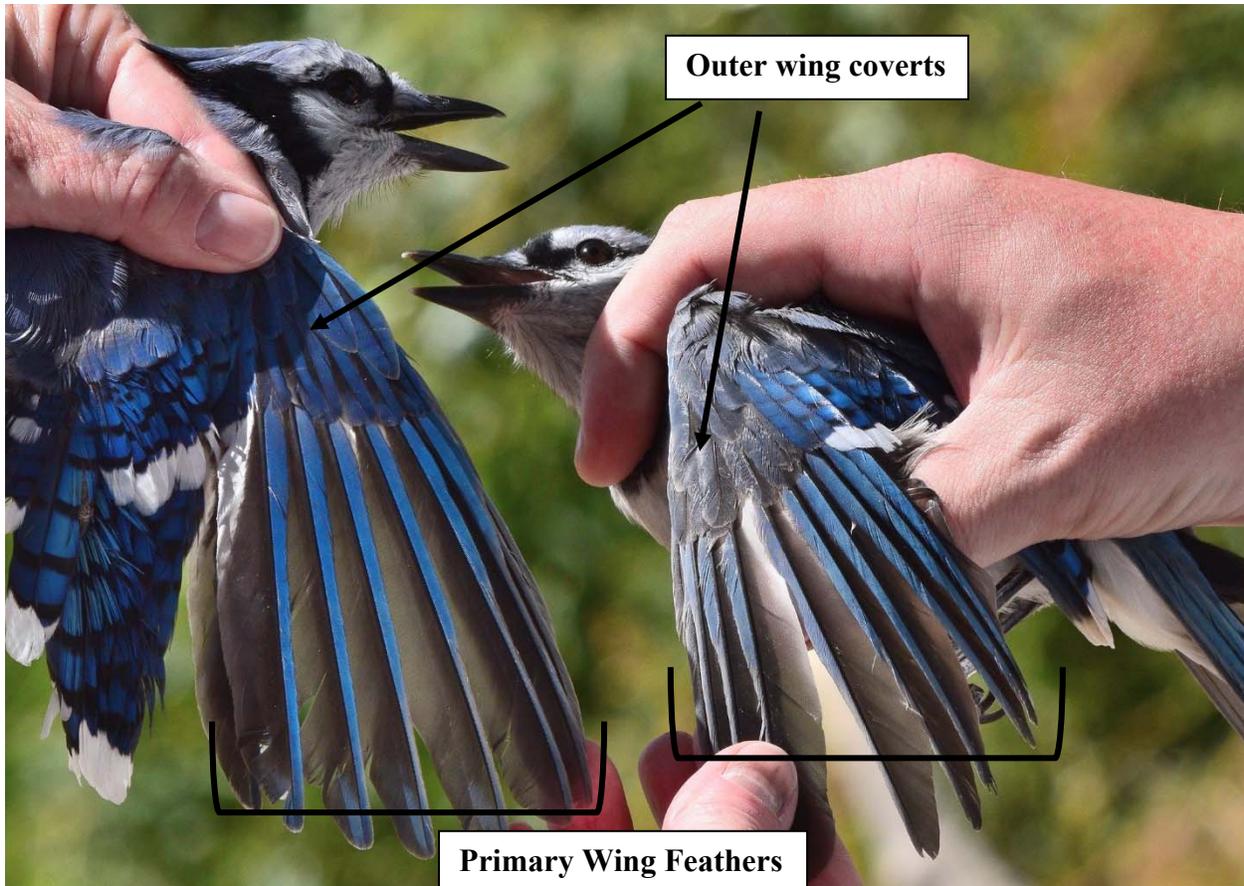


Learning to identify similar species: Birders are frequently frustrated by being unable to identify similar species. Seeing birds up close, and birds that are not flying away as you grab for your binoculars,



provides an opportunity to study the characteristics that allow us to separate similar species. Photographer Susan Rosine put together the photo array above of sparrows that shows how similar they can be and why it is so hard to tell them apart in the field, but also allows us to see notable differences in the throat and breast patterns of these four species. (If you are having trouble with identification, go to the end of the report to learn the identities of these birds!)

Understanding age differences within species: We were lucky to catch an adult and a hatch-year Blue Jay at the same time. Can you tell which is which and why?



A close look at the wing feathers of these two birds tells us that the bird on the left is an adult and the one on the right hatched this year. The outer wing coverts on the bird on the left are bright blue and look “fresh”, while the same feathers on the bird on the right are grayish and worn, contrasting with the brighter blue and blackish-barred replaced inner coverts. You can also see the brighter color and better condition of the primary wing feathers on the adult. These characteristics differ among species and are easier to see in some species than others. They have to do with when and how species molt and the stronger condition of adult feathers.

What's up with this bird?? A leucistic bird – one that has partially lost pigmentation in feathers – like this one we caught this fall, presents identification problems, and highlights how much focus we humans place on color when we are doing identification. Here, it is necessary to focus on other

attributes, including overall size and shape and the shape of the bill. Careful evaluation of those features as well as wing and tail measurements gave us our answer. See end of report if you haven't figured out what species this is!



Rare Birds

Truly Rare Birds: Most years, we catch a few birds that are truly rare to our region. This year we had these two stunners:



Rare birds in the fall can often be very difficult to identify, but not this time. The Black-throated Blue Warbler (left), an adult male, was unmistakable. The Prothonotary Warbler (right), a hatch-year

female, does not look quite like the photos in our field guides, but no other warbler is even remotely similar. The normal range for both of these species is much further east. This was the ninth ever BTBW at Barr and the first since 2002. It was only the third ever PROW; the others were caught in 2000 and 2006.

Rare-to-Banding-Station Species: There are many species that are fairly common to our region that we almost never catch, either because the specific habitat is wrong, their preferred location in the habitat is higher than the nets, or the timing is off. We caught several of these species this year:



This hatch-year, female (determined based on its short wings and tail) Western Kingbird was the fifth ever caught at the station and the first since 2004. A common breeding species at Barr in the summer, they tend to stay up high and most have migrated south before banding begins.

The Red-naped Sapsucker below was one of two we caught this year. There had only been six caught previously.



The Rarest Captures of the Season: We caught three (yes, three) hatch-year Savannah Sparrows this fall. There had only been one previously, in 1991. According to the Second Colorado Bird Breeding Atlas, although Savannah's breeding is concentrated in the mountainous regions of the state, scattered pairs breed on the plains, with an increase in probable breeding near Barr from the First to Second Atlas. Will we see more in the future?

The young ones, like these, might be mistaken for Lincoln's Sparrows, which are quite common at Barr in the fall. The short tail and the totally white background on the breast, very evident in these photos, help in identification.



Answers to questions posed earlier in report:

Sparrows, clockwise from top left: White-throated, Song, Savannah, Lincoln's
Leucistic bird: Warbling Vireo

Photo credits:

Child (left), Wilson’s Warbler, sparrows compared, Blue Jays, leucistic Warbling Vireo, Western Kingbird, Red-napped Sapsucker, Savannah Sparrow – Susan Rosine
 Landscape – Francis Commercon
 Children with Downy Woodpecker – Meaghan Schultze
 Student volunteers – Meredith McBurney
 Black-throated Blue and Prothonotary Warblers – Megan Miller

Species	Newly Banded	Returns	Recoveries	Total
Mourning Dove	2			2
Red-naped Sapsucker	2			2
Downy Woodpecker	3	1		4
Hairy Woodpecker	1			1
Northern “Red-shafted” Flicker	3			3
Western Kingbird	1			1
Western Wood-Pewee	21			21
Willow Flycatcher	2			2
Least Flycatcher	2			2
Hammond’s Flycatcher	6			6
Dusky Flycatcher	6			6
Western Flycatcher	3			3
Cassin’s Vireo	2			2
Plumbeous Vireo	1			1
Philadelphia Vireo	1			1
Warbling Vireo	2			2
Red-eyed Vireo	4			4
Blue Jay	3			3
Black-capped Chickadee	10	6		16
Red-breasted Nuthatch	3			3
White-breasted Nuthatch	2			2
Rock Wren	2			2
House Wren	106	7		113
Blue-gray Gnatcatcher	1			1
Golden-crowned Kinglet	2			2
Ruby-crowned Kinglet	55			55
Townsend’s Solitaire	1			1
Swainson’s Thrush	5			5
Hermit Thrush	28			28
Gray Catbird	19			19
Brown Thrasher	3			3
Lesser Goldfinch	1			1

American Goldfinch	1			1
Lark Sparrow	2			2
Chipping Sparrow	46			46
Clay-colored Sparrow	6			6
Brewer's Sparrow	2			2
"Oregon" Dark-eyed Junco	30			30
"Pink-sided" Dark-eyed Junco	44			44
"Slate-colored" Dark-eyed Junco	1			1
Unidentified Dark-eyed Junco	1			1
"Gambel's" White-crowned Sparrow	39			39
"Mountain" White-crowned Sparrow	3			3
White-throated Sparrow	1			1
Savannah Sparrow	3			3
Song Sparrow	34	1		35
Lincoln's Sparrow	30			30
Green-tailed Towhee	27			27
Spotted Towhee	9			9
Yellow-breasted Chat	3			3
Ovenbird	1			1
Northern Waterthrush	7			7
Prothonotary Warbler	1			1
Orange-crowned Warbler	136			136
Nashville Warbler	1			1
Virginia's Warbler	1			1
MacGillivray's Warbler	7			7
Common Yellowthroat	15			15
American Redstart	5			5
Yellow Warbler	152	1		153
Chestnut-sided Warbler	1			1
Black-throated Blue Warbler	1			1
"Audubon's" Yellow-rumped Warbler	83			83
"Myrtle" Yellow-rumped Warbler	12			12
Unidentified Yellow-rumped Warbler	1			1
Townsend's Warbler	2			2
Wilson's Warbler	415		1	416
Western Tanager	2			2
Blue Grosbeak	4			4
Lazuli Bunting	2			2
Total = 64 Species	1434	16	1	1451