

Beaverhill Bird Observatory Spring Report 2017

By Kevin Methuen

June 21st, 2017

Executive Summary

The Beaverhill Bird Observatory's spring migration monitoring was conducted by Head Biologist Kevin Methuen, along with Assistant Biologists Meghan Jacklin and Sara Pearce-Meijerink. Spring migration was monitored from April 1st to June 9th, with a standardized census conducted throughout these dates, in addition to banding that began on April 20th due to cold mornings in early April. BBO staff operated thirteen mist nets through these dates and recorded 996 captures of 51 species, achieving an overall capture rate of 49.0 birds per 100 net-hours. Staff, board members, dedicated volunteers, and 13 student interns completed many other monitoring programs and maintenance activities.

Migration Monitoring

Thirteen mist-nets (2, 2X, 8, 9, 9X, 50, 51, 52, 53, 54, 55, 56, and 57) were operated from April 20th to June 9th on days that were above zero degrees Celsius, relatively calm (wind below 20 kph), and free of precipitation. A total of 2031 net hours were accumulated, which was lower than recent years due to cold mornings in April, and rain and wind in May. A total of 996 birds were captured, of which 802 were newly banded. Species diversity was above average with 51 species captured (Table 1). BBO staff are happy to report the second highest number of captures, and second highest capture rate for spring migration since 1992, the year that standardized protocols were adopted.

	2002	2003	2004	2005	2006	2007	2008	2009
Total Captures	950	754	532	276	242	408	382	500
Birds Banded	740	546	424	196	169	318	288	351
Net hours (NH)	2569	2219	1809	1570	1615	1813	1828	1608
Capture Rate (birds/100 NH)	37.0	34.0	29.4	17.6	15.0	22.5	20.9	31.1
Species	55	44	38	32	31	44	38	39
	2010	2011	2012	2013	2014	2015	2016	2017
Total Captures	497	412	459	324	841	810	849	996
Birds Banded	333	241	307	211	561	641	663	802
Net hours (NH)	2016	1884	1997	1884	2615	2859	3432	2031
Capture Rate (birds/100 NH)	24.7	21.9	23.0	17.2	32.2	28.3	24.7	49.0
Species	38	40	39	36	43	45	54	51

Table 1. Numbers of captures, mist-netting effort, capture rates, and number of species caught during spring migration monitoring at the Beaverhill Bird Observatory since 2002.

The five most commonly captured species this spring were Clay-coloured Sparrow (341 captures, representing 34.2% of all captures), Least Flycatcher (94 captures, representing 9.4% of all captures), Yellow Warbler (61 birds caught, 6.1% of captures), House Wren (59 birds caught, 5.9% of captures), and Chipping Sparrow (57 birds caught, 5.7% of captures). These top five species made up 61.4% of the total number of birds caught. See Table 2 for full banding results.



Common Yellowthroat, photo by George McBride.

May 14th to 20th was the busiest week of spring migration, with a grand total of 415 captures! Our single busiest day at the lab occurred on May 19th when we caught 124 birds, 63 of which were Clay-coloured Sparrows. We had many other notable captures this spring, including a Mallard, a Northern Shoveler, 23 Blackpoll Warblers, and 4 Ruby-throated Hummingbirds. One of the Ruby-throated Hummingbirds we caught was a return, originally banded in 2016 at BBO by our Chair, Geoff Holroyd.

Table 2. Total number and type of capture per species during 2017 spring migration monitoring at Beaverhill Bird Observatory (BBO). Repeat captures were banded in 2017 at BBO, Return captures were banded at BBO in a previous year, Foreign captures were banded at a location other than BBO, and other captures were caught in a mist net but released unbanded.

Species	Banded	Repeat	Return	Foreign	Other	Total
Alder Flycatcher	1					1
American Goldfinch	4		1			5
American Redstart	13					13
American Robin	5	2	3		1	11
Baltimore Oriole	8	5				13
Black-capped Chickadee	5	6	6			17
Blackpoll Warbler	22	1				23
Brown-headed Cowbird	6	6	1			13
Cedar Waxwing	2					2
Chipping Sparrow	55	1			1	57
Clay-coloured Sparrow	282	50	4		5	341
Common Yellowthroat	9					9
Downy Woodpecker	2	1				3
Eastern Phoebe	1					1
Gray Catbird	7					7
Gray-cheeked Thrush	5					5
Hairy Woodpecker			1		1	2
Hermit Thrush	3	1				4
House Wren	42	12	2		3	59
Least Flycatcher	58	16	17		3	94
Lincoln's Sparrow	23	2			1	26
MacGillivray's Warbler	4					4
Magnolia Warbler	1					1
Mallard					1	1
Mourning Warbler	5					5
Myrtle Warbler	34					34
Northern Shoveler					1	1
Northern Waterthrush	2					2
Orange-crowned Warbler	5					5
Oregon Junco	1					1
Ovenbird	1					1
Palm Warbler	4				1	5
Philadelphia Vireo	2					2
Red-breasted Nuthatch	1					1
Rose-breasted Grosbeak	5					5
Ruby-crowned Kinglet	1					1
Ruby-throated Hummingbird			1		3	4

White-throated Sparrow Yellow Warbler	33 33	4 20	8		37 61
White-crowned Sparrow	4				4
White-breasted Nuthatch	1		1		2
Warbling Vireo	3				3
Tree Swallow	1				1
Traill's Flycatcher	6				6
Tennessee Warbler	14				32 14
Song Sparrow Swainson's Thrush	10 32				10
Slate-coloured Junco	41	1			42
Savannah Sparrow	1				1

Staff surveyed birds along a standardized census route each day between April 1st and June 9th. Census results are combined with other incidental observations and daily banding totals to produce a Daily Estimated Total (DET) of the number, and type of species migrating through the Beaverhill Natural Area. Looking back at the DET data, there are many sightings that stand out. A flock of over 3000 Snow Geese and many flocks of Tundra Swans were recorded in the first week of April. There was also an American Bittern perched in a tree, a Northern Goshawk, and a Peregrine Falcon on a few days. In early May, a Bald Eagle flying over Beaverhill Lake flushed over 2000 ducks that were taking advantage of the water that has returned to the lake. By starting migration monitoring on April 1st, BBO staff have been able to provide exceptional coverage of spring migration for the past two years.



Blackpoll Warbler, photo by Sara Pearce-Meijerink.

Other Banding

On May 13th, BBO staff set up a feeder mist-net for Nature Alberta's Nature kids group. Over 15 people attended and we caught three Downy Woodpeckers, three Black-capped Chickadees, and two Brown-headed Cowbirds. On May 18^{th,} we set the feeder net again, this time for a homeschool group of about 30 people. We managed to catch one American Goldfinch and one Downy Woodpecker, and the group was treated to a Northern Flying Squirrel on their way out!

Student Interns

The BBO is very lucky to have 13 student interns this year!! Each group of interns has a mentor, who volunteers their time to ensure their project is successful. Board member Laurie Hunt organizes the BBO internship program, which is funded by SCiP (Serving Community internship Program). In late April, Laurie arranged an intern orientation at the lab, which allowed everyone to meet and get started on their projects.

This year's interns and mentors are: amphibian intern Cassandra Breton, mentored by Kris Kendell; Tree Swallow interns Brandi Charette, Serena Mackay, Cassandra Walker, and Robyn Schnierer, all mentored by Meghan Jacklin; breeding bird grid interns Myla-Rae Baldwin and Hannah Smith mentored by Geoff Holroyd; House Wren interns Shyla Golly and Zach Antoniw mentored by Sarah Pearce-Meijerink; bat interns Erin Low and Emily Gillmore are mentored by Jody Rintoul; our butterfly intern Maya Frederickson is being mentored by Steve Andersen and marsh bird monitoring intern Jeremy Lambe mentored by Geoff Holroyd.



2017 intern orientation. Photo by Laurie Hunt.

Big Birding Breakfast

This year's Big Birding Breakfast was held on June 3rd and 4th, and was a huge success! We hosted approximately 90 visitors over two days and treated them to crepes, bacon, and birds in the hand. Geoff Holroyd led a bird walk each day to complement the banding effort. Once the nets were shut, David Lawrie led a butterfly walk (June 3rd) and Rene Belland led



House Wren being released after banding. Photo by Helen Trefry.

a moss walk (June 4th), both of which were a big hit with our visitors!

As always, the Big Birding Breakfast would not be possible without our incredible chefs! Claude Roberto (June 3rd) and Janos Kovaks (June 4th) made around 350 delicious crepes, all of which were quickly eaten! Ariane Roberto helped her mom cook on the 3rd. A big thanks to both chefs, who also generously provided some of the crepe ingredients! This event was made possible by planning and assistance from many others, who are all recognized in the acknowledgements at the end of this report. Thank you so much!

Education and Outreach



Sara Pearce-Meijerink and Colonel Slade the Barred Owl. Photo by Sara.

BBO staff continued interpretation activities this spring, building on momentum created by Sara Pearce-Meijerink and Meghan Jacklin this winter. A total of six presentations in April, and another ten in May were completed at Edmonton and area schools. Sara also represented BBO at a science fair for high school students at Queen Elizabeth High School in Edmonton.

Banding demos were completed at Big Lake for Migratory Bird Day, a Nature Conservancy volunteer event near Lindbrook, and the John Janzen Nature Center to raise funds for WildNorth (formerly known as Wildlife Rehab of Edmonton). We also brought one of our education owls to each of these events. On June 2nd, Sara and Meghan gave a nature walk, presentation and banding demo to a Girl Guides Group from Sherwood Park.

A spring edition of the Willet was produced in May by board member Helen Trefry, and distributed to members in addition to being posted on our website and social media outlets. Our Facebook page has grown from 830 page "likes" last spring to 1245 this spring!!

Geoff Holroyd, Sara, and Meghan represented BBO at the Snow Goose Chase in Tofield at the end of April. Geoff sold memberships, promoted our programs and showed off Ray, while Sara and Meghan completed numerous banding demonstrations. Around 200 children participated in our banding demonstration in Petra's Park near the Tofield community hall. Ten fake birds were placed in a mist net in the park, and kids extracted, banded, and measured their birds. This demo allowed kids to experience the work we do at the BBO on a daily basis.

BBO Assistant Biologist Sara wrote an article about the return of water to Beaverhill Lake and our early start date, welcoming visitors to the observatory. Her article was successfully published in the Tofield Mercury, the Tofield local newspaper.

Great Canadian Birdathon



The 2017 Birdathon team! Photo by Sara Pearce-Meijerink.

This year's birdathon was a blast! In total, 109 were species identified and so far we have raised over \$1100! The 2017 birdathon team included Jeremy Lambe, Kyle Nuttall, Alyssa Bohart, Alyshia Skurdal, and all three BBO staff. We also had two die-hard birders who were birding on the other side of Canada. Irene Crosland was combing the coastline in Newfoundland, while Sian Ford was looking over lakes in Ontario! Highlights around the

BBO included Yellow Rails and Virginia Rails on Lister Lake around three AM, and a large flock of American Golden Plovers found in a field near Francis Viewpoint in the afternoon. A huge thanks to all who participated, and those who donated to our team.

The duo of Helen Trefry and Geoff Holroyd held a real birdathon where all species were seen by both party members [©]. They saw 105 species but quit early to host a birthday party.

Aerial Survey

On May 10th, BBO staff conducted an aerial survey of Beaverhill Lake to assess water levels. The three of us estimated approximately 50% open water cover, and up to 70% water cover including emergent vegetation. This is likely the most water that Beaverhill Lake has had in over a decade, which is great news for the birds. There are tens of thousands of birds using this habitat well into the summer this year, a dramatic change from recent years.



Center of Beaverhill Lake, looking west. Photo by Kevin Methuen.

Acknowledgements

Volunteers are the backbone of this organization, and our work would not be possible without the countless hours they contribute.

Starting with the Big Birding Breakfast, thank you to Helen Trefry who was the key organizer of the event; David Lawrie, the butterfly expert, who captivated attendees with his knowledge of lepidopterans; Rene Belland, the moss expert, led a very interesting walk and discussion about life as a moss; muffins were made by Irene Crossland, Linda Kershaw, Carol Nolan, Geoff, and Helen; Rolly Perrot was greeter on June 3rd; Joyce DeGroot cooked and Al DeGroot delivered 18 lbs of bacon; Jeremy Lambe provided kitchen and general help; Gerry Beyersbergen for photos on June 4th; website coordination by Rose, Darren and Jason; financial details were coordinated by Rose; and Geoff who was the main shopper, coffee maker, hike leader twice and June 4th greeter.

For supporting our day-to-day operations, thank you Al and Geoff for setting up solar panels and batteries; Geoff for setting up rain barrels and bringing water, filling and delivering propane, and cutting grass on all of our large trails with his riding mower; Helen Trefry for producing the Willet; Darren Macgregor for designing and maintaining our new website; Rose Scott for managing BBO's finances, with assitance from Liz Tymon; Fred Basargin for helping with banding and trail maintenance; Irene Crosland for being an awesome field mom to BBO staff; Helmi Hess for helping with banding, maintenance, and ice cream at Mom's ice cream corral; and Amelie Roberto-Charron for leading BBO's efforts in a meme contest, where BBO won \$1000!

Thank you to all other BBO volunteers, board members, and interns who visited and helped with banding, maintenance, and other activites. You make our work possible!

Thank you to **Steve and Kay** from the **Wildbird General Store** for providing us monthly in-kind support in the form of birdseed and suet. We feel humbled by your generosity!

The **Tofield Library** is the BBO afternoon office complete with couches to write reports, and the ability to scan and print. Thank you Connie, Diane, Susan, and Ashley for your weekly support. **This library also donated a laptop computer** to the BBO this spring, which allows us to enter and back up our data. Thank you!

Finally, the BBO has to extend a massive thank you to our funders. Our 2017 spring operations were made possible by financial support from the Alberta Conservation Association, Alberta Liquor and Gaming Commission, TD Friends of the Environment, Edmonton Community Foundation, Nature Canada's Labatiuk Fund, Bird Studies Canada's Baillie Fund, The Wildbird General Store, and personal donations.



BBO Assistant Biologists Meghan Jacklin and Sara Pearce-Meijerink. Photo by Irene Crosland.