



Beaverhill Bird Observatory
Fall Report 2017

By
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Executive Summary

The Beaverhill Bird Observatory's fall migration monitoring was conducted by Head Biologist Kevin Methuen, and Assistant Biologists Meghan Jacklin and Sara Pearce Meijerink. Migration monitoring was conducted from July 30th to October 10th, and a daily census continued until October 20th to visually account for late migrants. BBO staff operated thirteen mist nets and recorded 1918 captures of 52 species, resulting in an overall capture rate of 45.6 birds per 100 net-hours. Owl monitoring numbers were average this year, with 365 total captures. Staff, dedicated volunteers, student interns, and board members completed numerous education and outreach activities.

Migration Monitoring

Thirteen mist-nets (2, 2X, 8, 9, 9X, 50, 51, 52, 53, 54, 55, 56, and 57) were operated from July 30th to October 10th on days that were above zero degrees Celsius, relatively calm, and free of precipitation. A total of 4202.25 net-hours were accumulated, despite a chilly start to October which did not allow staff to achieve full hours on all days. 1918 birds were captured, of which 1620 were newly banded. This marked the highest number of captures in autumn since 2006, and the highest number of banded birds since 2001! Species diversity was average, with 52 distinct species captured (Table 1).

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

	2002	2003	2004	2005	2006	2007	2008	2009
Total Captures	1734	1315	975	1256	1969	1079	892	875
Birds Banded	1464	1093	818	1089	1525	952	723	718
Net hours (NH)	4174	3818	3229	2787	3476	3534	3400	3671
Capture Rate (birds/100 NH)	41.5	34.4	30.2	45.1	56.6	30.5	26.2	23.8
Species Captured	62	57	60	59	63	52	58	51

	2010	2011	2012	2013	2014	2015	2016	2017
Total Captures	880	701	978	631	738	1641	1721	1918
Birds Banded	708	589	776	628	618	1393	1390	1620
Net hours (NH)	3190	3678	3683	3144	2565	4478	4174	4202
Capture Rate (birds/100 NH)	27.6	19.1	26.6	20.1	28.8	36.6	41.2	45.6
Species Captured	60	53	57	45	46	58	53	52

The five most commonly caught species this fall were Myrtle Warbler (587 birds captured, representing 30.6% of all captures), Orange-crowned Warbler (211 captures, 11% of total), Least Flycatcher (190 captures, 9.9% of total), Black-capped Chickadee (131 captures, 6.8% of total), and American Tree Sparrow (108 captures, 5.6% of total). These five species

accounted for 1227 or 64% of the 1918 birds caught. Full banding results can be viewed in Table 2.



A Myrtle Warbler that had an unusual amount of white in its plumage and bill

Table 2. Total number and type of capture per species during 2017 fall 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 un-banded, or caught more than once in a single day.

Species	Banded	Repeat	Return	Foreign	Other	Total
Myrtle Warbler	560	18			9	587
Orange-crowned Warbler	198	8			5	211
Least Flycatcher	142	36	4		8	190
Black-capped Chickadee	36	88	5		2	131
American Tree Sparrow	102	2			4	108
Slate-coloured Junco	86	12			3	101
Tennessee Warbler	59	16	1		1	77
Wilson's Warbler	60	1				61
Yellow Warbler	48	5	1		2	56
House Wren	32	18	3		2	55
Ruby-crowned Kinglet	29	2			2	33
Warbling Vireo	21	6				27
Lincoln's Sparrow	20				3	23
White-throated Sparrow	20				1	21
American Redstart	19					19
Traill's Flycatcher	16				1	17
Ovenbird	17					17
American Goldfinch	11	4				15
Swainson's Thrush	15					15
Cedar Waxwing	9	4				13
Downy Woodpecker	4	8				12
Palm Warbler	11	1				12
Clay-coloured Sparrow	11					11
Canada Warbler	10					10
Rose-breasted Grosbeak	7	2				9
Song Sparrow	7					7
Magnolia Warbler	7					7
Common Yellowthroat	6					6
Northern Waterthrush	6					6
Ruby-throated Hummingbird		1			5	6
Hermit Thrush	4				1	5
Audubon's Warbler	5					5
Black-and-white Warbler	4					4
Red-breasted Nuthatch	4					4
White-crowned Sparrow	4					4

Red-winged Blackbird	3					3
Blackpoll Warbler	3					3
Mourning Warbler	2			1		3
Red-eyed Vireo	3					3
Brown Creeper	2			1		3
White-breasted Nuthatch	3					3
Eastern Phoebe	2					2
Blue-headed Vireo	2					2
Philadelphia Vireo	1					1
Savannah Sparrow	1					1
MacGillivray's Warbler	1					1
Cooper's Hawk	1					1
Sharp-shinned Hawk	1					1
Gray Catbird	1					1
Blue Jay	1					1
Oregon Junco	1					1
Golden-crowned Kinglet	1					1
Winter Wren	1					1
Swamp Sparrow					1	1
Totals	1620	232	14	0	52	1918

Every fall, there are highlights at the lab that make for unforgettable experiences. In late October, we were notified that a Baltimore Oriole, originally banded at BBO on May 26th, 2017, had been recaptured in Colombia (South America!). In August, we recaptured a Yellow Warbler that had originally been banded at BBO 10 years and 2 days ago! Meghan remarked that this bird had returned for its ten-year band-iversary. ☺

Among other notable events this fall were the number of Canada Warblers we caught. Usually we are lucky to catch one of these beauties every few years; this fall we caught ten! Additionally, from September 12th to 25th, we caught over 800 songbirds! Our busiest days saw capture totals of 219, 146, 133, and 120 birds! It was a very exciting time at the BBO.

Staff surveyed birds along a standardized census route each morning between July 30th and October 20th. Each year, 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. This fall, raptor highlights included five Turkey Vultures flying over the banding lab on one morning in early August, and a Northern Goshawk that was spotted multiple times. We observed tens of thousands of Greater White-fronted and Snow Geese, which attracted a number of visitors towards the end of September. From early to mid-October, we observed a good number of Golden-crowned Kinglets, Brown Creepers, Rough-legged Hawks, and Tundra Swans moving through.

Owl Monitoring



Foreign recapture Saw-whet owl that was originally banded in Wisconsin in 2016

Assistant Biologists Meghan Jacklin and Sara Pearce Meijerink led BBO’s owl monitoring program this fall, along with owl interns Brittany Whiteman and Marie-Eve Bedard, and long-term volunteer Alyshia Skurdal. Four mist nets with a Saw-whet owl audio lure were utilized from September 5th to November 1st, and two mist nets with a Boreal owl audio lure were set from October 9th to November 1st. Nets were only operated on evenings that were calm, warmer than minus 15 Celsius, and relatively free of precipitation.

1359.1 net hours were accumulated and 365 owls were captured, which resulted in a capture rate of 26.9 birds/100 net-hours. This is similar to last year’s capture rate of 27.6, despite last year’s capture total record of 583 owls. Our net hours were significantly lower this year, as the cold weather forced us to close nets over two weeks earlier than last year. A detailed breakdown of banding results can be viewed in Table 3.

Table 3. Total number and type of capture per species during 2017 owl 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 un-banded, or caught more than once in a single day.

Species	Banded	Repeat	Return	Foreign	Other	Total
Northern Saw-whet Owl	359	2		3		364
Boreal Owl	1					1
Totals	360	2	0	3	0	365

Education and Outreach

Over one hundred guests attended our annual fall fundraiser, Steaks and Saw-whets on September 29th and 30th. A representative from TD Friends of the Environment presented BBO with an oversized cheque on the first night, which highlighted their support of our outreach events this year. Everyone had a great night at the observatory and enjoyed interacting with Ricki, one of our education owls. Guests that stayed later in the evening were thrilled to see wild Saw-whet Owls go through the banding process, and flying squirrels near the bird feeders.

In early August, Ricki and I attended a product release party for Barn Owl Gold Vodka at the Hansen Distillery, while later in the month Sara and Ricki represented BBO at Pigeon Lake’s “Love the Lake Day.” BBO also hosted an evening bioblitz to celebrate Canada’s 150th birthday! Helen Trefry brought a Great Horned Owl, Dave Lawrie displayed a series of moth sheets and lights to show moths to visitors, and Erin Low gave a presentation on bats!



We had a few groups visit the lab this fall for songbird banding. Laurie Hunt's class joined us from NAIT, and Chris Olsen's class visited from Lakeland College in Vermillion. A girl guides group stayed for banding, and an interpretive nature walk by Sara! We also had a number of groups visit for owl banding this fall: Junior Forest Wardens, Friends of Elk Island Society, a Scouts group, University of Alberta outdoors club (3 nights), University of Alberta Wildlife Society, Tofield Library, Nature Alberta's Nature kids, Augustana Wildlife Club, and a private birthday party. Thank you for the support!

BBO hosted three interns this autumn who studied bats and Saw-whet Owls. Watch for their reports on the BBO website in December.

School presentations began late this fall, and will operate throughout the winter. There have been some noteworthy highlights thus far. Meghan gave a presentation and nature walk to some lucky students from Roberta McAdams School. While they were on their owl themed nature walk, a Great Horned owl appeared, allowing everyone to get an awesome look! For another presentation with Ricki the Saw-whet owl, Meghan dressed up as a Hogwarts professor from Harry Potter! The students loved it. Meghan also represented BBO at the University of Alberta faculty of ALES open house with Colonel Slade the Barred Owl.

Other Activities

When BBO staff are not busy with banding or interpretation, we complete a variety of other activities, sometimes related to stewardship of the Beaverhill Natural Area. This fall we removed a 400-meter stretch of barbwire fence that was inside of the Natural Area, to improve mobility and safety for wildlife. All BBO staff, with help from volunteers Helmi Hess, Nataliya Hontar, and Annalena Thiesen completed this project over the course of a sunny afternoon. The next day, Helmi and I borrowed Helen Trefry's pickup truck to haul the barbwire out of the Natural Area.



Acknowledgements

The conservation and outreach activities we conduct each year would simply not occur without the ongoing support we receive from our funders, volunteers, board members, and interns.

Thank you to everyone who made Steaks and Saw-whets a success: Fraser & Rena Methuen, Natasha Annich, Laura Garland, Thea Carpenter, Steve Andersen, Scott Wilson, Emily Upham-Mills, Caitlin Mader, BBO staff, Darren MacGregor, Rose Scott, Rolly Perrott, Geoff Holroyd, and Helen and Phil Trefry.

Thank you to our long-term volunteers this fall, Alyshia Skurdal, Amanda Shave, and Luke Zhou. Thank you to Helmi Hess for inventorying our mist nets, patching the road, helping remove barbwire fence, and for helping with a bunch of other tasks. Thank you Irene Crosland, Gerry Beyersbergen, Emily Cicon, Brittany Whiteman and Marie-Eve Bedard for

assisting with owl banding. Also, thanks to Greg Ottway, Lawrence Lam, and Sabina Mastrolonardo for your assistance with banding.

Thanks to Geoff Holroyd for mowing the trails in the Natural area, and for keeping the BBO staff in line! Thank you to Al Degroot and Geoff for winterizing the lab, and to Al for maintaining our solar power at the lab. Thank you to Helen Trefry for producing another stellar edition of the Willet, and to Laurie Hunt for coordinating our internship program.

A huge thanks to all other volunteers, board members, and interns who helped with a variety of tasks and activities. You make the BBO a special place!

Thank you **Wildbirds Unlimited** for your donation to BBO this fall.

Thank you to **Steve and Kay from the Wildbird General Store** for providing us monthly in-kind support of bird seed. Thank you **Connie, Diane, Susan, and Ashley at the Tofield Library** for your daily and weekly support.

Finally, the BBO extends massive thank yous to our funders. Our 2017 fall operations were made possible by financial support from the Alberta Conservation Association, Alberta Gaming and Liquor Commission, TD Friends of the Environment, Nature Canada's Labatiuk Fund, Bird Studies Canada's Baillie Fund, World Wildlife Fund Canada, the Community Environment Action Grant Program, Serving Communities Internship Program (SCiP), Canada's Farmers Grow Communities (Monsanto Fund) and personal donations. THANK YOU!