



Beaverhill Bird Observatory
Annual Report 2017

By
Kevin Methuen, Editor

January 2018

A special thanks to the following organizations for funding our projects in 2017: Alberta Conservation Association, Community Environment Action Grant, Alberta Liquor and Gaming Commission, TD Friends of the Environment, Edmonton Community Foundation, Bird Studies Canada's Baillie Fund, the Wildbird General Store, World Wildlife Fund Canada, Serving Communities Internship Program (SCiP), Canada's Farmers Grow Communities (Monsanto Fund), Wildbirds Unlimited, and Nature Canada's Charles Labatiuk Nature Endowment Fund.

Thank you to individuals who made our work possible by providing cash donations and in-kind support.

Note from BBO Chair, Geoff Holroyd

2017 was a very successful year, and we built on BBO's previous years' accomplishments. Our success was the result of very dedicated and competent staff, Kevin Methuen, Meghan Jacklin and Sara Pearce Meijerink, and the result of the hard work of the board of directors and many volunteers. Our treasurer, Rose Scott and accounting advisor, Elzbieta (Liz) O. Tymon kept our many finances organized and we owe them a huge thank you for processing about 1000 records and preparing financial reports at year end. Helen Trefry produced three issues of the Willet, housed our education saw-whet owls, and organized the Big Birding Breakfast and the Young Ornithologist Workshop. Laurie Hunt coordinated our many internships. Thea Carpenter recorded the minutes of Board meetings and entered our many new memberships. Darren McGregor updated our excellent website and assisted with PayPal. Steve Anderson picked up mail weekly and organized our CanadaHelps account. Rolly Perrot greeted guests at the Steaks and Saws Dinners. I thank all board members for their input to many issues to keep BBO a vibrant and active organization. I also thank all the volunteers and visitors to BBO who make all this effort worthwhile. As we go about our daily lives, Think Globally, Act Locally.

Note from BBO Head Biologist, Kevin Methuen

I would like to thank the staff, board of directors, volunteers, and funders for another extraordinary year at the BBO! It was a memorable year for Canada's 150th birthday, as we hosted a bioblitz and invited expert scientists to lead interpretation at our outreach events. I feel very fortunate to be working for this organization, alongside so many wonderful people. The community at BBO is what makes it a special place. I am looking forward to spending more time with great people, catching birds in the woods this year! Thank you all for your time and contributions in 2017.

Table of Contents

- List of Executive and Contact Information.....4
- Spring Report.....5
- Summer Report.....8
- Fall Report.....12
- Weekly Updates.....16
- Intern Reports.....17
- Willet Newsletters.....18
- 2017 Financial Report.....19

List of Executive and Contact Information

First Name	Last Name	Position	Year Joined the Board
Geoff	Holroyd	Chair	1988 (1984)
	Vacant	Vice-Chair	
Rose	Scott	Treasurer	2016
Thea	Carpenter	Recording/Membership Secretary	2013
Helen	Trefry	Director at Large	2014
Andra	Bismanis	Director at Large	2018
Christine	Boulton	Director at Large	2006
Rolly	Perrot	Director at Large	2017
Laurie	Hunt	Director at Large	2015
Darren	McGregor	Web Designer	2005
Steve	Andersen	Director at Large	2016
Emily	Upham- Mills	Director at Large	2016
Caitlin	Mader	Director at Large	2016
Jonathan	DeMoor	Director at Large	2016
	STAFF		
Kevin	Methuen	Staff	
Sara	Pearce Meijerink	Staff	
Meghan	Jacklin	Staff	

Contact Information:

Geoff Holroyd - chair@beaverhillbirds.com

Kevin Methuen - beaverhillbirds@gmail.com

Spring Report

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 0°C, 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 were 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.

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.

	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

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.

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!

Great Canadian Birdathon



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

This year's BBO birdathon was a blast! In total, 109 were species identified and we 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 3 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.

Many other monitoring programs and maintenance activities were completed by staff, board members, dedicated volunteers, and student interns. To view the spring report in its entirety, visit <http://beaverhillbirds.com/media/1641/2017-spring-report.pdf>

Summer Report

Highlights

The summer season of 2017 covers the period from June 12th to August 8th. During this time the Beaverhill Bird Observatory (BBO) programs were operated by Head Biologist Kevin Methuen and Assistant Biologists Meghan Jacklin and Sara Pearce Meijerink. Six rounds at three sites of the Monitoring Avian Productivity and Survivorship (MAPS) program were conducted, with a total of 615 birds captured. This was the highest number of captures the BBO has ever had in its 29 years of running the program! For a second year in a row, the BBO hosted another successful Geoff Holroyd Young Ornithologist Workshop and had seven youth spend a week on site learning about bird banding, conservation, and biology. BBO staff conducted many nest searches, banded nestlings, provided educational outreach programming to the public, interpretive talks at the lab, interacted with visitors and volunteers and wrote interpretive articles for the local paper. Thirteen interns worked in the natural area surveying the bats, butterflies, species at risk, as well as the nesting House Wrens, Tree Swallows and the two Breeding Bird Census grids.



Cedar Waxwing caught at LILA-MAPS station. (Photo credit: Sara Pearce Meijerink)

BLAB

BLAB had one of its slowest seasons in the last 29 years, with a total of only 60 birds captured, of 11 different species. We had an effort of 360 net hours, for a capture rate of 16.7 birds per 100 net hours. Least Flycatchers were our most frequently captured species (44) representing 73% of all birds caught. We also caught a number of House Wrens (6) and Downy Woodpeckers (2), we caught only one of each of the following; American Goldfinch, Baltimore Oriole, Black-capped Chickadee, Brown-headed Cowbird, Hairy Woodpecker, Hermit Thrush, Ovenbird and White-Throated Sparrow.



Baltimore Oriole caught at BLAB-MAPS station (Photo credit: Sara Pearce)

SOPO

At SOPO we captured 315 birds over 343 hours, producing a capture rate of 91.8 birds per 100 net hours. 28 species were caught, the most abundant being Least Flycatchers (73) followed by Yellow Warblers (49) and Clay-colored Sparrows (45). Other species of interest include Song Sparrows (23), Swamp Sparrows (11), Red-winged Blackbirds (9), Marsh Wrens (8), Gray Catbirds (5), Common Yellowthroat (1) and a Myrtle Warbler (1).

LILA

The LILA nets caught a total of 240 birds in 340.5 hours for a capture rate of 70.5 birds per 100 net hours. Least Flycatchers were the most frequently captured bird (93), followed by Yellow Warbler (27), Cedar Waxwings (18), and Yellow-bellied Sapsucker (15). Other interesting captures included Tennessee Warblers (6), Pine Siskins (2), Rose-Breasted Grosbeak (1) and another Myrtle Warbler (1).

Other Banding

This year, staff joined Geoff Holroyd, Glen Hvengaard and other volunteers for a Purple Martin banding spree in mid July. For three days, staff banded 541 Purple Martin chicks and 8 adults (37 recaptured) in the at multiple private residences in the Camrose-Tofield region and more at the Ellis Bird Farm with Myrna Pearman and volunteers. We began with target trapping previously banded adults at most locations, and were therefore able to get recaptures of adults of known age (most were banded as chicks). When as many banded adults had been recaptured as possible, we moved on to banding chicks. Whenever nests were found to be affected by parasites, nest material was replaced and a slight insecticide was added when available. BBO staff hope to participate in Purple Martin banding for years to come.

Geoff Holroyd Young Ornithologist Workshop

The Geoff Holroyd Young Ornithologist Workshop operated for its second consecutive year in 2017. It was attended by seven keen young birders. The participants travelled from Ontario, British Columbia, and Alberta to attend the workshop. The workshop focused on banding skills with daily banding of Migration Monitoring and MAPS programs. By the end of the week each participant could band and extract some birds with supervision, and could readily identify many species. Each afternoon, guest speakers brought in their expertise to share with the young birders. Guest speakers included Geoff Holroyd (Tree Swallows, Burrowing Owls, and Isla Clarion, Mexico), Brenda Dale (Citizen Science), David Lawrie (Moths and Butterflies) and Helen Trefry (Peregrine Falcon Conservation). Gerald Romanchuk led the Young Ornithologists to several birding locations in and around Elk Island Park for the Big Birding Day, where the youths found up to 118 species in one day. The Canadian Wildlife Service loaned a bird specimen collection to hone the birders identification and aging/sexing knowledge. The Young Ornithologists themselves participated in the release of rehabilitated orphaned ducklings courtesy of Kim Blomme from WildNorth. They also constructed 10 nest boxes for Saw-whet Owls in the natural area funded by World Wildlife Fund Canada. Finally, Irene Crosland shared her mycological knowledge with a tour in the Beaverhill Natural Area. By participating in this week long workshop, Young Ornithologists experienced field biology for themselves, and learned much more about bird conservation and the threats facing birds today.

Over the course of the Geoff Holroyd Young Ornithologists Workshop, the participants grew in confidence and bonded with other youth interested in nature. Every night the group explored the best shorebird viewing location in the area, the Weir, and found many rare species. During the week they recorded 145 species of birds! We hope that this workshop will inspire them to become passionate biologists in the future.



2017 Young Ornithologists group (missing Meghan Jacklin): Dawson Shufliet, Cole Gaerber, Nataliya Hontar, Annalena Thiesen, Isabel Apkarian, Megan Coleson, Jon Van Arragon, with Dr. Geoff Holroyd (Chair Beaverhill Bird Observatory), Helen Trefry (Board Member and Workshop organizer), banders Kevin Methuen and Sara Pearce Meijerink, and volunteer Luke Zhou (Photo credit: Helen Trefry)

Though this workshop was in its second year, it does not yet have a reliable source of funding. This workshop is offered free to participants to allow individuals who love nature but come from any background to participate. If you are interested in helping to sponsor a Young Ornithologist to attend next year's workshop, contact Helen Trefry at helentrefry@gmail.com. A \$400 donation covers the cost of one participant attending the workshop.

Thank you once again to guest speakers Geoff Holroyd, Brenda Dale, David Lawrie, Helen Trefry, Gerald Romanchuk, Kim Blomme, and Irene Crosland. A huge thank you to Helen Trefry for meal planning and groceries for the entire event, and thank you to Irene for dessert! Thank you to Geoff Holroyd for helping Helen organize this workshop and for your expertise.

This is a shortened version of the summer report. You can find the full version on our new website: <http://beaverhillbirds.com/media/1649/2017-summer-report.pdf>

Fall Report

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 0°C, 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 2. 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

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 bandiversary. ☺

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.

Owl Monitoring



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

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 awareness 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 Kevin 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 several groups visit the lab this fall for songbird banding. Laurie Hunt's biology class from NAIT joined us, and Chris Olsen's class visited from Lakeland College in Vermillion. A girl guide 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 early 2018.

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.

If you are interested in reading more about our fall activities, please see the full report here: <http://beaverhillbirds.com/media/1676/2017-fall-report.pdf>

Weekly Updates

BBO's assistant biologists completed a banding summary each week to keep you up to date on our activities at the observatory. These updates were a great way for the public to monitor our progress through the field season and find out when the migrants were arriving. Be sure to follow us on Facebook and Twitter where we post these updates when they are hot off the presses in 2018. To view weekly updates from 2017, visit the banding summaries page of our website: <http://beaverhillbirds.com/updates/banding-summaries/>



Intern Reports

The BBO was fortunate to have fourteen student interns in 2017. Four interns monitored Tree Swallow nest boxes, two monitored House Wren nest boxes, two conducted breeding bird surveys, two monitored bats, one conducted butterfly surveys along a standardized route, one conducted marsh bird surveys, and two assisted with owl monitoring and interpretation . Each group of interns had a mentor, who volunteered their time to ensure each project was successful. Board member, Laurie Hunt, organized the BBO internship program, which was funded by SCiP (Serving Community internship Program). These interns allowed the Observatory to complete many more projects than the staff would be able to do on their own, which we are very grateful for.

Intern reports produced in 2017 can be viewed on our website:
<http://beaverhillbirds.com/publications/student-interns/>



Willet Newsletters

The Willet is the official newsletter of the Beaverhill Bird Observatory. Each newsletter contains information about upcoming events, stories from the field, and more. Usually three editions are produced and sent out to BBO members each year. In 2017, the 3 issues of the Willet were once again produced by BBO board member Helen Trefry. If you would like to read editions of the Willet from 2017, click the following link:

<http://beaverhillbirds.com/publications/the-willet/>





Beaverhill Bird Observatory Society

Financial Statements

December 31, 2017

Beaverhill Bird Observatory Society

Statement of Operations

For the year ended December 31, 2017

	2017	2016
Revenues		
Grants	\$ 83,721	\$ 41,725
Casino	41,684	-
Donations	18,738	14,399
Presentations and talks	12,510	6,668
Events	4,590	4,260
Memberships	1,662	1,335
Miscellaneous	290	474
Casino interest income	279	-
	163,474	68,861
Expenditures		
Salaries	109,983	96,674
Depreciation	6,862	8,192
Travel	5,952	11,488
Small equipment	3,144	3,305
Young Ornithologists' Workshop	2,388	1,762
Office expenses	2,073	1,944
Conference expenses	1,948	675
Bursaries	1,900	2,000
Events	1,750	1,324
Laboratory supplies	1,586	2,078
Occupancy costs	1,050	728
Bank charges	495	355
Repairs and maintenance	216	1,224
Licenses, dues and memberships	78	-
	139,426	131,749
Net income (loss)	24,048	(62,888)
Unrestricted net assets, January 1	70,000	132,888
Unrestricted net assets, December 31	94,048	70,000

Beaverhill Bird Observatory Society

Statement of Financial Position

As at December 31, 2017

	<u>2017</u>	<u>2016</u>
Assets		
<i>Current assets:</i>		
Cash	\$ 51,974	\$ 25,074
Restricted cash - casino	48,063	42,541
GICs	25,225	35,000
Restricted GIC - casino	-	31,000
Accounts receivable	7,970	7,235
Prepaid expenses	270	270
Goods and services tax receivable	190	654
	<u>133,692</u>	<u>141,774</u>
Property and equipment	<u>17,131</u>	<u>22,993</u>
	<u>150,823</u>	<u>164,767</u>
Liabilities and net assets		
<i>Current liabilities:</i>		
Accounts payable	2,359	7,546
Deferred grant income	23,154	14,275
Current portion of deferred casino income	<u>31,263</u>	<u>41,684</u>
	56,775	63,504
Deferred casino income	<u>-</u>	<u>31,263</u>
	56,775	94,767
<i>Net assets:</i>		
Unrestricted net assets	<u>94,048</u>	<u>70,000</u>
	<u>150,823</u>	<u>164,767</u>

Beaverhill Bird Observatory Society

Statement of Cash Flows

For the year ended December 31, 2017

	<u>2017</u>	<u>2016</u>
Operating Activities		
Net income (loss)	\$ 4,048	\$ 62,888)
<i>Items not affecting cash:</i>		
Depreciation	6,862	8,192
Deferred casino income	(41,684)	72,947
Deferred grant income	8,879	14,275
 <i>Changes in non-cash working capital:</i>		
Increase in accounts receivable	(735)	(425)
(Increase) decrease in prepaid expenses	-	2,336
(Increase) decrease in goods and services tax receivable	464	(372)
Decrease in accounts payable	(5,187)	(7,165)
Net cash provided by operating activities	<u>(7,353)</u>	<u>26,900</u>
 Investing Activities		
Redemption of GICs	66,000	35,363
Purchase of GICs	(25,225)	(35,000)
Purchase of restricted GICs - casino	-	(31,000)
Purchase of capital assets	(1,000)	-
Net cash used in investing activities	<u>39,775</u>	<u>(30,637)</u>
Net decrease in cash	32,422	(3,737)
Cash, January 1	<u>67,615</u>	<u>71,352</u>
Cash, December 31	<u>100,037</u>	<u>67,615</u>
 Cash is composed of:		
Cash	51,974	25,074
Restricted cash - casino	48,063	42,541