2011 ANNUAL REPORT

by

Lisa Priestley, Editor

January 2012

Acknowledgements

We thank Katie Calon and Meaghan Bouchard for their hard work and commitment over the 2011 field season. We would also like to thank the Golodrinas crew Maya Wilson, Sara Berk, Ghazi Mahjoub, and Elsie Shogren for working tireslessly on the Tree Swallows. Thanks also to Justin Proctor and and Cornell University for coordinating their work for the summer. We thank the Beaverhill Bird Observatory board of directors: Jim Beck, Christine Boulton, Al DeGroot, Geoff Holroyd, Richard Knapton, Chuck Priestley, James Sheppard, Bryn Spence, and Margaret Takats. We had many volunteers throughout the season and we thank them for their help (listed in the seasonal reports). Thank you to all the organizations that provided funding for our work in 2011: Alberta Conservation Association, Alberta Gaming and Liquor Commission (Casino funds), Alberta Sport Recreation Parks and Wildlife Foundation, Canada Summer Jobs, Community Spirit Program, Mountain Equipment Coop, Nature Canada (Charles Labatiuk Fund), Shell Environmental Fund, Student Career Placement Program, and TD Friends of the Environment. Donations (cash and in-kind) from various people are appreciated. We also thank all the volunteer owl surveyors, Hardy Pletz and Bob Gehlert for their dedication to our programs. We thank all the attendees to our Steaks and Saw-whets and BIG Birding Breakfast events and Janos Kovacs for providing the wonderful breakfast. Support from Edmonton Nature Club, Environment Canada, Nature Alberta and Bird Studies Canada is greatly appreciated.

An influx of water at Amisk Creek, melt from a record snow fall winter 2010-11.

Table of Contents

Volunteers replace the 20 year old roof of the lab.

2011 Audited Financial Report

We, the authorised internal auditors assigned to audit the 2011 Financial Records of the Beaverhill Bird Observatory, have examined the attached sheets (together with receipts and cancelled cheques associated with each debit, receipts issued for donations, monthly bank statements and records of deposits made at the bank); and we find that the records as presented are complete, balance and are in order.

Signature

Alan Hingston (BBO member)

Helen Trefry (BBO member)

Date: February 21 2012.

BEAVERHILL BIRD OBSERVATORY SOCIETY

Box 1418
Edmonton Alberta
T5J 2N5

Balance Sheet

As of 13th Period 20

1/6/2013
5:02:44 PM

Assets			
Current Assets			
Chequing Account		$18,022.97	
Casino Chequing Account		$9,608.46	
Casino Investment Account		$45,000.00	
US cash		$0.00	
Investments		$10,000.00	
Elson Investment Fund		$20,000.00	
Accounts Receivable		$7,850.00	
Interest Receivable		$0.00	
Deposits Paid		$0.00	
Property & Equipment			
Buildings	$4,236.32		
Donation Boxes	$541.00		
Computer	$2,471.43		
Banding Equipment	$2,350.00		
General Mis. Equipement	$4,899.89		
Display Board	$527.00		
Refrigerator	$2,000.14		
Solar Panels	$2,618.15		
Lab Equipment	$1,122.01		
Total Property & Equipment		$20,765.94	
Total Assets			$131,247.37
Liabilities			
Current Liabilities			
Accounts Payable	$0.00		
Deposits on account	$0.00		
Total Current Liabilities		$0.00	
Payroll Liabilities			
Income Tax Deductions	$2,125.55		
Income Tax Deductions for Casi	$1,800.00		
CPP Payable	$857.24		
CPP Payable Casino Account	$0.00		
EI Payable	$465.53		
E I Payable Casino Account	$0.00		
Workers' Compensation Payable	$0.00		
Vacation Payable	$0.00		
Total Payroll Liabilities		$5,248.32	
exchange		$0.00	
Total Liabilities			$5,248.32
Equity			
Retained Earnings		$68,323.40	
Current Year Earnings		$56,675.65	
Historical Balancing		$1,000.00	
Total Equity			$125,999.05
Total Liability & Equity			$131,247.37

BEAVERHILL BIRD OBSERVATORY SOCIETY

Box 1418
Edmonton, Alberta
T5J 2N5

Profit & Loss Statement

13th Period 2011

1/6/2013
5:02:58 PM

	Selected Period	% of Sales	Year to Date	% of YTD Sales
Income				
GRANTS				
Alta Govt - Stop	$0.00	NA	$2,450.00	1.3%
Charles Labatiuk Fund	$0.00	NA	$5,000.00	2.7%
Community Spirit Program of AB	$0.00	NA	$13,742.64	7.5%
Canadian Govt. - SCPP	$0.00	NA	$5,517.00	3.0%
Science Hor. - Environment Cana	$0.00	NA	$12,000.00	6.6%
Bird Studies Canada	$0.00	NA	$75.00	0.0%
ACA	$0.00	NA	$3,000.00	1.6%
ACA Stewardship Project	$0.00	NA	$16,950.00	9.3%
Total GRANTS	$0.00	NA	$58,734.64	32.3%
Memberships	$0.00	NA	$715.00	0.4%
TALKS AND PRESENTAIONS	$0.00	NA	$1,667.46	0.9%
Mis. Income	$0.00	NA	$1,640.64	0.9%
Donations				
General donation	$0.00	NA	$10,572.00	5.8%
Donations Saw-whet owl monitor	$0.00	NA	$326.55	0.2%
Alberta Owl Surveys	$0.00	NA	$786.48	0.4%
Raptor Telemetry Project	$0.00	NA	$30,350.00	16.7%
Total Donations	$0.00	NA	$42,035.03	23.1%
Interest	$0.00	NA	$90.00	0.0%
Casino Account Interest	$0.00	NA	$79.99	0.0%
GST Refund	$0.00	NA	$200.48	0.1%
GST Refund Casino	$0.00	NA	$215.32	0.1%
Sales				
Pancake Breakfast	$0.00	NA	$95.00	0.1%
Steaks and Saw-whets Event	$0.00	NA	$1,821.00	1.0%
Total Sales	$0.00	NA	$1,916.00	1.1%
Inventory Assets from Grants	$0.00	NA	$2,723.64	1.5%
Casino Income	$0.00	NA	$72,070.24	39.6%
Total Income	$0.00	NA	$182,088.44	100.0%
Cost of Sales				
Gross Profit	$0.00	NA	$182,088.44	100.0%
Expenses				
Office Expense				
Mail Box Rental	$0.00	NA	$194.25	0.1%
Printing	$0.00	NA	$3,019.00	1.7%
Telephone	$0.00	NA	$383.51	0.2%
Bank Charges	$0.00	NA	$72.50	0.0%
Miscellaneous Expenses	$0.00	NA	$1,353.12	0.7%
Office Expenses	$0.00	NA	$284.31	0.2%
Total Office Expense	$0.00	NA	$5,286.69	2.9%
Supplies	$0.00	NA	$2,910.79	1.6%
Event Expenses	$0.00	NA	$98.70	0.1%
Food	$0.00	NA	$1,034.02	0.6%
Repairs & Mntce	$0.00	NA	$457.76	0.3%
Lab - Purchases for Housing	$0.00	NA	$262.48	0.1%
Bands & Equipment	$0.00	NA	$2,412.50	1.3%
Dues & Subscriptions	$0.00	NA	$30.00	0.0%
Property Taxes	$0.00	NA	$148.58	0.1%
WCB Expense	$0.00	NA	$200.00	0.1%

BEAVERHILL BIRD OBSERVATORY SOCIETY

Profit & Loss Statement

13th Period 2011

1/6/2012
5:03:58 PM

	Selected Period	% of Sales	Year to Date	% of YTD Sales
Accommodations	$0.00	NA	$2,868.76	1.6%
Mileage	$0.00	NA	$7,413.00	4.1%
Travel Expenses	$0.00	NA	$850.96	0.5%
Payroll				
Wages	$0.00	NA	$38,600.00	21.2%
Contract Work Others	$0.00	NA	$1,303.20	0.7%
Contract Work Exec. Director	$0.00	NA	$3,750.00	2.1%
Vacation Pay Expense	$0.00	NA	$1,064.00	0.6%
Employer Expenses	$0.00	NA	$2,805.22	1.5%
Owl Projects	$0.00	NA	$3,596.21	2.0%
Transmitters for Owl Projects	$0.00	NA	$24,015.02	13.2%
AB Noct. Owl Survery Expenses	$0.00	NA	$860.03	0.5%
Casino Expense Accounts				
Bank S/C Casino Account	$0.00	NA	$45.00	0.0%
Education Alberta Expenses	$0.00	NA	$736.87	0.4%
Contract Salary Casino Funds	$0.00	NA	$24,000.00	13.2%
Insurance - Liability & Pro.	$0.00	NA	$663.00	0.4%
Total Expenses	$0.00	NA	$125,412.79	68.9%
Operating Profit	$0.00	NA	$56,675.65	31.1%
Other Income				
Other Expenses				
Net Profit / (Loss)	$0.00	NA	$56,675.65	31.1%

SEASONAL REPORTS

Beaverhill Bird Observatory
Spring Report 2011

Introduction

The 2011 banding season staff included myself, Katie Calon, and returning banding assistant Meaghan Bouchard. It is great to have two experienced staff members on site, familiar with all the ins and outs of the programs BBO participates in. May 1st was our set up day for the migration nets, standard mist-netting started on May 2nd.

The winter of 2010/2011 had a lot of snow, more than we have seen in recent years. This resulted in a lot more water in and around the Beaverhill Lake Natural Area, especially compared to last year when it bone almost dry. This spring the water was actually flowing from Lister Lake into Beaverhill Lake, and the hiking trails leading out the Weir required rubber boots to access without soaking your feet. The Kallal field on the way to the Natural Area was deep enough to house a large quantity of ducks once again. We look forward to seeing if the increase in water impacts the number or types of birds we see in the nets this year.

Songbird Migration Monitoring

Songbird Migration Monitoring started on May 2nd and ran through to June 9th. Over the course of the spring banding period, a total of 412 birds of 40 different species were captured in 1884 net hours, yielding a total of 21.87 birds/100 net hours (Table 1). It does not appear as though the increase in water this year resulted in an increased number or diversity of birds. A list of all birds banded (total 241), repeat captured birds (total 89), returning birds (total 38), and other captures (total 44) is presented in Table 2.

The nets were set for 1884 net hours out of a possible 3120 (60%). Poor weather conditions (rain, wind) prevented banding or reduced net hours on 6 days. Staff days off accounted for 7 days of banding lost, and unfortunately no qualified volunteers were found to cover these days. A large number of the net hours (6 hours per day) were lost due to the fact that the aerial net (net 43X) was not run this spring at all (damaged).

The top five species captured during Spring Migration Monitoring included; Least Flycatcher (117), Yellow Warbler (57), Clay-coloured Sparrow (49), House Wren (26), and Swainson's Thrush (22). This accounted for 66% of all captures during spring migration monitoring. The top five banded birds included; Least Flycatcher (59), Clay-coloured Sparrow (38), Swainson's Thrush (21), House Wren (17), and American Robin (14). This accounted for 62% of all banded birds during spring migration monitoring.

Table 1. Ten year trends for bird captures and net hours at the BBO.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Birds Captured	629	950	754	532	276	242	408	382	500	497	412
Birds Banded	472	740	546	424	196	169	318	288	351	333	241
Net Hours	1756	2569	2219	1809	1570	1615	1813	1828	1608	2016	1884
Capture Rate (birds/100 net hours)	35.83	36.98	33.98	29.41	17.46	14.98	22.84	20.9	31.09	24.65	21.87
Species Captured	39	55	44	38	32	31	44	38	39	38	40

Table 2. Birds caught in mist nets at Beaverhill Bird Observatory Spring 2011

Species	Banded	Repeat[1]	Return[2]	Foreign[3]	Other[4]	Total
Alder Flycatcher	2	0	0	0	0	2
American Goldfinch	1	0	1	0	0	2
American Redstart	2	0	0	0	0	2
American Robin	14	0	0	0	1	15
American Tree Sparrow	1	0	0	0	0	1
Baltimore Oriole	6	9	3	0	2	20
Black-capped Chickadee	6	0	0	0	3	9
Blackpoll Warbler	1	0	0	0	0	1
Brown Creeper	1	0	0	0	0	1
Brown-headed Cowbird	6	3	3	0	2	14
Chipping Sparrow	1	0	0	0	0	1
Clay-coloured Sparrow	38	6	0	0	5	49
Eastern Phoebe	2	0	0	0	1	3
Gray Catbird	2	0	0	0	0	2
Gray-cheeked Thrush	1	0	0	0	0	1
Hairy Woodpecker	1	1	0	0	0	2
Hermit Thrush	3	0	0	0	0	3
House Wren	17	4	0	0	5	26
Least Flycatcher	59	36	13	0	9	117
Lincoln's Sparrow	1	0	0	0	0	1
Magnolia Warbler	1	0	0	0	0	1
Mourning Warbler	3	0	0	0	0	3
Myrtle Warbler	7	0	0	0	0	7
Olive-sided Flycatcher	1	0	0	0	0	1
Orange-crowned Warbler	1	0	0	0	0	1
Red-breasted Nuthatch	1	0	0	0	0	1
Rose-breasted Grosbeak	1	0	0	0	0	1
Ruffed Grouse	0	0	0	0	1	1
Sharp-shinned Hawk	0	0	0	0	1	1
Slate-colored Junco	2	0	0	0	0	2
Song Sparrow	4	3	0	0	5	12
Swainson's Thrush	21	0	0	0	1	22
Tennessee Warbler	2	0	0	0	0	2
Tree Swallow	1	0	2	0	0	3
Veery	2	0	1	0	0	3
Warbling Vireo	1	0	2	0	0	3
White-crowned Sparrow	10	0	0	0	3	13
Willow Flycatcher	2	0	0	0	0	2
Yellow Warbler	12	27	13	0	5	57
Yellow-bellied Flycatcher	4	0	0	0	0	4
Total	241	89	38	0	44	412

1 Banded recently (within 90 days) at the BBO.
2 Banded at the BBO > 90 days prior to recapture (e.g. in a previous year).
3 Banded at a location other than the BBO.
4 Caught in a mist-net but not banded (e.g. escaped net).

Tree Swallows

For the 2011 Tree Swallow season, the Golondrinas de las Americas project once again sent students to the BBO to conduct detailed studies on the three swallow grids. The entire contingent of Golondrinas students that were working in Canada for this summer (8 total!) arrived on May 16th, they stayed in Tofield and studied and trained up on the various protocols on the 17th, 18th, and 19th. After this, three students headed off to the site in Saskatchewan, and two headed up to Prince George (including 2010 season's Justin Proctor) to be joined by another. Three students stayed behind at BBO, and we welcomed Maya Wilson, Sara Berk, and Ghazi Mahjoub to the Nuthatch Nest. Part way through the season Ghazi returned home, and his replacement, Elsie Shogren came to stay with us. Sara had actually been on site last year, as she was part of the Saskatchewan crew for 2010. Nice to see her again!

The Canadian Golo crews, learning egg metabolism protocols

The entire crew, before heading to their different sites

The "Golo crew" were responsible for checking the Tree Swallow boxes in early spring regularly to determine the stage of nest development. Once the first egg was laid in a nest, it was visited daily to monitor the rate of egg laying. In almost every case, a single egg was laid every day until the final clutch size was reached (generally 5 – 8 eggs per nest). In one unusual nest, four eggs were laid at a rate of one per day, and then three of the eggs disappeared (predation?). A single egg remained in the nest for the next 10 days, and then laying resumed as normal with 5 total eggs in that clutch.

By the end of spring migration monitoring, most of the Tree Swallows were either finishing laying eggs or had started incubating their clutch. House Wrens and Mountain Bluebirds had also claimed their boxes and were well on their way with nesting and incubating.

Other Banding

While there was one large Great-horned Owl chick seen at the nest in the Tofield graveyard this year, the BBO staff were unfortunately unable to attend the banding. No other raptor nests were found or banded.

Francis View Point nest boxes were checked this spring, and many nests were found, including Mountain Bluebirds, House Wrens, Tree Swallows, a Barn Swallow nesting in the blind. We are looking forward to monitoring these nests through MAPS and banding young wherever possible!

Other Work

Meaghan and I decided that this year the old Raven's Roost cabin could really use a facelift, so we redecorated the interior. Repainting the inside, adding trim, and placing some tile-like linoleum on the floor really helped to spruce it up! A huge thanks to Al for replacing the old glass windows on May 28th with ones that we can open to get some airflow. We are still looking for ideas on how to improve the look of the ceiling which is still just exposed particle board. Let us know if you have any thoughts on this!

The lab also benefited from the donation of two very nice leather couches from Don and Tamara Hauglum. A huge thanks for these! They are very comfortable and a significant upgrade from the old couches that have been here for years and years. Many rainy days were spent doing data entry on these couches, and they have supported more than a few afternoon naps…

Interpretation

The Junior Forest Warden crew came out once again, this year on May 22nd. There were a total of 16 people and luckily there were enough birds for each person to release one. It turned out to be a good banding day and a great demonstration of the banding process. It has been neat for me to have this regular group come out every year, as I get to watch the kids grow. There are certainly some budding young naturalists in this crowd!

The Big Birding Breakfast was once again a fantastic event with a great turn out. We were able to catch the crowd-pleasing Baltimore Orioles, it was great to get three in one net check, all in the same net! We also caught Tennessee Warblers, Least Flycatchers, House Wrens, Swainson's Thrushes, Yellow Warblers, Clay-coloured Sparrows, Brown-headed Cowbirds, a Hairy Woodpecker, and another fun bird, the Gray-cheeked Thrush! The day was a great success, and visitors were even taken out to the swallow grids with the Golo crew to get a look at the nests before heading home. Huge thank you to all the volunteers that come out to put on this event, it is always a highlight for the staff.

Bacon, crepes, good company, and an oriole. It doesn't get any better than this!

Baillie Birdathon

The BBO staff and the Golo crew teamed up on May 31st to do our Baillie Birdathon for the year. We started the day during our banding hours, including everything we caught and heard around the lab. In between net checks we took a few short walks around the natural area to try and up the total number of species. Afterwards, we headed down to the Amisk Creek bridge so that we could add the Cliff Swallows and other waterbirds nearby (including a Rusty Blackbird!). We grabbed a quick lunch at Subway, which we ate behind the Tofield Nature Centre so we could add the Purple Martins and Common Grackles to our list. Then a quick drive down to the Tofield gravel pits south of town for shorebirds. And shorebirds there were! American Avocets, American Golden Plovers, Willets, Godwits, Dowitchers oh my! After the long distance scope IDing of the shorebirds, we headed to Islet Lake in the Blackfoot to look for species that like a little deeper water, including the Common Loon and Red-necked Grebes. We had to hit Elk Island National Park as well, we needed some big forest species like the Pileated Woodpecker. A non-bird highlight for the day included the big Bison sleeping on the sandy shore of Astotin Lake! All in all, it was a very busy and very successful day, with a total of 79 species. It was also a great way to show the Golo crew a bunch of the birding hotspots in the area.

American Avocet through the scope

Other Wildlife

While repairing Tree Swallow nest boxes early in the spring, we were surprised to disturb to very happy, fat Red-backed Voles that had taken up residence in one of the boxes that had fallen on the ground. Unfortunately for them, we put the box back up for the birds, and they had to relocate.

We are quite happy with the weasel that has taken up residence in the lab over the spring, not only is he a neat animal to get to see occasionally, he has also fully eliminated the mouse population in the lab!

Myself, volunteer Erin, and Maya and Sara were lucky to come across a small deer fawn hiding near one of the net lanes in the late spring when we were setting up the nets for the Weir station. Though there has been quite a bit of evidence of the moose left around the lab, we have yet to see one this year. Other species we have seen include porcupine, Northern Flying Squirrel, and one day on a hike out to the Weir, a badger! I was super surprised because I have never seen one out here before, though Dick Dekker makes mention of them in his book on Beaverhills Lake.

Visitors/Volunteers

Throughout the spring we have had a number of visitors. Our most regular volunteer has been Erin Low, who has been staying for a few days at a time and is very keen on learning the banding process. Thanks for all your help Erin! Anna Daku and her young son Micah with their dog Finn made it out to the lab three times during the spring, always great to have experienced help and to see familiar faces! Irene and Onyx have been out a number of times, sometimes catching the banding and sometimes just enjoying a walk through the natural area. Treva and sons were out as well for a visit, as were Maureen Mulherron and Brenna Bouchard. Todd Mahon and Marie-Christine Bélair were able to make it out for one day. Volunteer help from Thera and Amir from Edmonton was appreciated, and we loved hearing about the Calgary Bird Banding Society and their station from Mike who came up to band with us for a day and see Beaverhill.

Acknowledgements

Many thanks to the board of directors for all the work they do to maintain the BBO and find funding so that we can continue to work here. 2011 was a great season, thanks for all that you do!

Appendix A.
Top 5 Species

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
#1 Captured Species	Least Flycatcher (174)	Myrtle Warbler (162)	Least Flycatcher (68)	Least Flycatcher (69)	Clay-coloured Sparrow (72)	Least Flycatcher (84)	Least Flycatcher (70)	Least Flycatcher (131)	Least Flycatcher (117)
#2 Captured Species	Myrtle Warbler (149)	Chipping Sparrow (59)	Yellow Warbler (47)	Yellow Warbler (32)	Least Flycatcher (70)	Yellow Warbler (37)	Clay-coloured Sparrow (66)	Clay-coloured Sparrow (81)	Yellow Warbler (57)
#3 Captured Species	Yellow Warbler (119)	Clay-coloured Sparrow (51)	Clay-coloured Sparrow (27)	Clay-coloured Sparrow (23)	Myrtle Warbler (35)	Brown-headed Cowbird (33)	Myrtle Warbler (33)	Myrtle Warbler (38)	Clay-coloured Sparrow (49)
#4 Captured Species	White-throated Sparrow (48)	Least Flycatcher (31)	Swainson's Thrush (20)	Swainson's Thrush (19)	Yellow Warbler (25)	Myrtle Warbler (27)	Swainson's Thrush (25)	Yellow Warbler (37)	House Wren (26)
#5 Captured Species	Clay-coloured Sparrow (40)	Swainson's Thrush (48)	Myrtle Warbler (19)	House Wren (17)	House Wren (22)	Swainson's Thrush (25)	Yellow Warbler (18)	House Wren (32)	Swainson's Thrush (22)
% of total Captures	70%	66%	66%	66%	55%	55%	43%	64%	66%

Summer Report 2011

Meaghan Bouchard

Introduction

The summer staff for the 2011 summer season consisted of head bander Katie Calon and assistant bander Meaghan Bouchard. They were responsible for running three stations for the Monitoring Avian Productivity and Survivorship (MAPS) Program, which consists of constant effort mist netting and point counts. The program was run from June 10th to July 31st this year.

Other summer activities included nest searches around the natural area, and banding young out of nests and nests boxes. The *Golondrinos de las Americas* swallow project crew was also monitoring the three Tree Swallow grids.

Monitoring Avian Productivity and Survivorship (MAPS) Program

The MAPS program has been in operation since 1989, and was created by the Institute for Bird Populations with the goal of monitoring the vital rates and population dynamics of North American land birds (http://www.birdpop.org/programs.htm). The BBO runs three MAPS stations (BLAB, PARK and WEIR) for 5 rounds each over the summer. Each station has ten nets (12m long, 30mm mesh) and 9 point count stations. Every ten day cycle the ten-minute point counts are done, and the nets are opened at sunrise for 6 hours (for a total of 60 net hours) at each station.

Mist Netting

We were able to complete 100% of the 900 hours for all stations this year. Mist netting was only conducted during standard weather conditions: temperature between 0 °C and 27 °C, wind speed less that 20 km/h (less than 3 on the Beaufort scale) and no precipitation. During several rounds we were interrupted by inclement weather, but were able to make up the lost net hours within the same round.

BLAB

The BLAB station is located around the banding station (Lat 52 22 50 Long 112 31 39), and has been operating since 1989. A total of 92 birds of 10 different species were captured at this station, for a capture rate of 30.7 birds/100 net hours.
Banding occurred on June 21, June 27, July 2, July 12 (for 4.25 hours) and July 17 (for 1.75 hours), and July 21.

Male and female Baltimore Oriole

PARK

The PARK station is located south of the banding station (Lat 53 22 34 Long 112 31 45), and has been in operation since 1996. A total of 42 birds of 7 different species were captured at this station, for a capture rate of 14.0 birds/100 net hours.
Banding occurred on June 16 (for only one hour), June 22 (for the remaining 5 hours), June 30, July 11, July 23, and July 31.

WEIR

The WEIR station is located east of the lab (Lat 53 22 48 Long 112 30 19), and has been in operation since 1994. A total of 38 birds of 5 different species were captured at this station, for a capture rate of 12.7 birds/100 net hours.
Banding occurred on June 14, June 23, July 3, July 18 (for one hour) and 19 (for the remaining 5 hours), and July 30.

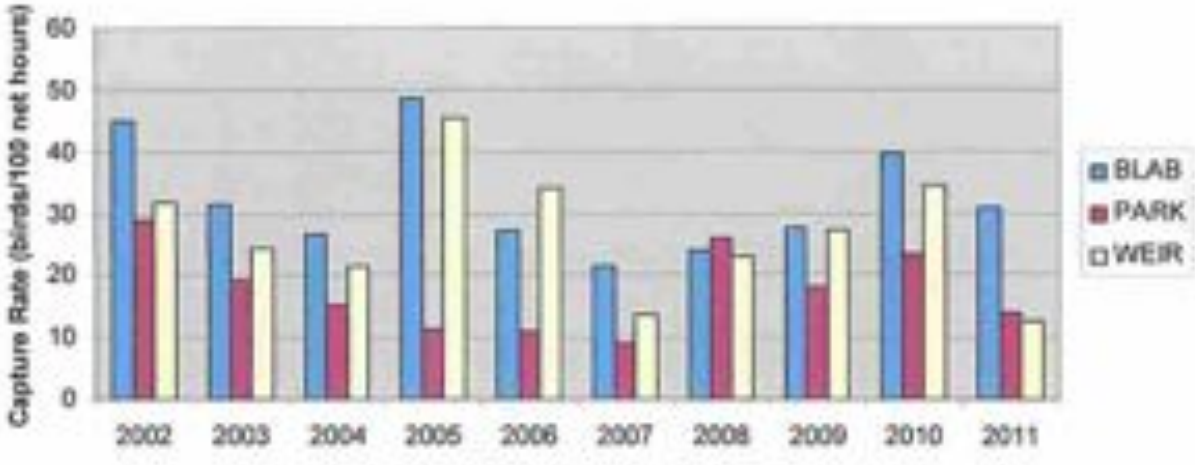
The commute to the WEIR station

All stations

A total of 172 birds of 14 different species were captured in the mist nets, for a total capture rate of 19.1 birds/100 net hours. The most frequently captured species by far was the Least Flycatcher, representing 77.9 % of the birds captured, followed by the American Robin (4.7%) and Brown-headed Cowbird (2.3%). For a breakdown of species caught per station, see Appendix 1.

One notable catch at PARK was a second year female Gray Catbird caught on July 11 with a brood patch (band number 8051-84222). Only one other Gray Catbird has been caught during MAPS at the BBO (an after second year of unknown sex in 2009 at the WEIR station, band number 1581-43356), and it is exciting to see evidence that they are breeding onsite.

Figure 1. Ten year trend for capture rates at MAPS stations



Point Counts

Hatch year Least Flycatcher

Point counts were also conducted at nine locations within each of the MAPS stations. At each point count observers listened for 10 minute periods and recorded all birds heard within that time, noting the approximate distance of the bird from the observer, the direction of the bird, as well as which time interval the bird was heard singing (Interval 1 = 1-3 minutes, Interval 2 = 3-5 minutes, and Interval 3 = 5-10 minutes). The top species detected were Least Flycatcher (29.2 % of detections), Warbling Vireo (10.4%), Yellow Warbler (8.2%), Wilson's Snipe (5.7%) and Baltimore Oriole (5.0%). The list of species observed during point counts can be found in Appendix 2. Dates point counts were conducted are as follows:

BLAB: June 17, June 24, July 1, July 17, July 29,
PARK: June 17, June 24, July 1, July 17, July 29
WEIR: June 15, June 23, July 6, July 18 and 19, July 30

Golondrinas de las Americas

A Tree Swallow box equipped with a perch counter, RFID detector, and iButton temperature recorders

The *Golondrinas de las Americas* project sent out a crew again this year to monitor the three swallow grids in and around the natural area. The staff at Beaverhill this year included Sara Berk, Maya Wilson and Elsie Shogren, who were kept busy with 147 boxes to watch.

Boxes were steadily monitored over the summer, tracking nest development, egg laying, and chick hatching. Egg metabolism data was collected, and each chick was regularly weighed, had blood samples taken and were banded prior to fledging. Adults were also captured, had blood samples taken and were banded.

Additionally, hour long feeding observations were done in conjunction with perch counters on some boxes. Some new protocols this year included chick metabolism experiments using the entire brood instead of a single chick, and the use of RFID (Radio Frequency Identification) tags. The RFID tags were placed on the adult Tree Swallows' leg bands, and the detectors were placed at the nest box entrance. This allows the crew to record the exact number of visits by each individual bird to the nest box, and

may help determine which parent makes the most visits to the nest, or if any other adults come in to the box as well.

Overall, the T grid had similar productivity and capture rates to the previous 2 years. The S grid showed an increase in successful nest attempts and number of fledglings. The R grid had a similar number of nest attempts as previous years, but had a lower number of successful nests and fledglings than the last two years. For a summary of the Tree Swallow data, see Appendix 3.

Nest-side Banding

Natural Area

Two different specie's ground nests were banded in the natural area; two Clay-coloured Sparrow (CCSP) nests and a Savannah Sparrow (SAVS) nest. Other nests found included American Robin (AMRO), Blue-winged Teal (BWTE), Least Flycatcher (LEFL) and Mallard (MALL).

There were 11 of House Wren (HOWR) nests and 5 Mountain Bluebirds (MOBL) nests on the grids within the natural area (on the T, S or R grid).

Clay-coloured Sparrow nest

Francis Point/Elston Bluebird Trail/Rowan's Route

Of the boxes outside the natural area, there were nine Tree Swallow (TRES) nests, and 5 Mountain Bluebird nests. There was also one Barn Swallow nest with chicks in the blind at Francis Viewpoint.

One of the Tree Swallow boxes at Francis Viewpoint had an impressive 8 chicks that were banded, which was the most out of any monitored nests this summer.

Table 1. Nests monitored within the natural area, 2011

Species	Number of Young Banded	Outcome[1]
AMRO	-	Failed
BWTE	-	Failed
BWTE	-	Failed
CCSP	-	Failed
CCSP	2	Unknown
CCSP	4	Unknown
HOWR	7	Successful
HOWR	0 of 4	Successful
HOWR	7	Unknown
HOWR	7	Successful
HOWR	-	Unknown
HOWR	5	Unknown
HOWR	0 of 7	Successful
HOWR	-	Unknown
HOWR	4	Unknown
HOWR	-	Successful
HOWR	-	Unknown
LEFL	-	Failed
MALL	5 of 11 eggs hatched	Successful
MOBL	5	Unknown
MOBL	-	Unknown
MOBL	-	Unknown
MOBL	0 of 3	Successful
MOBL	6	Unknown
SAVS	4	Successful

Table 2. Nests monitored outside of the natural area, 2011

Species	Number of Young Banded	Outcome[1]
BARS	-	Unknown
MOBL	5	Unknown
MOBL	4	Unknown
MOBL	3	Successful
MOBL	-	Unknown
MOBL	6	Unknown
TRES	0 of 5	Unknown
TRES	7	Unknown
TRES	0 of 5	Unknown
TRES	5	Unknown
TRES	8	Unknown
TRES	-	Unknown
TRES	-	Failed
TRES	6	Unknown
TRES	7	Unknown

(1) Outcomes are defined as follows: Successful = chicks were capable of fledging on the last visit to the nest, Failed = evidence of predation, or still at the egg stage, or chicks no longer present and insufficient time had elapsed to allow them to fledge between visits, Unknown = chicks were incapable of fledging on last visit, but sufficient time had elapsed to allow them to fledge between visits

Other Wildlife

The wet winter and spring this year meant that Lister Lake had standing water all summer, and enough water that it was over the weir. This led to a large number of waterfowl and shorebirds occupying and nesting on the lake. Several species were seen around the water that were not recorded during point counts, including:

Black-crowned Night Heron
Blue Heron
Blue Winged Teal
Canvasbacks
Common Yellowthroat
Green Winged Teal
Marsh Wrens
Northern Harrier
Pintails
Redheads
Ringnecked Ducks
Ruddy Ducks
White Pelicans
Wilson's Phalarope
Yellow-headed Blackbird
Yellowleg Species

Other species observed included porcupine, northern flying squirrel, voles, coyotes and white-tailed and mule deer. Katie was also lucky enough to come across a young white- tailed deer fawn hiding on the ground while at WEIR on June 14.

Volunteers/Visitors

A number of visitors joined us out at the lab; we were pleased to have the following people stop by for a visit:

Irene and her dog Onyx
Geoff Holroyd
The Stauffer's

As well as many whose names we did not catch or that we knew of only by the presence of their vehicles in the parking lot. We hope they all enjoyed their visit, the birds, and will come back again soon!

Young fawn at WEIR

Appendix 1. Summary of species captured during the MAPS program for each banding location from June 10, to July 31, 2011.

	Banded			Repeat[1]			Return[2]			Other[3]			Grand Total			MAPS
SPECIES	BLAB	PARK	WEIR	BLAB	PARK	WEIR	BLAB	PARK	WEIR	BLAB	PARK	WEIR	BLAB	PARK	WEIR	TOTAL
American Robin	5	0	2	1	0	0	0	0	0	0	0	0	6	0	2	8
Baltimore Oriole	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Black-capped Chickadee	2	1	0	1	0	0	0	0	0	0	0	0	3	1	0	4
Brown-headed Cowbird	1	0	3	2	0	0	0	0	0	0	0	0	3	0	3	6
Downy Woodpecker	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	2
Gray Catbird	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Hairy Woodpecker	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
House Wren	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Least Flycatcher	33	16	15	18	5	4	9	9	10	11	4	0	71	34	29	134
Song Sparrow	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Veery	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	2
Warbling Vireo	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	4
Yellow-bellied Sapsucker	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Yellow Warbler	1	1	0	0	0	0	0	0	0	1	0	0	2	1	0	3
Total	**48**	**24**	**24**	**22**	**5**	**4**	**10**	**9**	**10**	**12**	**4**	**0**	**92**	**42**	**38**	**172**

1 Banded recently (within 90 days) at the BBO.

2 Banded at the BBO > 90 days prior to recapture (e.g. in a previous year).

3 Caught in a mist-net but not banded (e.g. escaped net).

Appendix 2. Summary of species observed during the MAPS point counts program for each station from June 10, to July 31, 2011.

Species	BLAB	PARK	WEIR	Grand Total
Alder Flycatcher	1	0	2	3
American Bittern	0	0	3	3
American Coot	4	0	15	19
American Crow	1	0	2	3
American Goldfinch	14	14	14	42
American Robin	11	8	12	31
Baltimore Oriole	16	10	23	49
Black-and-white Warbler	1	0	0	1
Black-billed Magpie	7	0	1	8
Black-capped Chickadee	10	0	2	12
Brown-headed Cowbird	17	12	19	48
Black Tern	1	0	0	1
California Gull	1	0	1	2
Canada Goose	0	2	4	6
Clay-coloured Sparrow	8	2	2	12
Cedar Waxwing	4	2	7	13
Cooper's Hawk	2	0	0	2
Common Raven	8	8	15	31
Eastern Pheobe	0	0	1	1
Franklin Gull	10	6	2	18
Gadwall	0	0	4	4
Great Horned Owl	0	0	3	3
Gray Catbird	0	0	2	2
Hairy Woodpecker	0	1	0	1
Hermit Thrush	0	1	0	1
House Wren	13	6	11	30
Least Flycatcher	93	104	89	286
Long-eared Owl	0	0	1	1
Lesser Yellowlegs	2	0	4	6
Marbled Godwit	0	0	2	2
Mallard	0	1	2	3
Mourning Dove	0	1	1	2
Northern Flicker	1	0	1	2
Northern Shoveler	1	0	0	1
Rose-breasted Grosbeak	0	0	4	4
Red-eyed Vireo	0	0	1	1
Red-necked Grebe	3	0	0	3
Ruffed Grouse	0	1	0	1
Red-winged Blackbird	10	12	17	39
Sora	2	4	10	16
Song Sparrow	1	1	3	5
Tree Swallow	13	0	0	13
Unknown Duck species	2	0	0	2
Veery	1	0	0	1
Warbling Vireo	34	27	41	102
Wilson's Snipe	18	14	24	56
Yellowbellied Sapsucker	0	2	3	5
Yellow Warbler	31	21	28	80
Grand Total	341	260	376	977

Appendix 3. Tree Swallow summary data for the T, S, and R grid for 2009 to 2011.

	2009	2010	2011	2009	2010	2011	2009	2010	2011
Grid	**T**			**S**			**R**		
Available boxes	49	49	49	50	50	50	48	48	48
TRES nest attempts	39	26	31	5	12	15	23	26	22
Boxes with successful TRES nests (%)	67.3	53.1	55.1	10.0	18.0	28.0	39.6	41.7	27.1
Failed TRES nests	6	0	4	0	3	1	4	6	7
Rate of TRES nest failure (%)	15.4	0.0	8.2	0.0	25.0	2.0	17.4	12.5	14.6
Avg TRES young/nest	5.7	4.5	4.8	4.2	4.4	5.1	4.2	4.8	5.1
Highest clutch size	7	7	8	5	7	7	6	7	7
Lowest clutch size	3	1	2	3	2	1	1	2	2
MOBL nests	1	2	1	2	1	1	1	5	3
HOWR nests	2	7	9	0	0	0	0	1	3
Adult TRES banded	64	59	20	7	18	11	27	43	16
Adult recapture rate (%)	39.1	54.2	67.2	14.3	27.8	52.2	14.8	41.9	44.8
Total TRES fledglings	187	118	139	21	40	71	80	96	61

Fall Report 2011

by

Lisa Priestley

December 2011

Songbird Fall Migration Monitoring

Fall migration at Beaverhill Bird Observatory in 2011 was the lowest ever, with only 701birds captured, a capture rate of19.1 birds/100 net hours (Table 1, Figure 1). A total of 3677.5 net hours were run, 65.5% of the total 5616 net hours that were possible. Most netting time missed was due to poor weather (rain and wind) in September.

Table 1. 2011 fall songbird banding results from Beaverhill compared to previous ten years.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Birds Captured	2095	1734	1315	975	1256	1969	1079	892	875	880	701
Birds Banded	1758	1464	1093	818	1089	1525	952	723	718	708	
Net Hours	3678.5	4173.8	3818.3	3228.5	2787.3	3476.0	3534.0	3399.5	3670.5	3189.5	3677.5
Capture Rate (birds/100NH)	56.9	41.2	34.4	30.2	45.1	56.6	30.5	26.2	23.8	27.6	19.1
Species Captured	56	62	57	60	59	63	52*	58*	51	60*	53

* includes Ruffed Grouse caught in net but not banded

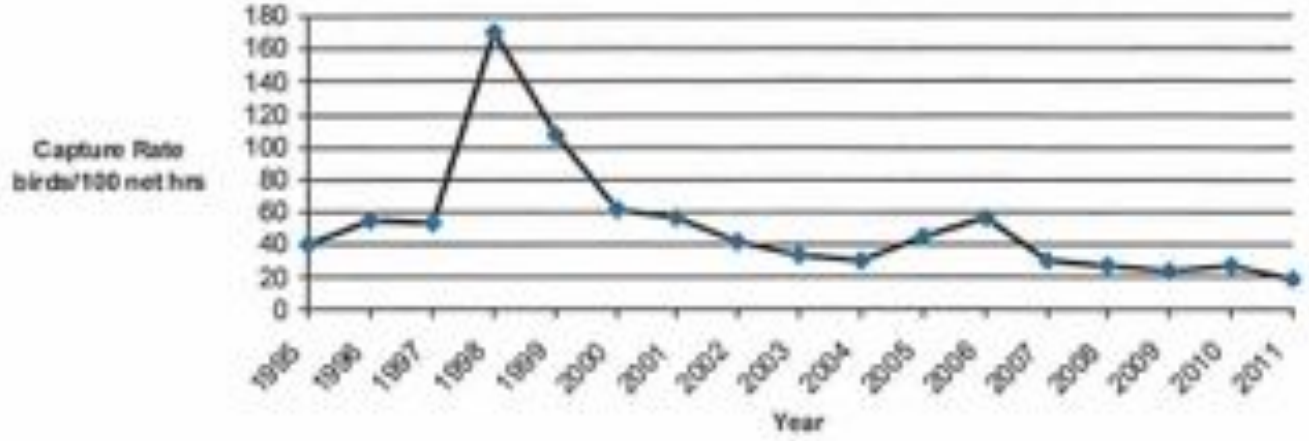


Figure 1. A comparison of fall capture rates (songbirds/100 net hours) between 1995 and 2011.

Top five species representing 66.6% of the captures were: Least Flycatcher (137), Myrtle Warbler (133), Slate-colored Junco (72), American Tree Sparrow (70), and Black-capped Chickadee (55). Very few Clay-colored Sparrows were captured, a species that is usually in the top five. Unusual species that were captured this fall were two Ruby-throated Hummingbirds (in one day), a Blue Jay, a Varied Thrush, four Gray Catbirds, and three Sharp-shinned Hawks. Despite the number of unusual species captured, there was low species diversity compared to other years.

Table 2. Birds caught in mist nets at Beaverhill Bird Observatory fall 2011.

Species	Banded	Recap	Foreign	Other	Total
Alder Flycatcher	3	0	0	0	3
American Goldfinch	2	2	0	0	4
American Redstart	2	0	0	0	2
American Robin	5	0	0	0	5
American Tree Sparrow	***58***	***4***	***0***	***8***	***70***
Black-and-White Warbler	1	0	0	0	1
Black-billed Magpie	2	0	0	0	2
Black-capped Chickadee	***16***	***35***	***0***	***4***	***55***
Blue-headed Vireo	2	0	0	0	2
Blue Jay	1	0	0	1	2
Blackpoll Warbler	3	0	0	0	3
Brown Creeper	4	0	0	0	4
Canada Warbler	1	0	0	0	1
Clay-colored Sparrow	15	2	0	2	19
Cedar Waxwing	1	0	0	0	1
Chipping Sparrow	1	0	0	0	1
Downy Woodpecker	2	2	0	0	4
Fox Sparrow	3	0	0	0	3
Gray Catbird	3	1	0	0	4
Hairy Woodpecker	1	1	0	0	2
Hermit Thrush	2	0	0	0	2
House Wren	2	0	0	0	2
Least Flycatcher	***118***	***14***	***0***	***5***	***137***
Lincoln's Sparrow	3	0	0	0	3
Magnolia Warbler	5	0	0	0	5
Mourning Warbler	3	0	0	0	3
Myrtle Warbler	***127***	***0***	***0***	***6***	***133***
Orange-crowned Warbler	32	1	0	2	35
Ovenbird	14	1	0	1	16
Philadelphia Vireo	1	0	0	0	1
Pine Siskin	1	0	0	0	1
Rose-breasted Grosbeak	1	0	0	0	1
Red-breasted Nuthatch	3	0	0	0	3
Ruby-crowned Kinglet	5	0	0	0	5
Ruby-throated Hummingbird	0	0	0	2	2
Savannah Sparrow	4	0	0	0	4
Slate-colored Junco	***65***	***3***	***0***	***4***	***72***
Song Sparrow	3	0	0	0	3
Sharp-shinned Hawk	3	0	0	0	3
Swainson's Thrush	9	0	0	0	9
Tennessee Warbler	21	0	0	1	22
Traill's Flycatcher	1	0	0	0	1
Varied Thrush	1	0	0	0	1
Warbling Vireo	4	0	0	0	4
White-breasted Nuthatch	1	1	0	0	2
White-crowned Sparrow	3	0	0	2	5
Willow Flycatcher	1	0	0	0	1
Wilson's Warbler	3	0	0	0	3
Western Palm Warbler	2	0	0	0	2
White-throated Sparrow	9	0	0	1	10
Yellow-bellied Flycatcher	1	0	0	0	1
Yellow-bellied Sapsucker	1	0	0	0	1
Yellow Warbler	14	4	0	2	20
Total	**589**	**71**	**0**	**41**	**701**

[1] Repeat indicates it was captured with the last 90 days at the bird observatory
[2] Return indicated it was captured over 90 days before at the bird observatory
[3] Other Captures include escaped birds, released without banding

Saw-whet Owl Migration

Beaverhill Bird Observatory

Northern Saw-whet Owl fall migration monitoring began on September 10 and was completed on November 7. A total of 53 nights were covered amounting to 1114.00 net hours. We caught 229 Saw-whet owls (capture rate of 20.6 owls/100 net hours) (Table 3, Figure 2). We had 224 unbanded Saw-whets, two recaptures within the season, one recapture from last year, and two foreign encounters). The foreign encounters are not that foreign, they were banded by one of our subpermittees, volunteer owl bander Bob Gehlert, at his banding station near Lindbrook (about 17 km west of our station at Beaverhill). Five Long-eared Owls were also captured (Sept. 10, Oct. 10,15,22 and Nov. 6). Up to six Long-eared Owls were observed flying around the lab at one time.

Table 3. Number of Northern Saw-whet Owls captured at Beaverhill Lake 2002-2010 (Sept 9- Nov 14).

Year	Number of Nights	Number of Net Hours	Number of Owls Captured	Number of Owls/ 100 Net Hours
2002	55	953.00	142	14.9
2003	48	753.00	150	19.9
2004	59	996.00	299	30.0
2005	37	600.00	135	22.5
2006	42	551.50	149	27.0
2007	50	675.00	184	27.3
2008	47	669.50	131	19.6
2009	48	806.50	127	15.8
2010	57	1067.00	304	28.5
2011	53	1114.00	229	20.6

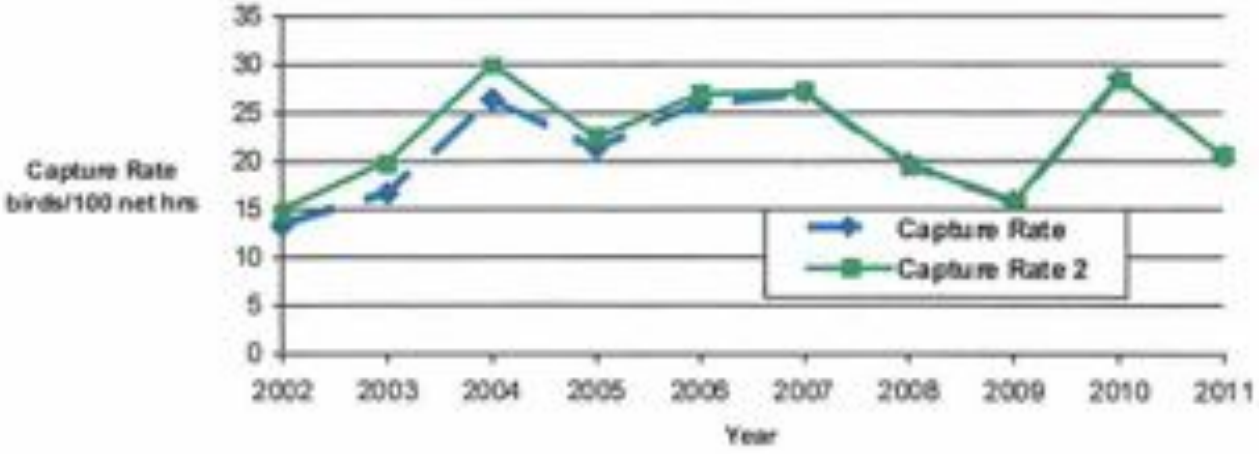


Figure 2. A comparison of capture rates (Saw-whets/100 net hours) between 2002 and 2011: capture rate (all captures), capture rate 2 (September 9 to November 14 only).

Other species of animals that were observed include up to three Northern Flying Squirrels and a large Porcupine that came to the lab each night in search of bird seed under the feeder. A Short-tailed Weasel was also observed a number of times, and we are hoping he makes the lab his home again this winter to keep the mice in check.

Pletz Park

Hardy Pletz spent 18 nights between September 16 and November 1 trapping for Saw-whets at his acreage Pletz Park, south of Millet, and caught XX Saw-whet Owls (XXX owls/100 net hour).

Gehlert's Grove

Bob Gehlert ran his third year of Saw-whet monitoring at Gehlert's Grove near Lindbrook (west of Tofield) with 4 nets. Bob banded on 36 nights between September 15 and October 30 for 443 net hours and caught 69 Saw-whet Owls (capture rate of 15.6 owls/100 net hours).

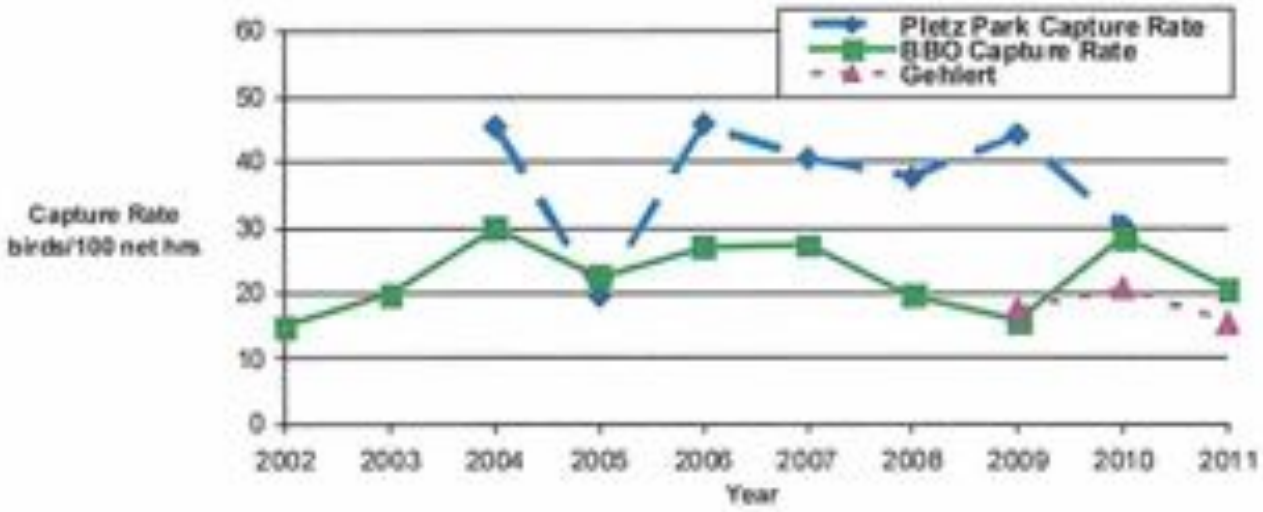


Figure 3. Comparison of Saw-whet Owl capture rates of Pletz Park, BBO, and Gehlert's Grove.

Interpretation

Large numbers of visitors came out to Beaverhill throughout the fall to observe the banding. We had homeschoolers, University of Alberta students, and other groups come to see saw-whet banding. Our Steaks and Saw-whets event was very successful with 54 people on Friday and 38 on Saturday. We also had a banding demonstration at the John Janzen Nature Center in September (free admission day) with almost 2000 visitors.

Natural Area Work

The trails became overgrown again and were mowed just before Steaks and Saw-whets event. We have funding for gravelling the road from the main gravel road to the public parking lot. This will be completed in the spring.

Aeknowledgements

Funding and in-kind support from the following agencies is greatly appreciated: Alberta Conservation Association, Alberta Sustainable Resource Development, Environment Canada (Canadian Wildlife Service), Environment Canada Science Horizons, Nature Canada (Charles Labatiuk Endowment Fund). Our work here at Beaverhill Bird Observatory would not be possible without the wonderful staff and volunteers that spend time checking nets, banding birds, and keeping data. First we need to thank Katie Calon and Meaghan Bouchard for conducting the songbird migration monitoring in August. Katie and Meaghan continued songbird monitoring and tag-team saw-whet owl banding in September. Lisa and Meaghan ran saw-whet owl monitoring till November 7. We really appreciate all the volunteers for their help!! Songbird banding volunteers were (# of days): Geoff Holroyd (6), and Saw-whet Owl volunteers were: Jim and Barb Beck (5), Gerry Beyersbergen (3), Geoff Holroyd (9), Chuck Priestley (3), and Bryn Spence (1). Thanks to Steaks and Saw-whets volunteers. We also thank Hardy Pletz and Bob Gehlert for volunteering their time to run Saw-whet owl monitoring at their acreages, and share their data. A BIG THANKS TO KATIE CALON FOR ALL HER HARD WORK, she will be missed!!