



**Beaverhill Bird Observatory  
Spring Report 2012**

by

**Meaghan Bouchard**

**July 2012**

## Songbird Migration Monitoring

The staff at the Beaverhill Bird Observatory for the 2012 season consisted of Meaghan Bouchard and Amélie Roberto-Charron. Migration monitoring started on May 1<sup>st</sup> and ran through until June 10<sup>th</sup>. A total of 459 birds were captured during 1996.5 net hours, resulting in a capture rate of 23.0 birds per 100 net hours. For a breakdown of captures by species and type of capture see Table 1.

Table 1. Birds caught in mist nets at Beaverhill Bird Observatory Spring 2012.

Species	Banded	Repeat <sup>1</sup>	Return <sup>2</sup>	Foreign <sup>3</sup>	Other <sup>4</sup>	Total
American Goldfinch	6	0	2	0	0	8
American Robin	5	1	3	0	0	9
Baltimore Oriole	13	13	1	0	2	29
Black and White Warbler	2	0	0	0	0	2
Black-capped Chickadee	1	5	3	0	1	10
Blackpoll Warbler	3	0	0	0	0	3
Brown-headed Cowbird	7	2	1	0	0	10
Cedar Waxwing	1	0	0	0	0	1
Chipping Sparrow	16	0	0	0	2	18
Clay-coloured Sparrow	17	2	0	0	1	20
Gray Catbird	5	0	0	0	0	5
Green-winged Teal	0	0	0	0	1	1
Hairy Woodpecker	0	0	1	0	0	1
Hermit Thrush	6	0	0	0	2	8
House Wren	9	1	0	0	2	12
Least Flycatcher	63	46	14	0	7	130
Lincoln Sparrow	5	0	0	0	1	6
Magnolia Warbler	1	0	0	0	0	1
Mourning Warbler	2	0	0	0	0	2
Myrtle Warbler	41	0	0	0	2	43
Nashville Warbler	1	0	0	0	0	1
Northern Flicker	2	0	0	0	0	2
Orange-crowned Warbler	2	0	0	0	0	2
Ovenbird	2	0	0	0	0	2
Pine Siskin	8	0	0	0	1	9
Red-eyed Vireo	2	0	0	0	0	2
Rose-breasted Grosbeak	0	0	0	0	0	0
Ruby-throated Hummingbird	1	0	0	0	1	2
Ruffed Grouse	0	0	0	0	3	3
Song Sparrow	4	0	0	0	0	4
Swainson's Thrush	33	0	0	0	1	34
Tennessee Warbler	3	0	0	0	0	3
Tree Swallow	1	0	0	0	0	1
Unidentified Yellow-rumped Warbler	1	0	0	0	0	1
Warbling Vireo	5	1	2	0	0	8
Western Palm Warbler	1	0	0	0	0	1
White-crowned Sparrow	5	0	0	0	0	5
White-throated Sparrow	25	2	0	0	1	28
Yellow Warbler	8	11	9	0	4	32
<b>Total</b>	<b>307</b>	<b>84</b>	<b>36</b>	<b>0</b>	<b>32</b>	<b>459</b>

Net Hours: 1996.5 NH

Capture Rate: 22.99 birds/ 100 NH

- 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).



Western Palm Warbler showing off his rufous crown

Nets were open on 33 out of a possible 41 days during migration monitoring. Nets were not opened on 8 days due to days off for staff (7 days), and rain (1 day). The 12 net lanes were open for a total of 1996.5 net hours out of a possible 2952 net hours. A total of 391.5 net hours were also lost due to weather conditions (wind, rain, cold temperatures) that resulted in nets being opened late and/or closed early.

Thirty-nine species were captured during the 2012 spring migration (Table 2). The top five species caught represented 58.4 % of the captures, which is a decrease from the last 2 years (Appendix 1). The top five captured species were: Least Flycatcher (28.3%), Myrtle Warbler (9.4 %), Swainson’s Thrush (7.4 %), Yellow Warbler (7.0 %) and Baltimore Oriole (6.3 %). The top five banded species were: Least Flycatcher (63), Myrtle Warbler (41), Swainson’s Thrush (33), White-throated Sparrow (25) and Clay-coloured Sparrow (17). These accounted for 58.3 % of all banded birds.

Table 2. Ten-year capture trends for the Beaverhill Bird Observatory.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Birds Captured	950	754	532	276	242	408	382	500	497	412	459
Birds Banded	740	546	424	196	169	318	288	351	333	241	307
Net Hours	2569	2219	1809	1570	1615	1813	1828	1608	2016	1884	1997
Capture Rate (birds/100 net hours)	36.98	33.98	29.41	17.46	14.98	22.84	20.9	31.09	24.65	21.87	22.99
Species Captured	55	44	38	32	31	44	38	39	38	40	39

A few notable captures included two birds originally banded in the fall of 2007 and aged as HY. The first was a male Warbling Vireo (band number 2370-59980) banded by Anna Daku on August 8<sup>th</sup>, 2007, and captured again in June 2009 by Ashley Thorsen. A female Hairy Woodpecker (band number 1142-12869), originally banded by Jonathan Martin-DeMoor on September 18, 2007, was captured on May 29<sup>th</sup> this year which is the first time she had been captured since 2008. We also enjoyed the Nashville Warbler, which was only the 8<sup>th</sup> one caught at the BBO since 1999, and just the second one to be caught during spring migration. Another unusual capture was of the female Green-winged Teal that hit net 8 when Amélie walked around the corner. She managed to wiggle out before Amélie caught up to her, but everyone involved had a good scare!



The Nashville Warbler, a SY male



Sara setting up flap traps to catch adult Tree Swallows

### **Tree Swallows**

This year the *Golondrinas de las Americas* project did not send a crew to the BBO. However, Sara Berk, who has worked on the project for several seasons and who was at the BBO last summer, returned to do an independent project with the Beaverhill Tree Swallows. She is collecting feathers to analyse stress hormones later and hopes to shed light on how stressful events during moult impact future breeding. Sara is monitoring the T and S grid, checking every box every day to track nest building, and clutch laying. By June 10<sup>th</sup>, approximately 75 nests were occupied on these two grids, with two nests (on the T grid) already hatched.

The BBO staff has been monitoring the R grid, as well as the boxes on Range Road 183 and at Francis Viewpoint. As of June 10<sup>th</sup>, there were 25 boxes with eggs on the road grid, with the largest clutch having 7 eggs.

Earlier this spring a 20 new Tree Swallow boxes were installed by Geoff Holroyd on the Road grid along Rowan's Route. Some older boxes were replaced, while others were paired with boxes already in place. The new boxes are of a slightly different design than the *Golondrinas* boxes in that they are missing the ventilation gaps near the lid.

### **Other Banding**

We were determined to catch the sizeable flock (60+) of Pine Siskins that frequented the feeders for about a week in mid-May. Of course the day we set up the feeder net, no Pine Siskins showed up! We did capture 4 Brown-headed Cowbirds, 4 American Goldfinches and 1 Red-winged Blackbird in 1.25 net hours.

There were also several Mountain Bluebird pairs nesting in the boxes in and around the natural area. As of June 10<sup>th</sup>, one box on the T grid had 6 chicks, and the road grid had one box with 4 chicks, as well as two additional boxes with eggs. There were also 4 boxes along Range Road 183, two with 5 chicks and two with 6 chicks.

### **Other Work**

The BBO lab underwent a much anticipated and appreciated upgrade this spring: a fantastic new kitchen! There is now ample storage provided by the mouse-proof cupboards, a spacious double sink and a great new countertop. A huge thank you to Al DeGroot, Geoff Holroyd and Josef Takats for putting in a long day to get the kitchen installed. Thanks also to James Sheppard who brought out and installed the new top for the stove.

Other work has included repairing mist nets and clearing net lanes and trails in preparation for MAPS. New trail signs were painted and installed around the natural area, and the staff installed 4 duck boxes on the fence posts by the weir.

John Acorn came out to visit and teach the staff how to perform a butterfly count on May 29<sup>th</sup>; we are hoping to revive the weekly pollard walk in the natural area. We saw a total of 44 individuals of 5 species: Mourning Cloak (12), Greenish Blue (3), Cabbage White (10), Canadian Tiger Swallowtail (16), and Angle Wings (3).

We also participated once again this year in the Baillie Birdathon. We were able to observe a total of 75 species in the area surrounding Tofield and in



Amélie, John and a Canadian Tiger Swallowtail Butterfly

Blackfoot Grazing Reserve.



Amélie presenting to the crowds at the Big Birding Breakfast

### **Interpretation**

The Bird Birding Breakfast was successful again this year: beautiful weather, a great crowd, and delicious food (of course). Approximately 40 visitors came out on May 26<sup>th</sup> to visit and enjoy the 20 birds caught throughout the morning. A huge thank you to the volunteers for all your help, and a special thanks to Janos Kovacs for cooking all the fantastic crepes!

### **Visitors and Volunteers**

The lab has been busy with visitors this spring! Thanks Irene for dropping by on a regular basis and finding some cool nests for us, and to Donna and her friends brought amazing vacation photos to share on a rainy day. Chris Robinson, Chris and Jeremy, and Pat the honey man are also becoming familiar faces. Julia, Silvi, Nicolas, Jenny, Joseph and Simon, and Rachel and her family have all also come by to visit.

Thanks also Calvin Knorr for the extra pair of experienced banding hands early in the season, Erin for spending a few days with us and helping with chores, and our great neighbours the Stauffers for coming by to visit while out repairing fences.

We also appreciate the help from our volunteers and board members at the Big Birding Breakfast and with the installation of the kitchen.

Appendix 1. Top five captured species at the Beaverhill Bird Observatory during Spring Migration Monitoring.

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
#1 Captured Species	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)	Least Flycatcher (130)
#2 Captured Species	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)	Myrtle Warbler (43)
#3 Captured Species	Clay- coloured Sparrow (51)	Clay- coloured Sparrow (27)	Clay- coloured Sparrow (23)	Myrtle Warbler (35)	Brown- headed Cowbird (35)	Myrtle Warbler (35)	Myrtle Warbler (38)	Clay- coloured Sparrow (49)	Swainson's Thrush (34)
#4 Captured Species	Least Flycatcher (51)	Swainson's Thrush (20)	Swainson's Thrush (19)	Yellow Warbler (25)	Myrtle Warbler (27)	Swainson's Thrush (25)	Yellow Warbler (37)	House Wren (26)	Yellow Warbler (32)
#5 Captured Species	Swainson's Thrush (40)	Myrtle Warbler (19)	House Wren (17)	House Wren (22)	Swainson's Thrush (25)	Yellow Warbler (18)	House Wren (32)	Swainson's Thrush (22)	Baltimore Oriole (29)
% of total Captures	66%	66%	66%	55%	55%	43%	64%	66%	58%



## Summer Report 2012

Amélie Roberto-Charron

## **Introduction**

---

The summer staff this year, 2012, were Meaghan Bouchard, Bander In Charge, and Amelie Roberto-Charron, Assistant Bander, who were responsible for carrying out the Monitoring Avian Survivorship and Productivity (MAPS) Program.

The Monitoring Avian Productivity and Survivorship (MAPS) Program provides information on population size, and post-fledging productivity, estimates of adult survivorship, proportion of residents in the population, and population growth rate by utilizing constant effort, standardized, mist netting during the breeding season. It is a cooperative effort throughout North America composed of individual bird banders, public agencies and private organizations and is organized by the Institute for Bird Populations. The goal is to monitor the productivity, survivorship and population trends of North American land birds.

The MAPS program has been in operation since 1989. The three MAPS stations run on the Beaverhill Natural Area are the Beaverhill lab (BLAB), an area east of the weir (WEIR), and another area south of the lab (PARK). At each site there are 10 mist nets, and 9 point count locations. This year migration monitoring began on June 11<sup>th</sup> and was carried out until July 29<sup>th</sup>. During that time period, five 10-day rotations were carried out comprised of one day of constant effort mist-netting, followed by point counts at each respective location.

This summer was filled with various other activities, such as monitoring nest boxes, with the help of Sara Berk, conducting butterfly surveys and writing updates and conducting general maintenance around the lab.

## **Mist Netting**

---

Constant effort mist-netting is the main method of data collection for MAPS. The mist nets have a mesh size of 30mm and are strung on poles that are 3.2m tall. Mist netting does not take place in unsuitable conditions, i.e. in rain, in windy conditions that exceed a 3 on the Beaufort Force scale or 20km/hour, in temperatures below 0 °C and above 27 °C. Nets are checked frequently, at least every half hour.

All 900 hours of banding, 300 per station, were successfully completed this summer. And luckily, this year no rounds were interrupted by poor weather!

### ***PARK***

The PARK station (Lat 53 22 34 Long 112 31 45) has been in operation since 1996.

A total of 59 individual birds were caught here in 2012, from 8 different species during the 300 hours of mist netting, resulting in 19.7 birds/100 net hours. This year we banded the highest number of birds at the Park station, 42 birds of 7 different species.

Dates banding was conducted were: June 13<sup>th</sup>, June 25<sup>th</sup>, July 2<sup>nd</sup>, July 17<sup>th</sup>, July 29<sup>th</sup>

### **BLAB**

The BLAB station (Lat 52 22 50 Long 112 31 39) has been operating since 1989, the very start of the MAPS program. A total of 78 birds were captured during the mist netting at this location from a total of 9 species in 300 net hours. A total of 41 birds were banded in 2012 from 5 different species. This yielded a capture rate of 26.0 birds/100 net hours.

Dates Banding: June 11<sup>th</sup>, June 21<sup>st</sup>, June 30<sup>th</sup>, July 13<sup>th</sup>, July 24<sup>th</sup>.

### **WEIR**

The WEIR station (Lat 53 22 48 Long 112 30 19) has been in operation since 1994. In 2010, a total of 61 birds from 10 species were captured in 300 total net hours, yielding a capture rate of 20.3 birds/100 net hours. This year at the Weir station only 38 individuals were banded. Although the lowest number of birds were banded at the Weir station, a total of 8 species were banded there.

Dates of banding were: June 12<sup>th</sup>, June 22<sup>nd</sup>, July 1<sup>st</sup>, July 14<sup>th</sup>, July 25<sup>th</sup>.

### **All stations**

The three most abundant species that were banded during MAPS at all three stations were the Least Flycatcher (composing 71.2% of all captures), the Black Capped Chickadee (composing 5.1% of all captures) and the Yellow Warbler (making up 4.0% of all captures). For a breakdown of species caught per station, see Appendix 1.



Yellow Warbler male feeding chicks (photo by Tyler Hallman)

By far the most interesting catches of the summer included a Veery, bird band #1861-68150.

This Veery was originally banded on July 14<sup>th</sup>, 2005 by Tyler Flockhart at the BLAB station. It was identified as being in its second year, so it was hatched in 2004. Since the year it was banded, this bird was captured again twice in 2007, and twice in 2008. When he was caught in 2008 he had a cloacal protuberance, indicating that he likely bred on site. When we

recaptured him this year, he had once again a cloacal protuberance, so we can once again assume he bred on-site somewhere this year. This Veery is, therefore, 8 years old, and seems to be returning regularly to the natural area to breed!

In comparison to last year the capture rate at the Weir and Park station increased. The capture rate at Blab slightly decreased. Since 2010 the capture rate at Blab has been decreasing, see Figure 1. Whereas the capture rates at the Weir and Park stations seem to be about average.

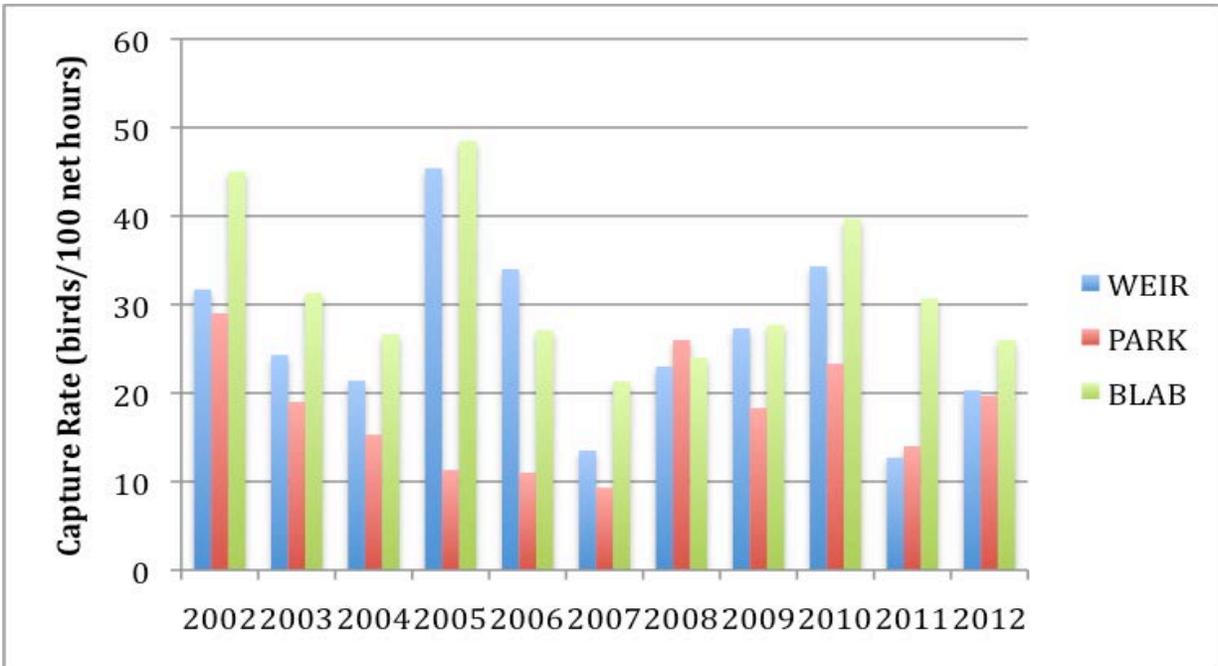


Figure 1. Ten year trend for capture rates at MAPS stations

### **Point counts**

Point counts were also conducted within each of the MAPS stations at nine different locations. Point counts were done in the same 10 day rotation as the mist netting, but on separate days. At each point count observers listened for 10 minute periods and recorded all birds heard during that time. Observers also approximated the distance of the bird from the observer, the direction of the bird, as well as which time interval, one, two or three, the bird was heard singing, Interval 1 was defined as during 1-3 minutes, Interval 2 during 3-5 minutes, and Interval 3 during 5-10 minutes. The list of species heard during point counts along with the number of detections can be found in Table 1. The species that were most often detected were the Least Flycatcher, composing 37.5% of all detections, the Yellow Warbler, composing 10.4% of all detections, and the Warbling Vireo, composing 9.8% of all detections. Dates point counts were conducted are as follows:

*Park* June 14<sup>th</sup>, June 23<sup>rd</sup>, July 3<sup>rd</sup>, July 12<sup>th</sup>, July 26<sup>th</sup>, July 29<sup>th</sup>  
*Blab* June 18<sup>th</sup>, June 24<sup>th</sup>, July 5<sup>th</sup>, July 16<sup>th</sup>, July 26<sup>th</sup>  
*Weir* June 14<sup>th</sup>, June 22<sup>nd</sup>, July 3<sup>rd</sup>, July 5<sup>th</sup>, July 12<sup>th</sup>

A few days were interrupted by poor weather. Usually, point counts can take place in the rain, however on July 26<sup>th</sup> we had a downpour half way through the point counts at Park, causing the birds to be inactive. As a result we stopped our point counts and continued them on a later day.

Table 1. Number of detections for each species at the BBO MAPS stations  
(combining of all visits listed above).

Species	PARK	BLAB	WEIR	Total
American Bittern	7	0	7	14
American Goldfinch	11	20	4	35
American Robin	1	8	9	18
American Crow	3	3	5	11
Baltimore Oriole	10	20	28	58
Black Billed Cuckoo	4	0	1	5
Black Capped Chickadee	6	21	4	31
Brown Headed Cowbird	17	14	24	55
Canadian Goose	1	0	5	6
Cedar Waxwing	1	3	0	4
Clay Colored Sparrow	3	1	3	7
Common Raven	3	3	4	10
Common Snipe	0	0	9	9
Coot	0	0	1	1
Downy Woodpecker	2	4	5	11
Duck sp.	5	0	7	12
Gull so.	14	0	7	21
Hairy Woodpecker	3	0	0	3
Hermit Thrush	3	1	3	7
House Wren	9	14	16	39
Least Flycatcher	153	127	110	390
Lesser Yellowlegs	0	1	0	1
Long-eared Owl	0	0	1	1
Marbled Godwit	0	0	1	1
Northern Flicker	1	0	3	4
Pied-billed Greibe	1	0	4	5
Pine Siskin	0	4	0	4
Red-breasted Grosbeak	0	3	0	3
Red-breasted Nuthatch	0	0	1	1
Red-winged Blackbird	5	1	10	16
Ruby-throated Hummingbird	1	0	0	1
Ruffed Grouse	2	0	0	2
Savannah Sparrow	0	1	0	1
Song Sparrow	1	0	1	2
Sora	3	0	11	14
Swainson's Thrush	0	0	1	1
Tennessee Warbler	3	0	0	3
Tree Swallow	0	3	0	3
Veery	0	1	0	1
Warbling Vireo	33	32	37	102
White-throated Sparrow	1	0	0	1
Wilson's Snipe	0	0	1	1
Yellow-bellied Sapsucker	1	0	0	1
Yellow Warbler	38	44	26	108
Yellow-headed Blackbird	0	0	6	6
Yellowlegs sp.	0	1	8	9
Total	17	9	32	58

## **Pollard Walks**

---

This summer we tried to gain local knowledge about the butterfly populations within the natural area by conducting Pollard Walks. These walks were conducted semi-regularly by walking a set route throughout the natural area and counting the butterflies encountered within a 1 meter radius of ourselves, and noting their species. Pollard Walks were attempted biweekly, but were only conducted if the weather was permitting. Pollard walks were not conducted in the rain. Other factors were also noted, such as: time of day, temperature, and wind.

Butterflies detected in the Natural Area throughout the summer include; Canada Tiger Swallowtails, Fritillary sp., Cabbage Whites, Blue Greens, Mourning Cloaks, White Admirals, Red Admirals, Pearl Crescents, Ringlets, European Skippers, Milbert's Tortoiseshells and Green Commas. We even spotted a Monarch this summer! The Monarch was spotted during net checks at the BLAB station, and not during a Pollard Walk. Regardless, it was a neat encounter!

## **Other Wildlife**

---

Other animals seen throughout the summer within the natural area include Moose, White-tailed Deer, Coyotes, Snowshoe hares, Porcupines, Voles, Deer Mice, a Short-tailed Weasel and Northern Flying-Squirrels.

## **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 Onyx  
Chris Robinson

Thanks also to those who stopped by the lab while we were at different stations and not around to chat! Hopefully you enjoyed the birds, and will come back again soon!

## **Acknowledgments**

---

A number of changes were made to the lab this summer! Many thanks to Al DeGroot who replaced the tarp that was covering the deck with a fancy new awning. Thanks also to Joe Takats, Geoff Holroyd and Al DeGroot for installing lovely new cabinets into the lab!

**Appendix 1.** Summary of species captured during the MAPS program for each banding location from June 11, to July 29, 2012.

Species:	Banded			Repeats <sup>1</sup>			Recoveries <sup>2</sup>			Other			Grand Totals:			MAPS totals
	B-Lab	Weir	Park	B-Lab	Weir	Park	B-Lab	Weir	Park	B-Lab	Weir	Park	B-Lab	Weir	Park	
American Goldfinch	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
American Robin	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	2
Baltimore Oriole	1	2	0	2	0	0	1	0	0	1	0	0	5	2	0	7
Black-capped Chickadee	6	0	2	1	0	0	0	0	0	0	0	1	7	0	3	10
Brown-headed Cowbird	0	5	0	0	1	0	0	0	0	0	1	0	0	7	0	7
Cedar Waxwing	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Clay-colored Sparrow	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Downy Woodpecker	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Hairy Woodpecker	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2
Hermit Thrush	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1
House Wren	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1
Least Flycatcher	28	26	28	5	8	6	20	6	4	3	4	3	56	44	41	141
Northern Flicker	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Ovenbird	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Sharp-shinned Hawk	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
Veery	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
Warbling Vireo	0	0	5	0	0	0	0	1	0	0	1	0	0	2	5	7
White-throated Sparrow	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Yellow Warbler	4	0	4	0	0	0	0	0	0	0	0	0	4	0	4	8
Yellow-bellied Sapsucker	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	2
<b>Grand Totals:</b>	<b>41</b>	<b>38</b>	<b>42</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>22</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>78</b>	<b>61</b>	<b>59</b>	<b>198</b>

*Net Hours: 900 NH*

- 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).



**Fall Report 2012**

by

**Lisa Priestley**

**November 2012**

## Songbird Fall Migration Monitoring

Fall migration at Beaverhill Bird Observatory in 2012 was higher than 2011, 2009, and 2008, with 978 birds captured, a capture rate of 26.6 birds/100 net hours (Table 1, Figure 1). The capture rate was lower than the last nine years average of 32.6 birds/100 net hours. A total of 3682.5 net hours were run, 72% of the total 5112 net hours (aerial net was not run) that were possible. Most netting time missed was due to poor weather (rain and wind) in September.

Table 1. 2012 fall songbird banding results from Beaverhill compared to previous ten years.

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Birds Captured	1315	975	1256	1969	1079	892	875	880	701	978
Birds Banded	1093	818	1089	1525	952	723	718	708		
Net Hours	3818.3	3228.5	2787.3	3476.0	3534.0	3399.5	3670.5	3189.5	3677.5	3682.5
Capture Rate (birds/100NH)	34.4	30.2	45.1	56.6	30.5	26.2	23.8	27.6	19.1	26.6
Species Captured	57	60	59	63	52*	58*	51	60*	53	57*

\* includes Ruffed Grouse caught in net but not banded

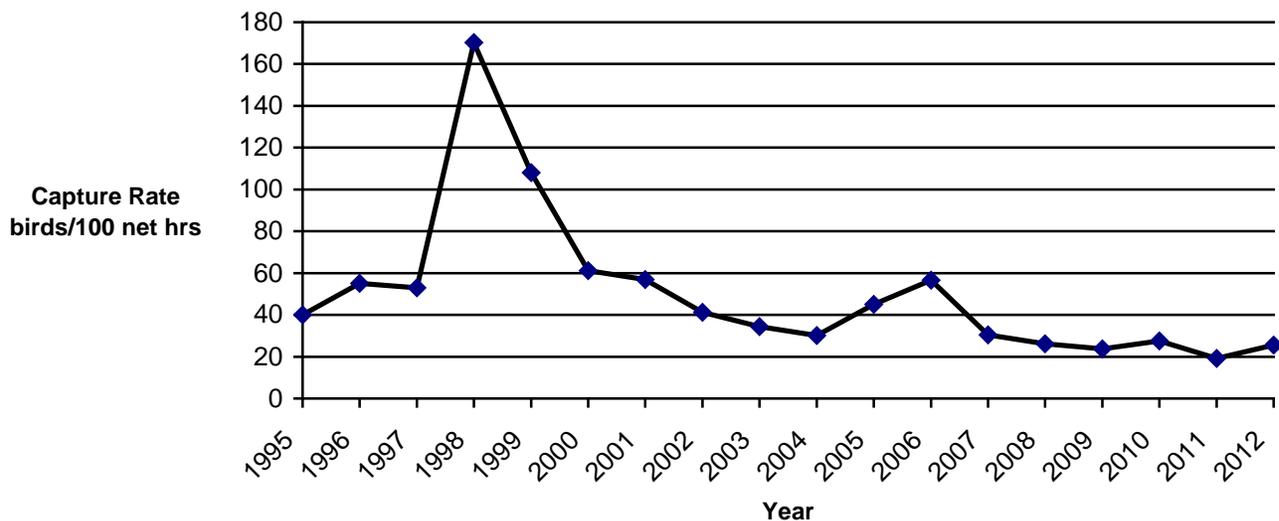


Figure 1. A comparison of fall capture rates (songbirds/100 net hours) between 1995 and 2012.

Top five species representing 61% of the captures were: Myrtle Warbler (217), Least Flycatcher (144), Slate-colored Junco (102), Black-capped Chickadee (99), and American Tree Sparrow (35). Both Yellow Warbler and Clay-colored Sparrow have much lower capture rates than previous years. Unusual species that were captured this fall were Chestnut-sided Warbler, Nashville Warbler, two Black-throated Green Warblers, and three Sharp-shinned Hawks.

Table 2. Birds caught in mist nets at Beaverhill Bird Observatory fall 2012.

<b>Species</b>	<b>Banded</b>	<b>Repeat<sup>1</sup></b>	<b>Return<sup>2</sup></b>	<b>Foreign<sup>3</sup></b>	<b>Other<sup>4</sup></b>	<b>TOTAL</b>
Alder Flycatcher	4	0	0	0	0	4
American Redstart	19	0	0	0	1	20
American Goldfinch	5	0	0	0	0	5
American Tree Sparrow	31	4	0	0	0	35
Bay-breasted Warbler	1	1	0	0	0	2
Black-and-white Warbler	3	0	0	0	0	3
Black-capped Chickadee	27	61	0	0	11	99
Black-throated Green Warbler	2	0	0	0	0	2
Blackpoll Warbler	5	0	0	0	0	5
Blue-headed Vireo	2	0	0	0	0	2
Brown Creeper	5	0	0	0	0	5
Cape May Warbler	1	0	0	0	0	1
Cedar Waxwing	4	1	0	0	0	5
Chestnut-sided Warbler	1	0	0	0	0	1
Clay Colored Sparrow	8	1	0	0	2	11
Downy Woodpecker	4	2	2	0	1	9
Fox Sparrow	1	0	0	0	0	1
Golden-crowned Kinglet	2	0	0	0	0	2
Hairy Woodpecker	2	3	0	0	1	6
House Wren	4	6	0	0	8	18
Hermit Thrush	12	1	0	0	0	13
Least Flycatcher	122	14	1	0	7	144
Lincoln's Sparrow	7	0	0	0	0	7
Magnolia Warbler	8	0	0	0	0	8
McGillivray's Warbler	1	0	0	0	0	1
Mourning Warbler	2	0	0	0	0	2
Myrtle Warbler	198	6	0	0	13	217
Nashville Warbler	1	0	0	0	0	1
Northern Flicker	4	0	0	0	1	5
Northern Waterthrush	2	0	0	0	0	2
Orange-crowned Warbler	30	0	0	0	0	30
Ovenbird	16	1	0	0	4	21
Philadelphia Vireo	3	0	0	0	0	3
Pine Siskin	1	0	0	0	0	1
Red-breasted Nuthatch	14	0	0	0	0	14
Red-eyed Vireo	3	0	0	0	0	3
Rose-breasted Grosbeak	2	0	0	0	0	2
Ruby-crowned Kinglet	15	0	0	0	3	18
Ruffed Grouse	0	0	0	0	1	1
Sharp-shinned Hawk	2	0	0	0	1	3
Slate-colored Junco	84	8	0	0	10	102
Song Sparrow	1	0	0	0	0	1
Swainson's Thrush	11	1	0	0	0	12
Tennessee Warbler	30	1	0	0	0	31
Trail's Flycatcher	2	0	0	0	0	2
Unidentified Sparrow	0	0	0	0	3	3
Warbling Vireo	9	2	0	0	0	11
Western Palm Warbler	6	0	0	0	1	7
Western Wood-pewee	1	0	0	0	0	1
White-breasted Nuthatch	3	4	0	0	0	7
Willow Flycatcher	4	0	0	0	0	4
Wilson's Warbler	9	0	0	0	0	9
White-crowned Sparrow	5	0	0	0	1	6
White-throated Sparrow	14	2	0	0	5	21
Yellow-bellied Flycatcher	1	0	0	0	0	1
Yellow-bellied Sapsucker	2	0	0	0	1	3
Yellow Warbler	20	4	1	0	0	25
<b>Total</b>	<b>776</b>	<b>123</b>	<b>4</b>	<b>0</b>	<b>75</b>	<b>978</b>

<sup>1</sup> Repeat indicates it was captured with the last 90 days at the bird observatory

<sup>2</sup> Return indicated it was captured over 90 days before at the bird observatory

<sup>3</sup> Other Captures include escaped birds, released without banding

## Saw-whet Owl Fall Monitoring

### Beaverhill Bird Observatory

Northern Saw-whet Owl fall migration monitoring began on September 10 and was completed on November 16, 2012. Data from September 10 through November 14 was used in analysis to be comparable to previous seasons. A total of 53 nights were covered amounting to 1044.0 net hours. We caught 157 Saw-whet owls (capture rate of 15.0 owls/100 net hours) (Table 3, Figure 2). We had 153 unbanded Saw-whets, two recaptures within the season from our site, one recapture from Lesser Slave Lake Bird Observatory, and one unknown encounter (still no information on where it is from). Two extra nights of banding occurred after on Nov. 15 and 16, and a single Saw-whet Owl was captured each night. No Long-eared Owls were captured this year.

Table 3. Number of Northern Saw-whet Owls captured at Beaverhill Lake 2002-2012 (Sept 9- Nov 14).

Year	Number of Nights	Number of Net Hours	Number of Owls Captured	Number of Owls/ 100 Net Hours
2002	54	929.0	144	15.5
2003	48	761.0	147	19.3
2004	58	992.0	296	29.8
2005	38	604.0	135	22.4
2006	42	559.5	147	26.3
2007	49	675.5	183	27.1
2008	47	669.5	131	19.6
2009	48	806.5	125	15.5
2010	57	1067.0	304	28.5
2011	55	1130.0	229	20.3
2012	53	1044.0	157	15.0

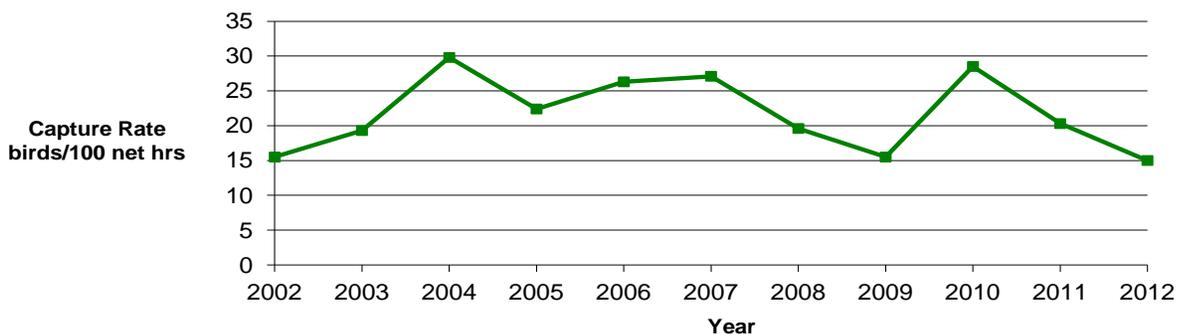


Figure 2. A comparison of capture rates (Saw-whets/100 net hours) between 2002 and 2012 (September 9 to November 14 only).

We also initiated a pilot Boreal Owl netting project in 2012. Two additional nets were set about 100 meters away from the Saw-whet Owl net array. The nets were set every night, however, Boreal Owl call was played every second night at the Boreal Owl net array. The Saw-whet Owl call was still played every night at the saw-whet net array. We captured 5 Boreal Owls, 4 in the Boreal Owl nets and one in the Saw-whet nets.

## Pletz Park

Hardy Pletz spent XX nights between September XX and November X 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 fourth year of Saw-whet monitoring at Gehlert's Grove near Lindbrook (west of Tofield) with 2 nets. Bob banded on 29 nights between September 19 and October 22 for 190 net hours and caught 101 Saw-whet Owls (capture rate of 55.8 owls/100 net hours). The big change in his operations was using saw-whet owl mist nets instead of songbird nets this season provided by BBO.

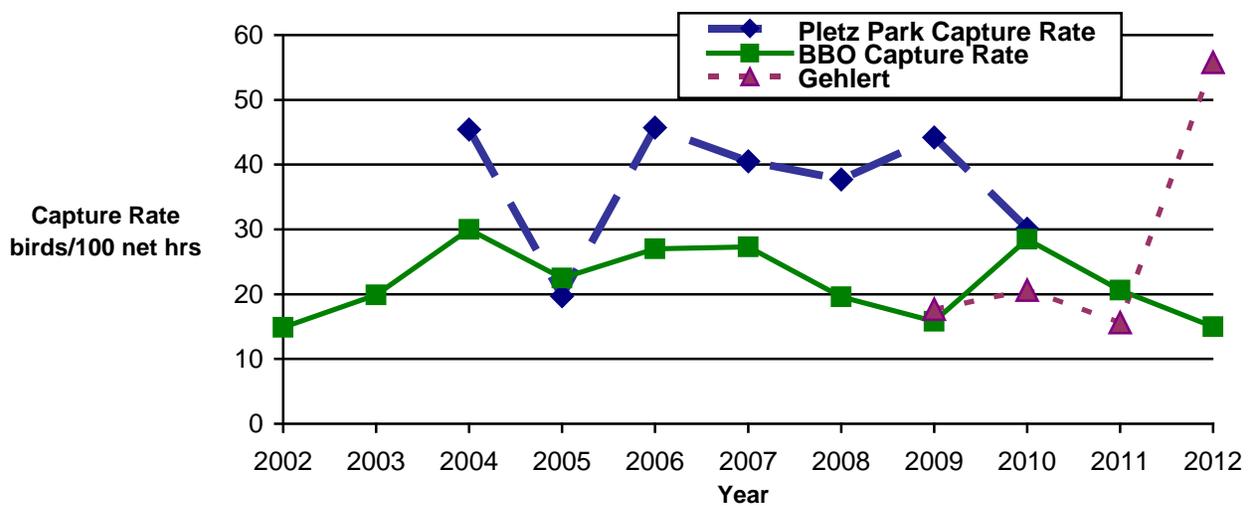


Figure 3. Comparison of Saw-whet Owl capture rates of Pletz Park, BBO, and Gehlert's Grove.

## **Interpretation**

Large numbers of visitors came out to Beaverhill throughout the fall to observe the banding. We had University of Alberta students, NAIT Biological Sciences group, homeschoolers, Tofield Outdoor Club, and other groups come to see saw-whet banding. Our Steaks and Saw-whets event was very successful with 48 people on Friday and 56 on Saturday.



## **Natural Area/Lab Upkeep Work**

The trails became overgrown again and were mowed just before Steaks and Saw-whets event. A new wood stove was purchased for the lab to replace the 14 year old one. Thank you ACA for providing funding for this purchase.

## Acknowledgements

Funding and in-kind support from the following agencies is greatly appreciated: Alberta Conservation Association, Alberta Sustainable Resource Development, Environment Canada (Canadian Wildlife Service), Nature Canada (Labatiuk Endowment Fund), and the Community Spirit Program. 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 Meaghan Bouchard and Amelie Roberto-Charron for conducting the songbird migration monitoring in August and part of September. Amelie continued the songbird monitoring and Meaghan took on Owl monitoring for the rest of September. Lisa and Meaghan completed the owl monitoring in October and November. 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 sharing their data. In particular, to Sara Pearce Meijerink who spent over a month at the lab in the fall assisting with our operations

