McGill Bird Observatory
Annual Program Report 2013

Prepared by Marcel A. Gahbauer

December 2013

MIGRATION
RESEARCH FOUNDATION

Cover photo:
One of the record high 45 Cape May Warblers banded at MBO in fall 2013
(photo by Simon Duval)

Suggested citation for this report:
Gahbauer, M.A. 2013. McGill Bird Observatory Annual Program Report 2013. Migration Research Foundation, Ste-Anne-de-Bellevue QC. 75 pp.

Table of Contents

1. Executive Summary

McGill Bird Observatory (MBO) is the flagship project of the Migration Research Foundation (MRF), focused on monitoring bird populations throughout the year at McGill University's Stoneycroft Wildlife Area, in Ste-Anne-de-Bellevue, Quebec. The primary objective is to collect data that can be used to contribute to the understanding of bird movements and population trends, in collaboration with the Canadian Migration Monitoring Network / Réseau Canadien de Surveillance des Migrations (CMMN-RCSM). MBO also pursues a variety of other research projects and delivers educational programs, ranging from banding workshops and ongoing training of volunteers to public presentations and development of identification resources.

This report summarizes all MBO activities for the 2013 project cycle, which spans from November 2012 through October 2013. It focuses primarily on the Spring and Fall Migration Monitoring Programs, but also incorporates summaries of the winter and summer programs, as well as an overview of other MBO efforts throughout the year.

The winter program (31 October 2012 – 27 March 2013) was highlighted by a tremendous invasion of Common Redpolls, 340 of which were banded, contributing strongly to a record total of 800 birds banded for the season. American Goldfinch and House Finch were also both banded in record numbers; together these three species comprised 83% of birds banded this winter. Only 44 species were observed, reflecting the generally harsh conditions for most of the season.

The Spring Migration Monitoring Program (28 March – 5 June) set a new record for number of species banded (68) although the 790 individuals was just barely above the long-term average. The 145 species observed was slightly above average for spring. Again this spring, half of the ten most frequently banded species were warblers, including record counts of Magnolia Warbler and Northern Waterthrush. Fox and Swamp Sparrows were also banded in record numbers. Ross's Goose was observed for the first time ever, the 208th species recorded at MBO.

The summer program (6 June – 31 July) was for a fifth year operated as part of the international MAPS (Monitoring Avian Productivity and Survivorship) network. The 137 birds banded were close to average, but the 30 species involved was just one less than last year's record high. No new species were observed or banded this summer, and the 56 species observed matched the 2012 total and was slightly above the long-term average for summer.

The Fall Migration Monitoring Program (1 August – 30 October) was close to average all around, with 3341 individuals of 77 species banded, and 147 species observed. However, the previous fall record for species observed in a day was beaten twice this year, with 63 on 14 September, and 65 on 25 September. Eight species were banded in record numbers this fall, most notably 45 Cape May Warblers (more than in all previous years combined), as well as Magnolia Warbler (284) and Tennessee Warbler (249). Greater White-fronted Goose became the 209th species observed at MBO, while Carolina Wren was the 113th species banded.

The Northern Saw-whet Owl Monitoring Program (26 September – 6 November) had full coverage for a fourth consecutive year, and yielded 174 individuals banded, plus a record 17 foreign recoveries and one individual each of two other owl species. The peak of migration was between October 8 and 10, with 30% of owls banded over those three nights; there was a secondary peak from October 20-23 accounting for another 17% of owls banded. Only 18% of saw-whets this fall were hatch-year birds, compared to 80% last year; 57% were second-year individuals.

2. Introduction

McGill Bird Observatory (MBO) was founded in 2004 by graduate students in McGill University's Natural Resource Sciences department. It is operated by the Migration Research Foundation (MRF), and is a member of the Canadian Migration Monitoring Network / Réseau Canadien de Surveillance des Migrations (CMMN-RCSM). Located at 45.43°N, 73.94°W, near the western tip of the island of Montreal, MBO is the only active migration monitoring station in southwestern Quebec. The nearest sites with standardized migration research programs are Innis Point Bird Observatory in Ottawa (175 km to the west), Prince Edward Point Bird Observatory in Quinte (300 km to the southwest), and l'Observatoire d'Oiseaux de Tadoussac (450 km to the northeast). Operations at MBO are patterned after those at other Canadian bird observatories, with a particular emphasis on standardized migration monitoring protocols. In addition to collecting and analyzing valuable scientific data, MBO serves as a training facility for students and other individuals interested in developing practical skills in field ornithology.

This report summarizes all research activities at MBO during the 2013 project cycle, which began with the winter 2012-2013 season and concluded with the 2013 fall season. The Spring and Fall Migration Monitoring Programs are the most standardized and intensive surveys conducted at MBO, and are summarized in greatest detail in this report. The Migration Monitoring Programs follow a consistent protocol, most recently updated in 2011, but largely unchanged since 2005 (Gahbauer and Hudson 2011). The Northern Saw-whet Owl monitoring project is summarized separately. Annual summaries of the winter and summer programs were published only on the MBO website from 2005 through 2010, but in recognition of the growing value of these programs, they have been incorporated in the annual reports since 2011.

One of the many Common Redpolls of the large northern rostrata *subspecies banded at MBO in winter 2012-2013.*
(Photo by Marcel Gahbauer)

3. Winter population monitoring program

The winter season at MBO spans the 21-week period from 31 October through 27 March. Although relatively few species overwinter regularly at MBO, several of them are uncommon to absent in other seasons, and therefore winter provides the best opportunity to monitor them. Additionally, observations in early and late winter provide an opportunity to document lingering late fall migrants or early spring arrivals. Except at the beginning and end of the season, winter visits rarely occur more than twice per week, and scheduling of activities is much more weather-dependent than at other times of year. Banding effort in previous winters used four to five nets surrounding a set of feeders (usually stocked with black oil sunflower, millet, and nyjer seed). This winter only two nets were used near the feeders, but an audiolure broadcasting a mix of Bohemian Waxwing, House Finch, Pine Grosbeak, Common Redpoll, White-winged Crossbill, and American Goldfinch calls was played. Banding was usually limited to three hours per day, although when weather was suitable, was extended up to five hours. Timing was somewhat variable, but often spanned late morning to early afternoon, when temperatures were warmest.

3.1 Effort

Observations were recorded on 48 (32%) of the 148 days during the winter season, somewhat above average. Visits were most frequent in November, to focus on late migrants and monitoring of winter residents while weather was still mild, in January to observe the growing flocks of Common Redpolls, even though it was too cold for banding, and in March to continue those observations and band some of them before they moved back north. Banding took place during all but one of the November visits, three times in December, twice in February, and on five dates in March; during all but one of the November visits, and on another 8 occasions over the rest of winter, including at least one day per month except January; the total of 17 days banding was the same as last winter, matching the highest frequency since winter 2005-06.

Table 3-1. Effort during the 2012-2013 winter population monitoring program, by month.

	Oct 31 – Nov 30	Dec 1 – 31	Jan 1-31	Feb 1-28	Mar 1-27	SEASON
# days observing	8	7	14	5	14	48
# days banding	7	3	0	2	5	17

3.2 Site conditions

Overall it was a somewhat colder and snowier winter than normal. March was particularly harsh, with cold temperatures and snow remaining until late in the month, in sharp contrast to the record warm March the previous winter. While official weather records from Environment Canada, as reflected in the table below, suggest that snow depth was modest for most of the winter, the microclimate at MBO was somewhat colder, with a solid base of at least 50 cm from late December through early March.

Table 3-2. Weather conditions during the 2012-2013 winter population monitoring program, by month.

	Oct 31 - Nov 30	Dec 1 – 31	Jan 1-31	Feb 1-28	Mar 1-27	SEASON
Mean daily high (°C)	5.4	-0.1	-3.3	-3.5	2.0	0.1
Mean daily low (°C)	-3.7	-6.9	-12.8	-10.3	-4.6	-7.7
Mean daily temp (°C)	0.9	-3.5	-8.1	-6.9	-1.3	-3.8
Highest temp (°C)	19 (Nov 12)	13 (Dec 4)	10 (Jan 31)	7 (Feb 22)	9 (Mar 10)	19 (Nov 12)
Lowest temp (°C)	-14 (Nov 30)	-16 (Dec 29)	-27 (Jan 23)	-17 (Feb 5)	-13 (Mar 18)	-27 (Jan 23)
# days with rainfall	10	11	10	3	4	38
Total rain (mm)	13	65	27	2	16	123
# days with snowfall	1	15	11	17	9	53
Total snow (cm)	1	89	37	62	44	233
Mean snow depth (cm)	0	9.4	16.8	2.7	9.5	7.7
Max. snow depth (cm)	n/a	40 (Dec 28)	31 (Jan 7)	11 (Feb 28)	27 (Mar 20)	40 (Dec 28)

3.3 Results

The 800 birds banded was a new record, nearly double the previous high of 449 in winter 2010-11. The 19 species banded tied the record set in winter 2010-11. This was despite considerably less banding effort than last winter (with respect to net hours), but reflected the incredible influx of Common Redpolls in the second half of winter, as well as a particularly strong movement of American Goldfinches early in the season. The number of species observed during the season was only 44, the lowest count since the winter of 2007-2008, and likely in part due to the cold and snow in March delaying some of the early spring migrants that in other years were spotted arriving before the end of winter.

Table 3-3. Summary results of the 2012-2013 winter population monitoring program, by month.

	Oct 31 - Nov 30	Dec 1 – 31	Jan 1-31	Feb 1-28	Mar 1-27	SEASON
Birds (species) banded	277 (15)	155 (8)	n/a	97 (6)	271 (13)	800 (19)
Birds (species) repeat	100 (11)	41 (8)	n/a	17 (4)	54 (7)	212 (14)
Birds (species) return	16 (5)	6 (5)	n/a	16 (6)	16 (7)	54 (11)
# species observed	35	28	29	24	33	44
# net hours	118.5	24.0	--	11.0	44.0	197.5
Birds banded / 100 hrs	233.8	645.8	n/a	881.8	615.9	405.1

3.3.1 Birds banded

The number of Common Redpolls banded this winter exceeded the full season banding total across all species for five previous winters. It was an exceptional irruption for the species, and included many individuals of the larger *rostrata* subspecies (thought to mostly be from Greenland), of which we banded 56 (16% of the season total). The number of American Goldfinches banded was also more than double any previous winter, while the number of House Finches banded increased for the third winter in a row, to nearly 100. Slate-colored Junco was the top species the previous two winters, but numbers were lower this year, consistent with the far below average number recorded in fall 2012; American Tree Sparrows were similarly down in numbers. The three Downy Woodpeckers banded was a new record high for winter. The only new species banded for the season was White-winged Crossbill, which was also a first for MBO overall, bringing the cumulative winter total to 31 species, and the all-season count to 111.

Table 3-4. Top 10 species banded at MBO during the 2012-2013 winter population monitoring program, with comparison to the numbers banded in previous winters (rank in other years in parentheses). Dashes represent species not banded during a particular winter season.

		2012-13	2011-12	2010-11	2009-10	2008-09	2006-07	2005-06	2004-05
1.	Common Redpoll	340	--	53 (4)	--	21 (1)	--	41 (4)	1 (11)
2.	American Goldfinch	228	87 (2)	93 (2)	79 (1)	2 (4)	21 (1)	111 (1)	113 (1)
3.	House Finch	95	69 (3)	61 (3)	31 (5)	--	21 (1)	5 (9)	58 (2)
4.	Slate-colored Junco	42	90 (1)	150 (1)	48 (3)	--	20 (3)	54 (2)	20 (4)
5.	Black-capped Chickadee	28	12 (6)	33 (5)	54 (2)	3 (2)	17 (4)	51 (3)	26 (4)
6.	American Tree Sparrow	24	56 (4)	25 (6)	35 (4)	2 (4)	7 (5)	11 (5)	9 (5)
7.	Red-winged Blackbird	10	25 (5)	1 (11)	15 (7)	--	--	--	--
8.	Northern Cardinal	9	11 (7)	5 (9)	4 (11)	1 (6)	2 (8)	4 (10)	7 (6)
9.	White-throated Sparrow	8	1 (15)	12 (7)	6 (9)	--	--	2 (11)	--
10.	Downy Woodpecker	3	2 (11)	1 (11)	--	--	--	2 (11)	1 (11)

3.3.2 Birds recaptured

The 212 repeats this winter was also a new record, beating the long-standing count of 186 in 2005-2006. Over 60% of repeats were captured just twice during the season; most of the individuals with three or more encounters during winter were Black-capped Chickadees. Only 47 (14%) of the Common Redpolls were recaptured at least once, and 7 of those were caught a third

time too. Three of the 26 Common Redpolls banded in December were recaptured in late March, but even by late winter, the majority of the flocks observed daily remained unbanded, suggesting that the total number observed throughout the season was far greater than the number banded. Overall, Black-capped Chickadees accounted for 52% of all repeats this winter, similar to 54% last winter, but still a bit lower than the rate of 61% across all winters at MBO. Common Redpoll (25%) and American Goldfinch (12%) were the next most frequent repeats, while the number of House Finch repeats (13) again set a new record for the species.

The number of returns this winter (54) was a new record for a third year in a row, and the 11 species involved was also a big increase over the previous high of 8 (Table 3-5). As usual, Black-capped Chickadees dominated, with 21 returns, including one not seen since two winters ago, three dating back to last winter, and others last encountered between spring and fall 2012. Winter site fidelity was documented for six Slate-colored Juncos and four American Tree Sparrows banded in previous years, including a junco dating back to October 2008. Despite the large number of House Finches banded at MBO each winter, the return of 2541-76048 on 7 December was only the second year-to-year return recorded for the species to date (but see section 3.3.3 below for additional "visual returns").

Table 3-5. List of returns captured during winter 2012-13, sorted by time elapsed.

Band number	Species	Age/sex at return	Age/sex at banding	Banding date	Previous capture	2012-13 return	Time elapsed	
2600-16465	AMGO	AHY-F	AHY-U	30 Oct 2009	30 Oct 2009	9 Nov	3 years	9 days
2600-15725	SCJU	AHY-F	HY-F	6 Dec 2009	6 Dec 2009	7 Dec	3 years	1 day
2600-17056	AMGO	AHY-M	HY-M	26 Oct 2010	26 Oct 2010	14 Nov	2 years	19 days
2650-25656	AMGO	AHY-M	HY-M	25 Nov 2010	25 Nov 2010	7 Dec	2 years	12 days
2600-15375	BCCH	AHY-U	ASY-U	21 Jan 2010	25 Nov 2010	7 Nov	1 year 11 months	12 days
2541-76048	HOFI	AHY-F	HY-U	9 Nov 2011	9 Nov 2011	7 Dec	1 year	28 days
2650-41089	SCJU	ASY-M	SY-M	23 Feb 2012	23 Feb 2012	22 Mar	1 year	27 days
2650-25511	SCJU	AHY-M	HY-M	1 Nov 2010	9 Nov 2012	3 Dec	1 year	24 days
1383-62359	BLJA	ASY-U	ASY-U	23 Feb 2012	23 Feb 2012	24 Feb	1 year	1 day
2650-25815	ATSP	AHY-U	SY-U	19 Apr 2011	12 Dec 2011	7 Dec	11 months	26 days
2600-15369	BCCH	AHY-U	HY-U	29 Nov 2009	22 Nov 2011	14 Nov	11 months	23 days
2600-15948	BCCH	AHY-U	HY-U	9 Sep 2010	17 Nov 2011	7 Nov	11 months	21 days
2650-43019	BCCH	AHY-U	HY-U	19 Aug 2011	12 Dec 2011	11 Nov	10 months	30 days
2541-73902	DOWO	AHY-F	SY-F	23 Feb 2012	23 Feb 2012	21 Nov	8 months	29 days
2650-41092	SCJU	AHY-M	SY-M	23 Feb 2012	23 Feb 2012	21 Nov	8 months	29 days
2650-41105	ATSP	AHY-U	ASY-U	18 Mar 2012	18 Mar 2012	3 Dec	8 months	14 days
2650-41080	ATSP	AHY-U	AHY-U	10 Dec 2011	22 Mar 2012	7 Nov	8 months	14 days
2650-43064	BCCH	AHY-U	SY-U	28 Apr 2012	28 Apr 2012	16 Nov	6 months	18 days
2650-43018	BCCH	AHY-U	HY-U	16 Aug 2011	22 Apr 2012	9 Nov	6 months	17 days
2650-25486	BCCH	AHY-U	SY-U	20 Feb 2011	24 Apr 2012	7 Nov	6 months	13 days
2650-41216	AMGO	AHY-M	SY-M	18 May 2012	18 May 2012	24 Nov	6 months	6 days
2500-65200	BCCH	AHY-U	HY-U	21 Sep 2008	5 Jun 2012	7 Dec	6 months	2 days
2650-43065	BCCH	AHY-U	SY-F	17 May 2012	17 May 2012	14 Nov	5 months	28 days
2501-10216	HAWO	SY-F	HY-F	14 Sep 2012	14 Sep 2012	24 Feb	5 months	10 days
2650-41001	SCJU	ASY-M	HY-M	9 Nov 2011	22 Oct 2012	26 Mar	5 months	4 days
2560-25252	SCJU	ASY-M	HY-M	27 Oct 2008	23 Oct 2012	27 Mar	5 months	4 days
2650-41513	BCCH	SY-U	HY-U	23 Jul 2012	29 Sep 2012	22 Feb	4 months	24 days
2650-41299	AMGO	SY-F	HY-F	7 Nov 2012	7 Nov 2012	27 Mar	4 months	20 days
2581-69143	HOFI	SY-U	HY-U	9 Nov 2012	9 Nov 2012	27 Mar	4 months	18 days
2581-69148	HOFI	SY-U	HY-M	9 Nov 2012	9 Nov 2012	24 Mar	4 months	15 days
2650-43018	BCCH	AHY-U	HY-U	16 Aug 2011	14 Nov 2012	22 Mar	4 months	8 days
2501-10219	HAWO	SY-M	HY-M	24 Oct 2012	24 Oct 2012	24 Feb	4 months	
2571-23034	DOWO	SY-M	HY-M	8 Oct 2012	25 Oct 2012	22 Feb	3 months	28 days
2490-24907	BCCH	ASY-U	HY-U	16 Aug 2007	27 Oct 2012	24 Feb	3 months	28 days
2650-43039	BCCH	ASY-U	HY-U	26 Sep 2011	27 Oct 2012	22 Feb	3 months	26 days
2650-41105	ATSP	ASY-U	ASY-U	18 Mar 2012	3 Dec 2012	26 Mar	3 months	23 days
2690-79866	AMGO	AHY-F	HY-F	7 Dec 2012	7 Dec 2012	27 Mar	3 months	20 days

Band number	Species	Age/sex at return	Age/sex at banding	Banding date	Previous capture	2012-13 return	Time elapsed	
2690-79906	CORE	SY-F	HY-U	3 Dec 2012	7 Dec 2012	27 Mar	3 months	20 days
2600-16140	BCCH	ASY-U	HY-U	21 Jul 2011	7 Dec 2012	26 Mar	3 months	19 days
2690-79919	CORE	AHY-M	HY-M	7 Dec 2012	7 Dec 2012	24 Mar	3 months	17 days
2600-15948	BCCH	ASY-U	HY-U	9 Sep 2010	7 Nov 2012	22 Feb	3 months	15 days
2650-43068	BCCH	AHY-U	HY-U	1 Aug 2012	9 Nov 2012	24 Feb	3 months	15 days
2541-73902	DOWO	TY-F	SY-F	23 Feb 2012	7 Dec 2012	22 Mar	3 months	15 days
2500-65165	BCCH	ASY-U	HY-U	2 Aug 2008	9 Nov 2012	22 Feb	3 months	13 days
2531-23766	NOCA	SY-F	HY-F	7 Nov 2012	9 Nov 2012	22 Feb	3 months	13 days
2690-79943	CORE	SY-M	HY-M	14 Dec 2012	14 Dec 2012	24 Mar	3 months	10 days
2650-43085	BCCH	SY-U	HY-U	16 Aug 2012	14 Dec 2012	22 Mar	3 months	8 days
2560-25133	BCCH	ASY-U	U-U	17 Aug 2009	16 Nov 2012	22 Feb	3 months	6 days
2650-43020	BCCH	ASY-U	HY-U	22 Aug 2011	16 Nov 2012	22 Feb	3 months	6 days
2571-23555	WTSP	SY-U	HY-U	26 Oct 2012	16 Nov 2012	22 Feb	3 months	6 days
2690-79942	SCJU	SY-M	HY-M	14 Dec 2012	14 Dec 2012	22 Mar	3 months	8 days
2690-79123	BCCH	SY-U	HY-U	29 Sep 2012	21 Nov 2012	24 Feb	3 months	3 days
2431-74164	DOWO	TY-M	HY-U	25 Jul 2011	21 Nov 2012	22 Feb	3 months	1 day

3.3.3 Birds resighted

All 69 House Finches and 87 American Goldfinches banded during winter 2011-2012 also received an additional band on the other leg, with two white characters on a black background, intended to permit identification of individuals without needing to recapture them. Reports were collected through the MBO website: http://www.migrationresearch.org/mbo/feederbirds.html

Only one of the American Goldfinches was resighted, at MBO on two occasions within one month of banding. Legibility of the goldfinch bands was a challenge because of their small size, but observers who reported banded House Finches did not even see any banded American Goldfinches, suggesting that most likely moved out of the region.

By the end of 2012, 41 of the 69 House Finches had been reported a total of 119 times (range 1-17). The majority of records (64%) came from two backyards in Senneville, within 3 km of MBO, while most of the rest (32%) were observed at MBO itself. In December 2012, the first few reports arrived from Beaconsfield and Ste-Anne-de-Bellevue, both also within 5 km of MBO. Thanks to Simon Duval, Gay Gruner, Alison Hackney, Betsy McFarlane, David Mulholland, and Ryan Young for reporting sightings.

Only 21 additional sightings (involving 9 individual House Finches) were reported in 2013, all but two of them at MBO. This suggests that after one year, most individuals either dispersed from the area or died. However, it is interesting to note that at least 8 individuals returned to MBO the following winter, even though only one (different) individual was recaptured, highlighting the value of the colour bands in tracking the occurrence of individuals in this species.

3.3.4 Daily estimated totals (DET)

The number of species observed daily ranged from a low of 2 during a brief visit on January 6 to a high of just 25 on the final day of the season, March 27. Over the course of the season, 44 species were observed, the fewest since winter 2007-2008. No new species were observed this winter, leaving the cumulative season total at 91 species. Record high mean daily counts for winter were set for 6 species: Great Gray Owl, Downy Woodpecker, Hairy Woodpecker, House Finch, Common Redpoll, and Hoary Redpoll.

4. Spring Migration Monitoring Program (SMMP)

The Spring Migration Monitoring Program has been operated at MBO annually since 2005. It covers the 10-week period from 28 March through 5 June. Since 2007, the protocol has been to focus banding on a 45-day window from 18 April through 1 June, recognizing that during the first three weeks of the season it is often too cold to permit for consistent effort, and that by the last four days of the season, migrants are becoming scarce relative to local breeders; these periods are instead covered through census and supplementary observations.

4.1 Effort

Census was conducted every morning throughout the season, while banding took place on 43 (96%) of the 45 scheduled days; banding was cancelled on the other two days due to rain. On 12 additional days, rain and/or strong winds resulted in reduced net hours, leaving only 31 days (69%) of full operation according to the site protocol. However, the 2924 net hours this spring was well above the average of 2807 over the previous seven years.

All captures this spring were through the standard set of 16 mist nets used for migration monitoring, arranged as in previous years (net locations A1, A2, B2, N1, N3, B3, C1, C2, D1, D2, D3, D4, E1, E2, H1, and H2; see Gahbauer and Hudson 2011 for a map). Flooding was relatively modest this spring, only preventing the use of net H1 on April 18, 20, and 21. All nets were new and from Manomet, 12 m long with 30 mm mesh.

4.2 Site conditions

Weather can have a significant influence on migration, especially in spring. Following an unusually cold and snowy winter, temperatures over the first three weeks of spring remained slightly below normal. Temperatures over the remainder of the season were largely seasonal, except for a record heat wave in the first week of May (week 6). It was the driest spring since 2008, with more than half of the season's rain coming during the final two weeks.

Table 4-1. Weather conditions during the 2013 Spring Migration Monitoring Program, by week.

	1	2	3	4	5	6	7	8	9	10	SEASON
Mean daily high (°C)	6.5	8.2	8.7	14.8	18.3	26.0	17.0	20.8	17.1	24.5	16.2
Mean daily low (°C)	-2.5	-1.2	1.1	2.2	6.0	10.7	6.7	10.1	7.6	14.4	5.5
Mean daily temp (°C)	2.0	3.5	4.9	8.5	12.1	18.4	11.9	15.5	12.4	19.5	10.9
Highest temp (°C)	12	10	14	21	26	29	25	23	23	32	32
Lowest temp (°C)	-7	-6	-2	-2	2	8	0	7	4	7	-7
# days with rainfall	2	3	3	4	1	1	4	4	5	2	29
Total rain (mm)	6	16	13	9	1	1	19	20	66	25	176
# days with snowfall	-	1	1	-	-	-	-	-	-	-	2
Total snow (cm)	-	1	13	-	-	-	-	-	-	-	14

4.3 Results and discussion

4.3.1 Birds banded

The 790 birds banded this spring was very close to the long-term mean of 786 for the season. However, the 68 species banded was a new record, two more than in 2009 and 2012. The busiest day of the season was 22 May, with 94 birds banded (Figure 4-1). The count of birds banded exceeded 40 on just three other days, all between 19 and 25 May, reflecting a very concentrated peak of migration this year. For SMMP 2013 the mean count of birds banded per day was 17.6 (or 18.4 during the 43 days with nets open).

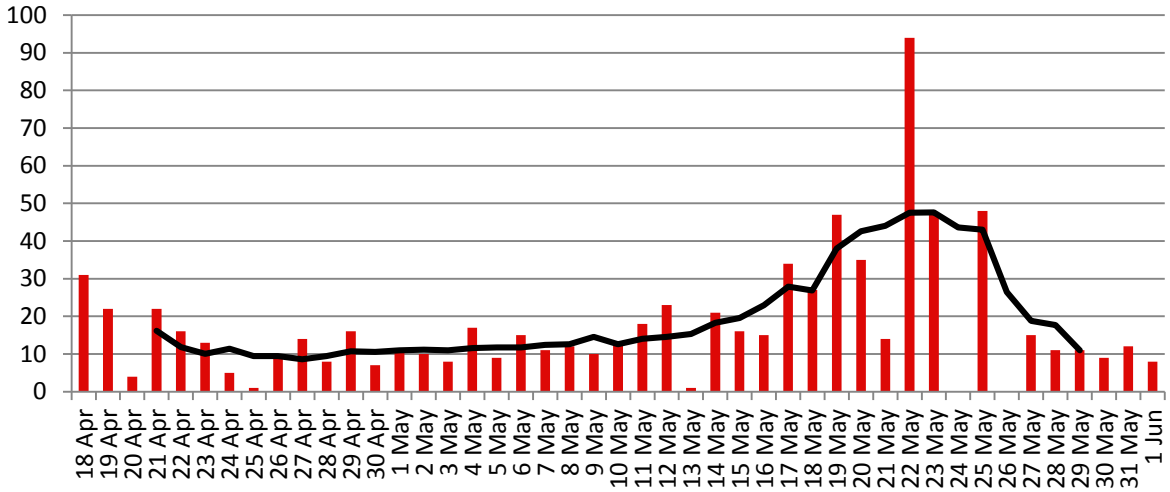

Figure 4-1. Number of individuals banded per day during the 2013 Spring Migration Monitoring Program, with a running 7-day average in black.

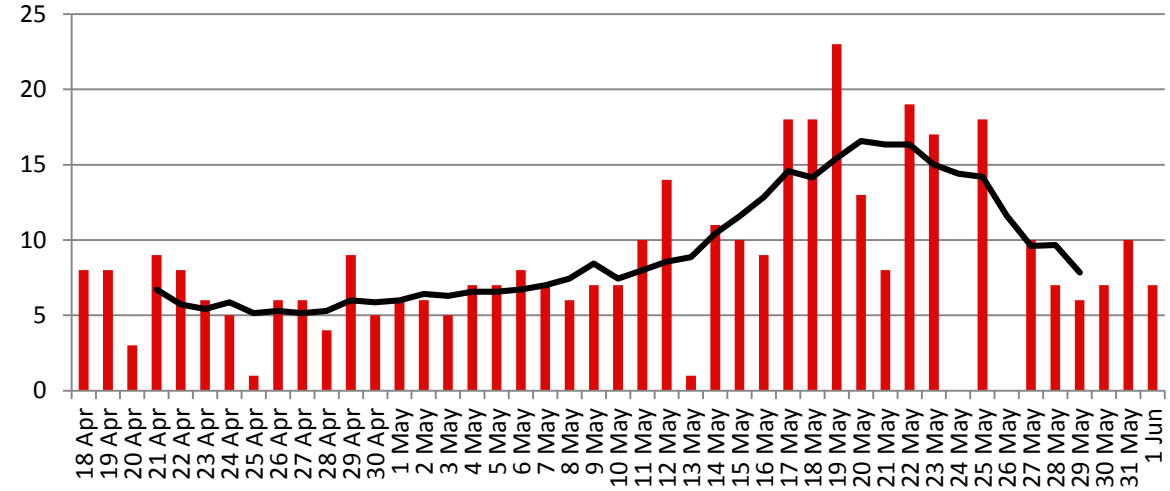

Figure 4-2. Number of species banded per day during the 2013 Spring Migration Monitoring Program, with a running 7-day average in black.

Species richness among banded bird peaked during the third week of May, which is typical (Figure 4-2). The greatest variety banded in a single day was 23 species on 19 May, close to the long-term average. The mean number of species banded per day was 8.8, slightly lower than last year (9.3).

American Woodcock was the only new species banded at MBO this spring, increasing the site total to 112 species. Blackburnian Warbler was the only species this spring observed only by virtue of being banded. Nineteen species were banded just once this spring: Solitary Sandpiper, American Woodcock, Black-billed Cuckoo, Yellow-bellied Sapsucker, Northern Flicker, Eastern Kingbird, Blue-headed Vireo, White-breasted Nuthatch, Brown Creeper, Gray-cheeked Thrush, Swainson's Thrush, Brown Thrasher, Black-and-white Warbler, Cape May Warbler, Blackburnian Warbler, Western Palm Warbler, Black-throated Green Warbler, Rusty Blackbird, and Brown-headed Cowbird.

At the other extreme, Table 4-2 lists the 10 most frequently banded species, which account for 57.5% of all birds banded during SMMP 2012. Four of these (Ruby-crowned Kinglet, Yellow Warbler, Yellow-rumped Warbler, and Red-winged Blackbird) have been in the top 10 for spring annually since 2005. Two others have missed the top 10 only once – White-throated Sparrow in 2007 and American Goldfinch in 2011.

Red-winged Blackbird was again the top species this spring, for the sixth time in nine years. A record number of Magnolia Warblers pushed that species to second place for the first time, while Tennessee Warbler dropped a bit compared to the past two years and had the third highest total for spring. The 43 Northern Waterthrushes banded this spring was a record, and pushed the species into the top five for the first time. It was also a good spring for sparrows, with Fox Sparrow and Swamp Sparrow both in the top ten for the first time ever, as well as an average number of White-throated Sparrows. Warblers of 19 species were banded this spring, comprising 41% of all birds banded; 10 sparrow species accounted for another 23% of the spring total.

Table 4-2. Top 10 species banded at MBO during SMMP 2013, as well as the numbers for 2005-2012. Numbers in parentheses indicate the rank in past years.

	2013	2012	2011	2010	2009	2008	2007	2006	2005
1. Red-winged Blackbird	83	116 (1)	70 (3)	85 (1)	50 (3)	114 (1)	154 (1)	169 (1)	73 (2)
2. Magnolia Warbler	66	39 (8)	27 (13)	12 (18)	41 (6)	18 (14)	17 (10)	22 (8)	5 (21)
3. Tennessee Warbler	49	94 (2)	71 (2)	7 (22)	82 (1)	6 (27)	16 (11)	2 (40)	4 (28)
4. Yellow Warbler	43	37 (9)	30 (9)	26 (7)	43 (5)	36 (6)	29 (6)	21 (10)	47 (4)
5. Northern Waterthrush	43	28 (10)	28 (12)	12 (18)	26 (12)	12 (18)	15 (12)	5 (30)	4 (28)
6. Fox Sparrow	42	6 (31)	18 (15)	16 (12)	2 (46)	23 (12)	--	9 (17)	8 (18)
7. White-throated Sparrow	40	57 (4)	51 (4)	22 (8)	34 (9)	79 (3)	13 (17)	42 (5)	29 (6)
8. Ruby-crowned Kinglet	39	54 (5)	43 (7)	36 (4)	73 (2)	92 (2)	52 (2)	58 (3)	20 (9)
9. Swamp Sparrow	26	19 (18)	12 (20)	16 (12)	11 (22)	19 (13)	3 (36)	11 (15)	19 (11)
10. Yellow-rumped Warbler	23	46 (7)	102 (1)	30 (5)	37 (8)	47 (4)	32 (5)	22 (8)	25 (7)

4.3.2 Birds recaptured

There were 226 repeats (individuals caught within 3 months of banding at MBO) of 33 species during SMMP 2013. This is down from last year's record high of 299, but still well above the eight-year mean of 187. Repeats can be subdivided into local residents caught repeatedly, and migrants captured twice or more during their stopover at MBO. As is often the case in spring, the species recaptured most frequently are ones with a local breeding population (Table 4-3).

There were more recaptures this spring of Yellow Warbler than any other species, with 35 repeats of 17 individuals. Black-capped Chickadee, Song Sparrow, and Red-winged Blackbird each had 20 repeats, although many chickadees were recaptured twice, while all but two of the blackbirds were recaptured just once. Both Northern Waterthrush and Fox Sparrow are transients at MBO and had unusually large numbers of repeats this spring. However, the longest stopovers recorded were 8 days for one Northern Waterthrush and 7 days for one Fox Sparrow, whereas last year three individuals stayed for longer, with one up to 15 days.

Table 4-3. Top 10 species recaptured most often during SMMP 2013. These represent the same individuals caught repeatedly in some cases.

Species	# repeats	# individuals
1. Yellow Warbler	35	17
2. Black-capped Chickadee	20	11
2. Song Sparrow	20	12
2. Red-winged Blackbird	20	18
5. Northern Waterthrush	19	14
6. Common Yellowthroat	13	8
6. Fox Sparrow	13	9
8. Eastern Phoebe	11	3
9. White-throated Sparrow	9	4
10. Gray Catbird	7	4

There were a near-record 105 returns of 23 species during SMMP 2013 (Table 4-4). The most noteworthy capture this spring was a five-year-old male Red-winged Blackbird last recorded four years earlier. Three other individuals were recaptured for the first time in over two years, including a Slate-colored Junco that may have been missed during winter, or else was showing fidelity to MBO on migration. In total there were 24 returns that had not been recorded at MBO for more than one year. The oldest bird recaptured this spring was a Yellow Warbler banded in August 2005 as an after-hatch-year bird, and therefore now at least 9 years old. Among the returns were several individuals that were banded at MBO as juveniles, including Black-capped Chickadee, Gray Catbird, Yellow Warbler, Common Yellowthroat, Song Sparrow, Swamp Sparrow, Baltimore Oriole, and Red-winged Blackbird.

No foreign-banded birds were captured at MBO during SMMP 2013. However, a Northern Saw-whet Owl banded at MBO on 22 October 2011 was found dead in Toronto, Ontario on 7 April 2013, an American Robin banded on 18 August 2012 was found dead in Greendale, Quebec on 22 April 2013, another American Robin banded on 7 November 2012 was found dead in Trois-Rivières, Quebec on 26 April 2013.

Table 4-4. List of returns captured during SMMP 2013, sorted by time elapsed.

Band number	Species	Age/sex in 2013	Age/sex at banding	Banding date	Previous capture	2013 return	Time elapsed		
1292-00593	RWBL	ASY-M	SY-M	5 May 2009	5 May 2009	20 May	4 years		15 days
2500-65524	YEWA	ASY-F	AHY-F	1 Aug 2008	19 May 2010	17 May	2 years	11 months	29 days
2600-16049	COYE	ASY-M	SY-M	24 May 2010	24 May 2010	20 May	2 years	11 months	27 days
2600-15688	SCJU	ASY-M	HY-M	15 Nov 2009	1 Nov 2010	24 Apr	2 years	5 months	23 days
2600-16015	YEWA	ASY-F	SY-F	17 May 2010	20 May 2011	18 May	1 year	11 months	29 days
1891-91391	BHCO	ASY-M	ASY-M	22 May 2009	1 May 2011	22 Apr	1 year	11 months	21 days
1222-70395	RWBL	ASY-M	ASY-M	14 May 2006	19 May 2011	3 May	1 year	11 months	16 days
2401-74500	REVI	ASY-U	AHY-U	15 Aug 2011	15 Aug 2011	17 May	1 year	9 months	2 days
2401-97378	SOSP	SY-U	HY-U	1 Aug 2012	1 Aug 2012	26 Apr	1 year	8 months	25 days
1272-07818	BLJA	ASY-U	HY-U	5 Sep 2008	29 Aug 2011	10 May	1 year	8 months	11 days
2431-74604	SOSP	ASY-U	HY-U	25 Sep 2010	7 Oct 2011	5 May	1 year	6 months	29 days
2650-41039	SCJU	ASY-M	HY-M	17 Nov 2011	1 Dec 2011	28 Apr	1 year	4 months	27 days
1342-36242	RWBL	ASY-M	SY-M	22 Apr 2012	22 Apr 2012	30 May	1 year	1 month	8 days
2650-43897	AMGO	ASY-M	SY-M	5 May 2012	5 May 2012	30 May	1 year		25 days
1342-36057	RWBL	ASY-M	SY-M	25 May 2011	29 Apr 2012	15 May	1 year		17 days
2421-70885	RWBL	ASY-F	ASY-F	14 May 2012	14 May 2012	23 May	1 year		9 days
1891-91634	BAOR	ASY-F	AHY-F	25 Jul 2011	7 May 2012	12 May	1 year		5 days
1951-51422	BAOR	ASY-M	HY-F	7 Aug 2006	12 May 2012	17 May	1 year		5 days
1342-36287	RWBL	ASY-M	SY-M	6 May 2012	6 May 2012	10 May	1 year		4 days
2401-97286	PUFI	ASY-M	SY-M	22 Apr 2012	27 Apr 2012	30 Apr	1 year		3 days
1951-51414	BAOR	ASY-F	HY-F	4 Aug 2006	15 May 2012	18 May	1 year		3 days

Band number	Species	Age/sex in 2013	Age/sex at banding	Banding date	Previous capture	2013 return	Time elapsed	
2541-73958	DOWO	TY-F	SY-F	27 May 2012	27 May 2012	30 May	1 year	3 days
2421-70682	BAOR	ASY-M	ASY-M	18 May 2011	15 May 2012	16 May	1 year	1 day
1891-91513	RWBL	ASY-F	SY-F	1 May 2010	24 May 2012	25 May	1 year	1 day
1383-62381	COGR	AHY-M	SY-M	17 May 2012	17 May 2012	17 May	1 year	
2421-70827	RWBL	ASY-F	ASY-F	18 Apr 2012	15 May 2012	14 May	11 months	30 days
2500-65380	YEWA	ASY-M	SY-M	27 May 2008	20 May 2012	19 May	11 months	30 days
2351-48518	SWSP	AHY-F	HY-U	14 Jun 2011	5 May 2012	3 May	11 months	29 days
2600-16130	YEWA	ASY-F	SY-F	6 Jun 2011	23 May 2012	21 May	11 months	29 days
2401-97301	TRES	AHY-M	AHY-M	6 May 2012	24 May 2012	22 May	11 months	29 days
2431-86875	BHCO	ASY-F	AHY-F	27 Apr 2011	25 May 2012	23 May	11 months	29 days
2460-40364	COYE	ASY-M	ASY-M	25 May 2006	26 May 2012	20 May	11 months	25 days
2431-87108	SOSP	AHY-U	HY-U	14 Aug 2011	30 Apr 2012	23 Apr	11 months	24 days
2421-70861	RWBL	ASY-F	AHY-F	9 May 2012	9 May 2012	2 May	11 months	24 days
1891-91604	BAOR	ASY-M	SY-M	27 Jun 2010	25 May 2012	17 May	11 months	23 days
1891-91522	RWBL	ASY-F	ASY-F	5 May 2010	17 May 2012	7 May	11 months	21 days
2650-43267	YEWA	ASY-M	AHY-M	2 Aug 2011	31 May 2012	16 May	11 months	16 days
2650-43309	YEWA	ASY-M	AHY-M	6 Aug 2011	30 May 2012	12 May	11 months	13 days
2460-40492	YEWA	ASY-M	SY-M	11 May 2007	27 May 2012	8 May	11 months	12 days
2600-16372	COYE	ASY-M	HY-M	23 Aug 2010	16 Jun 2012	28 May	11 months	12 days
2650-41374	YEWA	ASY-M	SY-M	21 May 2012	5 Jun 2012	16 May	11 months	11 days
2600-16257	COYE	ASY-M	HY-M	10 Aug 2010	23 Jun 2012	1 Jun	11 months	8 days
1342-01071	RWBL	ASY-M	SY-M	16 May 2010	23 Jun 2012	27 May	11 months	4 days
2421-70890	RWBL	ASY-F	AHY-F	16 May 2012	16 May 2012	19 Apr	11 months	3 days
2650-41396	CHSP	ASY-U	SY-M	26 May 2012	26 May 2012	28 Apr	11 months	2 days
2650-25868	HOWR	ASY-U	SY-U	2 May 2011	31 May 2012	30 Apr	10 months	30 days
1840-76953	YEWA	ASY-M	AHY-M	12 Aug 2005	6 Jul 2012	16 May	10 months	10 days
2650-41504	YEWA	SY-F	HY-U	23 Jul 2012	23 Jul 2012	23 May	10 months	
2650-43397	COYE	ASY-F	AHY-F	18 Aug 2011	27 Jul 2012	21 May	9 months	25 days
2650-41503	YEWA	SY-M	HY-M	23 Jul 2012	23 Jul 2012	17 May	9 months	25 days
2650-41553	COYE	SY-F	HY-U	30 Jul 2012	30 Jul 2012	23 May	9 months	24 days
2401-97379	REVI	SY-U	HY-U	1 Aug 2012	1 Aug 2012	21 May	9 months	20 days
2421-93809	GRCA	ASY-U	SY-U	28 May 2012	3 Aug 2012	23 May	9 months	20 days
2650-41539	YEWA	SY-M	HY-U	23 Jul 2012	1 Aug 2012	19 May	9 months	18 days
2650-41448	YEWA	SY-F	HY-U	1 Aug 2012	1 Aug 2012	18 May	9 months	17 days
2571-20502	SOSP	AHY-M	HY-U	30 Jul 2012	30 Jul 2012	14 May	9 months	16 days
2650-41601	COYE	SY-M	HY-U	7 Aug 2012	7 Aug 2012	22 May	9 months	15 days
2650-41505	YEWA	SY-M	HY-M	23 Jul 2012	5 Aug 2012	16 May	9 months	11 days
2650-41639	COYE	SY-M	HY-M	12 Aug 2012	12 Aug 2012	23 May	9 months	11 days
2421-93923	GRCA	SY-U	HY-U	17 Aug 2012	17 Aug 2012	27 May	9 months	10 days
2421-93904	GRCA	ASY-U	SY-U	11 Aug 2012	13 Aug 2012	22 May	9 months	9 days
2650-41455	YEWA	ASY-M	AHY-M	2 Aug 2012	13 Aug 2012	17 May	9 months	4 days
2650-41323	YEWA	ASY-F	AHY-F	15 May 2012	13 Aug 2012	16 May	9 months	3 days
2421-93916	BAOR	ASY-M	AHY-M	14 Aug 2012	14 Aug 2012	17 May	9 months	3 days
2650-41325	YEWA	ASY-M	SY-M	15 May 2012	11 Aug 2012	10 May	8 months	30 days
2600-16066	YEWA	ASY-M	SY-M	30 May 2010	15 Aug 2012	14 May	8 months	30 days
2571-23155	SOSP	AHY-M	HY-U	16 Aug 2012	16 Aug 2012	14 May	8 months	29 days
2650-41692	COYE	ASY-M	AHY-M	19 Aug 2012	19 Aug 2012	17 May	8 months	29 days
2341-58999	SOSP	AHY-U	HY-U	26 Sep 2009	2 Aug 2012	28 Apr	8 months	26 days
2650-41304	YEWA	ASY-F	SY-F	12 May 2012	18 Aug 2012	14 May	8 months	26 days
2650-43587	COYE	ASY-M	HY-M	18 Sep 2011	24 Aug 2012	19 May	8 months	25 days
2600-16159	WAVI	ASY-U	SY-M	23 Jun 2012	27 Aug 2012	18 May	8 months	21 days
1851-88521	INBU	ASY-F	SY-F	4 Sep 2012	4 Sep 2012	22 May	8 months	18 days
2571-23114	SOSP	SY-U	HY-U	8 Aug 2012	8 Aug 2012	18 Apr	8 months	10 days
2571-23128	SOSP	AHY-U	HY-U	9 Aug 2012	9 Aug 2012	18 Apr	8 months	9 days
2421-70875	NOCA	AHY-F	AHY-F	12 May 2012	6 Sep 2012	12 May	8 months	6 days
2421-70736	GRCA	ASY-U	AHY-U	7 Aug 2011	16 Sep 2012	16 May	8 months	
2650-43429	COYE	ASY-F	HY-U	24 Aug 2011	19 Sep 2012	18 May	7 months	30 days
2571-23117	SOSP	AHY-U	HY-U	8 Aug 2012	18 Sep 2012	6 May	7 months	19 days
1383-62342	BLJA	ASY-U	HY-U	29 Sep 2011	20 Sep 2012	20 Apr	7 months	
2571-23118	SOSP	AHY-U	HY-U	8 Aug 2012	24 Sep 2012	22 Apr	6 months	28 days

Band number	Species	Age/sex in 2013	Age/sex at banding	Banding date	Previous capture	2013 return	Time elapsed	
2571-23130	SOSP	AHY-U	HY-U	9 Aug 2012	26 Sep 2012	23 Apr	6 months	27 days
2431-87186	SOSP	AHY-U	HY-U	30 Sep 2011	2 Oct 2012	24 Apr	6 months	22 days
2421-93996	NOCA	AHY-M	HY-M	26 Sep 2012	25 Oct 2012	17 May	6 months	22 days
2431-87112	SOSP	AHY-U	HY-U	15 Aug 2011	3 Oct 2012	19 Apr	6 months	16 days
2341-64943	SOSP	AHY-U	HY-U	3 Oct 2012	3 Oct 2012	18 Apr	6 months	15 days
1383-62336	BLJA	ASY-U	AHY-U	23 Sep 2011	19 Oct 2012	26 Apr	6 months	7 days
2690-79706	AMGO	ASY-F	AHY-F	7 Nov 2012	7 Nov 2012	14 May	6 months	7 days
2650-41521	BCCH	SY-U	HY-U	23 Jul 2012	21 Oct 2012	27 Apr	6 months	6 days
2341-64925	SOSP	SY-U	HY-U	27 Sep 2012	22 Oct 2012	26 Apr	6 months	4 days
2241-91844	DOWO	ATY-M	HY-M	11 Aug 2007	21 Oct 2012	24 Apr	6 months	3 days
2531-23767	NOCA	AHY-F	U-F	7 Nov 2012	16 Nov 2012	16 May	6 months	
2421-93989	NOCA	SY-M	HY-M	20 Sep 2012	28 Oct 2012	24 Apr	5 months	27 days
2531-23763	NOCA	SY-F	U-F	29 Oct 2012	29 Oct 2012	24 Apr	5 months	26 days
2650-43072	BCCH	SY-U	HY-U	4 Aug 2012	28 Oct 2012	22 Apr	5 months	25 days
2650-43037	BCCH	ASY-U	HY-U	22 Sep 2011	31 Oct 2012	19 Apr	5 months	19 days
2690-79106	BCCH	SY-U	HY-U	15 Sep 2012	9 Nov 2012	22 Apr	5 months	13 days
2690-79818	AMGO	SY-F	HY-F	21 Nov 2012	24 Nov 2012	5 May	5 months	11 days
2650-43009	BCCH	ASY-U	HY-U	1 Aug 2011	9 Nov 2012	18 Apr	5 months	9 days
2571-23564	WTSP	AHY-U	HY-U	14 Nov 2012	14 Nov 2012	18 Apr	5 months	4 days
2600-15941	BCCH	ASY-U	HY-U	20 Aug 2010	16 Nov 2012	18 Apr	5 months	2 days
2690-79637	BCCH	SY-U	HY-U	31 Oct 2012	3 Dec 2012	20 Apr	4 months	17 days
2571-23565	WTSP	SY-F	HY-F	14 Nov 2012	3 Dec 2012	19 Apr	4 months	16 days
2650-43034	BCCH	ASY-U	HY-U	22 Sep 2011	7 Dec 2012	23 Apr	4 months	16 days
2500-65165	BCCH	ASY-F	HY-U	2 Aug 2008	22 Feb 2013	27 May	3 months	5 days

4.3.3 Census

One or more experienced observers walked the standardized census route daily during SMMP except May 24, often recording species not otherwise documented during the course of the morning and greatly contributing to the documentation of migration through MBO. This year 8 species (compared to between 4 and 14 in each of the past four years) were observed only through census: Hooded Merganser, Sora, Red-bellied Woodpecker, Carolina Wren, Hermit Thrush, Orange-crowned Warbler, Pine Warbler, and Eastern Meadowlark.

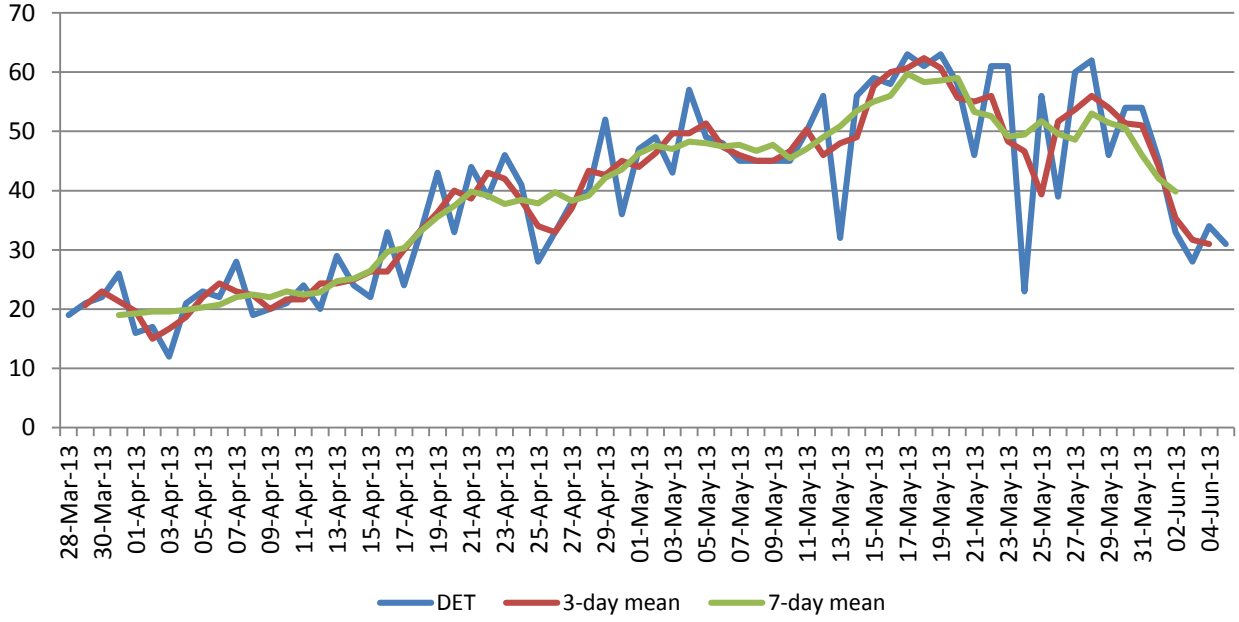

Figure 4-3. Number of species recorded on the daily census during SMMP 2013 at MBO, including a 3-day and 7-day running mean.

As shown in Figure 4-3, there was considerable daily variation in the number of species observed during the census, ranging from a low of 12 on 3 April, to a high of 43 on 16 May. This reflects not only actual changes in the bird population from day to day, but also variation due to weather and among observers. To account for this, 3-day and 7-day running means were calculated and plotted. This year diversity on census peaked in the third week of May, as usual. After that, diversity tapered off in a typical manner, and by the end of the season, most species being observed were likely local breeders.

4.3.4 Daily estimated totals (DET)

The DET reflects not only banding and census data, but also all supplemental observations made by participants throughout each morning. It is particularly important for waterfowl and raptors, which are not targeted by the banding program, and are only marginally sampled by the census, since many are more active later in the morning. However, the DET is also valuable for passerines, both to monitor infrequently captured species, and as a means to evaluate the percentage of individuals of each species that are caught and banded. Fifteeen species (five fewer than last year) were only recorded as incidental observations this spring, highlighting their importance for the DET. The species this year were Ross's Goose, Osprey, Bald Eagle, Northern Harrier, Peregrine Falcon, Least Sandpiper, Wilson's Snipe, Common Tern, Rock Pigeon, Chimney Swift, Great Horned Owl, Purple Martin, Eastern Bluebird, Bobolink, and Evening Grosbeak.

During SMMP 2013, 145 species were recorded, slightly above the eight-year spring mean. There were 18 species seen on just a single day, highlighting the importance of full daily coverage throughout the season. The only new species for MBO observed this spring was Ross's Goose.

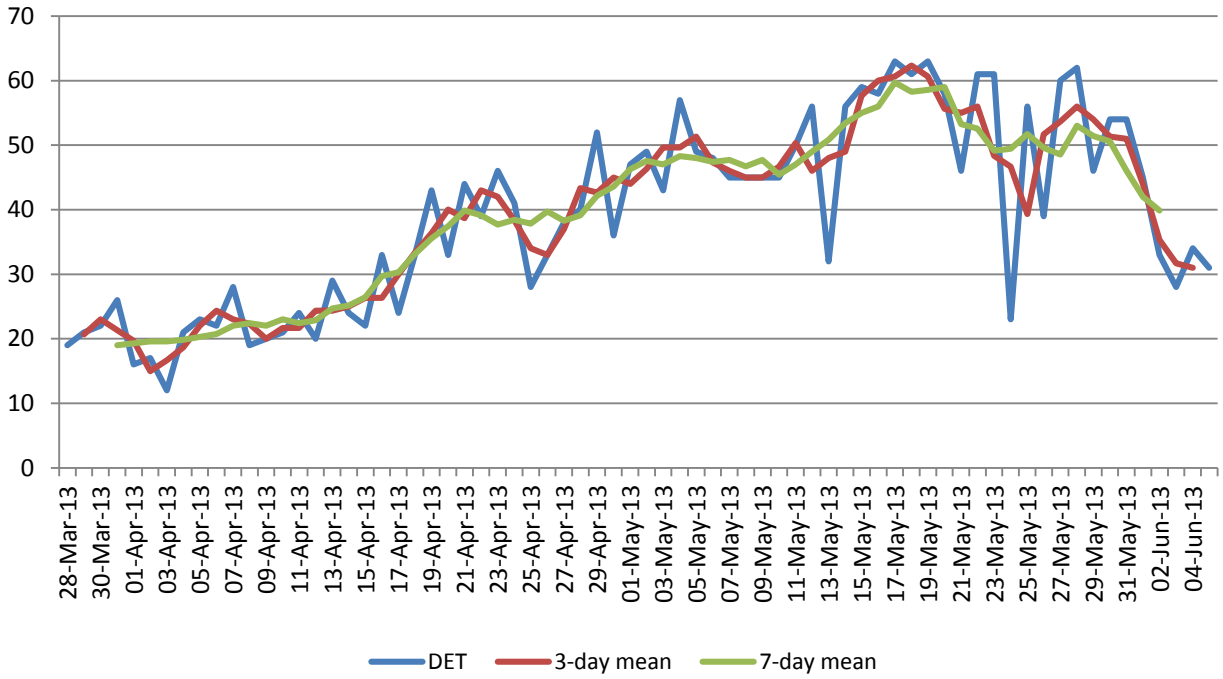

Figure 4-4. Number of species observed daily during SMMP 2013 at MBO, including a 3-day and 7-day running mean.

The highest single day total, 63 species, was recorded on 17 May and 19 May, while the lowest count of 12 occurred on 3 April (Figure 4-4). There was considerable variation in daily estimated totals from day to day, again due to weather and observer effects. A clearer pattern is shown by

the 7-day running average, which increased steadily until around 17 May, hit a plateau just below 60 species for four days, and then started to decline.

This year 21 species were observed during all 10 weeks of the spring season: Canada Goose, Mallard, Turkey Vulture, Ring-billed Gull, Downy Woodpecker, Pileated Woodpecker, Blue Jay, American Crow, Common Raven, Black-capped Chickadee, American Robin, European Starling, Northern Cardinal, Red-winged Blackbird, Brown-headed Cowbird, Common Grackle, and American Goldfinch. This list is relatively similar to last year's, except for Wood Duck, Great Blue Heron, Red-tailed Hawk, Tree Swallow, Cedar Waxwing, and Song Sparrow dropping off, and Mourning Dove, Hairy Woodpecker, White-breasted Nuthatch, and White-throated Sparrow being added. This spring no species were banded weekly throughout the banding period.

4.3.5 Coverage of priority species

MBO has produced a list of 62 target species for priority monitoring (Gahbauer and Hudson 2011). The list is based on priority rankings proposed by Bird Studies Canada, with an emphasis on species poorly studied by the Breeding Bird Survey due to their northern breeding distribution, and on neotropical migrants, recognized as being at elevated conservation risk due to threats to their wintering grounds. The MBO list has been modified to eliminate western species not expected to occur at the site.

Table 4-5. Summary of priority species observed and banded during SMMP 2013. Detailed category definitions are provided in Gahbauer and Hudson (2011).

	Priority A	Priority B	Priority C	Priority D
Number of species in category	15	10	18	19
Number of species observed	15	10	17	19
Number of species banded	14	10	13	12
Number of individuals banded	174	206	119	157

All but one of the species on the MBO priority list were observed during SMMP 2013 (Mourning Warbler missed), and 79% were banded (Table 4-5). Over 91% of individuals banded were priority species. Of the top 10 species banded at MBO during SMMP 2013, all are designated as priority species, including 8 that are priority A or B, indicating the program is effective at documenting these otherwise poorly monitored birds.

4.3.6 Net productivity

As in previous seasons, the productivity of nets during SMMP 2013 was assessed. Table 4-6 summarizes the usage and productivity of all nets. The nets are clustered into three main groups. C and D (six nets total) are along the east and north edges of Stoneycroft Pond. Four nets sample the shrubby areas east of Stoneycroft Pond (A and E). H and B/N (six nets total) are along the back ponds. Under normal weather and personnel conditions, all nets were operated for five hours daily. However, the B/N nets are more vulnerable to wind, and were closed when conditions were unfavourable, resulting in a core group of 12 nets (C-A-D-E-H) that allows for sampling from each area.

The overall capture rate for SMMP 2013 was 27.0 new birds per 100 net hours, comparable to the long-term spring mean. An additional 11.3 birds per 100 net hours were recaptured.

The relative effectiveness of nets varies from year to year, although typically the A and H nets along with E2 are the most productive in spring. This year was somewhat different, with A2 and E1 the most productive nets, followed by C2 and E2. C1 and the H nets were also slightly above average. A1 and D1 were a bit below average, while the remainder of the D nets and the B/N series were the least productive, with B2 by far the lowest.

Table 4-7. Net usage and capture rates during SMMP 2013

Net	Hours open	New Captures	Repeats+ Returns	Total captures	Birds / 100 net hours	
					New	Total
A1	187.6	44	22	66	23.5	35.2
A2	187.6	84	38	122	44.8	65.0
A – TOTAL	**375.1**	**128**	**60**	**188**	**34.1**	**50.1**
B2	175.8	21	20	41	11.9	23.3
N1	175.8	31	13	44	17.6	25.0
N3	175.8	36	24	60	20.5	34.1
B3	175.8	35	11	46	19.9	26.2
B/N – TOTAL	**703.2**	**123**	**68**	**191**	**17.5**	**27.2**
C1	187.6	58	25	83	30.9	44.2
C2	188.6	76	30	106	40.3	56.2
C – TOTAL	**376.1**	**134**	**55**	**189**	**35.6**	**50.3**
D1	185.1	42	23	65	22.7	35.1
D2	185.1	30	17	47	16.2	25.4
D3	185.1	40	18	58	21.6	31.3
D4	184.3	39	15	54	21.2	29.2
D – TOTAL	**739.4**	**151**	**73**	**224**	**20.4**	**30.3**
E1	186.6	82	18	100	43.9	53.6
E2	186.6	69	18	87	37.0	46.6
E – TOTAL	**373.1**	**151**	**36**	**187**	**40.5**	**50.1**
H1	170.3	52	18	70	30.5	41.1
H2	186.6	51	21	72	27.3	38.6
H – TOTAL	**356.9**	**103**	**39**	**142**	**28.9**	**39.8**
GRAND TOTAL	**2923.8**	**790**	**331**	**1121**	**27.0**	**38.3**

4.4 Summary and analysis

The banding effort of 2924 hours this spring was above average, but the 790 birds banded was within a few of the eight-year mean for the season. However, the 68 species banded was a new record high for spring for the second year in a row. Winter lingered than usual and many early migrants were delayed in their arrival. Also, despite the heat wave in early May, many mid-season migrants arrived somewhat later than in recent years, likely due to a major lower pressure system that lingered over the southeastern US during the first and second weeks of May and delayed the northward movement of many birds. Overall though, the peak of migration was in the third week of May, as usual. The number of species observed this spring was 145, above average for the season, and included one species never before observed at MBO, Ross's Goose.

Warblers rebounded a bit from last year's relatively low numbers, accounting for 41% of birds banded this spring, in part reflecting record numbers of Northern Waterthrush and Magnolia Warbler. Also noteworthy this spring were the record numbers of Fox and Swamp Sparrows.

Repeats and returns were again both far above average this spring. The number of returns in spring has been close to 100 for four of the past five years, and likely reflects a good percentage of the local breeding population at MBO.

5. Summer (MAPS) program

Summer at MBO spans an 8-week period between migration periods, from 6 June through 31 July. In earlier years, observations during this period were on a casual basis, but since 2009 data have been collected in a more standardized manner through the Monitoring Avian Productivity and Survivorship (MAPS) program. Banding takes place at 9 nets around the southern half of Stoneycroft Pond, used only for MAPS.

5.1 Effort

Seven MAPS visits were conducted between 6 June and 31 July; on each occasion there were six hours of banding. Incidental observations of all species were also recorded during each visit. An additional two visits were made to band nestlings in nest boxes.

5.2 Site conditions

Overall, it was the coolest summer since 2009, and the wettest since 2006. However, it was primarily the first week of summer that was unusually cool and rainy; most of the rest of the season conditions were relatively close to normal.

Table 5-1. Weather conditions during the 2013 MAPS program, by week.

	1 *Jun 6-12*	2 *Jun 13-19*	3 *Jun 20-26*	4 *Jun 27-Jul 3*	5 *Jul 4-10*	6 *Jul 11-17*	7 *Jul 18-24*	8 *Jul 25-31*	SEASON
Mean daily high (°C)	19.4	22.1	25.5	22.6	28.5	30.0	26.9	25.0	24.9
Mean daily low (°C)	12.4	10.5	17.0	15.6	19.9	18.6	16.4	14.4	15.4
Mean daily temp (°C)	15.9	16.3	21.3	19.1	24.2	24.3	21.7	19.7	20.3
Highest temp (°C)	25	26	30	26	30	33	33	27	33
Lowest temp (°C)	10	9	11	14	17	14	10	9	9
# days with rainfall	6	2	4	2	4	1	4	2	25
Total rain (mm)	61	12	25	19	15	23	44	15	215

5.3 Results

5.3.1 Birds banded

The 137 birds banded was down considerably from last year's record high, but the total of species banded was 30, just one less than last year's high. In addition, 4 Tree Swallow nestlings were banded from nest boxes (not counted as part of the MAPS totals).

Table 5-2. Top 11 species banded at MBO during MAPS 2013, as well as the numbers for 2005-2012 (note that 2005-2008 did not follow the MAPS protocol). Numbers in parentheses indicate the rank within the top 10 in past years. Dashes represent species not banded in a given year.

	2013	2012	2011	2010	2009	2008	2007	2006	2005
1. Song Sparrow	29	26 (2)	18 (1)	20 (1)	10 (5)	--	3 (4)	10 (1)	4 (1)
2. Gray Catbird	14	3 (11)	7 (7)	3 (13)	4 (12)	--	--	--	2 (5)
3. American Robin	11	18 (3)	14 (2)	13 (3)	13 (3)	--	--	--	--
3. Red-winged Blackbird	11	5 (8)	--	6 (7)	29 (1)	--	--	1 (6)	--
5. Yellow Warbler	8	61 (1)	11 (4)	8 (6)	10 (5)	--	--	3 (4)	4 (1)
5. Veery	8	1 (17)	--	4 (12)	4 (12)	--	--	--	4 (1)
7. Warbling Vireo	7	8 (5)	--	2 (14)	--	--	--	--	--
8. Great Crested Flycatcher	5	1 (17)	2 (13)	--	2 (15)	--	--	--	--
9. Downy Woodpecker	4	1 (17)	6 (8)	6 (8)	6 (9)	--	--	--	--
9. Red-eyed Vireo	4	6 (7)	12 (3)	9 (5)	4 (12)	--	--	--	--
9. American Redstart	4	--	1 (18)	1 (18)	--	--	--	--	--

Three species have been in the top ten in all five years of the MAPS program (American Robin, Yellow Warbler, and Song Sparrow); Black-capped Chickadee was also consistent over the first

four years, but only one individual was banded this summer. On the contrary, record high numbers of Gray Catbird, Veery, Great Crested Flycatcher, and American Redstart were banded during MAPS 2013.

Species banded in MAPS for the first time this year were Eastern Phoebe and Blue Jay, bringing the total count of species banded at MBO in summer to 45. Indigo Bunting was missed for the second year in a row, and for the first time in four years no White-throated Sparrows were banded.

5.3.2 Birds recaptured

There were 34 repeats of 9 species and 17 returns of 10 species during MAPS (Table 5-3). The oldest of the returns was a Baltimore Oriole banded as a hatch-year male in August 2008, and therefore five years old this summer.

Table 5-3. List of returns captured during MAPS 2013, sorted by time elapsed.

Band number	Species	Age/sex in 2013	Age/sex at banding	Banding date	Previous capture	2013 return	Time elapsed		
2231-66225	BAOR	ASY-M	HY-M	5 Aug 2008	5 Aug 2008	23 Jun	4 years	10 months	18 days
2431-74306	CEDW	ASY-F	AHY-F	14 Aug 2010	14 Aug 2010	29 Jul	2 years	11 months	15 days
2401-74497	REVI	ASY-M	HY-U	14 Aug 2011	14 Aug 2011	15 Jun	1 year	10 months	1 day
2421-70506	NOCA	AHY-F	HY-U	4 Aug 2010	29 Sep 2011	6 Jun	1 year	9 months	7 days
2650-41320	WAVI	ASY-U	SY-U	14 May 2012	17 May 2012	29 Jul	1 year	2 months	12 days
2431-74661	SOSP	AHY-F	AHY-U	30 Apr 2011	20 Apr 2012	23 Jun	1 year	2 months	3 days
2650-41147	WAVI	AHY-F	SY-U	9 May 2012	23 Jun 2012	14 Jul	1 year		21 days
2401-97338	REVI	ASY-U	SY-U	20 May 2012	16 Jun 2012	6 Jul	1 year		20 days
0972-31246	AMRO	AHY-M	HY-U	6 Jul 2012	6 Jul 2012	14 Jul	1 year		8 days
2541-63851	SOSP	AHY-F	AHY-F	11 May 2012	16 Jun 2012	6 Jun		11 months	21 days
2421-93874	BAOR	ASY-F	AHY-F	1 Aug 2012	5 Aug 2012	23 Jun		10 months	18 days
2650-41456	COYE	SY-F	HY-U	2 Aug 2012	2 Aug 2012	15 Jun		10 months	13 days
2431-74663	SOSP	ASY-M	AHY-M	22 May 2011	11 Aug 2012	23 Jun		10 months	12 days
2650-41244	AMGO	ASY-F	AHY-F	25 Aug 2012	25 Aug 2012	23 Jun		9 months	29 days
2650-41477	COYE	ASY-M	AHY-U	5 Aug 2012	8 Sep 2012	6 Jun		8 months	29 days
2650-41280	AMGO	ASY-M	AHY-M	24 Oct 2012	24 Oct 2012	23 Jun		7 months	30 days
2650-25467	BCCH	ASY-U	HY-U	8 Nov 2010	3 Dec 2012	6 Jun		7 months	3 days

5.3.3 Daily estimated totals (DET)

The number of species observed daily ranged from a low of 28 on 6 July to a high of 36 on 29 July. Over the course of the season, 56 species were observed, the same as last year, and again slightly above the average of 52 during the first four seasons of MAPS. For a second year in a row, no new species were observed for summer, leaving the cumulative count for the season at 100 species.

6. Fall Migration Monitoring Program (FMMP)

The Fall Migration Monitoring Program has been operated at MBO annually since 2004, with standardized operations since 2005. It covers the 13-week period from 1 August through 30 October, with census, observations, and a five-hour banding period daily (weather permitting).

6.1 Effort

Census was conducted on all 91 days of the season, and banding occurred on 87 days (96%), with three of the four days lost to rain occurring during the final two weeks of the season. There were an additional 13 days during which rain and/or strong winds caused net hours to be reduced, still leaving an above-average 74 days (81%) of full operation according to the site protocol. As a result of the generally favourable conditions, the banding effort of 6489 net hours was above average, although below last year's record high.

All captures this fall were through the standard set of 16 mist nets used for migration monitoring, arranged as in previous years (net locations A1, A2, B2, N1, N3, B3, C1, C2, D1, D2, D3, D4, E1, E2, H1, and H2; see Gahbauer and Hudson 2011 for a map). All nets were from Manomet, 12 m long with 30 mm mesh, and were new or lightly used (from spring 2013) at the beginning of the season.

6.2 Site conditions

Weather can have a significant influence on migration. Temperatures for the first half of the season were generally close to normal, but from late September to past mid-October were much higher than usual, offset by an unusually cold final week of fall. It was the driest fall on record for MBO, although moderate amounts of rain were scattered throughout the season and did affect the banding program on some days.

Table 6-1. Weather conditions during the 2013 Fall Migration Monitoring Program, by week.

	1	2	3	4	5	6	7	8	9	10	11	12	13	SEASON
Mean daily high (°C)	24.7	24.7	26.2	25.1	23.6	21.0	18.0	19.2	22.0	18.0	19.3	14.1	6.4	20.2
Mean daily low (°C)	15.1	16.2	15.4	15.4	15.8	11.0	9.3	8.9	9.6	8.6	9.0	5.2	-1.2	10.6
Mean daily temp (°C)	19.9	20.5	20.8	20.3	19.8	16.0	13.7	14.1	15.8	13.3	14.2	9.7	2.6	15.4
Highest temp (°C)	27	28	29	30	27	31	24	26	25	24	22	17	8	31
Lowest temp (°C)	11	13	12	10	11	6	4	5	6	4	6	1	-5	-5
# days with rainfall	5	3	0	3	3	2	4	2	0	2	2	6	3	35
Total rain (mm)	12	21	0	17	38	18	39	18	0	19	16	16	7	223

6.3 Results

6.3.1 Birds banded

The total of 3341 individuals banded during FMMP 2013 was below the long-term average of 3995 for the season, but very close to the average of 3321 when excluding the two years with totals inflated by exceptional counts of Yellow-rumped Warblers. The 77 species banded this fall was down from last year's record of 87, but within the range of 74 to 78 from previous years. The busiest day of the season was 3 October, with 150 birds banded (Figure 6-1); there was only one other day with over 100 birds banded, 5 October. This year there was a modest peak of banding activity in early October, only a bit higher than the relatively sustained plateau from late August to mid-September and a modest peak in early October. For FMMP 2013 the mean count of birds banded per day was 36.7 (38.4 for the 87 days with banding effort).

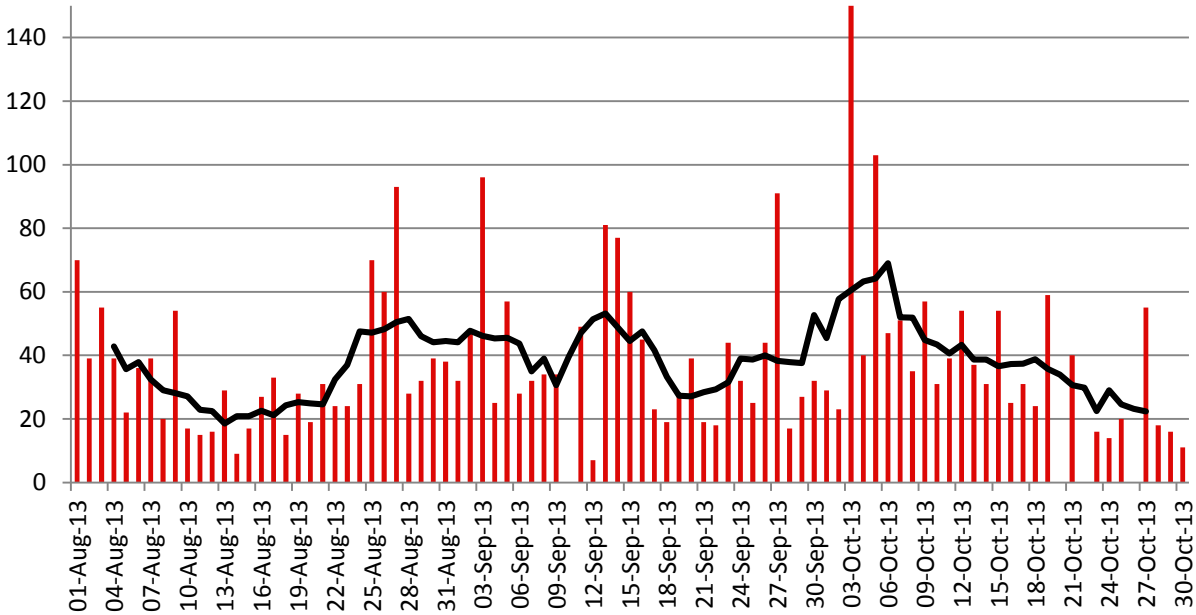

Figure 6-1. Number of individuals banded per day during the 2013 Fall Migration Monitoring Program, with a running 7-day mean in black.

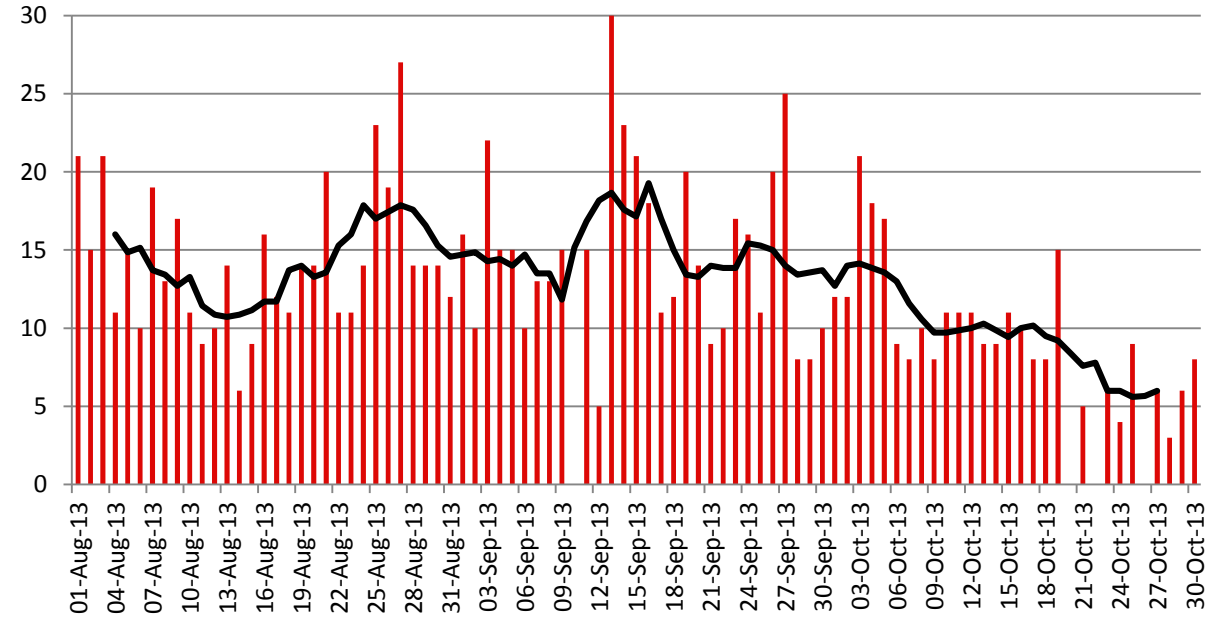

Figure 6-2. Number of species banded per day during the 2013 Fall Migration Monitoring Program, with a running 7-day mean in black.

Species richness among banded birds peaked in mid-September, but there was an earlier spike to nearly equal levels in late August; diversity tapered off from late September onward, as usual (Figure 6-2). The greatest variety banded in a single day was 30 species on 4 October, tying the record high set on 7 September 2008. The mean number of species banded per day was 13.1.

Carolina Wren was banded at MBO for the first time this fall. Gray-cheeked Thrush was the only species this fall detected only through banding. Eleven species/forms were banded just once this fall: Black-billed Cuckoo, Yellow-bellied Sapsucker, Eastern Wood-Pewee, Northern Shrike, Carolina Wren, Brown Thrasher, European Starling, Blackburnian Warbler, Yellow Palm Warbler, Scarlet Tanager, and House Finch.

At the other extreme, Table 6-2 lists the 10 most frequently banded species, which account for 62.6% of all birds banded during FMMP 2013. Five of these (Ruby-crowned Kinglet, American Robin, Magnolia Warbler, Song Sparrow, and White-throated Sparrow) have been in the top 10 for fall annually since 2005. Among this year's top 10, the only species to have never made the list in past years is Cedar Waxwing, which with 91 individuals this fall more than doubled the previous record high of 45. Four warblers were among the top ten species this year, and 23 were banded overall, the same as in fall 2011 and 2012; overall they comprised 38% of individuals banded, compared to 49% in 2011 and 30% in 2012. Ten sparrow species accounted for another 20% of the birds banded this fall.

Ruby-crowned Kinglet was the most frequently banded species this fall, for the first time since 2007. Magnolia Warbler was in second place, with a record high total for the species. Nearly equal numbers of Song and White-throated Sparrows took third and fourth place. Tennessee Warbler set a record high for the second time in three years, enough to reach the top five for fall for the second time. American Robin rebounded to sixth place after two below-average years. American Redstart numbers have now been quite steady for four straight years, while Yellow-rumped Warbler has shown incredible consistency over the past three "odd" years. Record high totals of Golden-crowned Kinglet and Cedar Waxwing rounded out the top ten for fall 2013.

Table 6-2. Top 10 species banded at MBO during FMMP 2013, as well as the numbers for 2005-2012. Numbers in parentheses indicate the rank in past years.

	2013	2012	2011	2010	2009	2008	2007	2006	2005
1. Ruby-crowned Kinglet	347	353 (2)	180 (4)	271 (6)	257 (4)	319 (3)	375 (1)	435 (2)	245 (2)
2. Magnolia Warbler	284	203 (5)	252 (1)	260 (7)	103 (9)	264 (5)	74 (10)	157 (6)	192 (5)
3. Song Sparrow	267	216 (4)	170 (5)	219 (8)	322 (3)	199 (7)	198 (4)	302 (3)	212 (4)
4. White-throated Sparrow	263	506 (1)	216 (2)	351 (5)	428 (1)	315 (4)	318 (2)	187 (5)	354 (1)
5. Tennessee Warbler	249	75 (14)	208 (3)	114 (12)	23 (32)	86 (11)	18 (31)	57 (11)	46 (18)
6. American Robin	236	130 (10)	79 (10)	394 (4)	200 (5)	346 (2)	318 (2)	299 (4)	119 (9)
7. American Redstart	146	139 (9)	150 (6)	149 (10)	104 (8)	99 (9)	77 (9)	48 (13)	66 (13)
8. Yellow-rumped Warbler	108	292 (3)	108 (8)	2359 (1)	106 (7)	1732 (1)	68 (11)	522 (1)	157 (8)
9. Golden-crowned Kinglet	101	91 (13)	70 (13)	90 (15)	25 (30)	36 (23)	22 (25)	73 (9)	54 (16)
10. Cedar Waxwing	91	29 (32)	45 (20)	25 (36)	39 (23)	16 (41)	21 (28)	22 (28)	8 (52)

6.3.2 Birds recaptured

There were 759 repeats (individuals caught within 3 months of banding at MBO) of 46 species during FMMP 2013, slightly above the eight-year mean of 700 repeats of 43 species. Among the most frequently recaptured species (Table 6-3), only four have substantial local breeding populations (Black-capped Chickadee, Gray Catbird, Common Yellowthroat, and Song Sparrow), although some of the individuals banded and recaptured were also likely migrants from farther north. A number of birds were recaptured on multiple occasions, most notably two hatch-year Black-capped Chickadees caught 8 times each, and a Brown Thrasher caught four times over a span of two months.

Table 6-3. Top 10 species recaptured most often during FMMP 2013. These represent the same individuals caught repeatedly in some cases. .

Species	# repeats	# individuals
1. Song Sparrow	90	71
2. Black-capped Chickadee	87	29
3. Ruby-crowned Kinglet	61	46
4. Gray Catbird	57	36
5. White-throated Sparrow	57	45
6. Magnolia Warbler	56	43
7. Tennessee Warbler	53	46
8. Common Yellowthroat	30	23
9. American Redstart	30	26
10. Cedar Waxwing	22	16

Repeats were most frequent within two days of banding (23%), and 51% of repeats were within one week of banding. Discounting birds likely to be locals, 26 individuals of 10 species stopped over for at least two weeks (Brown Creeper, Ruby-crowned Kinglet, Hermit Thrush, Swainson's Thrush, Tennessee Warbler, Nashville Warbler, American Redstart, Magnolia Warbler, Yellow-rumped Warbler, and Slate-colored Junco). At least some of the Hermit and Swainson's Thrushes and Nashville, Tennessee, and Yellow-rumped Warblers were observed moulting. The longest stopovers (>4 weeks) were by a Ruby-crowned Kinglet (43 days), Swainson's Thrushes (34 and 39 days), Tennessee Warblers (30, 33, and 40 days), Nashville Warblers (36 and 42 days), and Yellow-rumped Warblers (32 and 37 days).

There were 53 returns of 18 species during FMMP 2013 (Table 6-4). The number of individuals and species are both lower than last year, but above the long-term means for fall. Among the noteworthy returns this fall were two individuals last observed in fall 2009 or earlier (Indigo Bunting and Song Sparrow); 19 others were last captured more than a year ago. The oldest bird recaptured this fall was a Black-capped Chickadee banded in August 2007 as a hatch-year bird, and now 6 years old.

No foreign-banded birds were captured at MBO during FMMP 2013. However, a House Wren banded at MBO on 5 May 2013 was recaptured nearby in Laval on 30 September 2013.

Table 6-4. List of returns captured during FMMP 2013, sorted by time elapsed.

Band number	Species	Age/sex in 2013	Age/sex at banding	Banding date	Previous capture	2013 return	Time elapsed		
2341-49556	SOSP	AHY-U	HY-U	27 Sep 2008	27 Sep 2008	27 Oct	5 years	1 month	
2351-40225	INBU	AHY-F	HY-U	14 Sep 2009	14 Sep 2009	8 Aug	3 years	10 months	24 days
2600-16404	AMGO	AHY-M	SY-M	18 May 2009	10 Aug 2010	13 Sep	3 years	1 month	3 days
2431-87125	SOSP	AHY-U	AHY-U	18 Aug 2011	18 Aug 2011	10 Oct	2 years	1 month	22 days
2351-48529	REVI	AHY-F	AHY-U	31 Jul 2011	31 Jul 2011	13 Aug	2 years		13 days
2650-43273	BTBW	AHY-F	HY-F	3 Aug 2011	3 Aug 2011	10 Aug	2 years		7 days
2650-41004	SCJU	AHY-F	HY-F	13 Nov 2011	18 Nov 2011	19 Oct	1 year	11 months	1 day
2650-41037	SCJU	AHY-M	HY-U	17 Nov 2011	17 Nov 2011	12 Oct	1 year	10 months	25 days
2650-41223	AMGO	AHY-F	SY-F	21 May 2012	21 May 2012	2 Aug	1 year	2 months	12 days
2541-63877	SOSP	AHY-U	HY-U	2 Aug 2012	2 Aug 2012	27 Sep	1 year	1 month	25 days
2321-00368	REVI	AHY-U	AHY-U	5 Aug 2008	6 Jul 2012	27 Aug	1 year	1 month	21 days
2650-41465	COYE	AHY-M	HY-U	3 Aug 2012	3 Aug 2012	13 Sep	1 year	1 month	10 days
2421-93879	GRCA	AHY-U	HY-U	3 Aug 2012	24 Aug 2012	30 Sep	1 year	1 month	6 days
2630-69207	CSWA	AHY-F	AHY-F	2 Aug 2012	5 Aug 2012	31 Aug	1 year		26 days
2550-81126	NAWA	AHY-U	AHY-U	4 Aug 2011	9 Aug 2012	29 Aug	1 year		20 days
1342-36337	BRTH	AHY-U	HY-U	10 Aug 2012	10 Aug 2012	30 Aug	1 year		20 days
1851-88564	INBU	AHY-F	HY-U	14 Sep 2012	14 Sep 2012	27 Sep	1 year		13 days

Band number	Species	Age/sex in 2013	Age/sex at banding	Banding date	Previous capture	2013 return	Time elapsed	
2541-63893	SOSP	AHY-F	AHY-U	4 Aug 2012	4 Aug 2012	9 Aug	1 year	5 days
2650-41500	COYE	AHY-F	AHY-F	7 Aug 2012	11 Sep 2012	15 Sep	1 year	4 days
2341-58846	VEER	AHY-U	HY-U	3 Aug 2009	22 Aug 2012	24 Aug	1 year	2 days
2401-97416	REVI	AHY-F	AHY-U	10 Aug 2012	10 Aug 2012	9 Aug	11 months	30 days
2401-97412	REVI	AHY-F	AHY-U	9 Aug 2012	9 Aug 2012	1 Aug	11 months	23 days
2401-97481	REVI	AHY-U	HY-U	27 Aug 2012	27 Aug 2012	13 Aug	11 months	17 days
2650-43226	COYE	AHY-F	SY-F	30 May 2011	14 Sep 2012	19 Aug	11 months	5 days
2690-79904	SCJU	AHY-M	HY-M	24 Nov 2012	24 Nov 2012	29 Oct	11 months	5 days
2341-64904	SOSP	AHY-U	HY-U	14 Sep 2012	14 Sep 2012	9 Aug	10 months	25 days
2571-23194	SOSP	AHY-F	HY-U	10 Sep 2012	10 Sep 2012	2 Aug	10 months	22 days
2650-43001	BCCH	AHY-U	SY-U	13 May 2011	24 Nov 2012	21 Sep	9 months	27 days
2600-15926	BCCH	AHY-U	HY-U	2 Aug 2010	16 Nov 2012	5 Sep	9 months	19 days
2690-79941	SCJU	AHY-F	HY-F	14 Dec 2012	22 Feb 2013	21 Oct	7 months	30 days
2571-23005	DOWO	SY-M	HY-M	1 Aug 2012	22 Feb 2013	14 Sep	6 months	22 days
2650-41039	SCJU	AHY-M	HY-M	17 Nov 2011	28 Apr 2013	29 Oct	6 months	1 day
2490-24907	BCCH	AHY-U	HY-U	16 Aug 2007	22 Apr 2013	14 Oct	5 months	22 days
1383-62336	BLJA	AHY-U	AHY-U	23 Sep 2011	1 May 2013	17 Oct	5 months	16 days
2571-23114	SOSP	AHY-U	HY-U	8 Aug 2012	19 Apr 2013	29 Sep	5 months	10 days
2581-69211	SOSP	U-U	AHY-U	22 Apr 2013	23 Apr 2013	20 Sep	4 months	27 days
2650-41521	BCCH	AHY-U	HY-U	23 Jul 2012	27 Apr 2013	21 Sep	4 months	24 days
2650-43034	BCCH	AHY-U	HY-U	22 Sep 2011	2 May 2013	24 Sep	4 months	22 days
1272-07818	BLJA	AHY-U	HY-U	5 Sep 2008	10 May 2013	30 Sep	4 months	20 days
2581-69225	SOSP	AHY-U	AHY-M	31 May 2013	31 May 2013	17 Oct	4 months	17 days
2690-79668	BCCH	AHY-U	SY-U	18 Apr 2013	18 Apr 2013	15 Aug	3 months	27 days
2581-69216	SOSP	AHY-U	AHY-U	24 Apr 2013	24 Apr 2013	21 Aug	3 months	27 days
2650-45284	EAPH	AHY-U	SY-U	18 Apr 2013	25 May 2013	14 Sep	3 months	20 days
2431-74164	DOWO	AHY-M	HY-U	25 Jul 2011	24 Apr 2013	8 Aug	3 months	14 days
2600-16257	COYE	AHY-M	HY-M	10 Aug 2010	1 Jun 2013	15 Sep	3 months	14 days
2650-41639	COYE	AHY-M	HY-M	12 Aug 2012	23 May 2013	5 Sep	3 months	13 days
2431-87108	SOSP	AHY-F	HY-U	14 Aug 2011	23 Apr 2013	1 Aug	3 months	8 days
2650-43009	BCCH	AHY-U	HY-U	1 Aug 2011	23 May 2013	31 Aug	3 months	8 days
2421-93809	GRCA	AHY-U	SY-U	28 May 2012	28 May 2013	4 Sep	3 months	7 days
2011-90226	SWSP	AHY-U	SY-U	29 Apr 2013	29 Apr 2013	2 Aug	3 months	4 days
2581-69217	SOSP	AHY-F	AHY-U	29 Apr 2013	29 Apr 2013	1 Aug	3 months	3 days
2600-15941	BCCH	AHY-U	HY-U	20 Aug 2010	30 Apr 2013	1 Aug	3 months	2 days
2650-41323	YWAR	AHY-F	AHY-M	15 May 2012	17 May 2013	17 Aug	3 months	

6.3.3 Census

One or more experienced observers walked the standardized census route daily during FMMP, often recording species not otherwise documented during the course of the morning and greatly contributing to the documentation of migration through MBO. Five species this fall were observed only through census: Double-crested Cormorant, Yellow-billed Cuckoo, Red-bellied Woodpecker, Pine Warbler, and Field Sparrow.

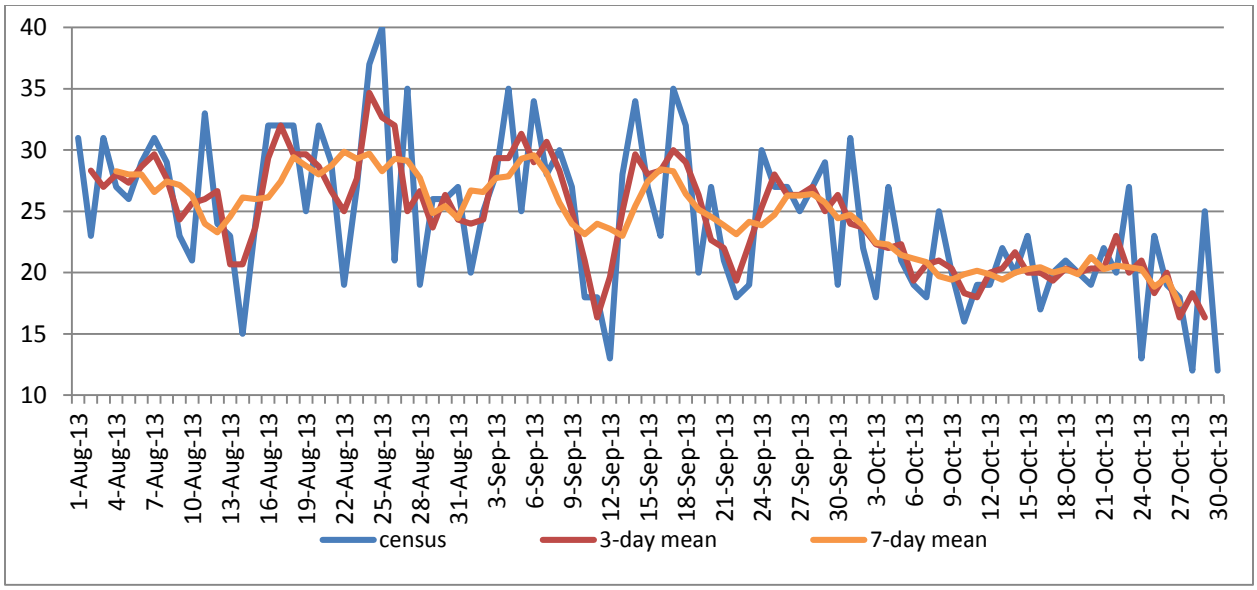

Figure 6-3. Number of species recorded on the daily census during the 2013 Fall Migration Monitoring Program at MBO, including a 3-day and 7-day running mean.

As shown in Figure 6-3, there was considerable daily variation in the number of species observed during the census, ranging from a low of 12 on 28 October and 30 October to a high of 40 on 25 August. This reflects not only actual changes in the bird population from day to day, but also variation due to weather and among observers. To account for this, 3-day and 7-day running means were calculated and plotted. Census numbers had three modest peaks in mid-late August, the second week of September, and the third week of September, then tapered off.

6.3.4 Daily estimated totals (DET)

The DET reflects not only banding and census data, but also all supplemental observations made by participants throughout each morning. It is particularly important for waterfowl and raptors, which are not targeted by the banding program, and are only marginally sampled by the census, since many are more active later in the morning. However, the DET is also valuable for passerines, both to monitor infrequently captured species, and as a means to evaluate the percentage of individuals of each species that are caught and banded. This fall, 23 species were observed only as incidental observations, highlighting their importance for the DET: Greater White-fronted Goose, Snow Goose, American Black Duck, Common Merganser, Common Loon, Black-crowned Night Heron, Great Egret, Turkey Vulture, Bald Eagle, Rough-legged Hawk, American Kestrel, Peregrine Falcon, Spotted Sandpiper, Greater Yellowlegs, Wilson's Snipe, Great Black-backed Gull, Common Nighthawk, Eastern Screech-Owl, Olive-sided Flycatcher, Bank Swallow, Blue-gray Gnatcatcher, Clay-colored Sparrow, and Evening Grosbeak.

During FMMP 2013, 147 species were recorded, above the eight-year fall mean of 144. There were 16 species seen on just a single day, highlighting the importance of full daily coverage throughout the season. On 23 days the daily estimated total was at least 50 species, including two days with more than 60. A lone Greater White-fronted Goose observed flying back and forth with a flock of Canada Geese on 21 September was the first new species observed at MBO since Ross's Goose in May 2013, and increased the all-time checklist for MBO to 209 species.

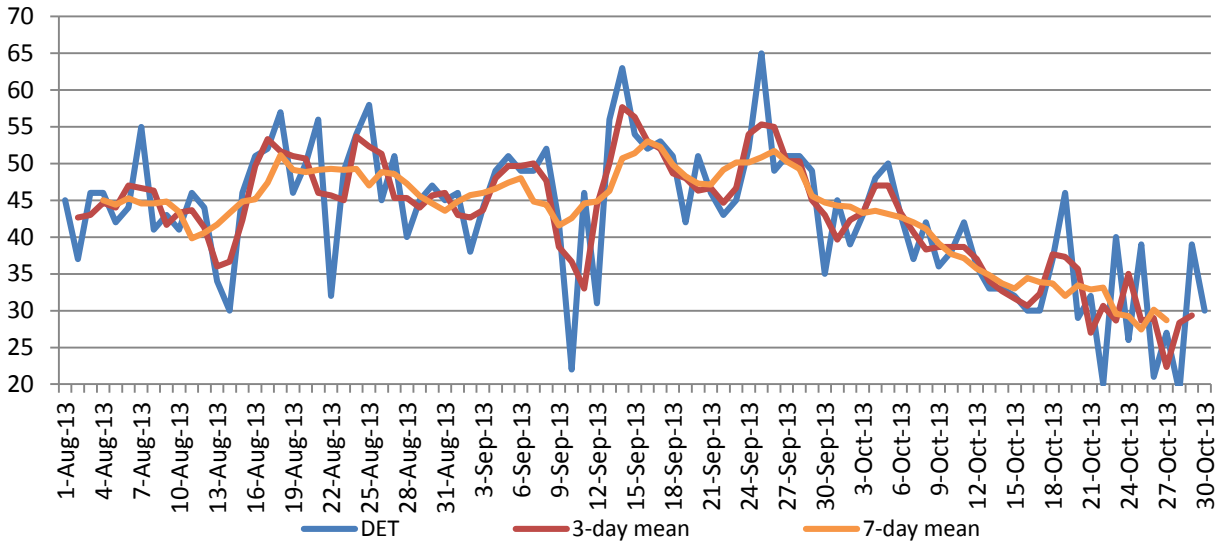

Figure 6-4. Number of species observed daily during the 2013 Fall Migration Monitoring Program at MBO, including a 3-day and 7-day running mean.

The highest single day total, 65 species, occurred on 25 September, much later than usual, and was a new record for fall, two more than on 14 September, which in turn was three higher than the previous high of 60 reached three times in fall 2012. The lowest count of 19 species was on 28 October, the second-coldest day of the season (Figure 6-4). There was considerable variation in daily estimated totals from day to day, again due to weather and observer effects. A clearer pattern is shown by the 7-day running average, which stayed near 50 species for the third week of August, and had two spikes above 50 in mid-September and late September before tapering off steadily from 40 to just under 30 over the course of October.

This year 24 species were observed during all 13 weeks of the fall season: Canada Goose, Mallard, Ring-billed Gull, Mourning Dove, Downy Woodpecker, Hairy Woodpecker, Pileated Woodpecker, Northern Flicker, Blue Jay, American Crow, Common Raven*, Black-capped Chickadee, White-breasted Nuthatch, American Robin, Gray Catbird, European Starling, Cedar Waxwing*, Northern Cardinal, Song Sparrow, Swamp Sparrow, White-throated Sparrow, Red-winged Blackbird, Common Grackle, and American Goldfinch (* = species not observed in all weeks in fall 2012). Among the species observed weekly in fall 2012, only Wood Duck, Red-tailed Hawk, Cooper's Hawk, Sharp-shinned Hawk, and Purple Finch missed repeating the feat this year, and all except the finch were observed in 12 of 13 weeks. Only Black-capped Chickadee and Song Sparrow were banded in all 13 weeks; Song Sparrow has been banded in every week of fall since 2005, and for Black-capped Chickadee the streak extends back through fall 2009.

6.3.5 Coverage of priority species

MBO has produced a list of 62 target species for priority monitoring (Gahbauer and Hudson 2011). The list is based on priority rankings proposed by Bird Studies Canada, with an emphasis on species poorly studied by the Breeding Bird Survey due to their northern breeding distribution, and on neotropical migrants, recognized as being at elevated conservation risk due to threats to their wintering grounds. The MBO list has been modified to eliminate western species not expected to occur at the site.

Table 6-5. Summary of priority species observed and banded during FMMP 2013. Detailed category definitions are provided in Gahbauer and Hudson (2011).

	Priority A	Priority B	Priority C	Priority D
Number of species in category	15	10	18	19
Number of species observed	15	10	17	19
Number of species banded	15	9	14	15
Number of individuals banded	741	854	481	850

All but one of the species on the MBO priority list were observed during FMMP 2013 (Cliff Swallow was missed), and 85% were banded (Table 6-5). Nearly 88% of individuals banded were priority species, which is near the middle of the range of 83% to 91% in previous years. Of the top 10 species banded at MBO during FMMP 2013, all are designated as priority species, including 5 that are priority A or B, indicating the program is effective at documenting these otherwise poorly monitored birds.

6.3.6 Net productivity

As in previous seasons, the productivity of nets during FMMP 2013 was assessed. Table 6-7 summarizes the usage and productivity of all nets. The nets are clustered into three main groups. C and D (six nets total) are along the east and north edges of Stoneycroft Pond. Four nets sample the shrubby areas east of Stoneycroft Pond (A and E). H and B/N (six nets total) are along the back ponds. Under normal weather and personnel conditions, all nets are operated for five hours daily. However, the B/N nets are more vulnerable to wind, and are closed when conditions are unfavourable, resulting in a core group of 12 nets (C-A-D-E-H) that allows for sampling from each area while minimizing walking time.

The overall capture rate for FMMP 2013 was 51.5, below the eight-year mean of 72.3; the additional 12.5 birds recaptured per 100 net hours was close to average.

The relative effectiveness of nets varies from year to year, although typically the A and H nets along with C2 and E2 are the most productive in fall. This fall the C nets were by far the most productive, especially over the first half of the season. The E and H nets were also well above average this fall; A2 and B3 were right around the average. Again the D nets performed poorly, as did the remainder of the B/N group, with B2 having the lowest rate of capture overall, as in spring.

Although efforts have been made annually to maintain habitat consistency, especially near the nets, it is impossible to keep conditions identical from year to year, especially given annual variability in growing conditions for species like goldenrod, and growth/senescence of shrubs. This year's annual habitat review took place in August, as always involving visual inspection of all net lanes and surrounding areas and comparison with photos from each previous year dating back to 2005. Attempts to scale back the invasion of raspberries at A2 and D3 have only been partially successful and will require further effort to attempt to restore the goldenrod that dominated there previously. Some of the buckthorns and sumacs encroaching along B/N, H, and A were removed this August. Further habitat management in 2014 will continue to focus on selective clearing of shrubs to facilitate the return of goldenrod, used heavily by a variety of warblers and sparrows in fall. Considerable thinning of buckthorn and other shrubs along the census trail (especially on the far side of Stoneycroft Pond) was also part of the 2013 habitat management work, and will also continue in 2014.

Table 6-7. Net usage and capture rates during FMMP 2013

Net	Hours open	New Captures	Repeats+ Returns	Total captures	Birds / 100 net hours New	Birds / 100 net hours Total
A1	413.2	176	45	221	42.6	53.5
A2	413.2	205	59	264	49.6	63.9
A – TOTAL	**826.3**	**381**	**104**	**485**	**46.1**	**58.7**
B2	383.5	91	38	129	23.7	33.6
N1	383.5	153	51	204	39.9	53.2
N3	383.5	142	72	214	37.0	55.8
B3	383.5	210	59	269	54.8	70.1
B/N – TOTAL	**1534.0**	**596**	**220**	**816**	**38.9**	**53.2**
C1	413.2	334	70	404	80.8	97.8
C2	413.2	348	69	417	84.2	100.9
C – TOTAL	**826.3**	**682**	**139**	**821**	**82.5**	**99.4**
D1	412.2	127	36	163	30.8	39.5
D2	412.2	111	27	138	26.9	33.5
D3	412.2	145	38	183	35.2	44.4
D4	412.2	146	34	180	35.4	43.7
D – TOTAL	**1648.6**	**529**	**135**	**664**	**32.1**	**40.3**
E1	413.2	283	38	321	68.5	77.7
E2	413.2	280	66	346	67.8	83.7
E – TOTAL	**826.3**	**563**	**104**	**667**	**68.1**	**80.7**
H1	413.7	277	46	323	67.0	78,1
H2	414.2	313	64	377	75.6	91.0
H – TOTAL	**827.8**	**590**	**110**	**700**	**71.3**	**84.6**
GRAND TOTAL	**6489.3**	**3341**	**812**	**4153**	**51.5**	**64.0**

6.4 Summary and analysis

Banding effort was down a bit from last year's record high for fall, but still well above average. The 3341 individuals banded was close to the long-term mean of 3321, if excluding the two years with exceptional numbers of Yellow-rumped Warblers, and the 77 species banded was within the range of 74-78 that has been the case every year except 2012, when the count spiked to 86. The peak day of the season was 3 October, one day earlier than last year, but with 150 individuals was fairly modest compared to some other years when the busiest days topped 200 birds.

Throughout the first half of the season, the numbers of species observed and banded weekly were both far above average, and often at record levels. Observations dropped off to average levels over the second half of the season, but the total of 147 species observed remained well above the long-term mean. Meanwhile, the daily estimated totals of 63 on 14 September and 65 on 25 September both eclipsed the previous record of 60 for fall. The higher than average numbers over the past couple of years likely reflect in part the increasing success in encouraging volunteers to actively observe around the site throughout each morning; this level of effort should be maintained in future years.

Warblers were again the dominant group this fall, comprising 38% of individuals banded, and 30% of species. Record numbers of Tennessee and Magnolia Warblers were banded, while American Redstart was within 4 of matching its previous high. Although not nearly abundant enough to make the top ten for the season, the biggest surprise of fall was Cape May Warbler, with more banded this fall than in all previous years combined. Also noteworthy were record numbers of Golden-crowned Kinglets and Cedar Waxwings. In all, just 8 of the species banded this season reached record highs, the others being Eastern Phoebe, Carolina Wren (banded for the first time this fall), and Bay-breasted Warbler. On the other hand, five species were banded in record low numbers: Mourning Warbler, Palm Warbler, Chipping Sparrow, Lincoln's Sparrow, and Red-winged Blackbird.

The record numbers of Tennessee, Cape May, and Bay-breasted Warblers are almost certainly in response to population increases stimulated by spruce budworm outbreaks. Interestingly though, the current distribution of spruce budworm is primarily Côte-Nord and Saguenay/Lac St-Jean (i.e. northeast of MBO), suggesting strongly that birds from that area are migrating through MBO, rather than just coming from areas more directly to the north.

Both returns and repeats were above average in number this fall, though below the record highs of 2012. The top five species banded this fall accounted for 42% of all repeats, and all were among the top seven of repeats; the only other species mixed in with them were Black-capped Chickadee and Gray Catbird, both involving many local individuals. As usual, molt migrants included Hermit and Swainson's Thrushes, as well as Tennessee, and Nashville Warblers, and possibly also Yellow-rumped Warbler. Among the returns were 5 Slate-colored Juncos showing winter site fidelity, and a Nashville Warbler coming back as a molt migrant.

The Carolina Wren banded on 3 August, one of just two species banded at MBO for the first time in 2013.
(Photo by Simon Duval)

7. Northern Saw-whet Owl Migration Monitoring Program

Nocturnal banding of Northern Saw-whet Owls has been undertaken at MBO during fall migration annually since 2004, except in 2006 and 2008. For the first four years, efforts were sporadic, primarily limited by availability of banders. Since 2010, effort has been largely standardized, with nightly coverage (weather permitting) over six weeks from 26 September to 6 November, plus supplemental effort until roughly mid-November on nights with suitable conditions. Owl banding since 2010 has used a roughly elliptical array of seven nets surrounding a FoxPro broadcaster playing a standard Northern Saw-whet Owl audiolure. The standard banding period was 4 hours, beginning 30 minutes after sunset, but when conditions were promising, non-standard banding continued later into the night, as late as within three hours of sunrise.

7.1 Effort

Banding was possible on 34 (81%) of 42 nights during the standard season, although effort per night was somewhat variable in relation to weather conditions. This year there was no banding during the supplementary period of Nov 7-20, as numbers tapered off sharply toward the end of the standard season, and unlike last year, no Boreal Owls were expected this fall.

7.2 Site conditions

Temperatures were somewhat above average for the first four weeks of the season, dipped sharply in week 13, and then were fairly close to seasonal for the remainder of the season. Rainfall was relatively light and infrequent for much of the season, except for week 14.

Table 7-1. Weather conditions during the 2013 Northern Saw-whet Owl Monitoring Program, by week.

	9 *Sep 26-Oct 2*	10 *Oct 3-9*	11 *Oct 10-16*	12 *Oct 17-23*	13 *Oct 24-30*	14 *Oct 31-Nov 6*	STANDARD	15 *Nov 7-13*	16 *Nov 14-20*	SEASON
Mean daily high (°C)	22.0	18.0	19.3	14.1	6.4	10.0	15.0	4.7	8.5	12.9
Mean daily low (°C)	9.6	8.6	9.0	5.2	-1.2	0.2	5.2	-1.7	0.1	3.7
Mean daily temp (°C)	15.8	13.3	14.2	9.7	2.6	5.1	10.1	1.5	4.3	8.3
Highest temp (°C)	25	24	22	17	8	19	25	14	15	25
Lowest temp (°C)	6	4	6	1	-5	-6	-6	-8	-6	-8
# days with rainfall	0	2	2	6	3	4	17	3	2	21
Total rain (mm)	0	19	16	16	7	50	108	22	17	147

7.3 Results

The 174 Northern Saw-whet Owls banded during the standard season (weeks 9-14) was below fewer than last year's record, but still well above average. The capture rate of 9.0 new owls per 100 net hours was down a bit from last year's high of 10.6 at the standard nets, though above the overall 2012 rate of 7.9, including the effort at the nets targeting Boreal Owls. A single Long-eared Owl and one Eastern Screech-Owl were also banded this fall; unlike last year no Boreal or Barred Owls were banded, although Barred were heard periodically during the season. Long-eared Owls were also heard occasionally during the banding season, as were Great Horned Owls.

Table 7-2. Summary results of the 2013 Northern Saw-whet Owl Monitoring Program, by week.

	9	10	11	12	13	14	STANDARD	15	16	TOTAL
# owls banded	8	51 [a]	42	31 [b]	30	14	176	-	-	176
# owls repeat	-	-	5	7	9	3	24	-	-	24
# owls return	-	-	-	1 [a]	-	-	1	-	-	1
# owls foreign	2	5	6	2	2	-	17	-	-	17
# net hours	377.1	295.7	374.0	283.0	375.6	259.4	1964.8	-	-	1964.8
# banded / 100 hrs	2.1	17.2	11.2	11.0	8.0	5.4	9.0	-	-	8.3

[a] – incl. 1 Eastern Screech-Owl [b] – incl. 1 Long-eared Owl

7.3.1 Birds banded

The season started much more slowly than last year, with just two owls banded over the first six nights. The peak of the season was October 8-10, with 52 owls banded over three nights, following two nights of rain. There was a second lower peak from October 20-23, with 29 owls banded over four nights, again coming after two nights of rain. The biggest single night of the year was October 8, with 20 Northern Saw-whet Owls banded plus three foreign returns. On five of the 34 nights of banding effort, no owls were captured.

This year was dominated by second-year birds, which accounted for 100 of 174 (57%) saw-whets banded; only 32 (18%) were hatch-year, compared to 80% last year. As usual, females dominated (84%), even more so than in most previous years; males remained scarce (5%, slighty fewer than in 2011 and 2012), and 11% were intermediates that could not be sexed.

Two additional species were banded this year, a hatch-year Eastern Screech-Owl at the end of the first week of the season, and a hatch-year Long-eared Owl on 20 October.

7.3.2 Birds recaptured

There were was one owl return this fall, a second-year Eastern Screech-Owl banded in the first week of the 2012 season. The 20 repeats involving 18 individuals was a new record high; five owls lingered between 9 and 20 nights from the time of banding, but all others were recaptured within one week.

A record 17 foreign owls were recaptured at MBO this fall, more than in all previous years combined (Table 7-3). Of particular note are the two individuals banded on spring migration at Whitefish Point in Michigan, nearly 900 km northwest of MBO, and the one banded last fall in Tennessee, the most distant recovery to date of any bird recaptured at MBO.

Table 7-3. List of foreign-banded Northern Saw-whet Owls captured at MBO, sorted by time elapsed.

Band number	Age/sex in 2013	Age/sex at banding	Banding date	2013 capture	Time elapsed	Banding location	Distance (km)
1014-20019	ASY-F	AHY-F	9 Oct 10	10 Oct	3 yr 1 day	Charlton NY	280
1014-25330	ASY-F	SY-F	10 Oct 10	2 Oct	2 yr 11 mon 22 days	Ellenville NY	415
1014-50214	ASY-F	HY-F	4 Nov 10	21 Oct	2 yr 11 mon 17 days	Berlinsville PA	540
1014-07171	ASY-F	ASY-F	26 Oct 11	10 Oct	1 yr 11 mon 14 days	South Hadley MA	375
0924-30411	TY-F	HY-F	5 Nov 11	10 Oct	1 yr 11 mon 5 days	Lamb's Knoll MD	730
1014-50867	SY-F	HY-F	7 Oct 12	10 Oct	1 yr 3 days	Lincoln MA	400
1014-51480	SY-F	HY-F	11 Oct 12	8 Oct	11 mon 27 days	New Paltz NY	410
1014-51646	SY-F	HY-F	4 Nov 12	28 Oct	11 mon 24 days	Liberty TN	1460
1014-76916	SY-F	HY-F	17 Oct 12	8 Oct	11 mon 21 days	Hawk Mountain PA	560
1014-77160	SY-F	HY-F	20 Oct 12	8 Oct	11 mon 18 days	Leesport PA	580
1014-36952	ASY-F	ASY-F	3 Nov 12	20 Oct	11 mon 17 days	Holiday Beach ON	825
1014-78897	SY-F	HY-F	14 Nov 12	16 Oct	11 mon 2 days	Berlinsville PA	540
1014-13827	SY-F	HY-F	3 Nov 12	5 Oct	11 mon 2 days	Huntsdale PA	650
1014-04452	SY-U	HY-U	14 Nov 12	10 Oct	10 mon 26 days	Kiptopeke VA	925
1014-49227	SY-F	HY-F	16 Nov 12	9 Oct	10 mon, 23 days	Lamb's Knoll MD	730
0914-91873	SY-F	HY-F	25 Apr 13	28 Oct	6 mon 3 days	Whitefish Point MI	880
0914-91705	SY-F	SY-F	16 Apr 13	3 Oct	5 mon, 17 days	Whitefish Point MI	880

In addition, 4 Northern Saw-whet Owls banded at MBO within a four-night span this fall had already been recaptured by other banders to the south by the end of November (Table 7-4). The most notable was an owl recaptured only three nights later, 115 km to the south near the middle of Adirondack State Park.

Table 7-4. List of MBO Northern Saw-whet Owls captured elsewhere in 2013, sorted by time elapsed.

Band number	Age/sex in 2013	Age/sex at banding	Banding date	2013 capture	Time elapsed	Recapture location	Distance (km)
1014-64596	SY-F	SY-F	9 Oct 13	12 Oct	3 days	Paul Smiths NY	115
1014-64593	SY-F	SY-F	8 Oct 13	24 Oct	16 days	Burlington VT	120
1014-90227	SY-F	SY-F	10 Oct 13	28 Oct	18 days	NY	?
1014-90236	TY-F	TY-F	11 Oct 13	19 Nov	39 days	Little Gap PA	540

7.3.3 Net productivity

The nets used for owl banding since 2010 are five 60-mm nets (O1-O5) exclusive to the owl program, and two 30-mm nets (E1-E2) that are shared with the Fall Migration Monitoring Program. O1-O4, and E1 are all within 10-15 m of an audiolure broadcasting a Northern Saw-whet Owl call, while E2 is nearly 30 m away. O4 is entirely within a conifer grove, while O1-O3, and E1 are along its periphery, and E2 is within a cluster of hawthorns. O5, outside the eastern edge of the conifer grove, was consistently unproductive in past years, and was replaced at the start of this season with O6, a net within the conifer stand, perpendicular to and on the far side of O4.

Capture rates varied substantially among nets (Table 7-4). For the first time, O4 was not the most productive net, instead ranking third and accounting for only 18% of new captures. The top net this year (usually runner-up in the past) was O1, with 24% of new captures, followed by E1, which caught 20% of owls. New net O6 accounted for only 9% of captures, but was still an improvement over O5. O2 and O3 were relatively unproductive as usual, while E2 was just below average.

Table 7-4. Net usage and capture rates during the standard 2013 owl monitoring season

Net	Hours open	New captures	Repeats+ Returns	Total captures	Owls / 100 net hours	
					New	Total
O1	280.9	43	7	50	15.3	17.8
O2	280.9	12	-	12	4.3	4.3
O3	280.9	18	1	19	6.4	6.8
O4	280.9	31	10	41	11.0	14.6
O6	280.9	16	8	24	5.7	8.5
O - TOTAL	**1404.5**	**120**	**26**	**146**	**8.5**	**10.4**
E1	280.9	35	5	40	12.5	14.2
E2	279.4	21	8	29	7.5	10.4
E - TOTAL	**560.3**	**56**	**13**	**69**	**10.0**	**12.3**
GRAND TOTAL	**1964.8**	**176**	**39**	**215**	**9.0**	**10.9**

This Eastern Screech-Owl was the first return ever for the species, recaptured just over one year after being banded. (Photo by Simon Duval)

8. Other MBO programs

Although the seasonal monitoring programs are the primary focus at MBO, they also provide opportunities to pursue a number of secondary objectives, including education and training, improvement identification techniques, and more detailed research on particular species.

8.1 Education and training

MBO provides ongoing training in avian research techniques to McGill University students and other interested individuals. This is implemented through an annual spring internship, and training throughout the spring and fall programs in all aspects of migration monitoring from field identification skills and data recording to practice in extraction and banding. To keep learning opportunities accessible, we limit the number of volunteers per day to one bander-in-training, two experienced extractors and up to three additional assistants, who could get one-on-one training from either the extractors or the bander-in-charge. Experienced extractors able to work independently are a limiting factor for banding operations, and thus helping volunteers improve their skills at extraction is a priority at MBO. However, observers with good identification skills are also critical to effective migration monitoring, and good progress was made again in 2013 in attracting experienced birders as volunteers, as well as training newer volunteers to actively observe and note birds throughout their time on site.

There is also an ongoing effort to share results with the local, national, and international communities, to illustrate how migration monitoring data can contribute to understanding and conservation of boreal birds. This year we again welcomed several groups for tours of MBO, including members of Bird Protection Quebec, Club d'ornithologie de Mirabel, Société d'ornithologie de Lanaudière, and Club d'ornithologie de Vaudreuil-Soulanges, as well as McGill classes. A three-day photo-based ageing and sexing workshop in February attracted over 20 participants. Over 30 research updates were posted to the MBO website throughout the year, in addition to a number of existing resources being augmented.

8.2 Photo documentation

MBO continues to photo document all rarities captured, as well as any individuals showing abnormalities, such as aberrant pigmentation or moult, deformities, or healed injuries. Photos were also taken throughout the year to augment MBO's online resource for bird identification, posted at www.migrationresearch.org/mbo/id/index.html, which features 65 species accounts, with more under development. The aim is continue growing this collection, to provide diagnostic photos of the upper body, wing, and tail of each age and sex class of every species banded regularly at MBO. These photos, supplemented by related commentary pointing out key differences between ages and sexes, are intended as a complement to the information presented by Pyle (1997).

8.3 Research projects

Especially for species banded in large numbers at MBO, there is potential to analyze standard morphometric data, or collect additional measurements that could be analyzed to improve the accuracy of ageing/sexing techniques or provide other insights. Among the topics under investigation in 2013 were the colour of the mouth lining in Black-capped Chickadees, tail spot size and uppertail covert patterns in Magnolia Warblers, and extent of eccentric molt in House Finches. DNA analysis of Magnolia Warblers and House Finches, to confirm reliability of plumage features for determining sex, is also underway thanks to a grant from Bird Protection Quebec. Brief summaries of past projects and a list of current research is maintained at http://www.migrationresearch.org/mbo/researchtopics.html.

9. Acknowledgments

The operation of MBO is possible only through the support of many dedicated people volunteering their time throughout the year. More than 4500 hours of service on site were contributed by over 90 participants in our migration monitoring, MAPS, and winter monitoring programs. While many volunteers fulfilled multiple roles, they are listed below only under the first heading that applies to them.

Special thanks to:

- David Davey, for continued development of our new data-entry program that has greatly improved the speed and accuracy with which we process our records
- Barbara Frei, Alison Hackney, and Francine Marcoux for leading this year's fundraising efforts so successfully
- The banders-in-charge, who each contributed many additional hours off-site to coordinate volunteers, manage data, and generate website updates
- All who put in extra time fundraising, planning, and assisting with site maintenance
- Everyone who voted in the Jamieson "Call for the Wild" contest, which was MBO's most important fundraising event to date

Executive Director: *The licensed master permit holder, responsible for overseeing research activities.*
Marcel Gahbauer

Director: *Sub-permit holder and bander-in-charge (see below for details), responsible for coordinating volunteers, implementing policies, updating protocols, overseeing finances, and long-term planning*
Gay Gruner

Coordinator: *Sub-permit holder and bander-in-charge (see below for details), responsible for data entry and reporting, site maintenance, and implementation of research projects*
Simon Duval

Banders-in-charge: *Sub-permit holder, responsible for directing the activities of volunteers, ensuring adherence to protocols, prioritizing the safety of birds at all times, banding birds, and directly supervising other trainees who are banding birds.*
Nicolas Bernier, Barbara Frei, James Junda, Lisa Keelty, Lance Laviolette

Banders-in-training: *Experienced volunteers trained specifically in extraction, capable of safely removing birds from nets with minimal or no supervision. These volunteers are also seasoned observers able to conduct the census and are being trained as banders.*
Christine Barrie, Rodger Titman

Extractors: *Experienced volunteers trained specifically in extraction, capable of safely removing birds from nets with minimal or no supervision.*
David Davey, Leah den Besten, Andrée Dubois-Laviolette, Steve Dumont, Réjean Duval, Nicola Fleming, Alison Hackney, Meghan Laviolette

Census / observation leaders: *Experienced birders able to recognize the majority of local species by sight and sound, responsible for conducting the daily census and playing a leadership role in observing birds throughout the morning, and assisting less experienced volunteers with identification.*
David Bird, Sue Bishop, Jean Demers, Frédéric Hareau, Jeff Harrison, Barbara and Don MacDuff, Betsy McFarlane, Chris Murphy, Ahmad Shah, Clémence Soulard, Elise Titman, Jay VanderGaast

Assistants: *Volunteers and visitors of all levels, responsible for recording data, transporting birds, providing direct assistance to extractors and banders as requested, learning to become extractors, banders, or censusers, and helping with any other observation/monitoring/maintenance tasks that arise.*
Angelika Aleksieva, Richard Beauchamp, Yvan Bernier, Marc Boisvert, Salomé Bonnefoi, Cindy Bouchard, Kim Bouchard, Marie-France Boudreault, Emily Boulanger, Carl Bromwich, Vincent Carignan, Yolande Cossette, Serge Côté, Gabrielle Cottam, Luke Currin, Mark Currin, Christina Damant, Rui de Jesus, Geneviève Dubois, Josée Dubreuil, Adam Feller, Michael Fleming, Liette Fortier, Louise Gagné, Jo-Annie Gagnon, Marianne Gagnon, Kirsten Gavin, Nathalie Gendron, Monique Groulx, Julie Hamel, Martina Hoft, Leslie Hunt, Line Lamontagne, Ghislaine Laurin, Christie Lovatt, Christine Marcoux, Francine Marcoux, Ana Morales, David Oldacre, Charlotte Payette, Yves Payette, Marie Perkins, Benoit Piquette, Jean Rogez, Lisa Rosenberger, Catherine Russell, Joanne Ryan, Leo Sarrazin, Shawna Sevigny, Marilou Skelling, Jillian Slater, Patricia Stotland, Nathalie Tessier, Carine Touma, Fernanda Triconi, Monique Venne, Michael Waddes, Corrine Waheed, Yifu Wang

Maintenance: *Last but certainly not least – responsible for maintaining the facilities and trails in good and safe working condition*
Malcolm Johnson

In addition, we extend our sincere thanks to all who donated materials or funds to MBO in 2013, especially:

This year's two Baillie Birdathon Teams, and two independent participants (Marcel Gahbauer, Alison Hackney) who together raised nearly $10,000 in support of MBO's operations in 2013:
MBO Green Team: Nicolas Bernier, Simon Duval, Barbara MacDuff, Francine Marcoux
Red-eyed Wearios: Sue Bishop, Averill Craig, Gay Gruner, Betsy McFarlane, and Ahmad Shah

Bird Protection Quebec, for financial support of the Fall Migration Monitoring Program, food for the feeders in winter, DNA analysis of two species, ongoing publicity, and continuing to encourage members to become MBO volunteers
Canada Steamship Lines, for a donation in support of MBO
TD Friends of the Environment Foundation, for a grant to install a solar energy system at MBO
Environment Canada, for a donation in support of MBO

All of the individual donors, for their generous support of MBO

10. References

American Ornithologists' Union. 2013. AOU Checklist of North and Middle American Birds. Available at http://checklist.aou.org/taxa

Gahbauer, M.A. 2010. McGill Bird Observatory Five-Year Report #1: 2005-2009. Migration Research Foundation, Ste-Anne-de-Bellevue QC, 145 pp. Available at http://www.migrationresearch.org/documents/MBO5-yearreport2005-2009.pdf

Gahbauer, M.A. 2011. McGill Bird Observatory Annual Program Report 2011. Migration Research Foundation, Ste-Anne-de-Bellevue QC, 71 pp. Available at http://www.migrationresearch.org/documents/MBOreport2011.pdf

Gahbauer, M.A. 2012. McGill Bird Observatory Annual Program Report 2012. Migration Research Foundation, Ste-Anne-de-Bellevue QC, 75 pp. Available at http://www.migrationresearch.org/documents/MBOreport2012.pdf

Gahbauer, M.A. and G. Gruner. 2011. McGill Bird Observatory Fall Migration Monitoring Program 2010 Report. Migration Research Foundation, Ste-Anne-de-Bellevue QC, 44 pp. Available at http://www.migrationresearch.org/documents/fmmp2010.pdf

Gahbauer, M.A. and M-A. Hudson. 2010. McGill Bird Observatory Spring Migration Monitoring Program 2010 Report. Migration Research Foundation, Ste-Anne-de-Bellevue QC, 37 pp. Available at http://www.migrationresearch.org/documents/smmp2010.pdf

Gahbauer, M.A. and M-A. Hudson. 2011. McGill Bird Observatory Field Protocol for Migration Monitoring Program (Revised). Migration Research Foundation, Ste-Anne-de-Bellevue QC, 23 pp. Available at: http://www.migrationresearch.org/mbo/documents/MBO_Protocol_2011.pdf

Pyle, P. 1997. Identification Guide to North American Birds, Part 1. Slate Creek Press, Bolinas, California.

Appendix A. Seasonal occurrence of species

The charts below summarize the pattern of occurrence of each of the 162 species observed during the 2013 Spring and/or Fall Migration Monitoring Programs, which had daily coverage for 10 and 13 weeks, respectively. Where applicable, these are supplemented by notes on winter 2012-13, and summer 2013. Brief text-only summaries are also provided for the 6 species observed during the 2013 winter, summer, and/or owl programs, but missed during migration monitoring. Species are listed according to the latest taxonomic revisions by the American Ornithologists' Union (AOU 2013). The # processed includes: individuals banded, returns, and repeats, in that order (or banded only, if no returns or repeats occurred). Summary notes accompany each species overview, describing patterns of occurrence throughout the period covered in this report (31 October 2012 to 30 October 2013), and often comparing them to data presented in *MBO Five-year Report #1: 2005-2009* (Gahbauer 2010), as well as the spring (Gahbauer and Hudson 2010) and fall (Gahbauer and Gruner 2011) 2010 reports and the 2011 and 2012 annual reports (Gahbauer 2011, 2012).

GWFG: Greater White-fronted Goose / Oie rieuse (*Anser albifrons*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY								0.14						**0.01**
# DAYS OBSERVED								1						**1**
	FIRST OBSERVED: September 21				LAST OBSERVED: September 21			PEAK DATE: September 21			NUMBER OF INDIVIDUALS: 1			

Notes: A lone individual observed three times in one morning with a flock of Canada Geese; the 209th species added to the MBO checklist.

GSGO: Greater Snow Goose / Oie des neiges (*Chen caerulescens atlanticus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	7.14	83.57		5.71							**9.64**
# DAYS OBSERVED	1	3		1							**5**
	FIRST OBSERVED: March 31			LAST OBSERVED: April 21			PEAK DATE: April 10			NUMBER OF INDIVIDUALS: 260			

	AUGUST				SEPTEMBER				OCTOBER					
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY									0.14	3.43				**0.27**
# DAYS OBSERVED									1	3				**4**
	FIRST OBSERVED: October 2				LAST OBSERVED: October 5			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 22			

Notes: Relatively uncommon in spring, as in recent years, although there was a good movement in week 2. Fall sightings were limited to four consecutive days in early October, including one individual as part of a flock of Canada Geese that was seen for a few days.

ROGO: Ross's Goose / Oie de Ross (*Chen rossii*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.14				**0.01**
# DAYS OBSERVED							1				**1**
	FIRST OBSERVED: May 12			LAST OBSERVED: May 12			PEAK DATE: May 12			NUMBER OF INDIVIDUALS: 1			

Notes: A lone individual was heard and then seen flying over MBO on May 12, a first for the site, and the 208th species added to the MBO checklist.

CACG: Cackling Goose / Bernache de Hutchins (*Branta hutchinsii*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.57				0.14						0.14	**0.07**
# DAYS OBSERVED			1				1						1	**3**
	FIRST OBSERVED: August 18				LAST OBSERVED: October 29			PEAK DATE: August 18			NUMBER OF INDIVIDUALS: 4			

Notes: Small numbers observed in fall, as has been the case annually since 2005; the sightings in August were the earliest ever at MBO in fall.

CANG: Canada Goose / Bernache du Canada (*Branta canadensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	297.00	236.14	100.71	110.14	182.71	261.71	57.71	11.14	4.86	2.57	**126.47**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	6	**69**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5		PEAK DATE: March 31			NUMBER OF INDIVIDUALS: 1200		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	3.57	0.71	14.57	1.71	6.71	11.43	53.29	282.86	612.14	349.71	190.71	170.00	215.14	**147.12**
# DAYS OBSERVED	1	4	5	3	4	4	7	7	7	7	7	7	7	**70**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 30			PEAK DATE: September 26			NUMBER OF INDIVIDUALS: 1002			

Notes: Spring numbers were below average, although comparable to results from the past couple of years. As usual, there were two distinct peaks, in early April and early May. Fall numbers were the lowest since 2008, in part because flocks tapered off substantially in mid-October, at a time when they have often remained much larger in past years. Fewer observed in winter than any year since 2005-06; only observed in summer once, two individuals on the first day of the season.

WODU: Wood Duck / Canard branchu (*Aix sponsa*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		5.86	6.29	11.57	10.14	7.00	6.29	4.43	4.43	2.43	**5.84**
# DAYS OBSERVED		5	7	7	7	7	7	7	7	5	**59**
	FIRST OBSERVED: April 5			LAST OBSERVED: June 4		PEAK DATE: April 21			NUMBER OF INDIVIDUALS: 15		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.00	1.29	1.29	0.71	1.00	1.43	5.14	3.00	1.86	1.43	0.14	0.86		**1.47**
# DAYS OBSERVED	3	2	4	4	2	4	6	4	5	3	1	2		**40**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 20			PEAK DATE: September 13			NUMBER OF INDIVIDUALS: 24			

Notes: Both in spring and fall, numbers were a bit below average, the lowest they have been in either season since 2009. The Wood Ducks were a bit later to arrive in spring, and also disappeared before the end of fall for the first time since 2008. Spring numbers peaked in mid-late April as usual; in fall the count was fairly steady throughout except for a spike in mid-September. Missed in winter for the first time in five years, but observed in summer for the second time in three years, with observations on three of the MAPS visits.

GADW: Gadwall / Canard chipeau (*Anas strepera*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.29		0.14	0.57	0.14	0.14	**0.13**
# DAYS OBSERVED					1		1	4	1	1	**8**
	FIRST OBSERVED: April 29			LAST OBSERVED: May 30		PEAK DATE: April 29			NUMBER OF INDIVIDUALS: 2		

Notes: Gadwall is an irregular visitor to MBO, previously recorded only once or twice each in 2006, 2008, 2009, and 2011. The multiple sightings this spring were the most ever in a single year, although many of them likely involved the same individual lingering on the back pond for several weeks.

ABDU: American Black Duck / Canard noir (*Anas rubripes*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		2.43	0.71			0.14					**0.33**
# DAYS OBSERVED		2	1			1					**4**
	FIRST OBSERVED: April 9			LAST OBSERVED: May 5		PEAK DATE: April 10			NUMBER OF INDIVIDUALS: 11		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.71											**0.05**
# DAYS OBSERVED			2											**2**
	FIRST OBSERVED: August 15				LAST OBSERVED: August 16			PEAK DATE: August 16			NUMBER OF INDIVIDUALS: 4			

Notes: Observed in both spring and fall for the second year in a row, although again in low numbers in both seasons. The spring observations were on average earlier than usual, although there was a lone sighting in early May as well. All fall sightings were on two consecutive days in mid-August; this was the first time since 2008 that no American Black Ducks were observed in October.

MALL: Mallard / Canard colvert (*Anas platyrhynchos*)

MARCH	APRIL				MAY						JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	2.71	10.71	6.14	7.86	7.43	5.86	6.29	4.29	3.00	1.57	**5.59**
# DAYS OBSERVED	3	5	7	7	7	7	7	7	6	4	**60**
	FIRST OBSERVED: March 29			LAST OBSERVED: June 4			PEAK DATE: April 10			NUMBER OF INDIVIDUALS: 35	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.14	3.14	1.00	0.43	1.71	0.14	0.57	0.29	0.57	0.29	2.00	3.86	**1.10**
# DAYS OBSERVED	1	1	5	2	1	3	1	3	2	2	2	4	6	**33**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 30			PEAK DATE: Aug 15, Oct 29			NUMBER OF INDIVIDUALS: 10			

Notes: Present weekly in spring and fall this year. Spring numbers were generally a bit below average, except for a peak in early April. Mallards were unusually scarce in fall, with fewer observed than any year since 2005. Numbers began to build slightly toward the end of October, which is the traditional peak in abundance, but even then were much scarcer than usual. Also unusually scarce in winter 2012-13, with sightings on just two days in November. A lone individual was observed on the first day of summer.

BWTE: Blue-winged Teal / Sarcelle à ailes bleues (*Anas discors*)

MARCH	APRIL				MAY						JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					1.00	1.86	0.14				**1.36**
# DAYS OBSERVED					3	5	1				**9**
	FIRST OBSERVED: April 29			LAST OBSERVED: May 10			PEAK DATE: May 3			NUMBER OF INDIVIDUALS: 4	

Notes: Observed in spring for the first time since 2010. There were daily sightings of 2-4 individuals for a week in mid-season, plus a couple of other sightings the following week.

AGWT: American Green-winged Teal / Sarcelle d'hiver (*Anas crecca carolinensis*)

MARCH	APRIL				MAY						JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.29	2.14	5.00	1.14					**0.86**
# DAYS OBSERVED			1	3	4	5					**13**
	FIRST OBSERVED: April 16			LAST OBSERVED: May 6			PEAK DATE: April 28			NUMBER OF INDIVIDUALS: 18	

Notes: Observed in spring as in every previous year; missed in fall for the third time in four years. Like in 2010 and 2012, there were regular observations over a span of a few weeks, but no sightings beyond week 6; the peak flock of 18 was particularly large.

HOME: Hooded Merganser / Harle couronné (*Lophodytes cucullatus*)

MARCH	APRIL				MAY						JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.29									**0.03**
# DAYS OBSERVED		1									**1**
	FIRST OBSERVED: April 7			LAST OBSERVED: April 7			PEAK DATE: April 7			NUMBER OF INDIVIDUALS: 2	

Notes: Observed in spring for the seventh time in nine years, but limited to two individuals spotted on April 7.

COME: Common Merganser / Grand Harle (*Mergus merganser*)

MARCH	APRIL				MAY						JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.29			0.86	0.29	0.43					**0.19**
# DAYS OBSERVED	1			4	2	3					**10**
	FIRST OBSERVED: March 30			LAST OBSERVED: May 8			PEAK DATE: Mar 30, Apr 19, Apr 22			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY										0.14		0.29		**0.03**
# DAYS OBSERVED										1		1		**2**
	FIRST OBSERVED: October 4				LAST OBSERVED: October 23			PEAK DATE: October 23			NUMBER OF INDIVIDUALS: 2			

Notes: Spring sightings were scattered over the first six weeks of the season, the most since 2009. Observed in fall for the fifth year in a row, with sightings concentrated in October as usual.

COLO: Common Loon / Plongeon huard (*Gavia immer*)

MARCH	APRIL			MAY					JUNE		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.29	1.29	1.43	0.57		0.43		**0.40**
# DAYS OBSERVED				2	3	6	2		2		**15**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 28			PEAK DATE: April 28			NUMBER OF INDIVIDUALS: 5	

AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				0.14									0.29	**0.03**
# DAYS OBSERVED				1									1	**2**
	FIRST OBSERVED: August 25				LAST OBSERVED: October 30			PEAK DATE: October 30				NUMBER OF INDIVIDUALS: 2		

Notes: Spring numbers matched the record high from 2008, thanks to unusually high numbers flying by in late April and early May. Fall numbers were typically low, with a lone individual observed in late August and two more on the final day of the season.

DCCO: Double-crested Cormorant / Cormoran à aigrettes (*Phalacrocorax auritus*)

MARCH	APRIL			MAY					JUNE		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.71		1.86	0.43	0.29	0.86		**0.41**
# DAYS OBSERVED				1		3	1	2	2		**9**
	FIRST OBSERVED: April 22			LAST OBSERVED: May 28			PEAK DATE: May 3			NUMBER OF INDIVIDUALS: 7	

AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY									0.14					**0.01**
# DAYS OBSERVED									1					**1**
	FIRST OBSERVED: September 27				LAST OBSERVED: September 27			PEAK DATE: September 27				NUMBER OF INDIVIDUALS: 1		

Notes: Spring numbers were close to average overall, with a modest peak in early May. There was just one observation in fall, fewer than in any previous year.

AMBI: American Bittern / Butor d'Amérique (*Botaurus lentiginosus*)

MARCH	APRIL			MAY					JUNE		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.29	0.14		0.14		0.14	**0.07**
# DAYS OBSERVED					2	1		1		1	**5**
	FIRST OBSERVED: April 30			LAST OBSERVED: June 4			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 1	

Notes: As in every previous spring, there were scattered sightings, in this case scattered from late April to early June. Missed in fall for the second year in a row.

GBHE: Great Blue Heron / Grand Héron (*Ardea herodias*)

MARCH	APRIL			MAY					JUNE		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.29		0.71	0.57	1.14	0.71	0.71	0.71	0.29	**0.51**
# DAYS OBSERVED		2		5	2	5	3	4	3	2	**26**
	FIRST OBSERVED: April 5			LAST OBSERVED: May 31			PEAK DATE: May 5, May 23			NUMBER OF INDIVIDUALS: 3	

AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.00	0.43	0.14	0.14	0.14		0.29		0.14	0.71	0.14			**0.24**
# DAYS OBSERVED	2	2	1	1	1		2		1	4	1			**15**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 11			PEAK DATE: August 1				NUMBER OF INDIVIDUALS: 6		

Notes: Spring numbers continued the trend of below average counts that have been typical of the past few years, and there was a slight peak in early May. Fall numbers were also slightly lower than usual, and sightings tapered off earlier than in the past three years. Observed in summer for the second year in a row, although just a single individual on July 29.

GREG: Great Egret / Grande Aigrette (*Ardea alba*)

AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.29						0.14					**0.03**
# DAYS OBSERVED			1						1					**2**
	FIRST OBSERVED: August 16				LAST OBSERVED: September 26			PEAK DATE: August 16				NUMBER OF INDIVIDUALS: 2		

Notes: Observed for a third consecutive fall, with scattered sightings in August and September.

GRHE: Green Heron / Héron vert (*Butorides virescens*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.14	0.57	0.29	0.14		**0.11**
# DAYS OBSERVED						1	4	2	1		**8**
	FIRST OBSERVED: May 8			LAST OBSERVED: May 29			PEAK DATE: 8 dates			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14			0.14							0.14			**0.03**
# DAYS OBSERVED	1			1							1			**3**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 10			PEAK DATE: Aug 4, Aug 24, Oct 10			NUMBER OF INDIVIDUALS: 1			

Notes: Scarcer in spring than any previous year, and missing in week 10 for the third time in four years. Also the fewest ever fall sightings, although the mid-October record was the latest ever. Single individuals were observed on two days in mid-July.

BCNH: Black-crowned Night Heron / Bihoreau gris (*Nycticorax nycticorax*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14													**0.01**
# DAYS OBSERVED	1													**1**
	FIRST OBSERVED: August 3				LAST OBSERVED: August 3			PEAK DATE: August 3			NUMBER OF INDIVIDUALS: 1			

Notes: The only sighting of the year was on August 3. It was the second fall record, and just the seventh overall.

TUVU: Turkey Vulture / Urubu à tête rouge (*Cathartes aura*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.29	0.57	3.29	1.57	2.86	3.00	3.29	0.43	1.14	**1.66**
# DAYS OBSERVED	1	2	2	6	4	7	6	6	2	4	**40**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 4			PEAK DATE: May 18			NUMBER OF INDIVIDUALS: 10	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29	0.14	0.14	0.14	0.43		0.14	1.14					0.29	**0.21**
# DAYS OBSERVED	1	1	1	1	2		1	1					1	**9**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 24			PEAK DATE: September 25			NUMBER OF INDIVIDUALS: 8			

Notes: Higher spring numbers than ever before, despite there being no resident pair for the first time in four years. Fall numbers were somewhat below average, as no large flights of migrants were observed this year. Only one sighting in summer, on July 21, despite the regular sightings through the end of spring.

OSPR: Osprey / Balbuzard pêcheur (*Pandion haliaetus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.14	0.57	0.29			0.14	**0.11**
# DAYS OBSERVED					1	3	2			1	**7**
	FIRST OBSERVED: April 28			LAST OBSERVED: May 30			PEAK DATE: May 4			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY								0.14			0.14			**0.02**
# DAYS OBSERVED								1			1			**2**
	FIRST OBSERVED: September 25				LAST OBSERVED: October 12			PEAK DATE: Sep 25, Oct 12			NUMBER OF INDIVIDUALS: 1			

Notes: Typically uncommon in both spring and fall. Spring sightings were mostly from late April to mid-May except for one late May record. Fall records were between mid-September and mid-October as usual.

BAEA: Bald Eagle / Pygargue à tête blanche (*Haliaeetus leucocephalus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.14							**0.01**
# DAYS OBSERVED											**1**
	FIRST OBSERVED: April 21			LAST OBSERVED: April 21			PEAK DATE: April 21			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY					0.14	0.14		0.14					0.29	**0.05**
# DAYS OBSERVED					1	1		1					1	**4**
	FIRST OBSERVED: August 29				LAST OBSERVED: October 29			PEAK DATE: October 29			NUMBER OF INDIVIDUALS: 2			

Notes: Observed in spring for just the fourth time, a lone individual passing overhead on April 21. The five eagles observed this fall was just one short of last year's record, and still well above average; observations were scattered across two months.

NOHA: Northern Harrier / Busard Saint-Martin (*Circus cyaneus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.29				0.14			**0.04**
# DAYS OBSERVED				2				1			**3**
	FIRST OBSERVED: April 23			LAST OBSERVED: May 16			PEAK DATE: Apr 23, Apr 24, May 16		NUMBER OF INDIVIDUALS: 1		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29				0.14		0.14	0.29	0.43	0.14			0.29	**0.13**
# DAYS OBSERVED	1				1		1	1	1	1			1	**7**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 25			PEAK DATE: September 28			NUMBER OF INDIVIDUALS: 3			

Notes: Spring numbers were lower than in any previous year, limited to two individuals in late April and another in mid-May. The fall count was also below average, but with sightings scattered throughout the season.

SSHA: Sharp-shinned Hawk / Épervier brun (*Accipiter striatus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.29	0.57	0.14	0.14		0.14	0.14	**0.14**
# DAYS OBSERVED				2	3	1	1		1	1	**9**
	FIRST OBSERVED: April 21			LAST OBSERVED: June 5			PEAK DATE: April 28			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.43	0.14	0.71	1.57	2.29	2.57	2.14	1.29	1.86	1.29	0.71	0.43	**1.19**
# DAYS OBSERVED		3	1	3	6	4	5	7	4	6	5	3	2	**49**
# PROCESSED					1		2			1				**4**
	FIRST OBSERVED: August 10				LAST OBSERVED: October 29			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 9			

Notes: Numbers in spring were fairly typical, and concentrated in mid-season as is usual. The fall count was somewhat above average, although lower than last year's record numbers. Observations peaked in mid-September, matching the norm across previous years. Fewer individuals were banded in fall than any year since 2008.

COHA: Cooper's Hawk / Épervier de Cooper (*Accipiter cooperi*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.57	0.14	0.43	0.14	0.71	0.29				**0.23**
# DAYS OBSERVED		3	1	3	1	3	2				**13**
	FIRST OBSERVED: April 6			LAST OBSERVED: May 14			PEAK DATE: Apr 6, May 3, May 5			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.29	0.14	0.29	1.14	0.86	0.86	0.86	0.71	0.57	0.71	0.71	0.29	**0.58**
# DAYS OBSERVED	1	2	1	2	6	4	3	4	4	3	3	4	2	**39**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 30			PEAK DATE: September 18			NUMBER OF INDIVIDUALS: 3			

Notes: Typically uncommon in spring, and with observations tapering off by mid-May. Observed weekly in fall, with numbers close to average and fairly steady through most of the season. Five sightings over the course of winter, between early November and late January.

NOGO: Northern Goshawk / Autour des palombes (*Accipiter gentilis*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY									0.29		0.14	0.29		**0.05**
# DAYS OBSERVED									2		1	2		**5**
	FIRST OBSERVED: September 26				LAST OBSERVED: October 23			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Missed in spring for the first time in four years. Fewer observations in fall than any year since 2008, and all concentrated in the final third of the season. Missed in winter for the second time in three years.

RSHA: Red-shouldered Hawk / Buse à épaulettes (*Buteo lineatus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.29			0.86	0.14	0.86	0.14	0.29	0.29	0.14	**0.30**
# DAYS OBSERVED	2			3	1	4	1	1	1	1	**14**
	FIRST OBSERVED: March 28			LAST OBSERVED: May 31			PEAK DATE: April 21			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.14	0.29	0.43	0.29	1.29	1.00	0.43	1.14		0.29		0.14	**0.42**
# DAYS OBSERVED		1	2	1	1	3	5	3	2		2		1	**21**
	FIRST OBSERVED: August 14				LAST OBSERVED: October 29			PEAK DATE: Sep 8, Sep 29			NUMBER OF INDIVIDUALS: 6			

Notes: Unusually scarce this spring, with scattered sightings throughout the season, likely of the pair nesting somewhere in the Arboretum. Fall numbers were fairly typical, with somewhat of a peak from mid- to late September as migrants passed through. Missed in winter for the first time in five years, and also in summer for the first time in five years.

BWHA: Broad-winged Hawk / Petite Buse (*Buteo platypterus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.29					0.14		**0.04**
# DAYS OBSERVED				2					1		**3**
	FIRST OBSERVED: April 19			LAST OBSERVED: May 28			PEAK DATE: Apr 19, Apr 21, May 28			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				1.00	1.57	0.29	14.86	0.86	0.14	0.29				**1.46**
# DAYS OBSERVED				1	2	2	4	2	1	1				**13**
	FIRST OBSERVED: August 28				LAST OBSERVED: October 5			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 74			

Notes: Spring observations were unusually scarce, with just two individuals observed during the peak of migration in April, and another lone sighting in late May. The fall count was well above average, thanks to a strong movement in mid-September highlighted by 74 individuals passing overhead on the 14th.

RTHA: Red-tailed Hawk / Buse à queue rousse (*Buteo jamaicensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.14	0.14	0.43	0.43	0.43		0.43	0.43	0.14	0.14	**0.37**
# DAYS OBSERVED	5	1	3	3	3		2	3	1	1	**22**
	FIRST OBSERVED: March 29			LAST OBSERVED: May 31			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14		0.57	1.00	1.14	1.71	1.43	4.14	0.71	1.71	2.14	3.00	1.86	**1.51**
# DAYS OBSERVED	1		3	4	4	4	5	5	4	5	5	4	4	**48**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 29			PEAK DATE: September 25			NUMBER OF INDIVIDUALS: 24			

Notes: Spring counts of Red-tailed Hawks have been quite consistent over the years, and 2013 was no exception. For the second year in a row, observations began in the first week of the season, and this year numbers peaked then as well. Fall abundance was above average, although slightly lower than the past two years. There was a peak in migration in week 12, consistent with the pattern in earlier years, but there was an even larger movement in week 8. Observed monthly in winter except for February. One sighting in summer, on July 21, the first for the season since 2007; it and many of the other sightings this year likely involved the pair breeding on the adjacent farm.

RLHA: Rough-legged Hawk / Buse pattue (*Buteo lagopus*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY												0.29		**0.02**
# DAYS OBSERVED												1		**1**
	FIRST OBSERVED: October 23				LAST OBSERVED: October 23			PEAK DATE: October 23			NUMBER OF INDIVIDUALS: 2			

Notes: Observed in fall for the fifth year in a row, but limited to two individuals on the final day of week 12.

AMKE: American Kestrel / Crécerelle d'Amérique (*Falco sparverius*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.43	0.29			0.14	0.14		**0.10**
# DAYS OBSERVED				3	1			1	1		**6**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 23			PEAK DATE: April 29			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY							0.43	0.29				0.14		**0.07**
# DAYS OBSERVED							1	1				1		**6**
	FIRST OBSERVED: September 14				LAST OBSERVED: October 18			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 3			

Notes: The seven American Kestrel sightings this spring was a record high; observations were scattered over a span of six weeks and likely involved mostly different birds. Fall sightings were fewer than last year, but still slightly above average; observations were concentrated in mid-late September as usual.

MERL: Merlin / Faucon émerillon (*Falco columbarius*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.14	0.14	0.14			0.14				**0.06**
# DAYS OBSERVED		1	1	1			1				**4**
	FIRST OBSERVED: April 6			LAST OBSERVED: May 15			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.71	0.14	0.14	0.57	0.14	0.14	0.29	0.29			0.14		**0.20**
# DAYS OBSERVED		4	1	1	3	1	1	2	2			1		**16**
	FIRST OBSERVED: August 8				LAST OBSERVED: October 18			PEAK DATE: Aug 10, Aug 29			NUMBER OF INDIVIDUALS: 2			

Notes: The four Merlin sightings in spring matched the record high from 2007; observations were scattered between early April and mid-May. The number of observations in fall was close to average, with weekly sightings from the second week of August to late September, plus a late migrant in week 12. A single winter observation on January 28, the first in three years.

PEFA: Peregrine Falcon / Faucon pèlerin (*Falco peregrinus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.14		0.14					**0.03**
# DAYS OBSERVED				1		1					**2**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 6			PEAK DATE: Apr 18, May 6			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY								0.14			0.14	0.29		**0.04**
# DAYS OBSERVED								1			1	1		**3**
	FIRST OBSERVED: September 25				LAST OBSERVED: October 18			PEAK DATE: October 18			NUMBER OF INDIVIDUALS: 2			

Notes: Two spring observations is close to average for Peregrine Falcon, and four in fall is just one less than last year's record. Three of the four fall observations were in the mid-October period that corresponds to the peak of Peregrine Falcon migration.

VIRA: Virginia Rail / Râle de Virginie (*Rallus limicola*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.57	0.43	0.57	0.29	0.14	**0.20**
# DAYS OBSERVED						4	3	4	2	1	**14**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 30			PEAK DATE: 14 dates			NUMBER OF INDIVIDUALS: 1	

Notes: Virginia Rail showed up only in week 6 this spring, the latest arrival since 2008. Once present, sightings continued weekly through week 10, suggesting territoriality in Stoneycroft again, even though sightings were sporadic. There was also one summer sighting on July 14.

SORA: Sora / Marouette de Caroline (*Porzana carolina*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.14		**0.01**
# DAYS OBSERVED									1		**1**
	FIRST OBSERVED: May 27			LAST OBSERVED: May 27			PEAK DATE: May 27			NUMBER OF INDIVIDUALS: 1	

Notes: Only a single sighting in late May, the first record at MBO since a successful nesting in June 2010.

KILL: Killdeer / Pluvier kildir (*Charadrius vociferus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.43	0.57	0.71	0.43	1.71	0.86	1.00			**0.59**
# DAYS OBSERVED	1	2	3	3	3	5	4	6			**27**
	FIRST OBSERVED: March 31			LAST OBSERVED: May 22			PEAK DATE: May 6			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14		0.29			0.14		0.57				0.14		**0.10**
# DAYS OBSERVED	1		1			1		1				1		**5**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 20			PEAK DATE: September 20			NUMBER OF INDIVIDUALS: 4			

Notes: Killdeer arrived in the first week of spring and were seen in small numbers weekly through mid-May. Fall sightings were fewer, though more numerous than in any previous year; observations spanned almost the entire season. A single individual was observed on the final day of winter, and there were summer sightings on June 23 and July 14.

SPSA: Spotted Sandpiper / Chevalier grivelé (*Actitis macularius*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.43	0.14												**0.04**
# DAYS OBSERVED	3	1												**4**
	FIRST OBSERVED: August 5				LAST OBSERVED: August 11			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in early August for the second time in three years, likely a single individual hanging around for close to a week.

SOSA: Solitary Sandpiper / Chevalier solitaire (*Tringa solitaria*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.14	1.00	2.00	2.00	0.14	0.14	**0.54**
# DAYS OBSERVED					1	5	5	6	1	1	**19**
# PROCESSED							1				**1**
	FIRST OBSERVED: May 1			LAST OBSERVED: May 30			PEAK DATE: May 14			NUMBER OF INDIVIDUALS: 5	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.14	0.57	0.14	0.14	0.57	0.14							**0.13**
# DAYS OBSERVED		1	3	1	1	3	1							**10**
	FIRST OBSERVED: August 9				LAST OBSERVED: September 13			PEAK DATE: Aug 17, Sep 6			NUMBER OF INDIVIDUALS: 2			

Notes: Observed weekly over a span of six weeks in spring, the longest span recorded to date for this species; the frequent observations resulted in an above average count of sightings for the season, although many records likely involved the same two individuals, one of which was banded on May 15, only the second one banded at MBO, and five years after the first. Fall sightings also spanned a six-week period, with the latest sighting in mid-September, somewhat earlier than most years.

GRYE: Greater Yellowlegs / Grand Chevalier (*Tringa melanoleuca*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.14	0.14		0.14			**0.04**
# DAYS OBSERVED					1	1		1			**3**
	FIRST OBSERVED: April 26			LAST OBSERVED: May 18			PEAK DATE: Apr 26, May 2, May 18			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.14											0.14	**0.02**
# DAYS OBSERVED		1											1	**2**
	FIRST OBSERVED: August 13				LAST OBSERVED: October 30			PEAK DATE: Aug 13, Oct 30			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring for the second year in a row, and fifth year overall, with three sightings of lone individuals scattered between late April and mid-May. The two fall sightings were both earlier (August 13) and later (October 30) than any previously recorded for the season.

LESA: Least Sandpiper / Bécasseau minuscule (*Calidris minutilla*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.86				**0.09**
# DAYS OBSERVED							1				**1**
	FIRST OBSERVED: May 15			LAST OBSERVED: May 15			PEAK DATE: May 15			NUMBER OF INDIVIDUALS: 6	

Notes: Observed for the first time since 2009, and both previous observations were in fall. A flock of six individuals was observed foraging among the cut cattails in Stoneycroft Pond on May 15.

WISN: Wilson's Snipe / Bécassine de Wilson (*Gallinago delicata*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.14							**0.01**
# DAYS OBSERVED				1							**1**
	FIRST OBSERVED: April 20			LAST OBSERVED: April 20			PEAK DATE: April 20			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY							0.43							**0.03**
# DAYS OBSERVED							1							**1**
	FIRST OBSERVED: September 17				LAST OBSERVED: September 17			PEAK DATE: September 17			NUMBER OF INDIVIDUALS: 3			

Notes: Observed in spring for only the third time in nine years, with previous sightings in 2007 and 2010. A lone individual was observed this spring on April 20. Three individuals in mid-September were the first observations of Wilson's Snipe during the Fall Migration Monitoring Program since 2009, although a few individuals were observed during the owling program in October 2011.

AMWO: American Woodcock / Bécasse d'Amérique (*Scolopax minor*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.14	0.14	0.29	0.43	0.43	0.29				**0.19**
# DAYS OBSERVED	1	1	1	2	2	2	2				**11**
# PROCESSED							1				**1**
	FIRST OBSERVED: April 3			LAST OBSERVED: May 15			PEAK DATE: April 25, May 8			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29	0.57	0.57	0.29		0.14	0.14	0.14		0.43	0.14	0.14		**0.22**
# DAYS OBSERVED	2	4	3	2		1	1	1		1	1	1		**17**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 19			PEAK DATE: October 5			NUMBER OF INDIVIDUALS: 3			

Notes: Observed more regularly in spring than in any previous year, with weekly sightings for the first seven weeks of the season. A presumed resident (a female with a brood patch) was banded on May 15, the first ever banded at MBO, and only the second shorebird species to date. Fall observations were also more frequent than in any previous year, and spanned most of the season.

RBGU: Ring-billed Gull / Goéland à bec cerclé (*Larus delawarensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	7.43	14.43	9.29	15.86	10.00	25.57	81.29	53.00	5.14	4.71	**22.67**
# DAYS OBSERVED	7	7	7	7	7	7	7	6	7	5	**67**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 4			PEAK DATE: May 15			NUMBER OF INDIVIDUALS: 230	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.86	0.57	1.14	0.71	1.43	1.71	1.43	11.57	25.86	2.43	36.57	28.43	5.14	**9.07**
# DAYS OBSERVED	2	2	3	3	5	3	3	4	6	6	4	5	6	**52**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 30			PEAK DATE: October 16			NUMBER OF INDIVIDUALS: 250			

Notes: Spring numbers were close to average after three consecutive years of low counts. There was a distinct spike in abundance in mid-May, corresponding with the traditional peak for the species. Fall numbers were typically low for the first half of the season, then increased sharply to an unusually high peak in mid-October that brought the overall season to an above average total. Observed just once in each of November and Decmber and in small numbers on just over half of March visits; more numerous in summer than the past four years, and missed on just the first two MAPS visits.

HERG: Herring Gull / Goéland argenté (*Larus argentatus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.14		0.14		0.14		0.14		0.14	**0.09**
# DAYS OBSERVED	1	1		1		1		1		1	**6**
	FIRST OBSERVED: March 29			LAST OBSERVED: June 3			PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY							0.29	0.14	0.29	0.14		0.14		**0.08**
# DAYS OBSERVED							1	1	2	1		1		**6**
	FIRST OBSERVED: September 14				LAST OBSERVED: October 19			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 2			

Notes: Lone individuals were observed on six dates spanning most of the spring season. Fall observations were more concentrated in the second half of the season; in both spring and fall numbers were slightly below average.

GBBG: Great Black-backed Gull / Goéland marin (*Larus marinus*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.86	0.29		0.14	0.14				0.14	0.86	**0.34**
# DAYS OBSERVED	2	1		1	1				1	1	**7**
	FIRST OBSERVED: March 29			LAST OBSERVED: June 5			PEAK DATE: March 30			NUMBER OF INDIVIDUALS: 12	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29					0.14		0.14			0.14	0.29	0.14	**0.09**
# DAYS OBSERVED	1					1		1			1	2	1	**7**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 25			PEAK DATE: August 4			NUMBER OF INDIVIDUALS: 2			

Notes: Far more abundant than in any previous spring, thanks to a record large flock of 12 individuals on March 30, and also a surprisingly high count of 6 on June 5, later in the season than most sightings in other years. Fall observations were fairly typical, aside from the observation of two individuals in the first week of August, a full five weeks earlier than the previous earliest fall record. A single winter sighting on March 10.

COTE: Common Tern / Sterne pierregarin (*Sterna hirundo*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.14				**0.01**
# DAYS OBSERVED							1				**1**
	FIRST OBSERVED: May 11			LAST OBSERVED: May 11			PEAK DATE: May 11			NUMBER OF INDIVIDUALS: 1	

Notes: Common Tern was first observed at MBO in August 2010 and there were subsequent fall sightings in September 2011 and August and September 2012. In 2013 it was missed in fall, but observed for the first time in spring, a lone individual flying overhead on May 11.

ROPI: Rock Pigeon / Pigeon biset (*Columba livia*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.86	1.14	0.14	0.29	**0.24**
# DAYS OBSERVED							1	4	1	1	**7**
	FIRST OBSERVED: May 12			LAST OBSERVED: May 30			PEAK DATE: May 12			NUMBER OF INDIVIDUALS: 6	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.00	1.14	5.14	0.86	1.00	1.57	1.43	0.14	0.57	6.71	0.43		2.71	**1.82**
# DAYS OBSERVED	3	2	2	3	2	3	1	1	2	7	1		2	**29**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 29			PEAK DATE: August 16			NUMBER OF INDIVIDUALS: 24			

Notes: Rock Pigeon was strangely absent for the first six weeks of spring, but then observed regularly in small numbers over the final four weeks of the season. Fall observations were more regular, and numbers overall were above average for the season, largely thanks to an unusually high count in mid-August. Winter sightings were limited to a flock of three pigeons on March 2; none were seen in summer for the fifth time in six years.

MODO: Mourning Dove / Tourterelle triste (*Zenaida macroura*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	2.00	1.29	1.14	1.29	0.71	0.43	1.14	1.00	0.57	0.57	**1.01**
# DAYS OBSERVED	5	4	5	6	3	3	5	5	3	3	**42**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 4			PEAK DATE: March 28			NUMBER OF INDIVIDUALS: 8	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.57	1.14	1.71	1.71	1.14	0.57	1.14	1.29	0.57	0.14	1.43	1.86	1.29	**1.20**
# DAYS OBSERVED	5	4	6	5	4	3	4	6	3	1	3	4	3	**51**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: Aug 27, Oct 12, Oct 25			NUMBER OF INDIVIDUALS: 5			

Notes: Mourning Doves were observed weekly throughout spring, with a modest decline in average daily counts over the course of the season. Fall numbers were the lowest since 2008, in part because the typical mid-late October influx did not occur this year. Winter numbers were well above average, largely thanks to high numbers throughout January, peaking at 55 on January 15, but fewer were around in early and late winter when banding was occurring, and only a single individual was banded. Lone individuals were observed on three days in summer.

YBCU: Yellow-billed Cuckoo / Coulicou à bec jaune (*Coccyzus americanus*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY						0.14								**0.01**
# DAYS OBSERVED						1								**1**
	FIRST OBSERVED: September 7				LAST OBSERVED: September 7			PEAK DATE: September 7			NUMBER OF INDIVIDUALS: 1			

Notes: A lone individual was observed on census at the end of Warbler Alley on September 7, and was just the fifth record for MBO; the past three have all been between mid-August and mid-September.

BBCU: Black-billed Cuckoo / Coulicou à bec noir (*Coccyzus erythropthalmus*)

MARCH	APRIL					MAY				JUNE	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.14		0.14	**0.02**
# DAYS OBSERVED								1		1	**2**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 19			LAST OBSERVED: June 4			PEAK DATE: May 19, June 4			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14								0.14	0.43				**0.05**
# DAYS OBSERVED	1								1	3				**5**
# PROCESSED										1				**1**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 8			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Typically rare, observed in both spring and fall for the sixth time in nine years The observations in late September and early October were all beyond the previous late season record of 20 September. This was the first time since 2008 that two Black-billed Cuckoos were banded in a year, and of the nine banded to date, the one this May was only the second ever in spring.

EASO: Eastern Screech-Owl / Petit-duc maculé (*Megascops asio*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY						0.14	0.14							**0.02**
# DAYS OBSERVED						1	1							**2**
	FIRST OBSERVED: September 5				LAST OBSERVED: September 17			PEAK DATE: Sep 5, Sep 17			NUMBER OF INDIVIDUALS: 1			

Notes: Observed during the Fall Migration Monitoring Program for only the second time, the other back in September 2005. Both observations were in response to a human imitation of an Eastern Screech-Owl call intended to attract a mixed flock of warblers. In addition to the two encounters in mid-September, one was banded during the owling program, and there was a return of one of the Eastern Screech-Owls banded during last year's owling.

GHOW: Great Horned Owl / Grand Duc d'Amérique (*Bubo virginianus*)

MARCH	APRIL					MAY				JUNE	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.29				**0.02**
# DAYS OBSERVED							1				**1**
	FIRST OBSERVED: May 14			LAST OBSERVED: May 14			PEAK DATE: May 14			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.14	0.14			0.57	0.43	0.71	0.86	0.86	0.86	0.71	0.71	**0.47**
# DAYS OBSERVED	1	1	1			4	3	4	4	4	5	5	5	**37**
	FIRST OBSERVED: August 6				LAST OBSERVED: October 30			PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 2			

Notes: Observed in spring for the sixth time in nine years, thanks to two owls calling to each other on the morning of May 14. Remarkably regular in fall, almost always right around dawn, and usually near the gate. There were a few scattered records in August, but then the species was detected on 34 of 56 days over the final eight weeks of the season. One winter observation, on March 16. Heard regularly during the owl banding program in fall; overall much more vocal than in previous year.

BDOW: Barred Owl / Chouette rayée (*Strix varia*)

Notes: Heard in the Arboretum periodically during the fall owl banding program.

GGOW: Great Gray Owl / Chouette lapone (*Strix nebulosa*)

Notes: Observed on 8 of 14 visits between January 5 and February 6, one individual each time except on January 26 when a second one was observed over the farm field to the east. These were the first sightings at MBO since March 2005.

LEOW: Long-eared Owl / Hibou moyen-duc (*Asio otus*)

Notes: Heard regularly during the fall owl banding program. Banded for the second year in a row, a single bird on October 20.

NSWO: Northern Saw-whet Owl / Petite Nyctale (*Aegolius acadicus*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY						0.14								**0.01**
# DAYS OBSERVED						1								**1**
	FIRST OBSERVED: September 7				LAST OBSERVED: September 7			PEAK DATE: September 7			NUMBER OF INDIVIDUALS: 1			

Notes: Finally spotted roosting at MBO for the first time on September 7, a hatch-year still mostly in juvenile plumage, suggesting it may have come from a nest nearby. An above-average number of Northern Saw-whet Owls was banded in fall 2013 (174), and a record 18 foreign birds were recaptured as well.

CONI: Common Nighthawk / Engoulevent d'Amérique (*Chordeiles minor*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				0.14										**0.01**
# DAYS OBSERVED				1										**1**
	FIRST OBSERVED: August 24				LAST OBSERVED: August 24			PEAK DATE: August 24			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in fall for the fourth year in a row, as usual between late August and mid-September.

CHSW: Chimney Swift / Martinet ramoneur (*Chaetura pelagica*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.43			**0.04**
# DAYS OBSERVED								2			**2**
	FIRST OBSERVED: May 17			LAST OBSERVED: May 19			PEAK DATE: May 17			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.14	1.00											**0.09**
# DAYS OBSERVED		1	2											**3**
	FIRST OBSERVED: August 11				LAST OBSERVED: August 16			PEAK DATE: August 16			NUMBER OF INDIVIDUALS: 6			

Notes: Sightings of Chimney Swifts have been declining, reflecting its status as a Threatened species under Canada's Species at Risk Act. Only three individuals were observed this spring, the fifth year in a row the count has been no more than three. The fall count was the second lowest ever, with only a few individuals observed in mid-August.

RTHU: Ruby-throated Hummingbird / Colibri à gorge rubis (*Archilochus colubris*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								1.71	0.86	1.14	**0.37**
# DAYS OBSERVED								5	4	4	**13**
# PROCESSED								(5)	(1)	(2)	**(8)**
	FIRST OBSERVED: May 16			LAST OBSERVED: June 3			PEAK DATE: May 31			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.86	3.71	8.14	7.43	4.43	3.43	0.57							**2.35**
# DAYS OBSERVED	7	7	7	7	7	6	2							**43**
# PROCESSED	(4)	(6)	(19)	(13)	(11)	(10)	(2)							**(65)**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 15			PEAK DATE: August 21			NUMBER OF INDIVIDUALS: 15			

Notes: Ruby-throated Hummingbirds did not show up this spring until week 8, the latest arrival since 2005. Once back though, numbers were close to average. In fall, they lingered through week 7, which is typical, but numbers were slightly higher than in any previous year due to record high counts over the third and fourth weeks of August. As in past years, hummingbirds were not banded, but age and sex were noted for all individuals extracted from nets. There were just 8 in spring (4 after-hatch-year males, 3 after-hatch-year females, and 1 unknown) and 65 in fall, slightly fewer than last year despite the higher counts this year (3 after-hatch-year males, 4 after-hatch-year females, 3 hatch-year males, 45 hatch-year unknowns, and 10 unknowns). As always, some individuals were likely captured more than once, but this could not be tracked as they were not banded. Observed on five of seven MAPS visits, in fairly typical numbers. At least one pair may have bred on site, given that a female captured in late spring (May 31) had a brood patch.

BEKI: Belted Kingfisher / Martin-pêcheur d'Amérique (*Megaceryle alcyon*)

	MARCH	APRIL			MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.14		0.29							**0.04**
# DAYS OBSERVED		1		2							**3**
	FIRST OBSERVED: April 10			LAST OBSERVED: April 24			PEAK DATE: Apr 10, Apr 21, Apr 24		NUMBER OF INDIVIDUALS: 1		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.14	0.14	0.14	0.14			0.14						**0.07**
# DAYS OBSERVED														
	FIRST OBSERVED: August 6				LAST OBSERVED: September 24			PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 1			

Notes: For the second year in a row, there were a record few three sightings in spring, this time all in April. The six sightings in fall (including one weekly for the first five weeks) were the fewest since 2008.

RBWO: Red-bellied Woodpecker / Pic à ventre roux (*Melanerpes carolinus*)

	MARCH	APRIL			MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY										0.14	**0.01**
# DAYS OBSERVED										1	**1**
	FIRST OBSERVED: June 4			LAST OBSERVED: June 4			PEAK DATE: June 4			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				0.14										**0.01**
# DAYS OBSERVED				1										**1**
	FIRST OBSERVED: August 24				LAST OBSERVED: August 24			PEAK DATE: August 24			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring for the first time ever, a lone sighting in the final week of the season. There was also a single sighting for fall, in late August.

YBSA: Yellow-bellied Sapsucker / Pic maculé (*Sphyrapicus varius*)

	MARCH	APRIL			MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.14	3.57	3.29	4.29	1.43	1.43	0.29	0.43	**1.49**
# DAYS OBSERVED			1	4	4	5	4				**18**
# PROCESSED						1					**1**
	FIRST OBSERVED: April 17			LAST OBSERVED: May 15			PEAK DATE: April 21			NUMBER OF INDIVIDUALS: 3	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14		0.14		0.14	0.14			0.14					**0.05**
# DAYS OBSERVED	1		1		1	1			1					**5**
# PROCESSED	1													**1**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 30			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 1			

Notes: After being scarcer than ever in spring 2012, Yellow-bellied Sapsucker rebounded very well in 2013, with higher spring numbers than ever before, largely due to record high counts from mid-April through early May. Despite their unusual abundance, only a single individual was banded, on May 7. In contrast to the spring abundance, fall numbers matched the record low set last year, with only five individuals observed over the first two months of the season. Also for the second year in a row, just one individual was banded in fall. Two sightings of lone individuals in summer.

DOWO: Downy Woodpecker / Pic mineur (*Picoides pubescens*)

	MARCH	APRIL			MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	2.57	1.57	2.14	2.86	1.71	1.71	1.00	1.71	0.86	0.86	**1.70**
# DAYS OBSERVED	7	7	7	7	6	7	4	7	3	5	**61**
# PROCESSED				2-1-1	0-0-1				0-0-1	0-1-0	**2-2-3**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: Apr 2, Apr 13, Apr 24		NUMBER OF INDIVIDUALS: 5		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.71	1.29	3.00	2.43	1.71	1.43	1.86	2.57	3.43	2.43	3.57	1.86	1.86	**2.32**
# DAYS OBSERVED	7	6	7	7	6	6	7	7	7	7	7	7	7	**88**
# PROCESSED	6-0-0	1-1-2	1-0-1	1-0-6	0-0-5	0-0-1	0-1-2		1-0-1		3-0-0			**13-2-18**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: August 21			NUMBER OF INDIVIDUALS: 8			

Notes: Observed weekly in both spring and fall for the fourth time in the past five years. Numbers observed were well above average in spring and slightly below average in fall. Observed on 44 of 48 winter visits, with a higher mean daily count (2.2) than in any previous winter; 3 were banded, more than in any previous winter, and there were a record 4 returns and 11 repeats, reflecting much more activity at the feeders than in past winters. Another 4 individuals were banded during MAPS.

HAWO: Hairy Woodpecker / Pic chevelu (*Picoides villosus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.43	0.57	1.14	1.57	1.57	1.00	0.71	0.29	0.57	0.14	**0.80**
# DAYS OBSERVED	3	3	4	5	7	5	4	1	3	1	**36**
# PROCESSED				0-0-1					0-0-1		**0-0-2**
FIRST OBSERVED: March 29	LAST OBSERVED: May 31	PEAK DATE: April 20	NUMBER OF INDIVIDUALS: 4								

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.14	0.86	1.29	1.71	1.43	0.71	1.57	1.86	1.43	1.71	1.00	1.57	0.57	**1.30**
# DAYS OBSERVED	6	4	6	5	7	4	6	7	6	7	5	6	2	**71**
# PROCESSED											1	1		**2**
FIRST OBSERVED: August 1	LAST OBSERVED: October 29	PEAK DATE: October 17	NUMBER OF INDIVIDUALS: 5											

Notes: Observed weekly in spring for the seventh time in nine years, with numbers slightly above average overall, and peaking slightly from mid-April to early May as is the norm. For just the second time, none were banded in spring, although there were two repeats from birds banded in winter. Observed weekly in fall, as in all previous years; fall numbers matched the long-term average, and as usual were slightly higher in the second half of the season. Observed on 35 of 48 winter visits, and on average in higher numbers than in any previous year. Two were banded in winter, and for the first time there were also winter returns (2) and repeats (3). Observed on two of the MAPS visits in summer.

YSFL: Yellow-shafted Flicker / Pic flamboyant (*Colaptes auratus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.14	3.57	3.29	4.29	1.43	1.43	0.29	0.43	**1.49**
# DAYS OBSERVED			1	7	7	7	6	3	2	3	**36**
# PROCESSED						1					**1**
FIRST OBSERVED: April 16	LAST OBSERVED: June 2	PEAK DATE: May 3, May 5	NUMBER OF INDIVIDUALS: 6								

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.57	0.43	1.43	2.29	1.86	3.43	6.86	5.86	3.86	1.43	0.57	1.14	0.29	**2.46**
# DAYS OBSERVED	6	3	4	7	7	6	7	7	7	5	4	4	2	**69**
FIRST OBSERVED: August 1	LAST OBSERVED: October 25	PEAK DATE: September 14	NUMBER OF INDIVIDUALS: 12											

Notes: Late to arrive this spring, having returned by week 1 or 2 in all previous years. Overall abundance was average for the season, but the peak in week 6 was also one week later than usual. Just one individual was banded in spring, as in four previous years. Fall numbers were close to average, with a peak in mid-late September as usual, but for the first time ever, none were banded in fall. Observed on four of the seven MAPS visits, with numbers the highest for the season since 2008.

PIWO: Pileated Woodpecker / Grand Pic (*Dryocopus pileatus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.71	0.57	0.71	2.29	1.14	3.00	0.86	0.86	0.71	0.43	**1.13**
# DAYS OBSERVED	2	4	3	6	5	7	4	3	3	3	**40**
# PROCESSED						1		1			**2**
FIRST OBSERVED: March 30	LAST OBSERVED: June 5	PEAK DATE: April 22	NUMBER OF INDIVIDUALS: 5								

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	0.43	1.43	1.57	1.29	2.29	2.00	2.43	2.29	1.43	1.14	1.43	2.00	**1.56**
# DAYS OBSERVED	3	3	5	6	5	7	6	7	7	7	6	6	5	**73**
FIRST OBSERVED: August 3	LAST OBSERVED: October 29	PEAK DATE: October 27	NUMBER OF INDIVIDUALS: 5											

Notes: Observed weekly in both spring and fall for the fourth consecutive year. Spring numbers were slightly above average, and this was the first time that two individuals were banded in the same spring. Fall numbers were also above average, although not quite as high as in 2012; there was a modest peak that spanned most of September. Observed at least once per month in winter, and on three of seven MAPS visits in summer.

OSFL: Olive-sided Flycatcher / Moucherolle a côtés olive (*Contopus cooperi*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14											**0.01**
# DAYS OBSERVED			1											**1**
FIRST OBSERVED: August 18	LAST OBSERVED: August 18	PEAK DATE: August 18	NUMBER OF INDIVIDUALS: 1											

Notes: For a fourth straight year, there was a single Olive-sided Flycatcher observed, and for the third year in a row it was in the third week of August. This year's observations was in the dead trees past the C nets.

EAWP: Eastern Wood-Pewee / Pioui de l'Est (*Contopus virens*)

MARCH	APRIL				MAY					JUNE	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.14	0.43	**0.06**
# DAYS OBSERVED									1	3	**4**
	FIRST OBSERVED: May 27			LAST OBSERVED: June 3			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.14	0.14		0.14	0.14								**0.04**
# DAYS OBSERVED		1	1		1	1								**4**
# PROCESSED					1									**1**
	FIRST OBSERVED: August 14				LAST OBSERVED: September 9			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Typically scarce in spring, with only a few observations over the final two weeks. Even less common than usual in fall, but banded for the first time since September 2009.

YBFL: Yellow-bellied Flycatcher / Moucherolle à ventre jaune (*Empidonax flaviventris*)

MARCH	APRIL				MAY					JUNE	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.29	0.14	**0.04**
# DAYS OBSERVED									1	1	**2**
# PROCESSED									1	1	**2**
	FIRST OBSERVED: May 25			LAST OBSERVED: May 30			PEAK DATE: May 25			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.29	0.29	0.86	1.00	0.57	0.43	0.29						**0.30**
# DAYS OBSERVED	1	2	2	4	5	4	2	2						**22**
# PROCESSED	1	2	1	4	4	4	1	2						**19**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 23			PEAK DATE: September 4			NUMBER OF INDIVIDUALS: 3			

Notes: Typically scarce in spring, with two individuals banded actually above average. Seen and banded for eight straight weeks in fall, both new records, and above average in terms of numbers observed and banded; there was a weak peak in abundance in the first week of September, which is typical.

TRFL: Traill's Flycatcher / Moucherolle des aulnes ou des saules (*Empidonax alnorum/traillii*)

MARCH	APRIL				MAY					JUNE	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.14	0.57	2.00	1.14	**0.38**
# DAYS OBSERVED							1	3	4	3	**11**
# PROCESSED								2-0-0	10-0-0	4-0-1	**16-0-1**
	FIRST OBSERVED: May 15			LAST OBSERVED: June 4			PEAK DATE: May 25			NUMBER OF INDIVIDUALS: 5	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	1.00	1.43	0.29	0.43									**0.24**
# DAYS OBSERVED	1	4	5	2	3									**15**
# PROCESSED	1	7	6	1	1									**16**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 4			PEAK DATE: August 16			NUMBER OF INDIVIDUALS: 4			

Notes: Above average abundance and number banded in spring for a third straight year, again largely due to an influx in week 9. There were no confirmed Willow Flycatchers this year; all may have been Alder. Numbers observed and banded in fall were below average; as usual almost all were gone by the end of August. A record three individuals banded during MAPS.

LEFL: Least Flycatcher / Moucherolle tchébec (*Empidonax minimus*)

MARCH	APRIL				MAY					JUNE	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.57	0.14	1.71	2.57	0.86	0.14	**0.60**
# DAYS OBSERVED					1	1	4	6	4	1	**17**
# PROCESSED							2	8	2		**12**
	FIRST OBSERVED: April 29			LAST OBSERVED: June 2			PEAK DATE: April 29, May 19			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	0.14	0.43	0.57	0.43									**0.16**
# DAYS OBSERVED	4	1	2	3	2									**12**
# PROCESSED	1		1	1	2									**5**
	FIRST OBSERVED: August 4				LAST OBSERVED: September 2			PEAK DATE: Aug 17, Aug 23, Aug 30			NUMBER OF INDIVIDUALS: 2			

Notes: Record high numbers observed and banded in spring, including an earlier than usual arrival (usually not present until week 7). Conversely, fall numbers were well below average for a third straight year. Two individuals were banded during MAPS, matching last year's record high, and lone individuals were observed on six of seven visits.

EAPH: Eastern Phoebe / Moucherolle phébi (*Sayornis phoebe*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.86	3.00	2.29	3.14	2.14	2.00	1.43	1.14	**1.60**
# DAYS OBSERVED			3	7	7	7	6	6	5	5	**46**
# PROCESSED				5	2-0-3	0-0-2	1	0-0-2	0-0-3	0-0-1	**8-0-11**
	FIRST OBSERVED: April 15			LAST OBSERVED: June 5			PEAK DATE: April 22			NUMBER OF INDIVIDUALS: 6	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.29		1.14	0.43	0.29	1.14	0.71	1.57	1.00	0.29	0.43			**0.64**
# DAYS OBSERVED	7		5	3	2	6	4	6	5	2	2			**42**
# PROCESSED	2-0-1		1	1	1	1	0-1-2		2					**8-1-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 13			PEAK DATE: September 23			NUMBER OF INDIVIDUALS: 4			

Notes: Record high abundance and number banded in spring, especially from mid-April through early May. Unlike Traill's and Least Flycatchers, Eastern Phoebe was also unusually abundant in fall, with the number observed matching the high set in 2005, and the 8 individuals banded equal to the record from fall 2008. An additional individual was banded during MAPS.

GCFL: Great-crested Flycatcher / Tyran huppé (*Myiarchus crinitus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							1.00	2.71	1.29	2.29	**0.73**
# DAYS OBSERVED							4	6	5	6	**21**
# PROCESSED								2			**2**
	FIRST OBSERVED: May 9			LAST OBSERVED: June 5			PEAK DATE: May 16			NUMBER OF INDIVIDUALS: 5	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.43	1.43	2.00	0.43	0.43									**0.52**
# DAYS OBSERVED	7	4	5	2	3									**21**
# PROCESSED		2		1										**3**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 3			PEAK DATE: August 18			NUMBER OF INDIVIDUALS: 7			

Notes: Arrived in week 7, as was the norm from 2005-2008, though for the past four years the first individuals arrived in week 6 each year. Overall numbers were also more similar to earlier years than the past two years when the species was more than twice as abundant. Fall numbers were fairly average, and as usual were highest over the first few weeks of the season. Five adults were banded during MAPS, a record number, and matching the total across all previous years; the number observed in summer was nearly double the previous high for summer.

EAKI: Eastern Kingbird / Tyran tritri (*Tyrannus tyrannus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.14	2.57	4.14	2.86	2.29	**1.20**
# DAYS OBSERVED						1	6	7	6	5	**25**
# PROCESSED							1				**1**
	FIRST OBSERVED: May 6			LAST OBSERVED: June 4			PEAK DATE: 8 dates			NUMBER OF INDIVIDUALS: 5	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.71	1.43	2.29	0.29	0.29	0.14								**0.47**
# DAYS OBSERVED	6	6	7	2	1	1								**23**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 8			PEAK DATE: August 18			NUMBER OF INDIVIDUALS: 5			

Notes: Observed weekly throughout the second half of spring; numbers peaked as usual in mid-May, but were overall above average. Recorded beyond week 5 in fall for only the second time, though abundance was lower than usual, especially during the first couple of weeks of the season when the peak usually occurs. Missed in summer for the first time ever.

NSHR: Northern Shrike / Pie-grièche grise (*Lanius excubitor*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY													0.29	**0.01**
# DAYS OBSERVED													2	**2**
# PROCESSED													1	**1**
	FIRST OBSERVED: October 27				LAST OBSERVED: October 30			PEAK DATE: Oct 27, 30			NUMBER OF INDIVIDUALS: 1			

Notes: Missed in spring for the third time in four years. A lone individual was banded in the final week of fall. Only two sightings in winter, on November 16 and March 10.

BHVI: Blue-headed Vireo / Viréo à tête bleue (*Vireo solitarius*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.14	0.29	0.86	0.14		**0.14**
# DAYS OBSERVED						1	2	4	1		**8**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 8			LAST OBSERVED: May 25			PEAK DATE: May 16, May 22		NUMBER OF INDIVIDUALS: 2		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14			0.14	0.14	0.14	1.43	1.14	1.14	0.86		0.29		**0.42**
# DAYS OBSERVED	1			1	1	1	5	3	5	2		2		**21**
# PROCESSED					1		6	1	2-0-1			1		**11-0-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 23			PEAK DATE: October 8			NUMBER OF INDIVIDUALS: 5			

Notes: Uncommon again this spring, with relatively few sightings in May, mostly concentrated in week 8, and just one individual banded during that peak. Numbers were also slightly below average in fall, and the 11 birds banded was the fewest ever for fall. The fall peak was week, but slightly earlier than usual, near mid-September rather than end of the month.

WAVI: Warbling Vireo / Viréo mélodieux (*Vireo gilvus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.57	2.71	3.71	2.71	4.14	**1.39**
# DAYS OBSERVED						3	6	7	6	7	**29**
# PROCESSED								2-1-2		0-0-2	**2-1-4**
	FIRST OBSERVED: May 4			LAST OBSERVED: June 5			PEAK DATE: June 3		NUMBER OF INDIVIDUALS: 5		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.57	1.57	2.71	1.86	1.57	1.57	0.71	0.86						**0.96**
# DAYS OBSERVED	6	6	7	6	4	6	3	3						**41**
# PROCESSED		3-0-1			0-0-1	2	0-0-1							**5-0-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 25			PEAK DATE: August 18			NUMBER OF INDIVIDUALS: 5			

Notes: Numbers in spring were down almost by half compared to last year, but still well above the long-term average. This spring the count peaked later than usual, in the final week of the season. Despite the many individuals observed, only two were banded, which was below average. Fall numbers remained elevated far higher than usual for the first six weeks of the season, but the number banded was also fewer than normal. Counts were at a record level in summer for the second year in a row, with a record 7 individuals banded during MAPS, plus two returns from 2012 and a repeat from this spring.

PHVI: Philadelphia Vireo / Viréo de Philadelphie (*Vireo philadelphicus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.43	0.14	**0.06**
# DAYS OBSERVED									2	1	**3**
	FIRST OBSERVED: May 23			LAST OBSERVED: May 30			PEAK DATE: May 28		NUMBER OF INDIVIDUALS: 2		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14			0.29	0.29	0.14	1.43							**0.18**
# DAYS OBSERVED	1			1	2	1	5							**10**
# PROCESSED					1	1	5-0-1							**7-0-1**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 18			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 3			

Notes: Observed in spring for the sixth time in nine years and typically rare. Fall numbers fairly average, and peaking in mid-September as usual, though missing from weeks 8-9 for the first time since 2009.

REVI: Red-eyed Vireo / Viréo aux yeux rouges (*Vireo olivaceus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								2.00	2.71	3.57	**0.83**
# DAYS OBSERVED								5	6	6	**17**
# PROCESSED								0-2-0	2	1	**3-2-0**
	FIRST OBSERVED: May 17			LAST OBSERVED: June 5			PEAK DATE: May 31		NUMBER OF INDIVIDUALS: 7		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	5.14	4.43	4.00	5.43	3.57	2.29	4.71	3.43	1.71	0.43	0.14			**2.71**
# DAYS OBSERVED	7	6	7	7	7	7	7	6	5	2	1			**62**
# PROCESSED	9-1-0	7-3-0	5	7-1-0	13	6-0-2	13-0-1	12	6-0-1	0-0-2				**78-5-6**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 11			PEAK DATE: August 27			NUMBER OF INDIVIDUALS: 13			

Notes: Close to average in spring, peaking as usual in week 10. Fall numbers were slightly above average, with good counts in early August in addition to the usual mid-September peak. Four banded during MAPS, plus two returns, and observed on all visits.

BLJA: Blue Jay / Geai bleu (*Cyanocitta cristata*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	5.14	4.00	3.57	6.71	6.14	19.29	7.57	8.57	4.29	8.57	**7.39**
# DAYS OBSERVED	7	6	6	7	7	7	7	7	7	7	**68**
# PROCESSED				0-1-0	0-1-1		0-1-0				**0-3-1**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: May 8			NUMBER OF INDIVIDUALS: 55	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	10.14	6.86	10.43	12.29	12.14	14.14	19.00	24.57	19.86	35.43	26.43	15.00	13.29	**16.89**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED				1			5	5	4-1-0	12-0-1	3	2-1-0	3	**35-2-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 90			

Notes: Observed weekly in spring and fall, as in all previous years. Spring numbers were higher than in any previous year, largely due to a record migration in early May. Despite the high numbers, none were banded in spring. Fall numbers observed and banded were also well above average, with an extended peak period ranging from late September to mid-October, somewhat later than usual. Observed on 42 of 48 days in winter, but in below average numbers, with a mean of 2.9 per day. None banded in winter, but there was one return. One banded during MAPS, and observed in higher numbers than any previous summer.

AMCR: American Crow / Corneille d'Amérique (*Corvus brachyrhynchos*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	6.71	6.57	8.00	13.43	11.14	22.14	24.43	26.71	17.57	8.86	**14.56**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	6	7	**69**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: May 23			NUMBER OF INDIVIDUALS: 51	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	21.00	13.43	17.71	14.00	28.86	49.00	75.86	72.29	66.00	65.14	72.29	53.14	31.57	**44.64**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 18			NUMBER OF INDIVIDUALS: 205			

Notes: Observed daily in both spring and fall. Spring numbers were the lowest since 2005, and the typical late April peak was either missed, or delayed this year into the first half of May. The fall count was almost identical to last year, which was the lowest on record. Observed on 37 of 48 days in winter, more frequently in February and March; winter numbers were also much lower than usual, and summer counts were also below average, although missed on just one of the MAPS visits. The overall pattern suggests that the local crow flock has decreased in size over the past couple of years.

CORA: Common Raven / Grand Corbeau (*Corvus corax*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.14	1.00	0.86	1.14	2.00	1.14	0.71	0.14	0.29	**0.76**
# DAYS OBSERVED	1	1	6	5	7	7	7	5	1	1	**41**
	FIRST OBSERVED: March 30			LAST OBSERVED: May 31			PEAK DATE: May 3			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.43	0.29	0.43	0.43	0.71	1.71	1.14	2.00	1.00	1.14	0.43	1.00	0.86	**0.89**
# DAYS OBSERVED	2	2	3	3	3	6	5	6	3	5	2	5	3	**48**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 29			PEAK DATE: Sep 6, Sep 21			NUMBER OF INDIVIDUALS: 4			

Notes: Observed weekly in spring for the second year in a row, and in higher numbers than ever before. Also observed weekly in fall, and likewise more numerous than in any previous year. Observed only once each in November and December, but more regularly in the second half of winter. MAPS sightings were recorded on three of seven summer visits.

PUMA: Purple Martin / Hirondelle noire (*Progne subis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.14			**0.01**
# DAYS OBSERVED								1			**1**
	FIRST OBSERVED: May 21			LAST OBSERVED: May 21			PEAK DATE: May 21			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.86		0.29	0.86										**0.15**
# DAYS OBSERVED	2		2	2										**6**
	FIRST OBSERVED: August 4				LAST OBSERVED: August 27			PEAK DATE: August 22			NUMBER OF INDIVIDUALS: 5			

Notes: A lone individual observed on May 21 was the first spring sighting since 2009. Fall observations were as usual limited to August, and although relatively scarce, were close to the long-term average for the season.

TRES: Tree Swallow / Hirondelle bicolore (*Tachycineta bicolor*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.29	2.43	7.00	5.29	5.71	5.86	10.00	3.14	3.14	**4.29**
# DAYS OBSERVED		1	4	7	7	7	7	7	6	7	**53**
# PROCESSED						1		2-1-0		0-0-1	**3-1-1**
	FIRST OBSERVED: April 10			LAST OBSERVED: June 5			PEAK DATE: May 17			NUMBER OF INDIVIDUALS: 27	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.43		1.29	3.43	0.29	0.14								**0.43**
# DAYS OBSERVED	1		4	3	1	1								**10**
	FIRST OBSERVED: August 2				LAST OBSERVED: September 9			PEAK DATE: August 25			NUMBER OF INDIVIDUALS: 20			

Notes: Tree Swallow numbers have been steadily declining at MBO for several years, and the spring count was another record low, with the mean daily count down nearly 40% from last year's previous low, and fewer individuals banded than in any previous year. Fall numbers were closer to average, but the peak was a week later than usual. Observed in low numbers in summer, with just two pairs breeding, and sightings limited to three of seven visits, aside from the banding of four nestlings on June 25.

NRWS: Northern Rough-winged Swallow / Hirondelle à ailes hérissées (*Stelgidopteryx serripennis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.29	0.43	0.14		0.14	**0.10**
# DAYS OBSERVED						1	1	1		1	**4**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 31			PEAK DATE: May 15			NUMBER OF INDIVIDUALS: 3	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.43		0.14										**0.04**
# DAYS OBSERVED		1		1										**2**
	FIRST OBSERVED: August 12				LAST OBSERVED: August 25			PEAK DATE: August 12			NUMBER OF INDIVIDUALS: 3			

Notes: Spring sightings were fairly average in abundance and spread of dates. Observed in fall for just the second time since 2008; like all but one previous fall record, the sightings were in August.

BANS: Bank Swallow / Hirondelle de rivage (*Riparia riparia*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29													**0.02**
# DAYS OBSERVED	1													**1**
	FIRST OBSERVED: August 7				LAST OBSERVED: August 7			PEAK DATE: August 7			NUMBER OF INDIVIDUALS: 2			

Notes: Two individuals observed during the first week of fall, just the fourth year that the species has been recorded in fall (also 2005, 2010, 2011). Missed in spring for the first time since 2007.

CLSW: Cliff Swallow / Hirondelle à front blanc (*Petrochelidon pyrrhonota*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.29	8.43	3.57	14.71	6.71	11.86	**4.56**
# DAYS OBSERVED					1	7	6	7	4	6	**31**
	FIRST OBSERVED: May 1			LAST OBSERVED: June 5			PEAK DATE: June 4			NUMBER OF INDIVIDUALS: 30	

Notes: Spring numbers rebounded from last year's record low, but were still below average, peaking in mid-May. Missed in fall for the fourth time in the past five years.

BARS: Barn Swallow / Hirondelle rustique (*Hirundo rustica*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.29		1.71	1.00	0.29	0.14	**0.34**
# DAYS OBSERVED					1		5	4	2	1	**13**
	FIRST OBSERVED: April 29			LAST OBSERVED: May 31			PEAK DATE: May 11			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.14	0.29	2.57										**0.23**
# DAYS OBSERVED		1	1	2										**4**
	FIRST OBSERVED: August 8				LAST OBSERVED: August 27			PEAK DATE: August 27			NUMBER OF INDIVIDUALS: 16			

Notes: Spring numbers were relatively typical, although observations were skewed somewhat later than usual. As usual, counts were highest in weeks 7 and 8. As usual, fall observations were limited to the first four weeks of the season, but the peak was later than usual, toward the end of August.

BCCH: Black-capped Chickadee / Mésange à tête noire (*Poecile atricapillus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	11.14	13.57	11.14	16.86	13.43	15.14	10.71	12.29	5.86	5.57	**11.57**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
# PROCESSED				14-7-7	0-1-5	1-0-3	0-0-2	0-0-1	0-1-2		**15-9-20**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5		PEAK DATE: April 18			NUMBER OF INDIVIDUALS: 25		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	16.14	19.57	21.14	24.29	15.86	17.71	15.00	22.00	18.14	16.14	18.43	16.14	13.86	**18.03**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED	8-1-3	9-0-7	3-1-9	3-0-6	3-1-4	2-1-5	4-0-5	1-3-9	5-0-2	3-0-10	2-1-11	1-0-5	3-0-11	**47-8-87**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: August 27			NUMBER OF INDIVIDUALS: 42			

Notes: Observed daily in spring and fall, and also banded in each week of fall. Spring abundance was down slightly from last year's record, but still above average; for the seventh year in a row, the peak in abundance was in week 4. Fall numbers were slightly below average, and there did not appear to be a migration this year. Observed on all but two of the 48 winter visits, although numbers were the lowest since winter 2008-09. Another 28 individuals were banded in winter, plus 21 returns and 89 repeats. Only one was banded during MAPS, fewer than in any previous year, and there was also one summer return.

RBNU: Red-breasted Nuthatch / Sittelle à poitrine rousse (*Sitta canadensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.29			0.14				0.57		**0.10**
# DAYS OBSERVED		2			1				2		**5**
	FIRST OBSERVED: April 6			LAST OBSERVED: May 27		PEAK DATE: May 25			NUMBER OF INDIVIDUALS: 3		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.43		0.14	0.29	0.71	0.43	0.43	0.14	0.43	0.14	0.43	0.14		**0.29**
# DAYS OBSERVED	2		1	2	3	2	3	1	2	1	2	1		**20**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 19			PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 2			

Notes: Typically scarce and irregular in spring. Observed in all but two weeks in fall, but in low numbers throughout the season. Observed once or twice monthly throughout winter.

WBNU: White-breasted Nuthatch / Sittelle à poitrine blanche (*Sitta carolinensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.29	0.57	0.57	1.00	1.00	1.29	0.57	0.43	0.86	0.29	**0.69**
# DAYS OBSERVED	1	3	3	4	4	7	4	2	5	1	**34**
# PROCESSED							1				**1**
	FIRST OBSERVED: March 31			LAST OBSERVED: May 31		PEAK DATE: April 28			NUMBER OF INDIVIDUALS: 3		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.14	1.86	2.00	3.43	3.43	1.14	1.14	2.29	2.71	2.14	2.29	1.43	1.71	**2.13**
# DAYS OBSERVED	7	7	6	7	7	4	5	7	7	7	5	5	5	**79**
# PROCESSED	1												1	**2**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: August 27			NUMBER OF INDIVIDUALS: 6			

Notes: Observed weekly in spring and fall. Spring numbers above average; the one banded was the first in spring since 2006. Fall numbers record high for a second straight year, again peaking in late August and early September. Observed at least twice per month in winter, but the only captures were two repeats from fall 2012. Also seen on five of seven MAPS visits.

BRCR: Brown Creeper / Grimpereau brun (*Certhia americana*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.29	0.29	0.14	0.14	0.14				**0.10**
# DAYS OBSERVED			1	2	1	1	1				**6**
# PROCESSED				1							**1**
	FIRST OBSERVED: April 11			LAST OBSERVED: May 15		PEAK DATE: April 11			NUMBER OF INDIVIDUALS: 2		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY							0.29	0.57	0.29	0.14	0.14	0.29	0.43	**0.16**
# DAYS OBSERVED							2	4	2	1	1	2	2	**14**
# PROCESSED							2	2	2	1	1	1-0-1	1-0-1	**10-0-2**
	FIRST OBSERVED: September 15				LAST OBSERVED: October 30			PEAK DATE: October 30			NUMBER OF INDIVIDUALS: 2			

Notes: Typically scarce in spring, but observed beyond week 5 for only the second time. Observed weekly through the second half of fall, but in lower than usual numbers. One winter observation, on the final day of the season for a second year in a row.

HOWR: House Wren / Troglodyte familier (*Troglodytes aedon*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.43	1.71	5.14	3.86	4.71	2.43	2.43	**2.07**
# DAYS OBSERVED				3	5	7	7	7	7	7	**43**
# PROCESSED					1-1-0	3-0-1	1-0-2	2-0-2	0-0-1		**7-1-6**
	FIRST OBSERVED: April 22			LAST OBSERVED: June 5		PEAK DATE: May 2			NUMBER OF INDIVIDUALS: 8		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	5.57	3.71	2.14	1.00	1.00	1.00	2.14	1.00	1.00	0.29				**1.45**
# DAYS OBSERVED	7	7	7	4	4	5	7	6	6	2				**55**
# PROCESSED	2-0-2	3-0-1	1			1	2	1	1					**11-0-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 5			PEAK DATE: Aug 3, Aug 6			NUMBER OF INDIVIDUALS: 7			

Notes: Spring numbers dropped off after three straight years of increases, but were still above average; they peaked earlier than usual in week 6. The fall count was fairly typical, and peaked in early August as usual, though the number banded was low for the fourth year in a row. Observed on all seven MAPS visits, with 2 individuals banded.

WIWR: Winter Wren / Troglodyte mignon (*Troglodytes troglodytes*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.14	0.29	0.71			0.14			**0.13**
# DAYS OBSERVED			1	2	4			1			**8**
	FIRST OBSERVED: April 17			LAST OBSERVED: May 17		PEAK DATE: April 26			NUMBER OF INDIVIDUALS: 2		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14				0.43	0.14		0.43	0.14	0.43	0.57	**0.18**
# DAYS OBSERVED			1				2	1		3	1	2	3	**13**
# PROCESSED										2		1		**3**
	FIRST OBSERVED: August 18				LAST OBSERVED: October 29			PEAK DATE: Sep 14, Oct 19, Oct 29			NUMBER OF INDIVIDUALS: 2			

Notes: Uncommon in spring, though more than any previous year. Numbers observed and banded slightly below average in fall.

MAWR: Marsh Wren / Troglodtye des marais (*Cistothorus palustris*)

Notes: A single individual observed on July 21.

CARW: Carolina Wren / Troglodyte de Caroline (*Thryothorus ludovicianus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.14					**0.01**
# DAYS OBSERVED						1					**1**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 4		PEAK DATE: May 4			NUMBER OF INDIVIDUALS: 1		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14											0.14		**0.02**
# DAYS OBSERVED	1											1		**2**
# PROCESSED	1													**1**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 21			PEAK DATE: Aug 3, Oct 2			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring for the third time, previously in 2009 and 2011. Banded for the first time ever on August 3, becoming the 113th species banded at MBO; also observed once in October.

GCKI: Golden-crowned Kinglet / Roitelet à couronne dorée (*Regulus satrapa*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.57	1.86	4.57	0.57	0.14	0.14				**0.79**
# DAYS OBSERVED		1	2	5	3	1	1				**13**
# PROCESSED				1	1						**2**
	FIRST OBSERVED: April 9			LAST OBSERVED: May 10		PEAK DATE: Apr 18			NUMBER OF INDIVIDUALS: 11		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14	0.14			3.29	8.86	5.71	15.86	16.14	10.57	2.71	**4.88**
# DAYS OBSERVED			1	1			3	5	7	7	7	7	6	**44**
# PROCESSED				1			7	14	9	25	30-0-3	12	3	**101-0-3**
	FIRST OBSERVED: August 16				LAST OBSERVED: October 30			PEAK DATE: October 5			NUMBER OF INDIVIDUALS: 42			

Notes: Spring numbers rebounded to slightly above average after three very low years, largely due to a strong peak of migration in week 4, although that was two weeks later than usual. Fall observations began early, with two birds in August, for just the third time in nine years. The fall count was the highest since 2005, and more individuals were banded than ever before; there was a peak of migration over the first two weeks of October, one week later than normal. Missed in winter for the first time in three years.

RCKI: Ruby-crowned Kinglet / Roitelet à couronne rubis (*Regulus calendula*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.14	10.71	10.14	4.86	0.71	1.00	0.14		**2.77**
# DAYS OBSERVED			1	7	7	6	3	3	1		**28**
# PROCESSED				13-0-4	10-0-1	12-0-1	2	2			**39-0-6**
	FIRST OBSERVED: April 16			LAST OBSERVED: May 28		PEAK DATE: Apr 23			NUMBER OF INDIVIDUALS: 24		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY					0.29	0.29	3.00	9.57	26.29	53.86	22.00	15.86	1.43	**10.20**
# DAYS OBSERVED					1	2	6	7	7	7	7	7	3	**47**
# PROCESSED					2		3-0-1	12	54-0-14	185-0-32	61-0-9	28-0-5	2	**347-0-61**
	FIRST OBSERVED: September 1				LAST OBSERVED: October 26			PEAK DATE: October 5			NUMBER OF INDIVIDUALS: 95			

Notes: Spring migration was shifted earlier by a week this year, overlapping much more than usual with the peak of Golden-crowned Kinglet movement. Fall migration peaked strongly in week 10 as is almost always the case, and numbers observed and banded were both marginally above average, although the number banded in week 10 was a record high.

BGGN: Blue-gray Gnatcatcher / Gobemoucheron gris-bleu (*Polioptila caerulea*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY							0.14							**0.01**
# DAYS OBSERVED							1							**1**
	FIRST OBSERVED: September 18				LAST OBSERVED: September 18			PEAK DATE: September 18			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in fall for the second year in a row, but only the third record for MBO overall.

EABL: Eastern Bluebird / Merlebleu de l'est (*Sialia sialis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.71			0.57	0.43	**0.17**
# DAYS OBSERVED						2			3	1	**6**
	FIRST OBSERVED: May 7			LAST OBSERVED: June 1		PEAK DATE: May 7, June 1			NUMBER OF INDIVIDUALS: 3		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.43	0.14	0.14								0.57	2.43	1.00	**0.36**
# DAYS OBSERVED	2	1	1								2	2	4	**12**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 23			NUMBER OF INDIVIDUALS: 14			

Notes: Scattered sightings in spring were likely all of a pair nesting at the neighbouring Arboretum. Observed in August for the first time ever, likely also the local birds. Migrants moved through as usual in late October, in above-average numbers. Five juveniles were banded at a nest box in the Arboretum on July 12. A small flock of three seen on November 20 was the first winter record since 2008-09.

VEER: Veery / Grive fauve (*Catharus fuscescens*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.14		0.71		**0.09**
# DAYS OBSERVED							1		4		**5**
# PROCESSED							1		1		**2**
	FIRST OBSERVED: May 11			LAST OBSERVED: May 27		PEAK DATE: May 25			NUMBER OF INDIVIDUALS: 2		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.00	1.00	1.43	1.57	1.00		0.57	0.29						**0.60**
# DAYS OBSERVED	7	4	5	5	5		1	2						**29**
# PROCESSED	5-0-3	1-0-4	2	3-1-0	3		2	1						**17-1-7**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 21			PEAK DATE: August 24			NUMBER OF INDIVIDUALS: 5			

Notes: Unusually scarce in spring for a third straight year, and with numbers even lower than in 2011 and 2012. Observed on all four July MAPS visits, during which 8 individuals were banded, double the previous record of 4. Fall numbers observed and banded were both above average for a second year in a row, and for the third straight year, observations continued past mid-September. Observed on the final five days of MAPS, in the highest numbers for summer since 2006.

GCTH: Gray-cheeked Thrush / Grive à joues grises (*Catharus minimus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.14		**0.01**
# DAYS OBSERVED									1		**1**
# PROCESSED									1		**1**
	FIRST OBSERVED: May 27			LAST OBSERVED: May 27			PEAK DATE: May 27			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY						0.14			0.29		0.14			**0.04**
# DAYS OBSERVED						1			2		1			**4**
# PROCESSED						1			2		1			**4**
	FIRST OBSERVED: September 8				LAST OBSERVED: October 10			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1			

Notes: As in 2006, 2010, and 2012, observed in spring only as a result of a lone individual caught and banded. Fall migration spanned an unusually broad period (all observations in previous years were between weeks 7 and 10), but numbers observed and banded were both well below average.

SWTH: Swainson's Thrush / Grive à dos olive (*Catharus ustulatus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.43		**0.04**
# DAYS OBSERVED									2		**2**
# PROCESSED									1		**1**
	FIRST OBSERVED: May 23			LAST OBSERVED: May 26			PEAK DATE: May 26			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	0.29	0.43	0.14		1.43	4.71	2.14	1.71	0.14	0.14			**0.90**
# DAYS OBSERVED	3	1	1	`		5	7	5	6	1	1			**33**
# PROCESSED	2			1		2-0-1	12-0-1	4-0-4	4-0-1					**25-0-8**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 10			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 11			

Notes: Typically rare in spring, with a lone individual banded for the seventh time in nine years. Fall numbers were far down from last year's dramatic record high, but still well above average; like last year there was a strong peak in week 7. As usual, a few molt migrants arrived in early August.

HETH: Hermit Thrush / Grive solitaire (*Catharus guttatus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.14								**0.01**
# DAYS OBSERVED			1								**1**
	FIRST OBSERVED: April 17			LAST OBSERVED: April 17			PEAK DATE: April 17			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14	0.14				0.57	1.29	3.43	2.57	3.00	1.71	**0.99**
# DAYS OBSERVED			1	1				3	5	6	7	5	5	**33**
# PROCESSED			1					4	5-0-4	16-0-4	9-0-3	11-0-2	3-0-4	**49-0-17**
	FIRST OBSERVED: August 16				LAST OBSERVED: October 30			PEAK DATE: October 19			NUMBER OF INDIVIDUALS: 12			

Notes: Usually scarce in spring, but particularly so this year with just a single individual observed in mid-April. A molt migrant showed up in August like in 2008 and 2009, but the main migration peaked in the first half of October as usual. Numbers observed and banded were close to the average for the previous eight years.

WOTH: Wood Thrush / Grive des bois (*Hylocichla mustelina*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.57	0.29		**0.09**
# DAYS OBSERVED								2	1		**3**
	FIRST OBSERVED: May 20			LAST OBSERVED: May 23			PEAK DATE: May 20			NUMBER OF INDIVIDUALS: 3	

Notes: Tied with Veery as the most frequently observed "spotted thrush" this spring, with 6 individuals counted over a span of four days in weeks 8 and 9, a new spring record for Wood Thrush. Missed in fall for the second time in three years. One individual observed on June 6 was the first for summer since 2005.

AMRO: American Robin / Merle d'Amérique (*Turdus migratorius*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	4.43	8.14	8.29	11.86	7.00	8.43	6.43	6.71	3.71	1.71	**6.67**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	6	5	**67**
# PROCESSED				2			0-0-1	4	0-0-1	1	**7-0-2**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: April 18			NUMBER OF INDIVIDUALS: 24	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	29.43	13.71	15.00	14.14	12.29	5.29	11.43	12.86	29.29	108.86	157.00	392.43	248.29	**80.77**
# DAYS OBSERVED	7	7	7	7	7	7	6	7	7	7	7	7	7	**90**
# PROCESSED	6	1	2	1	1					34	32	68	91	**236**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 19			NUMBER OF INDIVIDUALS: 613			

Notes: Present weekly in both spring and fall as in all previous years. In contrast to the record high numbers last spring, there were fewer American Robins observed this spring than ever before, and the number banded was the second lowest in nine years. There was a peak in week 4 as usual, but it was roughly one-third lower than average. Conversely, fall numbers were close to average, peaking in the second half of October as has been the case for the past three years. Observed on 6 of 8 November visits, and then at least once per month for the rest of winter, mostly in small numbers except for 17 on January 9; two individuals were banded on November 7. During MAPS another 11 individuals were banded and there was one return.

GRCA: Gray Catbird / Moqueur chat (*Dumetella carolinensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.29	4.57	4.57	1.86	**1.13**
# DAYS OBSERVED							2	7	7	5	**2**
# PROCESSED								10-2-1	6-2-5	2-0-1	**18-4-7**
	FIRST OBSERVED: May 9			LAST OBSERVED: June 5			PEAK DATE: May 23			NUMBER OF INDIVIDUALS: 12	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	7.29	5.43	5.43	7.86	5.29	5.71	8.29	5.14	6.71	2.57	0.29	0.14	0.14	**4.64**
# DAYS OBSERVED	7	7	7	7	7	6	7	7	7	7	2	1	1	**73**
# PROCESSED	13-0-11	2-0-4	1-0-2	5-0-8	4-1-7	3-0-8	6-0-2	6-0-5	5-1-7	1-0-3			1	**47-2-57**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 15			NUMBER OF INDIVIDUALS: 15			

Notes: Spring numbers observed and banded were close to average, and peaked in weeks 8 and 9 as usual. Fall numbers were also fairly typical, although for the second year in a row the species was observed weekly throughout the season, and the one banded on the final morning of the season was the latest ever. Observed on six of seven MAPS visits, with higher numbers than any previous summer, and a record 14 individuals were banded.

BRTH: Brown Thrasher / Moqueur roux (*Toxostoma rufum*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.14		1.29	0.29	0.86	0.14		**0.27**
# DAYS OBSERVED				1		6	1	4	1		**13**
# PROCESSED									1		**1**
	FIRST OBSERVED: April 21			LAST OBSERVED: May 23			PEAK DATE: May 4, May 19			NUMBER OF INDIVIDUALS: 3	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.86	1.43	0.29	0.57	1.29	1.00	2.43	1.57	0.57					**0.77**
# DAYS OBSERVED	4	6	2	3	6	3	7	6	3					**40**
# PROCESSED		0-0-1		0-0-1	1-1-0		0-0-1	0-0-1	0-0-2					**1-1-6**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 1			PEAK DATE: September 18			NUMBER OF INDIVIDUALS: 5			

Notes: Numbers in spring were fairly typical, although observations were missed in week 10 for just the second time. Despite that, at least one pair appears to have bred at MBO this summer, and two hatch-year individuals were banded during MAPS. Fall observations were more numerous than in any previous year, although a number of sightings likely involved the three hatch-year birds that stayed around until mid-late September as reflected by recaptures. However, there was also a small peak in movement of migrants around mid-September, as in most other years.

EUST: European Starling / Étourneau sansonnet (*Sturnus vulgaris*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	5.14	13.57	5.00	1.71	3.71	2.71	2.0	0.86	0.43	2.14	**3.73**
# DAYS OBSERVED	5	7	3	3	6	4	5	2	2	4	**41**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 4			PEAK DATE: April 6			NUMBER OF INDIVIDUALS: 60	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	0.43	0.29	0.14	0.71	11.71	74.86	12.57	5.14	30.29	84.43	250.57	221.43	**53.29**
# DAYS OBSERVED	1	1	2	1	3	3	4	6	5	6	7	7	7	**53**
# PROCESSED											1			**1**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 30			PEAK DATE: October 22			NUMBER OF INDIVIDUALS: 510			

Notes: Near-record numbers this spring, thanks largely to a distinct peak in week 2, matching four of eight previous years. Observed weekly throughout fall, although in very small numbers for the first five weeks. The fall count peaked in the final two weeks of the season, as is often the case; numbers were down a bit over 10% from last year's record high, but still well above average. Observed on nearly half of winter visits, with particularly large flocks on November 9 (300) and December 29 (120). Two individuals were banded during MAPS, a modest increase from one in each of the past three summers; the number observed in summer was the highest since 2008.

AMPI: American Pipit / Pipit d'Amérique (*Anthus rubescens*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.29					**0.03**
# DAYS OBSERVED						2					**2**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 7			PEAK DATE: May 4, May 7			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY								2.43	4.43	3.14	2.14	2.86	3.71	**1.44**
# DAYS OBSERVED								2	4	5	4	3	2	**20**
	FIRST OBSERVED: September 24				LAST OBSERVED: October 29			PEAK DATE: October 25			NUMBER OF INDIVIDUALS: 24			

Notes: The two individuals observed flying over in early May were the first for spring since 2009. Fall observations were very similar to last year, with consistent observations over the final six weeks of the season, and numbers much higher than in previous years.

BOWA: Bohemian Waxwing / Jaseur boréal (*Bombycilla garrulus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.00			1.00							**0.20**
# DAYS OBSERVED	1			2							**3**
	FIRST OBSERVED: March 31			LAST OBSERVED: April 23			PEAK DATE: March 31			NUMBER OF INDIVIDUALS: 7	

Notes: Irregular this spring, with two small flocks observed three weeks apart in April. Observed 1-4 times per month throughout winter, with the largest flock (40) seen on March 16.

CEDW: Cedar Waxwing / Jaseur d'Amérique (*Bombycilla cedrorum*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.86					9.00	3.14	1.00	5.71	18.71	**3.94**
# DAYS OBSERVED	1					6	4	2	5	7	**25**
# PROCESSED									6	1	**7**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: June 1			NUMBER OF INDIVIDUALS: 32	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	36.57	29.57	41.43	40.14	33.43	19.71	19.57	11.57	10.71	4.86	2.43	3.71	4.14	**19.84**
# DAYS OBSERVED	7	7	7	7	7	7	7	6	5	7	5	5	5	**82**
# PROCESSED	56-0-12	10-0-4	7-0-2	4-0-2	0-0-2	5	3		2	4				**91-0-22**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: August 20			NUMBER OF INDIVIDUALS: 70			

Notes: A peculiar spring, with a small movement in week 1, then an unprecedented four-week gap, followed by two distinct waves of migration in early and late May. Overall numbers observed were the lowest since 2009, and far fewer were banded than in any previous year. Conversely, fall numbers observed and banded were the highest ever, thanks to a strong peak in August for the third year in a row. Missed in winter for the first time ever. Record numbers observed during MAPS, more than double the summer average; one was banded, and there was a return of a female banded three years earlier.

OVEN: Ovenbird / Paruline couronnée (*Seiurus atricapilla*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.29	0.71	0.71	1.00	**0.27**
# DAYS OBSERVED							2	4	4	5	**15**
	FIRST OBSERVED: May 12			LAST OBSERVED: June 5			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 2	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.86	1.29	0.86	1.71	1.00	0.86	1.43	0.71	0.14	0.14				**0.69**
# DAYS OBSERVED	5	4	5	6	4	5	5	3	1	1				**39**
# PROCESSED	3	8-0-1	4-0-1	10-0-2	6	5	6	3-0-2	1	1				**47-0-6**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 3			PEAK DATE: Aug 9, Sep 14			NUMBER OF INDIVIDUALS: 4			

Notes: Slightly less common than usual in spring, with none banded for the second year in a row. Fall numbers above average, and the number banded tied the record set in 2011. Observed in October for just the second time, and banded later than ever before. One banded during MAPS, and there were observations on three of seven summer visits.

NOWA: Northern Waterthrush / Paruline des ruisseaux (*Parkesia noveboracensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.43	1.14	5.00	4.71	0.71	**1.20**
# DAYS OBSERVED						2	5	7	7	3	**25**
# PROCESSED						1	4	23-0-9	14-0-8	1-0-2	**43-0-19**
	FIRST OBSERVED: May 2			LAST OBSERVED: June 1			PEAK DATE: May 23			NUMBER OF INDIVIDUALS: 12	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29	0.57	0.86	2.86	1.00									**0.43**
# DAYS OBSERVED	2	3	3	6	5									**19**
# PROCESSED	2	4	5	17-0-2	5-0-2									**33-0-4**
	FIRST OBSERVED: August 3				LAST OBSERVED: September 4			PEAK DATE: August 28			NUMBER OF INDIVIDUALS: 6			

Notes: Far higher numbers observed and banded in spring than ever before, peaking in weeks 8 and 9 as usual, but at much higher levels; arrival and departure dates matched 2012. Fall numbers were close to average, but for the first time ever observations were constrained to the first five weeks of the season; previously at least some were seen into week 6, and in most years even week 7 or 8.

BAWW: Black-and-white Warbler / Paruline noir et blanc (*Mniotilta varia*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.29			1.14	0.43		**0.19**
# DAYS OBSERVED					1			3	2		**6**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 1			LAST OBSERVED: May 25			PEAK DATE: May 19			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14	1.00	1.00	0.86	0.57	0.57	1.29	0.29						**0.44**
# DAYS OBSERVED	1	4	5	5	2	3	4	2						**26**
# PROCESSED	1	4	4-0-1	4-0-1	3	1	6	0-0-1						**23-0-3**
	FIRST OBSERVED: August 5				LAST OBSERVED: September 24			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 3			

Notes: Unusually scarce in spring, with a couple of individuals observed earlier than usual in week 5, but otherwise no sightings except a few during a narrow peak in weeks 8 and 9; the one individual banded was the lowest count since 2005. Observed weekly for the first 8 weeks of fall, with numbers observed and banded close to average, but no distinct peaks of migration. Missed in summer for the first time in three years.

TEWA: Tennessee Warbler / Paruline obscure (*Oreothlypis peregrina*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.29	9.57	8.14		**1.80**
# DAYS OBSERVED							2	7	6		**15**
# PROCESSED								38-0-1	11-0-4		**49-0-5**
FIRST OBSERVED: May 14				LAST OBSERVED: May 28			PEAK DATE: May 22			NUMBER OF INDIVIDUALS: 30	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.29	0.86	2.43	13.57	24.86	10.57	6.14	6.00	114	0.43	0.14			**5.18**
# DAYS OBSERVED	4	5	6	7	7	6	6	7	5	3	1			**57**
# PROCESSED	2	2	8-0-3	74-0-10	87-0-14	36-0-8	17-0-5	18-0-11	3-0-1	2-0-1				**249-0-53**
FIRST OBSERVED: August 1					LAST OBSERVED: October 11			PEAK DATE: September 3			NUMBER OF INDIVIDUALS: 56			

Notes: Numbers observed and banded in spring were lower than the past two years, but still well above the long-term average. The migration window was particularly narrow this spring, with nearly all individuals moving through in weeks 8 and 9, as in 2005 and 2006. Fall numbers observed and banded were both roughly 25% higher than the previous records set in 2011. The single-week record of 87 birds banded in week 5 was more than in six of eight previous entire fall seasons; the week 5 peak was roughly two weeks earlier than usual.

OCWA: Orange-crowned Warbler / Paruline verdâtre (*Oreothlypis celata*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.14		**0.01**
# DAYS OBSERVED									1		**1**
FIRST OBSERVED: May 29				LAST OBSERVED: May 29			PEAK DATE: May 29			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY						0.14	0.43		0.43	0.14				**0.09**
# DAYS OBSERVED						1	2		2	1				**7**
# PROCESSED							1		3	1				**5**
FIRST OBSERVED: September 7					LAST OBSERVED: October 4			PEAK DATE: Sep 15, Sep 27			NUMBER OF INDIVIDUALS: 2			

Notes: As in 2011, a single Orange-crowned Warbler was observed in May; the species is always a scarce spring migrant at MBO. Fall numbers were somewhat below average.

NAWA: Nashville Warbler / Paruline à joues grises (*Oreothlypis ruficapilla*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.29	3.43	1.71	2.14		**0.76**
# DAYS OBSERVED						1	6	6	6		**19**
# PROCESSED						2	6	5-0-1			**13-0-1**
FIRST OBSERVED: May 6				LAST OBSERVED: May 28			PEAK DATE: May 26			NUMBER OF INDIVIDUALS: 8	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	0.43	0.71	1.43	2.14	1.71	3.00	2.29	1.57	2.00	0.29			**1.24**
# DAYS OBSERVED	3	3	5	5	7	6	6	7	6	3	2			**53**
# PROCESSED	3-0-1	1-0-1	3	7	6-1-1	4	8-0-3	9-0-1	8-0-1	10-0-1	0-0-2			**59-1-11**
FIRST OBSERVED: August 1					LAST OBSERVED: October 15			PEAK DATE: October 3			NUMBER OF INDIVIDUALS: 9			

Notes: Spring numbers were close to average, although for a second year in a row the peak of migration was in week 7, earlier than the traditional week 8 peak. Fall migration was unusually weak, comparable to the low numbers observed in 2007 and 2009; there was only a weak increase in migration during the typical mid-September peak.

MOWA: Mourning Warbler / Paruline triste (*Geothlypis philadelphia*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		0.57	0.43											**0.08**
# DAYS OBSERVED		2	3											**5**
# PROCESSED		1	2											**3**
FIRST OBSERVED: August 9				LAST OBSERVED: August 18			PEAK DATE: Aug 9, Aug 10			NUMBER OF INDIVIDUALS: 2				

Notes: Missed in spring for the first time ever, and also fewer observed and banded in fall than in any previous year. The few fall observations were all in the middle of August, corresponding to the usual peak of migration.

COYE: Common Yellowthroat / Paruline masquée (*Geothlypis trichas*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.14	0.29	3.00	9.00	8.00	6.57	**2.70**
# DAYS OBSERVED					1	2	6	7	7	7	**30**
# PROCESSED					1		5	9-7-4	7-3-7	1-1-2	**23-11-13**

FIRST OBSERVED: April 29 | LAST OBSERVED: June 5 | PEAK DATE: May 21 | NUMBER OF INDIVIDUALS: 15

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	6.14	4.43	6.43	7.71	8.57	7.00	5.71	2.86	1.00	0.57	0.14			**3.89**
# DAYS OBSERVED	7	7	7	7	7	7	7	6	4	3	1			**63**
# PROCESSED	8-0-3	9-0-1	8-1-4	19-0-7	20-0-6	19-1-3	6-3-4	3-0-1	2-0-1	2				**87-5-30**

FIRST OBSERVED: August 1 | LAST OBSERVED: October 15 | PEAK DATE: September 5 | NUMBER OF INDIVIDUALS: 16

Notes: Spring numbers have remained remarkably consistent over the years, although this year observations were slightly higher than ever before thanks to a prolonged peak of migration that spanned weeks 8 and 9. The first arrival was in week 5 for the fifth year in a row, after being in week 6 or later in the first four years of the Spring Migration Monitoring Program. Fall numbers observed and banded were both a bit above average, peaking as usual between late August and mid-September. Observed during all MAPS visits; one banded, plus two returns and six repeats.

AMRE: American Redstart / Paruline flamboyante (*Setophaga ruticilla*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.14	0.14	0.86	2.57	1.86	**0.56**
# DAYS OBSERVED						1	1	3	6	6	**17**
# PROCESSED						1		3	4	1	**9**

FIRST OBSERVED: May 4 | LAST OBSERVED: June 5 | PEAK DATE: May 25 | NUMBER OF INDIVIDUALS: 6

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.00	6.86	9.43	5.00	6.43	5.14	3.86	3.29		0.43				**3.26**
# DAYS OBSERVED	7	7	7	7	7	7	6	6		2				**56**
# PROCESSED	10-0-1	22-0-3	29-0-3	19-0-5	24-0-5	18-0-6	12-0-4	11-0-2		1-0-1				**146-0-30**

FIRST OBSERVED: August 1 | LAST OBSERVED: October 6 | PEAK DATE: August 17 | NUMBER OF INDIVIDUALS: 16

Notes: Spring numbers were close to average, although seen in week 6 for just the second time. Fall numbers were similar to the highs of the previous three years, and peaked in week 3 as usual. Four banded during MAPS, compared to a total of just two across all previous years; numbers observed slightly higher than in any previous summer.

CMWA: Cape May Warbler / Paruline tigrée (*Setophaga tigrina*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.43	1.14	0.14		**0.17**
# DAYS OBSERVED							2	4	1		**7**
# PROCESSED								1			**1**

FIRST OBSERVED: May 14 | LAST OBSERVED: May 23 | PEAK DATE: May 22 | NUMBER OF INDIVIDUALS: 4

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.43	2.29	2.57	3.00	4.14	0.57	0.71					**1.05**
# DAYS OBSERVED			2	5	5	4	5	3	3					**27**
# PROCESSED			3	10-0-1	12-0-2	4-0-1	14-0-2	0-0-1	2					**45-0-7**

FIRST OBSERVED: August 16 | LAST OBSERVED: October 1 | PEAK DATE: September 8 | NUMBER OF INDIVIDUALS: 12

Notes: Uncommon in spring, although slightly more observed than usual. The fall shattered previous records, with more observed and banded than in all previous years combined; the week 7 peak was later than most observations in other years.

NOPA: Northern Parula / Paruline à collier (*Setophaga americana*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.57		0.29		**0.09**
# DAYS OBSERVED							3		1		**4**

FIRST OBSERVED: May 11 | LAST OBSERVED: May 23 | PEAK DATE: May 11, May 23 | NUMBER OF INDIVIDUALS: 2

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14			0.14		0.29	0.86	0.14	0.14					**0.13**
# DAYS OBSERVED	1			1		2	3	1	1					**9**
# PROCESSED	1					1	3		1					**6**

FIRST OBSERVED: August 7 | LAST OBSERVED: September 26 | PEAK DATE: September 13 | NUMBER OF INDIVIDUALS: 3

Notes: Below average in spring, with none banded for the first time since 2006. Fall numbers were closer to average, although the one banded in week 1 was the first ever for August, and the two August observations were the first for the month since 2006.

MAWA: Magnolia Warbler / Paruline à tête cendrée (*Setophaga magnolia*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								10.14	4.00	0.29	**1.44**
# DAYS OBSERVED								6	6	2	**14**
# PROCESSED								51-0-1	14-0-3	1	**66-0-4**
	FIRST OBSERVED: May 17			LAST OBSERVED: June 1			PEAK DATE: May 22			NUMBER OF INDIVIDUALS: 39	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	0.14	1.86	9.14	10.71	14.86	18.29	6.29	1.29	0.71	0.43			**4.95**
# DAYS OBSERVED	3	1	5	6	7	7	7	7	5	5	2			**55**
# PROCESSED	3	0-0-1	5-0-2	45-0-7	53-0-8	70-0-10	84-0-16	19-0-6	3-0-3	2-0-3				**284-0-56**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 15			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 55			

Notes: Spring arrival was the latest since 2005, but the number observed and banded in week 8 were both single-week records for spring, and resulted in record counts for the season despite the compressed migration. Fall numbers observed and banded were also record high, although only slightly above 2011; the peak in mid-September was a bit later than usual.

BBWA: Bay-breasted Warbler / Paruline à poitrine baie (*Setophaga castanea*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.43	0.57		**0.10**
# DAYS OBSERVED								2	1		**3**
# PROCESSED								1	1		**2**
	FIRST OBSERVED: May 19			LAST OBSERVED: May 25			PEAK DATE: May 25			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				1.14	0.86	0.14	0.29		0.14					**0.20**
# DAYS OBSERVED				3	4	1	2		1					**11**
# PROCESSED				6	2		2							**10**
	FIRST OBSERVED: August 25				LAST OBSERVED: October 1			PEAK DATE: August 27			NUMBER OF INDIVIDUALS: 4			

Notes: Typically scarce in spring; uncommon but in record numbers in fall, thanks especially to an unprecedented number observed and banded in week 4.

BLBW: Blackburnian Warbler / Paruline à gorge orangée (*Setophaga fusca*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.14			**0.01**
# DAYS OBSERVED								1			**1**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 22			LAST OBSERVED: May 22			PEAK DATE: May 22			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				0.29	0.14			0.14						**0.04**
# DAYS OBSERVED				2	1			1						**4**
# PROCESSED								1						**1**
	FIRST OBSERVED: August 25				LAST OBSERVED: September 22			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1			

Notes: A bit scarcer than usual in both spring and fall; the fall banding record in week 8 was the latest ever.

YEWA (formerly YWAR): Yellow Warbler / Paruline jaune (*Setophaga petechia*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						5.00	13.71	20.00	12.86	12.57	**6.41**
# DAYS OBSERVED						4	7	7	7	7	**32**
# PROCESSED						1-1-0	10-4-2	25-13-15	6-1-10	1-0-8	**43-19-35**
	FIRST OBSERVED: May 5			LAST OBSERVED: June 5			PEAK DATE: May 16			NUMBER OF INDIVIDUALS: 25	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	6.29	2.57	5.00	2.29	0.14		0.14							**1.26**
# DAYS OBSERVED	7	7	7	7	1		1							**30**
# PROCESSED	19	2-0-2	6-1-2	7-0-1										**34-1-5**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 17			PEAK DATE: August 4			NUMBER OF INDIVIDUALS: 11			

Notes: Spring numbers observed and banded well above average, thanks to a near-record single week peak in week 8. Fall results were below average, although there was an observation as late as mid-September for just the fourth time. The fall peak was in the first week of August as usual. MAPS numbers were lower than usual, with just 8 individuals banded.

CSWA: Chestnut-sided Warbler / Paruline à flancs marron (*Setophaga pensylvanica*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.71	2.57	2.00	0.14	**0.54**
# DAYS OBSERVED							4	7	6	1	**18**
# PROCESSED							1	4	3		**8**
	FIRST OBSERVED: May 11			LAST OBSERVED: May 30			PEAK DATE: May 22		NUMBER OF INDIVIDUALS: 5		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	1.00	1.86	1.43	0.43	0.43	0.96	0.14			0.14			**0.53**
# DAYS OBSERVED	3	4	7	6	2	3	4	1			1			**31**
# PROCESSED	1	4-0-1	2	4-0-1	2-1-0	1-0-1	3							**17-1-3**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 13			PEAK DATE: August 20			NUMBER OF INDIVIDUALS: 4			

Notes: Spring numbers were above average, thanks to an unusually early and substantial peak in migration in week 8; the 8 individuals banded was a new spring record. Fall numbers were slightly below normal, but the observation in October was the first time the species has been recorded past week 9.

BLPW: Blackpoll Warbler / Paruline rayée (*Setophaga striata*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								1.43	6.57	0.29	**0.83**
# DAYS OBSERVED								3	7	2	**12**
# PROCESSED									14	1	**15**
	FIRST OBSERVED: May 19			LAST OBSERVED: May 31			PEAK DATE: May 23		NUMBER OF INDIVIDUALS: 20		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				0.43	0.86	1.57	1.71	0.57	0.29					**0.42**
# DAYS OBSERVED				1	3	5	6	2	2					**19**
# PROCESSED				2	5	7	5	1						**20**
	FIRST OBSERVED: August 27				LAST OBSERVED: September 30			PEAK DATE: September 13			NUMBER OF INDIVIDUALS: 5			

Notes: A bit below average in spring, but peaking in week 9 as in every year since 2006. Also slightly below average in fall, with migration largely constrained to September and peaking mid-month as usual.

BTBW: Black-throated Blue Warbler / Paruline bleue (*Setophaga caerulescens*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							1.00	1.14	1.57	1.14	**0.49**
# DAYS OBSERVED							4	5	7	5	**21**
# PROCESSED							1	1			**2**
	FIRST OBSERVED: May 10			LAST OBSERVED: June 4			PEAK DATE: May 22		NUMBER OF INDIVIDUALS: 3		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57	0.57	0.86	0.14	1.00	0.57	1.14	1.14	0.71	0.29		0.14		**0.55**
# DAYS OBSERVED	3	2	5	1	4	3	3	4	3	2		1		**31**
# PROCESSED	2	0-1-2	2		2	1	7	6	1-0-1	2		1		**24-1-3**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 21			PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 3			

Notes: Uncommon, but slightly more common in spring than in most previous years. Fall migration typically prolonged but without distinct peaks; numbers close to average. Two individuals were banded during MAPS, just the second time the species has been banded in summer, the first time being in 2010.

WPWA: Western Palm Warbler / Paruline à couronne rousse (*Setophaga palmarum palmarum*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.29	0.14	0.29	0.14			**0.09**
# DAYS OBSERVED					2	1	2	1			**6**
# PROCESSED							1				**1**
	FIRST OBSERVED: April 29			LAST OBSERVED: May 16			PEAK DATE: 6 dates		NUMBER OF INDIVIDUALS: 1		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY					0.29	0.29	0.57	0.57	0.71	0.71	0.14			**0.25**
# DAYS OBSERVED					1	1	4	2	3	3	1			**15**
# PROCESSED								1		2				**3**
	FIRST OBSERVED: September 1				LAST OBSERVED: October 10			PEAK DATE: Sep 25, Oct 3			NUMBER OF INDIVIDUALS: 3			

Notes: Typically uncommon in spring; banded in spring for just the second time. Unusually scarce in fall, with observations spanning seven weeks, but consistently in low numbers; the total of three individuals banded was the lowest ever.

YPWA: Yellow Palm Warbler / Paruline à couronne rousse (*Setophaga palmarum hypochrysea*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14						0.14	0.29				**0.04**
# DAYS OBSERVED			1						1	1				**3**
# PROCESSED														**1**
	FIRST OBSERVED: August 21				LAST OBSERVED: October 5				PEAK DATE: October 5			NUMBER OF INDIVIDUALS: 2		

Notes: Missed in spring for the second time in three years. Typically uncommon in fall, although the August record was only the second one for the month, the other back in 2006.

PIWA: Pine Warbler / Paruline des pins (*Setophaga pinus*)

MARCH	APRIL						MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.14				**0.01**
# DAYS OBSERVED							1				**1**
	FIRST OBSERVED: May 13			LAST OBSERVED: May 13			PEAK DATE: May 13			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14					0.14	0.14					**0.03**
# DAYS OBSERVED			1					1	1					**3**
	FIRST OBSERVED: August 21				LAST OBSERVED: September 30				PEAK DATE: Aug 21, Sep 23, Sep 30			NUMBER OF INDIVIDUALS: 1		

Notes: Observed in spring for the first time since 2009, a lone individual heard singing on May 13. The three observations in fall was the second most after the four recorded in 2010.

MYWA: Yellow-rumped (Myrtle) Warbler / Paruline à croupion jaune (*Setophaga coronata*)

MARCH	APRIL						MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY					0.57	1.86	11.71	7.29	0.29		**2.17**
# DAYS OBSERVED					2	6	6	7	1		**22**
# PROCESSED						1	15	5-0-1	2		**23-0-1**
	FIRST OBSERVED: April 29			LAST OBSERVED: May 25			PEAK DATE: May 14			NUMBER OF INDIVIDUALS: 30	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57		0.57	5.57	1.71	1.71	6.00	8.29	15.43	14.00	8.86	4.14	0.71	**5.20**
# DAYS OBSERVED	2		2	6	7	5	6	5	7	7	7	6	2	**62**
# PROCESSED				13	4-0-1	3	6-0-1	5-0-2	24-0-3	36-0-4	13	3	1	**108-0-11**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 25				PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 33		

Notes: The number observed in spring was close to average, although fewer were banded than any year since 2006; the peak in week 7 was typical. Fall numbers were close to average for an "odd" year; the 108 banded was particularly similar to 108 in 2011, 106 in 2009, and an average of 110 over 2005, 2007, 2009, and 2011. The fall peak spanned weeks 9 and 10 as in almost all previous years. Individuals lingered into the final week of fall for the sixth time in nine years, despite the sharp cold front that came through in week 13 this year.

BTNW: Black-throated Green Warbler / Paruline à gorge noire (*Setophaga virens*)

MARCH	APRIL						MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.43	1.29	0.71	0.14	**0.26**
# DAYS OBSERVED							3	5	3	1	**12**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 11			LAST OBSERVED: June 4			PEAK DATE: May 22, May 23			NUMBER OF INDIVIDUALS: 3	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14		0.14	0.57	0.14	0.86	1.29	1.14	0.14	0.29				**0.36**
# DAYS OBSERVED	1		1	3	1	4	5	3	1	2				**21**
# PROCESSED	1				1		4	3	1	2				**12**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 4				PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 3		

Notes: Spring numbers close to average, although migration appeared to be shifted a bit later than usual; a lone individual was banded as in 2007, 2008, 2010, and 2011. Fall numbers were below average, with the number banded the fewest since 2009; there was only a slight peak in migration in mid-September.

CAWA: Canada Warbler / Paruline du Canada (*Cardellina canadensis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.71	0.57		**0.13**
# DAYS OBSERVED								2	2		**4**
# PROCESSED								5	4		**9**
	FIRST OBSERVED: May 19			LAST OBSERVED: May 27			PEAK DATE: May 22			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY		1.00	1.57	1.00		0.14	0.14							**0.30**
# DAYS OBSERVED		3	7	5		1	1							**17**
# PROCESSED		5	7-0-2	4-0-1		1	1							**18-0-3**
	FIRST OBSERVED: August 11				LAST OBSERVED: September 13			PEAK DATE: August 13			NUMBER OF INDIVIDUALS: 4			

Notes: Uncommon in spring, but numbers observed and banded were both just below the record highs set in 2011; migration was constrained to weeks 8 and 9, matching the usual peak period for Canada Warbler. Fall numbers were close to average, and peaked as usual in week 3.

WIWA: Wilson's Warbler / Paruline à calotte noire (*Cardellina pusilla*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.71	1.57	0.71	**0.30**
# DAYS OBSERVED								4	4	2	**10**
# PROCESSED								4	9-0-1	4	**17-0-1**
	FIRST OBSERVED: May 17			LAST OBSERVED: May 31			PEAK DATE: May 27, May 30			NUMBER OF INDIVIDUALS: 4	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14	0.43	0.86	2.57	1.14	0.29						**0.42**
# DAYS OBSERVED			1	3	3	6	4	2						**19**
# PROCESSED			1	2	5	11-0-1	5-0-1	1						**25-0-2**
	FIRST OBSERVED: August 21				LAST OBSERVED: September 24			PEAK DATE: September 11			NUMBER OF INDIVIDUALS: 4			

Notes: Spring numbers were fairly typical, and limited to the final three weeks of the season as in most previous years. Fall counts were a bit below average, despite a strong peak in week 6 as in recent years.

ATSP: American Tree Sparrow / Bruant hudsonien (*Spizella arborea*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.86	8.86	4.14	4.00	0.57						**1.94**
# DAYS OBSERVED	4	6	6	6	1						**23**
# PROCESSED				5-0-1	1						**6-0-1**
	FIRST OBSERVED: March 28			LAST OBSERVED: April 27			PEAK DATE: April 10			NUMBER OF INDIVIDUALS: 25	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY											0.29	0.43	2.57	**0.25**
# DAYS OBSERVED											2	3	5	**10**
# PROCESSED											2	3	8-0-2	**13-0-2**
	FIRST OBSERVED: October 15				LAST OBSERVED: October 30			PEAK DATE: October 30			NUMBER OF INDIVIDUALS: 15			

Notes: Spring abundance was the highest ever thanks to a record high count in week 2; the number banded was a bit above average. Fall numbers observed and banded were record lows. Winter numbers were the lowest since 2008-09, even though the species was observed on 39 of 48 visits, but on average fewer than 3 individuals were seen per day. More than half of the 24 individuals banded in winter were in December; there were also 4 returns from previous winters.

CHSP: Chipping Sparrow / Bruant familier (*Spizella passerina*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.14	0.29	2.00	5.57	3.71	4.86	3.86	1.71	**2.21**
# DAYS OBSERVED			1	2	6	7	7	7	7	5	**42**
# PROCESSED					0-1-0	2	4-0-1	4	1		**11-1-1**
	FIRST OBSERVED: April 16			LAST OBSERVED: June 3			PEAK DATE: May 16			NUMBER OF INDIVIDUALS: 12	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.86	0.14	0.29		0.29		0.71	0.71	0.43	0.57	0.14			**0.32**
# DAYS OBSERVED	3	1	1		1		2	4	2	3	1			**18**
# PROCESSED	2				1			1	1					**5**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 11			PEAK DATE: September 17			NUMBER OF INDIVIDUALS: 4			

Notes: Record number observed and banded in spring, thanks to a sustained peak spanning most of May. In contrast, fall numbers were well below average, similar to 2010. Two were banded in November, a first for winter. One observed in summer.

CCSP: Clay-colored Sparrow / Bruant des plaines (*Spizella pallida*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY							0.14							**0.01**
# DAYS OBSERVED							1							**1**
	FIRST OBSERVED: September 17				LAST OBSERVED: September 17			PEAK DATE: September 17			NUMBER OF INDIVIDUALS: 1			

Notes: A lone observation in mid-September was the sixth record for MBO, the others coming in August 2007, September 2009 (three observations), and October 2011.

FISP: Field Sparrow / Bruant des champs (*Spizella pusilla*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	TOTAL
MEAN # BIRDS / DAY				0.29				0.14			**0.04**
# DAYS OBSERVED				2				1			**3**
	FIRST OBSERVED: April 19			LAST OBSERVED: May 18			PEAK DATE: Apr 19, Apr 20, May 18		NUMBER OF INDIVIDUALS: 1		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY							0.14							**0.01**
# DAYS OBSERVED							1							**1**
	FIRST OBSERVED: September 15				LAST OBSERVED: September 15			PEAK DATE: September 15			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring and fall in the same year for the first time since 2009. The spring observations were the first since 2009; fall sightings have been annual over the past three years, all between mid-September and early October.

SAVS: Savannah Sparrow / Bruant des prés (*Passerculus sandwichensis*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	TOTAL
MEAN # BIRDS / DAY					0.14	0.29	0.14	0.29			**0.09**
# DAYS OBSERVED					1	1	1	2			**5**
# PROCESSED							1	1			**2**
	FIRST OBSERVED: April 28			LAST OBSERVED: May 17			PEAK DATE: May 4		NUMBER OF INDIVIDUALS: 2		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY									0.14		0.14	0.14		**0.03**
# DAYS OBSERVED									1		1	1		**3**
# PROCESSED											1	1		**2**
	FIRST OBSERVED: September 29				LAST OBSERVED: October 19				PEAK DATE: Sep 29, Oct 10, Oct 19		NUMBER OF INDIVIDUALS: 1			

Notes: Banded in both spring and fall this year, noteworthy since none had been banded since October 2008 – perhaps because this was the first time since 2008 that the adjacent farm field was not planted with corn. Observed over a four-week span from late April to mid-May, the most consistent pattern of occurrence since 2009, although still in much lower numbers than from 2005 to 2009. Seen in fall for the first time since 2010, although limited to one individual seen in late September and two others banded in mid-October.

FOSP: Fox Sparrow / Bruant fauve (*Passerella iliaca*)

MARCH	APRIL					MAY				JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	TOTAL
MEAN # BIRDS / DAY			1.14	19.86	9.71	0.29					**3.10**
# DAYS OBSERVED			2	7	7	2					**18**
# PROCESSED				32-0-8	10-0-4	0-0-1					**42-0-13**
	FIRST OBSERVED: April 16			LAST OBSERVED: May 6			PEAK DATE: April 19		NUMBER OF INDIVIDUALS: 32		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY									0.43	0.29	3.43	2.00	0.57	**0.52**
# DAYS OBSERVED									3	2	7	5	3	**20**
# PROCESSED									2		11	2-0-5	1-0-2	**16-0-7**
	FIRST OBSERVED: September 26				LAST OBSERVED: October 30				PEAK DATE: Oct 15, Oct 16		NUMBER OF INDIVIDUALS: 7			

Notes: Spring numbers observed and banded were nearly double previous highs, thanks to a record number moving through in week 4, and a strong carry-over into week 5. Despite fall migration beginning in late September for just the third time in nine years, numbers observed and banded were well below average, although not quite as low as in 2008 or 2011. At least two individuals lingered through the first four winter visits.

SOSP: Song Sparrow / Bruant chanteur (*Melospiza melodia*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		5.57	13.29	26.00	16.43	15.14	10.86	9.29	7.14	8.29	**11.20**
# DAYS OBSERVED		6	7	7	7	7	7	7	7	7	**62**
# PROCESSED				9-8-4	2-3-4	5-2-3	0-2-1	1-0-7		2-0-1	**19-15-20**
	FIRST OBSERVED: April 4			LAST OBSERVED: June 5		PEAK DATE: April 19			NUMBER OF INDIVIDUALS: 42		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	35.43	21.57	19.29	11.43	7.14	5.29	11.57	18.43	18.00	15.43	6.57	1.71	1.71	**13.35**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	4	5	**86**
# PROCESSED	95-3-18	33-2-15	22-1-8	17-0-7	8-0-2	4-0-2	7-0-4	19-1-11	21-2-10	22-0-7	12-1-5	3-1-0	4-1-0	**267-12-89**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 29			PEAK DATE: August 3			NUMBER OF INDIVIDUALS: 42			

Notes: Missed in the first week of spring for the first time ever, but numbers observed and banded were close to typical for the season, despite a record high count in week 4. Fall numbers were a bit above average, largely thanks to the biggest early August count since 2006, and the highest number ever banded in a single week, 96 in week 1. As is often the case, there was a secondary peak of migrants in late September. Seen once or twice monthly through winter except in March, as there were no early spring arrivals this year; one was banded in November and another in December. Observed on all of the MAPS visits, and the 29 individuals banded was a record for summer; there were also 3 returns and 4 repeats.

LISP: Lincoln's Sparrow / Bruant de Lincoln (*Melospiza lincolnii*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.71	0.43		**0.11**
# DAYS OBSERVED								3	2		**5**
# PROCESSED								5	2-0-1		**7-0-1**
	FIRST OBSERVED: May 19			LAST OBSERVED: May 27		PEAK DATE: May 19			NUMBER OF INDIVIDUALS: 3		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY						0.14	0.14	0.57	0.14	0.14	0.14	0.14		**0.11**
# DAYS OBSERVED						1	1	4	1	1	1	1		**10**
# PROCESSED						1		1			1			**3**
	FIRST OBSERVED: September 9				LAST OBSERVED: October 19			PEAK DATE: 10 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Typically scarce in spring, and unusually constrained to just two weeks this year. Fall numbers were unusually low, with only half as many observed and banded as the previous record low year in 2011.

SWSP: Swamp Sparrow / Bruant des marais (*Melospiza georgiana*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.43	4.14	5.29	5.29	2.29	2.29	2.43	3.14	**2.53**
# DAYS OBSERVED			2	7	7	7	7	7	6	7	**50**
# PROCESSED				5-0-1	10-0-1	7-1-0	1-0-1		2-0-1	1-0-1	**26-1-5**
	FIRST OBSERVED: April 12			LAST OBSERVED: June 5		PEAK DATE: Apr 21, Apr 29, May 8			NUMBER OF INDIVIDUALS: 8		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	4.29	2.14	1.29	1.57	0.29	0.43	1.57	1.00	1.86	1.71	1.14	1.00	0.14	**1.42**
# DAYS OBSERVED	7	6	5	4	2	3	6	3	6	6	4	5	1	**58**
# PROCESSED	6-1-3	3	2	1		1	2-0-3	1	7	7-0-1	2	0-0-1		**32-1-8**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 25			PEAK DATE: August 2			NUMBER OF INDIVIDUALS: 7			

Notes: More numerous this spring than any year since 2005, and with a record number banded, thanks to a prolonged peak of migration than spanned from mid-April through early May. Fall numbers were closer to average, although better than in most recent years; as usual there was a peak right at the beginning of the season representing local juveniles, and then a wave of migrants in late September and early October. Observed on all seven MAPS visits in numbers higher than any previous summer; 2 were banded and there were a surprisingly high 8 repeats.

WTSP: White-throated Sparrow / Bruant à gorge blanche (*Zonotrichia albicollis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.29	1.00	1.57	7.57	14.86	12.29	8.57	2.00	0.14	0.29	**4.86**
# DAYS OBSERVED	1	2	4	7	7	7	7	6	1	2	**44**
# PROCESSED				5-2-4	12-0-1	10-0-1	9-0-3	3		1	**40-2-9**
	FIRST OBSERVED: April 30			LAST OBSERVED: June 1		PEAK DATE: May 4			NUMBER OF INDIVIDUALS: 34		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.86	0.71	1.14	1.14	0.71	1.00	11.86	27.43	36.57	43.86	47.43	17.71	8.71	**15.47**
# DAYS OBSERVED	7	4	5	4	4	5	6	7	7	7	7	7	7	**77**
# PROCESSED	3-0-1	2-0-2	0-0-3	2	1	1	15-0-2	23-0-3	55-0-13	78-0-7	61-0-12	15-0-6	7-0-9	**263-0-58**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 12			NUMBER OF INDIVIDUALS: 75			

Notes: Observed weekly throughout spring for the first time ever, although numbers observed and banded were close to average; the peak was in week 5 as usual. Observed weekly throughout fall as in all previous years. Numbers swelled beginning in week 7, roughly one week later than usual, and peaked in weeks 10-11, also a week later than in most years. Overall, the number observed this fall was roughly one-third below average, and the number banded was over 20% lower than the eight-year mean, and the third lowest total in nine years. Well above average in winter, observed on 37 of 48 visits; based on repeats, at least two individuals stayed around for the whole season, but in total there were 8 banded and 8 repeats. A lone individual on the first day of summer was the only one for the season, the lowest count in three years.

WCSP (EWCS): (Eastern) White-crowned Sparrow / Bruant à couronne blanche (*Zonotrichia leucophrys*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.86	1.57	4.00			**0.64**
# DAYS OBSERVED						3	3	6			**12**
# PROCESSED						1	1	14			**16**
	FIRST OBSERVED: May 6			LAST OBSERVED: May 22		PEAK DATE: May 10			NUMBER OF INDIVIDUALS: 8		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY								2.71	8.00	5.43	1.57	0.71		**1.42**
# DAYS OBSERVED								3	7	7	4	4		**25**
# PROCESSED								3	5	3-0-1	1			**12-0-1**
	FIRST OBSERVED: September 23				LAST OBSERVED: October 22			PEAK DATE: Sep 24, Sep 29			NUMBER OF INDIVIDUALS: 13			

Notes: Spring observations ended in week 8 for the fourth year in a row, after extending to at least week 9 in all five previous years; despite this, the peak this year was in week 8, whereas it was in week 7 in all previous years except 2009. Overall, numbers observed and banded in spring were close to average. Fall numbers observed were the lowest since 2005, and the number banded was a record low. All observations were within a five-week span, and peaked in week 9, a week earlier than usual.

SCJU: Slate-coloured Junco / Junco ardoisé (*Junco hyemalis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	3.57	9.43	5.86	9.14	7.14	1.14					**3.63**
# DAYS OBSERVED	6	7	7	7	7	4					**38**
# PROCESSED				9-1-2	2-1-0	1					**12-2-2**
	FIRST OBSERVED: March 28			LAST OBSERVED: May 7		PEAK DATE: April 16			NUMBER OF INDIVIDUALS: 24		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY								0.14	4.29	10.86	18.86	13.43	7.71	**4.25**
# DAYS OBSERVED								1	5	6	7	7	7	**33**
# PROCESSED								1	10-0-1	19	21-1-2	6-2-0	3-2-0	**60-5-3**
	FIRST OBSERVED: September 24				LAST OBSERVED: October 30			PEAK DATE: October 15			NUMBER OF INDIVIDUALS: 51			

Notes: Spring migration for Slate-coloured Juncos varies considerably from year to year, but numbers observed and banded this spring were quite close to the eight-year average. Fall migration began slightly later than usual, and peaked in week 11, rather than numbers building to the end of the season as in most previous years. Overall the number observed was less than half the long-term mean, and the number banded was more than two-thirds below average. The fourth most abundant songbird in winter, with a mean of 10.5 individuals observed daily, and sightings on 44 of 48 visits. Juncos were banded in each month of winter, 42 in total, which is below average; there were also 4 returns from previous winters in November and December, plus another 4 returns in March from earlier in the same winter.

SCTA: Scarlet Tanager / Tangara écarlate (*Piranga olivacea*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY									0.14	0.14	**0.03**
# DAYS OBSERVED									1	1	**2**
	FIRST OBSERVED: May 27			LAST OBSERVED: June 1			PEAK DATE: May 27, Jun 1		NUMBER OF INDIVIDUALS: 1		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.14		0.29											**0.03**
# DAYS OBSERVED	1		2											**3**
# PROCESSED	1													**1**
	FIRST OBSERVED: August 6				LAST OBSERVED: August 20			PEAK DATE: Aug 6, Aug 18, Aug 20			NUMBER OF INDIVIDUALS: 1			

Notes: The two observations in spring matched the record low of 2008. The three observations and one individual banded in fall matched the lows of 2008, 2010, and 2011. For the first time since 2009, there were no observations beyond the end of August. The one observed on the final day of MAPS (July 29) was the first in summer since 2009.

NOCA: Northern Cardinal / Cardinal rouge (*Cardinalis cardinalis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	5.86	5.71	4.57	7.14	5.43	6.00	4.29	5.57	3.86	4.29	**5.27**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
# PROCESSED				2-2-3		2-0-1	1-1-1	0-2-1			**5-5-6**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: Apr 22, May 22		NUMBER OF INDIVIDUALS: 10		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	5.71	6.57	6.86	5.29	4.71	3.00	3.43	4.71	4.57	4.57	5.29	7.00	4.00	**5.05**
# DAYS OBSERVED	7	7	7	7	7	6	7	7	7	7	7	7	7	**90**
# PROCESSED	2-0-4	1-0-5	0-0-3	1-0-2	2	0-0-1	0-0-1	2		2-0-1	0-0-1	1	0-0-1	**11-0-19**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: Aug 18, Aug 20, Oct 8			NUMBER OF INDIVIDUALS: 11			

Notes: Observed weekly in spring and fall as in all previous years. Spring numbers were above average; the 5 birds banded tied the previous record from 2005 and 2012. Abundance was record high in fall, while the number banded was average. More numerous this winter than any previous year except 2009-10, observed on 44 of 48 visits, with up to 9 individuals per day and a mean daily count of 3.8. Another 9 individuals were banded on top of the record 21 banded the previous fall; there was also a return and 5 repeats. Observed on all seven MAPS visits, with a record 3 individuals banded, plus a return and two repeats.

RBGR: Rose-breasted Grosbeak / Cardinal à poitrine rose (*Pheucticus ludovicianus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.29	1.57	0.86	0.14	**0.29**
# DAYS OBSERVED							2	5	4	1	**12**
	FIRST OBSERVED: May 11			LAST OBSERVED: June 1			PEAK DATE: May 17		NUMBER OF INDIVIDUALS: 6		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	3.14	2.14	4.43	3.29	1.57	2.43	1.71	1.29		0.14				**1.55**
# DAYS OBSERVED	7	5	7	6	6	7	4	6		1				**49**
# PROCESSED	8-0-2	7-0-2	6-0-1	2-0-5	1-0-1	5-0-3	4	1-0-1						**34-0-15**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 9			PEAK DATE: August 9			NUMBER OF INDIVIDUALS: 10			

Notes: Spring numbers matched the record low of 2010, and for the third time in four years did not arrive until week 7. For the first time ever, none were banded in spring. Fall numbers were average, but for the second year in a row peaked in the second half of August, rather than the first half as in previous years. One individual was banded during MAPS.

INBU: Indigo Bunting / Passerin indigo (*Passerina cyanea*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY								0.86	1.14	3.00	**0.50**
# DAYS OBSERVED								2	4	7	**13**
# PROCESSED								0-1-0	1	2	**3-1-0**
	FIRST OBSERVED: May 21			LAST OBSERVED: June 5			PEAK DATE: June 1		NUMBER OF INDIVIDUALS: 6		

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	6.57	4.14	3.57	1.86	2.14	2.14	2.29	0.71	0.86					**1.87**
# DAYS OBSERVED	7	7	7	6	6	5	6	4	4					**52**
# PROCESSED	4-0-1	2-1-2	5-0-1	7-0-3	7	8	6-0-8	3-0-1	0-1-1					**42-2-17**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 30			PEAK DATE: Aug 4, Aug 7			NUMBER OF INDIVIDUALS: 8			

Notes: Spring numbers fairly typical, and limited to the final three weeks of the season as in 2005-2008. Fall counts were also close to average, peaking in the first half of August as usual. Lone individuals were observed on two dates in summer.

BOBO: Bobolink / Goglu des prés (*Dolichonyx oryzivorus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							0.14	0.43			**0.06**
# DAYS OBSERVED							1	2			**3**

FIRST OBSERVED: May 14 | LAST OBSERVED: May 19 | PEAK DATE: May 18 | NUMBER OF INDIVIDUALS: 2

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			2.29			1.00								**0.25**
# DAYS OBSERVED			2			1								**3**

FIRST OBSERVED: August 20 | LAST OBSERVED: September 6 | PEAK DATE: August 20 | NUMBER OF INDIVIDUALS: 15

Notes: Fewer spring sightings than in any previous year, limited to four individuals over a six day span in mid-May. Observed in fall for the second time since 2008, with flocks passing by in mid-August and early September.

RWBL: Red-winged Blackbird / Carouge à épaulettes (*Agelaius phoeniceus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	36.86	57.57	46.29	57.14	49.00	60.14	56.43	51.29	33.14	31.57	**47.94**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
# PROCESSED				8-1-0	12	25-3-4	24-3-7	11-1-3	3-3-4	0-1-2	**83-12-20**

FIRST OBSERVED: March 28 | LAST OBSERVED: June 5 | PEAK DATE: April 9 | NUMBER OF INDIVIDUALS: 110

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	7.14	3.86	2.71	0.86	0.14	15.14	33.00	70.71	14.71	22.14	98.57	326.29	217.71	**62.54**
# DAYS OBSERVED	7	4	6	2	1	4	6	6	7	7	7	7	7	**71**
# PROCESSED												1	1	**2**

FIRST OBSERVED: August 1 | LAST OBSERVED: October 30 | PEAK DATE: October 29 | NUMBER OF INDIVIDUALS: 850

Notes: The number observed in spring was slightly above average and nearly identical to last year, although the number banded dropped back below average; abundance remained elevated from early April to mid-May before tapering off a bit toward the end of the season. Fall abundance was only slightly more than half of what was observed 2010-2012, and roughly one-quarter lower than the long-term average; numbers peaked sharply only in the final two weeks of the season. The two individuals banded in fall was the lowest total ever, except for 2005 when none were banded. A few individuals lingered into winter, with sightings on four days in each of November and December; spring migrants began returning March 7 and were in good numbers by mid-month. All 10 individuals banded were in the first half of November. Observed on all MAPS visits, in numbers higher than any year since 2008, and with an above average 11 individuals banded.

EAME: Eastern Meadowlark / Sturnelle des prés (*Sturnella magna*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY		0.14									**0.01**
# DAYS OBSERVED		1									**1**

FIRST OBSERVED: April 5 | LAST OBSERVED: April 5 | PEAK DATE: April 5 | NUMBER OF INDIVIDUALS: 1

Notes: Observed for the first time since 2011, and only the fifth observation overall for MBO. All have been in spring; this was the earliest ever.

RUBL: Rusty Blackbird / Quiscale rouilleux (*Euphagus carolinus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.71	3.29	1.43		0.14			**0.56**
# DAYS OBSERVED				2	3	5		1			**11**
# PROCESSED								1			**1**

FIRST OBSERVED: April 19 | LAST OBSERVED: May 17 | PEAK DATE: May 1 | NUMBER OF INDIVIDUALS: 9

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY							0.29	3.14	1.29	6.00	0.86	1.00	0.29	**0.99**
# DAYS OBSERVED							1	3	3	6	4	5	2	**24**

FIRST OBSERVED: September 16 | LAST OBSERVED: October 29 | PEAK DATE: September 25 | NUMBER OF INDIVIDUALS: 17

Notes: The number observed this spring matched last year's record high, although this year the migration was more concentrated, with a single-week record of 23 individuals recorded in week 5. The one individual banded in spring was the only one for 2013. Fall numbers were somewhat below average, despite a distinct peak in migration in early October.

COGR: Common Grackle / Quiscale bronzé (*Quiscalus quiscula*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	4.29	0.86	2.57	5.86	7.00	9.57	10.71	14.00	5.43	6.29	**6.66**
# DAYS OBSERVED	5	4	4	7	6	7	7	7	6	7	**60**
# PROCESSED						2	4	4-1-0			**10-1-0**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: May 17			NUMBER OF INDIVIDUALS: 24	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	9.29	2.29	4.57	10.29	4.71	2.29	79.57	5.43	1.71	187.71	68.57	63.43	5.00	**34.22**
# DAYS OBSERVED	7	6	5	3	4	3	5	3	4	7	5	5	3	**60**
# PROCESSED							1			6		8		**15**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 29			PEAK DATE: October 6			NUMBER OF INDIVIDUALS: 1200			

Notes: Present weekly in spring and fall, as in all previous years. Spring numbers peaked in mid-May, which is typical, but were slightly below average, and fewer individuals were banded than in any previous spring. Fall numbers have been erratic from year to year, and in 2013 were somewhat below average overall, with sudden spikes in abundance in mid-September and early to mid-October offsetting otherwise low numbers. All individuals banded corresponded to the two peaks of migration. Lone individuals were observed on November 7 and the final two days of winter; the one in November was banded, only the third ever for winter. Only one was also banded during MAPS, even though the species was observed on all visits and numbers were higher than in any previous summer.

BHCO: Brown-headed Cowbird / Vacher à tête brune (*Molothrus ater*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	0.43	0.71	1.00	2.57	2.43	2.14	1.86	0.86	2.14	2.14	**1.63**
# DAYS OBSERVED	2	2	4	7	7	7	6	4	6	5	**50**
# PROCESSED				0-1-0			1		0-1-1		**1-2-1**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 5			PEAK DATE: May 29			NUMBER OF INDIVIDUALS: 5	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29		0.43				0.29	1.57	0.14		0.29			**0.23**
# DAYS OBSERVED	2		1				1	1	1		1			**7**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 10			PEAK DATE: September 25			NUMBER OF INDIVIDUALS: 11			

Notes: Spring abundance was lower than ever before, less than half the eight-year mean, and there was only a modest increase in numbers during the typical peak of migration in the second half of April. The one individual banded matched last year's record low. Fall numbers were typically scarce, and as usual were scattered through much of the season. One was banded during MAPS, and lone individuals were observed on five of seven visits.

BAOR: Baltimore Oriole / Oriole de Baltimore (*Icterus galbula*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY							5.14	14.71	7.57	7.29	**3.47**
# DAYS OBSERVED							6	7	7	7	**27**
# PROCESSED							1-1-0	4-5-3		2	**7-6-3**
	FIRST OBSERVED: May 10			LAST OBSERVED: June 5			PEAK DATE: May 16			NUMBER OF INDIVIDUALS: 18	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.14	1.86	8.14	7.00	3.14	0.43	0.41	0.14						**1.79**
# DAYS OBSERVED	4	5	7	7	4	3	2	1						**33**
# PROCESSED	1		10	10-0-2	4									**25-0-2**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 20			PEAK DATE: August 21			NUMBER OF INDIVIDUALS: 12			

Notes: Spring numbers well above average this spring, thanks to a particularly strong peak of migration in week 8, although not quite as abundant as last year's record high. Despite the many individuals observed, the 7 individuals banded matched the record low from 2011. Fall numbers were close to average, peaking in week 3 for the fifth year in a row, and with observations extending to week 8 for the third time in nine years. The 25 individuals banded was slightly below the long-term mean, but the highest count since 2008. Observed on all MAPS visits, in the highest numbers since 2008; 3 were banded and there were 2 returns.

PIGR: Pine Grosbeak / Durbec des sapins (*Pinicola enucleator*)

Notes: Observed on three dates between early November and late January, the first winter sightings since 2008-09.

PUFI: Purple Finch / Roselin pourpré (*Haemorhous purpureus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY				0.57	1.14	1.14		0.29		0.29	**0.35**
# DAYS OBSERVED				3	4	5		2		2	**16**
# PROCESSED					2-1-0						**2-1-0**
	FIRST OBSERVED: April 22			LAST OBSERVED: June 1		PEAK DATE: Apr 30, May 4		NUMBER OF INDIVIDUALS: 4			

	AUGUST				SEPTEMBER				OCTOBER					
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.29	0.29	0.14				0.29		0.43	1.00		0.57		**0.31**
# DAYS OBSERVED	4	2	1				1		1	4		2		**15**
# PROCESSED	4	0-0-1												**4-0-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 23			PEAK DATE: August 5			NUMBER OF INDIVIDUALS: 4			

Notes: The scattered observations this spring were fairly typical for Purple Finch. Fall sightings were also spread out in small numbers throughout the season as in most previous years; only banded in the first week of fall. Scattered observations of single birds in late winter, once in February and four times in March; one was banded on March 24, just the third ever in winter.

HOFI: House Finch / Roselin familier (*Haemorhous mexicanus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.29		0.29	0.43	0.57						**0.26**
# DAYS OBSERVED	5		2	1	2						**10**
	FIRST OBSERVED: March 28			LAST OBSERVED: Apr 29		PEAK DATE: Apr 2, Apr 23, Apr 26		NUMBER OF INDIVIDUALS: 3			

	AUGUST				SEPTEMBER				OCTOBER					
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.43	0.14	0.71		0.14		0.43		0.43	1.43	2.43	1.86	3.43	**0.88**
# DAYS OBSERVED	3	1	4		1		2		2	4	5	5	7	**34**
# PROCESSED	1													
	FIRST OBSERVED: August 3				LAST OBSERVED: October 30			PEAK DATE: October 25			NUMBER OF INDIVIDUALS: 10			

Notes: Slightly more common in spring than usual, but with all observations limited to the first half of the season. Observed most weeks in fall, in above average numbers. Seen on all winter visits except March 22, and generally more common than usual in the second half of winter, and as a result the daily mean of 14.8 individuals for the season was higher than any previous winter. For the third winter in a row, a new record was set for the number banded, with 95, 88 of which were in November and December; there were also record numbers of returns (3) and repeats (10). Missed in summer for the fifth year in a row.

CORE: Common Redpoll / Sizerin flammé (*Acanthis flammea*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	23.29	2.43	1.57								**2.73**
# DAYS OBSERVED	5	4	2								**11**
	FIRST OBSERVED: March 28			LAST OBSERVED: April 13		PEAK DATE: March 28		NUMBER OF INDIVIDUALS: 50			

	AUGUST				SEPTEMBER				OCTOBER					
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY													2.57	**0.20**
# DAYS OBSERVED													1	**1**
	FIRST OBSERVED: October 25				LAST OBSERVED: October 25			PEAK DATE: October 25			NUMBER OF INDIVIDUALS: 18			

Notes: More abundant than in any previous winter, with a few individuals arriving in the second half of November, the first big flock in the second week of December, and then large numbers persisting from January through the end of March, with daily counts over 100 on three occasions, and averaging 43 over the final three months of the season. The 340 individuals banded was nearly 7 times the previous record, but largely due to a very productive final four days of the season (March 22, 24, 26, and 27) when 223 were banded. At least three of the individuals banded in December remained until late winter, but overall there were only 54 recaptures, suggesting that many flocks were moving through over the course of winter. Observed in spring for just the third time in nine years, with a record number carrying over into the first three weeks of the season from the winter influx. Arrived in the final week of fall for the third year in a row.

HORE: Hoary Redpoll / Sizerin blanchâtre (*Acanthis hornemanni*)

Notes: Observed on six dates between mid-January and late March, with a record count of four individuals on January 18. One banded on the final day of winter was only the second ever for MBO.

PISI: Pine Siskin / Tarin des pins (*Spinus pinus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY			0.71	0.43					0.14	0.29	**0.16**
# DAYS OBSERVED			1	1					1	1	**4**
	FIRST OBSERVED: April 11			LAST OBSERVED: June 1			PEAK DATE: April 11			NUMBER OF INDIVIDUALS: 5	

Notes: Observed in spring for the fifth time in nine years; there appeared to be one small movement in mid-April and another in late May. Missed in fall for the first time since 2009. A large flock of 61 was observed on November 9, but there were sightings on only 5 other days over the rest of winter, ranging from 1 to 10 individuals.

AMGO: American Goldfinch / Chardonneret jaune (*Spinus tristis*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY	1.57	1.57	22.14	4.00	4.43	11.14	7.43	10.43	6.29	6.29	**5.53**
# DAYS OBSERVED	5	3	6	7	7	7	7	7	7	7	**63**
# PROCESSED						1-1-0	1-1-0	3	3-0-1	1-1-0	**9-3-1**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: June 4			NUMBER OF INDIVIDUALS: 14	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	17.57	18.29	31.00	39.00	48.00	35.14	24.86	19.43	12.43	7.86	5.14	1.71	2.86	**20.33**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	3	6	**86**
# PROCESSED	2-1-1	2	4	12	9	13	14-1-1	4-0-1	8-0-1		2			**70-2-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 3			NUMBER OF INDIVIDUALS: 85			

Notes: Observed in all weeks of spring and fall, as in all previous years. Spring numbers well below normal, although slightly above the record low in 2011. There was an atypical big movement in mid-April, but the usual peak in early-mid May was lower than usual. The 9 individuals banded was a record low by a wide margin, and a full 85% lower than the long-term mean for spring. Conversely, the number observed in fall was a record high, more than 50% above the long-term mean, and the number banded was also a bit above average. The fall peak spanned late August to mid-September, earlier than in most other years, and the mean daily counts for weeks 4 to 6 were all higher than any previously recorded at MBO. Winter numbers were somewhat lower than the previous four years, due to being unusually scarce from January through March, observed on just 12 of 33 visits and with no more than 4 individuals per day except for 11 on the final day of winter. More abundant in early winter, with a daily mean of 34 in November and 18 in December, and peaking at 75 individuals on December 7. Nevertheless, a record 228 individuals were banded, and there were record high numbers of returns (6) and repeats (19). Two were banded in MAPS, and for the first time there were also two returns in summer.

EVGR: Evening Grosbeak / Gros-bec errant (*Coccothraustes vespertinus*)

MARCH	APRIL					MAY					JUNE
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	**TOTAL**
MEAN # BIRDS / DAY						0.14					**0.01**
# DAYS OBSERVED						1					**1**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 4			PEAK DATE: May 4			NUMBER OF INDIVIDUALS: 1	

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY													0.14	**0.01**
# DAYS OBSERVED													1	**1**
	FIRST OBSERVED: October 25				LAST OBSERVED: October 25			PEAK DATE: October 25			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring and fall of the same year for the first time ever, although by virtue of a single individual in each season. The spring observation was the first since 2008, and later in the season than all four previous records; the fall record was in the final week of the season as in 2007 and 2012.