McGill Bird Observatory
Annual Program Report 2012

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MIGRATION RESEARCH FOUNDATION

Cover photo:
One of the six Rusty Blackbirds banded at MBO in 2012, more than in any previous year (photo by Simon Duval)

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1. Executive Summary

McGill Bird Observatory (MBO) is a 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 2012 project cycle, which spans from November 2011 through October 2012. It focuses primarily on 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 2011 – 27 March 2012) benefited from warmer than usual temperatures for most of the season, and yielded above average totals of 380 individuals and 18 species banded. For a second straight winter, Slate-colored Junco, American Goldfinch, and House Finch together comprised roughly two-thirds of birds banded. A record 63 species were observed over the course of the season, including 8 never previously documented in winter.

The Spring Migration Monitoring Program (28 March – 5 June) was a great success this year, tying the record for species banded (66) and setting a new record for individuals banded (993), while the 143 species observed was above the long-term mean for spring. The banding numbers were bolstered by a rebound in Red-winged Blackbirds, and record counts of Tennessee Warbler and Cedar Waxwing. As in 2011, five of the ten most frequently banded species were warblers. In contrast to the record low number of returns in spring 2011, the count of 103 individuals documented in spring 2012 was just below the previous record high.

The summer program (6 June – 31 July) was for a fourth year operated as part of the international MAPS (Monitoring Avian Productivity and Survivorship) network. The 184 birds banded of 31 species were both record totals for the season, although the count of individuals was skewed by an influx of early fall migrants during the 23 July session. Red-breasted Nuthatch, Brown Thrasher, Chipping Sparrow, and Purple Finch were all banded for the first time in summer, bringing the cumulative total for the season to 43 species. The 56 species observed in summer was slightly above the average for the past five years, but did not include any species previously unobserved during the season.

The Fall Migration Monitoring Program (1 August – 30 October) was particularly notable for diversity, with the 87 species banded well beyond the previous range of 76-79 species in all previous years, and the 149 species observed during the season the second highest ever during fall. The mean daily estimated total from week 2 through week 9 hovered just below 50 species. The *Catharus* thrushes were the big surprise this fall, with all five species banded and observed in record numbers. Another 18 species were banded in record numbers, led by White-throated Sparrow, and including four never before banded at MBO in fall.

The Northern Saw-whet Owl Monitoring Program (26 September – 6 November) had full coverage for a third consecutive year, and yielded a record of 235 individuals banded, plus 2 foreign recoveries and 10 individuals of four other owl species. The peak of migration was between October 7 and 23, but there was also an earlier wave of birds right at the beginning of the season in late September. Over 80% of saw-whets this fall were hatch-year birds.

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 other sites 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 2012 project cycle, which began with the winter 2011-2012 season and concluded with the 2012 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.

Swainson's Thrushes were the unexpected highlight of FMMP 2012, with 176 individuals banded, compared to a cumulative total of 144 over seven previous years of migration monitoring at MBO. (Photo by Simon Duval)

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 is focused on five nets surrounding a set of feeders (usually stocked with black oil sunflower, millet, and nyjer seed), and is usually limited to three hours at a time.

3.1 Effort

Observations were recorded on 25 (17%) of the 148 days during the winter season, somewhat below the level of coverage in recent years. Visits were most frequent in November, to focus on late migrants and monitoring of winter residents while weather was still mild, and in the second half of March, to document activity during an unusually warm period. Banding took place 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 highest since winter 2005-06.

Table 3-1. Effort during the 2011-2012 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	10	4	3	3	5	25
# days banding	9	4	0	1	3	17

3.2 Site conditions

Although there were a few brief cold spells, overall this was the mildest winter on record at MBO. March deviated from the norm most significantly, with the mean daily high more than 6 degrees higher than the mean over the previous seven winters, largely due to five straight days with temperatures at or above 20 degrees in the third week of the month. Correspondingly, there was less snow than in any previous winter.

Table 3-2. Weather conditions during the 2011-2012 winter population monitoring program, by month.

	Oct 31 - Nov 30	Dec 1 – 31	Jan 1-31	Feb 1-29	Mar 1-27	SEASON
Mean daily high (^{o}C)	9.8	1.0	-2.5	-0.7	8.4	3.1
Mean daily low (^{o}C)	0.8	-6.1	-12.3	-8.8	-1.9	-5.7
Mean daily temp (^{o}C)	5.3	-2.5	-7.4	-4.7	3.3	-1.3
Highest temp (^{o}C)	19 (Nov 14)	11 (Dec 15)	6 (Jan 1)	7 (Feb 22)	26 (Mar 21)	26 (Mar 21)
Lowest temp (^{o}C)	-8 (Nov 22)	-18 (Dec 29)	-24 (Jan 15)	-17 (Feb 5)	-16 (Mar 5)	-24 (Jan 15)
# days with rainfall	12	10	10	7	13	52
Total rain (mm)	46	96	30	11	30	213
# days with snowfall	3	17	22	19	8	69
Total snow (cm)	8	20	58	23	20	129
Mean snow depth (cm)	0.5	2.4	6.4	7.8	3.0	4.0
Max. snow depth (cm)	7 (Nov 24)	9 (Dec 26)	15 (Jan 18)	13 (Feb 25)	18 (Mar 2)	18 (Mar 2)

3.3 Results

The 380 birds banded was down from the record of 449 in winter 2010-11, but still well above the long-term average for the season. The 18 species was also just below last winter's record of 19, but higher than in most previous years. However, the amount of banding effort was more than double that of last winter, therefore the rate of birds banded was far lower. The number of species observed during the season was 63, besting the previous record of 58 in 2009-10.

Table 3-3. Summary results of the 2011-2012 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	231 (14)	74 (8)	n/a	26 (8)	49 (7)	380 (18)
Birds (species) repeat	99 (9)	45 (6)	n/a	1 (1)	13 (4)	158 (9)
Birds (species) return	11 (3)	10 (4)	n/a	5 (4)	21 (6)	47 (8)
# species observed	40	27	18	18	45	63
# net hours	177.5	74.5	--	15.0	48.8	315.8
Birds banded / 100 hrs	130.1	99.3	n/a	173.3	102.5	120.6

3.3.1 Birds banded

As in winter 2010-11, the three most frequently banded species were Slate-colored Junco, American Goldfinch, and House Finch, and again they collectively comprised close to two-thirds of all birds banded during the season, although Slate-colored Junco was less dominant in winter 2011-12. House Finch numbers set a record high for a second straight winter, in part due to the launch of a new program to colour band them (as well as American Goldfinches), which included extra effort in the early part of the season when both species are typically most abundant. Other species with record high banding totals this winter were American Tree Sparrow, Red-winged Blackbird, Northern Cardinal, Blue Jay, and Purple Finch. Chipping Sparrow and Common Grackle were banded for the first time ever in winter, bringing the cumulative winter total to 30 species.

Table 3-4. Top 10 species banded at MBO during the 2011-2012 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.

	2011-12	2010-11	2009-10	2008-09	2006-07	2005-06	2004-05
1. Slate-colored Junco	90	150 (1)	48 (3)	--	20 (3)	54 (2)	20 (4)
2. American Goldfinch	87	93 (2)	79 (1)	2 (4)	21 (1)	111 (1)	113 (1)
3. House Finch	69	61 (3)	31 (5)	--	21 (1)	5 (9)	58 (2)
4. American Tree Sparrow	56	25 (6)	35 (4)	2 (4)	7 (5)	11 (5)	9 (5)
5. Red-winged Blackbird	25	1 (11)	15 (7)	--	--	--	--
6. Black-capped Chickadee	12	33 (5)	54 (2)	3 (2)	17 (4)	51 (3)	26 (4)
7. Northern Cardinal	11	5 (9)	4 (11)	1 (6)	2 (8)	4 (10)	7 (6)
8. Blue Jay	7	1 (11)	1 (13)	--	1 (9)	1 (13)	6 (8)
9. Purple Finch	6	1 (11)	1 (13)	--	--	--	--
10. Mourning Dove	5	2 (10)	17 (6)	--	6 (6)	11 (5)	2 (10)

3.3.2 Birds recaptured

The 158 repeats this winter was well above average, second only to 186 in 2005-2006. Under 12% of the 380 birds banded during winter were recaptured at least once, but they accounted for 36% of repeats during the season. Repeats were less frequent among birds banded in early November and March, reflecting the movement of late fall / early spring migrants during those periods. Birds banded during fall 2011 and staying around in winter contributed another 33% of repeats, including 43 cases involving 13 Black-capped Chickadees. Overall, Black-capped Chickadees accounted for 54% of all repeats this winter, a bit lower than the rate of 62% across all winters at MBO. Slate-colored Junco (21%) and American Tree Sparrow (11%) were the next two most frequent repeats, while House Finches were recaptured as many times this winter (10) as in all previous winters combined.

The number of returns this winter (47) was a new record for a second year in a row, and the 8 species involved were far more than the previous high of 5. Nearly half of the individuals (23) were Black-capped Chickadees, which comprise 62% of winter returns across all years. Notable this winter were the 10 American Tree Sparrow returns, compared to only one in all

previous years. The number is slightly inflated, as two individuals were counted twice due to more than three months elapsing between captures in November and March; had banding occurred more regularly throughout the season, several of these birds would likely have been recaptured more frequently, and would have remained categorized as repeats after the first encounter. All the same, the results show greater winter site fidelity for American Tree Sparrow than previously documented at MBO. Also returning in higher numbers than ever before this winter was American Goldfinch, with 7 individuals.

Table 3-5. List of returns captured during winter 2011-12, sorted by time elapsed.

Band number	Species	Age/sex at return	Age/sex at banding	Banding date	Previous capture	2011-12 return	Time elapsed		
2600-15714	SCJU	AHY-M	HY-M	29 Nov 09	29 Nov 09	1 Dec	2 years		2 days
2500-65200	BCCH	AHY-U	HY-U	21 Sep 08	4 Dec 09	1 Dec	1 year	11 months	28 days
1342-01071	RWBL	ASY-M	SY-M	16 May 10	16 May 10	20 Mar	1 year	10 months	10 days
2600-15727	ATSP	AHY-U	SY-U	21 Jan 10	21 Jan 10	9 Nov	1 year	9 months	20 days
2650-15864	AMGO	AHY-F	SY-F	15 May 10	15 May 10	7 Dec	1 year	6 months	22 days
2600-15960	BCCH	AHY-U	HY-U	17 Sep 10	23 Sep 10	7 Dec	1 year	2 months	14 days
2560-25142	BCCH	AHY-U	HY-U	26 Aug 09	23 Sep 10	1 Dec	1 year	2 months	8 days
2600-15370	BCCH	AHY-U	HY-U	29 Nov 09	8 Nov 11	1 Dec	1 year		23 days
2600-15920	BCCH	AHY-U	HY-U	1 Aug 10	24 Oct 10	4 Nov	1 year		11 days
2490-24907	BCCH	AHY-U	HY-U	16 Aug 07	6 Nov 10	9 Nov	1 year		3 days
2650-25792	ATSP	ASY-U	SY-U	13 Mar 11	13 Mar 11	20 Mar	1 year		7 days
2650-25673	AMGO	ASY-M	SY-F	21 May 11	21 May 11	20 Mar		9 months	29 days
2600-15948	BCCH	AHY-U	HY-U	9 Sep 10	1 Mar 11	13 Nov		8 months	12 days
2600-15963	BCCH	AHY-U	HY-U	19 Sep 10	1 Mar 11	13 Nov		8 months	12 days
2650-25777	ATSP	AHY-U	SY-U	13 Mar 11	13 Mar 11	13 Nov		8 months	
2431-74666	SOSP	AHY-U	HY-U	1 Aug 11	3 Aug 11	22 Mar		7 months	19 days
2650-25815	ATSP	AHY-U	SY-U	19 Apr 11	19 Apr 11	17 Nov		6 months	28 days
2600-15729	ATSP	AHY-U	SY-U	21 Jan 10	19 Apr 11	7 Nov		6 months	18 days
2500-65183	BCCH	AHY-U	HY-U	26 Aug 08	21 May 11	7 Dec		6 months	16 days
2650-25674	AMGO	ASY-M	SY-M	21 May 11	20 Aug 11	23 Feb		6 months	3 days
2650-25671	AMGO	AHY-M	SY-M	21 May 11	23 May 11	25 Nov		6 months	2 days
2431-87031	DOWO	SY-M	HY-M	24 Aug 11	24 Aug 11	23 Feb		5 months	29 days
2650-43034	BCCH	SY-U	HY-U	22 Sep 11	4 Oct 11	18 Mar		5 months	14 days
2650-43023	BCCH	SY-U	HY-U	26 Aug 11	18 Oct 11	18 Mar		5 months	
2650-43046	BCCH	SY-U	HY-U	19 Oct 11	22 Oct 11	22 Mar		5 months	
2600-15947	BCCH	ASY-U	AHY-U	1 Sep 10	19 Oct 11	18 Mar		4 months	29 days
2650-43009	BCCH	SY-U	HY-U	1 Aug 11	19 Oct 11	18 Mar		4 months	29 days
2600-15369	BCCH	AHY-U	HY-U	29 Nov 09	25 Jul 11	22 Nov		4 months	28 days
2600-16146	BCCH	AHY-U	AHY-F	25 Jul 11	27 Oct 11	20 Mar		4 months	23 days
2650-25467	BCCH	AHY-U	HY-U	11 Aug 10	25 Jul 11	17 Nov		4 months	23 days
2650-43012	BCCH	SY-U	HY-U	8 Aug 11	25 Oct 11	18 Mar		4 months	23 days
2650-43807	AMGO	SY-M	HY-M	4 Nov 11	4 Nov 11	20 Mar		4 months	16 days
2600-16133	BCCH	HY-U	HY-U	26 Jun 11	25 Jul 11	10 Dec		4 months	15 days
2490-24907	BCCH	ASY-U	HY-U	16 Aug 07	9 Nov 11	22 Mar		4 months	13 days
2600-15729	ATSP	ASY-U	SY-U	21 Jan 10	7 Nov 11	20 Mar		4 months	13 days
2650-43813	AMGO	SY-F	HY-F	7 Nov 11	7 Nov 11	20 Mar		4 months	13 days
2650-41009	SCJU	SY-F	HY-F	13 Nov 11	13 Nov 11	22 Mar		4 months	9 days
2650-41005	ATSP	SY-U	HY-U	13 Nov 11	13 Nov 11	20 Mar		4 months	7 days
2421-70644	NOCA	AHY-M	AHY-M	18 Apr 11	31 Jul 11	7 Dec		4 months	7 days
2650-43018	BCCH	SY-U	HY-U	16 Aug 11	19 Oct 11	23 Feb		4 months	4 days
2650-41054	SCJU	SY-M	HY-M	22 Nov 11	22 Nov 11	22 Mar		4 months	
2650-41065	ATSP	ASY-U	HY-U	25 Nov 11	25 Nov 11	20 Mar		3 months	25 days
2650-43977	ATSP	SY-U	HY-U	30 Nov 11	30 Nov 11	23 Feb		3 months	23 days
2650-43019	BCCH	HY-U	HY-U	19 Aug 11	26 Aug 11	12 Dec		3 months	16 days
2650-41080	ATSP	ASY-U	AHY-U	10 Dec 11	10 Dec 11	22 Mar		3 months	12 days
2650-43860	AMGO	SY-M	HY-M	10 Dec 11	10 Dec 11	20 Mar		3 months	10 days

3.3.3 Birds resighted

All 69 House Finches and 87 American Goldfinches banded during winter 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 a form on 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.

3.3.4 Daily estimated totals (DET)

The number of species observed daily ranged from a low of 8 on 28 February to a high of 33 on 20 March, well above the previous single-day record for winter of 30 species on 1 November, 2009. Over the course of the season, 63 species were observed, also much higher than the previous record of 58 recorded in the winter of 2009-2010. Eight species were observed for the first time in winter (American Wigeon, Green-winged Teal, Hooded Merganser, American Kestrel, American Woodcock, Eastern Phoebe, American Pipit, and Chipping Sparrow), bringing the cumulative winter total to 91. Except for the pipit and sparrow, all other new species were observed between 20 and 27 March, reflecting the unusually warm weather during that period, which resulted in many birds advancing their spring migration. Record high mean counts for the season were set for 23 species (not including the 8 seen for the first time this winter), again mostly as a result of either early spring migrants, or in some cases lingering fall migrants.

The first House Finch fitted with a colour band.
(Photo by Simon Duval)

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 on all 70 days of the season, while banding took place on 41 (91%) of the 45 scheduled days. Banding was cancelled on the other 4 days due to rain. On 8 additional days, rain and/or strong winds resulted in reduced net hours, leaving only 33 days (73%) of full operation according to the site protocol. The 2818 net hours this spring was just above the average of 2805 over the previous six years.

Except for 3 Tree Swallows taken from nest boxes, 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). Due to lack of flooding this spring, all nets were available from the start of the season. 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 mild winter, temperatures topped 20°C for five straight days in mid-March, a period during which many spring migrants began to arrive much earlier than usual. On the contrary, temperatures for the first half of the spring season were generally colder than usual, except for a warm spell in week 3. In the second half of the season, temperatures were seasonal except for substantially above-normal highs in weeks 8 and 9.

After an unusually wet spring in 2011, rainfall was close to average this spring. There were only six days with at least 10 mm of rain, fairly well distributed through the season.

Table 4-1. Weather conditions during the 2012 Spring Migration Monitoring Program, by week.

	1	2	3	4	5	6	7	8	9	10	SEASON
Mean daily high (°C)	7.0	10.0	18.0	10.4	9.8	17.2	19.9	24.5	24.5	19.9	16.1
Mean daily low (°C)	-2.7	2.0	5.0	2.1	1.2	7.5	9.3	11.3	13.4	11.6	6.1
Mean daily temp (°C)	2.2	6.0	11.5	6.3	5.5	12.4	14.6	17.9	19.0	15.8	11.1
Highest temp (°C)	11	13	29	21	13	21	24	31	28	24	31
Lowest temp (°C)	-6	-1	1	-1	-2	3	6	6	11	9	-6
# days with rainfall	2	2	4	5	5	5	6	3	5	7	44
Total rain (mm)	7	4	2	52	10	22	8	24	32	28	189
# days with snowfall	3	-	-	4	1	-	-	-	-	-	8
Total snow (cm)	1	-	-	1	1	-	-	-	-	-	3

4.3 Results and discussion

4.3.1 Birds banded

Despite the relatively average level of effort, a record 993 birds were banded during SMMP 2012, and the 66 species involved tied the previous record set in 2009. The busiest day of the season was 17 May, with 62 birds banded (Figure 4-1), a relatively modest peak for spring. On another four other days, the count of birds banded exceeded 40; these spanned a fairly broad

range from 6 May to 23 May. For SMMP 2012 the mean count of birds banded per day was 22.1 (or 24.2 during the 41 days with nets open).

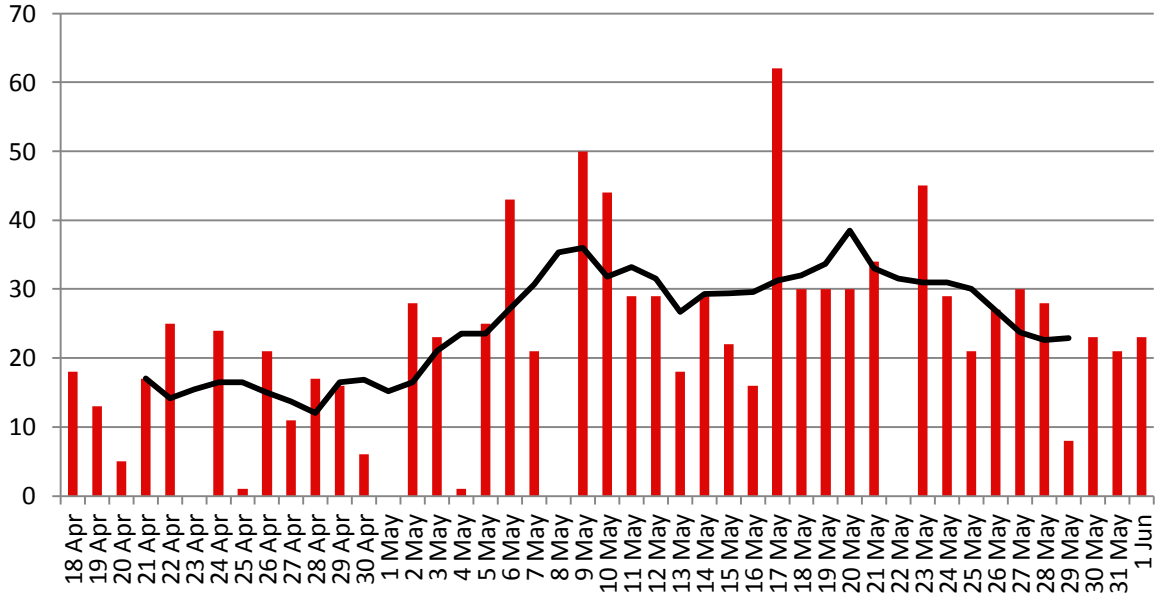

Figure 4-1. Number of individuals banded per day during the 2012 Spring Migration Monitoring Program, with a running 7-day average in black.

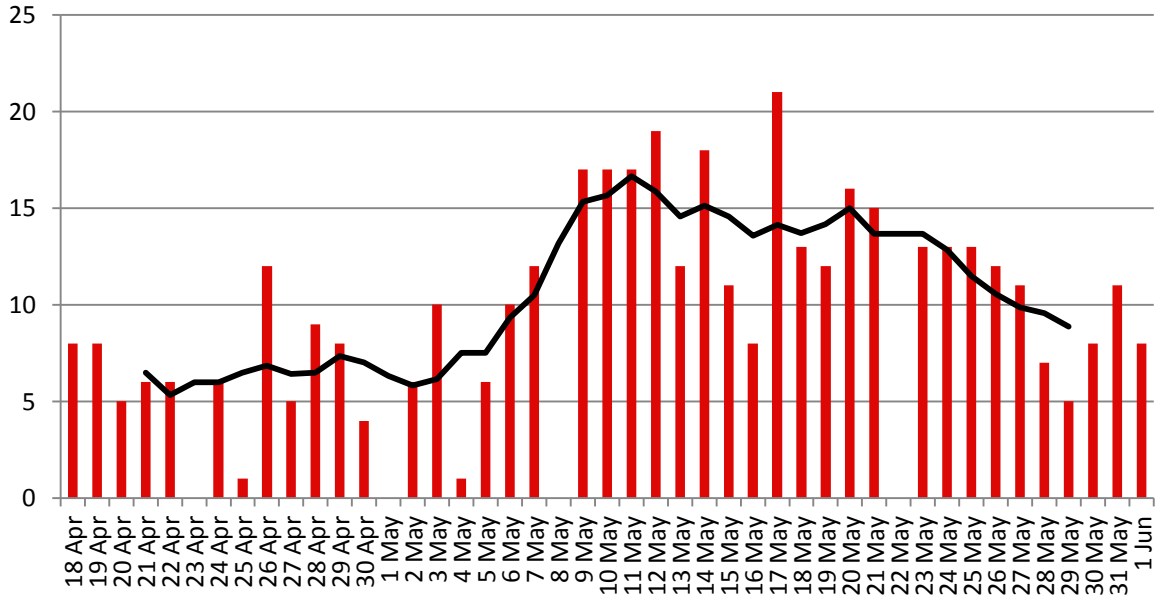

Figure 4-2. Number of species banded per day during the 2012 Spring Migration Monitoring Program, with a running 7-day average in black.

Species richness among banded bird peaked earlier than usual, during the second week of May, consistent with the atypical week 7 peak counts of several species usually more numerous in the second half of May (Figure 4-2). The greatest variety banded in a single day was just 21 species on 17 May, also earlier than usual. The mean number of species banded per day was 9.3, slightly below last year's record high of 10.2.

No new species were banded at MBO this spring. Swainson's and Gray-cheeked Thrush were observed this spring only by virtue of being banded. Fifteen species were banded just once this spring: Sharp-shinned Hawk, Hairy Woodpecker, Northern Flicker, Great Crested Flycatcher, Philadelphia Vireo, Brown Creeper, Marsh Wren, Swainson's Thrush, Gray-cheeked Thrush, Wood Thrush, Orange-crowned Warbler, Bay-breasted Warbler, Rose-breasted Grosbeak, Slate-colored Junco, and Brown-headed Cowbird.

At the other extreme, Table 4-2 lists the 10 most frequently banded species, which account for 60.4% 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 returned to top spot this year, for the fifth time in eight years. Tennessee Warbler was in second place, like in 2011, and has now been a dominant spring migrant in three of the past four years. Cedar Waxwing cracked the top three for the third time in spring, thanks to a record number of individuals banded. Of the remaining species in the top ten, Magnolia Warbler made the list for the first time since 2009, and Northern Waterthrush appeared in the top ten for the first time ever. Warblers of 18 species were banded this spring, comprising 37% of all birds banded, both somewhat lower than in spring 2011.

Table 4-2. Top 10 species banded at MBO during SMMP 2012, as well as the numbers for 2005-2011. Numbers in parentheses indicate the rank in past years.

	2012	2011	2010	2009	2008	2007	2006	2005
1. Red-winged Blackbird	116	70 (3)	85 (1)	50 (3)	114 (1)	154 (1)	169 (1)	73 (2)
2. Tennessee Warbler	94	71 (2)	7 (22)	82 (1)	6 (27)	16 (11)	2 (40)	4 (28)
3. Cedar Waxwing	77	50 (5)	72 (2)	14 (17)	29 (8)	17 (9)	17 (13)	59 (3)
4. White-throated Sparrow	57	51 (4)	22 (8)	34 (9)	79 (3)	13 (17)	42 (5)	29 (6)
5. Ruby-crowned Kinglet	54	43 (7)	36 (4)	73 (2)	92 (2)	52 (2)	58 (3)	20 (9)
6. American Goldfinch	51	17 (16)	45 (3)	47 (4)	41 (5)	51 (3)	32 (6)	111 (1)
7. Yellow-rumped Warbler	46	102 (1)	30 (5)	37 (8)	47 (4)	32 (5)	22 (8)	25 (7)
8. Magnolia Warbler	39	27 (13)	12 (18)	41 (6)	18 (14)	17 (10)	22 (8)	5 (21)
9. Yellow Warbler	37	30 (9)	26 (7)	43 (5)	36 (6)	29 (6)	21 (10)	47 (4)
10. Northern Waterthrush	28	28 (12)	12 (18)	26 (12)	12 (18)	15 (12)	5 (30)	4 (28)

4.3.2 Birds recaptured

There were 299 repeats (individuals caught within 3 months of banding at MBO) of 29 species during SMMP 2012. This is the highest count ever for a spring season, and far above the seven-year mean of 171. 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 majority of 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 43 repeats of 18 individuals. Nearly as many Black-capped Chickadees were repeats (17), but they were not encountered quite as often (32 occasions). Unlike the past two years, some migrants lingered at MBO and were recaptured in higher numbers, most notably 26 repeats of 14 Ruby-crowned Kinglets. Among species not breeding at MBO, the longest stopover was 15 days by a Fox Sparrow, followed by two Ruby-crowned Kinglets recaptured 13 and 9 days after being banded; all other repeats by definite migrants were within 5 days of banding.

Table 4-3. Top 10 species recaptured most often during SMMP 2012. These represent the same individuals caught repeatedly in some cases.

Species	# repeats	# individuals
1. Yellow Warbler	43	18
2. Black-capped Chickadee	32	17
3. Song Sparrow	28	14
4. Ruby-crowned Kinglet	26	14
5. Red-winged Blackbird	16	14
6. Baltimore Oriole	13	6
7. American Goldfinch	11	8
7. Northern Waterthrush	11	8
9. House Wren	11	7
10. Gray Catbird	11	4

There were a near-record 103 returns of 15 species during SMMP 2012 (Table 4-4). Among the surprising returns this spring were a male Baltimore Oriole and a female Red-winged Blackbird, each last documented nearly four years earlier. Also of particular interest was a male Purple Finch recovered for the first time in three years, showing considerable site fidelity despite no history of the species breeding at MBO. In total there were 23 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 8 years old. Among the returns were several individuals that were banded at MBO as juveniles, including Black-capped Chickadee, House Wren, Gray Catbird, American Redstart, Yellow Warbler, Common Yellowthroat, Song Sparrow, Baltimore Oriole, and Red-winged Blackbird.

No foreign-banded birds were captured at MBO during SMMP 2012. However, two birds banded at MBO were reported elsewhere during this period. A Common Grackle banded on 29 August 2010 was found nearby in Laval on 6 May 2012. A bigger surprise was the report of the only Merlin ever banded at MBO (on 19 April 2007) from Winchester, Massachusetts (a suburb of Boston, roughly 400 km southeast of MBO) on 27 May 2012.

Table 4-4. List of returns captured during SMMP 2012, sorted by time elapsed.

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed		
2231-72761	BAOR	ASY-M	SY-M	22 May 08	23 May 08	20 May	3 years	11 months	27 days
1951-51388	RWBL	ASY-F	SY-F	7 May 08	17 May 08	5 May	3 years	11 months	18 days
2221-20754	PUFI	ASY-M	AHY-U	20 May 07	12 May 09	18 May	3 years		6 days
2231-72744	RWBL	ASY-F	ASY-F	18 May 08	13 May 09	9 May	2 years	11 months	26 days
1212-69210	RWBL	ASY-M	JUV-U	20 Jun 09	20 Jun 09	26 Apr	2 years	10 months	6 days
1342-01030	RWBL	ASY-M	ASY-M	24 Apr 10	26 Apr 10	17 May	2 years		21 days
1342-01036	RWBL	ASY-M	SY-M	26 Apr 10	26 Apr 10	10 May	2 years		14 days
2600-15873	AMGO	ASY-M	SY-M	20 May 10	20 May 10	25 May	2 years		5 days
1342-01042	RWBL	ASY-M	SY-M	30 Apr 10	30 Apr 10	4 May	2 years		4 days
2600-16735	YWAR	ASY-F	HY-U	10 Aug 09	16 May 10	15 May	1 year	11 months	29 days
2460-40492	YWAR	ASY-M	SY-M	11 May 07	10 May 10	9 May	1 year	11 months	29 days
1951-51414	BAOR	ASY-F	HY-F	4 Aug 06	12 May 10	11 May	1 year	11 months	29 days
2431-74027	SOSP	AHY-F	AHY-M	6 May 10	22 May 10	17 May	1 year	11 months	25 days
1891-91522	RWBL	ASY-F	ASY-F	5 May 10	5 May 10	24 Apr	1 year	11 months	19 days
1891-91560	BAOR	ASY-M	SY-M	24 May 10	24 May 10	12 May	1 year	11 months	18 days
2341-57980	SOSP	AHY-M	AHY-M	1 Aug 09	31 May 10	27 Apr	1 year	10 months	26 days
2351-48629	INBU	ASY-M	AHY-M	15 Aug 10	15 Aug 10	23 May	1 year	9 months	8 days
1951-51422	BAOR	ASY-F	HY-F	7 Aug 06	5 Aug 10	12 May	1 year	9 months	7 days
2600-16257	COYE	ASY-M	HY-M	10 Aug 10	10 Aug 10	13 May	1 year	9 months	3 days
1891-91608	BAOR	ASY-M	HY-M	5 Jul 10	4 Aug 10	5 May	1 year	9 months	1 day
2431-86875	BHCO	AHY-F	AHY-F	27 Apr 11	1 May 11	25 May	1 year		24 days

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed
2421-70690	RWBL	ASY-F	ASY-F	19 May 11	19 May 11	31 May	1 year 12 days
2500-65500	AMGO	ASY-M	SY-M	16 May 09	7 May 11	18 May	1 year 11 days
2490-24915	BCCH	ASY-F	HY-U	14 Sep 07	21 May 11	31 May	1 year 10 days
2650-25676	AMGO	ASY-M	ASY-M	25 May 11	25 May 11	27 May	1 year 2 days
1342-36030	RWBL	ASY-M	ASY-M	9 May 11	9 May 11	10 May	1 year 1 day
1891-91513	RWBL	ASY-F	SY-F	1 May 10	3 May 11	2 May	11 months 29 days
1342-36014	RWBL	ASY-M	SY-M	1 May 11	30 May 11	28 May	11 months 28 days
1891-91604	BAOR	ASY-M	SY-M	27 Jun 10	27 May 11	25 May	11 months 28 days
2650-25959	YWAR	ASY-F	ASY-F	20 May 11	20 May 11	17 May	11 months 27 days
2600-16048	YWAR	ASY-F	SY-F	24 May 10	13 May 11	9 May	11 months 26 days
2460-40364	COYE	ASY-M	ASY-M	25 May 06	30 May 11	26 May	11 months 26 days
2421-70666	RWBL	ASY-F	ASY-F	7 May 11	7 May 11	3 May	11 months 26 days
2500-65380	YWAR	ASY-M	SY-M	27 May 08	23 May 11	18 May	11 months 25 days
2600-16686	YWAR	ASY-F	AHY-F	4 Aug 09	25 May 11	18 May	11 months 23 days
2500-65557	YWAR	ASY-M	AHY-M	4 Aug 08	27 May 11	17 May	11 months 20 days
1891-91451	GRCA	ASY-U	SY-F	6 Aug 09	20 May 11	10 May	11 months 20 days
2600-16228	YWAR	ASY-F	HY-U	6 Aug 10	29 May 11	18 May	11 months 19 days
1891-91394	BAOR	ASY-M	SY-M	25 May 09	23 May 11	12 May	11 months 19 days
2600-16061	YWAR	ASY-M	ASY-M	27 May 10	30 May 11	18 May	11 months 18 days
2650-25944	HOWR	ASY-U	SY-U	13 May 11	21 May 11	9 May	11 months 18 days
2421-70682	BAOR	ASY-M	ASY-M	18 May 11	18 May 11	6 May	11 months 18 days
2421-70695	BAOR	ASY-F	SY-F	21 May 11	26 May 11	14 May	11 months 18 days
1840-76953	YWAR	ASY-M	AHY-M	12 Aug 05	24 May 11	12 May	11 months 18 days
2560-25347	YWAR	ASY-F	ASY-F	9 May 09	22 May 11	9 May	11 months 17 days
2600-16002	YWAR	ASY-M	SY-M	15 May 10	29 May 11	15 May	11 months 16 days
2421-70684	RWBL	ASY-F	SY-F	18 May 11	18 May 11	4 May	11 months 16 days
2421-70699	BAOR	ASY-F	SY-F	22 May 11	26 May 11	12 May	11 months 16 days
2650-25868	HOWR	ASY-M	SY-U	2 May 11	21 May 11	6 May	11 months 15 days
2600-16066	YWAR	ASY-M	SY-M	30 May 10	30 May 11	14 May	11 months 14 days
1891-91350	BAOR	ASY-M	SY-M	11 May 09	27 May 11	10 May	11 months 13 days
2341-57968	SOSP	AHY-M	AHY-M	24 May 09	6 Jun 11	19 May	11 months 12 days
2600-16130	YWAR	ASY-F	SY-F	6 Jun 11	6 Jun 11	12 May	11 months 6 days
1342-36057	RWBL	ASY-M	SY-M	25 May 11	25 May 11	29 Apr	11 months 4 days
2431-86901	DOWO	TY-F	SY-F	20 May 11	20 May 11	19 Apr	10 months 29 days
2341-57982	SOSP	AHY-M	AHY-M	1 Aug 09	23 May 11	18 Apr	10 months 25 days
2600-16131	AMGO	ASY-M	SY-M	14 Jun 11	14 Jun 11	9 May	10 months 24 days
2431-74661	SOSP	AHY-U	AHY-U	30 Apr 11	26 May 11	20 Apr	10 months 24 days
2431-74663	SOSP	AHY-M	AHY-M	22 May 11	14 Jun 11	5 May	10 months 20 days
2351-48518	SWSP	ASY-F	HY-U	14 Jun 11	26 Jun 11	5 May	10 months 9 days
2431-74684	SOSP	HY-U	AHY-M	6 Aug 11	6 Aug 11	25 May	9 months 19 days
2431-87112	SOSP	AHY-U	HY-U	15 Aug 11	15 Aug 11	1 Jun	9 months 16 days
1891-91634	BAOR	SY-F	HY-F	25 Jul 11	25 Jul 11	7 May	9 months 12 days
2231-66134	GRCA	ASY-U	HY-U	11 Aug 07	2 Aug 11	14 May	9 months 12 days
2650-43251	YWAR	ASY-M	AHY-M	1 Aug 11	1 Aug 11	10 May	9 months 9 days
2650-43267	YWAR	SY-M	AHY-M	2 Aug 11	2 Aug 11	10 May	9 months 8 days
2650-43309	YWAR	ASY-M	AHY-M	6 Aug 11	6 Aug 11	7 May	9 months 1 day
2351-48517	SWSP	ASY-U	AHY-M	6 Jun 11	21 Jul 11	20 Apr	8 months 29 days
2650-25684	AMGO	ASY-F	AHY-F	18 Aug 11	18 Aug 11	11 May	8 months 23 days
2431-74679	SOSP	AHY-U	HY-U	4 Aug 11	4 Aug 11	26 Apr	8 months 22 days
2431-74693	SOSP	AHY-M	HY-U	7 Aug 11	7 Aug 11	29 Apr	8 months 22 days
2650-43394	YWAR	ASY-M	AHY-M	17 Aug 11	17 Aug 11	7 May	8 months 20 days
2431-74480	SOSP	AHY-U	AHY-U	11 Sep 10	7 Aug 11	26 Apr	8 months 19 days
2341-58999	SOSP	AHY-U	HY-U	26 Sep 09	12 Aug 11	22 Apr	8 months 10 days
2431-87108	SOSP	AHY-U	HY-U	14 Aug 11	14 Aug 11	20 Apr	8 months 6 days
2431-74672	SOSP	AHY-U	HY-U	2 Aug 11	23 Aug 11	21 Apr	7 months 28 days
2421-70736	GRCA	ASY-U	AHY-U	7 Aug 11	19 Sep 11	7 May	7 months 17 days
2431-87154	SOSP	AHY-U	AHY-U	17 Sep 11	17 Sep 11	3 May	7 months 15 days
2431-74694	SOSP	AHY-M	HY-U	8 Aug 11	14 Sep 11	19 Apr	7 months 5 days
2650-25700	AMGO	ASY-F	HY-F	11 Oct 11	11 Oct 11	14 May	7 months 3 days
1383-62342	BLJA	SY-F	HY-U	29 Sep 11	24 Oct 11	26 May	7 months 2 days

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed	
2431-87186	SOSP	AHY-M	HY-U	30 Sep 11	30 Sep 11	29 Apr	6 months	29 days
2431-87173	SOSP	AHY-M	HY-U	27 Sep 11	2 Oct 11	24 Apr	6 months	22 days
2650-43804	AMGO	SY-M	HY-M	4 Nov 11	4 Nov 11	26 May	6 months	22 days
2431-74079	SOSP	AHY-M	HY-U	8 Aug 10	4 Oct 11	18 Apr	6 months	14 days
2650-43043	BCCH	SY-U	HY-U	4 Oct 12	4 Oct 12	18 Apr	6 months	14 days
2650-25467	BCCH	ASY-U	HY-U	8 Nov 10	22 Nov 11	1 Jun	6 months	10 days
2560-25150	BCCH	ASY-U	U-U	2 Sep 09	4 Nov 11	10 May	6 months	6 days
2541-63960	WTSP	SY-U	HY-U	12 Oct 11	12 Oct 11	18 Apr	6 months	6 days
2650-43017	BCCH	AHY-U	HY-U	16 Aug 11	29 Oct 11	29 Apr	6 months	
2560-25133	BCCH	AHY-M	U-U	17 Aug 09	4 Nov 11	3 May	5 months	30 days
1342-36143	RWBL	SY-M	HY-M	25 Oct 11	25 Oct 11	22 Apr	5 months	27 days
2421-70813	NOCA	AHY-M	U-M	4 Nov 11	4 Nov 11	29 Apr	5 months	25 days
2600-15925	BCCH	ASY-U	HY-U	2 Aug 10	4 Nov 11	28 Apr	5 months	24 days
2650-43020	BCCH	SY-F	HY-U	22 Aug 11	17 Nov 11	6 May	5 months	20 days
2650-43039	BCCH	ASY-U	HY-U	26 Sep 11	4 Nov 11	18 Apr	5 months	14 days
2500-65165	BCCH	ASY-M	HY-M	2 Aug 08	13 Nov 11	25 Apr	5 months	12 days
2431-74164	DOWO	SY-M	HY-U	25 Jul 11	17 Nov 11	22 Apr	5 months	5 days
2600-15941	BCCH	ASY-F	HY-U	20 Aug 10	18 Nov 11	18 Apr	5 months	
2500-65183	BCCH	ASY-F	HY-U	16 Aug 08	7 Dec 11	30 Apr	4 months	23 days
2650-25486	BCCH	ASY-F	SY-U	20 Feb 11	12 Dec 11	24 Apr	4 months	12 days
2650-43037	BCCH	SY-U	HY-U	22 Sep 11	7 Dec 11	18 Apr	4 months	11 days
2600-15926	BCCH	ASY-U	HY-U	2 Aug 10	10 Dec 11	19 Apr	4 months	9 days

4.3.3 Census

One or more experienced observers walked the standardized census route daily during SMMP, often recording species not otherwise documented during the course of the morning and greatly contributing to the documentation of migration through MBO. This year just 4 species (compared to between 9 and 14 in each of the past three years) were observed only through census: Cackling Goose, American Black Duck, Northern Shrike, and Tufted Titmouse.

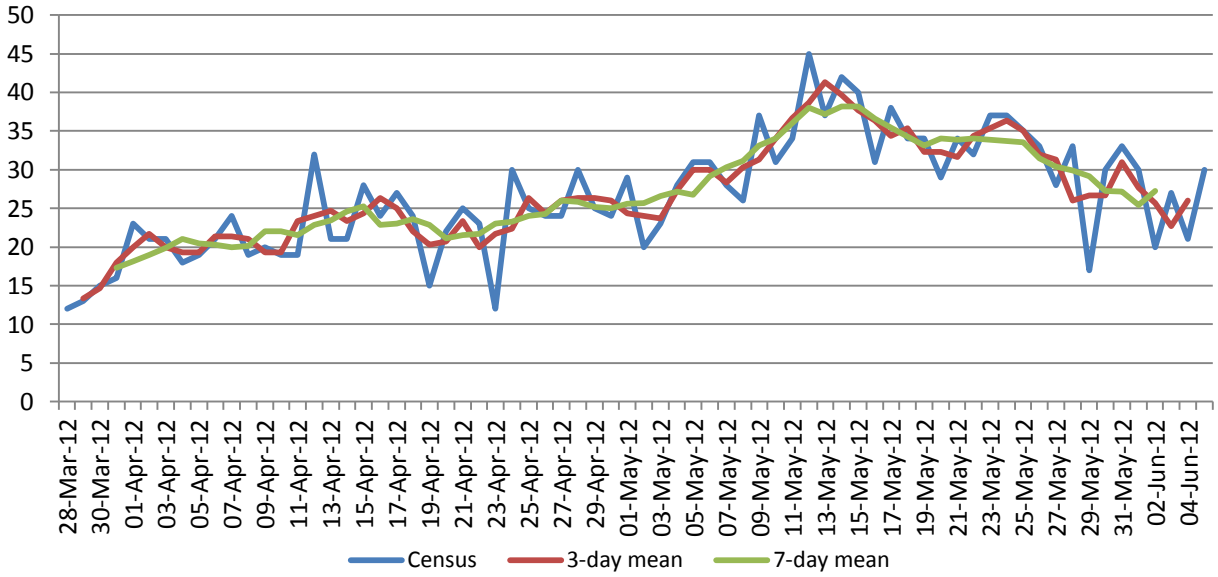

Figure 4-3. Number of species recorded on the daily census during SMMP 2012 at MBO, including a 3-day and 7-day running mean.

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 28 March and 23 April, to a high of 45 on 12 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 second week of May, one week earlier than 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. Twenty species (seven more than last year) were only recorded as incidental observations this spring, highlighting their importance for the DET. The species this year were Snow Goose, American Wigeon, Pied-billed Grebe, Bald Eagle, Osprey, Northern Harrier, Broad-winged Hawk, American Kestrel, Peregrine Falcon, Black-bellied Plover, Spotted Sandpiper, Great Black-backed Gull, Chimney Swift, Great Horned Owl, Northern Rough-winged Swallow, Barn Swallow, Eastern Bluebird, Northern Mockingbird, Golden-winged Warbler, and Vesper Sparrow.

During SMMP 2012, 143 species were recorded, slightly above the seven-year spring mean. There were 22 species seen on just a single day, highlighting the importance of full daily coverage throughout the season. Black-bellied Plover, Fish Crow, and Tufted Titmouse were added to the all-time MBO checklist this spring, increasing the total to 207 species.

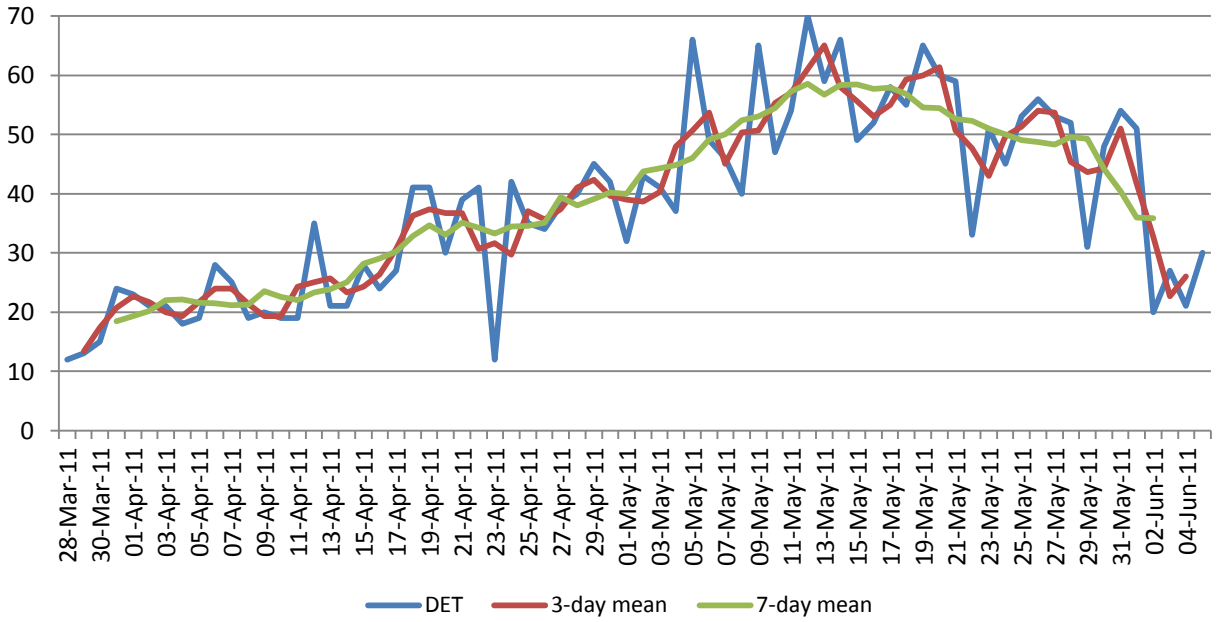

Figure 4-4. Number of species observed daily during SMMP 2012 at MBO, including a 3-day and 7-day running mean.

The highest single day total, 70 species, was recorded on 12 May, while the lowest count of 12 occurred on both 28 March and 23 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 12 May, hit a plateau of around 58 species for five days (well in advance of the peak of 22 May in 2010 and 2011), and then started to decline.

This year a record high 23 species were observed during all 10 weeks of the spring season: Canada Goose, Mallard, Wood Duck, Great Blue Heron, Red-tailed Hawk, Turkey Vulture, Ring-billed Gull, Downy Woodpecker, Pileated Woodpecker, Tree Swallow, Blue Jay, American Crow, Common Raven, Black-capped Chickadee, American Robin, European Starling, Cedar Waxwing, Northern Cardinal, Song Sparrow, Red-winged Blackbird, Brown-headed Cowbird, Common Grackle, and American Goldfinch. This list is similar to last year's, except for Hairy Woodpecker dropping off, and Wood Duck, Red-tailed Hawk, Turkey Vulture, Tree Swallow, Common Raven, and Brown-headed Cowbird being added. Only Red-winged Blackbird and American Goldfinch were banded during each week of 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 2012. 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	14	10	18	19
Number of species banded	13	10	12	13
Number of individuals banded	241	199	132	285

All but one of the species on the MBO priority list were observed during SMMP 2012 (Yellow-bellied Flycatcher missed), and 77% were banded (Table 4-5). Over 86% of individuals banded were priority species. Of the top 10 species banded at MBO during SMMP 2012, all except American Goldfinch are designated as priority species, including 6 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 2012 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 2012 was 35.2 new birds per 100 net hours, slightly lower than in 2011, but still well above all previous years. An additional 13.2 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 fairly normal in that regard, with the top three nets by rate of capture being A2, H2, and E2, although A1, E1, and H1 were all only barely above average, while the C nets rounded out the top five for spring. Except for N1, the B/N nets were below average this spring, as were all of the D nets, comparable to the pattern last year, although the relative productivity of nets within each group varied a bit.

Table 4-7. Net usage and capture rates during SMMP 2012

Net	Hours open	New captures	Repeats+ Returns	Total captures	Birds / 100 net hours New	Birds / 100 net hours Total
A1	177.5	63	28	91	35.5	51.3
A2	177.5	107	41	148	60.3	83.4
A – TOTAL	**355.0**	**170**	**69**	**239**	**47.9**	**67.3**
B2	172.5	35	15	50	20.3	29.0
N1	172.5	64	27	91	37.1	52.8
N3	176.0	40	13	53	22.7	30.1
B3	176.0	48	20	68	27.3	38.6
B/N – TOTAL	**697.0**	**187**	**75**	**262**	**26.8**	**37.6**
C1	177.5	75	26	101	42.3	56.9
C2	177.5	71	23	94	40.0	53.0
C – TOTAL	**355.0**	**146**	**49**	**195**	**41.1**	**54.9**
D1	177.5	54	30	84	30.4	47.3
D2	177.5	41	12	53	23.1	29.9
D3	177.5	40	17	57	22.5	32.1
D4	167.5	52	18	70	31.0	41.8
D – TOTAL	**700.0**	**187**	**77**	**264**	**26.7**	**37.7**
E1	177.5	70	27	97	39.4	54.6
E2	177.5	78	26	104	43.9	58.6
E – TOTAL	**355.0**	**148**	**53**	**201**	**41.7**	**56.6**
H1	178.0	63	18	81	35.4	45.5
H2	178.0	87	29	116	48.9	65.2
H – TOTAL	**356.0**	**150**	**47**	**197**	**42.1**	**55.3**
SUBTOTAL	**2818.0**	**988**	**370**	**1358**	**35.1**	**48.2**
Nest Boxes	-	4	-	4	n/a	n/a
Unknown	-	1	1	2	n/a	n/a
GRAND TOTAL	**2818.0**	**993**	**371**	**1364**	**35.2**	**48.4**

4.4 Summary and analysis

The banding effort of 2818 hours this spring was just above average. However, a record high 993 birds were banded, and the 66 species banded was also a new high for spring; both surpassed new highs set just last year. For many species, migration was earlier than ever this year. Even before the season officially began, several species began to arrive during a week of unusually mild weather beginning on 18 March, and therefore some individuals that would have in most years been counted as part of the Spring Migration Monitoring Program were likely missed. Later in the season, the main push of neotropical migrants was earlier than usual, with many species peaking in week 7 (9-15 May), rather than the more typical week 8; again, a significant sustained warm front likely was behind this pattern. The number of species observed this spring was 143, above average for the season, and including three species never before observed at MBO: Black-bellied Plover, Fish Crow, and Tufted Titmouse. The peak of 70 species on 12 May was the third best day in MBO's history, and considerably earlier than the only two dates with higher diversity (18 May 2009 and 30 May 2007).

Warblers were less dominant than last spring, but still comprised 37% of birds banded, largely due to a record number of Tennessee Warblers, plus four other species (Yellow-rumped, Magnolia, Yellow, and Northern Waterthrush) among the season's top ten. The other particularly dominant species this spring were Red-winged Blackbird and Cedar Waxwing.

Repeats and returns were both far above average this spring, in sharp contrast to the unusually low numbers in 2011. The increase in repeats was largely the result of a higher proportion of migrants stopping over this spring. The jump in returns was at least partly due to the recapture of 18 individuals that were last recorded in 2010, but also is back to near the level observed in 2009 (99) and 2010 (113) which probably reflects that through year-round programs at MBO, a high percentage of the local breeders have been banded, and many of them have a good chance of being captured during spring.

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. Most involved six hours of banding with the MAPS nets, but hours were reduced on four days due to rain or extreme heat. 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

Temperatures this summer were on average the hottest in MBO's 8-year history, with the weekly mean high temperature remaining at or above 25°C throughout the season. It was also the driest summer on record, with 16 mm less rain than in 2007. The unusually hot and dry weather may have had an impact on nesting success.

Table 5-1. Weather conditions during the 2012 MAPS program, by week.

	1 *Jun 6-12*	2 *Jun 13-19*	3 *Jun 20-26*	4 *Jun 26-Jul 3*	5 *Jul 4-10*	6 *Jul 11-17*	7 *Jul 18-24*	8 *Jul 25-31*	SEASON
Mean daily high (°C)	24.9	25.9	27.1	27.7	27.6	30.6	26.8	27.1	27.2
Mean daily low (°C)	12.8	14.9	17.9	16.9	15.9	18.9	15.0	16.7	16.1
Mean daily temp (°C)	18.9	20.4	22.5	22.3	21.8	24.8	20.9	21.9	21.7
Highest temp (°C)	30	28	33	31	31	33	31	30	33
Lowest temp (°C)	9	12	13	14	12	12	11	14	9
# days with rainfall	4	0	4	7	3	3	1	3	25
Total rain (mm)	18	0	19	12	19	42	27	4	141

5.3 Results

5.3.1 Birds banded

Both the number of individuals (184) and species (31) banded were the highest totals ever for summer, although both are skewed by an unusually productive session on July 23 during which 107 individuals of 22 species were banded, including 56 Yellow Warblers, most of which were likely unusually early fall migrants rather than local birds. In addition, 9 Tree Swallow and 4 House Wren nestlings were banded from nest boxes (not counted as part of the MAPS totals).

Table 5-2. Top 10 species banded at MBO during MAPS 2012, as well as the numbers for 2005-2011 (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.

	2012	2011	2010	2009	2008	2007	2006	2005
1. Yellow Warbler	61	11 (4)	8 (6)	10 (5)	--	--	3 (4)	4 (1)
2. Song Sparrow	26	18 (1)	20 (1)	10 (5)	--	3 (4)	10 (1)	4 (1)
3. American Robin	18	14 (2)	13 (3)	13 (3)	--	--	--	--
4. Black-capped Chickadee	13	8 (6)	14 (2)	11 (4)	--	--	--	--
5. Warbling Vireo	8	--	2 (14)	--	--	--	--	--
5. Common Yellowthroat	8	3 (9)	--	5 (10)	--	--	--	2 (5)
7. Red-eyed Vireo	6	12 (3)	9 (5)	4 (12)	--	--	--	--
8. Swamp Sparrow	5	3 (9)	5 (10)	2 (15)	--	--	4 (3)	2 (5)
8. Red-winged Blackbird	5	--	6 (7)	29 (1)	--	--	1 (6)	--
10. Cedar Waxwing	4	2 (13)	10 (4)	8 (7)	--	1 (5)	--	--

There continues to be a reasonable amount of consistency from year to year, with four species in the top ten in all four years of the MAPS program to date (Black-capped Chickadee, American Robin, Yellow Warbler, and Song Sparrow), and five of the other six in the top ten in two of the previous three years (Red-eyed Vireo, Cedar Waxwing, Common Yellowthroat, Swamp Sparrow, and Red-winged Blackbird; Table 5-2).

Species banded in MAPS for the first time this year were Red-breasted Nuthatch, Brown Thrasher, Chipping Sparrow, Brown-headed Cowbird, and Purple Finch, bringing the total count of species banded at MBO in summer to 43. The only notable miss this summer was Indigo Bunting, with 6 individuals banded over previous years.

5.3.2 Birds recaptured

There were 26 repeats of 8 species and 10 returns of 5 species during MAPS (Table 5-3). The oldest of the returns was a Red-eyed Vireo banded as an after-hatch-year bird in August 2008, and therefore at least five years old this summer. Also, a second-year Common Yellowthroat banded elsewhere was captured; her origins are not yet known. Meanwhile, an American Robin banded on 5 October 2007 was reported from nearby in Kirkland on 14 June.

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

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed		
2321-00368	REVI	ASY-F	AHY-U	5 Aug 08	5 Aug 10	6 Jul	1 year	11 months	1 day
2431-74296	VEER	AHY-F	AHY-U	10 Aug 10	1 Sep 10	14 Jul	1 year	10 months	13 days
2600-16270	COYE	ASY-M	HY-U	11 Aug 10	19 May 11	5 Jun	1 year		16 days
2600-16372	COYE	AHY-M	HY-M	23 Aug 10	4 Jul 11	5 Jun		11 months	1 day
2351-48524	REVI	AHY-U	AHY-U	25 Jul 11	25 Jul 11	23 Jun		10 months	28 days
2650-43397	COYE	AHY-F	AHY-F	18 Aug 11	18 Aug 11	23 Jun		10 months	5 days
2650-43587	COYE	SY-M	HY-M	18 Sep 11	18 Sep 11	6 Jul		9 months	18 days
2401-89694	SWSP	AHY-M	HY-U	11 Sep 11	11 Sep 11	5 Jun		8 months	24 days
2500-65200	BCCH	ASY-F	HY-U	21 Sep 08	10 Dec 11	5 Jun		5 months	26 days
2650-43059	BCCH	AHY-F	SY-U	23 Feb 12	23 Feb 12	5 Jun		3 months	12 days

5.3.3 Daily estimated totals (DET)

The number of species observed daily ranged from a low of 24 on 5 June to a high of 33 on 6 July and 14 July. Over the course of the season, 56 species were observed, slightly above the average of 53 during the first three seasons of MAPS, but below the range of 57 to 79 recorded between 2005 and 2008 when summer visits were more frequent, but less focused on banding. This year no new species were observed in summer, leaving the cumulative count for the season at 100 species.

Purple Finches were one of the big stories of 2012 at MBO, with a record number banded in all four seasons, including the first ever in summer. (Photo by Simon Duval)

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 for the first time ever, at least some banding effort occurred each day as well. However, there were 13 days during which rain and/or strong winds caused net hours to be reduced, still leaving an above-average 78 days (86%) of full operation according to the site protocol. As a result of the generally favourable conditions, the banding effort of 6788 net hours was the highest ever for FMMP.

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 2012) 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 on average well above normal, and after a month of more seasonal conditions from mid-September to mid-October, the final two weeks of fall were again much warmer than usual. Overall rainfall was below average although not at record low levels, but notably the majority of precipitation was in afternoons, evenings, or nights, resulting in minimal disruption to monitoring activities.

Table 6-1. Weather conditions during the 2012 Fall Migration Monitoring Program, by week.

	1	2	3	4	5	6	7	8	9	10	11	12	13	SEASON
Mean daily high (^{o}C)	29.3	26.0	25.1	28.3	26.5	24.0	23.6	17.9	16.3	16.0	11.6	15.2	16.4	21.3
Mean daily low (^{o}C)	19.2	18.2	14.9	17.7	14.2	12.6	10.2	8.7	8.4	7.7	3.1	6.6	7.7	11.5
Mean daily temp (^{o}C)	24.3	22.1	20.0	23.0	20.4	18.4	16.9	13.3	12.4	11.9	7.4	10.9	12.1	16.4
Highest temp (^{o}C)	33	29	27	32	29	29	29	20	21	21	18	19	22	33
Lowest temp (^{o}C)	16	16	12	11	9	6	4	5	4	1	-3	1	2	-3
# days with rainfall	4	6	3	3	2	2	3	3	4	5	6	3	1	45
Total rain (mm)	17	27	2	1	12	12	37	18	26	18	26	38	11	245

6.3 Results

6.3.1 Birds banded

The total of 4064 individuals banded during FMMP 2012 was slightly above the long-term average, although far below the only two years with higher counts (5101 in 2008 and 6808 in 2010). The difference among these three years is largely accounted for by variability in Yellow-rumped Warbler numbers; with them excluded, the totals are 3369 in 2008, 4449 in 2010, and 3778 in 2012. The 87 species banded this fall was far above the range of 74 to 78 in previous years, and included two species never before banded at MBO (Red-bellied Woodpecker and Bohemian Waxwing), plus another two banded for the first time in fall (Mourning Dove and Common Redpoll). The busiest day of the season was 4 October, with 241 birds banded (Figure 6-1), more than double last year's peak of 112 birds on 26 August, and the fourth highest single-day total in MBO's history. This year there was one distinct peak of banding activity in early October, with a much lower secondary peak in mid-September. For FMMP 2012 the mean count of birds banded per day was 44.7.

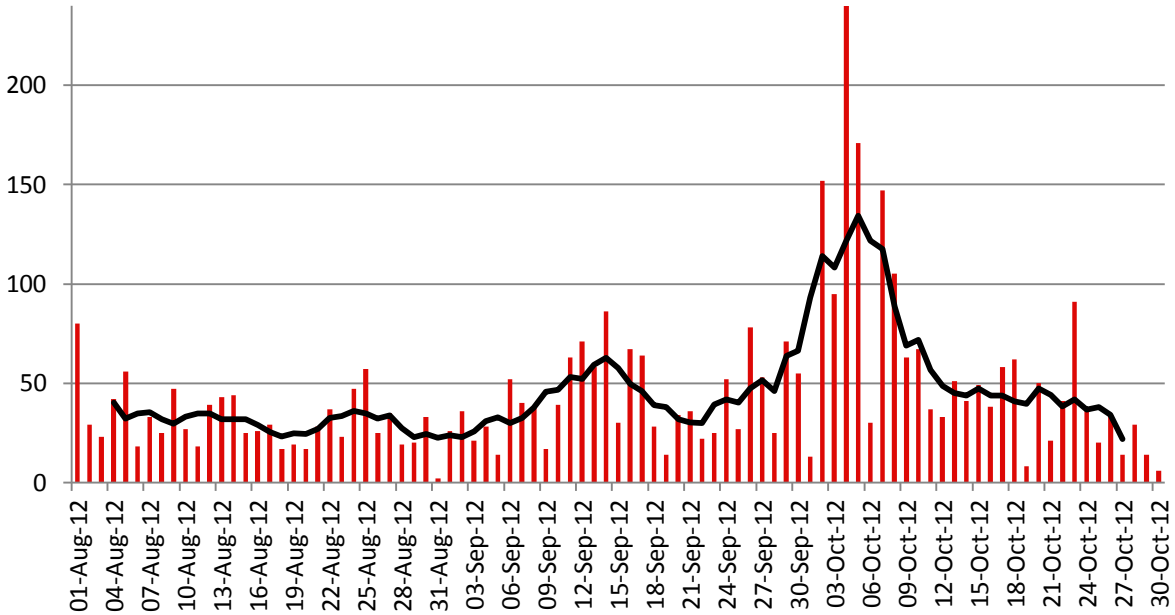

Figure 6-1. Number of individuals banded per day during the 2012 Fall Migration Monitoring Program, with a running 7-day mean in black.

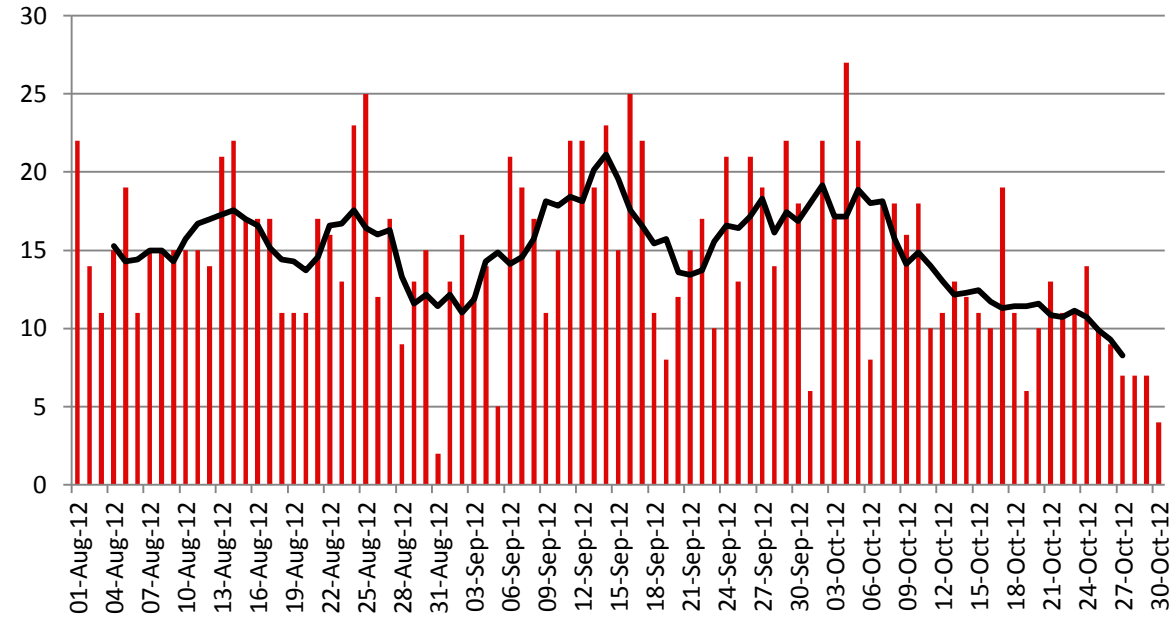

Figure 6-2. Number of species banded per day during the 2012 Fall Migration Monitoring Program, with a running 7-day mean in black.

Species richness among banded bird peaked in mid-September, but rebounded to a secondary peak in early October before tapering off sharply in the second half of the month as usual (Figure 6-2). The greatest variety banded in a single day was 27 species on 4 October, the fourth-highest single day diversity ever, and the latest in the year that such a high count has been recorded. The mean number of species banded per day was 14.7, a record high.

The only new species banded at MBO in 2012 both came in the final week of fall – Red-bellied Woodpecker and Bohemian Waxwing. Northern Shrike, Bicknell's Thrush, and Common Redpoll were detected this fall only through banding. Thirteen species/forms were banded just once this fall: Cooper's Hawk, Black-billed Cuckoo, Mourning Dove, Red-bellied Woodpecker, Yellow-bellied Sapsucker, Great Crested Flycatcher, Northern Shrike, Red-breasted Nuthatch, Wood Thrush, Bohemian Waxwing, European Starling, Yellow Palm Warbler, and Pine Warbler.

At the other extreme, Table 6-2 lists the 10 most frequently banded species, which account for 58.6% of all birds banded during FMMP 2012. 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 Swainson's Thrush, which with 176 individuals this fall nearly quintupled the previous record high of 36. Only three warblers were among the top ten species this year, but overall 23 warbler species were banded as in 2011, but they comprised only 30% of individuals banded this fall, compared to 49% last year.

White-throated Sparrow was the most frequently banded species this fall, for the third time in eight years; it also became only the third species (after Yellow-rumped Warbler and Slate-colored Junco) with over 500 individuals banded in a single season. Ruby-crowned Kinglet was in second place, with the highest total since 2007. Yellow-rumped Warbler was expected to dominate again this fall after massive flights in the previous two "even" years, but numbers proved to be relatively modest, good enough only for third place this fall. Song Sparrow numbers were marginally below average this fall, but still enough to land in fourth place, while Magnolia Warbler was just above its long-term average and rounded out the top five. Slate-colored Junco and Black-capped Chickadee both rebounded from unusually low totals in fall 2011, while American Redstart slipped slightly compared to 2010 and 2011 but remained well above average compared to all earlier years. For the second year in a row, American Robin barely hung on to tenth place, with numbers well below the long term average.

Table 6-2. Top 10 species banded at MBO during FMMP 2012, as well as the numbers for 2005-2011. Numbers in parentheses indicate the rank in past years.

	2012	2011	2010	2009	2008	2007	2006	2005
1. White-throated Sparrow	506	216 (2)	351 (5)	428 (1)	315 (4)	318 (2)	187 (5)	354 (1)
2. Ruby-crowned Kinglet	353	180 (4)	271 (6)	257 (4)	319 (3)	375 (1)	435 (2)	245 (2)
3. Yellow-rumped Warbler	292	108 (8)	2359 (1)	106 (7)	1732 (1)	68 (11)	522 (1)	157 (8)
4. Song Sparrow	216	170 (5)	219 (8)	322 (3)	199 (7)	198 (4)	302 (3)	212 (4)
5. Magnolia Warbler	203	252 (1)	260 (7)	103 (9)	264 (5)	74 (10)	157 (6)	192 (5)
6. Slate-colored Junco	198	58 (14)	509 (2)	361 (2)	236 (6)	127 (6)	33 (23)	191 (6)
7. Swainson's Thrush	176	21 (32)	27 (35)	14 (43)	15 (42)	15 (35)	7 (47)	36 (21)
8. Black-capped Chickadee	171	48 (15)	440 (3)	135 (6)	49 (15)	172 (5)	27 (27)	222 (3)
9. American Redstart	139	150 (6)	149 (10)	104 (8)	99 (9)	77 (9)	48 (13)	66 (13)
10. American Robin	130	79 (10)	394 (4)	200 (5)	346 (2)	318 (2)	299 (4)	119 (9)

6.3.2 Birds recaptured

There were 1089 repeats (individuals caught within 3 months of banding at MBO) of 52 species during FMMP 2012. The number of individuals is a record high, far beyond the long-term mean of 645; the number of species is also well above the seven-year mean of 42. 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 a Black-capped

Chickadee 19 times spanning the full season, and a Tennessee Warbler on 10 occasions between mid-August and end of September while it completed its moult.

Table 6-3. Top 11 species recaptured most often during FMMP 2012. These represent the same individuals caught repeatedly in some cases. .

Species	# repeats	# individuals
1. Black-capped Chickadee	195	48
2. White-throated Sparrow	142	109
3. Hermit Thrush	114	49
4. Gray Catbird	85	46
5. Song Sparrow	81	60
6. Ruby-crowned Kinglet	65	44
7. Common Yellowthroat	51	35
8. Swainson's Thrush	40	31
9. Tennessee Warbler	29	18
9. Magnolia Warbler	29	23
9. Yellow-rumped Warbler	29	19

Repeats were most frequent within two days of banding, and over 90% of repeats were within one week of banding. Discounting birds likely to be locals, 28 individuals of 10 species stopped over for at least two weeks (Hermit Thrush, Swainson's Thrush, Tennessee Warbler, Nashville Warbler, Northern Parula, Magnolia Warbler, Yellow-rumped Warbler, Fox Sparrow, White-crowned Sparrow, and Purple Finch). Except for the two sparrows, at least one individual of all other long-term stopovers was observed moulting. The longest stopovers (>4 weeks) were by Swainson's Thrushes (28 and 41 days), a Nashville Warbler (32 days), and a Tennessee Warbler (43 days).

There were 87 returns of 24 species during FMMP 2012 (Table 6-4). The number of individuals is a record high, and more than double the long-term mean, while the number of species is also far above the seven-year fall mean of 14. Among the noteworthy returns this fall were four individuals all last observed in fall 2009 (Red-eyed Vireo, Common Yellowthroat, Rose-breasted Grosbeak, and American Goldfinch); 27 others were last captured a year or more earlier. The oldest bird recaptured this fall was a Gray Catbird banded in May 2005 as a second-year bird, and now over 8 years old.

No foreign-banded birds were captured at MBO during FMMP 2012. The only bird banded at MBO and reported elsewhere during this period was an American Goldfinch banded on 15 September 2010 and found approximately 100 km to the east in Saint-Dominique on 28 August.

Table 6-4. List of returns captured during FMMP 2012, sorted by time elapsed.

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed		
2600-16441	AMGO	AHY-M	AHY-F	26 Aug 09	26 Aug 09	14 Sep	3 years		19 days
2321-00389	REVI	AHY-U	HY-U	12 Aug 08	4 Aug 09	17 Aug	3 years		13 days
1891-91418	RBGR	AHY-F	HY-F	2 Aug 09	2 Aug 09	3 Aug	3 years		1 day
2560-24763	COYE	AHY-U	HY-U	28 Aug 09	28 Aug 09	5 Aug	2 years	11 months	7 days
2560-25252	SCJU	AHY-M	HY-M	7 Oct 08	21 Nov 09	16 Oct	2 years	10 months	25 days
2241-91844	DOWO	AHY-M	HY-M	11 Aug 07	1 May 10	21 Oct	2 years	5 months	20 days
2600-15852	AMGO	AHY-M	ASY-M	1 May 10	20 May 10	24 Oct	2 years	5 months	4 days
2431-74021	SOSP	AHY-U	AHY-U	22 Apr 10	29 May 10	10 Oct	2 years	4 months	11 days
2600-15873	AMGO	AHY-M	SY-M	20 May 10	20 May 10	30 Aug	2 years	3 months	10 days
2431-74109	VEER	AHY-U	SY-M	27 Jun 10	27 Jun 10	1 Aug	2 years	1 month	4 days
2431-74437	SOSP	AHY-U	HY-U	18 Aug 10	18 Aug 10	20 Sep	2 years	1 month	2 days

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed		
2600-16247	COYE	AHY-M	HY-M	8 Aug 10	8 Aug 10	2 Sep	2 years		24 days
1891-89732	GRCA	AHY-U	SY-M	18 May 05	7 Aug 10	1 Aug	1 year	11 months	24 days
2600-16802	COYE	AHY-F	HY-U	31 Aug 10	31 Aug 10	10 Aug	1 year	11 months	10 days
2431-64041	SOSP	AHY-U	HY-U	2 Oct 09	18 Sep 10	8 Aug	1 year	10 months	20 days
2501-10204	HAWO	AHY-M	SY-M	3 May 11	3 May 11	24 Oct	1 year	5 months	21 days
2650-43001	BCCH	AHY-U	SY-U	13 May 11	13 May 11	24 Oct	1 year	5 months	11 days
2431-74037	SOSP	AHY-U	AHY-F	1 Jun 10	19 Apr 11	2 Sep	1 year	4 months	13 days
2650-43226	COYE	AHY-F	SY-F	30 May 11	30 May 11	14 Sep	1 year	3 months	15 days
2431-74157	SOSP	AHY-U	HY-U	25 Jul 11	25 Jul 11	5 Oct	1 year	3 months	11 days
2351-48519	REVI	AHY-U	AHY-U	14 Jun 11	14 Jun 11	11 Aug	1 year	2 months	27 days
2431-86793	WTSP	AHY-U	HY-U	7 Aug 11	7 Aug 11	15 Sep	1 year	1 month	8 days
2401-74479	OVEN	AHY-U	HY-U	4 Aug 11	4 Aug 11	29 Aug	1 year		25 days
2351-48525	OVEN	AHY-U	HY-U	25 Jul 11	7 Aug 11	27 Aug	1 year		20 days
2351-48533	REVI	AHY-U	AHY-U	31 Jul 11	2 Aug 11	17 Aug	1 year		15 days
2650-43588	COYE	AHY-F	HY-M	18 Sep 11	18 Sep 11	26 Sep	1 year		8 days
2650-43924	SCJU	AHY-M	HY-M	21 Oct 11	21 Oct 11	28 Oct	1 year		7 days
2341-58846	VEER	AHY-U	HY-U	3 Aug 09	16 Aug 11	20 Aug	1 year		4 days
2650-43339	BAWW	AHY-F	SY-U	9 Aug 11	9 Aug 11	11 Aug	1 year		2 days
2550-81717	AMRE	AHY-F	HY-F	14 Aug 11	14 Aug 11	16 Aug	1 year		2 days
2650-43503	COYE	AHY-F	HY-F	4 Sep 11	4 Sep 11	4 Sep	1 year		
2431-87199	SOSP	AHY-U	HY-U	4 Oct 11	4 Oct 11	2 Oct		11 months	29 days
2550-81774	TEWA	AHY-U	AHY-U	24 Aug 11	24 Aug 11	21 Aug		11 months	28 days
2650-43021	BCCH	AHY-U	HY-U	22 Aug 11	22 Sep 11	18 Sep		11 months	27 days
2401-74485	INBU	AHY-F	HY-U	7 Aug 11	7 Aug 11	2 Aug		11 months	26 days
2401-74454	REVI	AHY-U	ASY-U	30 May 11	16 Aug 11	9 Aug		11 months	24 days
2431-87161	SOSP	AHY-U	HY-U	23 Sep 11	23 Sep 11	16 Sep		11 months	24 days
2421-70773	GRCA	AHY-U	HY-U	11 Sep 11	23 Sep 11	15 Sep		11 months	23 days
2401-89693	REVI	AHY-U	AHY-U	11 Sep 11	11 Sep 11	2 Sep		11 months	22 days
2550-81675	TEWA	AHY-U	AHY-F	5 Aug 11	26 Aug 11	16 Aug		11 months	21 days
2650-43399	YWAR	AHY-M	HY-U	18 Aug 11	18 Aug 11	1 Aug		11 months	14 days
2650-41001	SCJU	AHY-M	HY-M	9 Nov 11	9 Nov 11	22 Oct		11 months	13 days
2650-41023	ATSP	AHY-U	HY-U	13 Nov 11	17 Nov 11	28 Oct		11 months	11 days
2560-25130	BCCH	AHY-U	HY-U	4 Aug 09	28 Sep 11	8 Sep		11 months	11 days
2650-43429	COYE	AHY-F	HY-U	24 Aug 11	24 Aug 11	4 Aug		11 months	11 days
2541-63827	SOSP	AHY-U	HY-U	23 Oct 11	23 Oct 11	3 Oct		11 months	11 days
2650-41035	SCJU	AHY-M	HY-M	17 Nov 11	17 Nov 11	25 Oct		11 months	8 days
2600-16140	BCCH	AHY-U	HY-U	21 Jul 11	29 Oct 11	29 Sep		11 months	
2550-81126	NAWA	AHY-M	AHY-U	4 Aug 11	8 Sep 11	6 Aug		10 months	29 days
2431-87153	SOSP	AHY-U	AHY-U	14 Sep 11	14 Sep 11	3 Aug		10 months	20 days
1383-62336	BLJA	AHY-U	AHY-U	23 Sep 11	22 Oct 11	30 Aug		10 months	8 days
2421-70717	NOCA	AHY-F	AHY-F	1 Aug 11	30 Oct 11	2 Aug		9 months	2 days
2650-43017	BCCH	AHY-U	HY-U	16 Aug 11	7 Dec 11	5 Aug		7 months	29 days
2650-41087	SCJU	AHY-F	SY-U	23 Feb 12	23 Feb 12	13 Oct		7 months	20 days
2650-43023	BCCH	AHY-U	HY-U	26 Aug 11	18 Mar 12	25 Oct		7 months	7 days
2650-43009	BCCH	AHY-U	HY-U	1 Aug 11	18 Mar 12	15 Oct		6 months	27 days
2650-43039	BCCH	AHY-U	HY-U	26 Sep 11	18 Apr 12	27 Oct		6 months	9 days
2490-24907	BCCH	AHY-U	HY-U	16 Aug 07	22 Mar 12	26 Sep		6 months	4 days
2600-15947	BCCH	AHY-U	AHY-U	1 Sep 10	18 Mar 12	21 Sep		6 months	3 days
2431-74164	DOWO	SY-M	HY-U	25 Jul 11	22 Apr 12	24 Oct		6 months	2 days
2650-43034	BCCH	AHY-U	HY-U	22 Sep 11	18 Mar 12	18 Sep		6 months	
2541-73901	DOWO	AHY-M	SY-M	23 Feb 12	23 Feb 12	18 Aug		5 months	25 days
2421-70813	NOCA	AHY-M	U-M	4 Nov 11	29 Apr 12	14 Oct		5 months	16 days
2541-63835	SOSP	AHY-U	AHY-U	18 Apr 12	18 Apr 12	26 Sep		5 months	9 days
2431-74694	SOSP	AHY-U	HY-U	8 Aug 11	19 Apr 12	16 Sep		4 months	27 days
2600-15926	BCCH	AHY-U	HY-U	2 Aug 10	19 Apr 12	12 Sep		4 months	23 days
2500-65165	BCCH	AHY-U	HY-U	2 Aug 08	25 Apr 12	18 Sep		4 months	23 days
2560-25133	BCCH	AHY-U	U-U	17 Aug 09	3 May 12	18 Sep		4 months	15 days
2650-43037	BCCH	AHY-U	HY-U	22 Sep 11	18 Apr 12	2 Sep		4 months	14 days
2431-87154	SOSP	AHY-U	AHY-U	17 Sep 11	3 May 12	17 Sep		4 months	14 days
2490-24915	BCCH	AHY-U	HY-U	14 Sep 07	31 May 12	14 Oct		4 months	14 days

Band number	Species	Age/sex in 2012	Age/sex at banding	Banding date	Previous capture	2012 return	Time elapsed	
2421-70736	GRCA	AHY-U	AHY-U	7 Aug 11	7 May 12	16 Sep	4 months	9 days
2431-87112	SOSP	AHY-U	HY-U	15 Aug 11	1 Jun 12	3 Oct	4 months	2 days
2650-41141	WAVI	AHY-U	SY-U	6 May 12	6 May 12	4 Sep	3 months	28 days
2421-70894	GRCA	AHY-U	SY-U	19 May 12	19 May 12	17 Sep	3 months	28 days
2650-25467	BCCH	AHY-U	HY-U	8 Nov 10	1 Jun 12	29 Sep	3 months	28 days
2560-25150	BCCH	AHY-U	U-U	2 Sep 09	10 May 12	4 Sep	3 months	25 days
2421-70875	NOCA	AHY-F	AHY-F	12 May 12	12 May 12	6 Sep	3 months	25 days
2431-74079	SOSP	AHY-U	HY-U	8 Aug 10	18 Apr 12	11 Aug	3 months	23 days
2650-43020	BCCH	AHY-U	HY-U	22 Aug 11	6 May 12	28 Aug	3 months	22 days
1383-62342	BLJA	AHY-U	HY-U	29 Sep 11	26 May 12	12 Sep	3 months	17 days
2541-63842	SOSP	AHY-U	AHY-U	21 Apr 12	21 Apr 12	6 Aug	3 months	15 days
2600-15941	BCCH	AHY-U	HY-U	20 Aug 10	18 Apr 12	1 Aug	3 months	13 days
2600-16131	AMGO	AHY-M	SY-M	14 Jun 11	9 May 12	20 Aug	3 months	11 days
0972-31247	AMRO	HY-M	HY-M	6 Jul 12	6 Jul 12	17 Oct	3 months	11 days
2650-41304	YWAR	AHY-F	SY-F	12 May 12	12 May 12	18 Aug	3 months	6 days
2431-74663	SOSP	AHY-U	AHY-M	22 May 11	5 May 12	11 Aug	3 months	6 days

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. Just three species this fall were observed only through census: Olive-sided Flycatcher, Blue-gray Gnatcatcher, and Blackburnian Warbler.

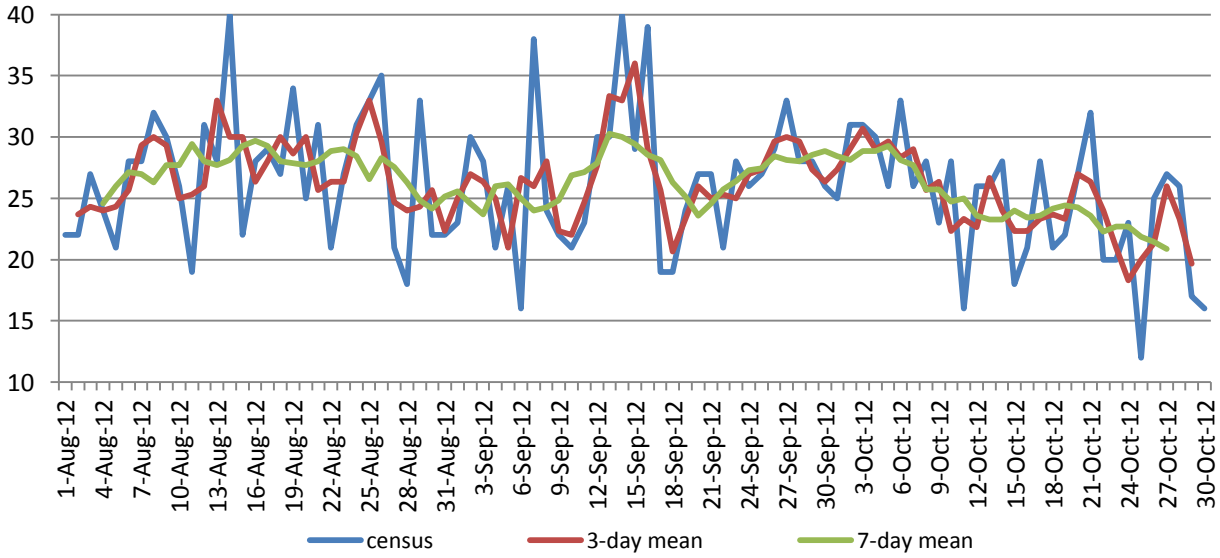

Figure 6-3. Number of species recorded on the daily census during FMMP 2012 at MBO, including a 3-day and 7-day running mean.

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 25 October to a high of 40 reached twice, one month apart on 14 August and 14 September. 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-August, mid-September, and early October, then tapered off to the end of the season.

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. Twenty species were observed only as incidental observations, highlighting their importance for the DET: Tundra Swan, Blue-winged Teal, Common Merganser, Great Egret, Black-crowned Night Heron, seven raptor species (Bald Eagle, Osprey, Golden Eagle, Broad-winged Hawk, Rough-legged Hawk, Turkey Vulture, Great Horned Owl), American Woodcock, Great Black-backed Gull, Common Tern, Black Tern, Common Nighthawk, Field Sparrow, Evening Grosbeak, and House Sparrow.

During FMMP 2012, 149 species were recorded, well above the seven-year fall mean of 143, and second only to the 151 species counted during FMMP 2005. There were 13 species seen on just a single day, highlighting the importance of full daily coverage throughout the season. No new species were observed in fall, leaving the all-time checklist for MBO at 207 species, after the addition of three new ones in spring.

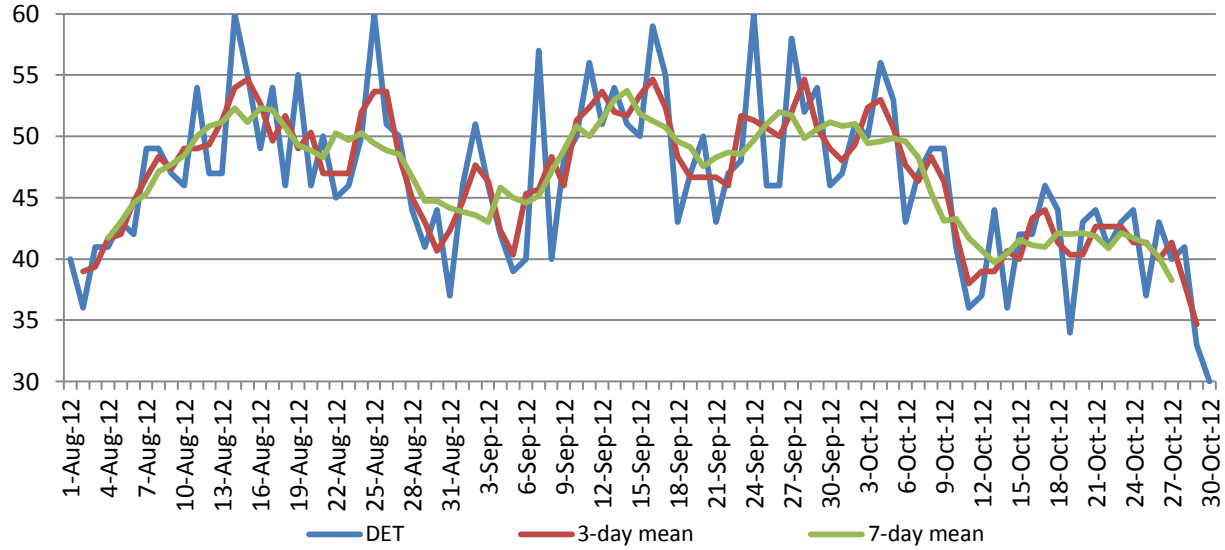

Figure 6-4. Number of species observed daily during FMMP 2012 at MBO, including a 3-day and 7-day running mean.

The highest single day total, 60 species, occurred on 14 August, 25 August, and 24 September, while the lowest count of 30 species was on the final day of the season, 30 October (Figure 6-4). Only once previously (18 September 2011) did a fall DET reach 60 species or higher. 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 peaked above 50 species in mid-August, mid-September, and again in late September, then dropped sharply in the second week of October to a plateau of just over 40 species for most of the remainder of the season.

This year a record high 27 species were observed during all 13 weeks of the fall season: Canada Goose, Mallard*, Wood Duck*, Red-tailed Hawk*, Sharp-shinned Hawk*, Cooper's Hawk*, Ring-billed Gull*, Mourning Dove, Downy Woodpecker, Hairy Woodpecker, Pileated Woodpecker, Northern Flicker, Blue Jay, American Crow, Black-capped Chickadee, White-

breasted Nuthatch, American Robin, Gray Catbird*, European Starling, Northern Cardinal, Song Sparrow, Swamp Sparrow*, White-throated Sparrow, Red-winged Blackbird, Common Grackle, Purple Finch*, and American Goldfinch (* = species not observed in all weeks in fall 2011). Among the species observed weekly in fall 2011, only Rock Pigeon, Common Raven, and Cedar Waxwing missed repeating the feat this year, and the latter two each by just one week. As in 2011, only Black-capped Chickadee, Song Sparrow, and White-throated Sparrow were banded in all 13 weeks.

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 2012. 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	14	10	17	19
Number of species banded	14	10	14	17
Number of individuals banded	651	1543	535	875

All but two of the species on the MBO priority list were observed during FMMP 2012 (Cliff Swallow and Savannah Sparrow were missed), and 89% were banded (Table 6-5). Nearly 89% of individuals banded were priority species, which is near the upper end of the range of 83% to 91% in previous years. Of the top 10 species banded at MBO during FMMP 2012, all are designated as priority species, including 6 (all among this year's top 7) 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 2012 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 2012 was 59.9, below the seven-year mean of 74.1 due to the combination of a record level of effort and overall numbers close to average. However, the additional 17.3 birds recaptured per 100 net hours was a record high.

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. As in spring 2012, E2 and H2 were among the busiest nets this fall; the A nets, C2, and H1 rounded out the top six, so results closely matched the norm (although A1 and A2 had been below average in fall 2011). As in fall 2011, the B/N nets were relatively close to the overall average capture rate for the site, with only B2 bringing the numbers significantly down. Once again, the D nets were by far the least productive group, with D2 especially poor; E1 was also poor this fall.

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. A thorough habitat review was done on site in early October 2012, supplemented with annual site photos dating back to 2005. The greatest amount of habitat change has occurred around the A and D nets, with buckthorn, sumac, and raspberry encroaching on the net lanes at the expense of goldenrod (which is heavily frequented in fall by several warblers and sparrows in particular). Habitat management in early 2013 will focus on selective clearing of shrubs in these areas to facilitate the return of goldenrod.

Table 6-7. Net usage and capture rates during FMMP 2012

Net	Hours open	New captures	Repeats+ Returns	Total captures	Birds / 100 net hours	
					New	Total
A1	435.3	331	89	420	76.0	96.5
A2	433.0	318	103	421	73.4	97.2
A – TOTAL	**868.3**	**649**	**192**	**841**	**74.7**	**96.9**
B2	390.3	161	56	217	41.3	55.6
N1	390.3	253	89	342	64.8	87.6
N3	400.0	238	89	327	59.5	81.8
B3	400.0	208	62	270	52.0	67.5
B/N – TOTAL	**1580.6**	**860**	**296**	**1156**	**54.4**	**73.1**
C1	435.5	285	70	355	65.4	81.5
C2	435.5	311	67	378	71.4	86.8
C – TOTAL	**871.0**	**596**	**137**	**733**	**68.4**	**84.2**
D1	430.2	165	69	234	38.4	54.4
D2	431.5	105	42	147	24.3	34.1
D3	432.5	152	39	191	35.1	44.2
D4	431.5	187	49	236	43.3	54.7
D – TOTAL	**1725.7**	**609**	**199**	**808**	**35.3**	**46.8**
E1	433.2	178	48	226	41.1	52.2
E2	436.5	409	124	533	93.7	122.1
E – TOTAL	**869.7**	**587**	**172**	**759**	**67.5**	**87.3**
H1	436.5	340	86	426	77.9	97.6
H2	436.5	420	89	509	96.2	116.6
H – TOTAL	**873.0**	**760**	**175**	**935**	**87.1**	**107.1**
SUBTOTAL	**6788.3**	**4061**	**1171**	**5232**	**59.8**	**77.1**
Unknown	-	3	5	8	n/a	n/a
GRAND TOTAL	**6788.3**	**4064**	**1176**	**5240**	**59.9**	**77.2**

6.4 Summary and analysis

For the first time ever, weather allowed for banding on all days throughout the fall season, and as a result banding effort was the highest ever. The total of 4064 birds banded was well above the long-term average, although much lower than in 2008 and 2010 since there was only a modest migration of Yellow-rumped Warblers. The 87 species banded was a new record by a large margin, and surprisingly given that the range in all previous years was remarkably consistent, always between 74 and 78. The peak day of the season was 4 October, with 241 individuals banded, the third-highest single day total in MBO's history.

Throughout most of the season, the numbers of species observed and banded weekly were both far above average, and often at record levels. The total of 149 for the season was second only to the 151 counted in 2005. Three times in August and September, the daily estimated total reached 60 species, notable as in seven previous years, the count had only reached that level once before. While banding results suggest that it was an above-average year for fall migration, the elevated daily/weekly/seasonal species counts probably also reflect the dedicated efforts of many volunteers this fall to contribute through remaining observant throughout each

morning. Although this has been encouraged throughout MBO's history, the approach has gradually been embraced by more and more participants; this level of effort should be maintained in future years.

As in spring, warblers were somewhat less dominant than in 2011, in fall comprising only 30% of birds banded, and just three of the top ten species, half as many as last year. Instead, it was a big fall for sparrows, with 1150 individuals of 9 species banded, including three of the top six species, and record high counts for Chipping, Fox, Lincoln's, and White-throated Sparrows. Even more unusual was the unprecedented abundance of *Catharus* thrushes this fall, with all five species observed and banded in higher numbers than in any previous year. This was exemplified best by Swainson's Thrush, with 176 individuals banded, more than in all seven previous years of migration monitoring combined. In all, 23 of the 87 species banded were in record numbers for the season, including two never before banded in fall (Mourning Dove and Common Redpoll) and two banded for the first time ever at MBO (Red-bellied Woodpecker and Bohemian Waxwing), bringing the list for the site to 110 species. Relatively few species were notable for their scarcity in fall 2012, but fewer Black-throated Blue Warblers were banded than any year since 2006, and the Ovenbird count was the lowest since 2007.

There were more repeats this fall than in any previous year, in part because two of the species banded in record numbers (White-throated Sparrow and Hermit Thrush) were slow to move through, with over 20% of the sparrows and more than half of the thrushes stopping over, and together accounting for 256 repeats (24% of the season total). The only species with more repeats was Black-capped Chickadee, with 195 encounters involving 48 individuals, most of them local breeders or their offspring, but also including a few of the migrants that moved through late in the season. As usual, molt migrants included Hermit and Swainson's Thrushes, as well as Tennessee and Nashville Warblers, but for the first time also Northern Parula.

Despite a return to an above-average number of returns in spring, and another ten in summer, there was a record total of 87 returns in fall, including 15 that had been missed since at least 2010. While most of these are local breeders, there were 5 Slate-colored Juncos and an American Tree Sparrow showing winter site fidelity, and a Tennessee Warbler, showing consistency as a molt migrant.

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. In 2012, a secondary array of five nets T1 to T5 was established approximately 500 m away, with a second broadcaster playing a Boreal Owl lure. At both locations, 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 37 (88%) of 42 nights during the standard season, although effort per night was somewhat variable in relation to weather conditions. Additionally, banding took place on 15 supplementary nights, November 7 and November 9-22, in an attempt to target late-moving Boreal Owls and identify the end of migration for Northern Saw-whet Owls.

7.2 Site conditions

Temperatures were normal to begin the season, but then were above average in weeks 12 and 13, before cooling off sharply for the final standard week and two supplemental weeks. Rainfall was heaviest and most frequent over the first four weeks, but interfered with banding on relatively few nights.

Table 7-1. Weather conditions during the 2012 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 (^{o}C)	16.3	16.0	11.6	15.2	16.4	6.4	13.7	7.8	5.1	11.9
Mean daily low (^{o}C)	8.4	7.7	3.1	6.6	7.7	-0.3	5.5	-2.7	-5.5	3.3
Mean daily temp (^{o}C)	12.4	11.9	7.4	10.9	12.1	3.0	9.6	2.5	-0.2	7.6
Highest temp (^{o}C)	21	21	18	19	22	16	22	19	7	22
Lowest temp (^{o}C)	4	1	-3	1	2	-2	-3	-6	-7	-7
# days with rainfall	4	5	6	3	1	4	23	3	0	26
Total rain (mm)	26	18	26	38	11	7	126	3	0	129

7.3 Results

The 235 Northern Saw-whet Owls banded during the standard season (weeks 9-14) was a new record, although it partly reflected the extra effort from a second set of nets, and the overall capture rate of 7.9 saw-whets per 100 net hours was similar to last year (7.7); an extra 14 Northern Saw-whet Owls were banded during the supplementary period. Eastern Screech-Owls were banded for the first time since 2010, while Barred, Long-eared, and Boreal Owls were all banded for the first time ever. Great Horned Owls were also heard during banding.

Table 7-2. Summary results of the 2012 Northern Saw-whet Owl Monitoring Program, by week.

	9	10	11	12	13	14	STANDARD	15	16	TOTAL
# owls banded	44 [a]	42	57	76 [b]	12	14 [c]	245	11	3	259
# owls repeat	-	2	3	2	3	5	15	4	-	19
# owls return	-	-	-	-	-	-	0	-	-	0
# owls foreign	-	1	1	-	-	-	0	-	-	2
# net hours	484.9	501.6	414.7	570.6	520.8	468.5	2961.1	708.3	819.0	4488.4
# banded / 100 hrs	9.1	8.4	13.7	13.3	2.3	3.0	8.3	1.6	0.4	5.8

[a] – incl. 3 Eastern Screech-Owls [b] – incl. 1 Barred Owl and 2 Long-eared Owls [c] – incl. 4 Boreal Owls

7.3.1 Birds banded

The season got off to a busy start with 29 Northern Saw-whet Owls banded in the first two nights, compared to a total of just 27 over 12 nights of effort during the first week of the season across all previous years. After this initial flurry, activity tapered off for a while, until the main peak of migration between October 7 and 23, during which 163 Northern Saw-whet Owls (65% of the season total) were banded. The busiest night of the year was October 16-17, with 30 Northern Saw-whet Owls banded, compared to just one the previous night. On 7 of 37 nights during the standard season, no owls were banded.

This year was overwhelmingly dominated by hatch-year birds, which accounted for 200 of 249 (80%) saw-whets banded; another 31 (12%) were second-year, and the remainder were older. As usual, females dominated (66%), but less so than in previous years; males remained scarce (7%, same as in 2011), but there were more intermediates that could not be sexed (27%).

Four additional species were banded this year, three of which were new for MBO. Three Eastern Screech-Owls were banded in the first week of the season, a Barred Owl was banded on October 19, two Long-eared Owls were banded on October 23, and four Boreal Owls were banded over the nights of November 5 and 6.

7.3.2 Birds recaptured

There were no owl returns this fall. However, there were 14 repeats during the standard season, a record high, plus another 4 in the supplemental period. Most recaptures were within 1-3 nights of banding, but four individuals were recaptured at least 10 nights later, and in one case after three weeks.

Only two foreign owls were recaptured at MBO this fall. One was banded as a second-year female at King's Gap, Pennsylvania on 17 October 2010 and recaptured at MBO on 9 October 2012; the other was recaptured at MBO on 12 October 2012 but the original data have not yet been received. In addition, 10 Northern Saw-whet Owls banded at MBO (half each from 2011 and 2012) were recaptured elsewhere between 17 October and 20 November 2012 (Table 7-3). Six of them were recaptured in Pennsylvania, where extra effort was put into owl banding this fall; the others were scattered across Michigan, West Virginia, Maryland, and Massachusetts. Remarkably, one owl was recaptured twice in the same night at different sites in Pennsylvania.

Table 7-4. List of MBO Northern Saw-whet Owls captured elsewhere in 2012, sorted by time elapsed.

Band number	Age/sex in 2012	Age/sex at banding	Banding date	2012 capture	Time elapsed	Banding location	Distance (km)
0924-66296	TY-F	SY-F	8 Oct 11	8 Nov	1 year, 1 month	Lake Erie Metropark MI	830
0926-66266	SY-F	HY-F	6 Oct 11	5 Nov	1 year, 29 days	Hawk Mountain PA	570
0924-66252	TY-F	SY-F	6 Oct 11	24 Oct	1 year, 18 days	New Tripoli PA	580
1014-44207	SY-F	HY-F	10 Oct 11	17 Oct	1 year, 7 days	Elizabethville PA	610
1014-44241	TY-F	SY-F	22 Oct 11	24 Oct	1 year, 2 days	Lincoln MA	380
1014-47667	SY-F	SY-F	7 Oct 12	20 Nov	1 month, 13 days	Fairmont WV	830
1014-47617	HY-F	HY-F	27 Sep 12	7 Nov	1 month, 11 days	King's Gap PA	590
1014-47676	HY-F	HY-F	8 Oct 12	10 Nov	1 month, 2 days	Chestertown MD	740
1014-64441	HY-M	HY-M	17 Oct 12	6 Nov	20 days	Hawk Mountain PA	570
1014-64441	HY-M	HY-M	17 Oct 12	6 Nov	20 days	New Tripoli PA	580

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 m of an audiolure broadcasting a Northern Saw-whet Owl call throughout the night, while O5 is approximately 15 m away, and E2 is nearly 30 m

away. O4 is entirely within a conifer grove, while O1-O3, O5, and E1 are along its periphery, and E2 is within a cluster of hawthorns. This year an additional array of five 60-mm nets (T1-T5) was established at the northeast end of MBO, approximately 500 m from the O/E nets. This secondary location was targeted at Boreal Owls, and an audiolure of that species was used nightly throughout the season; all nets were within 15 m of the speaker.

Capture rates varied substantially among nets (Table 7-4). Not surprisingly, the vast majority (84%) of Northern Saw-whet Owls were at the O/E nets, whereas three of four (75%) Boreal Owls were at the T nets. As usual, captures were most frequent at O1 (15%) and O4 (24%), although these nets were less dominant than in past years. Among the T nets, T2 was the most productive over the full season, but T5 was added on October 17 and during the second half of the season its capture rate exceeded that of all others in the group. Overall though, the productivity of the T nets was lower than all of the O/E nets except O5, which as usual had the lowest capture rate by far. Orientation, cover, proximity to the audiolure, nature of the audiolure, and mesh size are all likely to have an influence on capture rate, and it is difficult to separate the relative influence of these factors.

Table 7-4. Net usage and capture rates during the standard 2012 owl monitoring season

Net	Hours open	New captures	Repeats+ Returns	Total captures	Owls / 100 net hours New	Owls / 100 net hours Total
O1	276.2	41		41	14.8	14.8
O2	276.2	27	1	28	9.8	10.1
O3	276.2	29	1	30	10.5	11.5
O4	276.2	59	4	63	21.4	22.8
O5	276.2	6		6	2.2	2.2
O - TOTAL	**1381.0**	**162**	**6**	**168**	**11.7**	**12.2**
E1	276.2	17	3	20	6.2	7.2
E2	276.2	25	2	27	9.1	9.8
E - TOTAL	**552.4**	**42**	**5**	**47**	**7.6**	**8.5**
SUBTOTAL	**1933.4**	**204**	**11**	**215**	**10.6**	**11.1**
T1	228.2	7	1	8	3.1	3.5
T2	228.2	16	1	17	7.0	7.4
T3	228.2	3	1	4	1.3	1.8
T4	228.2	9	1	10	3.9	4.4
T5	114.9	6	2	8	5.2	7.0
T - TOTAL	**1027.7**	**41**	**6**	**47**	**4.0**	**4.6**
GRAND TOTAL	**2961.1**	**245**	**17**	**262**	**8.3**	**8.8**

The three species banded for the first time this fall, from left to right, Barred Owl, Long-eared Owl, and Boreal Owl. (Photos 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 in 2012 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 la région des Moulins, and Club d'ornithologie de Mirabel. Local presentations on MBO research were given at meetings of Bird Protection Quebec and the Congrès des ornithologues amateurs du Québec. 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 2011 were the colour of the mouth lining in Black-capped Chickadees, Blue Jays, Gray Catbirds, and vireos; tail spot size in Magnolia Warblers and American Robins, and tail colour and pattern in American Goldfinches. 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. Over 4500 hours of service on site were contributed by over 110 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 developing a new data-entry program that has greatly improved the speed and accuracy with which we process our records
- The banders-in-charge, who each contributed 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

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.*
Bob Barnhurst, Barbara Frei, James Junda, 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, Nicolas Bernier, Lisa Keelty, Marie-Pier Laplante, 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, Tiffany Gilchrist, Alison Hackney, Lima Kayello, Meghan Laviolette, Alex Stone, Gijs van Tol

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.*
Sue Bishop, Jean Demers, Frédéric Hareau, Barbara and Don MacDuff, Betsy McFarlane, Chris Murphy, Ahmad Shah, Clémence Soulard, Elise Titman

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.*

Richard Beauchamp, Normand Beaudet, Suzanne Bérard, Emily Board, Marc Boisvert, Cindy Bouchard, Emily Boulanger, Dan Brisebois, Adam Bromwich, Carl Bromwich, Chantal Cloutier, Chris Cloutier, Yolande Cossette, Dawn Cruchet, Marine Dageville, Rui de Jesus, Andrée-Anne Deschamps Leonard, Gail Desnoyer, Nicole Doucet, Amanda Droghini, Tammy Elliot, Jessica Fiset, David Fishman, Michael Fleming, Liette Fortier, Alexandre Fouillet, Andray Gagné, Louise Gagné, Jo-Annie Gagnon, Marie-France Gagnon, Nathalie Gendron, Sean Godwin, Monique Groulx, Myriam Haineault, Nathaniel Harper, Shelley Kirk, Joane Lafontaine, Benoit Laliberté, Catherine Langevin, Patrick Laniel, Louise LeBel, Catherine Leclerc, Martin Lessard, Asya Malinova, Francine Marcoux, Daniel Martin, Ana Morales, Harriel Morgan, Karen Nassi, Tash Nicholson, Aubrey Paolino, Charla Patterson, Yves Payette, Scott Pemberton, Benoit Piquette, Francine Piquette, Yves Poirier, Geneviève Potvin, Charles Régnier, Sabrina Rochefort, Lisa Rosenberger, Catherine Russell, Marilou Skelling, Jane Sorensen, Patricia Stotland, Bonnie Soutar, Victor Thomasson, Carine Touma, Jessica Turgeon, Joost Valkenburg, Jay VanderGaast, Monique Venne, Yifu Wang

Maintenance: *Last but certainly not least – responsible for maintaining the facilities and trails in good and safe working condition, and assisting with installation of additional nest boxes*
Alex Bernal, Robert Boule, Malcolm Johnson, Norsola Johnson, Mariner Palmer, George Panciuk, Andrew Patterson, Chick Taylor, Chris Taylor, Bruno Tremblay, Geoffrey Webster, Ryan Young

In addition, we extend our sincere thanks to all who donated materials or funds to MBO in 2012, 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: Richard Beauchamp, Mike Beaupré, Simon Duval, Barbara Frei, Louise Gagné, James Junda, Barbara MacDuff, and Francine Marcoux

Red-eyed Wearios: Sue Bishop, Averill Craig, Gay Gruner, Betsy McFarlane, and Ahmad Shah

Bird Protection Quebec, for financial support of the winter monitoring program, 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
PF Expert, for donating three windows to let more light into the banding cabin
The Home Depot, for construction materials in support of renovations at MBO
Centre de conservation de la faune ailée, for donating all seeds for the winter feeders
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Avian Science and Conservation Centre, for logistical and equipment support

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Appendix A. Seasonal occurrence of species

The charts below summarize the pattern of occurrence of each of the 167 species observed during the 2012 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 2011-12, and summer 2012. Brief text-only summaries are also provided for the 7 species observed during the 2012 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 2012). 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 2011 to 30 October 2012), 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 annual report (Gahbauer 2011).

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					12.57		14.29				**2.69**
# DAYS OBSERVED					1		1				**2**
	FIRST OBSERVED: April 25			LAST OBSERVED: May 12			PEAK DATE: May 12			NUMBER OF INDIVIDUALS: 100	

	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	3.14	**0.30**
# DAYS OBSERVED												2	1	**3**
	FIRST OBSERVED: October 17				LAST OBSERVED: October 28			PEAK DATE: October 28			NUMBER OF INDIVIDUALS: 22			

Notes: Scarcer than in any previous spring, and also later than usual. Also atypically uncommon in fall, with the first sighting of the season later than in any previous year. One flock of 63 in late winter, just the third record for the season across all years.

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

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 9			LAST OBSERVED: May 9			PEAK DATE: May 9			NUMBER OF INDIVIDUALS: 1	

Notes: Only one individual observed this year, on May 9; just the third of eight years with a spring observation.

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	297.71	162.29	100.71	158.14	68.57	195.29	128.00	2.43	3.57	7.57	**112.43**
# DAYS OBSERVED	7	7	7	7	7	7	7	6	6	5	**66**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: March 28			NUMBER OF INDIVIDUALS: 710	

	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	4.86	11.71	45.71	73.00	27.57	45.57	45.57	93.00	407.14	406.57	296.71	1159.14	1206.43	**294.08**
# DAYS OBSERVED	2	4	6	7	5	7	6	7	7	7	7	7	7	**79**
	FIRST OBSERVED: August 6				LAST OBSERVED: October 30			PEAK DATE: October 17			NUMBER OF INDIVIDUALS: 2343			

Notes: Spring numbers well below average, with two distinct peaks a month apart in early April and early May, then rapidly tapering off to the end of spring as usual. Fall numbers were above average mid-August to mid-September, then below average for the next month, before reaching a peak in the second half of October. More abundant than ever in winter, largely due to big flocks in late March, peaking at 3000 individuals on March 18. Observed only on the first day of summer.

TUSW: Tundra Swan / Cygne siffleur (*Cygnus columbianus*)

	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 24				LAST OBSERVED: September 24			PEAK DATE: September 24			NUMBER OF INDIVIDUALS: 1			

Notes: A single individual was spotted on September 24, only the second record for MBO, and coming almost exactly a year after the first record on September 19, 2011.

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	8.86	9.29	12.14	14.29	11.57	10.71	14.00	8.57	4.43	1.29	**9.51**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	4	**67**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 4			PEAK DATE: Apr 27, Apr 28, May 9		NUMBER OF INDIVIDUALS: 22		

	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	1.29	1.14	1.29	1.29	4.29	3.14	2.29	2.86	7.43	7.71	7.14	**3.16**
# DAYS OBSERVED	1	2	4	4	3	4	6	7	3	4	6	5	4	**53**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 29			PEAK DATE: October 22			NUMBER OF INDIVIDUALS: 34			

Notes: Seen every week in spring, and in record abundance overall, largely due to a period of five weeks mid-season during which the daily mean remained above 10. Also observed weekly in fall, for the first time since 2007. Overall, fall numbers were higher than in any year except 2006, and as usual, they peaked near the end of the season. Observed on four of five March visits, peaking at 7 individuals on March 27. Missed in summer for the second time in three years.

AMWI: American Wigeon / Canard d'Amérique (*Anas 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	0.14										**0.01**
# DAYS OBSERVED	1										**1**
	FIRST OBSERVED: March 31			LAST OBSERVED: March 31			PEAK DATE: March 31		NUMBER OF INDIVIDUALS: 1		

Notes: Just two individuals observed this year on March 20 and March 31; the fifth time in eight years with a spring record, and the first time one has been observed in any other season.

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			0.29								**0.03**
# DAYS OBSERVED			1								**1**
	FIRST OBSERVED: April 12			LAST OBSERVED: April 12			PEAK DATE: April 12		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										3.00	1.86	**0.40**
# DAYS OBSERVED	1	1										3	4	**9**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 30			PEAK DATE: October 17, 21			NUMBER OF INDIVIDUALS: 8			

Notes: Observed in spring for just the second time in the past four years, but limited to two individuals on April 12. Two sightings in early August were the first at that time of year since 2006; overall, the count of individuals in fall was higher than in any previous year, largely due to two mornings with 8 individuals each in week 12. Observed in small numbers in early winter (one individual on November 7) and late winter (two individuals on the final day of the season, March 27).

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	11.57	7.14	18.57	12.43	10.29	12.43	12.43	6.71	3.86	2.00	**9.74**
# DAYS OBSERVED	7	7	7	7	7	7	7	6	6	4	**65**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: April 12		NUMBER OF INDIVIDUALS: 83		

	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	1.43	1.00	1.57	0.14	0.71	1.00	1.43	3.00	1.86	6.86	20.00	46.00	**6.55**
# DAYS OBSERVED	1	3	3	4	1	2	3	5	2	4	4	7	7	**46**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 30			PEAK DATE: October 28			NUMBER OF INDIVIDUALS: 109			

Notes: Present weekly in spring, as in every previous year except 2008. There was a modest peak in mid-April, but overall numbers were fairly stable, tapering off only after mid-May. Also observed weekly in fall, for the first time ever, although in both weeks 1 and 5 only a single individual was recorded. As in most years, numbers peaked sharply in the final two weeks of fall. More numerous than in any previous winter, thanks to high numbers over the first two-thirds of November (peaking at 115 on November 18), and early migrants in the second half of March. Missed in summer for the second time in three years.

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

	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													1	**1**
	FIRST OBSERVED: October 29				LAST OBSERVED: October 29			PEAK DATE: October 29			NUMBER OF INDIVIDUALS: 5			

Notes: Only observed on October 29 this year, a single flock of 5 individuals, just the second fall record of Blue-winged Teal.

NOPI: Northern Pintail / Canard pilet (*Anas acuta*)

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			4.86	8.71							**1.36**
# DAYS OBSERVED			2	4							**6**
	FIRST OBSERVED: April 12			LAST OBSERVED: April 23			PEAK DATE: April 18			NUMBER OF INDIVIDUALS: 48	

Notes: Highest numbers in spring since 2006, but all concentrated within a two-week period in April. Missed in fall for the fourth time in eight years. Observed in winter for just the second time, an early spring migrant on March 20.

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	0.71	1.86	1.86	3.71	3.86	5.00					**1.70**
# DAYS OBSERVED	2	2	4	5	6	5					**24**
	FIRST OBSERVED: March 31			LAST OBSERVED: May 6			PEAK DATE: May 6			NUMBER OF INDIVIDUALS: 16	

Notes: Observed weekly through week 6 of spring for the second time in three years, and in larger numbers than in any previous year. Missed in fall for just the third time in eight years. Observed in winter for the first time, a flock of 9 early migrants on the last day of the season, March 27.

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

Notes: The only observations this year were of three early migrants on March 20, the first winter record for the species.

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				0.14				1.00			**0.11**
# DAYS OBSERVED				1				3			**4**
	FIRST OBSERVED: April 24			LAST OBSERVED: May 21			PEAK DATE: May 18, May 20			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	2.00				**0.16**
# DAYS OBSERVED									1	1				**2**
	FIRST OBSERVED: September 30				LAST OBSERVED: October 7				PEAK DATE: October 7			NUMBER OF INDIVIDUALS: 14		

Notes: Observed in spring of the first time since 2009, on two occasions nearly one month apart. Seen in fall for the fourth year in a row, with the flock of 14 on October 7 a single day record for MBO.

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			0.14	0.29	0.43	0.14	1.29	0.43	0.29	0.14	**0.31**
# DAYS OBSERVED			1	2	2	1	6	1	2	1	**16**
	FIRST OBSERVED: April 16			LAST OBSERVED: June 1			PEAK DATE: May 12, May 17			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	0.86	0.14	0.14	0.14		**0.15**
# DAYS OBSERVED	1	1	1			1		1	1	1	1	1		**9**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 18				PEAK DATE: Oct 1			NUMBER OF INDIVIDUALS: 6		

Notes: Spring observations spanned eight consecutive weeks for the first time, but sightings were generally infrequent except for a brief spike in activity in the second week of May. Scattered observations of lone individuals extended through most of fall, with no more than one day per week, but with a notable flock of six individuals overhead on the morning of October 1.

PBGR: Pied-billed Grebe / Grèbe à bec bigarré (*Podilymbus podiceps*)

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 14			LAST OBSERVED: May 14			PEAK DATE: May 14			NUMBER OF INDIVIDUALS: 1	

Notes: Since 2006, Pied-billed Grebe has been seen in spring only every other year. This year's lone sighting on May 14 kept that streak alive.

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				0.14		0.71	0.29	1.14	0.43	1.29	**0.40**
# DAYS OBSERVED				1		1	2	3	2	2	**11**
	FIRST OBSERVED: April 21			LAST OBSERVED: May 31			PEAK DATE: May 19, May 30			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	0.14		0.43				1.14	0.29	0.86	0.29				**0.24**
# DAYS OBSERVED	1		1				1	2	2	2				**9**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 9			PEAK DATE: September 16			NUMBER OF INDIVIDUALS: 8			

Notes: Spring numbers were close to average overall, but were noteworthy for extending into the final week of the season for the first time ever. Fall abundance was also relatively typical, including the slight peak in observations from mid-September to early October. No summer observations despite sightings at the end of spring and beginning of fall.

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	0.14	0.57		0.57						0.14	**0.14**
# DAYS OBSERVED	1	3		3						1	**8**
	FIRST OBSERVED: April 1			LAST OBSERVED: June 2			PEAK DATE: Apr 10, Apr 24			NUMBER OF INDIVIDUALS: 2	

Notes: Arrived in spring a full two weeks earlier than ever before, but then disappeared after late April, except for a surprise appearance by a lone individual more than a month later on June 2. No fall sightings for the first time in three years.

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	0.14	0.14	0.14	0.43	0.29	1.14	1.14	1.00	1.14	0.71	**0.63**
# DAYS OBSERVED	1	1	1	2	2	4	4	3	4	4	**26**
	FIRST OBSERVED: April 2			LAST OBSERVED: June 3			PEAK DATE: May 9			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	1.29	1.43	0.14	0.29	2.14	1.29	0.71	0.71	0.14	0.14		0.14	**0.66**
# DAYS OBSERVED	1	6	6	1	2	5	6	3	3	1	1		1	**36**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 25				PEAK DATE: Aug 8, Sep 5, Sep 9			NUMBER OF INDIVIDUALS: 4		

Notes: Observed weekly in spring for the second year in a row, although like last year overall numbers were lower than in all previous years, with only a modest peak in May. Present weekly in fall except for week 12, and with a somewhat more distinct peak in frequency and abundance in mid-September. An early migrant on March 22 was the lone winter record; there was also just one summer sighting, on July 23.

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											**0.02**
# DAYS OBSERVED			1											**1**
	FIRST OBSERVED: August 21				LAST OBSERVED: August 21			PEAK DATE: August 21			NUMBER OF INDIVIDUALS: 2			

Notes: Observed for a third consecutive year, but only once this fall, on August 21.

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						0.29	0.14	1.14	0.29		**0.19**
# DAYS OBSERVED						2	1	3	2		**8**
	FIRST OBSERVED: May 5			LAST OBSERVED: May 27			PEAK DATE: May 19, May 20			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	0.57	0.71											**0.18**
# DAYS OBSERVED	3	3	3											**9**
	FIRST OBSERVED: August 3				LAST OBSERVED: August 19			PEAK DATE: August 4, 17			NUMBER OF INDIVIDUALS: 3			

Notes: Continuing to become scarcer in spring, with sightings tapering off in late May rather than continuing into the breeding season. However, sightings were semi-regular over the first three weeks of fall before suddenly dropping off; in all previous years there was at least one sighting in week 5 or beyond. Just one individual this summer, on the first day of the season.

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 11				LAST OBSERVED: August 11				PEAK DATE: August 11			NUMBER OF INDIVIDUALS: 1		

Notes: The only sighting of the year was on August 11. It was the first ever fall record, and just the sixth 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	0.29	0.14	0.71	0.86	1.71	1.43	1.57	0.86	2.00	0.29	**0.99**
# DAYS OBSERVED	1	1	2	4	5	4	4	5	3	2	**31**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 1			PEAK DATE: May 12, May 26			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	0.14	0.57		0.14	1.29	0.43	0.14	0.71	10.14	0.57		0.71	0.57	**1.19**
# DAYS OBSERVED	1	3		1	4	2	1	3	3	1		2	1	**22**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 24				PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 69		

Notes: For a third consecutive spring, there was a resident Turkey Vulture pair along the B/N nets, accounting for many of the spring sightings. Fall numbers were higher than ever before, but primarily due to a record flight of 69 individuals as part of a significant raptor migration on September 27. For the third winter in a row, observed during the final week of the season in March. In summer there was only one sighting in each of June and July.

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				**0.10**
# DAYS OBSERVED				1		1	2				**4**
	FIRST OBSERVED: April 19			LAST OBSERVED: May 14			PEAK DATE: May 5			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					**0.03**
# DAYS OBSERVED						1			2					**3**
	FIRST OBSERVED: September 9				LAST OBSERVED: October 1				PEAK DATE: Sep 9, Sep 27, Oct 1			NUMBER OF INDIVIDUALS: 1		

Notes: Spring sightings this year were spread over nearly one month in the middle of the season, but with low numbers as usual. Typically scarce in fall, with just three individuals observed near the middle of the season.

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							0.29				**0.03**
# DAYS OBSERVED							2				**2**
	FIRST OBSERVED: May 12			LAST OBSERVED: May 15			PEAK DATE: May 12, May 15			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	0.14		0.14		**0.07**
# DAYS OBSERVED			1						3	1		1		**6**
	FIRST OBSERVED: August 19				LAST OBSERVED: October 23				PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 1		

Notes: The two spring sightings were the first for the season since 2008. In fall, the mid-August observation was quite a surprise, as the previous earliest record was in week 7. An additional five individuals were seen over the last month of the season, more consistent with the peak in past years; overall, more Bald Eagles were recorded than in any previous year.

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				0.43	0.14						**0.06**
# DAYS OBSERVED				3	1						**4**
	FIRST OBSERVED: April 18			LAST OBSERVED: April 28			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	0.29				1.00	0.57		0.57	0.71	**0.25**
# DAYS OBSERVED				1	2				3	3		3	5	**17**
	FIRST OBSERVED: August 24				LAST OBSERVED: October 29				PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 3		

Notes: Spring numbers were well below average, and compressed into the second half of April. Conversely, the fall count was above average, mostly thanks to a good number of records from late September through the end of 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		0.14		0.14	0.14	1.14		0.14	0.29		**0.20**
# DAYS OBSERVED		1		1	1	4		1	2		**10**
# PROCESSED						1					**1**
	FIRST OBSERVED: April 7			LAST OBSERVED: May 28			PEAK DATE: May 5			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	0.29	1.14	1.29	1.00	1.86	2.00	2.43	10.14	2.29	1.71	0.71	0.86	**2.00**
# DAYS OBSERVED	1	2	6	6	2	5	6	7	7	7	7	4	3	**63**
# PROCESSED		1	1	1	1	3			2					**9**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 28			PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 50			

Notes: Typically uncommon in spring, but with one individual banded during the season for the third year in a row. Numbers observed in fall higher than ever before, largely due to a record count on September 27; the number banded was also above average overall, but with fewer than usual in the second half of the season. Winter sightings were limited to lone individuals on November 4 and 9. As in every year but 2007, none observed in summer.

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		0.14	0.14		0.14	0.43	0.14	0.43	0.43	0.14	**0.20**
# DAYS OBSERVED		1	1		1	1	1	3	3	1	**12**
	FIRST OBSERVED: April 6			LAST OBSERVED: June 1			PEAK DATE: May 5			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	0.29	0.71	0.29	0.71	1.71	1.29	1.00	1.86	1.71	1.71	1.14	1.29	**1.07**
# DAYS OBSERVED	1	2	4	2	4	5	7	6	5	7	7	5	7	**62**
# PROCESSED									1					**1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 11			NUMBER OF INDIVIDUALS: 7			

Notes: Typically uncommon in spring, although with observations spanning most of the season. Fall numbers higher than in any previous year, with individuals observed much more frequently than usual, especially from mid-September onward. The one individual banded in week 9 was only the third in MBO's history. One winter record on November 13. Despite regular observations in spring and fall, missed in summer for the sixth time in eight years.

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

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 8			LAST OBSERVED: April 29			PEAK DATE: Apr 8, Apr 12, Apr 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	0.29			0.14	0.29				0.14			0.29		**0.09**
# DAYS OBSERVED	2			1	2				1			2		**8**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 23			PEAK DATE: 8 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Typically rare in both spring and fall. Three spring records spanned much of April, while in fall, the 8 observations were scattered across most of the season. One winter observation on March 22.

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	0.14	0.14		0.71	0.29	0.57	1.00	1.86	0.43	0.57	**0.57**
# DAYS OBSERVED	1	1		3	2	2	3	6	2	3	**23**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 1			PEAK DATE: May 15, May 18			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	0.57	0.43	0.57	0.57	0.29	0.86	0.14	1.14			0.29	0.29	**0.42**
# DAYS OBSERVED	2	4	3	4	3	2	3	1	4			2	1	**29**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 26			PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 5			

Notes: Observed on roughly one-third of days in spring, but scattered throughout the season, and perhaps representing occasional sightings of the Arboretum nesting pair. Also observed on nearly one-third of days in fall, in close to average numbers. Four observations in the final week of winter, matching arrival times in most previous years. A single individual was observed on three of seven MAPS days in summer.

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	3.29					**0.36**
# DAYS OBSERVED					2	1					**3**
	FIRST OBSERVED: April 28			LAST OBSERVED: May 5			PEAK DATE: May 5			NUMBER OF INDIVIDUALS: 23	

	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	0.86	0.86		0.14	0.57			0.14		**0.21**
# DAYS OBSERVED				1	2	2		1	2			1		**9**
	FIRST OBSERVED: August 8				LAST OBSERVED: October 18			PEAK DATE: September 1			NUMBER OF INDIVIDUALS: 5			

Notes: All spring observations were within a span of just eight days; the total count was similar to the past two years, which in turn were higher than all previous ones. There was no strong movement observed in fall, although there was a modest peak in numbers in early September as usual. The lone migrant spotted on October 18 was the latest ever in fall.

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	0.29	0.14	0.57	0.29	0.57	0.43	0.57	0.71	0.43	0.14	**0.41**
# DAYS OBSERVED	1	1	4	1	4	2	3	4	3	1	**24**
	FIRST OBSERVED: March 31			LAST OBSERVED: May 31			PEAK DATE: 5 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	0.43	0.43	0.57	1.00	1.71	0.71	0.71	0.43	3.71	2.86	1.86	3.29	7.00	**1.90**
# DAYS OBSERVED	2	3	2	4	5	3	4	3	3	7	6	7	7	**56**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 20			

Notes: Arrived earlier in spring than the past couple of years, but overall abundance for the season was average. Fall abundance reached a new high for the fourth year in a row, thanks to observations each week of the season (for the first time ever) and strong numbers from week 9 onward, peaking later than ever before in week 13. Small numbers observed each month in winter except January. Missed in summer for the fifth consecutive year.

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									0.86				0.57	**0.11**
# DAYS OBSERVED									1				1	**2**
	FIRST OBSERVED: September 28				LAST OBSERVED: October 25			PEAK DATE: September 28			NUMBER OF INDIVIDUALS: 6			

Notes: Observed in September for the first time ever – and with the highest single daily count ever (6 individuals). With another good flight of 4 individuals on October 25, the total for the season was also a new record high. One winter observation, a late fall migrant on November 9.

GOEA: Golden Eagle / Aigle royal (*Aquila chrysaetos*)

	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**
	FIRST OBSERVED: October 23				LAST OBSERVED: October 28			PEAK DATE: October 23, 26, 28			NUMBER OF INDIVIDUALS: 1			

Notes: Three Golden Eagles were observed within a six-day period at the end of fall, a record high total for any fall season. One winter observation, a late fall migrant on November 7, just the second winter record for MBO.

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					0.14						**0.01**
# DAYS OBSERVED					1						**1**
	FIRST OBSERVED: April 26			LAST OBSERVED: April 26			PEAK DATE: April 26			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	0.71	0.14	0.14			**0.13**
# DAYS OBSERVED		1			1			2	3	1	1			**9**
	FIRST OBSERVED: August 14				LAST OBSERVED: October 15			PEAK DATE: Sep 20, Sep 27, Oct 1			NUMBER OF INDIVIDUALS: 2			

Notes: For the second year in a row, just one individual was observed in spring. Fall numbers were higher than in any previous year, with 12 individuals scattered over a ten-week period. One observation on the final day of winter, the first ever for the season, and likely an early spring migrant.

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			**0.03**
# DAYS OBSERVED			1					1			**2**
	FIRST OBSERVED: April 12			LAST OBSERVED: May 18			PEAK DATE: Apr 12, 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	0.57	0.71	0.43	0.14		0.14	1.00	0.29	0.14	0.14	0.29	**0.31**
# DAYS OBSERVED		1	3	4	2	1		1	5	2	1	1	2	**23**
	FIRST OBSERVED: August 10				LAST OBSERVED: October 30			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 2			

Notes: Typically scarce in spring, with just two sightings a bit over one month apart. More common in fall, with a record high 28 observations scattered across almost the entire season.

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							0.29	0.14			**0.04**
# DAYS OBSERVED							1	1			**2**
	FIRST OBSERVED: May 12			LAST OBSERVED: May 20			PEAK DATE: May 12		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		0.14	**0.05**
# DAYS OBSERVED								1		2	1		1	**5**
	FIRST OBSERVED: September 20				LAST OBSERVED: October 28			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring for a second consecutive year, and like in 2011, only in mid-May. The total of three sightings was the highest in spring since 2006. Fall observations were all in the second half of the season, and the five individuals observed was a record high total for fall. One winter observation, on November 15.

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				0.14	0.29	0.14			0.14	0.43	**0.11**
# DAYS OBSERVED				1	2	1			1	3	**8**
	FIRST OBSERVED: April 21			LAST OBSERVED: June 2			PEAK DATE: 8 dates		NUMBER OF INDIVIDUALS: 1		

Notes: Only sporadic sightings this spring, compared to more regular observations the past three years. Missed in fall for the third year in a row, and in summer for the second straight year.

BBPL: Black-bellied Plover / Pluvier argenté (*Pluvialis squatarola*)

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 26			LAST OBSERVED: May 26			PEAK DATE: May 26		NUMBER OF INDIVIDUALS: 1		

Notes: A lone individual flying overhead on May 26 was a new record for MBO, the 206th species observed on site.

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			0.29	0.57	0.14	0.86	0.57	0.43	0.43	0.14	**0.34**
# DAYS OBSERVED			1	4	1	4	3	3	1	1	**18**
	FIRST OBSERVED: April 17			LAST OBSERVED: May 31			PEAK DATE: May 7, May 24		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				**0.02**
# DAYS OBSERVED								1		1				**2**
	FIRST OBSERVED: September 19				LAST OBSERVED: October 4			PEAK DATE: Sep 19, Oct 4			NUMBER OF INDIVIDUALS: 1			

Notes: Observed weekly in spring from week 3 onward, with overall numbers below average, and peaking weakly in early May, around average. As usual, scarce in fall, with just two observations. Observed during four of five visits in the second half of March, peaking at 9 individuals on March 20.

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

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 14			LAST OBSERVED: May 14			PEAK DATE: May 14			NUMBER OF INDIVIDUALS: 1	

Notes: Missed in spring 2011, and just one observed this year in week 7. Not seen in fall, for the second time in three years.

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				0.29		2.00	0.71	0.29			**0.33**
# DAYS OBSERVED				2		5	5	2			**14**
	FIRST OBSERVED: April 21			LAST OBSERVED: May 19			PEAK DATE: 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				0.14			0.57	0.14	0.43		0.14			**0.11**
# DAYS OBSERVED				1			4	1	3		1			**10**
	FIRST OBSERVED: August 23				LAST OBSERVED: October 12			PEAK DATE: 10 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Spring observations were primarily within the first half of May as usual, but there was also an unusually early migrant present for two days in late April. Fall observations did not begin until week 4, for the first time since 2007, but overall numbers were comparable to the previous three years. The observation on October 12 was the latest ever in fall.

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				0.29		0,43		0.14			**0.09**
# DAYS OBSERVED				2		2		1			**5**
	FIRST OBSERVED: April 20			LAST OBSERVED: May 19			PEAK DATE: May 12			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					**0.01**
# DAYS OBSERVED									1					**1**
	FIRST OBSERVED: October 1				LAST OBSERVED: October 1			PEAK DATE: October 1			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in spring for the first time since 2007, with sightings scattered over five days spanning a month in mid-season. Only one fall record, on October 1.

LEYE: Lesser Yellowlegs / Petit Chevalier (*Tringa flavipes*)

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 16			LAST OBSERVED: May 16			PEAK DATE: May 16			NUMBER OF INDIVIDUALS: 1	

Notes: Limited to a lone individual observed on May 16, three days later than last year's only sighting, and just four days later than the only other spring record on May 12, 2008.

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	**0.03**
# DAYS OBSERVED								1		1	**2**
	FIRST OBSERVED: May 19			LAST OBSERVED: June 1			PEAK DATE: May 19, 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	0.14								0.43		0.43		**0.09**
# DAYS OBSERVED	1	1								2		2		**6**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 22			PEAK DATE: October 7, 22			NUMBER OF INDIVIDUALS: 2			

Notes: Two sightings after mid-May were the latest ever in spring, and might have represented a local bird. Fall observations began in early August as usual, but for the first time also included sightings in October, with several birds active during opening net rounds, including one that was briefly caught in net A1 but escaped on its own. Observed in winter for the first time ever, an early migrant on March 20.

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	12.86	19.86	11.14	13.43	11.86	14.57	43.43	8.86	8.86	3.71	**14.86**
# DAYS OBSERVED	6	7	7	6	7	7	7	7	7	5	**66**
	FIRST OBSERVED: March 29			LAST OBSERVED: June 4		PEAK DATE: May 12			NUMBER OF INDIVIDUALS: 150		

	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	1.86	0.43	0.14	1.29	10.43	0.86	3.14	8.29	4.86	0.14	2.29	6.43	255.00	**22.70**
# DAYS OBSERVED	5	3	1	3	2	4	4	5	4	1	5	6	7	**50**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 30			PEAK DATE: October 28			NUMBER OF INDIVIDUALS: 330			

Notes: Spring abundance was the second lowest in MBO's eight years of monitoring, despite a strong peak in the second week of May. Conversely, the fall mean was a record high, although only due to the remarkable influx of individuals in the final week of the season, in response to clearing of the corn crop in the field neighbouring MBO. Observed on five of ten November visits and all five March surveys; also seen in January for just the second time ever. Small numbers reported on the first four of seven MAPS visits in summer.

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				0.43		0.43	0.29	0.14		0.14	**0.14**
# DAYS OBSERVED				2		1	1	1		1	**6**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 30		PEAK DATE: May 5			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						**0.02**
# DAYS OBSERVED		1						1						**2**
	FIRST OBSERVED: August 13				LAST OBSERVED: September 24			PEAK DATE: Aug 13, Sep 24			NUMBER OF INDIVIDUALS: 1			

Notes: Spring sightings were slightly more numerous than over the past three years, although still widely scattered. Fewer observed in fall than any previous year, with just two sightings on August 13 and September 24.

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				0.29	0.14						**0.04**
# DAYS OBSERVED				1	1						**2**
	FIRST OBSERVED: April 19			LAST OBSERVED: April 29		PEAK DATE: April 19			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	0.86	0.14	0.14			**0.15**
# DAYS OBSERVED								3	1	1	1			**6**
	FIRST OBSERVED: September 22				LAST OBSERVED: October 13			PEAK DATE: September 30			NUMBER OF INDIVIDUALS: 6			

Notes: Typically scarce in spring, with observations concentrated in late April as in several previous years. Fall observations extended over four consecutive weeks for the first time, and the total number observed was a record high for the season. One winter sighting in each of November, February, and March.

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

	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								**0.09**
# DAYS OBSERVED	1		3	1		1								**6**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 6			PEAK DATE: September 6			NUMBER OF INDIVIDUALS: 3			

Notes: Observed for a third consecutive year; this is the first time there was more than one sighting in a year.

BLTE: Black Tern / Guifette noire (*Chlidonias niger*)

	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 7				LAST OBSERVED: August 7			PEAK DATE: August 7			NUMBER OF INDIVIDUALS: 1			

Notes: The lone sighting this year was on August 7, the first ever fall record for MBO, and only the third overall.

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		0.57	0.57		0.86					0.29	**0.23**
# DAYS OBSERVED		1	2		2					1	**6**
	FIRST OBSERVED: April 5			LAST OBSERVED: May 30			PEAK DATE: Apr 5, Apr 29			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		0.71	2.00	1.57	1.14	5.14	0.43	0.86		0.43	0.43		6.14	**1.45**
# DAYS OBSERVED		3	3	2	3	5	2	2		2	1		4	**27**
	FIRST OBSERVED: August 10				LAST OBSERVED: October 29			PEAK DATE: October 28			NUMBER OF INDIVIDUALS: 22			

Notes: Numbers below average this spring, with only a few scattered sightings in April, and on one day at the end of May. Observations were more regular in fall, especially early on, resulting in the highest overall mean since 2005. Observed on five occasions in November and once in December, then absent until April. Missed in summer for the fourth time in five 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		0.29	0.29	0.71	0.57	0.29	0.14	0.43	0.14		**0.29**
# DAYS OBSERVED		1	1	3	3	1	1	1	1		**12**
	FIRST OBSERVED: April 6			LAST OBSERVED: May 27			PEAK DATE: Apr 18, May 20			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	1.00	0.71	0.71	3.71	1.57	2.29	5.71	12.43	16.43	17.57	16.29	24.57	**7.99**
# DAYS OBSERVED	3	5	4	2	5	6	6	7	7	7	7	7	7	**73**
# PROCESSED														
	FIRST OBSERVED: August 2				LAST OBSERVED: October 30			PEAK DATE: October 27			NUMBER OF INDIVIDUALS: 44			

Notes: Missed in the first week of spring for the first time ever, and scarcer than in any spring except 2009. As usual, observed weekly in fall, but with an unprecedented sustained influx of individuals spanning the final six weeks of the season. Numbers peaked in week 13 for the fifth time in eight years. The individual banded on October 10 was the first ever in fall, compared to 43 in winter; all five individuals banded in winter were in November. Scarce in summer as usual, observed only on June 14.

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

	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						**0.03**
# DAYS OBSERVED		1						1						**2**
# PROCESSED								1						**1**
	FIRST OBSERVED: August 13				LAST OBSERVED: September 20			PEAK DATE: Aug 13, Sep 20			NUMBER OF INDIVIDUALS: 1			

Notes: Missed in spring for the first time since 2009, but observed in fall for the first time since that year. The lone individual banded was on September 20, the latest ever record of the species at MBO.

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

Notes: Observed only during the owl program, three hatch-year individuals banded on September 27, one of which was recaptured nearly one month later on October 25.

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									0.14		**0.01**
# DAYS OBSERVED									1		**1**
	FIRST OBSERVED: May 23			LAST OBSERVED: May 23			PEAK DATE: May 23			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	0.14	0.14	0.29	0.29			0.29	**0.13**
# DAYS OBSERVED	1					2	1	1	2	1			2	**10**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: Sep 9, Oct 8			NUMBER OF INDIVIDUALS: 2			

Notes: For the third year in a row, a single spring observation in May. As in 2011, fall records were much more numerous, with observations this year most consistent in September and early October. One winter observation, on December 1. Heard periodically during the owl banding program in fall.

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

Notes: Heard in the Arboretum periodically during the fall owl banding program. Banded for the first time ever on October 19, a hatch-year male caught in net O3, one of the nets between the Arboretum and the conifer grove at the centre of the net array.

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

Notes: Heard regularly during the fall owl banding program. Banded for the first time ever, two adult females in the same night (October 22-23), both in net T5.

BOOW: Boreal Owl / Nyctale de Tengmalm (*Aegolius funereus*)

Notes: Observed and banded at MBO for the first time on November 5; three individuals were banded that night and one the following evening. The first Boreal Owl came to the O nets (playing the Northern Saw-whet Owl lure), while the remainder were caught at the T nets (playing the Boreal Owl lure).

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							0.29		0.71		0.14	0.29	0.14	**0.12**
# DAYS OBSERVED							1		3		1	1	1	**7**
# PROCESSED							1		2		1	1		**5**
	FIRST OBSERVED: September 16				LAST OBSERVED: October 25				PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 2		

Notes: A record number of Northern Saw-whet Owls was banded in fall 2012, with 235 during the standard season (Sep 25 – Nov 6), and an additional 14 in 9 nights of supplemental banding between Nov 7 and Nov 17. A further 5 were banded through the passerine banding program, and for the first time, a few owls were during the day seen this fall, either roosting or flying around early in the morning.

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				0.57		0.29	0.14							**0.08**
# DAYS OBSERVED				2		2	1							**5**
	FIRST OBSERVED: August 27				LAST OBSERVED: September 14				PEAK DATE: August 27			NUMBER OF INDIVIDUALS: 3		

Notes: Observed in fall for the third year in a row, as usual between late August and mid-September. The total of seven individuals this fall was a record high for MBO.

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						0.14		0.14			**0.03**
# DAYS OBSERVED						1		1			**2**
	FIRST OBSERVED: May 6			LAST OBSERVED: May 21			PEAK DATE: May 6, 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	4.57	1.57	0.29										**0.56**
# DAYS OBSERVED	3	3	3	1										**10**
	FIRST OBSERVED: August 1				LAST OBSERVED: August 22				PEAK DATE: August 10			NUMBER OF INDIVIDUALS: 16		

Notes: Typically rare in spring, and with fall observations limited to August as usual, but including a high count in week 2.

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						0.14	1.00	1.29	2.14	1.14	**0.57**
# DAYS OBSERVED						1	6	5	6	4	**24**
# PROCESSED											
	FIRST OBSERVED: May 8			LAST OBSERVED: June 3			PEAK DATE: May 26, May 27			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	3.14	5.29	6.43	5.00	3.71	2.71	1.29							**2.12**
# DAYS OBSERVED	7	7	7	7	7	6	4							**45**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: September 17				PEAK DATE: August 14			NUMBER OF INDIVIDUALS: 12		

Notes: Numbers were typical in spring and above average in fall. As in past years, hummingbirds were not banded, but age and sex were noted for all individuals extracted from nets. There were 18 in spring (6 after-hatch-year males, 6 after-hatch-year females, 3 second-year males, 2 second-year males, and 1 unknown) and 74 in fall (5 after-hatch-year males, 1 hatch-year male, 2 hatch-year females, 17 hatch-year unknowns, and 49 unknowns). Summer numbers also above average, with observations on five of seven MAPS visits.

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						0.14	0.14		**0.04**
# DAYS OBSERVED		1						1	1		**3**
	FIRST OBSERVED: April 6			LAST OBSERVED: May 27			PEAK DATE: Apr 6, May 19, 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			0.14		0.14			0.14		**0.08**
# DAYS OBSERVED	1	2		1			1		1			1		**7**
	FIRST OBSERVED: August 3			LAST OBSERVED: October 20			PEAK DATE: 7 dates			NUMBER OF INDIVIDUALS: 1				

Notes: Only three scattered observations in spring, the fewest ever. Marginally more common in fall, but again spotted just occasionally.

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

	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	**0.06**
# DAYS OBSERVED				1		1			1				1	**4**
# PROCESSED													1	**1**
	FIRST OBSERVED: August 26			LAST OBSERVED: October 24			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1				

Notes: All four sightings this year were in fall, culminating in the first banding record for MBO on October 24 (species #109).

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			0.29	0.71	1.14	1.71	0.29	0.71	0.14		**0.50**
# DAYS OBSERVED			2	3	5	7	2	3	1		**23**
# PROCESSED						2					**2**
	FIRST OBSERVED: April 15			LAST OBSERVED: May 24			PEAK DATE: Apr 18, Apr 30, May 2		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		0.29	0.14	0.14				0.14						**0.05**
# DAYS OBSERVED		2	1	1				1						**5**
# PROCESSED				1										**1**
	FIRST OBSERVED: August 8			LAST OBSERVED: September 20			PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 1				

Notes: Observed weekly over a 40-day period in mid-spring, but overall scarcer than in any previous year. Fall numbers are typically lower than in spring, and 2012 was no exception, also recording a record low. The one individual banded in fall was the lowest count since 2007. Missed in summer for the second time in three years.

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	2.86	2.00	1.57	2.57	3.14	3.43	2.71	1.14	0.57	0.86	**2.09**
# DAYS OBSERVED	6	7	5	6	7	7	7	6	3	3	**57**
# PROCESSED				1-2-1	1	0-0-2			1	0-0-2	**3-2-5**
	FIRST OBSERVED: March 29			LAST OBSERVED: June 1			PEAK DATE: May 3			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	3.29	2.14	1.57	1.86	2.43	2.57	3.57	3.43	3.86	3.29	2.71	2.71	3.00	**2.80**
# DAYS OBSERVED	7	6	7	6	6	7	7	7	7	7	7	7	7	**88**
# PROCESSED	4	3-0-1	0-1-4	3	0-0-1	0-0-1	3-0-1		2-0-2	1-0-1	1-0-2	0-1-2	0-1-2	**17-3-17**
	FIRST OBSERVED: August 1			LAST OBSERVED: October 30			PEAK DATE: September 24			NUMBER OF INDIVIDUALS: 10				

Notes: Observed weekly in both spring and fall for the third time in the past four years. Numbers observed were a record high in spring and well above average in fall, as was the number banded in fall. Observed on 20 of 27 winter visits, resulting in a higher mean daily count (1.1) than in any previous year. Among the winter records were 2 individuals banded, 2 repeats, and a return. Also regular in summer, with observations on six of seven MAPS days, but just two banded.

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	1.00	1.00	0.71	0.86	0.86	0.29	0.43	**0.61**
# DAYS OBSERVED	3		3	6	5	5	6	4	2	2	**36**
# PROCESSED								1			**1**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 5			PEAK DATE: 7 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	1.14	1.43	1.29	1.57	1.14	1.71	2.86	2.57	3.14	2.71	2.14	2.29	3.29	**2.10**
# DAYS OBSERVED	7	6	7	7	6	7	7	7	7	7	6	7	7	**88**
# PROCESSED		1				1	1			1	1		1-1-0	**6-1-0**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 2				NUMBER OF INDIVIDUALS: 6		

Notes: Missed in week 2 of spring, the first time since week 3 of 2005 that there was a gap in observations. Overall spring numbers were slightly below average. Observed weekly in fall, as in all previous years; numbers record high, and as usual peaking in the second half of the season. Regular in November, with sightings on 7 of 10 visits, but then observed only four more times over the rest of winter; one individual banded. Missed in summer, for just the second time in eight years.

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		0.57	0.86	2.00	3.43	2.14	1.86	1.29	0.71	0.86	**1.37**
# DAYS OBSERVED		2	4	5	7	5	6	5	4	4	**42**
# PROCESSED						1					
	FIRST OBSERVED: April 9			LAST OBSERVED: June 5			PEAK DATE: 5 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	2.00	2.57	2.71	1.43	3.43	3.29	5.86	6.14	3.71	1.43	0.43	0.43	**2.70**
# DAYS OBSERVED	6	7	7	7	5	6	7	7	7	7	7	2	2	**77**
# PROCESSED		1	1-0-1									1		**3-0-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 23, 27				NUMBER OF INDIVIDUALS: 9		

Notes: Observed weekly in spring from week 2 onward, peaking in week 5 as in every previous year except 2010. Present weekly throughout fall for the seventh year in a row, peaking as usual in late September. One winter observation, an early spring migration on March 23. Lone individuals observed four of seven MAPS days; one banded.

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	0.29	1.00	0.86	0.86	0.57	1.00	1.29	1.14	0.57	0.57	**0.81**
# DAYS OBSERVED	1	5	4	4	3	5	6	5	3	3	**39**
	FIRST OBSERVED: April 1			LAST OBSERVED: June 5			PEAK DATE: Apr 19, May 12, May 18			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	1.57	1.86	2.71	1.29	2.14	2.43	2.71	2.14	2.71	2.43	1.29	2.14	**2.02**
# DAYS OBSERVED	4	7	6	7	6	6	7	7	7	7	7	5	5	**81**
# PROCESSED		1											1	**2**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 29			PEAK DATE: September 23				NUMBER OF INDIVIDUALS: 6		

Notes: Observed weekly in both spring and fall for the third consecutive year. Numbers in spring were close to average, and in fall were record high, thanks to a span of six weeks with a sustained mean daily count of over two individuals. This fall marked the first time ever that two Pileated Woodpeckers were banded in a single season. Observed on 13 of 27 winter visits and 4 of 7 MAPS dates, spread evenly throughout the season in both cases.

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 15				LAST OBSERVED: August 15			PEAK DATE: August 15				NUMBER OF INDIVIDUALS: 1		

Notes: For the third year in a row, there was just a single individual observed in early fall; this year's sighting was five days earlier than the lone bird in 2011.

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									0.29		**0.03**
# DAYS OBSERVED									1		**1**
	FIRST OBSERVED: May 27			LAST OBSERVED: May 27			PEAK DATE: May 27			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		0.29										**0.04**
# DAYS OBSERVED		2		2										**4**
	FIRST OBSERVED: August 12				LAST OBSERVED: August 26			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1			

Notes: Only observed on one day this spring, and scarcer than in any other year except 2010. Also a bit less common than average in fall, with just four observations, all in August. None banded for a third year in a row. One summer observation, on June 14.

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

	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	1.00	0.57	0.29	0.14	0.14	0.43						**0.23**
# DAYS OBSERVED		2	5	4	2	1	1	2						**17**
# PROCESSED		3	1	3	2		1	1						**11**
	FIRST OBSERVED: August 11				LAST OBSERVED: September 22			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 2			

Notes: Missed in spring for the third time in eight years. Abundance in fall roughly average, although fewer banded than in the any of the previous four years. The fall peak was early this year, in week 3, like in 2006.

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	0.86	4.14	1.86	**0.70**
# DAYS OBSERVED							1	2	6	5	**13**
# PROCESSED							1	1	11	4	**17**
	FIRST OBSERVED: May 14			LAST OBSERVED: June 5			PEAK DATE: May 28			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	0.14	2.29	0.86	1.43		0.29								**0.38**
# DAYS OBSERVED	1	7	4	5		2								**19**
# PROCESSED	1	14	2	3		2								**22**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 8			PEAK DATE: August 10			NUMBER OF INDIVIDUALS: 6			

Notes: Above average abundance in spring for a second straight year, again largely due to an influx in week 9. The number banded in spring was just two short of the record set last spring. Over 60% of spring records were identified as Alder Flycatcher by call, and just one Willow Flycatcher was confirmed on May 26; all individuals banded were considered Traill's Flycatchers. Numbers observed and banded in fall were close to average; as usual almost all were gone by the end of August. Two of the individuals banded in fall (on Aug 9 and Sep 8) were identified as Willow Flycatchers based on plumage and measurements. One summer observation, an individual banded on July 23.

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							2.71	0.43	0.14	0.43	**0.37**
# DAYS OBSERVED							5	2	1	2	**10**
# PROCESSED							5	2		2	**9**
	FIRST OBSERVED: May 10			LAST OBSERVED: June 5			PEAK DATE: May 13			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			0.71	1.00	0.43	0.14								**0.18**
# DAYS OBSERVED			5	5	2	1								**13**
# PROCESSED			2	4	2-0-1									**8-0-1**
	FIRST OBSERVED: August 15				LAST OBSERVED: September 9			PEAK DATE: Aug 25, Aug 27, Sep 4			NUMBER OF INDIVIDUALS: 2			

Notes: As usual, present for the final four weeks of spring, but for the first time peaking in week 7. Overall abundance and number banded in spring were fairly typical. Fall numbers were slightly below average, perhaps in part because none were observed in the first two weeks of August, unlike in all previous years. Lone individuals were observed on the first three visits in July.

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		1.00	0.43	0.43	0.43	0.43		0.29	0.43	0.29	**0.37**
# DAYS OBSERVED		4	2	2	3	3		2	3	1	**20**
	FIRST OBSERVED: April 6			LAST OBSERVED: May 30			PEAK DATE: 6 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	0.14		0.29		0.14	1.00	0.43	1.43	0.43	0.29	0.29	**0.35**
# DAYS OBSERVED		1	1		2		1	4	2	7	3	2	2	**25**
# PROCESSED					1				1	2-0-1	1			**5-0-1**
	FIRST OBSERVED: August 8				LAST OBSERVED: October 28			PEAK DATE: 7 dates			NUMBER OF INDIVIDUALS: 2			

Notes: Relatively scarce in spring, like the past two years; for the second year in a row none were banded during the season. Fall numbers close to the long-term mean, with a peak in week 10, the only time this year that the species was observed daily. Observed for the first time ever in winter, an early spring migrant on March 22. One observation in summer, on July 14.

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						0.57	5.14	4.57	3.43	2.14	**1.59**
# DAYS OBSERVED						2	7	7	7	5	**28**
# PROCESSED										1	**1**
	FIRST OBSERVED: May 7			LAST OBSERVED: June 5			PEAK DATE: May 12			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	2.86	3.29	1.29	0.43	0.14								**0.74**
# DAYS OBSERVED	4	7	7	6	3	1								**28**
# PROCESSED		1												**1**
	FIRST OBSERVED: August 4				LAST OBSERVED: September 8			PEAK DATE: August 6, 19			NUMBER OF INDIVIDUALS: 6			

Notes: Common for most of May, peaking earlier than ever before, in week 7. Only one individual banded in each of spring and fall, despite above average numbers observed in both seasons. Fall counts peaked in week 3 for the second year in a row. Less regular than last summer, but observed on three of seven MAPS visits, including one banded on July 23.

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						2.29	4.00	2.14	2.71	1.00	**1.21**
# DAYS OBSERVED						5	7	7	7	4	**30**
	FIRST OBSERVED: May 4			LAST OBSERVED: June 3			PEAK DATE: May 13			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	2.57	1.43	1.71											**0.44**
# DAYS OBSERVED	6	6	5											**17**
	FIRST OBSERVED: August 1				LAST OBSERVED: August 20			PEAK DATE: August 3, 19			NUMBER OF INDIVIDUALS: 5			

Notes: Like Least Flycatcher and Great Crested Flycatcher, migration was early this year, with numbers peaking in Week 7 for the first time. Fall migration also seemed early, with the last individual observed on August 20, an earlier end date than in any previous year. Although overall numbers were above average in spring and only a bit below average in fall, no Eastern Kingbirds were banded this year, for the first time ever. Summer sightings were limited to three of seven MAPS visits.

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

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										**0.07**
# DAYS OBSERVED	4										**4**
	FIRST OBSERVED: March 29			LAST OBSERVED: April 3			PEAK DATE: April 1			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	**0.01**
# DAYS OBSERVED													1	**1**
# PROCESSED													1	**1**
	FIRST OBSERVED: October 24				LAST OBSERVED: October 24			PEAK DATE: October 24			NUMBER OF INDIVIDUALS: 1			

Notes: As in 2011, observed in just the first week of spring and last week of fall, as well as 4 observations in winter (two in November, one in February, and one in March). Also like last year, there was just one individual banded, in week 13 of fall.

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						0.57	0.57	0.29			**0.14**
# DAYS OBSERVED						3	2	2			**7**
# PROCESSED						1	1				**2**
	FIRST OBSERVED: May 2			LAST OBSERVED: May 17			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							0.14	0.86	2.71	1.86	0.29		0.14	**0.46**
# DAYS OBSERVED							1	5	7	6	2		1	**22**
# PROCESSED							1	1	8-0-6	4-0-2	0-0-1			**14-0-9**
	FIRST OBSERVED: September 15				LAST OBSERVED: October 26			PEAK DATE: October 2				NUMBER OF INDIVIDUALS: 5		

Notes: Unusually scarce this spring, with only a few sightings compressed within a three week period in early/mid May. Fall numbers were also a bit below average, in part because there were no August records for the first time since 2007. The fall peak was in late September / early October as in all previous years.

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						3.00	9.57	4.29	5.43	3.71	**2.60**
# DAYS OBSERVED						4	7	7	7	7	**32**
# PROCESSED						2	6-0-6		1-0-1		**9-0-7**
	FIRST OBSERVED: May 5			LAST OBSERVED: June 5			PEAK DATE: May 10			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	0.71	0.43	0.71	0.86	0.57	1.57								**0.37**
# DAYS OBSERVED	2	3	3	3	3	3								**17**
# PROCESSED	2		0-0-1	1-0-1	0-1-0	1								**4-1-2**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 25			PEAK DATE: September 7				NUMBER OF INDIVIDUALS: 5		

Notes: More than twice as abundant this spring as in any previous year, in part thanks to a particularly strong movement of birds in week 7, but weekly mean counts for the remainder of the season also exceeded all past spring records. The number banded in spring matched the previous record of 9 from 2007. Counts remained at record highs in summer, with observations on all seven MAPS visits, including 8 banded and 2 repeats. As usual, scarcer in fall than spring, but also observed in record numbers this year, although the number of banded was average.

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							0.14		0.14		**0.03**
# DAYS OBSERVED							1		1		**2**
# PROCESSED									1		**1**
	FIRST OBSERVED: May 14			LAST OBSERVED: May 24			PEAK DATE: May 14, May 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		0.29	0.86		0.29					**0.12**
# DAYS OBSERVED				1		1	3		2					**7**
# PROCESSED				1			4		1					**6**
	FIRST OBSERVED: August 26				LAST OBSERVED: September 27			PEAK DATE: September 12				NUMBER OF INDIVIDUALS: 3		

Notes: Typically scarce in both spring and fall; the individual banded on May 24 was the first one in spring since 2008.

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							0.43	2.43	3.86	1.57	**0.83**
# DAYS OBSERVED							3	7	7	5	**22**
# PROCESSED								2	1		**3**
	FIRST OBSERVED: May 12			LAST OBSERVED: June 5			PEAK DATE: May 28			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	4.57	4.14	5.57	5.86	5.14	5.43	3.29	2.57	1.14	0.29				**2.92**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	4	2				**62**
# PROCESSED	13	9-2-3	8-2-1	9-0-1	10-1-0	8	8-0-2	4	4-0-1	2				**75-5-8**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 5			PEAK DATE: August 18				NUMBER OF INDIVIDUALS: 13		

Notes: Numbers observed and banded in spring were close to average, but roughly one week earlier than usual. The overall fall count was a record high, though numbers banded average. Abundance remained fairly consistent over the first half of the season, and tapered off by early October as usual. Observed on all 7 MAPS visits, including 6 banded, a repeat, and 2 returns.

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	8.00	5.00	8.29	6.71	6.00	5.00	4.57	4.71	4.86	1.86	**5.50**
# DAYS OBSERVED	7	6	7	7	7	7	7	7	7	5	**67**
# PROCESSED				1	1	1			1-1-0		**4-1-0**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: Apr 11, Apr 30			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	5.00	5.86	10.14	15.14	17.14	15.71	54.43	75.43	65.29	23.14	11.43	13.00	14.43	**25.09**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED			1		1-1-0	1	9-1-0	24-0-1	9-0-1	2	1	1-0-1		**49-2-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 23			NUMBER OF INDIVIDUALS: 125			

Notes: Observed weekly in spring and fall, as in all previous years. Spring numbers peaked in mid-April, but tapered off slowly, and overall were a bit above average, although the 4 individuals banded were the first ones in spring since 2009. Fall numbers were similar to the highs observed in 2010, with the total counted (2283) marginally lower, but the 49 banded a new record (the 24 individuals banded in week 8 was a single week record). The mean daily count in winter (6.8) was higher than in any previous year, in part due to Blue Jays being reported on all 27 visits; the seven individuals banded was also a winter record. Observed on four of seven MAPS visits.

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	16.43	12.43	18.86	33.57	26.14	53.71	29.86	25.43	17.57	15.29	**24.93**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: May 6			NUMBER OF INDIVIDUALS: 200	

	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	21.29	15.86	17.29	11.43	18.00	22.14	20.86	30.71	37.71	59.57	83.57	129.57	115.43	**44.88**
# 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: October 17			NUMBER OF INDIVIDUALS: 355			

Notes: Observed daily in both spring and fall. Spring abundance was well above average, but peaked later than ever, in week 6. Fall numbers were the lowest ever, although building to a peak in October as usual. Winter numbers were well above average, with a mean daily count of 55 in November and 78 in December, and sightings on all 27 visits throughout the season. Observed during six of seven MAPS visits, but in relatively low numbers, with a daily mean count of just 3.3.

FICR: Fish Crow / Corneille de ravage (*Corvus ossifragus*)

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	

Notes: Observed for the first time this year (species #205), a lone individual calling and flying over the adjacent field.

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	0.29	0.14	0.29	0.43	0.43	0.71	0.29	0.43	0.86	0.71	**0.46**
# DAYS OBSERVED	2	1	2	3	3	3	2	2	6	3	**27**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 1			PEAK DATE: May 5			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		0.71	0.57	1.29	0.71	0.71	0.57	0.43	1.14	1.14	1.29	0.57	0.71	**0.76**
# DAYS OBSERVED		4	3	5	4	4	4	2	4	6	6	4	4	**50**
	FIRST OBSERVED: August 8				LAST OBSERVED: October 29			PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 4			

Notes: Observed weekly in spring for the first time since 2008, with overall numbers slightly above average. Missed in the first week of fall, but otherwise observed weekly, and more frequently than usual especially in October, resulting in a record high overall abundance. Uncommon in winter, with sightings on just 6 of 27 visits, but including an unusually high count of 4 individuals on March 20. Lone individuals were observed during five of seven MAPS visits.

HOLA: Horned Lark / Alouette hausse-col (*Eremophila alpestris*)

Notes: Only one individual observed all year, on December 1.

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

	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	2.00	0.43											**0.20**
# DAYS OBSERVED	1	2	1											**4**
	FIRST OBSERVED: August 5				LAST OBSERVED: August 18				PEAK DATE: August 14				NUMBER OF INDIVIDUALS: 8	

Notes: Observed on four occasions in August, the best showing at MBO since 2008.

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	0.29	3.00	5.29	8.57	13.71	11.00	9.71	9.29	8.00	**6.91**
# DAYS OBSERVED	2	2	5	6	7	7	7	7	7	7	**57**
# PROCESSED				1	2	5	4-0-2	0-0-2	3-0-2	0-0-1	**15-0-7**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 5			PEAK DATE: April 26			NUMBER OF INDIVIDUALS: 23	

	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	1.86	0.71	0.57										**0.32**
# DAYS OBSERVED	3	4	3	2										**12**
	FIRST OBSERVED: August 2				LAST OBSERVED: August 26				PEAK DATE: August 8				NUMBER OF INDIVIDUALS: 6	

Notes: Observed weekly in spring for just the second time, but mean abundance was down further from 2011, which already was a record low. Despite that, the number banded was actually above average. Fall numbers were also well below average, in part because this was just the second time in eight years that observations did not extend past August. Summer results were poor too, with observations on just two of seven MAPS visits, both in June; 9 nestling were banded on June 19.

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						0.14					**0.01**
# DAYS OBSERVED						1					**1**
	FIRST OBSERVED: May 5			LAST OBSERVED: May 5			PEAK DATE: May 5			NUMBER OF INDIVIDUALS: 1	

Notes: Just one individual observed on May 5; although usually scarce, this is the first time that the species has been this rare.

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

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 24			LAST OBSERVED: May 5			PEAK DATE: Apr 24, May 5			NUMBER OF INDIVIDUALS: 1	

Notes: Observed earlier than ever in spring, but with just two individuals, scarcer than in any year since being missed entirely in 2006. Also missed in fall for the first time since 2009.

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					0.14	3.71	5.43	4.71	6.71	3.86	**2.46**
# DAYS OBSERVED					1	4	6	6	6	4	**27**
	FIRST OBSERVED: May 1			LAST OBSERVED: June 5			PEAK DATE: May 25			NUMBER OF INDIVIDUALS: 18	

Notes: Like other swallows, numbers were way down this spring, with a mean count barely half of last year's below-average result. The nearby colony on the McGill radar stations appeared less active than in previous years. Missed in fall for the third time in the past four 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	1.14	1.14	0.86	0.86	0.14	**0.44**
# DAYS OBSERVED					2	5	6	4	5	1	**23**
	FIRST OBSERVED: April 29			LAST OBSERVED: June 1			PEAK DATE: 8 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	0.43	0.86												**0.10**
# DAYS OBSERVED	2	2												**4**
	FIRST OBSERVED: August 3				LAST OBSERVED: August 11			PEAK DATE: August 11			NUMBER OF INDIVIDUALS: 5			

Notes: Unlike many species that arrived early this spring, the first Barn Swallow was one week later than usual, although the peak spanning weeks 6 and 7 was a week earlier than usual. Spring numbers were below average, but not as notably as for most other swallows. Fall numbers were somewhat below average, in part because the span of observations was shorter than in any previous year, with none observed past August 11.

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	15.14	10.86	12.14	20.43	16.71	17.00	14.14	9.71	6.71	7.57	**13.04**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
# PROCESSED				0-7-8	3-3-6	0-2-3	0-1-5	1-0-4	0-0-5	0-2-0	**4-15-31**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: April 20			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	16.29	17.29	16.71	17.86	19.00	18.29	19.71	19.86	27.57	20.14	19.14	25.00	34.14	**20.85**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED	10-2-11	7-0-9	4-0-6	6-1-11	5-2-7	2-1-10	11-5-17	6-1-14	10-3-20	12-0-19	8-2-20	62-0-16	28-3-35	**171-20-195**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 23			NUMBER OF INDIVIDUALS: 67			

Notes: Observed daily in spring and fall, and also banded in each week of fall. Spring abundance was up again from the record high in 2011; for the sixth year in a row, the peak in abundance was in week 4. Fall numbers were overall close to average, despite an influx of migrants over the final two weeks of the season. Despite Boreal Chickadees being reported with the migrant Black-capped Chickadee flocks elsewhere in southern Quebec and Ontario, none were observed at MBO this fall. Observed during all 27 winter visits, with a relatively typical mean daily count of 15.9 individuals; there were 12 banded, 23 returns, and 85 repeats Also noted during all seven MAPS visits, with 13 banded, 2 returns, and 3 repeats.

TUTI (ETTI): (Eastern) Tufted Titmouse / Mésange bicolore (*Baeolophus 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										0.14	**0.01**
# DAYS OBSERVED										1	**1**
	FIRST OBSERVED: June 3			LAST OBSERVED: June 3			PEAK DATE: June 3			NUMBER OF INDIVIDUALS: 1	

Notes: A long anticipated species, due to multiple sightings in nearby Baie d'Urfe and Ste-Anne-de-Bellevue in recent years, Tufted Titmouse finally was seen at MBO for the first time on June 3, becoming species 207 for the site.

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	0.14			0.29	0.14		0.14			0.14	**0.09**
# DAYS OBSERVED	1			2	1		1			1	**6**
	FIRST OBSERVED: April 3			LAST OBSERVED: May 31			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	1.14	0.43	0.29	0.71	1.43	0.57	0.29	0.57	0.29	0.86	0.86	**0.67**
# DAYS OBSERVED		2	3	2	2	4	5	2	4	4	2	5	5	**40**
# PROCESSED							1							**1**
	FIRST OBSERVED: August 12				LAST OBSERVED: October 30			PEAK DATE: August 17, October 2			NUMBER OF INDIVIDUALS: 5			

Notes: As in most years, spring sightings were scarce, and scattered throughout the season. Fall was a different matter, with observations weekly from week 2 onward, a pattern only previously documented in 2005. Overall abundance this fall was marginally higher, and reflected (albeit to a relatively minor extent) the mass irruption of the species reported over much of eastern Canada. Despite the increased number of sightings, only a single individual was banded in fall. However, observed in summer for the first time since 2008, with sightings on three of seven MAPS visits, and two banded on July 14, the first ever for the season.

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	0.71	0.86	1.00	0.43	1.00	0.71	0.43	0.14		**0.56**
# DAYS OBSERVED	2	5	5	4	3	5	4	3	1		**32**
	FIRST OBSERVED: April 2			LAST OBSERVED: May 27			PEAK DATE: 7 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	2.14	2.57	2.29	3.14	1.86	1.86	2.57	1.86	1.14	1.86	0.86	1.14	2.14	**1.96**
# DAYS OBSERVED	7	6	7	7	5	6	5	6	5	7	4	5	6	**76**
# PROCESSED	3									1			1	**5**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 12			NUMBER OF INDIVIDUALS: 8			

Notes: Observed weekly in spring except for week 10; numbers rebounded to near the long-term average after four years of lower abundance. Fall numbers were higher than ever before, largely thanks to nearly daily sightings of 2-3 individuals throughout August, including a weekly mean peaking at 3.1 individuals per day in week 4, matching the previous single week high for the species, also in week 4 of fall, back in 2006. The 5 individuals banded this fall is remarkable, given that previously there had never been more than one banded in any season. Observed twice in each of November and March and during three of seven MAPS visits, all of them in July.

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	0.29						**0.09**
# DAYS OBSERVED		1		2	2						
# PROCESSED				1							
	FIRST OBSERVED: April 7			LAST OBSERVED: April 29			PEAK DATE: April 7			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	1.43	0.43	0.86	2.14	0.57	0.14	**0.44**
# DAYS OBSERVED							1	3	2	4	5	3	1	**19**
# PROCESSED							1	5	3	6	5		1	**21**
	FIRST OBSERVED: September 17				LAST OBSERVED: October 24			PEAK DATE: October 12			NUMBER OF INDIVIDUALS: 8			

Notes: Spring observations were typically scarce, and limited to the first half of the season as in most years; a single individual was banded in week 4 for the third year in a row. For a second straight year, new highs were set in fall for both numbers observed and banded – despite this being the first time since 2006 that none were observed in the first half of the season. One winter observation, on the final day of the season, keeping alive the streak of at least one sighting each winter.

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				0.86	3.14	4.43	7.43	6.29	5.86	6.00	**3.40**
# DAYS OBSERVED				4	7	7	7	7	7	7	**46**
# PROCESSED					1	0-1-0	5-1-4	3-0-4	0-0-1	0-0-2	**9-2-11**
	FIRST OBSERVED: April 20			LAST OBSERVED: June 5			PEAK DATE: May 10, May 13, May 24			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	2.00	1.86	1.71	1.71	0.86	1.00	2.29	1.86	1.43	0.14				**1.14**
# DAYS OBSERVED	7	7	6	7	5	3	7	7	5	1				**55**
# PROCESSED	0-0-1	0-0-1				2-0-1	4-0-1	2-0-1	1-0-1					**9-0-6**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 8			PEAK DATE: September 12			NUMBER OF INDIVIDUALS: 4			

Notes: Spring numbers increased to a new record high for a third straight year, and were accompanied by a record number of individuals banded during the season; migration appeared to be shifted roughly one week earlier than last year. Conversely, the fall count was a bit below average, largely because there was no distinct peak in August as in most previous years. The number banded in fall was similar to results from 2010 and 2011, but well below counts from earlier years. Observed on six of seven MAPS visits, but in lower numbers than the past two years; 5 individuals banded in summer.

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	0.29				0.14	0.29					**0.07**
# DAYS OBSERVED	2				1	2					**5**
	FIRST OBSERVED: April 1			LAST OBSERVED: May 5			PEAK DATE: 5 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	0.57	0.57	0.86	1.00	0.29		**0.27**
# DAYS OBSERVED							2	4	3	3	5	2		**19**
# PROCESSED										1	2	2		**5**
	FIRST OBSERVED: September 15				LAST OBSERVED: October 21			PEAK DATE: October 3			NUMBER OF INDIVIDUALS: 3			

Notes: Typically scarce in spring with five individuals scattered over a six-week span. Numbers observed and banded in fall were close to average, peaking in the first half of October as usual.

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

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 28			LAST OBSERVED: May 28			PEAK DATE: 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						0.14	0.14		0.14					**0.03**
# DAYS OBSERVED						1	1		1					**3**
	FIRST OBSERVED: September 11				LAST OBSERVED: September 28			PEAK DATE: Sep 11, 12, 28			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in both spring and fall for the third year in a row; like in 2010 and 2011, there was a single spring sighting, but this year's was the first ever banded in spring. Three fall sightings likely involved two birds. One summer record, on July 6.

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		0.29	0.57	0.86				0.14			**0.19**
# DAYS OBSERVED		1	2	3				1			**7**
# PROCESSED				1				1			**2**
	FIRST OBSERVED: April 5			LAST OBSERVED: May 17			PEAK DATE: Apr 17, Apr 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						1.00	2.71	5.86	12.29	14.14	4.71	8.00	6.86	**4.27**
# DAYS OBSERVED						3	5	7	7	7	6	7	7	**49**
# PROCESSED						2	7-0-2	5	14	21-0-2	8	15	19-0-1	**91-0-5**
	FIRST OBSERVED: September 5				LAST OBSERVED: October 30			PEAK DATE: October 18			NUMBER OF INDIVIDUALS: 35			

Notes: Unusually scarce in spring for a third straight year, but the individual banded on May 17 was the latest ever record for the season. Although there have occasionally been early individuals in August, this was the first time the main push of fall migration began as early as week 6. The peak was in week 10, as in every previous year except 2006, and numbers remained unusually high through the end of the season, resulting in the highest number observed since 2005, and more banded than in any previous year. One individual observed on the last day of winter, an early spring migrant on March 27.

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				12.43	13.14	13.71	3.29				**4.26**
# DAYS OBSERVED				6	7	7	5				**25**
# PROCESSED				20-0-11	4-0-11	20-0-4	10				**54-0-26**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 13			PEAK DATE: Apr 21			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					0.43	0.57	2.43	5.29	19.43	55.43	19.71	14.14	3.57	**9.31**
# DAYS OBSERVED					2	3	7	7	7	7	7	7	7	**54**
# PROCESSED					1	1	3	15-0-3	67-0-10	165-0-35	56-0-10	41-0-7	4	**353-0-65**
	FIRST OBSERVED: August 29				LAST OBSERVED: October 30			PEAK DATE: October 5			NUMBER OF INDIVIDUALS: 97			

Notes: Spring migration was more concentrated than in any previous year, spanning only 26 days in the middle of the season. Numbers were remarkably consistent from week 4 through week 6, before dropping off sharply in week 7; overall the numbers observed and banded were close to average for spring. Like Golden-crowned Kinglets, Ruby-crowned Kinglets were a week ahead of schedule with the start of fall migration, but counts peaked in week 10 as in five of seven previous years. The 165 individuals banded in week 10 was a single-week record, and the season total of 353 was the highest since 2006.

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: August 18				LAST OBSERVED: August 18				PEAK DATE: August 18			NUMBER OF INDIVIDUALS: 1		

Notes: Only the second record for MBO, and the first in fall, the previous observation coming in the last week of spring 2008. This year's sighting was a lone individual just past the C nets.

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							0.29	0.14			**0.04**
# DAYS OBSERVED							1	1			**2**
	FIRST OBSERVED: May 12			LAST OBSERVED: May 21			PEAK DATE: May 12			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	0.43	0.71	3.29		**0.36**
# DAYS OBSERVED									2	1	2	6		**11**
	FIRST OBSERVED: September 28				LAST OBSERVED: October 23				PEAK DATE: October 20			NUMBER OF INDIVIDUALS: 11		

Notes: Observed on just two occasions in mid-May, in contrast to last year when a pair occupied a nest box and successfully produced 4 young. Fall records were concentrated in October as usual, with a particularly strong count in week 12. One summer observation, during the final MAPS visit on July 30.

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	0.86	0.29	0.14	**0.14**
# DAYS OBSERVED							1	5	2	1	**9**
# PROCESSED							1			1	**2**
	FIRST OBSERVED: May 9			LAST OBSERVED: May 31			PEAK DATE: May 21			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	1.71	2.71	1.71	1.86	0.29	0.29	0.43	0.14	0.29			0.14		**0.74**
# DAYS OBSERVED	6	7	7	6	2	2	2	1	2			1		**36**
# PROCESSED	3-1-0	7-0-2	4-1-0	5-0-3	1-0-1	1-0-0	1-0-0		1-0-1					**23-2-7**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 20				PEAK DATE: August 12			NUMBER OF INDIVIDUALS: 5		

Notes: Unusually scarce in spring for a second year in a row, and with sightings tapering off toward the end of the season, rather than building to a peak as in earlier years. Observed during four of seven MAPS visits, including two banded and one return. Abundance was above average this fall, like all other *Catharus* thrushes, and included a sighting in the second half of October for the first time. The number banded in fall was a new record, and the 7 banded in week 2 was just behind the single-week record of 8 in week 1 of 2009.

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 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							0.29	1.86	0.86	0.29				**0.25**
# DAYS OBSERVED							2	7	4	2				**15**
# PROCESSED							2	10	4-0-2	1				**17-0-2**
	FIRST OBSERVED: September 14				LAST OBSERVED: October 5				PEAK DATE: Sep 19, 21, 23			NUMBER OF INDIVIDUALS: 3		

Notes: As in 2006 and 2010, observed in spring only as a result of a lone individual caught and banded. Fall migration spanned four consecutive weeks for the first time since 2005; numbers observed and banded were both new record highs, as was the count of 10 individuals in a single week, in week 8.

BITH: Bicknell's Thrush / Grive de Bicknell (*Catharus bicknelli*)

	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									2					**2**
# PROCESSED									2					**2**
	FIRST OBSERVED: September 29				LAST OBSERVED: October 2				PEAK DATE: Sep 29, Oct 2			NUMBER OF INDIVIDUALS: 1		

Notes: Previously observed in fall only in 2008 and 2011; all records to date have been in weeks 9 and 10. This was the first time ever that more than one individual was observed in a year, with two banded over a span of just four days.

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										0.14	**0.01**
# DAYS OBSERVED										1	**1**
# PROCESSED										1	**1**
	FIRST OBSERVED: May 31			LAST OBSERVED: May 31			PEAK DATE: May 31			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	1.71	1.14	0.14	1.00	4.57	16.29	5.71	5.00	4.00	0.57	0.57		**3.16**
# DAYS OBSERVED	2	6	5	1	5	6	7	7	7	7	3	3		**59**
# PROCESSED	3	9-0-1	5	1	7	24-0-6	66-0-12	20-0-4	21-0-7	17-0-5	1-0-3	2-0-2		**176-0-40**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 22				PEAK DATE: September 13			NUMBER OF INDIVIDUALS: 28		

Notes: For the fourth year in a row, limited to one individual in spring, and unusually late. Fall abundance was unprecedented, with the new single-week record of 66 banded nearly double the previous record for an entire season (36 in fall 2005), and the mean daily count for five straight weeks in mid-season more than double the previous high for any week. Observed and banded in every week except the final one.

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				0.86	3.00					0.14	**0.40**
# DAYS OBSERVED				5	7					1	**13**
# PROCESSED				2							**2**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 1			PEAK DATE: April 27			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	0.57	1.57	7.29	8.86	5.14	0.29	**1.87**
# DAYS OBSERVED							3	4	5	7	7	7	2	**35**
# PROCESSED							2	1-0-2	7-0-1	39-0-10	32-0-68	14-0-31	0-0-2	**95-0-114**
	FIRST OBSERVED: September 16				LAST OBSERVED: October 25				PEAK DATE: October 13			NUMBER OF INDIVIDUALS: 14		

Notes: Although usually scarce in spring, seen almost daily this year in the second half of April, and the 2 individuals banded brought the cumulative spring total to just 3. Also observed and banded in record numbers in fall, although only marginally ahead of 2010 results.

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				**0.06**
# DAYS OBSERVED							3				**3**
# PROCESSED							1				
	FIRST OBSERVED: May 9			LAST OBSERVED: May 15			PEAK DATE: May 9			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**
# PROCESSED								1	0-0-1					**1-0-1**
	FIRST OBSERVED: September 25				LAST OBSERVED: September 28				PEAK DATE: Sep 25, 28			NUMBER OF INDIVIDUALS: 1		

Notes: Abundance close to average in both spring and fall, but banded in both seasons in the same year for the first time.

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	13.14	11.86	14.00	57.29	20.71	9.43	7.00	3.29	4.14	3.29	**14.41**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
# PROCESSED				4-0-1	13	1	1		1	1	**21-0-1**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5		PEAK DATE: April 22			NUMBER OF INDIVIDUALS: 205		

	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	18.43	15.43	21.29	14.57	9.86	7.43	16.14	37.57	93.14	136.86	213.29	207.43	196.29	**75.98**
# DAYS OBSERVED	7	7	7	7	7	6	7	7	7	7	7	7	7	**90**
# PROCESSED	5	2	3	1-0-1		3			4	19	29	45-1-0	19	**130-1-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 25			NUMBER OF INDIVIDUALS: 404			

Notes: Present weekly in both spring and fall as in all previous years. Overall abundance in spring was higher than in any previous year, largely due to a single-day record of 205 individuals on April 22. Numbers observed and banded in fall remained below average for a second straight year, but peaked over the final three weeks as usual. Winter numbers the highest since 2007-08, largely due to flocks of over 100 individuals on November 4 and 7, and an unexpected mid-winter flock of 70 on February 23. Overall, observed on 23 of 27 winter visits, and one individual banded. Observed during all seven MAPS visits; a record high 18 banded.

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						0.57	3.43	4.86	5.14	2.00	**1.60**
# DAYS OBSERVED						2	7	7	7	4	**27**
# PROCESSED							6-2-4	7-0-3	6-0-9	2-0-1	**21-2-17**
	FIRST OBSERVED: May 6			LAST OBSERVED: June 3		PEAK DATE: May 23			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	6.14	5.57	6.43	7.00	6.00	8.14	11.00	6.57	5.29	3.00	1.86	1.43	0.14	**5.27**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	1	**85**
# PROCESSED	10-1-6	8-0-8	4-0-13	6-0-8	6-0-10	11-0-5	12-3-12	2-0-7	3-0-6	2-0-6	0-0-3	0-0-1		**64-4-85**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 24			PEAK DATE: September 13			NUMBER OF INDIVIDUALS: 18			

Notes: Both in spring and fall, numbers observed were above average (record high in spring), and a record number of individuals was banded. Observed weekly in fall for the first time since 2005, thanks to an individual that stuck around for the first day of the week. The fall peak of 11 individuals per day in week 7 was a new high for the species. Observed on six of seven MAPS visits, including 3 banded and a repeat.

NOMO: Northern Mockingbird / Moqueur polyglotte (*Mimus polyglottus*)

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 7			LAST OBSERVED: May 7		PEAK DATE: May 7			NUMBER OF INDIVIDUALS: 1		

Notes: A lone sighting on May 7 was the first at MBO since May 2007.

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					0.86	0.43	0.43	0.14	0.71	0.29	**0.29**
# DAYS OBSERVED					6	3	3	1	5	1	**19**
# PROCESSED							1	1			**2**
	FIRST OBSERVED: April 26			LAST OBSERVED: June 1		PEAK DATE: June 1			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	1.00	1.14		0.57	0.29	0.57	1.29							**0.37**
# DAYS OBSERVED	4	5		3	2	3	6							**23**
# PROCESSED	2-0-1	1		0-0-1		0-0-1	0-0-1							**3-0-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 18			PEAK DATE: 11 dates			NUMBER OF INDIVIDUALS: 2			

Notes: Slightly below average in spring, peaking in week 5 for the second time in three years. Slightly above average numbers in fall, although disappearing unusually soon, with records to at least week 9 in all previous years. Observed just once this summer, an individual banded on July 23.

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	6.29	0.43	0.57	0.43	1.29	0.57	0.57	0.43	1.14	1.29	**1.30**
# DAYS OBSERVED	2	2	2	3	3	2	2	1	2	3	**22**
	FIRST OBSERVED: March 31			LAST OBSERVED: June 3			PEAK DATE: March 31			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	1.43	10.00	2.14	1.29	0.86	1.57	1.57	5.57	221.86	251.14	133.00	58.57	91.43	**60.03**
# DAYS OBSERVED	2	3	3	1	2	2	3	2	6	7	7	7	7	**52**
# PROCESSED												1		**1**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 30			PEAK DATE: October 3			NUMBER OF INDIVIDUALS: 561			

Notes: Present weekly in both spring and fall for a second year in a row, although observed three or fewer times per week throughout spring and the first eight weeks of fall. Overall spring numbers were lower than any year except 2005. Conversely, the mean daily count for fall was nearly double the previous record in 2010, thanks to sustained high numbers from late September through mid-October, an earlier peak than any previous year. The individual banded in week 12 was just the third for fall across all years. Winter numbers were the highest ever thanks to large flocks remaining present in November and December, including 200+ individuals on three dates, as late as December 10. Observed in small numbers on just two of seven MAPS visits in summer.

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

	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	2.29	12.29	1.14	2.57	0.71	**1.47**
# DAYS OBSERVED								1	2	7	4	2	2	**18**
	FIRST OBSERVED: September 21				LAST OBSERVED: October 26			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 44			

Notes: Missed in spring for a third straight year. Fall abundance was much higher than ever before, largely due to the record count of 44 individuals (in several smaller flocks) on October 4, as well as good numbers throughout the rest of week 10. The first ever winter record was of two late fall migrants flying overhead on November 17.

SNBU: Snow Bunting / Plectrophane des neiges (*Plectrophenax nivalis*)

Notes: The only sighting of the year was a flock of 35 individuals on December 1.

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

	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	**0.21**
# DAYS OBSERVED												1	6	**7**
# PROCESSED													1	**1**
	FIRST OBSERVED: October 23				LAST OBSERVED: October 29			PEAK DATE: October 27			NUMBER OF INDIVIDUALS: 13			

Notes: Absent this spring, in sharp contrast to the record numbers in 2011. Present only at the end of fall, but in larger numbers than in any previous year, and with the first individual ever banded at MBO (species #110). Unusually scarce in winter, with just two individuals observed on December 1, and one more on January 8.

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	0.14	6.43	19.43	1.71	6.43	1.14	1.71	19.71	22.71	17.43	**9.69**
# DAYS OBSERVED	1	4	7	5	5	3	2	7	7	5	**46**
# PROCESSED					1			9	38	29-0-2	**77-0-2**
	FIRST OBSERVED: April 1			LAST OBSERVED: June 5			PEAK DATE: May 21			NUMBER OF INDIVIDUALS: 54	

	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	19.86	22.29	25.86	31.43	13.29	7.71	10.43	8.71	8.57	0.71		0.29	0.29	**11.49**
# DAYS OBSERVED	7	7	7	7	7	6	5	6	5	2		2	1	**62**
# PROCESSED	13	10-0-1	3-0-1	3										**29-0-2**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 24			PEAK DATE: August 24			NUMBER OF INDIVIDUALS: 55			

Notes: After two years with very high spring numbers, 2012 was closer to average, although there were two good peaks of movement, one in mid-April, and the other in the second half of May and into early June. During the second wave, more individuals were banded in a single week than ever before (in any season), resulting in a record total for the season. In fall, both the number observed and banded were close to average, although the species was unusually scarce in October. Seen sporadically in winter, with 8 on November 4, 7 on December 7, 35 on January 8, and 7 on March 22. Observed during all seven MAPS visits, including 4 banded.

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						0.14	1.29	0.29			**0.17**
# DAYS OBSERVED						1	6	2			**9**
# PROCESSED											
	FIRST OBSERVED: May 7			LAST OBSERVED: May 19			PEAK DATE: May 11			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	0.71	0.29	0.71	1.57	0.71	0.57	0.57	0.29						**0.42**
# DAYS OBSERVED	4	1	4	7	3	3	4	2						**28**
# PROCESSED	4	2	4	9-1-1	4-1-0	4	3-0-1	2						**32-2-2**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 25			PEAK DATE: Aug 24, Aug 25, Sep 2			NUMBER OF INDIVIDUALS: 3			

Notes: Fewer observations than in any previous spring, missing from week 9 for the first time ever, and without any banded for the first time since 2009. Fall numbers observed and banded also a bit below average. Fewer observed in summer than ever before, just a lone individual banded on July 6.

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						0.29	1.86	2.71	2.00	0.29	**0.71**
# DAYS OBSERVED						2	7	5	5	2	**21**
# PROCESSED							6-0-1	15-0-4	6-0-7	1-0-1	**28-0-13**
	FIRST OBSERVED: May 2			LAST OBSERVED: June 1			PEAK DATE: May 21			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	0.71	1.14	1.14	0.43	1.29	1.14	0.14							**0.46**
# DAYS OBSERVED	2	4	5	3	5	6	1							**26**
# PROCESSED	5	7-0-2	6-0-2	3	8-0-1	5-0-1	1							**35-0-6**
	FIRST OBSERVED: August 4				LAST OBSERVED: September 12			PEAK DATE: September 1			NUMBER OF INDIVIDUALS: 4			

Notes: Timing and abundance of migrants in spring was fairly typical, although the number banded tied last year's record high. Similarly, fall abundance was close to normal, but the number banded was above average. The peak count in fall was within the first three days of September for the third year in a row.

GWWA: Golden-winged Warbler / Paruline à ailes dorées (*Vermivora chrysoptera*)

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 18			LAST OBSERVED: May 18			PEAK DATE: May 18			NUMBER OF INDIVIDUALS: 1	

Notes: Observed in spring for the first time ever, and the first sighting overall since August 2008.

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						0.71	2.14	0.43			**0.33**
# DAYS OBSERVED						2	4	2			**8**
# PROCESSED							2				**2**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 21			PEAK DATE: May 9			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	1.00	0.71	1.14	1.14	0.43	0.29	0.29							**0.38**
# DAYS OBSERVED	6	4	4	4	2	2	2							**24**
# PROCESSED	5-0-1	2-1-0	3	2	1	1	2							**16-1-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 16			PEAK DATE: Aug 15, Aug 25			NUMBER OF INDIVIDUALS: 3			

Notes: Spring migration was constrained to just three weeks, for the first time since 2005 and correspondingly, numbers observed and banded were below average for the season. Fall observations were the lowest ever, with a much weaker peak in the second half of August than usual; the number banded in fall was the lowest since 2007. Only one observation in summer, on the final MAPS visit, July 30.

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	7.57	18.00	9.57		**3.54**
# DAYS OBSERVED						2	7	6	6		**21**
# PROCESSED							16	48-0-1	30-0-2		**94-0-3**
	FIRST OBSERVED: May 5			LAST OBSERVED: May 28			PEAK DATE: May 17		NUMBER OF INDIVIDUALS: 45		

	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	1.29	2.29	6.57	3.43	4.57	3.00	1.14	0.29	0.71				**1.85**
# DAYS OBSERVED	3	5	7	7	5	7	7	4	2	2				**49**
# PROCESSED	4	5-0-1	5-2-3	21-0-7	8-0-1	20-0-9	5-0-3	2-0-4	1-0-1	4				**75-2-29**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 5			PEAK DATE: August 24			NUMBER OF INDIVIDUALS: 20			

Notes: The record high migration in fall 2011 was reflected in new highs for individuals observed and banded in spring 2012. The 48 individuals banded in week 8 was a record for any week in spring. Conversely, fall numbers dropped by more than half compared to 2011, and were only slightly above the long-term average. Although numbers in late August were actually higher than ever for that time of year, but the traditional September peak was missing this year.

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								0.29			**0.03**
# DAYS OBSERVED								2			**2**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 20			LAST OBSERVED: May 21			PEAK DATE: May 20, 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					0.14			0.14	0.29	1.57	0.14	0.14		**0.19**
# DAYS OBSERVED					1			1	1	6	1	1		**11**
# PROCESSED									2	7-0-1	0-0-1	1		**10-0-2**
	FIRST OBSERVED: September 3				LAST OBSERVED: October 19			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 5			

Notes: As in 2011, spring observations were limited to week 8; unlike last year, one was banded in 2012. For the fifth year in a row, there was a lone early fall migrant, well in advance of the main movement from late September to mid-October. Abundance was above average in fall, highlighted by a record high daily mean of 1.6 for week 10. The seven individuals banded in week 10 was also a single-week record, although the total for the season was behind the 12 banded in 2007.

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						1.00	3.57	1.29	0.14		**0.60**
# DAYS OBSERVED						4	7	4	1		**16**
# PROCESSED						3	10	3			**16**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 26			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	0.57	0.57	1.43	1.14	0.71	2.71	3.29	2.00	2.14	3.29		0.14		**1.38**
# DAYS OBSERVED	4	3	6	4	4	5	7	6	5	4		1		**49**
# PROCESSED	3-1-0	2-0-1	3	4-0-1	1-0-1	11	13-0-2	8-0-1	11	16		1		**73-1-6**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 17			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 15			

Notes: Spring abundance fairly typical, although peaking a week earlier than usual, and with an above-average number banded. Numbers observed and banded below average throughout fall, finally peaking in week 10 then abruptly disappearing.

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

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 19			LAST OBSERVED: May 19			PEAK DATE: May 19		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		0.57	0.86	0.14	0.14									**0.13**
# DAYS OBSERVED		4	5	1	1									**11**
# PROCESSED		3	6	1	1									**11**
	FIRST OBSERVED: August 11				LAST OBSERVED: August 31			PEAK DATE: August 15			NUMBER OF INDIVIDUALS: 2			

Notes: Rarer than ever in spring, with just a single record on May 19. Closer to average numbers in fall, but missing in September for the first time since 2006.

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					0.29	0.14	4.14	8.43	6.86	5.86	**2.57**
# DAYS OBSERVED					2	1	6	7	7	7	**30**
# PROCESSED							4-1-1	15	5-1-7	1-0-2	**25-2-10**
	FIRST OBSERVED: April 28			LAST OBSERVED: June 5			PEAK DATE: May 15			NUMBER OF INDIVIDUALS: 13	

	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	9.57	6.86	7.71	7.71	5.57	3.86	8.00	3.29	1.43	0.57	0.29		0.86	**4.29**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	4	3	1		5	**69**
# PROCESSED	28-2-5	10-1-11	21-0-4	15-0-9	11-2-7	6-0-7	18-1-2	4-0-5	6-1-0	1			1-0-1	**121-7-51**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 29			PEAK DATE: August 5				NUMBER OF INDIVIDUALS: 15		

Notes: Spring numbers have remained remarkably consistent over the years, but abundance set a new record in 2012 by a small margin over last year. Fall numbers observed and banded were both record high this year, highlighted by a single-week record of 28 banded in week 1, and observations for the first time in week 13. Observed during all seven MAPS visits, including 8 banded, 4 returns, and 8 repeats, all of which were record high counts.

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							0.86	2.00	2.71	0.14	**0.57**
# DAYS OBSERVED							3	6	5	1	**15**
# PROCESSED							2	5	12		**19**
	FIRST OBSERVED: May 9			LAST OBSERVED: May 31			PEAK DATE: May 25, May 27			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	4.29	6.71	7.43	5.43	3.57	4.29	2.00	0.29	0.71					**2.67**
# DAYS OBSERVED	6	7	7	7	7	7	6	2	3					**52**
# PROCESSED	23-0-1	39-0-5	19-1-1	28-0-2	10-0-1	12-0-5	5-0-3		3					**139-1-18**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 2			PEAK DATE: August 18				NUMBER OF INDIVIDUALS: 18		

Notes: Back to average abundance this spring after two high years, although the number banded this spring was a new record. Fall numbers also dropped off a bit in 2012, after increasing steadily for the previous five years, but remained above average. For the fourth time in the past five years, migration peaked in week 3. Missed in summer for the first time ever.

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							0.71				**0.07**
# DAYS OBSERVED							1				**1**
# PROCESSED							3				**3**
	FIRST OBSERVED: May 9			LAST OBSERVED: May 9			PEAK DATE: May 9			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	0.43		0.14	0.14							**0.09**
# DAYS OBSERVED		1	1	2		1	1							**6**
# PROCESSED			2	0-0-2			1							**3-0-2**
	FIRST OBSERVED: August 14				LAST OBSERVED: September 15			PEAK DATE: Aug 21, Aug 23				NUMBER OF INDIVIDUALS: 2		

Notes: More numerous in spring than in 2010 or 2011, although all five individuals were observed on May 9, earlier than the usual window of migration at MBO. Fall numbers returned to average after last year's record highs.

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							1.00				**0.10**
# DAYS OBSERVED							3				**3**
# PROCESSED											
	FIRST OBSERVED: May 9			LAST OBSERVED: May 13			PEAK DATE: May 9			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	1.00	1.00		0.14					**0.19**
# DAYS OBSERVED					2	4	3		1					**10**
# PROCESSED						5	3		0-0-1					**8-0-1**
	FIRST OBSERVED: August 29				LAST OBSERVED: September 26			PEAK DATE: Sep 6, Sep 13				NUMBER OF INDIVIDUALS: 4		

Notes: Below average in spring, with all observations in week 7, earlier than the usual peak for the season; none banded in spring for the first time since 2006. Above average numbers observed and banded in fall, mostly in the first half of September.

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						0.57	7.29	3.71	2.14	0.14	**1.39**
# DAYS OBSERVED						2	6	7	5	1	**21**
# PROCESSED							8	18-0-1	13		**39-0-1**
	FIRST OBSERVED: May 7			LAST OBSERVED: May 30			PEAK DATE: May 9		NUMBER OF INDIVIDUALS: 21		

	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	0.71	4.71	7.43	8.14	11.14	12.43	2.71	1.43	1.00				**3.85**
# DAYS OBSERVED	2	3	7	7	7	7	7	6	5	4				**55**
# PROCESSED	1	3-0-1	12-0-3	36-0-6	31-0-4	44-0-9	59-0-5	7	7-0-1	3				**203-0-29**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 6			PEAK DATE: September 12			NUMBER OF INDIVIDUALS: 32			

Notes: Spring numbers observed a new record high, but peaking earlier than ever before, in week 7; number banded also above average. Fall numbers observed and banded also above average, but with both peaking later than in any previous year, in week 7.

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							0.14	0.14			**0.03**
# DAYS OBSERVED							1	1			**2**
# PROCESSED								1			**1**
	FIRST OBSERVED: May 14			LAST OBSERVED: May 18			PEAK DATE: May 14, 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	0.29		0.14	0.43	0.14						**0.09**
# DAYS OBSERVED			1	2		1	3	1						**8**
# PROCESSED			1	1			3	1						**6**
	FIRST OBSERVED: August 15				LAST OBSERVED: September 22			PEAK DATE: 8 dates			NUMBER OF INDIVIDUALS: 1			

Notes: For the third year in a row, only two individuals were observed in spring, but as in 2011, one of them was banded. Although still rare in fall, numbers observed and banded remained above average for a third straight year.

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							0.86	0.29			**0.11**
# DAYS OBSERVED							3	1			**4**
	FIRST OBSERVED: May 9			LAST OBSERVED: May 21			PEAK DATE: May 9		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		0.14									**0.02**
# DAYS OBSERVED			1		1									**2**
	FIRST OBSERVED: August 20				LAST OBSERVED: August 31			PEAK DATE: Aug 20, Aug 31			NUMBER OF INDIVIDUALS: 1			

Notes: Even though only 8 individuals were observed in spring, this was still a new record for the season, although for the sixth time in eight years, none were banded. In fall, the two individuals observed was the lowest count since 2008, and it was the first time since 2009 that none were banded.

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						5.43	20.71	15.57	12.14	7.71	**6.16**
# DAYS OBSERVED						5	7	7	7	7	**33**
# PROCESSED						3	13-10-13	17-6-19	2-0-11	2-0-6	**37-16-49**
	FIRST OBSERVED: May 4			LAST OBSERVED: June 5			PEAK DATE: May 12		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	10.71	6.29	3.43	0.57			0.14							**1.63**
# DAYS OBSERVED	7	7	6	2			1							**23**
# PROCESSED	31-1-6	9-0-7	0-1-4	1			1							**42-2-17**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 14			PEAK DATE: August 1			NUMBER OF INDIVIDUALS: 18			

Notes: Numbers observed and banded this spring were slightly above average, in part due to record high numbers for week 6, and an unusually high peak for the season in week 7 (second only to 21.1 per day in week 9 of 2006). Fall numbers were slightly below average, but this may reflect an unusually early migration, detected during the second last MAPS session when a record 56 individuals were banded in one day. Observed during all MAPS sessions, with a total of 61 banded, plus 5 repeats.

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							1.43	1.00	2.71	1.29	**0.64**
# DAYS OBSERVED							5	5	6	6	**22**
# PROCESSED							3	1	1	2	**7**
	FIRST OBSERVED: May 11			LAST OBSERVED: June 5			PEAK DATE: May 24		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	1.00	1.57	0.86	0.29	0.86	0.71	0.29	0.14						**0.44**
# DAYS OBSERVED	6	5	4	2	5	3	2	1						**28**
# PROCESSED	6	6	3	2	1	3	2							**23**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 24			PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 3			

Notes: Spring migration was fairly typical, although more were observed and banded in week 7 than in any previous year. Fall numbers observed were the lowest since 2007, and banded since 2009. One individual observed in summer, on June 23.

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						0.43		4.43	5.86	1.43	**1.21**
# DAYS OBSERVED						1		6	6	3	**16**
# PROCESSED								4	9-0-1	7	**20-0-1**
	FIRST OBSERVED: May 8			LAST OBSERVED: June 1			PEAK DATE: May 23		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			0.14		0.57	5.71	2.57	0.86	0.14					**0.77**
# DAYS OBSERVED			1		2	7	5	3	1					**19**
# PROCESSED			1		2	21	12	3	1					**40**
	FIRST OBSERVED: August 20				LAST OBSERVED: October 2			PEAK DATE: September 7			NUMBER OF INDIVIDUALS: 13			

Notes: Spring migration was fairly typical, except for a record early group of three individuals on May 8. Fall numbers were above average, with the mean daily count of 5.7 and banding total of 21 individuals in week 6 both new weekly records for fall.

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						0.14	2.14	0.86			**0.31**
# DAYS OBSERVED						1	5	3			**9**
# PROCESSED							2				**2**
	FIRST OBSERVED: May 8			LAST OBSERVED: May 19			PEAK DATE: May 9		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	0.43	0.71	0.29	0.57	0.43	0.86	0.14				**0.29**
# DAYS OBSERVED		1	1	1	2	2	2	3	3	1				**16**
# PROCESSED		1	1	3	4	1	1	1	2					**14**
	FIRST OBSERVED: August 14				LAST OBSERVED: October 4			PEAK DATE: October 2			NUMBER OF INDIVIDUALS: 4			

Notes: Typically scarce in spring, though shifted a bit earlier than usual, and with a remarkable single-day count of 11 on May 9. Fall numbers the lowest since 2006, and especially notable for the virtual absence in October. Lone individuals observed twice in summer, on June 14 and July 14.

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				0.14		0.29	0.14				**0.06**
# DAYS OBSERVED				1		2	1				**4**
# PROCESSED				1		1					**2**
	FIRST OBSERVED: April 21			LAST OBSERVED: May 9			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						0.29	0.86	1.00	2.57	1.00	0.14			**0.45**
# DAYS OBSERVED						2	4	3	5	3	1			**18**
# PROCESSED						2	2	1	6	4-0-2	1			**16-0-2**
	FIRST OBSERVED: September 8				LAST OBSERVED: October 12			PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 5			

Notes: As usual, uncommon in spring; the April 21 bird was the earliest ever recorded. The two individuals banded were the first ones in the 8 years of the Spring Migration Monitoring Program. Fall numbers observed and banded were close to average, but the one banded in week 11 was the latest ever.

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

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 6			LAST OBSERVED: May 6			PEAK DATE: May 6			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: September 22				LAST OBSERVED: October 4			PEAK DATE: Sep 22, Oct 4			NUMBER OF INDIVIDUALS: 1			

Notes: A lone spring record in week 6, as in 2010. Scarcer than ever before in fall, with only two sightings, including one individual banded in week 8.

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

	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 27				LAST OBSERVED: September 7			PEAK DATE: Aug 27, Sep 7			NUMBER OF INDIVIDUALS: 1			

Notes: Banded at MBO for just the second time, and also observed for the first time since 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	8.57	15.71	0.86			**2.57**
# DAYS OBSERVED					2	5	6	3			**16**
# PROCESSED					1	2	41	2			**46**
	FIRST OBSERVED: April 27			LAST OBSERVED: May 19			PEAK DATE: May 9			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	0.14		0.29	0.29	0.14	1.00	4.71	2.71	47.86	68.86	10.86	2.43		**10.71**
# DAYS OBSERVED	1		2	1	1	6	5	4	7	7	7	7		**48**
# PROCESSED	1		1		1	4	6	2	84-0-8	170-0-15	21-0-6	2		**292-0-29**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 23			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 191			

Notes: Spring numbers returned to normal levels after last year's record influx. Abundance peaked in week 7, as in four of the five previous years, and nearly 90% of birds banded this spring were during that week. Fall numbers were expected to be high, given previous significant peaks in 2006, 2008, and especially 2010. However, both numbers observed (mean 10.7) and banded (total 292) were closer to the mean for "odd" years (4.4; 110) than for previous "even" years (39.2; 1538). The peak of 170 individuals banded in week 10 was more than double the highest weekly total in any "odd" year, but less than one-quarter of the best weeks in 2008 and 2010.

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						0.71	1.71	1.00	0.29		**0.37**
# DAYS OBSERVED						1	4	3	2		**10**
	FIRST OBSERVED: May 5			LAST OBSERVED: May 28			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			0.14	0.43	0.86	0.43	3.14	0.43	0.14					**0.43**
# DAYS OBSERVED			1	3	3	2	7	2	1					**19**
# PROCESSED			2			2	15		1					**20**
	FIRST OBSERVED: August 16				LAST OBSERVED: September 26			PEAK DATE: September 14			NUMBER OF INDIVIDUALS: 6			

Notes: Numbers observed in spring were close to average, but for the first time since 2009, none were banded. Overall numbers for fall were also near normal, but only as a result of a single-week record for both abundance and individuals banded in week 7. Absent in October for the first time ever.

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								0.29	1.29		**0.16**
# DAYS OBSERVED								2	5		**7**
# PROCESSED								1	4		**5**
	FIRST OBSERVED: May 21			LAST OBSERVED: May 27			PEAK DATE: May 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	0.29	1.29	0.43	0.29		0.14								**0.19**
# DAYS OBSERVED	1	5	2	2		1								**11**
# PROCESSED	2	7-0-1	2	2		1								**14-0-1**
	FIRST OBSERVED: August 7				LAST OBSERVED: September 7			PEAK DATE: August 14			NUMBER OF INDIVIDUALS: 3			

Notes: Typically scarce in spring, with observations limited to the traditional peak period of weeks 8 and 9, and this year compressed within a particularly narrow span of just 7 days. Fall numbers observed and banded the lowest since being at equivalent levels in 2009. The peak of migration was earlier than usual, in week 2, and there were fewer September records than any previous year except 2007.

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							0.29	1.43	4.57	0.86	**0.71**
# DAYS OBSERVED							1	5	7	4	**17**
# PROCESSED							1	4-0-1	16-0-3	4	**25-0-4**
	FIRST OBSERVED: May 12			LAST OBSERVED: June 2			PEAK DATE: May 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			0.14	0.86	1.29	2.29	1.29	0.14						**0.46**
# DAYS OBSERVED			1	6	5	6	5	1						**24**
# PROCESSED			1	4-0-3	5-0-1	14-0-1	5-0-4	1						**30-0-9**
	FIRST OBSERVED: August 15				LAST OBSERVED: September 22			PEAK DATE: September 8			NUMBER OF INDIVIDUALS: 6			

Notes: Like many warblers, arriving earlier in May than usual, with records in week 7 for only the second time in eight years. Overall, numbers observed and banded in spring were well above average, largely due to a significant peak in week 9. Numbers observed and banded in fall were lower than the past couple of years, but close to average overall; both peaked in week 6, which is also fairly typical.

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	0.57	0.86	1.86	1.43	0.71						**0.54**
# DAYS OBSERVED	1	2	2	3	2						**10**
# PROCESSED				2-0-2	0-0-1						**2-0-3**
	FIRST OBSERVED: April 2			LAST OBSERVED: April 26			PEAK DATE: April 15			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											0.43	4.57	5.71	**0.82**
# DAYS OBSERVED											2	7	7	**16**
# PROCESSED											2	12-0-4	19	**33-0-4**
	FIRST OBSERVED: October 15				LAST OBSERVED: October 30			PEAK DATE: October 27			NUMBER OF INDIVIDUALS: 9			

Notes: Spring abundance lower than ever before, and number banded also well below average. The unusual prolonged warm spell in March may have caused some migrants to head north earlier than usual. Fall numbers observed and banded close to normal, despite an unusually late first arrival date of October 15. Observed during all November and December visits, missed on half of January and February visits, and then observed again on all five occasions in March; the mean daily count of 7.0 individuals was nearly 50% higher than the previous best winter in 2009-10. New winter records were set for number banded (56), returns (10), and repeats (17).

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	0.43	0.71	2.57	3.71	3.29	2.71	0.86	**1.47**
# DAYS OBSERVED		1	2	2	4	7	7	6	7	3	**39**
# PROCESSED						2	1		1	1	**5**
	FIRST OBSERVED: April 9			LAST OBSERVED: June 3			PEAK DATE: May 15			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	0.71	0.29	0.14	1.71	2.86	1.71	4.71	1.43	0.86	3.43		0.71		**1.43**
# DAYS OBSERVED	4	1	1	3	5	4	7	5	6	4		2		**42**
# PROCESSED	3	2	1	1	8	2	9	1		5		1		**33**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 21			PEAK DATE: Sep 14, Oct 5			NUMBER OF INDIVIDUALS: 10			

Notes: In contrast to last year's record low spring numbers, abundance this year was higher than ever before, and the number banded was also above average. Observed in week 2 for just the second time, and in week 3 for the first time ever. Fall numbers were strong for a second year in a row, with a new high for abundance, and a tie with last year's record for number banded. The peak of migration this year was unusually early, in week 7. Observed in winter for the first time ever, an individual banded on February 23. Observed during three of seven MAPS sessions, including the first two individuals banded in summer.

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

	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 3				LAST OBSERVED: October 3			PEAK DATE: October 3			NUMBER OF INDIVIDUALS: 1			

Notes: Observed in fall for the fourth year in a row, and for the third time in that span, represented by just a single individual.

VESP: Vesper Sparrow / Bruant vespéral (*Pooecetes gramineus*)

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 22			LAST OBSERVED: May 5			PEAK DATE: April 22, May 5			NUMBER OF INDIVIDUALS: 1	

Notes: As in 2011, limited to just two sightings in spring; these were only the seventh and eighth records for MBO.

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					**0.03**
# DAYS OBSERVED				1		2					**3**
	FIRST OBSERVED: April 20			LAST OBSERVED: May 6			PEAK DATE: Apr 20, May 5, May 6			NUMBER OF INDIVIDUALS: 1	

Notes: Remaining scarce for a third straight spring, with three sightings limited to the middle of the season as in 2011. Missed in fall for the third time in four years. None have been banded since 2008.

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				1.29	1.57	0.29	0.14				**0.33**
# DAYS OBSERVED				3	7	2	1				**13**
# PROCESSED				2	4-0-4	0-0-1					**6-0-5**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 9			PEAK DATE: April 24			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										0.86	3.00	8.71	5.29	**1.37**
# DAYS OBSERVED										3	7	7	6	**23**
# PROCESSED										4	12-0-3	25-0-4	10-0-8	**51-0-15**
	FIRST OBSERVED: October 4				LAST OBSERVED: October 29			PEAK DATE: October 20			NUMBER OF INDIVIDUALS: 23			

Notes: Surprisingly late this spring, given that many other species seemed early, and the first Fox Sparrow has arrived in week 2 or week 3 in all previous years. Numbers observed lower than in any year other than 2007 (when the species was missed entirely in spring), and number banded well below average. Conversely, fall abundance was near the record high set in 2005, and the number banded tied the record from 2010. Numbers peaked in week 12 for the sixth time in eight years. Observed on all nine visits between November 2 and 22, and again on December 1, then not seen again until presumed early spring migrants were spotted on March 20. Two banded in winter, also involved in four subsequent repeat captures.

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	11.43	13.00	16.00	14.14	17.71	11.14	9.00	6.71	6.57	7.71	**11.34**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	**70**
# PROCESSED				10-8-1	4-5-8	2-2-6	4-0-3	2-2-7	1-1-1	0-1-2	**23-19-28**
	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	13.29	18.14	13.00	14.43	5.71	8.29	11.29	6.86	11.00	12.57	5.57	3.86	1.14	**9.63**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	4	**88**
# PROCESSED	55-2-7	37-3-13	14-0-6	16-0-3	2-1-4	14-0-3	13-3-8	9-1-6	19-2-16	19-3-10	8-1-3	8-0-2	2	**216-16-81**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 29			PEAK DATE: August 24				NUMBER OF INDIVIDUALS: 29		

Notes: Numbers observed in spring rebounded from last year's to around average; however, the number banded this spring was above average, and the number of returns was also high. The numbers observed and banded in fall were both close to average and followed the usual pattern of a main wave in August, followed by a second push of migrant in late September and early October. Observed twice in November, and then again during four of the five visits in the second half of March, no doubt early spring migrants; two individuals were banded in winter. Observed during all seven MAPS visits, with a record 26 individuals banded, plus 3 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							1.00	0.14	0.14	0.14	**0.14**
# DAYS OBSERVED							3	1	1	1	**6**
# PROCESSED							6	1	1	1	**9**
	FIRST OBSERVED: May 9			LAST OBSERVED: May 31			PEAK DATE: May 13			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	0.86	1.00	0.43	3.57		0.14		**0.48**
# DAYS OBSERVED					1	1	3	4	2	7		1		**19**
# PROCESSED					1	1	2	4	2	11-0-1		1		**22-0-1**
	FIRST OBSERVED: August 29				LAST OBSERVED: October 17			PEAK DATE: October 4				NUMBER OF INDIVIDUALS: 13		

Notes: Spring numbers slightly above average, largely due to a good movement in week 7. Fall numbers fairly low for most of the season, but elevated to record highs overall thanks to single-week records for numbers observed and banded in week 10.

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			0.14	3.29	4.71	4.14	1.43	0.71	2.14	1.43	**1.80**
# DAYS OBSERVED			1	6	7	7	6	5	7	5	**44**
# PROCESSED				7-1-0	7	3-1-3	2-0-2	0-0-2	0-0-4	0-0-1	**19-2-12**
	FIRST OBSERVED: April 17			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	2.29	1.43	0.29	1.57	1.43	0.14	0.57	0.43	1.14	3.29	1.57	1.00	0.14	**1.18**
# DAYS OBSERVED	5	6	1	6	5	1	3	3	3	7	6	4	1	**51**
# PROCESSED	7	3	1-0-1	1-0-4	1-0-1	0-0-1	1	1-0-1	4-0-1	10	6-0-2	3		**38-0-11**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 28			PEAK DATE: Aug 1, Oct 5, Oct 8				NUMBER OF INDIVIDUALS: 5		

Notes: Slightly more numerous than usual in spring, and with a banding total matching the record high set in 2005 and equaled in 2008. The peak in late April and early May matched most previous years. Fall numbers observed and banded were higher than in 2010 and 2011, but still marginally below the long-term average. As is often the case, there was one peak (presumably local birds) in early August, and a second (presumably mostly migrants) in early October. Observed on six of seven MAPS visits, including 5 individuals banded and one return.

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			0.14	23.00	19.29	16.43	8.43	0.57		0.14	**6.80**
# DAYS OBSERVED			1	6	7	7	7	4		1	**33**
# PROCESSED				18-1-0	11-0-5	24-0-1	4				**57-1-6**
	FIRST OBSERVED: April 12			LAST OBSERVED: June 1		PEAK DATE: April 24			NUMBER OF INDIVIDUALS: 102		

	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	3.00	1.29	2.86	2.86	10.29	14.43	41.57	64.00	103.57	140.71	58.00	26.86	6.71	**36.63**
# DAYS OBSERVED	7	5	6	5	7	7	7	7	7	7	7	7	7	**86**
# PROCESSED	11-0-5	4-0-2	3-0-7	2-0-2	10-0-7	8-0-4	53-1-11	60-0-16	112-0-28	158-0-33	55-0-18	20-0-8	10-0-1	**506-1-142**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 6			NUMBER OF INDIVIDUALS: 210			

Notes: Overall numbers record high this spring, and peaking earlier than usual, in week 4 for the first time, although the number banded did not peak for another two weeks. Fall abundance and number banded were both new records by a wide margin over the previous highs in 2010 and 2009, respectively. Banded each week in fall for the second year in a row, although with numbers again not building until mid-season. The banding counts for weeks 9 and 10 both exceeded the previous single week record of 103 in week 10 of 2009, and the mean daily count of nearly 141 individuals in week 10 was over 25% more than the previous weekly high of 112 in week 10 of 2005. Late-lingering fall migrants were observed on three occasions in November. Missed in summer until the final day of MAPS on July 30, when two were banded and a third was observed.

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						0.43	3.43	0.14			**0.40**
# DAYS OBSERVED						2	6	1			**9**
# PROCESSED							8-0-1				**8-0-1**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 17		PEAK DATE: May 12			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						0.57	0.43	1.43	5.00	28.43	5.43	4.57	1.43	**3.64**
# DAYS OBSERVED						1	3	5	6	7	7	7	6	**42**
# PROCESSED							1		9-0-1	35-0-7	3-0-4	5	0-0-2	**53-0-14**
	FIRST OBSERVED: September 5				LAST OBSERVED: October 29			PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 69			

Notes: Well below average again this spring, with almost all observations coming in the traditional peak of week 7; the 8 individuals banded was the lowest total since 2007. Conversely, fall numbers observed and banded were both the highest since 2009, each peaking in week 10 as they have each year since 2007. This was the first time that fall migration spanned eight weeks. The lone winter record was a late straggler on November 15.

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	2.29	7.86	5.14	4.43	1.00	0.43	0.14				**2.13**
# DAYS OBSERVED	5	6	7	6	3	3	1				**31**
# PROCESSED					0-0-1		1				**1-0-1**
	FIRST OBSERVED: March 28			LAST OBSERVED: May 12		PEAK DATE: April 6			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						0.43	0.43	1.14	2.57	73.14	45.43	43.71	22.43	**14.56**
# DAYS OBSERVED						1	2	4	3	7	7	7	7	**38**
# PROCESSED						2	2	1	5-0-1	80-0-2	43-2-3	47-1-2	18-2-0	**198-5-8**
	FIRST OBSERVED: September 11				LAST OBSERVED: October 30			PEAK DATE: October 6			NUMBER OF INDIVIDUALS: 130			

Notes: Numbers in spring paled in comparison with the record highs in 2011, but overall were only a bit below the long-term median. The peak in abundance was in week 2, earlier than in most years, and the spring results may well reflect the unusually warm period in March that accelerated migration for some species. The low spring numbers may also have been a reflection of the exceptionally low number of migrants last fall, whereas fall 2012 results were back to being above average. The peak of abundance in week 10 was the earliest ever. Observed during 26 of 27 winter visits, missing only on February 28. Numbers were highest in November, peaking at 50 on November 13, and unusually high again at 40 on November 22. The 90 individuals banded, 3 returns, and 33 repeats were all well above average.

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	0.14	0.29	0.14	**0.09**
# DAYS OBSERVED						1	1	1	2	1	**6**
	FIRST OBSERVED: May 4			LAST OBSERVED: May 30			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	0.57	0.29	0.43		0.29			0.14						**0.13**
# DAYS OBSERVED	2	2	3		2			1						**10**
# PROCESSED		1			2									**3**
	FIRST OBSERVED: August 3				LAST OBSERVED: September 25			PEAK DATE: August 3			NUMBER OF INDIVIDUALS: 3			

Notes: The observation in week 6 this spring was the earliest ever; overall, spring numbers were typical, and as in all previous years, none were banded. Fall sightings were somewhat more numerous than the past couple of years, but more concentrated in the first half of August than usual. The three individuals banded was the most in a year since 2007.

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	2.86	3.71	5.14	5.14	6.14	5.29	6.71	5.29	4.43	1.86	**4.66**
# DAYS OBSERVED	6	7	7	7	7	7	7	7	7	6	**68**
# PROCESSED				1	0-1-0	1	2	1			**5-1-0**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: May 1			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	4.29	3.14	3.43	3.57	3.43	5.29	4.57	3.57	3.57	2.86	4.00	5.57	10.43	**4.44**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED	2-1-2	1	2	1-0-4	1-0-2	0-1-1		1	1	1	0-1-1	6-0-1	5-0-6	**21-3-17**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 27			NUMBER OF INDIVIDUALS: 20			

Notes: Observed weekly in spring and fall as in all previous years. Spring numbers were above average overall, and as usual remained relatively steady for much of the season before tapering off toward the end; the 5 individuals banded tied the previous record from 2005. Abundance was typical through most of fall, but spiked over the final two weeks, resulting in a new overall record. In each of the final two weeks, more individuals were banded than in any previous week, resulting in a 50% increase over the previous season record for Northern Cardinals banded, set last fall. Observed on 25 of 27 winter visits, missed only on January 3 and February 17. A record 11 individuals banded, despite the record count of 14 banded the previous fall, and offset by only one return and no repeats, suggesting that there is more movement of Northern Cardinals than generally recognized. Observed on six of seven MAPS visits in summer, with one banded.

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							3.00	1.14	1.14	1.43	**0.67**
# DAYS OBSERVED							7	5	5	6	**23**
# PROCESSED							1				**1**
	FIRST OBSERVED: May 9			LAST OBSERVED: June 5			PEAK DATE: May 10			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	3.86	3.29	2.14	4.86	0.57	1.00	1.14	0.29	0.29					**1.34**
# DAYS OBSERVED	7	7	6	7	3	4	5	2	2					**43**
# PROCESSED	6-1-2	5-0-1	2-0-1	15-0-3		1	1							**30-1-7**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 28			PEAK DATE: August 24			NUMBER OF INDIVIDUALS: 14			

Notes: For the second time in three years, Rose-breasted Grosbeaks arrived late, not begin recorded until week 7 – however, they also peaked in that week, earlier than in all but one previous year. Overall, fewer were observed this spring than any year except 2010, and the one individual banded tied last year's record low. Fall numbers were more typical overall, the only noteworthy discrepancy being the peak of observations and birds banded in week 4, both of which have always previously reached their maximum in the first half of August. Observed on just two occasions during MAPS, including one banded.

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							0.71	2.86	4.00	2.86	**1.04**
# DAYS OBSERVED							2	7	7	6	**22**
# PROCESSED									2-1-1		**2-1-1**
	FIRST OBSERVED: May 14			LAST OBSERVED: June 5			PEAK DATE: May 24, 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	2.29	1.00	1.43	1.00	0.14	1.14	0.14						**0.70**
# DAYS OBSERVED	7	7	6	6	6	1	3	1						**37**
# PROCESSED	3-1-0	2	2	9	2-0-2	1	6							**25-1-2**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 23			PEAK DATE: August 11			NUMBER OF INDIVIDUALS: 5			

Notes: Record high in abundance this spring, with a new single-week record of 4.0 individuals per day in week 9. The two individuals banded were the first ones in spring since 2009, but overall close to the long-term average for the season. Fall numbers observed and banded were the lowest since 2007, largely because the traditional second wave of migrants from mid-September through early October was barely present this year. One or two individuals observed on four of seven MAPS visits.

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						0.29	1.57	0.43	0.14	0.14	**0.26**
# DAYS OBSERVED						1	5	2	1	1	**10**
	FIRST OBSERVED: May 8			LAST OBSERVED: June 1			PEAK DATE: May 13		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				0.29									**0.04**
# DAYS OBSERVED	2				1									**3**
# PROCESSED														
	FIRST OBSERVED: August 3				LAST OBSERVED: August 29			PEAK DATE: August 29			NUMBER OF INDIVIDUALS: 2			

Notes: Present over the second half of spring, peaking a bit earlier than usual in week 7. Observed in fall for the first time since 2008, with two sightings near the beginning and end of August.

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	42.14	29.14	42.14	55.00	82.86	71.00	57.57	41.14	32.43	32.43	**48.59**
# DAYS OBSERVED	7	7	7	6	7	7	7	7	7	7	**69**
# PROCESSED				21-2-0	12-2-0	49-5-6	19-3-7	9-1-3	2-1-4	4-1-0	**116-15-20**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 5			PEAK DATE: April 29		NUMBER OF INDIVIDUALS: 180		

	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	12.57	6.86	2.00	8.29	1.29	3.00	9.14	50.00	278.00	269.86	347.29	265.43	254.43	**116.01**
# DAYS OBSERVED	6	6	3	4	4	5	6	7	7	7	7	7	7	**76**
# PROCESSED	1										2	10		**13**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: October 10			NUMBER OF INDIVIDUALS: 1009			

Notes: Present weekly in spring and fall, as in most previous years. For the first time since 2008, spring numbers observed and banded were above average; both peaked in late April and early May as usual. Fall abundance increased for the fourth year in a row, although the number banded was close to average. As has been the case since 2010, numbers swelled sharply in week 9, and remained at elevated levels through the end of the season. This year's peak count of 1009 was slightly below the highs of 1100 in 2010 and 1200 in 2011. Winter numbers approached the record set in 2009-10, with sightings during all 14 visits in November and December, including high counts of 200 on November 4 and 125 on November 7. Absent in January and February, but back in good numbers during all five visits in the second half of March; a winter record of 25 individuals were banded. Observed during all MAPS visits except July 23; 5 individuals banded and 3 repeats.

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				1.71	1.00	1.29	1.57				**0.56**
# DAYS OBSERVED				5	4	6	6				**21**
# PROCESSED				1			3-0-1				**4-0-1**
	FIRST OBSERVED: April 18			LAST OBSERVED: May 14			PEAK DATE: April 21			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						0.14			14.29	9.14	2.14	3.71	0.57	**2.31**
# DAYS OBSERVED						1			6	7	6	3	3	**26**
# PROCESSED									1			1		**2**
	FIRST OBSERVED: September 11				LAST OBSERVED: October 27				PEAK DATE: October 1			NUMBER OF INDIVIDUALS: 50		

Notes: More numerous than in any previous spring, although all observations were within an unusually narrow span of just four weeks; the four individuals banded nearly matched the previous spring total of 5 over the previous 7 years. Fall abundance was average overall, but largely due to sustained good counts in weeks 9 and 10, the best since October 2009. Two more individuals were banded in fall, bringing the cumulative total for the season to just three. Winter observations were limited to four occasions between November 2 and 17.

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	3.29	1.29	4.71	6.43	10.43	15.57	17.14	10.71	7.57	4.00	**8.11**
# DAYS OBSERVED	4	3	6	6	7	7	7	7	6	6	**59**
# PROCESSED					5	8	5-0-1	5-0-1	2	1	**26-0-2**
	FIRST OBSERVED: March 30			LAST OBSERVED: June 5			PEAK DATE: May 7			NUMBER OF INDIVIDUALS: 28	

	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	69.00	186.00	114.86	129.71	319.00	21.00	3.43	109.71	524.71	377.29	79.57	59.14	**153.89**
# DAYS OBSERVED	7	7	7	7	7	5	6	6	6	7	7	7	4	**83**
# PROCESSED			1							19	6	1		**27**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: September 11			NUMBER OF INDIVIDUALS: 1809		

Notes: Present weekly in spring and fall, as in all previous years. Spring numbers peaked distinctly in the first half of May, and were above average overall. The pattern of occurrence in fall was unlike any previous year, a significant sustained peak from week 3 through week 6, dropping to almost nothing by week 8, and then quickly building again, reaching an all-time peak of nearly 525 birds/day in week 10. The number of individuals banded was a small fraction of the population observed, and the total count ranked second for fall behind 2006. Winter numbers were four times higher than ever before, thanks to observations on five occasions in November (including 15 on November 13), and four dates in the second half of March, most notably a large flock of 67 on March 20. Two individuals banded on November 22 were the first ever in winter. Much less common than usual in summer, with observations on just four of seven MAPS dates, including one individual banded.

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	1.43	0.43	4.29	5.86	3.71	3.29	2.57	2.14	2.14	0.71	**2.66**
# DAYS OBSERVED	4	2	6	7	7	7	7	6	5	3	**54**
# PROCESSED								1-0-2	0-1-0		**1-1-2**
	FIRST OBSERVED: March 28			LAST OBSERVED: June 4			PEAK DATE: April 22			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	0.14	0.14	0.14					0.14	0.43	0.71		0.14	0.14	**0.15**
# DAYS OBSERVED	1	1	1					1	1	2		1	1	**9**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 26				PEAK DATE: October 7			NUMBER OF INDIVIDUALS: 4		

Notes: Abundance was below average in spring, and the one individual banded was the lowest count ever. There was only a modest peak in observations, and it occurred earlier than usual, in week 4. Typically uncommon in fall. Winter sightings limited to small numbers on three dates in the second half of March. Observed during all seven MAPS visits, including one banded, the first ever in summer.

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						5.57	17.86	9.71	7.71	5.57	**4.64**
# DAYS OBSERVED						4	7	7	7	7	**32**
# PROCESSED						1-2-0	6-7-9	1-1-3	0-1-0	1	**9-11-12**
	FIRST OBSERVED: May 5			LAST OBSERVED: June 5			PEAK DATE: May 10			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	4.29	7.29	8.29	6.29	0.43		0.14							**2.05**
# DAYS OBSERVED	7	7	7	7	3		1							**32**
# PROCESSED	8-0-2	11-0-2	1	3-0-1										**23-0-5**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 17			PEAK DATE: August 15				NUMBER OF INDIVIDUALS: 13		

Notes: Present over the second half of spring as in most years, but with a new single-week record of 17.9 birds/day in week 7, contributing to a new overall high for the season. This was also the earliest ever peak for the species. Fall numbers observed were also up this year, behind only the much higher counts in 2006, although the number banded was only average. Except for a lone individual on September 17, most sightings were again in August, continuing a trend observed last year, but contrasting with previous years where records regularly extended well into September. Observed during all seven MAPS visits, but in below average numbers; only one individual banded this summer.

PUFI: Purple Finch / Roselin pourpré (*Carpodacus 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			0.29	0.57	1.14	1.14	0.86	0.71	0.29		**0.50**
# DAYS OBSERVED			2	1	5	5	3	5	1		**22**
# PROCESSED				3	0-0-1		2-0-2	2-1-1	1		**8-1-4**
	FIRST OBSERVED: April 12			LAST OBSERVED: May 24			PEAK DATE: Apr 24, May 1, 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	1.00	1.00	1.43	3.14	3.14	2.43	3.29	0.71	1.86	3.29	3.14	3.43	0.29	**2.16**
# DAYS OBSERVED	4	1	4	7	6	6	7	2	5	7	4	6	2	**61**
# PROCESSED	3			2	9	2-0-1	9-0-1	1	2	4	10	2-0-1		**44**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 25			PEAK DATE: October 23				NUMBER OF INDIVIDUALS: 10		

Notes: More numerous this spring than any previous year, occurring regularly from late April through May, and with a record number of individuals banded. Observed weekly throughout fall for the first time ever, and with overall abundance for the season nearly four times higher than the previous record in 2007; the 44 individuals banded in fall was nearly 50% more than all previous years combined. There were two small peaks in fall, from late August to mid-September, and in the first half of October. Observed on six occasions in winter, all between November 13 and December 7; 6 individuals were banded, a new record. The one banded on July 30 was the first ever in summer, and only the second observation for the season in eight years.

HOFI: House Finch / Roselin familier (*Carpodacus 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	0.14	0.29			0.14	0.71	0.14				**0.14**
# DAYS OBSERVED	1	2			1	1	1				**6**
	FIRST OBSERVED: April 3			LAST OBSERVED: May 12			PEAK DATE: May 2			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		0.71	0.71	1.14	2.00	2.29	0.29	0.57	1.43	0.71	0.57	1.57	3.57	**1.20**
# DAYS OBSERVED		4	4	5	4	5	2	3	4	1	2	4	5	**43**
# PROCESSED		2	2	1	2									**7**
	FIRST OBSERVED: August 8				LAST OBSERVED: October 30			PEAK DATE: October 25				NUMBER OF INDIVIDUALS: 12		

Notes: Uncommon in spring, as usual. Observed almost weekly in fall, only missing week 1. Numbers were above average overall, rising to a slight peak right at the end of the season. The seven individuals banded in fall tied the record high from 2010 and was noteworthy for the majority of captures coming in August and early September, a period during which only one had been banded across all previous years. Observed on the first 20 of 27 winter visits, but then missing from February 23 through the end of March; numbers peaked in mid-November at an average of roughly 30 individuals per day. A record 69 individuals were banded in winter, and they accounted for 10 repeats. Missing in summer for a fourth straight year.

WWCR: White-winged Crossbill / Bec-croisé bifascié (*Loxia leucoptera*)

	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		0.86	1.29	**0.19**
# DAYS OBSERVED				1						1		1	3	**6**
	FIRST OBSERVED: August 23				LAST OBSERVED: October 28			PEAK DATE: Oct 23, Oct 29				NUMBER OF INDIVIDUALS: 6		

Notes: Observed for the first time since 2008; most were in October, but like in 2008, there was also a lone late August sighting.

CORE: Common Redpoll / Sizerin flammé (*Acanthis flammea*)

	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**
# PROCESSED													3	**3**
	FIRST OBSERVED: October 28				LAST OBSERVED: October 28			PEAK DATE: October 28			NUMBER OF INDIVIDUALS: 3			

Notes: Observed in fall for the third year in a row; for the first time the species was also banded as part of the Fall Migration Monitoring Program (all previous MBO banding records were in winter). None were observed this year outside of the three that were banded.

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					0.14	0.86					**0.10**
# DAYS OBSERVED					1	2					**3**
	FIRST OBSERVED: April 25			LAST OBSERVED: May 5			PEAK DATE: May 5			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			0.43				8.57	1.71	3.57	3.29	3.71	**1.67**
# DAYS OBSERVED		1			1				1	4	6	5	5	**23**
	FIRST OBSERVED: August 10				LAST OBSERVED: October 30			PEAK DATE: September 29			NUMBER OF INDIVIDUALS: 60			

Notes: Observed in spring for the fourth time in eight years, but limited to a brief period in the middle of the season. Observed earlier in fall than ever before (previously never before week 8), but overall in close to average numbers. The peak in week 9 was also earlier than in all other years. Winter observations were relatively common early in the season, with sightings on seven dates between November 2 and December 1, but there was only one later in winter, on March 20.

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	4.43	4.86	7.43	9.57	10.57	11.43	13.57	12.71	10.57	6.57	**9.17**
# DAYS OBSERVED	5	7	6	6	7	7	7	7	6	7	**65**
# PROCESSED				5	2	8-0-1	4-3-2	17-1-5	14-3-2	1-0-2	**51-7-12**
	FIRST OBSERVED: March 30			LAST OBSERVED: June 5			PEAK DATE: April 24			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	20.86	23.71	22.43	20.00	18.71	30.29	26.43	18.71	15.29	9.29	2.00	3.43	13.43	**17.27**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	3	5	6	**84**
# PROCESSED		0-0-1	2-1-2	5	3-1-0	13	12-1-0	1	1	3			8	**48-4-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30			PEAK DATE: September 12			NUMBER OF INDIVIDUALS: 50			

Notes: Observed in all weeks of spring and fall, as in all previous years. Spring numbers returned to normal this year after dipping to a record low in 2011. Abundance rose to a modest peak in early May and dropped off in early June, as usual. Abundance was well above average in fall, especially in mid-September, but the number of individuals banded was average. Observed on 25 of 27 winter visits, and more common in the first half of the season; 87 were banded, plus 7 returns and 5 repeats. Missed on just one of seven MAPS visits; two individuals banded.

EVGR: Evening Grosbeak / Gros-bec errant (*Coccothraustes vespertinus*)

	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	**0.13**
# DAYS OBSERVED													1	**1**
	FIRST OBSERVED: October 25				LAST OBSERVED: October 25			PEAK DATE: October 25			NUMBER OF INDIVIDUALS: 12			

Notes: Observed only once this year, a flock of 12 individuals on October 25. This was the first record since April 2010, and the first fall sighting since 2007.

HOSP: House Sparrow / Moineau domestique (*Passer domesticus*)

	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 28				LAST OBSERVED: October 28			PEAK DATE: October 28			NUMBER OF INDIVIDUALS: 1			

Notes: House Sparrows remain scarce at MBO, with just one sighting this year in the final week of fall. This was the first since March 2011, and the first fall sighting since 2009.