McGill Bird Observatory
Fall Migration Monitoring Program
2008 Report

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MIGRATION RESEARCH FOUNDATION

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Front photo: An after-hatch-year male Yellow-rumped Warbler – what else could be the cover bird for a season in which they accounted for over one-third of all individuals banded? (Photo by Marcel Gahbauer).

About McGill Bird Observatory

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, and is a member of the Canadian Migration Monitoring Network. Located at 45.431°N, 73.939°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 research 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.

The Fall Migration Monitoring Program

The Fall Migration Monitoring Program (FMMP) is a standardized study undertaken at MBO annually, providing the basis for long-term trend analysis of bird populations. It is designed to be compatible with the aims and methodology of the Canadian Migration Monitoring Network (CMMN), of which MBO is a member. The program involves daily monitoring throughout the season, including a standardized census, banding, and incidental observations. A detailed protocol for migration monitoring at MBO has been prepared (Gahbauer and Hudson 2008). The FMMP season at MBO extends from August 1 to October 30. This 13-week period encompasses the majority of fall passerine migration. CMMN defines 'adequate' coverage as follows: (1) a minimum annual coverage of at least 75% of the days in the species' spring or fall migratory period (the span of dates within which the middle 95% of individuals occur); (2) an average of at least 10 individuals of a species recorded per season on an average of at least five separate days per season; and (3) where the majority of individuals of that species that are detected each day are passage migrants (i.e. the species does not breed or winter in significant numbers at the site).

2008 season coverage

Coverage of the 2008 fall season was similar to 2007, with no days missed entirely (i.e. at a minimum, census was conducted on all 91 days). On six days, only census was conducted due to steady rain making it unsafe to open the nets. Unlike in 2007, this fall those days were spread throughout the season. An extra seven days had significantly shortened net hours (i.e. fewer than 35 net hours per day) due to rain, high winds, or extreme bird volume. On the remaining 78 days of the season (86% of the season), there was full coverage, including census, banding, and general observations.

Equipment

Mist nets (30 mm mesh) were used for all trapping. All nets were from Spidertech, and all except the B/N series were new at the start of the season, replacing older sun-bleached nets. The standard setup for most of the season involved 16 nets in five groups. Most of these were the same as used since SMMP 2005 (Gahbauer 2005a, Hudson and Gahbauer 2006), though A1 and D1 were switched from 18-m to 12-m nets in fall 2007 to increase ease of replacement and standardization. Three extra nets (A2, E2 and H2) were added during FMMP 2006, such that all net groups are now at least paired to minimize traveling time between net groups while increasing netting potential. D4 was added in spring 2008 to complement the existing net arrangement at D. Details of net allocations are summarized in Appendix B.

Weather

Weather can have a significant influence on migration. September was the 13th driest one on record due to tropical storms Ike and Kyle. They pushed large amounts of precipitation towards the east of the province, leaving the rest of it exceptionally dry; we received half the average amount of rain in September (CRIACC 2007). With only a few heavy rainfalls towards the end of October, it was quite dry, allowing excellent daily coverage of this often difficult month. Overall, weather did not adversely affect monitoring efforts this season, and there were no major systems that appeared to significantly influence bird movements.

Results

Banding

During FMMP 2008, 5101 birds of 77 species were banded, by far the highest season total in MBO's five-year history, eclipsing the 3268 individuals in fall 2006. Compared to 2007, the number of individuals banded nearly doubled, though the number of species was the same. With only 140 more net hours this fall (5607) than in FMMP 2007 (5467), the increase cannot be explained by greater effort. The lower total in 2007 was largely accounted for by the drop in Yellow-rumped Warblers from 522 in 2006 to 68 in 2007. However, their dramatic increase to 1732 in 2008 was not the only factor in the record total, as 30 of the 77 species banded were in record numbers this fall. This includes another five that more than doubled previous high counts (Black-billed Cuckoo, Yellow-bellied Sapsucker, Yellow-shafted Flicker, Warbling Vireo, and Savannah Sparrow). Of note, 14 of the 23 warbler species banded were among those setting new records.

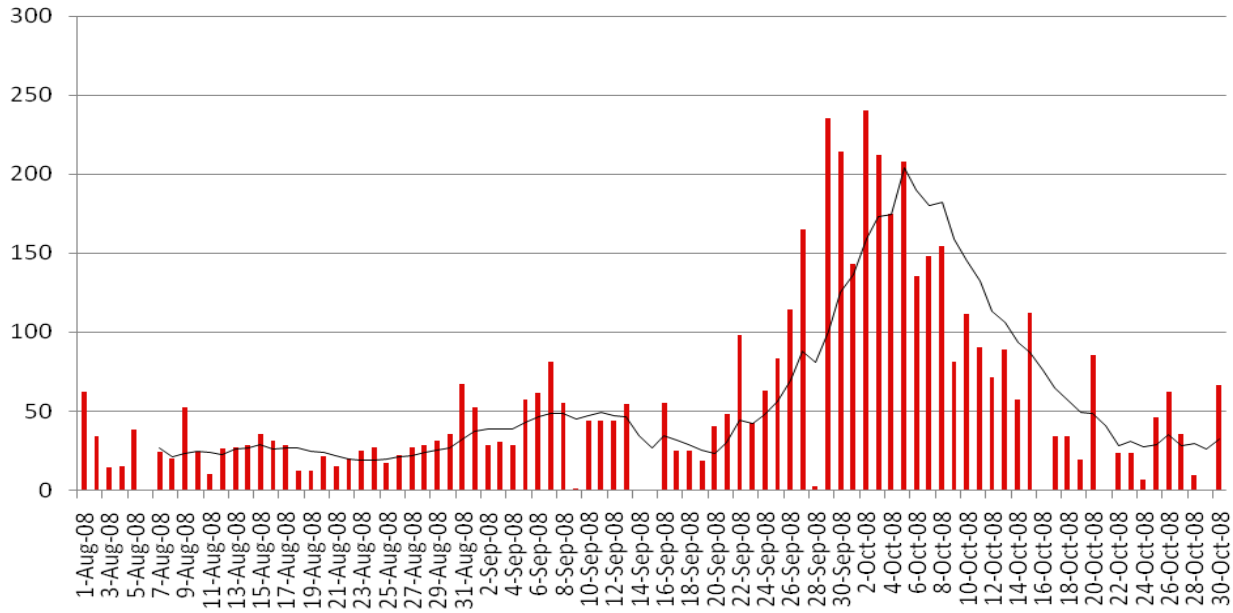

Figure 1. Number of individuals banded per day during the 2008 fall season at MBO, with a running seven-day average in black.

On fourteen occasions, all between September 26 and October 15, over 100 birds were banded in a single day. Five days even broke the 200-bird record, all between September 29 and October 5. The busiest day was October 2, with 240 birds banded (Figure 1). There were a number of days when the number of birds caught per net hour was higher, but banding effort was curtailed by the onset of rain, a shortage of extractors, or extreme bird volume. The mean

over 85 days of banding was 60.0 birds per day, the highest average MBO has ever experienced and double the rate of FMMP 2007.

Species richness among banded birds showed a slight peak that coincided with the peak in individuals banded (Figure 2). Interestingly, the day with the highest species richness was September 7 (30 species – a new single day record for MBO), roughly two weeks before this season's peak in migration and last year's peak (September 25). Overall there were fourteen days, up from five in 2007, on which 20 or more species banded. The mean number of species banded per day was 14.1, up from 11.7 in 2007 and 11.8 in 2006, but down from 15.9 in 2005.

For the first time, there were no species banded this season that had not been previously captured at MBO. However, new species observed for the first time at MBO during the fall 2008 season were Ruffed Grouse, Common Nighthawk, and Northern Gannet, bringing the total to 197 species. Also this season, four species were recorded as repeats for the first time (Traill's Flycatcher, Chestnut-sided Warbler, Mourning Warbler, Purple Finch), and two species were captured as returns for the first time (Ovenbird, Nashville Warbler).

Eight species were banded only once, two of which were also on this list last year: Wood Thrush and Golden-winged Warbler; Eastern Kingbird, Willow Flycatcher (a very short-winged Traill's Flycatcher), Bicknell's Thrush, Grey-cheeked Thrush, Blackburnian Warbler, and Scarlet Tanager. Three species this season were detected only through banding, as none were recorded on census or during general observations. Interestingly, all three were thrushes: Bicknell's, Grey-cheeked and Wood.

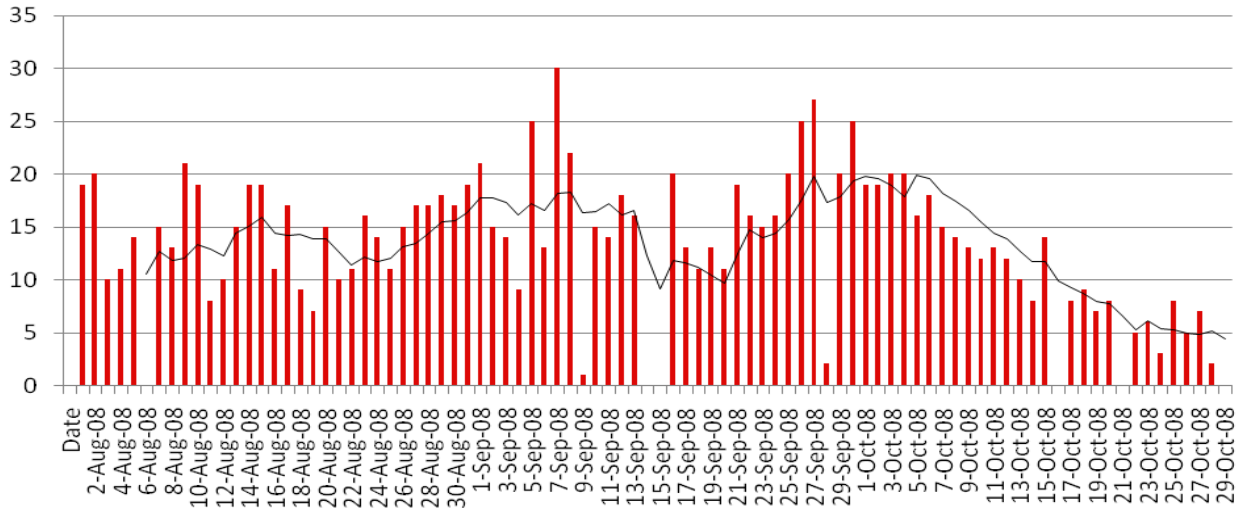

Figure 2. Number of species banded per day during the 2008 fall season at MBO, with a running seven-day average in black.

At the other extreme, Table 1 lists the 10 most frequently banded species. Seven of these were also in the top ten in 2007, and eight were in the top ten in 2006 and 2005, indicating a fair bit of consistency between years. As noted in last year's report, 2007 appears closer to 2005 in terms of species composition, and now we can say that 2008 more closely resembles 2006.

Yellow-rumped Warblers were far and away the species with the highest number banded this season, but were not the only ones to increase in number. American Robin numbers have steadily increased over the past four years, partly related to drier weather allowing improved coverage during their peak of migration in October. Ruby-crowned Kinglets decreased

somewhat, but still remain relatively stable in third position. Magnolia Warbler numbers jumped by 3.5 times the unusually low number banded in 2007. Slate-colored Junco numbers were also the highest ever seen at MBO. Song Sparrows remained stable in terms of number banded but ranked lower than in past fall seasons in comparison to other species. Nashville Warbler, American Redstart and Common Yellowthroat numbers were up quite dramatically, contributing to the overall success of the 2008 fall season.

Table 1. Top 10 species banded at MBO during FMMP 2008, as well as numbers banded in previous years. Numbers in parentheses indicate past rank within the top 10; dashes represent species not in the top 10 in those years.

	# banded			
Species	**2008**	**2007**	**2006**	**2005**
1. Yellow-rumped Warbler	1732	68 (-)	522 (1)	157 (8)
2. American Robin	346	318 (2)	299 (4)	119 (9)
3. Ruby-crowned Kinglet	319	375 (1)	435 (2)	245 (2)
4. White-throated Sparrow	315	318 (3)	187 (5)	354 (1)
5. Magnolia Warbler	264	74 (10)	157 (6)	192 (5)
6. Slate-colored Junco	236	127 (6)	33 (-)	191 (6)
7. Song Sparrow	199	198 (4)	302 (3)	212 (4)
8. Nashville Warbler	158	50 (-)	98 (7)	164 (7)
9. American Redstart	99	77 (9)	48 (-)	66 (-)
10. Common Yellowthroat	93	51 (-)	77 (8)	76 (-)

Recoveries

There were 924 repeats (individuals caught within three months of banding at MBO) of 48 species this season, almost double last year's number (and an additional five species). These can be subdivided into local residents caught repeatedly, and migrants caught twice or more during their stopover at MBO. This is the first time a migrant has been at the top of the list. However, the number of Yellow-rumped Warbler repeats is hardly surprising given their volume this fall. Among the residents, Black-capped Chickadees were again recaptured most frequently (Table 2). The top 10 species recaptured the most often this fall shifted from last year, dominated by sparrows, to a mix of warblers and residents.

Table 2. Top 10 species recaptured most often. These represent the same individuals caught repeatedly in some cases.

Species	**# repeats**
1. Yellow-rumped Warbler	201
2. Black-capped Chickadee	92
3. White-throated Sparrow	84
4. Song Sparrow	79
5. Ruby-crowned Kinglet	69
6. Common Yellowthroat	54
7. Gray Catbird	45
8. Magnolia Warbler	35
9. Nashville Warbler	30
10. Tennessee Warbler	24

The majority of migrants recorded as repeats were recaptured within a few days of being banded. However, some individuals stayed at MBO for longer, over four weeks in several cases (Table 3). The sparrows tended to linger the longest, but several moulting adult warblers remained on site for over one month as well, proving MBO's value as a staging area.

Table 3. List of migrants recaptured more than one week after banding, with first and last dates of capture, followed by time elapsed. Entries are sorted by time elapsed. Probable residents such as Northern Cardinals, Black-capped Chickadees, and woodpeckers were excluded.

Song Sparrow	Aug 4 - Oct 5 (62 days)	Song Sparrow	Sept 2 - Sept 29 (27 days)
Swamp Sparrow	Aug 1 - Sept 27 (57 days)	Tennessee Warbler	Aug 17 - Sept 13 (27 days)
Song Sparrow	Aug 4 - Sept 29 (56 days)	Gray Catbird	Aug 24 - Sept 18 (25 days)
Song Sparrow	Aug 1 - Sept 26 (56 days)	Swamp Sparrow	Aug 5 - Aug 30 (25 days)
Gray Catbird	Aug 1 - Sept 24 (54 days)	White-throated Sparrow	Sept 18 - Oct 13 (25 days)
Song Sparrow	Aug 1 - Sept 20 (50 days)	Song Sparrow	Aug 30 - Sept 23 (24 days)
Song Sparrow	Aug 7 - Sept 26 (50 days)	Ovenbird	Sept 1 - Sept 25 (24 days)
House Wren	Aug 9 - Sept 27 (49 days)	Black-and-white Warbler	Aug 10 - Sept 3 (24 days)
Gray Catbird	Aug 1 - Sept 18 (48 days)	Blue Jay	Sept 18 - Oct 11 (23 days)
Gray Catbird	Aug 4 - Sept 21 (48 days)	Song Sparrow x 2	Sept 21 - Oct 14 (23 days)
Song Sparrow	Aug 3 - Sept 20 (48 days)	White-throated Sparrow	Oct 2 - Oct 25 (23 days)
Song Sparrow	Aug 13 - Sept 30 (48 days)	Gray Catbird	Sept 10 - Oct 2 (22 days)
Veery	Aug 7 - Sept 21 (45 days)	Ovenbird	Aug 14 - Sept 5 (22 days)
Song Sparrow	Aug 15 - Sept 27 (43 days)	House Wren	Aug 8 -Aug 30 (22 days)
Song Sparrow	Aug 20 - Oct 2 (43 days)	Common Yellowthroat	Aug 21 - Sept 12 (22 days)
Song Sparrow	Sept 5 - Oct 17 (42 days)	Song Sparrow	Sept 5 - Sept 26 (21 days)
Song Sparrow	Aug 15 - Sept 25 (41 days)	Common Yellowthroat	Aug 15 - Sept 5 (21 days)
Song Sparrow	Sept 3 - Oct 13 (40 days)	Common Yellowthroat	Aug 1 - Aug 21 (20 days)
House Wren	Aug 9 - Sept 18 (40 days)	Gray Catbird	Aug 2 - Aug 21 (19 days)
Ovenbird	Aug 7 - Sept 16 (40 days)	White-throated Sparrow	Sept 10 - Sept 29 (19 days)
Gray Catbird	Aug 1 - Sept 7 (38 days)	Veery	Aug 9 - Aug 28 (19 days)
Song Sparrow x 2	Sept 7 - Oct 14 (37 days)	White-throated Sparrow	Sept 25 - Oct 14 (19 days)
Tennessee Warbler	Aug 4 - Sept 10 (37 days)	House Wren	Aug 1 - Aug 20 (19 days)
Tennessee Warbler	Aug 7 - Sept 13 (37 days)	Nashville Warbler	Aug 5 - Aug 24 (19 days)
Tennessee Warbler	Aug 10 - Sept 16 (37 days)	Nashville Warbler	Aug 11 - Aug 30 (19 days)
Song Sparrow	Sept 10 - Oct 15 (35 days)	Nashville Warbler	Aug 21 - Sept 8 (18 days)
Tennessee Warbler	Aug 2 - Sept 6 (35 days)	White-throated Sparrow	Sept 22 - Oct 9 (17 days)
White-throated Sparrow	Aug 7 - Sept 10 (34 days)	White-throated Sparrow	Oct 5 - Oct 22 (17 days)
Nashville Warbler	Aug 22 - Sept 25 (34 days)	White-throated Sparrow	Oct 8 - Oct 25 (17 days)
Rose-breasted Grosbeak	Aug 5 - Sept 6 (32 days)	Nashville Warbler	Aug 22 - Sept 8 (17 days)
Swamp Sparrow	Aug 23 - Sept 24 (32 days)	Brown Thrasher	Aug 13 - Aug 29 (16 days)
Gray Catbird	Aug 18 - Sept 18 (31 days)	White-throated Sparrow	Aug 27 - Sept 12 (16 days)
Gray Catbird	Aug 21 - Sept 21 (31 days)	White-throated Sparrow	Sept 7 - Sept 23 (16 days)
Swamp Sparrow	Aug 1 - Sept 1 (31 days)	Common Yellowthroat	Aug 3 - Aug 19 (16 days)
Song Sparrow	Aug 24 - Sept 24 (31 days)	Common Yellowthroat	Aug 28 - Sept 13 (16 days)
Tennessee Warbler	Aug 2 - Sept 2 (31 days)	Rose-breasted Grosbeak	Aug 5 - Aug 20 (15 days)
Gray Catbird	Aug 5 - Sept 4 (30 days)	Rose-breasted Grosbeak	Aug 23 - Sept 7 (15 days)
White-throated Sparrow	Sept 3 - Oct 3 (30 days)	Yellow Warbler	Aug 1 - Aug 16 (15 days)
Song Sparrow	Sept 5 - Oct 5 (30 days)	Yellow-rumped Warbler	Sept 30 - Oct 15 (15 days)
Tennessee Warbler	Aug 23 - Sept 22 (30 days)	Slate-coloured Junco	Oct 11 - Oct 26 (15 days)
Gray Catbird	Aug 5 - Sept 3 (29 days)	Slate-coloured Junco	Oct 15 - Oct 30 (15 days)
House Wren	Aug 9 - Sept 6 (28 days)	Gray Catbird	Aug 1 - Aug 15 (14 days)

Common Yellowthroat	Aug 14 - Aug 28 (14 days)
Nashville Warbler	Aug 1 - Aug 15 (14 days)
Yellow-rumped Warbler	Sept 26 - Oct 10 (14 days)
Slate-coloured Junco	Oct 13 - Oct 27 (14 days)
Song Sparrow	Oct 12 - Oct 25 (13 days)
Common Yellowthroat	Aug 2 - Aug 15 (13 days)
Tennessee Warbler	Aug 1- Aug 14 (13 days)
Yellow-rumped Warbler	Sept 22 - Oct 5 (13 days)
Yellow-rumped Warbler	Sept 27 - Oct 10 (13 days)
Yellow-rumped Warbler	Oct 8 - Oct 20 (12 days)
Baltimore Oriole	Aug 5 - Aug 17 (12 days)
Song Sparrow	Aug 2 - Aug 14 (12 days)
Song Sparrow	Aug 12 - Aug 24 (12 days)
White-throated Sparrow	Aug 3 - Aug 15 (12 days)
White-throated Sparrow	Oct 6 - Oct 18 (12 days)
White-throated Sparrow	Oct 13 - Oct 25 (12 days)
Common Yellowthroat	Aug 1 - Aug 13 (12 days)
Yellow-rumped Warbler	Sept 20 - Oct 2 (12 days)
Yellow-rumped Warbler x 2	Sept 29 - Oct 11 (12 days)
Slate-coloured Junco x 2	Oct 18 - Oct 30 (12 days)
Ruby-crowned Kinglet	Sept 29 - Oct 10 (11 days)
Song Sparrow	Aug 1 - Aug 12 (11 days)
White-throated Sparrow	Sept 3 - Sept 24 (11 days)
Swamp Sparrow	Sept 30 - Oct 11 (11 days)
White-throated Sparrow	Sept 26 - Oct 7 (11 days)
White-throated Sparrow	Oct 3 -Oct 14 (11 days)
Common Yellowthroat	Aug 22 - Sept 2 (11 days)
House Wren	Aug 4 - Aug 15 (11 days)
Common Yellowthroat	Aug 8 - Aug 19 (11 days)
Common Yellowthroat	Aug 13 - Aug 24 (11 days)
Black-throated Blue Warbler	Sept 2 - Sept 13 (11 days)
Yellow-rumped Warbler	Sept 20 - Oct 1 (11 days)
Nashville Warbler	Aug 22 - Sept 2 (11 days)
Yellow-rumped Warbler	Sept 22 -Oct 3 (11 days)
Yellow-rumped Warbler x 2	Sept 29 - Oct 10 (11 days)
Yellow-rumped Warbler	Sept 26 - Oct 7 (11 days)
Slate-coloured Junco x 2	Oct 15 - Oct 26 (11 days)
Gray Catbird	Aug 14 - Aug 24 (10 days)
White-throated Sparrow	Sept 3 - Sept 23 (10 days)
Song Sparrow	Oct 5 - Oct 15 (10 days)
White-throated Sparrow	Sept 25 - Oct 5 (10 days)
White-throated Sparrow	Oct 5 - Oct 15 (10 days)
Slate-coloured Junco	Oct 8 - Oct 18 (10 days)
Tennessee Warbler	Sept 19 - Sept 29 (10 days)
Yellow-rumped Warbler	Sept 22 - Oct 2 (10 days)
Yellow-rumped Warbler	Sept 25 - Oct 5 (10 days)
Veery	Aug 1 - Aug 10 (9 days)
White-throated Sparrow	Sept 11 - Sept 20 (9 days)
White-throated Sparrow	Oct 9 - Oct 18 (9 days)
White-throated Sparrow	Oct 17 - Oct 26 (9 days)
House Wren	Aug 1 - Aug 10 (9 days)
Common Yellowthroat	Aug 5 - Aug 14 (9 days)
Yellow-rumped Warbler	Sept 21 - Sept 30 (9 days)
Yellow-rumped Warbler	Sept 22 - Oct 1 (9 days)
Yellow-rumped Warbler	Oct 2 - Oct 11 (9 days)
Yellow-rumped Warbler	Sept 25 - Oct 4 (9 days)
Yellow-rumped Warbler	Sept 26 - Oct 5 (9 days)
Yellow-rumped Warbler x 3	Sept 29 - Oct 8 (9 days)
Red-eyed Vireo	Aug 12 - Aug 20 (8 days)
Ovenbird	Sept 8 - Sept 16 (8 days)
Swamp Sparrow	Sept 23 - Oct 1 (8 days)
Blue-headed Vireo	Sept 24 - Oct 2 (8 days)
Song Sparrow	Aug 24 - Sept 1 (8 days)
Song Sparrow	Sept 19 - Sept 27 (8 days)
Song Sparrow	Oct 5 - Oct 13 (8 days)
Eastern White-crowned Sparrow	Oct 7 - Oct 15 (8 days)
Eastern White-crowned Sparrow	Oct 12 - Oct 20 (8 days)
White-throated Sparrow	Oct 6 - Oct 14 (8 days)
White-throated Sparrow	Oct 17 - Oct 25 (8 days)
Yellow-rumped Warbler	Oct 2 - Oct 10 (8 days)
Yellow Warbler	Aug 1 - Aug 9 (8 days)
Common Yellowthroat	Aug 18 - Aug 26 (8 days)
Common Yellowthroat	Aug 22 - Aug 30 (8 days)
Nashville Warbler	Aug 29 - Sept 6 (8 days)
Tennessee Warbler	Sept 5 - Sept 13 (8 days)
Magnolia Warbler	Sept 5 - Sept 13 (8 days)
Magnolia Warbler	Sept 10 - Sept 18 (8 days)
Yellow-rumped Warbler x 2	Sept 22 -Sept 30 (8 days)
Yellow-rumped Warbler	Sept 23 - Oct 1 (8 days)
Yellow-rumped Warbler	Sept 24 - Oct 2 (8 days)
Yellow-rumped Warbler	Sept 25 - Oct 3 (8 days)
Yellow-rumped Warbler x 2	Sept 27 - Oct 5 (8 days)
Yellow-rumped Warbler x 2	Sept 29 - Oct 7 (8 days)
Yellow-rumped Warbler x 3	Sept 26 - Oct 4 (8 days)
Yellow-rumped Warbler x 2	Sept 30 - Oct 8 (8 days)
Yellow-rumped Warbler	Oct 9 - Oct 17 (8 days)

Individuals likely hatched on site were recaptured quite regularly, indicating that some young spent up to two months before dispersing or migrating (Table 3). These species include: House Wren, Veery, Gray Catbird, Brown Thrasher, Red-eyed Vireo, Ovenbird, Common Yellowthroat, Rose-breasted Grosbeak, Song Sparrow, Swamp Sparrow and Baltimore Oriole.

There were 31 returns (individuals last captured at least three months earlier) of 14 species (Table 4). The majority of returns were Song Sparrows (10) and Black-capped Chickadees (6), much like previous FMMPs. Almost half (48%) the records were birds handled during SMMP 2007, which almost certainly remained at MBO over the summer. Interestingly, 41% of returns were individuals that were last handled in fall 2007. Several of these are residents (Black-capped Chickadee, Downy and Hairy Woodpeckers and Blue Jay), and are likely to have been in the area throughout the year, even if not caught. However, House Wren, Gray Catbird, Veery, Warbling Vireo, Ovenbird, Nashville Warbler, Common Yellowthroat, and Song Sparrow almost certainly departed before winter, returning to breed at or near MBO. Notable returns include an Ovenbird and Nashville Warbler, which were banded as after-hatch-years in 2005 and 2007 (respectively), making them at least 5 and 3 years old, and a Song Sparrow and Black-capped Chickadee banded during the 2004 fall season as after-hatch years, making them at least 6 years old.

Table 4. List of returns captured during FMMP 2008, sorted by time elapsed.

Band number	Species	Age/Sex	Banding date	Last capture	Fall recovery date	Time elapsed
1921-97960	OVEN	AHY-U	Sept 5 2005	-	Aug 7 2008	2 years, 11 months, 2 days
2261-16117	SOSP	AHY-U	Aug 30 2006	-	Oct 13 2008	2 years, 1 month, 14 days
2490-24733	WAVI	AHY-U	May 18 2007	-	Sept 23 2008	1 year, 4 months, 5 days
2261-16591	SOSP	AHY-U	Aug 5 2007	Aug 26 2007	Oct 11 2008	1 year, 1 month, 16 days
2241-30911	VEER	AHY-U	July 30 2005	Aug 8 2007	Sept 11 2008	1 year, 1 month, 3 days
2480-15818	NAWA	AHY-M	Aug 3 2007	-	Sept 2 2008	1 year, 30 days
2241-91840	DOWO	AHY-M	Aug 8 2007	Oct 1 2007	Oct 6 2008	1 year, 5 days
2500-65161	BCCH	AHY-U	Oct 25 2007	-	Oct 30 2008	1 year, 5 days
2490-24813	HOWR	AHY-F	Aug 3 2007	-	Aug 1 2008	11 months, 29 days
2231-00831	GRCA	AHY-U	Sept 9 2005	Sept 22 2007	Sept 16 2008	11 months, 24 days
2241-91844	DOWO	SY-M	Aug 11 2007	-	Aug 3 2008	11 months, 23 days
2241-30907	VEER	AHY-U	July 22 2005	Aug 30 2007	Aug 2 2008	11 months, 3 days
2460-40098	BCCH	AHY-U	Aug 5 2007	Oct 18 2007	Sept 17 2008	10 months, 30 days
1951-51356	HAWO	ASY-M	Oct 28 2007	-	Sept 24 2008	10 months, 27 days
2231-66134	GRCA	AHY-U	Aug 11 2007	Sept 16 2007	Aug 4 2008	10 months, 18 days
1951-76605	NOCA	AHY-M	Aug 29 2006	Oct 14 2007	Aug 4 2008	8 months, 21 days
2460-40086	BCCH	AHY-U	May 11 2007	April 26 2008	Oct 25 2008	5 months, 29 days
1603-09996	BLJA	AHY-U	Oct 4 2007	May 23 2008	Sept 19 2008	3 months, 27 days
1231-80243	SOSP	AHY-U	Sept 22 2004	April 21 2008	Oct 11 2008	3 months, 25 days
1851-64424	SWSP	AHY-U	Aug 9 2007	May 26 2008	Sept 18 2008	3 months, 23 days
2160-65356	BCCH	AHY-U	Sept 30 2004	April 28 2008	Oct 15 2008	5 months, 17 days
2241-39523	SOSP	AHY-U	Aug 1 2006	April 28 2008	Oct 13 2008	5 months, 15 days
2490-24901	BCCH	AHY-U	Aug 9 2007	April 28 2008	Aug 29 2008	4 months, 1 day
2261-16567	SOSP	AHY-F	Aug 3 2007	April 24 2008	Aug 23 2008	3 months, 29 days
2460-40100	BCCH	AHY-U	Aug 8 2007	May 15 2008	Sept 7 2008	3 months, 23 days
2261-90642	SOSP	AHY-U	April 19 2008	-	Aug 3 2008	3 months, 14 days
2261-16558	SOSP	AHY-U	Aug 2 2007	April 20 2008	Aug 1 2008	3 months, 11 days
2400-71033	COYE	AHY-M	May 16 2005	June 1 2008	Sept 11 2008	3 months, 10 days
2241-39525	SOSP	AHY-F	Aug 1 2006	April 22 2008	Aug 1 2008	3 months, 9 days
2261-16577	SOSP	AHY-U	Aug 3 2007	April 25 2008	Aug 2 2008	3 months, 7 days
2261-90646	SOSP	AHY-M	April 22 2008	April 30 2008	Aug 1 2008	3 months, 1 day

Census

One or more experienced observers walked the standardized census route on all 91 days. Almost without exception, they recorded species not otherwise observed during the course of the morning, highlighting the importance of the census in monitoring the presence of migrants at MBO. The following five species were in fact recorded exclusively on census: Common Loon, Spotted Sandpiper, Eastern Wood-Pewee, American Pipit, and Snow Bunting.

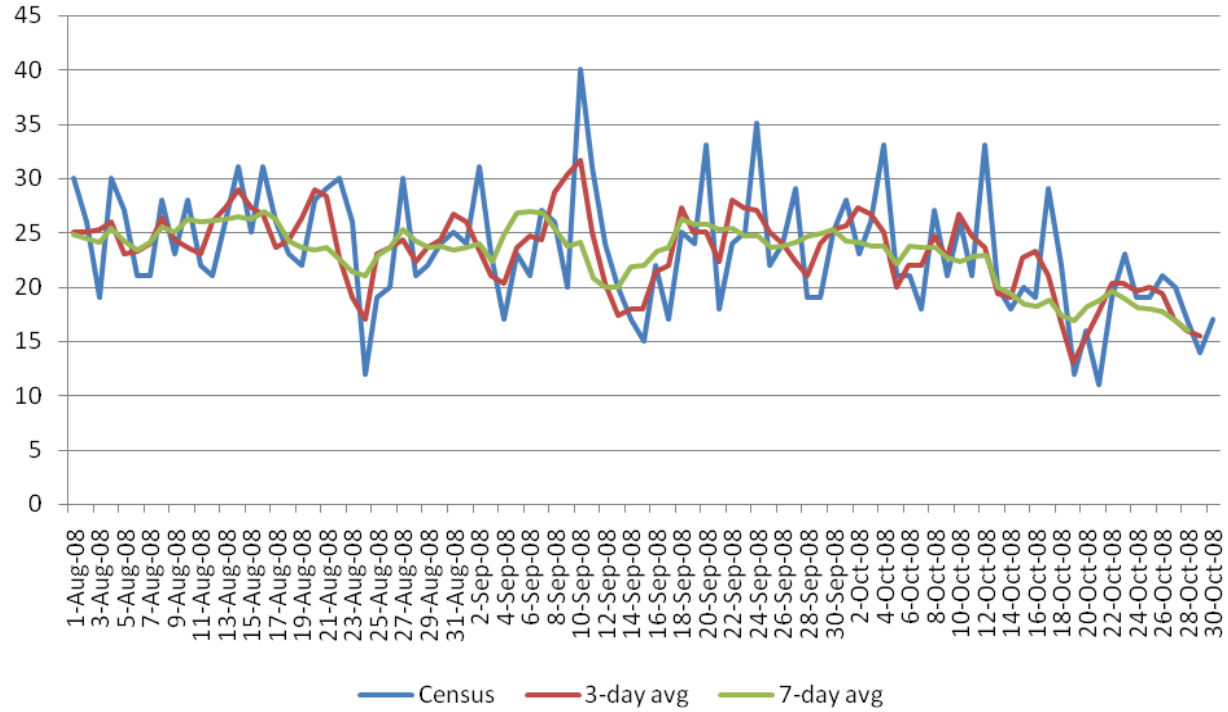

Figure 3. Number of species recorded on the daily census during the 2008 fall season at MBO, including a three-day and seven-day running average.

As shown in Figure 3, there was considerable daily variation in the number of species observed during the census, ranging from a low of 11 on October 21 to a high of 40 on September 10. 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, three-day and seven-day running averages were calculated and plotted. The seven-day running average remained between 20 and 30 species for most of the season (slight peaks in mid-August and early September), with the exception of a drop in species richness towards the end of the season (mid-October).

Daily estimated totals

The DET reflects not only banding and census data, but also all supplemental observations made by participants throughout each morning (Figure 4). 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 species rarely caught in fall such as blackbirds, and as an indicator of what percentage of individuals of each species are caught and banded. Twenty-two species, up from 13 last year (Northern Gannet, Cackling Goose, Greater Snow Goose, American Black Duck, Osprey, Northern Harrier, Northern Goshawk, Broad-winged Hawk, Rough-legged Hawk, Peregrine Falcon, Virginia Rail, Greater and Lesser Yellowlegs, American Woodcock, Great Black-backed Gull, Common Nighthawk, Belted Kingfisher, Cliff

Swallow, Alder Flycatcher, Eastern Bluebird, Horned Lark and Bobolink), were only observed during these incidental observations this fall, reflecting their significant value to the DET.

During the season, 139 species were recorded, down from 144 during FMMP 2007, but up from 134 during FMMP 2006. Of these, 21 were seen on just a single day (16 of which were represented by a single individual) highlighting the importance of full daily coverage throughout the season. The highest single day total was 53 species which occurred on three days (August 20, September 7 and 10), down from 57 species last fall. The lowest daily total of 11 species was under very rainy conditions on October 21. Figure 4 shows that there was considerable variation in daily estimated totals from day to day. Like the census, a clearer pattern is shown by the seven-day running average, which peaked at 45-46 species in mid-August and early September, followed by two troughs in mid- and late-September, then a slight peak in early October, and finally a steady decline to the end of the season. Though less pronounced, the seven-day average from the DET data mirrors the pattern seen in the seven-day average from the census data, with two peaks (mid-August and early September) followed by a trough.

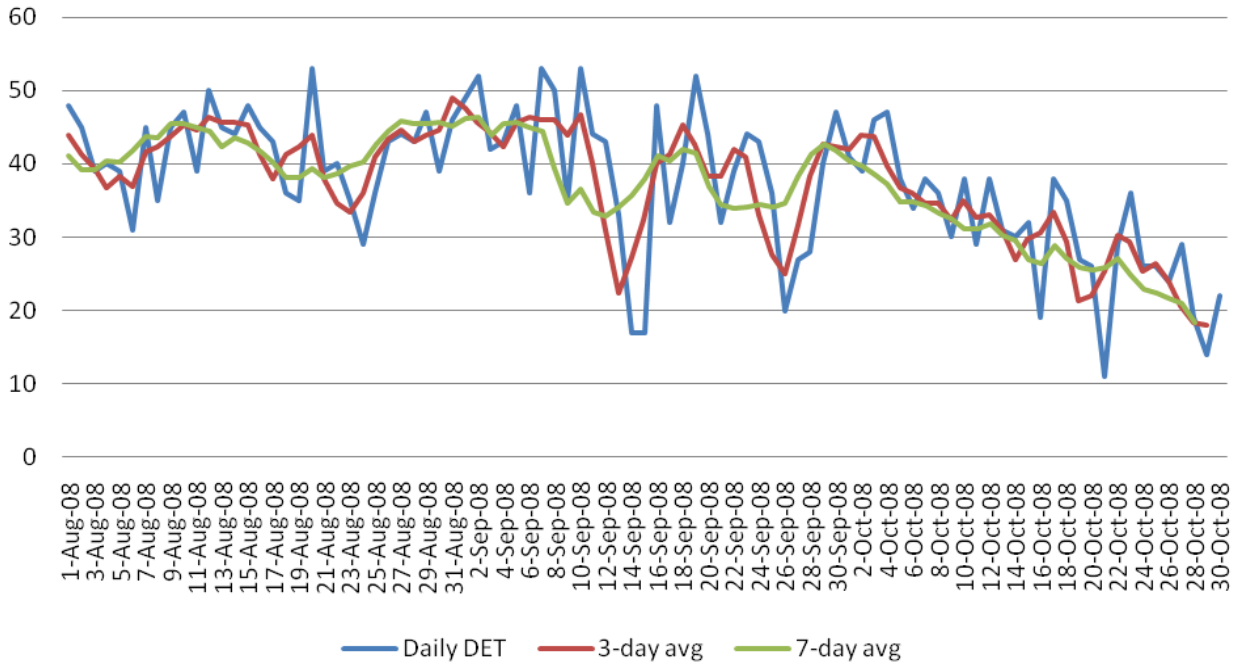

Figure 4. Daily estimated total number of species observed during the 2008 fall season at MBO, including a three-day and seven-day running average.

Owl banding

Owl banding was not conducted this season due to a shortage of qualified personnel.

Analysis

Migration patterns

Nineteen species were present throughout all 13 weeks of the season, fewer than the 21 and 26 during FMMPs 2007 and 2006 respectively, but more than the 17 species during FMMP 2005 (see Appendix). They were: Canada Goose, Ring-billed Gull, Mourning Dove, Downy Woodpecker, Hairy Woodpecker, Yellow-shafted Flicker, Pileated Woodpecker, Blue Jay (seen daily), American Crow (seen daily), Black-capped Chickadee (seen daily), White-breasted Nuthatch, American Robin, Cedar Waxwing, European Starling, Northern Cardinal, Song Sparrow, White-throated Sparrow, Common Grackle, and American Goldfinch. All of these

except Ring-billed Gull and European Starling were also seen weekly in fall 2007, while three of the species observed weekly last year (Wood Duck, Cooper's Hawk, Red-winged Blackbird) dropped off the list this fall. Of the species seen each week, only Black-capped Chickadee, Song Sparrow and White-throated Sparrow were also caught at least once per week.

The majority of species were observed during a more limited period of migration. Twelve species (up from last year's nine) peaked in abundance during the first week of the season, several of which were local breeders with offspring dispersing thereafter (Green Heron, Great-crested Flycatcher, Eastern Kingbird, Purple Martin, Northern Rough-winged Swallow, Cliff Swallow, House Wren, Gray Catbird, Yellow Warbler, Rose-breasted Grosbeak, Swamp Sparrow and Baltimore Oriole). Only three species (Mallard, European Starling and Slate-coloured Junco) peaked in the final week of the season, a more typical pattern than the 19 species in this category last year. Extending the season further could theoretically allow for the migration of these species to be better documented, but with relatively few species peaking this late in most years, the extra effort is not justifiable. A weekly census continues to be encouraged, allowing an extension of the season with a minimal amount of effort. It is therefore recommended that the current 13-week period from August 1 through October 30 be maintained for FMMP in future years, with non-standard weekly censuses maintained throughout the winter period.

For many species, sex cannot be reliably determined outside the breeding season, explaining the overall sex breakdown among banded birds of 34% male, 31% female, and 35% unknown. A 16% decrease in the number of unknowns from last year is likely due to the shift in abundance from sparrows, which are largely monomorphic, to warblers, most of which are sexually dimorphic even in fall. As is to be expected during fall migration, hatch-year individuals dominated, accounting for 84% of birds banded, while only 15% were after-hatch-year, and 0.2% were of unknown age. For several species in fact, all banded birds this season were aged as hatch-years: Sharp-shinned Hawk (4), Black-billed Cuckoo (2), Hairy Woodpecker (2), Willow Flycatcher (1), Black-capped Chickadee (49), Bicknell's Thrush (1), Wood Thrush (1), Golden-winged Warbler (1), Blackburnian Warbler (1), Mourning Warbler (13), Scarlet Tanager (1), and Lincoln's Sparrow (15). The number of Black-capped Chickadees is much higher than that of other species in this group, but given that this was a low year in their apparent two-year movement cycle, it makes sense that all the birds banded would be juveniles dispersing from nests at or adjacent to MBO. Among the top 10 species banded (Table 1), hatch-year birds also dominated, ranging from 78% (American Robin) to 93% (Song Sparrow) of the individuals banded (Table 5).

Table 5. Number of individuals of the top 10 banded species banded broken down by age and sex.

Species	HY (% of total)	AHY (% of total)	Male (% of total)	Female (% of total)	Unknown sex (% of total)
1. Yellow-rumped Warbler	1505 (87)	227 (13)	916 (53)	805 (46)	11 (1)
2. American Robin	270 (78)	75 (22)	74 (21)	81 (23)	191 (55)
3. Ruby-crowned Kinglet	253 (79)	65 (20)	145 (45)	171 (54)	3 (1)
4. White-throated Sparrow	269 (85)	44 (14)	4 (1)	1 (0.3)	310 (98)
5. Magnolia Warbler	219 (83)	45 (17)	61 (23)	43 (16)	160 (61)
6. Slate-colored Junco	209 (89)	27 (11)	103 (44)	108 (46)	25 (11)
7. Song Sparrow	185 (93)	10 (5)	1 (0.5)	-	198 (99.5)
8. Nashville Warbler	125 (79)	33 (21)	81 (51)	60 (38)	17 (11)
9. American Redstart	88 (89)	11 (11)	43 (43)	41 (41)	15 (15)
10. Common Yellowthroat	79 (85)	14 (15)	43 (46)	3 (3)	47 (51)

Species with seemingly skewed sex ratios often reflect a situation such as with the Common Yellowthroat, where unknown birds are strongly biased toward females, as only a minority of hatch-year males lack sexually distinct plumage, but their existence precludes the certain identification of any females.

Priority species

MBO has produced a list of 62 target species for priority monitoring (Gahbauer and Hudson 2008). 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. Species not expected at MBO due to their geographic distribution or species that have on average been observed on fewer than 10 occasions per year between 2006 and 2008 are excluded.

Of the species on the MBO priority list, 98% were observed during FMMP 2008, and 83% were banded (Table 6). Priority species accounted for 88% of individuals banded. Comparisons between the number of species observed and banded cannot be made between years since several species were eliminated from the list of priority species in 2008 to better reflect MBO's coverage in previous years. However, last year's coverage was 87%, a similar ratio despite the elimination of certain species, which reflects the fact that the right species were eliminated (i.e., they were not well covered and did not contribute to overall totals). All categories except D virtually doubled in the number of individuals banded despite the elimination of a handful of species in each category (A - 2 spp; B - 9 spp; C - 4 spp; D - 3 spp), again reflecting this year's high number of individuals banded. Of the top 10 species banded at MBO during FMMP 2008, all except Nashville Warbler are designated as priority species, indicating that the program is effective at documenting these otherwise poorly monitored birds.

Table 6. Summary of priority species observed and banded during FMMP 2008. Detailed category definitions are provided in Gahbauer and Hudson (2008).

	Category A	**Category B**	**Category C**	**Category D**
Number of species in category	15	10	18	19
Number of species observed	14	10	18	19
Number of species banded	13	9	15	15
Number of individuals banded	541	2710	523	747

Net productivity

As in previous seasons, the productivity of nets during FMMP 2008 was assessed. Table 7 summarizes the usage and productivity of all nets. The nets are clustered into three main groups. C and D (six nets total; D4 was added in 2008, placed perpendicular to the rest of the D nets) 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. They are also left out when human resources are limited and/or bird volume is sufficient to warrant operations being scaled back, resulting in a core group of 12 nets (C-A-D-E-H) that allows for sampling from each area while minimizing walking time. E was also closed at times this fall due to extremely high bird volume.

The overall capture rate for FMMP 2008 was the highest it has ever been at MBO over the course of a migration season, with 90.1 new birds per 100 net/trap hours, almost double last year's rate. An additional 17.2 birds per 100 net hours were recaptured. After adjusting numbers

for 2004-2006 to take into account the fact that A1, D1 and G1 were all 18m nets, the capture rates for both new and recaptured birds in 2008 were the highest to date (2005: 87.3, 13.1; 2006: 79.7, 10.6; 2007: 52.5, 11.2), but there appears to be substantial year-to-year variation. A, E and H net groups all showed great increases in productivity this season, while C and B/N showed a decrease and a modest increase, respectively. The D group's increase in productivity is due to the addition of D4.

The average total number of birds per 100 net hours for the net groups this season was 98.5. A, E and H were all well above the average, C was slightly below, D was quite a bit below, and B was extremely below average. However, it is worth noting that variation occurs within the season, e.g. C nets were by far the most productive location in August, while E nets were very quiet at that time. The J-trap was used on only one occasion this fall (maintenance required), and was not included in productivity analyses.

The A group had the highest productivity this season. A1's performance was below average last year, and this year it had the highest rate of all nets by far. Our speculation that the fallen apple tree was exposing the net may have had some merit, as this year it has regrown to some extent, restoring some cover. However, it is possible that there were just so many birds in the core area this year (i.e., A-D-E-H nets), that cover may have had very little to do with overall capture rates.

The E nets were second highest in productivity, though this is largely attributable to E2, the second most productive net overall. E2 was so effective at catching birds that it had to be closed on some peak days to control bird volume, therefore the reported rate of capture for E2 may actually under-represent its importance.

H1 and H2 had the third highest capture rates. This net group is the only net group that had relatively similar capture rates between nets. An effort was made this fall to not double-back along H2 on the way back from a net run. This effort appears to have allowed H2's productivity to bounce back from last year's decrease. However, it is also possible that the sheer number of birds in the area swamped any real effect this measure had. We suggest that the avoidance of H2 on the return from net runs be continued to ensure productivity is not affected by increased human presence.

The productivity of the C nets was slightly below average this year, C1's productivity having decreased since last year, but C2's having increased quite substantially. In order to maintain the stability of the vegetation around the C nets, we removed several large sumacs from around C1 early in the season. It is possible that this removed cover from the net, making it more visible. C2 was surrounded by poison ivy at the start of the season, and measures were taken to remove it. This was done through careful herbicide application, but mostly through piling vegetation on top to choke it out. This increased the amount of cover around the net, making it less visible and thus more likely to catch birds.

Whereas the D nets were the most productive during the initial fall pilot season in 2004, their capture rate was well below average this fall, although D4 was above average. The overall pattern continued from past years of D3 being the most productive of the three nets in sequence, while D2 was the least productive. No changes in habitat were observed to account for this difference. There were still some days when D was exceptionally productive. However, many other days D remained quiet, especially in mid/late morning. It is less sheltered and more conspicuous than other nets, making it especially susceptible to sunny weather. D4 is the exception as it is tucked in amongst hawthorns, providing it with more cover than the other three nets. D4 should be kept as a standard net, as it provides additional cover along Stoneycroft

Pond, and is perpendicular to the other nets, allowing for additional captures of birds travelling parallel to the net group.

As in previous years, the B/N nets had the lowest capture rates, and were the first to be closed when deemed necessary. If any of these nets were to be removed from standard operations, it should be B2, as it has had the lowest capture rates for the past two years. B3 should be maintained, as it consistently has the highest rate of capture within this group.

Table 7. Net usage and capture rates during FMMP 2008.

Net	Trap hours	New captures	Repeats/ Returns	Total birds	Birds / 100 net hours	
					New	Total
A1	388.25	726	106	832	187.0	214.3
A2	385.25	367	83	450	95.3	116.8
A - TOTAL	**773.5**	**1093**	**189**	**1282**	**141.3**	**165.7**
B2	278	88	12	100	31.7	36.0
N1	278	101	33	134	36.3	48.2
N3	278	100	35	135	36.0	48.6
B3	278	115	36	151	41.4	54.3
B/N – TOTAL	**1112**	**404**	**116**	**520**	**36.3**	**46.8**
C1	362.75	273	86	359	75.3	99.0
C2	321.25	362	71	433	112.7	134.8
C – TOTAL	**684**	**635**	**157**	**792**	**92.8**	**115.8**
D1	390.75	178	40	218	45.6	55.8
D2	390.75	169	24	193	43.3	49.4
D3	383.75	291	52	343	75.8	89.4
D4	385.75	465	93	558	120.5	144.7
D – TOTAL	**1551**	**1103**	**209**	**1312**	**71.1**	**84.6**
E1	349.75	275	38	313	78.6	89.5
E2	350.75	634	105	739	180.8	210.7
E - TOTAL	**700.5**	**909**	**143**	**1052**	**129.8**	**150.2**
H1	395	449	75	524	113.7	132.7
H2	391.25	494	84	578	126.3	147.7
H - TOTAL	**786.25**	**943**	**159**	**1102**	**119.9**	**140.2**
SUBTOTAL	**5607.25**	**5087**	**973**	**6060**	**90.7**	**108.1**
Nest Boxes	-	5	-	5	-	-
J-Trap	5	3	-	3	-	-
Unknown	-	6	2	8	-	-
GRAND TOTAL	**5612.25**	**5101**	**975**	**6068**	**90.9**	**108.1**

Photo documentation

MBO aims to obtain and catalogue photos of all rarities captured and banded, as well as any individuals showing abnormalities, such as aberrant pigmentation or moult, deformities, or healed injuries. Photos were taken throughout the season for use in the further preparation of MBO's online resource for bird identification, posted at www.migrationresearch.org/mbo/id.html. The aim is to provide diagnostic photos of the upper body, wing, and tail of each age and sex class of every species banded 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). This is a major ongoing project for MBO, with major updates reflecting contributions from the migration monitoring programs typically posted in winter, in addition to minor revisions throughout the year.

Education and training

In addition to conducting research through migration monitoring and other banding projects, MBO exists as a facility to provide training in avian research techniques to McGill University students and other interested individuals. This was actively implemented throughout FMMP 2008, with 86 volunteers receiving training during this period. This included 26 members of the McGill ornithology class, all of whom came out at least three times during the season to develop their skills in avian field work.

Training was generally given by the bander-in-charge or assistant banders-in-charge, mostly on a one-on-one basis. Topics covered varied according to the experience level of the volunteers, ranging from instruction in record-keeping to hands-on practice with extraction of netted birds. 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.

On a few occasions, groups visited MBO for a tour, receiving basic information about the purposes and methods of bird banding, as well as observing ongoing research. The groups involved were visitors from the Arboretum and EcoMuseum, as well as a local Boy Scout troop, several birding groups, several friends and family of MBO volunteers interested in the activities, banders visiting from other banding stations, and the Natural History of Vertebrates class from McGill, totaling approximately 140 people. Also, our third Ageing and Sexing Workshop was given in September, with 12 people attending the theoretical in-class session on the first day, and the practical field component at MBO on the second day.

Summary

In terms of individuals banded, FMMP 2008 totals were far beyond any of our previous seasons. Though we managed to train two banders to the point where they are now sub-permit holders (Gay Gruner and Simon Duval), and now have several excellent extractors participating regularly, a priority for MBO remains to train or recruit additional extractors, observers and banders to adequately deal with fall migration, so that full coverage can be maintained without difficulty.

The standard net group comprising of A, C, D, E and H should be complemented whenever possible with B/N, and should be maintained in their present positions in order to establish standardization between years. No new nets should be added, unless just cause is established.

Using the V nets for target-banding of Rusty Blackbirds using call playback, as is done at l'Observatoire d'Oiseaux de Tadoussac, was attempted without much success. It was decided that the stereo equipment was not sufficiently powerful to bring the Rusty Blackbirds in from the tree tops. We suggest that new, more powerful equipment be purchased and this target-banding program be attempted again next fall.

Acknowledgments

The 2008 Fall Migration Monitoring Program would not have been possible without the support of the many dedicated people who generously volunteered their time at MBO. In total, 86 volunteers contributed over 2700 hours on site during the season. Special thanks to the banders-in-charge, who each contributed many additional hours off-site.

Executive Director: *Master permit holder, responsible for supervision of banding and data management.*
Marcel Gahbauer

Director, Bander-in-charge: *Licensed permit holder, responsible for directing the activities of all other volunteers, ensuring adherence to protocols, prioritizing the safety of birds at all times, banding birds, and directly supervising other trainees who are banding birds. Also responsible for generating weekly and seasonal reports and data management.*
Marie-Anne Hudson and Barbara Frei

Assistant banders-in-charge: *Licensed permit holder responsible for all site activities in the absence of the Bander-in-charge, especially with respect to bird safety, banding birds and supervising the activities of other volunteers.*
James Junda, Gay Gruner, Simon Duval

Extractors: *Experienced volunteers trained specifically in extraction, capable of safely removing birds from nets with minimal or no supervision.*
Sophie Cauchon, Shawn Craik, Nicki Fleming, Marie-Melissa Kalamaras, Kristen Keyes, Mike Mayerhofer, André Pelletier, Katleen Robert

Censusers / 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.*
Jean Bacon, Jeff Harrison, Barbara and Don MacDuff, Chris Murphy, Rodger Titman

Assistants: *Volunteers of all levels, responsible for recording data, transporting birds, providing direct assistance to extractors and banders as requested, and helping with any other observation, monitoring, or maintenance tasks that arise.*
Veronica Aponte, Jean-François Beauchemin, Louise Bédard, Katrina Bélanger-Smith, Elisa Bernier, Christine Berry, Chantal Broueou, Virginie Cabana-Vaudrin, Chrystine Cadieux, Marie-Ève Campin, Victoria Chang, Anne Chen, Amélie Constantineau, Tiffany Damaglin, David Davey, Genevieve D'Avignon, Anna De Aguayo, Andréanne Deschamps, Victoria Desmarais-Low, Luc Farly, Maura Forrest, Mike Fleming, Sara Fréchette-Laflamme, Val Francella, Tiffany Gamelin, Marianne Gagnon, Marie-Hélène Gaulthier, Tiffany Gilchrist, Christina Guillemette, Janina Heim, Meggy Hervieux, Gracey Hlywa Mayta, Vicky Houde, Gillian Kinsman, Aless Kockel, Genki Kondo, Marjolaine Lagacé, Joëlle Lapalme, Dominique Lantier, Marie-Lise Legaise, Helen Leroux, Stéphanie Levesque, Emma Loosigian, Christie Lovat, Barry Mantal, Dara Mashonas, Melanie McCormack, Christina Miller, Chloé Nadeau-Perrier, Marie Nicole, Ken Nomura, Greg Rand, Sabrina Richard-Lalonde, Brittney Roughan, Émilie Roy-Dufresne, Audrey Saumure Di Fruscia, Marylise Schmidt, Dan Schmucker, Cat Spina, Laurie St-Onge, Krystal Swift Dumesnil, Victor Thomasson, Carine Touma, Virginie Vaudine, Fredella Weil, Brigette Zacharczenko

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- **2008 MBO Baillie Birdathon Team**, who raised $6,550.75 for MBO and Bird Studies Canada, and all those who participated in the MBO Baillie Birdathon outing: Marie-Anne Hudson, Samuel Denault, Richard and Jean Gregson, Mike Mayerhofer, Stacey Jarema, Rodger Titman, David Bird, Barbara MacDuff, André Pelletier, Sophie Cauchon, Helen Leroux, Jean Demers, Clémence Soulard, Sarah Marteinson, Bob Edwards, and Penny and Morgan Letchuk.
- **Bird Protection Quebec**, for past grants supporting MBO, and continued encouragement of members to become MBO volunteers
- **Sun-Mar**, for donating half of the cost of MBO's composting toilet
- **Canada Steamship Lines**, for donations in support of MBO
- **Avian Science and Conservation Centre**, for logistical and equipment support

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Appendix A. Seasonal distribution charts

The charts below summarize the pattern of occurrence of each species observed during FMMP 2008. The mean # birds/day is calculated using the number of days of observation each week (7 days/week). The # processed includes individuals banded, returns, and repeats, in that order. The total of mean # birds/day is the sum of individuals observed divided by 91 days.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: October 7				LAST OBSERVED: October 7				PEAK DATE: October 7			NUMBER OF INDIVIDUALS: 1		

Notes: Only one individual seen during the season, flying overhead.

NOGA: Northern Gannet / Fou de bassan (*Morus bassanus*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: September 7				LAST OBSERVED: September 7				PEAK DATE: September 7			NUMBER OF INDIVIDUALS: 1		

Notes: Only one immature individual seen during the season, flying overhead. First record for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: September 18				LAST OBSERVED: October 7				PEAK DATE: Sep 18 and Oct 7			NUMBER OF INDIVIDUALS: 1		

Notes: Two sightings of single individuals flying overhead.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.14	0.29	0.14	0.14	0.14	0.14	0.43	0.43	0.14				**0.26**
# DAYS OBSERVED	3	5	2	1	1	1	1	3	3	1				**21**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 5				PEAK DATE: August 12			NUMBER OF INDIVIDUALS: 3		

Notes: Seen consistently at least once a week from week 1 through week 10, usually flying overhead.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.43		0.29	0.29	0.14								**0.25**
# DAYS OBSERVED	7	2		2	2	1								**14**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: September 10				PEAK DATE: August 3			NUMBER OF INDIVIDUALS: 5		

Notes: Usually two or more individuals seen daily for the first two weeks, perhaps a pair with young. None seen after the second week of September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	6.86	0.14	4.43	53.00	28.57	42.43	452.14	311.71	428.14	175.00	283.43	80.3	**143.58**
# DAYS OBSERVED	1	4	1	1	6	5	5	7	7	7	7	7	7	**65**
# PROCESSED														
	FIRST OBSERVED: August 4				LAST OBSERVED: October 30					PEAK DATE: September 21 NUMBER OF INDIVIDUALS: 1150				

Notes: Fairly small groups seen until mid-September. Overall numbers peaked in mid-September and sightings continued daily until the end of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY								0.14						**0.01**
# DAYS OBSERVED								1						**1**
# PROCESSED														
	FIRST OBSERVED: September 22				LAST OBSERVED: September 22					PEAK DATE: September 22 NUMBER OF INDIVIDUALS: 1				

Notes: A single individual observed among a flock of Canada Geese.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY												2.86		**0.22**
# DAYS OBSERVED												1		**1**
# PROCESSED														
	FIRST OBSERVED: October 22				LAST OBSERVED: October 22					PEAK DATE: October 22 NUMBER: 20				

Notes: Observations limited to a single group of 20 individuals migrating late in the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.57		0.14	0.14	0.43		0.71				**0.26**
# DAYS OBSERVED	2	3	3	4		1	1	1		1				**17**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 7					PEAK DATE: October 7 NUMBER OF INDIVIDUALS: 5				

Notes: Somewhat common during the month of August and sporadically seen later in the season, usually as single individuals or small groups flying overhead.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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						**0.05**
# DAYS OBSERVED				1			1	1						**3**
# PROCESSED														
	FIRST OBSERVED: August 26				LAST OBSERVED: September 20					PEAK DATE: September 18 NUMBER OF INDIVIDUALS: 3				

Notes: Single individuals seen rarely throughout the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.71	1.86		1.71	0.14	1.86	0.14		0.90	0.57	6.10	**1.25**
# DAYS OBSERVED	1	1	2	2		3	1	2	1		3	2	5	**23**
# PROCESSED														
	FIRST OBSERVED: August 6				LAST OBSERVED: October 30					PEAK DATE: October 26 NUMBER OF INDIVIDUALS: 23				

Notes: Seen almost every week. It was the most common waterfowl observed on site in fall 2008. Large groups were expected late in the season based on observations in previous years, but were noticeably absent, perhaps due to a lack of late fall flooding in local fields.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		0.14		0.43		**0.11**
# DAYS OBSERVED		1				1	1	1		1		1		**1**
# PROCESSED														
	FIRST OBSERVED: August 10				LAST OBSERVED: October 17					PEAK DATE: October 17		NUMBER OF INDIVIDUALS: 3		

Notes: Observed sporadically throughout the season, typically near the end of the morning on sunny days.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: August 20				LAST OBSERVED: August 20					PEAK DATE: August 20		NUMBER OF INDIVIDUALS: 1		

Notes: Sightings limited to a single individual passing over the site in late August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14				0.14	0.57								**0.06**
# DAYS OBSERVED	1				1	3								**5**
# PROCESSED														
	FIRST OBSERVED: August 7				LAST OBSERVED: September 10					PEAK DATE: September 7		NUMBER OF INDIVIDUALS: 2		

Notes: Sparse sightings across the first half of the season, usually of a single individual flying low over the ponds or adjacent fields.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.00	0.29	0.71	0.71	1.86	1.29	0.29	0.14	0.57	0.14	**0.55**
# DAYS OBSERVED	1	1	1	5	2	4	3	7	5	2	1	2	1	**35**
# PROCESSED	1						1	1	1					**4**
	FIRST OBSERVED: August 5				LAST OBSERVED: October 24					PEAK DATE: September 30		NUMBER OF INDIVIDUALS: 4		

Notes: Seen every week of the season: it was the most common raptor of fall 2008. Small peak late in September, including individuals banded 3 weeks in a row.

COHA: Cooper's Hawk / Épervier de Cooper (*Accipiter 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	0.29		0.14	0.29	1.00	0.86	1.00	1.14	0.14	0.86	0.43	0.43	0.29	**0.52**
# DAYS OBSERVED	2		1	2	6	4	3	5	1	4	2	3	2	**35**
# PROCESSED														
	FIRST OBSERVED: August 2				LAST OBSERVED: October 26					PEAK DATE: Sep 16 and Sep 19		NUMBER OF INDIVIDUALS: 4		

Notes: The second most common raptor on site this fall, often spotted flying overhead or perched on a large dead tree overlooking the pond.

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

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

Notes: Observations limited to a single individual.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.29	0.43	0.29	0.14		0.57	1.14	1.57	0.86	0.57	0.14		0.14	**0.47**
# DAYS OBSERVED	2	3	2	1		2	5	6	5	4	1		1	**32**
# PROCESSED														
	FIRST OBSERVED: August 3				LAST OBSERVED: October 27				PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 4		

Notes: Seen or heard steadily throughout the season, lessening near the end of October. Often heard calling from the Morgan Arboretum.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY			0.14	0.43	0.86	2.43	4.71	0.14						**0.67**
# DAYS OBSERVED			1	1	2	2	2	1						**9**
# PROCESSED														
	FIRST OBSERVED: August 20				LAST OBSERVED: September 24				PEAK DATE: September 16			NUMBER OF INDIVIDUALS: 29		

Notes: Observed weekly from mid-August to late September. Early in migration seen singly or in small groups, increasing to larger kettles during peak migration.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.57	0.29	0.71	1.86	2.0	1.71	**0.61**
# DAYS OBSERVED			1	1	1	1	1	2	2	4	4	4	6	**27**
# PROCESSED														
	FIRST OBSERVED: August 20				LAST OBSERVED: October 30				PEAK DATE: Oct 10 and Oct 17			NUMBER OF INDIVIDUALS: 6		

Notes: Seen weekly from mid-August until the end of the season, peaking in late October.

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

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

Notes: Observations limited to single individuals on three days in the second half of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.57	0.14	0.43	0.14	0.29	0.14		0.29	0.29			**0.22**
# DAYS OBSERVED	1	2	4	1	3	1	1	1		1	2			**17**
# PROCESSED														
	FIRST OBSERVED: August 2				LAST OBSERVED: October 14				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 2		

Notes: Seen every week from early August until the end of September and then again in mid-October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY				0.14	0.14							0.14		**0.03**
# DAYS OBSERVED				1	1							1		**3**
# PROCESSED														
	FIRST OBSERVED: August 24				LAST OBSERVED: October 23				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to three individuals seen flying over the site.

RUGR: Ruffed Grouse / Gélinotte huppée (*Bonasa umbellus*)

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

Notes: A new species for the site, observed once a week for the final three weeks of the season, usually during the census walk.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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**
# PROCESSED														
	FIRST OBSERVED: September 16				LAST OBSERVED: September 16					PEAK DATE: September 16				NUMBER OF INDIVIDUALS: 2

Notes: Observations limited to two individuals skulking in Stoneycroft pond in mid-September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: August 3				LAST OBSERVED: September 26					PEAK DATE: 2 dates				NUMBER OF INDIVIDUALS: 1

Notes: Observations limited to two individuals heard vocalizing in nearby fields.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: September 23				LAST OBSERVED: September 23					PEAK DATE: September 23				NUMBER OF INDIVIDUALS: 1

Notes: Sighting limited to a single individual in late September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: August 10				LAST OBSERVED: August 10					PEAK DATE: August 10				NUMBER OF INDIVIDUALS: 1

Notes: Sighting limited to a single individual in early August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.86	0.86	0.29							**0.23**
# DAYS OBSERVED			2	4	5	5	2							**18**
# PROCESSED														
	FIRST OBSERVED: August 16				LAST OBSERVED: September 18					PEAK DATE: 3 dates				NUMBER OF INDIVIDUALS: 2

Notes: Commonly seen from mid-August to mid-September feeding in a small, muddy wetland near the banding station; likely the same individuals staging at MBO for an extended period.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY				0.14										**0.01**
# DAYS OBSERVED				1										**1**
# PROCESSED														
	FIRST OBSERVED: August 28				LAST OBSERVED: August 28					PEAK DATE: August 28			NUMBER OFINDIVIDUALS: 1	

Notes: Observations limited to a single individual seen in late August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.14	0.14											**0.02**
# DAYS OBSERVED		1	1											**2**
# PROCESSED														
	FIRST OBSERVED: August 13				LAST OBSERVED: August 20					PEAK DATE: Aug 13 & Aug 20			NUMBER OF INDVIDUALS: 1	

Notes: Two sightings in consecutive weeks in August. Both times the bird was flushed from the ground along the census route.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.57	4.14	0.43	0.43	0.14	2.57	5.71	0.29	3.75	1.75	58.0	9.14	**6.77**
# DAYS OBSERVED	1	4	3	2	2	1	3	4	1	5	5	3	4	**38**
# PROCESSED														
	FIRST OBSERVED: August 5				LAST OBSERVED: October 29					PEAK DATE: October 23			NUMBER OF INDIVIDUALS: 300	

Notes: Seen steadily throughout the season with a peak in the third week of October when nearby fields were plowed.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14											0.29	0.14	**0.04**
# DAYS OBSERVED	1											2	1	**4**
# PROCESSED														
	FIRST OBSERVED: August 6				LAST OBSERVED: October 27					PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1	

Notes: Absent except for the first and last two weeks of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: October 2				LAST OBSERVED: October 2					PEAK DATE: October 2			NUMBER OF INDIVIDUALS: 1	

Notes: Observations limited to a single individual flying overhead in late September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	2.00			0.43	0.71	0.14	1.00	0.57		0.43	0.29	**0.58**
# DAYS OBSERVED	4	1	4			2	1	1	2	2		1	2	**20**
# PROCESSED														
	FIRST OBSERVED: August 4				LAST OBSERVED: October 28					PEAK DATE: August 12			NUMBER OF INDIVIDUALS: 7	

Notes: Small flocks observed flying overhead throughout the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.14	1.00	0.57	0.43	0.29	1.86	1.71	0.43	0.86	2.14	0.57	**0.92**
# DAYS OBSERVED	5	2	4	2	3	3	2	6	6	3	3	6	1	**46**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 26				PEAK DATE: October 18			NUMBER OF INDIVIDUALS: 8		

Notes: Seen on a weekly basis with small peaks in the third weeks of each month.

BBCU: Black-billed Cuckoo / Coulicou à bec noire (*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		0.14									**0.03**
# DAYS OBSERVED	1		1		1									**3**
# PROCESSED			1		1									**2**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 1				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 1		

Notes: Observed once on the first day of the season; banded two individuals in the first half of the season.

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

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

Notes: A new species for the site: an individual was flushed from the driveway when arriving on site in the last week of August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.86	1.43	0.86		0.14									**0.25**
# DAYS OBSERVED	4	5	3		1									**13**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: September 4				PEAK DATE: August 18			NUMBER OF INDIVIDUALS: 5		

Notes: Seen in small numbers over the first three weeks of the season, with one straggler seen in early September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	3.57	4.00	6.14	4.00	2.86	2.71								**1.79**
# DAYS OBSERVED	6	7	7	7	7	6								**40**
# PROCESSED	5	9	8	6	3	4								**35**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 11				PEAK DATE: August 16			NUMBER OF INDIVIDUALS: 9		

Notes: Observed almost daily throughout the first half of the season, and also caught some of those days. Though they were not banded, an effort was made to quickly age and sex them whenever possible prior to release. One male, four females, and 30 undetermined individuals were released unbanded between 1 Aug and 11 Sep, but some individuals were likely caught more than once.

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

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

Notes: All sightings were of single individuals, perhaps the same bird, in the first two months of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.29	0.14	0.14		0.14	0.29	0.14	0.43	0.29	0.57				**0.19**
# DAYS OBSERVED	2	1	1		1	2	1	2	2	3				**15**
# PROCESSED	2		1			0-0-1	1		2					**6-0-1**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 6				PEAK DATE: Sept 2 and Oct 6		NUMBER OF INDIVIDUALS: 2			

Notes: Seen almost weekly until the first week of October. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	2.86	2.57	2.57	1.86	1.71	2.57	1.86	3.43	2.29	2.71	3.29	1.71	1.86	**2.41**
# DAYS OBSERVED	7	7	7	7	6	6	6	7	7	7	7	6	4	**84**
# PROCESSED	1-1-1	4-0-1	2	0-0-1	2-0-1		0-0-1	1-0-1	0-0-2	0-1-1		0-0-1	0-0-1	**10-2-11**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: Sept 7 and Oct 13		NUMBER OF INDIVIDUALS: 6			

Notes: Observed almost daily across the season, with relatively stable abundance throughout.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.86	1.29	1.14	1.71	1.57	1.14	1.00	2.86	1.71	1.86	3.29	2.29	2.57	**1.79**
# DAYS OBSERVED	5	6	4	7	7	5	4	7	5	6	7	6	7	**76**
# PROCESSED		1			1-0-1			0-1-0			0-0-1	0-0-1		**2-1-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: Sept 20 and Oct 15		NUMBER OF INDIVIDUALS: 6			

Notes:. Present weekly, like the Downy Woodpecker, but in lower numbers. A slight peak in abundance in late October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	2.71	2.57	1.86	2.43	2.43	2.43	2.57	1.71	1.00	0.29	0.29	0.14	**1.75**
# DAYS OBSERVED	7	7	7	7	7	6	5	6	5	5	2	2	1	**67**
# PROCESSED		1		1					1					**3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 24				PEAK DATE: Sept 8 and 12		NUMBER OF INDIVIDUALS: 5			

Notes: Present weekly throughout the season, until most of the last migrants left in mid-October. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.57	0.57	1.43	1.71	1.43	1.71	1.00	0.29	1.29	1.41	0.57	**1.03**
# DAYS OBSERVED	3	3	3	4	6	6	5	7	5	2	6	4	3	**57**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 27				PEAK DATE: 3 dates		NUMBER OF INDIVIDUALS: 4			

Notes: Seen weekly throughout the season yet only in one of those weeks recorded daily. It is likely that most, if not all sightings involved the local family.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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**
# DAYS OBSERVED					1									**1**
# PROCESSED														
	FIRST OBSERVED: August 29				LAST OBSERVED: August 29				PEAK DATE: August 29		NUMBER OF INDIVIDUALS: 1			

Notes: Observations limited to a single individual heard calling from the woods adjacent to MBO in early September.

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		0.86	0.43		1.14	0.71				0.14				**0.25**
# DAYS OBSERVED		4	2		3	4				1				**14**
# PROCESSED		6	2		7	4				1				**20**
	FIRST OBSERVED: August 9				LAST OBSERVED: October 4					PEAK DATE: August 31			NUMBER OF INDIVIDUALS: 4	

Notes: Several individuals observed and banded in mid-August and early September. One late migrant banded in early October. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.43	0.57		0.14	0.14						**0.49**
# DAYS OBSERVED	5	7	3	3	3									**21**
# PROCESSED	10-0-1	13-0-1	2	2	2		1							**30**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 19					PEAK DATE: 6 dates			NUMBER OF INDIVIDUALS: 3	

Notes: Seen weekly from the beginning of the season until early September. An Alder Flycatcher was heard vocalizing on September 19th and a Willow Flycatcher was banded (by short wing) on September 12th. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.43	0.43	1.00	0.71	0.14							**0.27**
# DAYS OBSERVED	3	3	3	3	5	4	1							**22**
# PROCESSED	2	1	2	2	4	2	0-0-1							**13-0-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 12					PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 2	

Notes: Seen and banded in small numbers from the beginning of the season until mid-September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	0.57			0.43	0.43	0.43	0.14	0.57	0.43	0.43	0.14	0.14		**0.28**
# DAYS OBSERVED	2			2	3	3	1	4	2	2	1	1		**21**
# PROCESSED				3		2		1	1	1				**8**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 17					PEAK DATE: August 1			NUMBER OF INDIVIDUALS: 4	

Notes: Seen and banded irregularly across the season with absence in mid-August. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	4.00	3.00	2.43	1.29	0.86	0.86	0.14							**0.97**
# DAYS OBSERVED	7	7	6	6	4	4	1							**35**
# PROCESSED		1	4											**5**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 12					PEAK DATE: August 4			NUMBER OF INDIVIDUALS: 7	

Notes: Common early in the season with a gradual disappearance by mid-September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	2.86	1.71	2.14	0.29	0.14									**0.55**
# DAYS OBSERVED	7	7	6	2	1									**23**
# PROCESSED		1												**1**
	FIRST OBSERVED: August 1				LAST OBSERVED: August 29					PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 4	

Notes: Seen most days in August, with numbers dropping gradually throughout the month. One of the earliest to leave of the regularly occurring species, with none observed beyond August. Most observations were likely of the breeding pair and their offspring.

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		0.14									**0.02**
# DAYS OBSERVED			1		1									**2**
# PROCESSED														
	FIRST OBSERVED: August 16				LAST OBSERVED: August 31					PEAK DATE: August 16 and 31		NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to two sightings of singletons in a stand of planted Sugar Maples at the edge of the Morgan Arboretum.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY												2.86		**0.22**
# DAYS OBSERVED												1		**1**
# PROCESSED														
	FIRST OBSERVED: October 23				LAST OBSERVED: October 23					PEAK DATE: October 23		NUMBER OF INDIVIDUALS: 20		

Notes: A group of 20 migrants seen in late October alighting on the adjacent freshly plowed field.

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	4.86	1.26	1.43		0.14									**0.59**
# DAYS OBSERVED	7	7	4		1									**19**
# PROCESSED														
	FIRST OBSERVED: August 11				LAST OBSERVED: August 31					PEAK DATE: August 1		NUMBER OF INDIVIDUALS: 12		

Notes: Seen daily for the first two weeks in August and sporadically afterwards until the end of the month.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	2.86	1.57	0.29										**0.38**
# DAYS OBSERVED	1	5	4	1										**11**
# PROCESSED														
	FIRST OBSERVED: August 5				LAST OBSERVED: August 22					PEAK DATE: August 12		NUMBER OF INDIVIDUALS: 7		

Notes: Bred on the site and seen irregularly in small numbers in August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		1.00											**0.16**
# DAYS OBSERVED	2		1											**3**
# PROCESSED														
	FIRST OBSERVED: August 6				LAST OBSERVED: August 15					PEAK DATE: August 15		NUMBER OF INDIVIDUALS: 7		

Notes: Small groups seen three times throughout the first part of August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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													**0.23**
# DAYS OBSERVED	2													**2**
# PROCESSED														
	FIRST OBSERVED: August 2				LAST OBSERVED: August 6					PEAK DATE: August 6		NUMBER OF INDIVIDUALS: 14		

Notes: Observations limited to a single flock flying high above the site on the second day of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.14	1.00											**0.20**
# DAYS OBSERVED	2	4	2											**8**
# PROCESSED														
	FIRST OBSERVED: August 4				LAST OBSERVED: August 18				PEAK DATE: August 16			NUMBER OF INDIVIDUALS: 5		

Notes: Scattered sightings in August, usually in the company of other swallow species.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	6.71	12.85	8.14	15.29	12.57	12.86	14.4	23.43	18.00	18.14	16.29	11.86	7.71	**13.71**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED		2		4	2	2	9	7-1-0	1	1-0-1	0-0-1	0-0-1		**28-1-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: September 20			NUMBER OF INDIVIDUALS: 36		

Notes: One of the few species seen every day of the season. Birds observed during the first five weeks were likely local residents. Numbers increased in mid-September and stayed elevated through mid-October. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	17.29	20.00	26.00	33.29	82.57	85.57	143.57	206.53	105.57	154.43	196.86	174.29	**96.90**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 20			NUMBER OF INDIVIDUALS: 500		

Notes: One of the few species seen every day of the season. Steady numbers from local flocks until the end of September when numbers grew. At the end of the month, large flocks seen leaving roosts in the Morgan Arboretum throughout the morning.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.29			0.43	0.29	0.71	0.57	0.71	0.14	0.14	1.14	0.14	**0.35**
# DAYS OBSERVED		2			2	2	4	3	3	1	1	6	1	**25**
# PROCESSED														
	FIRST OBSERVED: August 11				LAST OBSERVED: October 26				PEAK DATE: 7 dates			NUMBER OF INDIVIDUALS: 2		

Notes: Mostly absent in August, then seen on a weekly basis until the end of the season. Most sightings consisted of vocalizing singletons flying over MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	11.00	14.86	16.00	14.71	20.14	20.57	16.57	16.29	14.71	16.71	15.43	21.71	14.57	**16.40**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	**91**
# PROCESSED	9-0-2	7-0-6	5-0-3	4-0-1	6-1-8	2-1-6	1-1-7	4-0-13	0-0-9	1-0-4	0-1-9	9-0-19	1-2-5	**49-6-92**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 20			NUMBER OF INDIVIDUALS: 39		

Notes: One of three species seen every day of the season. Birds recorded in August were likely local residents and their offspring, with small migrant peaks in September and October. The moderate number of individuals banded fall 2008 coincides with the two-year cycle seen in this species.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.57	0.29	0.71	1.14	0.43	0.86	0.29	0.14		**0.41**
# DAYS OBSERVED	1		1	1	4	2	2	4	2	3	2	1		**23**
# PROCESSED														
	FIRST OBSERVED: August 7				LAST OBSERVED: October 17				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 4		

Notes: Seen almost weekly, with a peak in the middle of the season. Often heard vocalizing from evergreen patches in or adjacent to MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.29	0.29	1.00	0.86	1.14	1.29	0.71	0.29	**0.54**
# DAYS OBSERVED	1	2	3	1	1	2	2	4	4	4	5	4	1	**34**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 25				PEAK DATE: 5 dates			NUMBER OF INDIVIDUALS: 3		

Notes: Observed on a weekly basis throughout the season, usually one or two individuals heard vocalizing.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.43	0.29	0.14		0.14	**0.13**
# DAYS OBSERVED					1	1	1	1	1	2	1		1	**9**
# PROCESSED					1	1	1	1	1	2			1	**8**
	FIRST OBSERVED: September 1				LAST OBSERVED: October 24				PEAK DATE: September 26			NUMBER OF INDIVIDUALS: 3		

Notes: Most observations detected only through banding. Banded weekly for six consecutive weeks from early September to mid-October with one late individual in the last week of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	5.14	4.71	3.86	3.43	2.29	1.57	1.71	0.71	1.29	0.43				**1.93**
# DAYS OBSERVED	7	7	7	7	6	7	5	3	4	2				**55**
# PROCESSED	3-1-2	7-0-3	0-0-7	2	2-0-2	3	1-0-3		2-0-2	0-0-1				**20-1-20**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 4				PEAK DATE: August 5			NUMBER OF INDIVIDUALS: 9		

Notes: Bred on site. Seen weekly until the first week of October, peaking early and trailing off later in the season. All five young hatched on site were banded and most were recaught throughout the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.43	0.43		0.29		**0.13**
# DAYS OBSERVED			1				1	2	3	3		1		**11**
# PROCESSED							1			1				**2**
	FIRST OBSERVED: August 16				LAST OBSERVED: October 22				PEAK DATE: October 22			NUMBER OF INDIVIDUASL: 2		

Notes: Uncommon but present almost weekly throughout the second half of the season, with a small peak in the first week of October and an early individual in mid-August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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							2.57	2.29	2.86	0.29	0.86	0.14	**0.71**
# DAYS OBSERVED	1							4	5	5	2	4	1	**22**
# PROCESSED	2							8	8	14	2	1	1	**36**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: September 22			NUMBER OF INDIVIDUALS: 12		

Notes: Two juveniles banded on the very first day of the season, suggesting that breeding occurs in the Morgan Arboretum. Migration began in the third week of September and continued to the end of the season, with a late individual banded on the last day of the season. Migration peaked late-September / early October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.71	9.43	33.14	48.71	21.43	6.00	3.71	**9.62**
# DAYS OBSERVED			1			4	4	7	7	7	7	6	6	**49**
# PROCESSED						2	8-0-1	24-0-9	111-0-26	126-0-16	34-0-11	5-0-2	9-0-4	**319-0-69**
	FIRST OBSERVED: August 19				LAST OBSERVED: October 29				PEAK DATE: October 10			NUMBER OF INDIVIDUALS: 70		

Notes: Except for an early migrant in August, migration began mid-September and built to a peak in early October, quickly tapering off towards the end of October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		**0.04**
# DAYS OBSERVED												2		**2**
# PROCESSED														
	FIRST OBSERVED: October 17				LAST OBSERVED: October 19					PEAK DATE: October 19 NUMBER OF INDIVIDUALS: 3				

Notes: Observations limited to two sightings during the same week in late October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.29	1.29	0.86	0.86	0.43	0.43	0.29	0.29						**0.44**
# DAYS OBSERVED	5	6	4	4	3	3	2	2						**29**
# PROCESSED	3-1-1	4-0-1	1	5-0-1	1-0-1	2-1-0	2	0-0-2						**18-2-6**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 22					PEAK DATE: Aug 1 and 24 NUMBER OF INDIVIDUALS: 3				

Notes: The earliest of the *Catharus* thrushes, peaking in early August and gone before the end of September. Several of the early birds were likely local breeders: some juveniles were banded this season. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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: September 30				LAST OBSERVED: September 30					PEAK DATE: September 30 NUMBER OF INDIVIDUALS: 1				

Notes: Observations limited to a single individual banded in late September.

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										0.14				**0.01**
# DAYS OBSERVED										1				**1**
# PROCESSED										1				**1**
	FIRST OBSERVED: October 6				LAST OBSERVED: October 6					PEAK DATE: October 6 NUMBER OF INDIVIDUALS: 1				

Notes: A single bird banded in early October, only the second record for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		0.71	0.43	1.14				**0.21**
# DAYS OBSERVED	1	1				1		2	2	4				**11**
# PROCESSED	1	1				1		4	3	5-0-1				**15-0-1**
	FIRST OBSERVED: August 7				LAST OBSERVED: October 6					PEAK DATE: October 3 NUMBER OF INDIVIDUALS: 5				

Notes: Observed earlier than usual with two individuals banded in the first two weeks of August. Most passed through at the end of September and early October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.43	2.71	3.29	0.43	0.43	**0.60**
# DAYS OBSERVED		1		1				2	2	7	6	3	2	**24**
# PROCESSED		1		1				2	1	12-0-2	13-0-4	1-0-1	2	**33-0-7**
	FIRST OBSERVED: August 9				LAST OBSERVED: October 30					PEAK DATE: October 15 NUMBER OF INDIVIDUALS: 7				

Notes: The latest of the *Catharus* thrushes despite a few unusually early arrivals in August, peaking in mid-October. Several repeats show that the species stays on site for a few days during migration.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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 2				LAST OBSERVED: October 2				PEAK DATE: October 2			NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to a single individual banded in the first week of October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	16.14	10.86	13.29	11.14	7.86	20.43	6.86	16.71	33.86	105.57	260.00	263.86	259.00	**78.90**
# DAYS OBSERVED	7	7	7	7	7	7	5	7	7	7	7	7	7	**89**
# PROCESSED	1	6	1	4		2		3	2	28	103-0-1	101-0-1	95	**346-0-2**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 15			NUMBER OF INDIVIDUALS: 519		

Notes Seen on a weekly basis and almost daily basis throughout the season, save two days it was absent in mid-September. Peaked in late October with over 100 individuals banded in both weeks 11 and 12. A record number of individuals were banded this season. The very low proportion of repeats suggests that robins may be moving through the area quickly, or else may simply be quite averse to recapture.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	7.29	6.29	5.86	5.14	5.43	5.71	5.29	5.57	3.29	3.14	0.71			**4.13**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	6	3			**72**
# PROCESSED	12-1-7	3-0-7	3-0-4	1-0-4	3-0-3	4-0-5	3-1-7	4-0-4	7-0-2	5-0-2				**45-2-45**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 13				PEAK DATE: Aiug 1 and 12			NUMBER OF INDIVIDUALS: 12		

Notes: Observed daily until mid-October then dropped off rapidly. Peaked early in the season, when local breeders and their offspring were plentiful on site.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.29		0.29	0.14				**0.15**
# DAYS OBSERVED		2	1		1	4	1		2	1				**12**
# PROCESSED		1			0-0-1	1	1		1	1				**5-0-1**
	FIRST OBSERVED: August 8				LAST OBSERVED: October 3				PEAK DATE: Sep 11 and 12			NUMBER OF INDIVIDUALS: 2		

Notes: Seen sporadically throughout the season, mostly in September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	8.86	13.71	11.71	6.71	9.86	32.86	28.71	22.14	17.29	6.57	3.57	2.43	1.71	**12.78**
# DAYS OBSERVED	7	7	7	6	6	5	7	7	7	4	3	2	2	**70**
# PROCESSED	2	2				4		3	5					**16**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 26				PEAK DATE: September 8			NUMBER OF INDIVIDUALS: 100		

Notes: Seen weekly (almost daily for the first two thirds of the season) until the end of the season. A small peak occurred in mid-August, likely representing locally breeding adults and juveniles, with another larger peak in September.

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										0.29				**0.02**
# DAYS OBSERVED										1				**1**
# PROCESSED														
	FIRST OBSERVED: October 8				LAST OBSERVED: October 8				PEAK DATE: October 8			NUMBER OF INIDIVIDUALS: 2		

Notes: Observations limited to two individuals seen in early October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY											0.29		0.14	**0.03**
# DAYS OBSERVED											2		1	**3**
# PROCESSED											1			**1**
	FIRST OBSERVED: October 13				LAST OBSERVED: October 28				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 1		

Notes: Observed three times in mid- to late October, perhaps the same individual.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.43	1.71	1.00	0.43	6.86	1.14	5.71	7.57	4.00	49.14	28.29	131.43	**18.58**
# DAYS OBSERVED	5	2	3	1	2	3	2	4	4	5	6	7	7	**51**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 26			NUMBER OF INDIVIDUALS: 405		

Notes: Seen weekly in low numbers during the first half of the season, then regularly in late September, peaking in late October. Almost all birds seen were flying over rather than actively using MBO, however towards the end of the season many were observed perched at the tops of the large cottonwoods over the B/N nets.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.86	0.57	0.57	4.00	3.71	0.71		0.14	**0.86**
# DAYS OBSERVED	2		1	1	1	4	3	3	5	7	4		1	**32**
# PROCESSED						2	4	3	18-0-3	8-0-3	1			**36-0-6**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 25				PEAK DATE: October 4			NUMBER OF INDIVIDUALS: 10		

Notes: Seen weekly from early September through mid-October, peaking in late September and early October. A record number of individuals were banded this season, including nearly as many in week 9 as in all of fall 2007.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.57	0.86	0.57	0.43	0.14						**0.31**
# DAYS OBSERVED	2	2	3	3	4	2	2	1						**19**
# PROCESSED	2	2	1	2	4	2-0-1	2	0-1-0						**15-1-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 23				PEAK DATE: September 7			NUMBER OF INDIVIDUALS: 3		

Notes: Seen weekly from early August to late September. Fairly steady throughout; this was a record fall season for this species with three times as many individuals banded as last fall.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.14	0.57	0.14	0.14	0.14					**0.18**
# DAYS OBSERVED	1			1	4	3	1	1	1					**12**
# PROCESSED				1	5	2		1						**9**
	FIRST OBSERVED: August 9				LAST OBSERVED: October 2				PEAK DATE: September 2			NUMBER OF INDIVIDUALS: 3		

Notes: One early migrant in August followed by sightings in six consecutive weeks in the middle of the season, peaking in early September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	4.14	5.00	2.86	1.86	4.71	4.29	1.14	0.14	1.86	0.57	0.14			**2.05**
# DAYS OBSERVED	7	7	6	5	7	6	3	1	7	2	1			**52**
# PROCESSED	4-0-1	12	5-0-3	4	14	14	7		9	1				**70-0-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 12				PEAK DATE: August 12			NUMBER OF INDIVIDUALS: 10		

Notes: Recorded on most days during the first two months of the season, rapidly dropping off in early October. Many of the birds observed in August were likely local breeders and their offspring. A confirmed Brown-headed Cowbird host; a BHCO nestling was seen begging in a REVI nest at MBO this summer.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		1												**1**
	FIRST OBSERVED: August 10				LAST OBSERVED: August 11				PEAK DATE: Aug 10 and 11			NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to a sighting and banded individual (likely the same) in the second week of August. This is the second individual banded at MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.14	1.14	2.14	3.57	4.29	4.00	3.14	0.43				**1.62**
# DAYS OBSERVED	4	4	1	5	6	7	6	7	7	1				**48**
# PROCESSED	9-0-1	3-0-2	1	6	6-0-2	16-0-4	18-0-8	16-0-4	11-0-3					**86-0-24**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 3				PEAK DATE: September 13			NUMBER OF INDIVIDUALS: 14		

Notes: Present on a weekly basis until early October. Peaked in mid-September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY				0.14					0.14	0.57	0.29			**0.09**
# DAYS OBSERVED				1					1	4	2			**8**
# PROCESSED									1	3	2			**6**
	FIRST OBSERVED: August 27				LAST OBSERVED: October 15				PEAK DATE: 8 dates			NUMBER OF INDIVIDUALS: 1		

Notes: Uncommonly seen, with an early migrant in late August but peaking in early October. Most sightings consisted of banded individuals.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.14	2.29	3.14	4.14	6.71	4.29	5.00	6.43	5.71	0.71			**3.13**
# DAYS OBSERVED	6	6	7	6	7	6	6	7	6	5	2			**64**
# PROCESSED	5-0-1	4	6-0-3	11-0-6	10-1-5	22-0-10	19-0-2	20-0-1	36-0-1	21-0-1	4			**158-1-30**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 11				PEAK DATE: October 13			NUMBER OF INDIVIDUALS: 26		

Notes: Observed weekly for the first 11 weeks of the season before disappearing rapidly in mid-October. High number of repeats demonstrated species' use of MBO as stopover during fall migration.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		0.14	0.14				**0.13**
# DAYS OBSERVED					2	4	2		1	1				**10**
# PROCESSED						1	2		1					**4**
	FIRST OBSERVED: August 31				LAST OBSERVED: October 3				PEAK DATE: September 12			NUMBER OF INDIVIDUALS: 3		

Notes: Uncommon, seen in September and early October. Often seen in the company of other warbler species.

YWAR: Yellow Warbler / Paruline jaune (*Dendroica petechia*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	5.86	5.14	3.29	0.43	0.43									**1.16**
# DAYS OBSERVED	7	7	4	2	3									**23**
# PROCESSED	24-0-5	4-0-10	7-0-2	2	2									**39-0-17**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 3				PEAK DATE: August 1			NUMBER OF INDIVIDUALS: 14		

Notes: Seen daily early in the season, gradually tapering off at the end of August as local residents departed. Unlike in some previous years, no late (presumably northern) migrants were observed.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	2.57	0.71	1.29	1.29	0.57	0.29	0.14					**0.61**
# DAYS OBSERVED	2	4	6	4	6	5	2	2	1					**32**
# PROCESSED	3	2	10-0-1	3	3	6	1		1					**29-0-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 27				PEAK DATE: August 17			NUMBER OF INDIVIDUALS: 6		

Notes: Seen weekly in small numbers until the end of September with a peak in the third week of August and beginning of September. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	2.29	3.57	13.57	23.29	9.14	2.86	2.29	0.57	0.14			**4.46**
# DAYS OBSERVED		2	7	7	7	7	6	7	3	2	1			**49**
# PROCESSED		2	12-0-2	19-0-2	62-0-6	109-0-10	36-0-14	10-0-1	11	3				**264-0-37**
	FIRST OBSERVED: August 13				LAST OBSERVED: October 12				PEAK DATE: Sept 6 and 7			NUMBER OF INDIVIDUALS: 31		

Notes: Present over a 10-week span with a peak in the first week of September during which over 100 individuals were banded. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14	0.14	0.57	1.29	0.86	1.71	0.29	1.14	1.43	2.14	0.14			**0.76**
# DAYS OBSERVED	1	1	3	4	4	5	2	3	5	6	1			**35**
# PROCESSED			3	5-0-1	5	7-0-1	1-0-1	2	9	10-0-1	1			**43-0-4**
	FIRST OBSERVED: August 11				LAST OBSERVED: October 13				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 4		

Notes: Present weekly until the second week of October, peaking in early September and again in early October. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.57		0.14		0.14	2.43	45.71	155.29	177.57	58.86	9.14	0.86	**34.67**
# DAYS OBSERVED		1		1		1	3	7	7	7	7	5	3	**42**
# PROCESSED							4	170-0-4	688-0-66	650-0-77	209-0-50	11-0-4		**1732-0-201**
	FIRST OBSERVED: August 10				LAST OBSERVED: October 27				PEAK DATE: October 3			NUMBER OF INDIVIDUALS: 324		

Notes: A scattering of early migrants in August before migration started in September and continued until the end of the season. Seen daily for a four-week period from mid-September to mid-October with over 100 individuals banded weekly during this time. A record year, more than tripling the previous season total record of individuals banded, and a single day in late September on which more than twice as many were banded than during the entire 2007 fall season. An astounding 324 individuals were estimated to be on site on October 3.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	2.00	0.86	1.29	1.29	0.14				**0.49**
# DAYS OBSERVED				1	4	5	4	5	5	1				**25**
# PROCESSED					2	11	3	3	9					**28**
	FIRST OBSERVED: August 26				LAST OBSERVED: October 3				PEAK DATE: September 6			NUMBER OF INDIVIDUALS: 7		

Notes: Observed weekly from late August until early October, peaking in early September. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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 21				LAST OBSERVED: August 25				PEAK DATE: Aug 21 and 25			NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to one individual sighted and one banded (possibly the same) in late August.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		0.14	0.86	0.57				**0.21**
# DAYS OBSERVED					2	3		1	4	3				**13**
# PROCESSED					1	4		1	6	3				**15**
	FIRST OBSERVED: September 1				LAST OBSERVED: October 6				PEAK DATE: September 10			NUMBER OF INDIVIDUALS: 3		

Notes: Uncommon, seen sporadically in September and early October. Most sightings were a result of banding.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY								0.57	0.14	0.14	0.29			**0.09**
# DAYS OBSERVED								3	1	1	2			**7**
# PROCESSED								2	1	1	1			**5**
	FIRST OBSERVED: September 19				LAST OBSERVED: October 13				PEAK DATE: September 24			NUMBER OF INDIVIDUALS: 2		

Notes: Observations limited to a four-week period in late September to mid-October. A small number of individuals banded consist of the majority of the sightings.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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								**0.04**
# DAYS OBSERVED					1	3								**4**
# PROCESSED					1	2								**3**
	FIRST OBSERVED: August 31				LAST OBSERVED: September 7				PEAK DATE: 4 dates			NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to a two-week period in early September, most sightings the result of banding.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	4.00	2.86	1.43	0.86	0.29					**0.75**
# DAYS OBSERVED				2	5	6	2	3	2					**20**
# PROCESSED				2	16	11-0-1	7	6	2					**44-0-1**
	FIRST OBSERVED: August 25				LAST OBSERVED: September 29				PEAK DATE: August 31			NUMBER OF INDIVIDUALS: 15		

Notes: Seen weekly from late August to late September. Mid-season migrant, peaking in early to mid-September. A record number of individuals banded this fall season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.86	2.29	1.43	0.57	0.86	1.00	0.14		0.14				**0.61**
# DAYS OBSERVED	4	4	6	6	3	5	4	1		1				**34**
# PROCESSED	4-0-1	5	5	4-0-1	1-0-1	3	5-0-1			1				**28-0-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 3				PEAK DATE: Aug 20 and 21			NUMBER OF INDIVIDUALS: 4		

Notes: Seen weekly over the first eight weeks, with a late migrant in early October. Numbers peaked in mid- to late August. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	4.00	7.00	4.29	5.29	5.29	1.43	0.14	0.14					**1.76**
# DAYS OBSERVED	2	7	7	7	7	6	3	1	1					**41**
# PROCESSED	4	21	22-0-2	17-0-1	15-0-3	11-0-4	8		1					**99-0-10**
	FIRST OBSERVED: August 2				LAST OBSERVED: September 27				PEAK DATE: September 8			NUMBER OF INDIVIDUALS: 11		

Notes: Among the most common warblers, seen regularly throughout the first half of the season and peaking mid-August. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.57	1.00	2.00	2.29	1.29	1.00	0.14		0.14			**0.82**
# DAYS OBSERVED	2	3	4	4	7	6	4	4	1		1			**36**
# PROCESSED	1-1-0	7	7-0-2	5-0-1	12-0-2	3-0-4	3-0-5	5-0-2	1					**44-1-16**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 10					PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 5	

Notes: Early August records pertain to recently fledged birds, likely from nests within or adjacent to MBO. Migrants were recorded in small numbers from mid-August through mid-September, peaking in early September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.29	0.71			0.14					**0.23**
# DAYS OBSERVED		2		2	3	2			1					**10**
# PROCESSED		2		3	8-0-1	5			1					**19-0-1**
	FIRST OBSERVED: August 9				LAST OBSERVED: September 27					PEAK DATE: August 31			NUMBER OF INDIVIDUALS: 4	

Notes: Seen sporadically in August and September, with a peak in the first week of October. One of only two regularly occurring fall warblers at MBO (along with Palm) that was banded in below average numbers this year.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.29	0.43	1.00	0.57	0.14	0.14		0.14	0.14				**0.22**
# DAYS OBSERVED		2	3	4	2	1	1		1	1				**15**
# PROCESSED		2	1-0-1	6	2	1			1	0-0-1				**13-0-2**
	FIRST OBSERVED: August 10				LAST OBSERVED: October 7					PEAK DATE: August 29			NUMBER OF INDIVIDUALS: 3	

Notes: Seen weekly over a six-week period from mid-August to mid-September, with a couple of late migrants in October. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	5.57	3.86	6.14	6.29	8.29	8.00	3.71	4.00	3.29	0.71	0.14			**3.85**
# DAYS OBSERVED	7	7	7	7	7	7	6	7	6	4	1			**66**
# PROCESSED	7-0-5	3-0-6	9-0-7	14-0-13	19-0-8	16-1-10	9-0-3	8-0-1	7	1-0-1				**93-1-54**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 12					PEAK DATE: September 1			NUMBER OF INDIVIDUALS: 15	

Notes: Present almost daily until early October. Migration peaked in early September. A record number of individuals were banded this season.

WIWA: Wilson's Warbler / Paruline à calotte noire (*Wilsonia 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			1.00	1.00	4.57	4.00	0.29							**0.83**
# DAYS OBSERVED			4	4	7	6	1							**22**
# PROCESSED			4-0-1	6	22-0-3	20-0-2	1-0-1							**53-0-7**
	FIRST OBSERVED: August 21				LAST OBSERVED: September 12					PEAK DATE: September 3			NUMBER OF INDIVIDUALS: 8	

Notes: Migration occurred from mid-August to mid-September, peaking in early September. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	2.43		0.57	0.57								**0.39**
# DAYS OBSERVED		3	7		2	4								**16**
# PROCESSED		10-0-1	9-0-3		2	3								**24-0-4**
	FIRST OBSERVED: August 12				LAST OBSERVED: September 10					PEAK DATE: August 19			NUMBER OF INDIVIDUALS: 6	

Notes: One of the earliest warblers to depart, present for a four-week window from mid-August to early September. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY			0.29		0.14									**0.03**
# DAYS OBSERVED			2		1									**3**
# PROCESSED					1									**1**
	FIRST OBSERVED: August 17				LAST OBSERVED: September 1				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 1		

Notes: Observations limited to three sightings of singletons, only one of which was banded.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	2.43	2.00	2.00	2.14	2.00	1.14	2.14	2.14	1.29	3.14	2.43	2.43	**2.11**
# DAYS OBSERVED	7	7	6	7	6	6	4	5	6	5	7	7	6	**79**
# PROCESSED	1-1-1	1	1							1	3-0-1	0-0-1	0-0-1	**7-1-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 24			NUMBER OF INDIVIDUALS: 6		

Notes: Seen on almost a daily basis throughout the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	5.43	5.00	3.43	2.00	1.29	1.57	0.29	0.14	0.29		0.14			**1.51**
# DAYS OBSERVED	7	7	7	7	4	5	2	1	2		1			**43**
# PROCESSED	15-0-1	8	0-0-2	4	1	1-0-1			1					**30-0-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 12				PEAK DATE: August 5			NUMBER OF INDIVIDUALS: 15		

Notes: Seen daily until the end of August. Sightings scarce beyond September, except for a very late migrant in mid-October. Peaking in the beginning of the season, with half of the total individuals banded in the first week.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	3.43	2.43	1.71	0.86	1.14	1.57	0.14	0.71	1.14	0.86				**1.08**
# DAYS OBSERVED	7	7	6	4	5	5	1	4	4	4				**47**
# PROCESSED	4	2-0-1	4	3	3	3	0-0-1	2	6-0-1	5				**32-0-3**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 7				PEAK DATE: August 6			NUMBER OF INDIVIDUALS: 6		

Notes: Observed weekly until early October. Peaked early in the season with a smaller peak in late September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY										0.43	0.14	3.57	1.14	**0.41**
# DAYS OBSERVED										2	1	5	4	**12**
# PROCESSED										1	1	5	6-0-1	**13-0-1**
	FIRST OBSERVED: October 7				LAST OBSERVED: October 30				PEAK DATE: October 18			NUMBER OF INDIVIDUALS: 19		

Notes: Seen weekly throughout October with a peak in the third week.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.43	1.14	0.57	0.29		**0.27**
# DAYS OBSERVED	1					1	1	3	2	5	1	1		**15**
# PROCESSED							1		3	6	1-0-1			**11-0-1**
	FIRST OBSERVED: August 3				LAST OBSERVED: October 17				PEAK DATE: October 10			NUMBER OF INDIVIDUALS: 4		

Notes: One early sighting in the first week of the season; observed almost weekly in September and October with a peak in early October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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								0.71	0.29	0.71	0.29		**0.16**
# DAYS OBSERVED	1								2	1	2	2		**8**
# PROCESSED									3	2	3	1		**9**
	FIRST OBSERVED: August 4				LAST OBSERVED: October 13				PEAK DATE: Sept 27 and Oct 3			NUMBER OF INDIVIDUALS: 3		

Notes: One early sighting in the first week of the season, likely a local breeder. Remaining observations spanning a four-week period from late September to third week of October with no real peaks. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.43	**0.15**
# DAYS OBSERVED				1						2	2	4	2	**11**
# PROCESSED										1	3	1-0-1	3	**8-0-1**
	FIRST OBSERVED: August 22				LAST OBSERVED: October 28				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 2		

Notes: One very early individual seen in late August, otherwise seen weekly throughout October. Possibly a low year in a two-year cycle for the species.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	13.14	9.00	7.43	7.57	4.43	5.29	5.29	10.0	14.86	15.86	16.57	11.00	4.86	**9.64**
# DAYS OBSERVED	7	7	7	7	7	7	5	7	7	7	7	6	7	**88**
# PROCESSED	22-5-10	12-0-6	10-0-1	8-1-4	7-0-2	11	10-0-2	13-0-8	24-0-14	32-0-7	32-4-20	13-0-4	5-0-1	**199-10-79**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 17			NUMBER OF INDIVIDUALS: 29		

Notes: Seen almost daily throughout the season, with a resident peak in the first week of the season and a migrant peak in early October. One of the most abundant species on site and one of the few banded every week of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	0.29	0.86	1.86	0.29	0.29			**0.36**
# DAYS OBSERVED					2	4	2	3	4	2	2			**19**
# PROCESSED					1	3	2	2	5	1	1			**15**
	FIRST OBSERVED: August 29				LAST OBSERVED: October 12				PEAK DATE: September 27			NUMBER OF INDIVIDUALS: 7		

Notes: Observed weekly from early September to mid-October with a peak in the last week of September.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.43	1.14	0.29	0.86	1.14	0.86	2.43	1.57	0.71	0.71	0.29		**1.11**
# DAYS OBSERVED	7	6	4	2	4	5	5	5	6	2	2	2		**50**
# PROCESSED	6-0-1	4	1-0-3	1	2-0-3		2-1-2	4-0-3	4-0-3	2	2-0-2			**28-1-17**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 23				PEAK DATE: September 6			NUMBER OF INDIVIDUALS: 6		

Notes: Present weekly throughout the season except for the very last week. Local residents common in August, tapering off by mid-September. Migrants peaked from late-September to early October.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	1.14	0.43	1.14	0.43	1.57	4.29	8.14	28.71	27.14	56.57	26.14	14.00	5.86	**13.5**
# DAYS OBSERVED	3	2	3	2	6	6	5	7	7	7	7	7	6	**68**
# PROCESSED	7-0-1	1-0-1	0-0-1	3	4	13-0-3	20-0-5	50-0-16	74-0-5	100-0-24	25-0-11	15-0-11	3-0-6	**315-0-84**
	FIRST OBSERVED: August 2				LAST OBSERVED: October 30				PEAK DATE: October 8			NUMBER OF INDIVIDUALS: 82		

Notes: The most abundant sparrow on site, peaking from mid-September to mid-October. The high number of repeats demonstrates the species' use of MBO as a stopover during migration.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	4.29	13.14	3.57	0.86	0.29	**1.78**
# DAYS OBSERVED								4	6	7	7	3	1	**28**
# PROCESSED								6	7	19-0-11	7-0-8	0-0-1		**39-0-20**
	FIRST OBSERVED: September 21				LAST OBSERVED: October 27					PEAK DATE: Oct 3 and 4			NUMBER OF INDIVIDUALS: 20	

Notes: Seen weekly during the second half of the season, peaking in early October. A proportionately large number of repeats, indicating several birds remained on site for at least one week after being banded.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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	1.14	2.86	9.14	20.57	36.00	48.43	**9.15**
# DAYS OBSERVED							2	3	6	6	7	7	7	**38**
# PROCESSED							1	1	10	23	53-0-1	54-0-4	94-0-14	**236-0-19**
	FIRST OBSERVED: September 16				LAST OBSERVED: October 30					PEAK DATE: October 22			NUMBER OF INDIVIDUALS: 90	

Notes: Seen weekly during the second half of the season, peaking in the last week of the season with just under 100 individuals banded in the last week. A record number of individuals were banded this season.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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														
	FIRST OBSERVED: September 9				LAST OBSERVED: September 9					PEAK DATE: September 9			NUMBER OF INDIVIDUALS: 1	

Notes: Observations limited to a single observation of a vocalizing male. Early hay-cropping and fall tilling of adjacent fields reduced breeding and stopover habitat for the species.

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

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	14.71	2.43	0.86	0.43	7.29		23.86	35.57	31.57	50.29	175.71	275.71	210.86	**63.79**
# DAYS OBSERVED	7	6	4	1	3		4	6	7	7	7	7	7	**66**
# PROCESSED											5	1	1	**7**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30					PEAK DATE: October 17			NUMBER OF INDIVIDUALS: 550	

Notes: A clear division between the smaller number of breeders in August, which peaked early in the month, and the appearance of migrants in mid-September that peaked at the end of October. A new fall record was set for number of birds banded in a season.

RUBL: Rusty Blackbird / Quiscale rouilleux (*Euphagus 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									2.14	2.71	4.29	1.14	0.29	**0.81**
# DAYS OBSERVED									4	3	3	3	2	**15**
# PROCESSED														
	FIRST OBSERVED: September 29				LAST OBSERVED: October 27					PEAK DATE: October 12			NUMBER OF INDIVIDUALS: 17	

Notes: Small flocks seen weekly from late September until the end of the season, peaking in the second week of October.

COGR: Common Grackle / Quiscale bronzé (*Quiscalus quiscula*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	9.00	23.29	19.29	28.43	60.14	42.43	19.14	3.71	26.57	84.57	82.00	104.57	24.71	**40.60**
# DAYS OBSERVED	7	7	7	7	7	7	4	3	4	5	5	6	7	**76**
# PROCESSED	2	1	1		2					7	8			**21**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30					PEAK DATE: October 17			NUMBER OF INDIVIDUALS: 670	

Notes: Seen weekly throughout the season and daily until mid-September. From late August through late October, flocks of varying size were observed almost daily, peaking in the third week of October. These flocks either perched in the tall cottonwoods along the B/N nets or were seen flying over the woods towards the Arboretum.

BHCO: Brown-headed Cowbird / Vacher à tête brune (*Molothrus ater*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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						0.43		**0.08**
# DAYS OBSERVED	2					1						1		**4**
# PROCESSED														
	FIRST OBSERVED: August 1				LAST OBSERVED: October 18				PEAK DATE: October 18			NUMBER OF INDIVIDUALS: 3		

Notes: Irregular sightings of individuals scattered throughout the season. Confirmed local nest parasites.

BAOR: Baltimore Oriole / Oriole de Baltimore (*Icterus galbula*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	6.29	5.14	6.00	4.00	2.43	0.14	0.14	0.29						**1.88**
# DAYS OBSERVED	7	7	7	7	6	1	1	1						**37**
# PROCESSED	16	14-0-1	9-0-3	5	4									**48-0-4**
	FIRST OBSERVED: August 1				LAST OBSERVED: September 20				PEAK DATE: August 1			NUMBER OF INDIVIDUALS: 12		

Notes: Observed daily during August, peaking early in the season. Tapering off quickly with a few lingering individuals in September and no sightings past the end of the month.

PUFI: Purple Finch / Roselin pourpré (*Carpodacus purpureus*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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		0.86	0.14	0.57	0.14	0.57	0.71	**0.27**
# DAYS OBSERVED			1	1	1	1		4	1	3	1	2	2	**17**
# PROCESSED					1			1		2	0-0-1		3	**7-0-1**
	FIRST OBSERVED: August 20				LAST OBSERVED: October 27				PEAK DATE: 3 dates			NUMBER OF INDIVIDUALS: 3		

Notes: Observed sporadically throughout the season, peaking in late September.

HOFI: House Finch / Roselin familier (*Carpodacus mexicanus*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	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			1.86	0.57		**0.25**
# DAYS OBSERVED					2			3			3	1		**9**
# PROCESSED														
	FIRST OBSERVED: August 3				LAST OBSERVED: October 23				PEAK DATE: October 10			NUMBER OF INDIVIDUALS: 9		

Notes: Observed sporadically in the middle and end of the season; none were banded.

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								2.43	0.29	**0.22**
# DAYS OBSERVED				1								1	1	**3**
# PROCESSED														
	FIRST OBSERVED: August 26				LAST OBSERVED: October 29				PEAK DATE: October 22			NUMBER OF INDIVIDUALS: 17		

Notes: One individual seen early in the season and two small flocks in the end of October, the largest comprising 17 individuals.

PISI: Pine Siskin / Tarin des pins (*Carduelis 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											21.00	4.57	5.14	**2.36**
# DAYS OBSERVED											4	3	2	**9**
# PROCESSED											14			**14**
	FIRST OBSERVED: October 13				LAST OBSERVED: October 27				PEAK DATE: October 13			NUMBER OF INDIVIDUALS: 100		

Notes: Several flocks of various sizes seen in the last three weeks of the season. First time the species has been banded at MBO during migration monitoring.

AMGO: American Goldfinch / Chardonneret jaune (*Carduelis tristis*)

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	**TOTAL**
MEAN # BIRDS / DAY	17.29	14.86	14.71	10.29	11.57	15.86	13.29	13.86	10.57	13.57	4.86	3.00	2.43	**11.24**
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	6	5	4	**85**
# PROCESSED	2	2	2	2	1-0-1	9	7	4	12	10	1			**52-0-1**
	FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: September 10			NUMBER OF INDIVIDUALS: 31		

Notes: Common to abundant throughout the season, seen almost daily. Numbers peaked early in August and again with a smaller peak in mid-September. Likely a low year in the species' apparent two-year cycle.

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											0.29	0.86	0.14	**0.10**
# DAYS OBSERVED											1	3	1	**5**
# PROCESSED														
	FIRST OBSERVED: October 12				LAST OBSERVED: October 24				PEAK DATE: October 17			NUMBER OF INDIVIDUALS: 4		

Notes: Seen irregularly in small number over the last three weeks of the season.

Appendix B. Net allocation for FMMP 2008

Net location	Manufacturer	Length / mesh	Dates
A1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
A2	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
B2	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
N1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
N3	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
B3	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
C1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
C2	Spidertech	12 m / 30 mm	Aug 12 – Oct 30
D1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
D2	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
D3	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
D4	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
E1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
E2	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
H1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
H2	Spidertech	12 m / 30 mm	Aug 1 – Oct 30