

McGill Bird Observatory Fall Migration Monitoring Program 2006 Report

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Front photo: A hatch-year male Blackburnian Warbler, one of the surprisingly many observed this season at the McGill Bird Observatory (photo by Seabrooke Leckie).

About the McGill Bird Observatory

The 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. 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, 2004). The FMMP season at MBO extends from August 1 to October 30. This 13-week period encompasses the majority of fall passerine migration.

2006 season coverage

Nearly full coverage of the 2006 FMMP was obtained, with no days missed entirely (i.e. census was conducted on all 91 days). On eight days, only census was conducted due to steady rain making it unsafe to open the nets. An extra seven days had significantly shortened net hours due to rain early in the morning. On 72 days (79% of the season), there was full coverage, including census, banding, and general observations.

Equipment

Mist nets (30 mm mesh) were used for all trapping. The standard setup for most of the season involved 15 nets in six groups. Most of these were the same as used in FMMP 2005 (Gahbauer 2005). Two previously used nets along the west slope of Stoneycroft Pond, G1 and G2, were barely used, due to unsafe walking conditions. Instead, two other net pairs, K and L, were established on an experimental basis along the northeast perimeter of the property. By mid-season it was evident that neither of these locations was useful, and so three of the nets were reassigned to complement the existing single nets at A, E, and H. All nets were from Spidertech, and were new or in good condition at the start of the season. Details of net allocations are summarized in Appendix B.

Weather

Weather can have a significant influence on migration, and it is likely that the abnormal conditions in August and October of this year's FMMP had an impact on observations summarized in this report. August was the fourth rainiest in 65 years. Though rainy periods were largely restricted to the afternoon and thus did not directly affect banding hours, these likely influenced migration. Strangely enough, August was also the fourth sunniest of the past 37 years. Banding was halted early on only one day in August due to the heat and concerns for the welfare of the birds, but otherwise August temperatures were normal. For a second consecutive year, October was also particularly notable for abnormally frequent and heavy rain,

making it the third rainiest October in 66 years. Rain fell on 18 days in October, with accumulation more than twice the historical mean. This greatly limited banding opportunities, resulting in fewer late-season migrants being caught than expected. The rain also resulted in the ponds rising to and remaining at levels usually seen only following spring melt.

Results

Banding

During FMMP 2006, 3268 birds of 76 species were banded, comparable to the 3226 birds of 78 species banded in the 2005 program. On four occasions, all between September 30 and October 17, over 100 birds were banded in a single day. The busiest day was September 30, with 157 birds banded (Figure 1). There were a number of days when the number of birds caught per net hour was much higher, but banding effort was curtailed by the onset of rain, or a shortage of extractors. The mean over 83 days of banding was 38.9 birds per day, a decrease from the 2005 average of 48.8 birds per day.

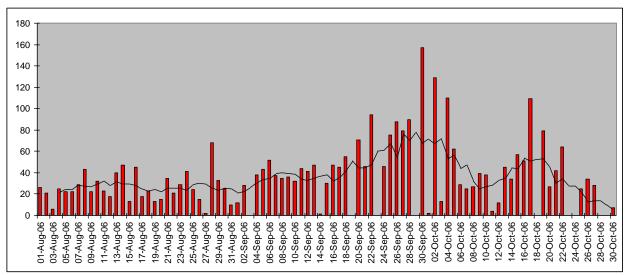


Figure 1. Number of individuals banded per day during the fall season at MBO, with a running 7-day average in black.

Species richness among banded birds showed no distinct peak, though was highest between mid-August and late September (Figure 2). The greatest variety banded in a single day was 23 species on September 18 and 30. Overall there were eight days where 20 species or more were banded in a single day. The mean number of species banded per day was 11.8, down from 15.9 in 2005.

Among the species banded was just one which had not been previously captured at MBO: August's one and only Black-billed Cuckoo. New species observed for the first time this fall at MBO were Caspian Tern and Sedge Wren, and the only new species to return to the site was the Red-eyed Vireo.

Just like in FMMP 2005, nine species were banded only once. This year they were: Yellowshafted Flicker, White-breasted Nuthatch, House Sparrow, Hairy Woodpecker, Great Crested Flycatcher, European Starling, Eastern Wood-Pewee, Eastern Kingbird and Black-billed Cuckoo.

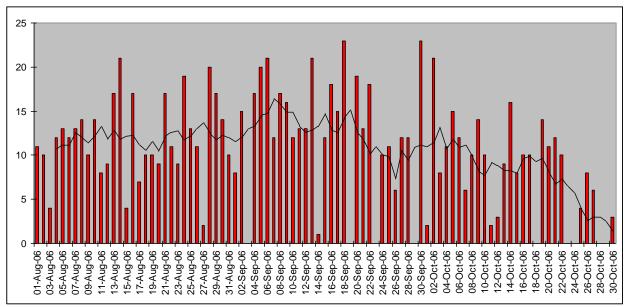


Figure 2. Number of species banded per day during the fall season at MBO, with a running 7-day average in black.

At the other extreme, Table 1 lists the ten most frequently banded species. Seven of these were also in the top ten in 2005, and five of them were in 2004's top ten too, indicating some consistency between years, despite the fact that monitoring began later in the season in 2004.

Table 1. Top ten species banded at MBO during FMMP 2006, as well as numbers of the same species banded in 2005 and 2004. Numbers in parentheses indicate the rank within the top ten in past years. Dashes represent species not in the top ten in 2004 and 2005. Note that the 2004 season did not begin until September 19, and thus missed most early season migrants.

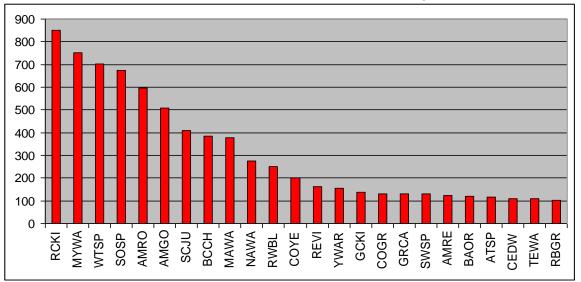
Species		# banded	
Species	2006	2005	2004
1. Yellow-rumped (Myrtle) Warbler	522	157 (8)	27 (8)
2. Ruby-crowned Kinglet	435	245 (2)	89 (3)
3. Song Sparrow	302	212 (4)	95 (2)
4. American Robin	299	119 (9)	145 (1)
5. White-throated Sparrow	187	354 (1)	85 (4)
6. Magnolia Warbler	157	192 (5)	2 (-)
7. Nashville Warbler	98	164 (7)	2 (-)
8. Common Yellowthroat	77	76 (-)	1 (-)
9. Golden-crowned Kinglet	73	54 (-)	4 (-)
10. Baltimore Oriole	62	31 (-)	0 (-)

The very large increase in Myrtle Warblers was surprising. However, since the station is so new, it is difficult to speculate as to whether this is a real increase or a normal year following a low in 2005. Continued monitoring will help address this question. The apparent increase in banded Ruby-crowned Kinglets is rather misleading. The number banded during FMMP 2005 would have been 487, however an unanticipated major influx of kinglets occurred during which the supply of 0A bands was exhausted, and 351 of them had to be released unbanded. The total for Ruby-crowned Kinglet would have otherwise been 487, fairly comparable to this year's 435. Song Sparrow numbers were up largely due to the month of August being dominated by

Song Sparrows. Whether it was a good breeding year or a shift in migration remains to be seen. American Robin numbers were up despite the five days of banding lost to rain. White-throated Sparrows showed the greatest decline between 2005 and 2006, with roughly half of the 2005 total banded in 2006. Magnolia and Nashville Warblers held their positions in the top ten, despite the number of Nashvilles dropping quite a bit. The number of Golden-crowned Kinglets banded in 2005 would have been 163 instead of 54 if the band supply had not been exhausted, so the number 'banded' actually decreased quite substantially. Finally, Baltimore Oriole numbers doubled this season, giving them the last spot in the top ten.

Overall, there are 13 species - some present in this season's top ten, some not - that were banded more in FMMP 2006 than all previous seasons together: Warbling Vireo (4/3), Ruby-crowned Kinglet (435/414, though again slightly misleading), Golden-crowned Kinglet (73/66, though again slightly misleading), Winter Wren (10/6), Hermit Thrush (37/29), American Robin (299/298), Myrtle Warbler (522/231), Tennessee Warbler (57/52), Ovenbird (46/37), Northern Waterthrush (39/27), Blackburnian Warbler (8/1), Baltimore Oriole (62/57), and White-crowned Sparrow (50/39).

There were 12 species for which there was a 50% or greater reduction between FMMP 2005 and 2006: Red-eyed Vireo (42/117), Great-crested Flycatcher (1/6), Swainson Thrush (7/36), Grey-cheeked Thrush (3/11), Palm Warbler (9/59), Black-throated Blue Warbler (14/34), Northern Parula (2/10), Indigo Bunting (19/39), Slate-colored Junco (33/191), Chipping Sparrow (5/26), Fox Sparrow (5/26) and White-throated Sparrow (187/354 - not quite 50%, but worth mentioning). Some of these decreases are based on rather low catch rates (e.g. Great-crested Flycatcher), and so may not represent decreases in the population but rather deviations in migratory pathways or strategies. Continued fall monitoring will help address this question.



Overall, as of the end of the 2006 fall season, 24 species are now in the triple digits banded; half of those are at 200 or more; and half of *those* at 500 or more (Figures 3 and 4).

Figure 3. Cumulative total number of individuals of the top 25 species banded since MBO's inception in 2004.

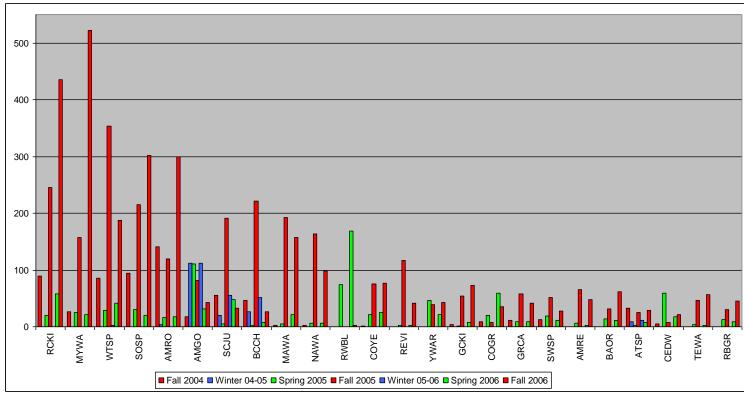


Figure 4. Number of individuals of the top 25 species banded at MBO since its inception broken down by season and year.

Recoveries

There were 412 repeats (individuals caught within 3 months of banding at MBO) of 38 species during the season. These can be subdivided into local residents caught repeatedly, and migrants caught twice or more during their stopover at MBO. Among the residents, Song Sparrows were recaptured most frequently. Black-capped Chickadees were also recaptured fairly often, and in good numbers. Table 2 shows the top 10 species recaptured most frequently.

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

Species	# repeats
Song Sparrow	76
Black-capped Chickadee	57
Ruby-crowned Kinglet	36
White-crowned Sparrow	30
White-throated Sparrow	24
Gray Catbird	23
Yellow-rumped (Myrtle) Warbler	18
Baltimore Oriole	17
Swamp Sparrow	16
Tennessee Warbler	14

The majority of migrants recorded as repeats were recaptured within a few days of being banded. However, some individuals stayed at MBO for longer, up to four weeks in one case (Table 3). Just like during FMMP 2005, Nashville and Tennessee Warblers lingered longer than most species. Though the number of White-throated Sparrows banded decreased quite

substantially this year when compared to last year, those that did arrive remained on site for quite some time, likely accumulating fat reserves in order to continue on their migration south. Interestingly, Eastern White-crowned Sparrows were re-caught proportionately more than other species, possibly indicating that a smaller number arrived at MBO, but remained on site an average of three weeks. Another possibility is that, due to behavioural differences such as feeding near the net lanes, etc., that they are more likely to be caught than other species.

Table 3. List of migrants recaptured more than one week after banding, with first and last dates of capture. Entries are sorted by time elapsed. All were hatch-year, except the eight individuals designated with an asterisk.

Species	First capture - last capture (time elapsed)
White-throated Sparrow	Aug 14 - Sept 15 (32 days)
Tennessee Warbler*	Aug 24 - Sept 18 (25 days)
Tennessee Warbler*	Aug 4 - Aug 28 (24 days)
White-throated Sparrow	Aug 5 - Aug 29 (24 days)
Tennessee Warbler*	Aug 21 - Sept 15 (24 days)
Eastern White-crowned Sparrow	Sept 26 - Oct 19 (23 days)
White-throated Sparrow*	Sept 26 - Oct 18 (22 days)
White-throated Sparrow	Aug 19 - Sept 9 (21 days)
Nashville Warbler	Aug 24 - Sept 13 (20 days)
Eastern White-crowned Sparrow	Sept 30 - Oct 20 (20 days)
Eastern White-crowned Sparrow	Oct 4 - Oct 22 (18 days)
Eastern White-crowned Sparrow	Sept 26 - Oct 13 (17 days)
Eastern White-crowned Sparrow	Sept 27 - Oct 13 (16 days)
Nashville Warbler	Aug 24 - Sept 8 (15 days)
Eastern White-crowned Sparrow	Oct 7 - Oct 22 (15 days)
Nashville Warbler	Aug 14 - Aug 28 (14 days)
Tennessee Warbler	Sept 2 - Sept 16 (14 days)
Yellow-rumped Warbler	Sept 11 - Sept 25 (14 days)
Tennessee Warbler*	Aug 13 - Aug 26 (13 days)
Yellow-rumped Warbler	Sept 16 - Sept 28 (12 days)
Yellow-rumped Warbler	Sept 22 - Oct 4 (12 days)
Eastern White-crowned Sparrow	Oct 2 - Oct 14 (12 days)
Nashville Warbler	Aug 18 - Aug 29 (11 days)
Canada Warbler*	Sept 1 - Sept 12 (11 days)
Hermit Thrush	Oct 5 - Oct 16 (11 days)
White-throated Sparrow*	Sept 22 - Oct 2 (10 days)
Eastern White-crowned Sparrow	Oct 5 - Oct 14 (9 days)
Hermit Thrush	Oct 10 - Oct 19 (9 days)
Slate-colored Junco*	Oct 10 - Oct 19 (9 days)
Northern Waterthrush	Aug 28 - Sept 5 (8 days)
Yellow-rumped Warbler	Sept 20 - Sept 28 (8 days)
Yellow-rumped Warbler	Sept 28 - Oct 6 (8 days)

Individuals likely breeding on site and their offspring were also recaptured quite regularly, indicating that some young spent up to almost two months before dispersing or migrating. Examples include: Gray Catbird (1 month, 16 days), Brown Thrasher (11 days), Common Yellowthroat (1 month, 17 days), Indigo Bunting (12 days), Ovenbird (13 days), Baltimore Oriole (20 days), House Wren (1 month, 2 days), Rose-breasted Grosbeak (14 days), Song Sparrow (1 month, 19 days), and Swamp Sparrow (1 month, 9 days).

There were 30 returns (individuals not captured since more than three months) of nine species (Table 4). The majority of returns were Black-capped Chickadees (9) and Song Sparrows (9), much like during FMMP 2005. Nearly 44% of records were of birds banded or recaptured during SMMP 2006, which almost certainly remained at MBO throughout the summer. Over half (16) of returns were individuals that had not been seen since before the winter of 2005-2006. Several of these were resident species (Black-capped Chickadee, American Goldfinch, and Northern Cardinal), and are likely to have been in the area throughout the year, even if not caught. However, the five Song Sparrows, the Common Yellowthroat, the Red-eyed Vireo and the Gray Catbird almost certainly departed during winter, and the two Slate-coloured Juncos very likely bred further north as there are no summer records of the species for MBO.

No foreign recoveries were recorded during FMMP 2006, and to date, only one bird banded at MBO, a Slate-colored Junco, has been reported elsewhere (New Jersey).

Band number	Species	Age/Sex	Banding date	Last capture	Fall recovery date	Time elapsed
1541-17935	SOSP	AHY-U	Oct 3 2004	-	Oct 9	2 years 6 days
2160-65321	BCCH	AHY-U	Sept 19 2004	Oct 15 2004	Sept 27	1 year 11 months 12 days
2370-95045	SCJU	AHY-M	Nov 22 2004	-	Oct 27	1 year 11 months 5 days
1231-80234	SOSP	AHY-M	Sept 22 2004	-	Aug 4	1 year 10 months 13 days
2400-71055	AMGO	AHY-F	May 16 2005	-	Aug 10	1 year 2 months 26 days
2370-95039	AMGO	AHY-M	Nov 22 2004	May 24 2005	Aug 4	1 year 2 months 11 days
1891-89732	GRCA	AHY-U	May 18 2005	May 30 2005	Aug 1	1 year 2 months 2 days
1541-17908	SOSP	AHY-U	Oct 1 2004	Sept 16 2005	Oct 15	1 year 29 days
1840-76942	COYE	AHY-M	Aug 10 2005	-	Aug 28	1 year 18 days
2241-39259	SOSP	AHY-U	Oct 10 2005	-	Oct 15	1 year 5 days
2160-65344	BCCH	AHY-U	Sept 23 2004	Oct 31 2005	Oct 27	11 months 27 days
1661-08080	REVI	AHY-F	Aug 13 2005	-	Aug 5	11 months 23 days
2241-31623	SOSP	AHY-U	Aug 29 2005	-	Aug 17	11 months 19 days
2460-40303	SCJU	AHY-M	Feb 1 2006	-	Oct 19	8 months 18 days
1840-76980	BCCH	AHY-U	Aug 15 2005	Jan 12 2006	Sept 9	7 months 28 days
2160-65371	BCCH	AHY-U	Oct 3 2004	Mar 11 2006	Oct 17	7 months 6 days
2231-00857	NOCA	AHY-F	Oct 4 2005	Feb 15 2006	Aug 14	5 months 30 days
2160-65355	BCCH	AHY-U	Sept 30 2004	Apr 29 2006	Sept 30	5 months 1 day
2440-40807	BCCH	AHY-U	Sept 4 2005	Apr 24 2006	Aug 29	4 months 5 days
2160-65356	BCCH	AHY-U	Sept 30 2004	May 25 2006	Oct 27	4 months 2 days
2460-40005	BCCH	AHY-U	Jan 12 2006	May 16 2006	Sept 15	3 months 30 days
1501-61113	SOSP	AHY-U	Apr 12 2005	Apr 12 2006	Aug 7	3 months 26 days
2231-00897	NOCA	AHY-F	Apr 12 2006	-	Aug 2	3 months 21 days
2231-00828	GRCA	AHY-U	Sept 6 2005	May 31 2006	Sept 16	3 months 16 days
2241-39503	SOSP	HY-U	May 6 2006	May 28 2006	Sept 11	3 months 14 days
1501-61136	SOSP	AHY-F	Apr 20 2005	Apr 28 2006	Aug 9	3 months 12 days
1501-61162	SOSP	AHY-F	Apr 30 2005	May 5 2006	Aug 14	3 months 9 days
2160-65338	BCCH	HY-U	Sept 22 2004	May 6 2006	Aug 12	3 months 6 days
2460-40138	AMGO	AHY-M	May 9 2006	-	Aug 10	3 months 1 day
2241-39446	DOWO	TY-M	Apr 22 2006	May 27 2006	Aug 28	3 months 1 day

Table 4. List of returns captured during FMMP 2006, sorted by time elapsed.

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. Several noteworthy species were in fact recorded exclusively on census, including Pine Warbler, Marsh Wren, Olive-sided Flycatcher and Pine Siskin.

As shown in Figure 3, there was considerable daily variation in the number of species observed during the census, ranging from a low of 13 on August 1 to a high of 37 on August 5. This reflects not only actual changes in the bird population from day to day, but also variation due to weather, and among observers. To account for this, 3-day and 7-day running averages were calculated and plotted. The 7-day running average remained between 24 and 30 species for most of the season, showing no distinct patterns until declining to roughly 20-22 species after mid-October.

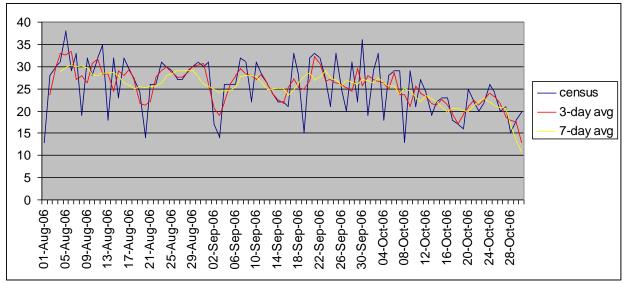


Figure 3. Number of species recorded on the daily census during the fall season at MBO.

Daily estimated totals

The DET reflects not only banding and census data, but also all supplemental observations made by participants throughout each morning. It is particularly important for waterfowl and raptors, which are not targeted by the banding program, and are only marginally sampled by the census, since many are more active later in the morning. However, the DET is also valuable for passerines, both to monitor species rarely caught in fall such as blackbirds, and as an indicator of what percentage of individuals of each species are caught and banded.

During the season 134 species were recorded, down from 151 during FMMP 2005. Of these, 11 were seen on just a single day, all represented by a single individual, highlighting the importance of full daily coverage throughout the season. The highest single day total, 57 species, occurred on both August 31 and September 30, whereas in 2005 the peak was 63 on September 11. The lowest daily total of 18 species was in the rain on September 3; in 2005 the lowest count was 11 on August 31. Figure 4 shows that there was considerable variation in daily estimated totals from day to day. A clearer pattern is shown by the 7-day running average, which peaked at 51 species in early September, and declined sharply beginning in early October.

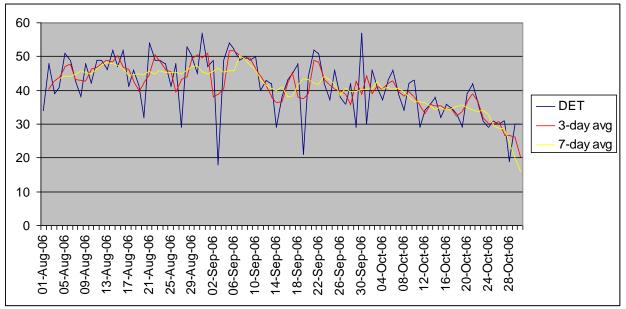


Figure 4. Daily estimated total number of species observed during the Fall season at MBO.

Owl banding

During the 2004 and 2005 fall seasons, owl banding was conducted on selected evenings from late September through late October. However, results were relatively poor, with a mean of only two owls banded per night. Given limited human resources in fall 2006, it was decided to not operate the owl program this year. By coincidence, the extremely wet and windy weather that dominated October would have prevented banding on all but a couple of nights. Though owling in 2004 and 2005 produced only modest results, it nonetheless clearly demonstrated the existence of a previously undocumented owl migration through the area. In the future, it would be desirable to have a coordinator dedicated to owling, to allow for systematic coverage of the season without affecting the passerine monitoring program. This would allow for a more rigorous analysis of the influence of weather and other factors on the patterns of migration observed.

Analysis

Migration patterns

Twenty-six species, up from 17 species during FMMP 2005, were present throughout all 13 weeks of the season: Canada Goose, Sharp-shinned Hawk, Cooper's Hawk, Red-shouldered Hawk, Rock Pigeon, Ring-billed Gull, Yellow-shafted Flicker, Pileated Woodpecker, Cedar Waxwing, European Starling and Yellow-rumped Warbler were added to 2005's Wood Duck, Mourning Dove, Downy Woodpecker, Hairy Woodpecker, Blue Jay, American Crow, Black-capped Chickadee, White-breasted Nuthatch, American Robin, Northern Cardinal, Song Sparrow, White-throated Sparrow, Red-winged Blackbird, Common Grackle, and American Goldfinch, with Gray Catbird and Swamp Sparrow dropping off the list, having disappeared by week 12 this year. Of these, only Song Sparrow and White-throated Sparrow were banded at least once in each week.

The majority of species were observed during a more limited period of migration. Only 12 species peaked in abundance during the first week of the season, several of which were local breeders with offspring dispersing thereafter (Hooded Merganser, Spotted Sandpiper, Chimney Swift, Black-billed Cuckoo, Traill's Flycatcher, Eastern Phoebe, Barn Swallow, Marsh Wren,

Yellow Warbler, Rose-breasted Grosbeak, Indigo Bunting and Swamp Sparrow). Four of these species were not seen beyond the first week. Another 5 species (Snow Goose, American Pipit, Northern Shrike, American Tree Sparrow, and Slate-colored Junco) peaked in the final week of the season, though all had been recorded earlier in the season. Extending the season further could theoretically allow for the migration of these species to be better documented. However, part-time monitoring in early November reaffirmed the results of similar observations in both 2004 and 2005 that yielded limited observations in general and few records of these late migrants in particular. It is therefore recommended that the current 13-week period from August 1 through October 30 be maintained for FMMP in future years.

For many species, sex cannot be reliably determined outside the breeding season, explaining the overall sex breakdown of 27.8% males, 31.2% females, and 41.0% unknowns. As is to be expected during fall migration, hatch-year individuals dominated, accounting for 83.5% of birds banded, while 16.1% were after-hatch-year, and 0.3% were of unknown age. For several species in fact, all banded birds this season were aged as hatch-years: Black-capped Chickadee, Blue Jay, Brown Thrasher, Black-throated Green Warbler, Chipping Sparrow, Downy Woodpecker, Hermit Thrush, Least Flycatcher, Mourning Warbler, Winter Wren, Yellow-bellied Flycatcher, and Yellow Palm Warbler. Among the top ten species banded (Table 1), hatch-year birds ranged from 62% (Ruby-crowned Kinglet) to 92% (Song Sparrow and Baltimore Oriole) of the individuals banded (Table 5).

NU	The of individuals of the top	TU Dai	lueu spe	cies pari	ded bloken	down by age a
_	Species	ΗY	AHY	Male	Female	Unknown sex
	Yellow-rumped Warbler	454	67	344	166	11
	Ruby-crowned Kinglet	270	165	209	224	2
	Song Sparrow	279	23	-	-	302
	American Robin	271	28	123	88	88
	White-throated Sparrow	149	38	-	-	187
	Magnolia Warbler	133	24	14	79	64
	Nashville Warbler	75	23	46	47	5
	Common Yellowthroat	68	9	43	3	31
	Golden-crowned Kinglet	57	16	42	31	-
_	Baltimore Oriole	57	5	32	16	14

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

Potential differences between the number of either sex banded may not be as large as apparently indicated in Table 5, as the species with few unknown sexes show similar sex ratios. Species with seemingly skewed sex ratios often have a large number of unknowns, usually due to situations like that of the Common Yellowthroat, where young birds with black flecks in the face can be sexed as males, but the absence of black flecks does not necessarily indicate a female and must be listed as an unknown.

For some of the most abundant species, enough data were collected to allow for analysis of seasonal patterns with respect to age and/or sex. Hatch-year Yellow-rumped Warblers peaked in early to mid-September, while after-hatch-year individuals peaked in late September. Despite significant overlap and some very early individuals, hatch-year female Ruby-crowned Kinglets peaked in mid- to late September, with young males and after-hatch-year females peaking in early to mid-October and after-hatch-year males peaking in mid- to late October.

Priority species

MBO has produced a list of 80 target species for priority monitoring (Gahbauer and Hudson 2004). The list is based on priority rankings proposed by Bird Studies Canada, with an emphasis on species poorly studied by the Breeding Bird Survey due to their northern breeding distribution, and on neotropical migrants, recognized as being at elevated conservation risk due

to threats to their wintering grounds. The MBO list has been modified to eliminate western species not expected to occur at the site.

Eighty percent of species on the MBO priority list were observed during FMMP 2006, and 65% of the species were banded (Table 6). Priority species accounted for 87% of individuals banded. Of the top 10 species banded at MBO during FMMP 2006, all except Nashville Warbler and Baltimore Oriole 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 2006. Detailed	d category
definitions are provided in Gahbauer and Hudson (2004).	

	Category A	Category B	Category C	Category D
Number of species in category	17	19	22	22
Number of species observed	15	12	18	19
Number of species banded	13	9	15	15
Number of individuals banded	355	1298	354	829

Net productivity

As in previous seasons, the productivity of nets during FMMP 2006 was assessed. Table 7 summarizes the usage and productivity of all nets. The overall capture rate for FMMP 2006 was high, at 73.8 new birds per 100 net hours. An additional 9.9 birds per 100 net hours were recaptured. After adjusting the 2004 and 2005 numbers to take into account the fact that A1, D1 and G1 were all 18m nets, these numbers are slightly lower than the rates recorded during FMMP 2004 and 2005 (84.0, 12.1, and 87.3, 13.1 respectively), suggesting that while there is some year-to-year variation, MBO is producing consistent strong results in fall migration. All net groups used this year and last year, with the exception of H1, showed declines in net productivity.

This past season some of the net lanes were widened considerably to ease passage and prevent volunteers from getting their jackets snagged in the nets. This perhaps increased the nets' exposure and thus decreased catch rates. Nets with the narrowest net lanes (e.g. A2 and H2) were the most productive, perhaps suggesting that next year net lanes should be returned to their normal widths.

The nets are clustered into three main groups. C and D (5 nets total) are along the east and north edges of Stoneycroft Pond. Two additional nets were installed late in the season (October 13) at A and E, so that four nets now sample the shrubby areas east of Stoneycroft Pond. One additional net was installed at H September 23. H and B/N (6 nets total) are along the back ponds. During the first half of the season, K and L (4 nets total) were also employed on a part-time basis along the lane following the northeast property boundary. Under normal conditions, all nets are operated for five hours daily. However, when human resources are limited and/or bird volume is sufficient to warrant operations being scaled back, a core group of nine nets (A, C, D, and H) is used, thereby sampling from each area while minimizing walking time.

The average total number of birds per 100 net hours for the standard net groups this season was 91.8. A, D and H were higher than the average, while B/N, C, and E were considerably lower.

Net H2 had by far the highest capture rate among the standard nets. Located perpendicular from H1 tucked between hawthorns and goldenrod, it had a capture rate almost triple the overall mean, with 232 new birds per 100 net hours this fall. This is partly due to the timing and

location of its installation, coinciding with the mass movement of Yellow-rumped Warblers (responsible for 27% of Yellow-rumped Warblers caught). Its productivity declined slightly once they migrated south. H1 was also a success, with an above average capture rate. It provides an opportunity to monitor birds skirting around the southeast end of the back ponds, and complements the B nets effectively. Though it did recapture a higher number of birds than the other nets (62), its proximity to the banding station (<30 metres) does not seem to pose a problem.

A1, last year's most productive net, dropped considerably in productivity. This is likely due to increased exposure after one of the apple trees lining the net lane fell over from old age last fall. However, the tree continues to grow from its prone position, so perhaps cover will be restored after a few seasons. A2, located perpendicular to A1 amidst a patch of goldenrod and raspberry, performed very well with double A1's total productivity.

Whereas the D nets were the most productive during FMMP 2004, their capture rate was only slightly above average this fall. 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, and thus the atypical weather experienced this year may have had an impact on its effectiveness.

Net E1's productivity was greatly reduced compared to last fall, though it was again successful at capturing kinglets and warblers, but overall generating below average numbers. It is desirable to keep E1 in operation, both for its consistency in monitoring the species that regularly favour the conifers surrounding the net, and for the surprises it occasionally produces, such as last year's Red-shouldered Hawk. E2 performed better than E1, though not as spectacularly as the other new nets (A2 and H2). E2 is much more exposed than the other nets, and should perhaps be moved to the south side of the hawthorn thicket as opposed to being left on the north side.

As usual, the C nets performed below average. However, they were responsible for just under half of all Common Yellowthroats caught, and 58% of all Swamp Sparrows caught, indicating their use as marsh bird monitors.

As in FMMP 2004 and SMMP 2005, the B nets had the lowest capture rate of the standard nets. As in the past, however, these nets were effective at capturing species poorly sampled elsewhere on the site, such as Black-and-white Warbler, Blackburnian Warbler, and Common Grackle. Based on experience during FMMP 2005, N1 and N3 were interspersed with B2 and B3 to create the B/N net lane. The N net had lower productivity than the B net with which each one was paired, a reversal of last year's trend. Perhaps the selection of active nets within the B/N series needs to be modified periodically in relation to current vegetation cover.

The G nets were barely used this season as quick and safe access was limited due to the treacherous state of the paths, and the low number of volunteers on most days in August precluded them from being opened. As bird activity also seemed drastically reduced compared to last fall, it was decided to retire these nets from regular operation in favour of nets closer to the banding station that can be operated more regularly. In future it would be interesting to use G for MAPS monitoring instead of migration monitoring, as the area seems much more active during the breeding season.

Based on their poor productivity and L's long distance from the banding lab, K and L were retired and/or reassigned to A, E and H.

Net	Net hours	New captures	Repeats/	Total birds	Birds / 100 net hours		
			Returns		New	Total	
A1	527.3	456	30	486	86.5	92.2	
A2	30.3	41	16	57	135.3	188.1	
A - TOTAL	557.6	497	46	543	89.1	97.4	
B2	169.3	67	7	74	39.6	43.7	
N1	169.3	52	15	67	30.7	39.6	
N3	166.5	86	15	101	51.7	60.7	
B3	163.8	95	16	111	58.0	67.8	
B/N – TOTAL	668.9	300	53	353	44.9	52.8	
C1	346.3	176	33	209	50.8	60.4	
C2	346.3	199	36	235	57.5	67.9	
C – TOTAL	692.6	375	69	444	54.2	64.1	
D1	528.8	422	52	474	79.8	89.6	
D2	352.5	210	27	237	59.6	67.2	
D3	341.3	385	52	437	112.8	128.0	
D – TOTAL	1222.6	1017	131	1148	83.2	93.9	
E1	303.5	128	23	151	42.3	49.8	
E2	51.3	33	5	38	64.3	74.1	
E - TOTAL	354.8	161	28	189	45.4	53.3	
H1	362	537	62	599	148.3	165.5	
H2	122.3	284	34	318	232.2	260.0	
H - TOTAL	484.3	821	96	917	169.5	189.3	
SUBTOTAL	3980.8	3171	423	3594	79.7	90.3	
G1	11.6	0	1	1	0	8.6	
G2	7.8	12	1	13	153.8	166.7	
G - TOTAL	19.8	12	2	14	60.6	70.7	
K1	238.5	44	7	51	18.4	21.4	
K2	158.3	26	6	32	16.4	20.2	
K – TOTAL	396.8	70	13	83	17.6	20.9	
L1	13.3	4	0	4	30.1	30.1	
L2	13.3	5	1	6	37.6	45.1	
L – TOTAL	26.5	9	1	10	34.0	37.7	
SUBTOTAL	443.1	91	16	107	20.5	24.1	
GRAND TOTAL	4422.9	3262	439	3701	73.8	83.7	

Table 7. Net usage and capture rates during FMMP 2006, separated into core and experimental nets.

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. Among such individuals photographed during FMMP 2006 were cross-billed White-throated Sparrows, eccentrically-moulting Song Sparrows, and aberrantly-coloured Baltimore Orioles.

In addition, photos were taken throughout the season for use in the preparation of a new online resource for bird identification, posted at <u>www.migrationresearch.org/mbo/id.html</u> (only partly developed at present). 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.

Research projects

Great potential exists to refine the ageing and sexing of many species banded regularly at MBO, using plumage characteristics and/or morphological measurements not currently cited by Pyle (1997). For FMMP 2006, based on the results of FMMP 2005, three species were studied: Black-capped Chickadee, Slate-coloured Junco, and American Goldfinch.

For the Black-capped Chickadee, Pyle (1997) has suggested that a white roof lining might be indicative of an older bird, based on preliminary research on the Mountain Chickadee. We developed a 4 point scale to categorize each individual:

- Code 1: roof lining entirely white
- Code 2: roof lining entirely dark (never observed)
- Code 3: roof lining white, with a complete black chevron
- Code 4: roof lining white, with an incomplete black chevron

The results to date suggest that, contrary to what is proposed in Pyle (1997), a completely white roof lining is more typical of hatch-year birds. Of 115 hatch-year birds examined, 66% had an entirely white roof lining. On the contrary, of 50 after-hatch-year birds, 72% had at least some dark marks on the roof (code 3 or 4). However, of the remaining 28%, some were known after-hatch-year birds (by original banding date) and clearly had a completely white roof lining. Therefore, while a weak pattern seems to exist, it does not appear to be sufficiently consistent to be used as an indicator of age. Data will continue to be collected, and reassessed periodically, with a particular focus on recaptures of known age birds to explore whether the pattern changes over time for individuals, and whether it is related at all to sex.

The American Goldfinch also has white patches on the tail, which Pyle (1997) suggests are useful in ageing and sexing individuals. However, some of his descriptions do not match known-age individuals banded at MBO, suggesting that there may be regional variation in the tail patterns not described in the account. To research this further, four characteristics were recorded for the tail of each individual banded:

Length of pale spot on rectrix 6, in millimetres Colour of rectrix 6 (black / brown / pale brown) Colour of pale spot on rectrix 6 (white / dusky white / beige) Gradient between dark and pale on rectrix 6 (abrupt / gradual)

As relatively few American Goldfinches were banded during FMMP 2006, analysis has been deferred until after further data are collected in winter and spring.

Research on all these species will continue through the next few seasons, followed by a more thorough analysis of the patterns observed. The preliminary results have not been promising. However, a low success rate is to be expected for this type of study, as these are common species which have already been studied extensively, but whose ageing and sexing nonetheless remain problematic. As long as it does not interfere with regular operations or cause undue delays in processing birds, we will continue to explore potential ways of improving our ability to assess these and other species common at MBO.

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 has been actively implemented throughout FMMP 2006, with 69 volunteers receiving training during this period. This included 18 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 Bird Protection Quebec, the club d'ornithologie d'Ahuntsic, and the Natural History of Vertebrates class from McGill, totaling approximately 85 people.

Summary

In terms of individuals banded, FMMP 2006 reached slightly higher totals than the 2005 season, far exceeding the predictions made in the 2004 FMMP report of 125 species observed and 2000 to 3000 birds banded (Gahbauer 2004). However, the overall number of birds banded per net hour was lower than in 2005. This is likely due to the fact that the bander-in-charge was the only experienced person on site on several occasions and found it necessary to close nets during peak migration in order to process birds safely. The number of species observed decreased by 17 species and is also due to a reduced number of experienced observers. MBO's priority is now to train enough experienced extractors, observers and banders to be able to adequately deal with fall migration.

The standard net group comprising of A, C, D, and H should be complemented whenever possible with B and E, and should be maintained in their present positions in order to establish standardization between years.

Acknowledgments

The 2006 Fall Migration Monitoring Program would not have been possible without the support of the many dedicated people who generously contributed their time at MBO, all of whom did so on an entirely volunteer basis. In total, 73 volunteers contributed 2180 hours on site during the season. Names in bold indicate those who were out on average at least once every two weeks (seven or more mornings) during the season (note that many volunteers fulfilled many roles, but are listed only once). Special thanks to the banders-in-charge, who each contributed many additional hours off-site.

Bander-in-charge: The 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.

Marcel Gahbauer

Assistant banders-in-charge: Deputies responsible for all site activities in the absence of the Bander-in-charge, especially with respect to banding birds and supervising the activities of other volunteers. Barbara Frei, Marie-Anne Hudson, Seabrooke Leckie

Extractors: Experienced volunteers trained specifically in extraction, capable of safely removing birds from nets with minimal or no supervision.

Jean Beaudreault, Shawn Craik, Gay Gruner, Isabel Julian, Lance Laviolette, Betsy McFarlane, Mike Mayerhofer, Anthi Mimidakis, Julia Mlynarek, André Pelletier, Greg Rand, Limoilou Renaud, Katleen Robert, Clémence Soulard

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. Martin Bowman, Jean Demers, Barbara and Don MacDuff, Chris Murphy

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/maintenance tasks that arise.

Nadège Allan, Laura Balanoff, Jennifer Bridgeman, Dan Brown, Véronik Campbell, Natalia Castelanos, Dominic Chambers, Averill Craig, **Sophie Cauchon**, Jacinthe Daprato, Alejandro del Peral, Diane Demers, Cheryl Diamond, Emilie Dion, David Fishman, Val Francella, Maria Frei, Helen Garland, Josée Girard, Raphael Goulet, Emily Gray, Bana Hamze, Kanako Hasegawa, Amy Henderson, Meggy Hervieux, Keelan Jacobs, Gillian Kinsman, Louis-Philip Lafrance, Marie-Pier Lambert, Steve Leckman, Juliana Lisi, Jennifer MacWilliam, Poonam Maskeri, **Sarah Marteinson**, Laurie Maurais, Sandra Minotti, Andrew Plimer, Ian Niu, Daniel Ouellette, Daniel Oyama, Annie-Claude Paradis, Sabrina Richard-Lalonde, Marie-Claude Roy, Emilie Roy-Dufresne, Luke Scott, Stephanie Steeves, Katie Sullivan, Rachel Verkade, Sandra Warren, John Webster, James Young

Data entry: Volunteers who transcribed data into spreadsheets at the end of the season. Marcel Gahbauer, Marie-Anne Hudson

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Appendix A. Seasonal distribution charts

The charts below summarize the pattern of occurrence of each species observed during FMMP 2006. The mean # birds observed/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 (or individuals banded only, if there were no recaptures). The total of the mean # birds/day is the sum of each mean divided by 13 weeks.

	AUGUST				SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14	0.14							0.14	0.14	0.14			0.05
# DAYS OBSERVED	1	1							1	1	1			5
# PROCESSED														0
	FIRST OBSERVED: August 5			LAST OF	LAST OBSERVED: October 12 PEA			PEAK	PEAK DATE: 5 dates NUMBER: 1					

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

Notes: Single individuals flying overhead in early August and again in early/mid October.

AMBI: A	merican Bitte	n / Butor d'A	mérique (Bo	taurus lentiginosus)
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	AUGUST			AUGUST SEPTEMBER					OCTOBER					
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OBSERVED: August 9			LAST OF	BSERVED:	August 9		PEAK [DATE: Augu	st 9		NUMBER: 1		

Notes: Only one individual seen during the season.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.29	0.14	0.14	0.14		0.29	0.71	0.29	0.14	0.29	0.29	0.14		0.30
# DAYS OBSERVED	5	1	1	1		2	4	2	1	2	2	1		22
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 17		PEAK I	DATE: Augu	ust 1		NUMBER: 4	

Notes: Rarely more than one or two individuals seen per day over most of the season.

GRHE: Green Heron / Héron vert (Butorides virescens)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	NEEK 1 WEEK 2 WEEK 3 WEEK 4 1.43 1.14 2.00 0.71				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.43	1.14	2.00	0.71		0.71	0.29	0.43						0.52
# DAYS OBSERVED	4	5	6	3		3	2	3						26
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	September 2	24	PEAK	DATE: Augu	st 17		NUMBER: 6	

Notes: Usually 1-2 individuals seen per day, sometimes 3-4; most sightings took place before mid-September.

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

		AUG	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.43	1.14	2.00	2.43	4.43	3.71	7.43	156.29	250.86	376.43	233.43	77.71	72.43	91.44
# DAYS OBSERVED	2	1	2	3	4	5	5	7	7	7	7	7	7	64
# PROCESSED														0
	FIRST OF	BSERVED:	August 6		LAST OF	BSERVED:	October 30		PEAK [DATE: Octob	per 5		NUMBER: 5	580

<u>Notes:</u> Fairly small groups seen until mid-September, increasing in abundance until peaking in early October. Number greatly reduced from fall 2005; peak number almost ten times smaller this season compared to last season.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 1 WEEK 2 WEEK 3 WEEK 4				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														0
	FIRST OF	BSERVED:	October 10		LAST OF	BSERVED:	October 10		PEAK	DATE: Octol	per 10		NUMBER: 1	

<u>Notes:</u> A single individual conspicuous within a flock of Canada Geese in mid October. It is probable that others occurred among the many flocks of Canada Geese and were missed, especially those counted at a distance.

SNGO: Snow Goose / Oie des neiges (Chen caerulescens)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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		4.57	0.37
# DAYS OBSERVED										1	1		1	3
# PROCESSED														0
	FIRST OF	BSERVED:	October 6		LAST OF	BSERVED:	October 28		PEAK	DATE: Octol	per 28		NUMBER: 3	2

Notes: Single individuals and one flock seen on only three days in October.

WODU: Wood Duck / Canard branchu (Aix sponsa)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK1 WEEK2 WEEK3 WEEK4 2.14 0.29 1.57 1.29				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	2.14	0.29	1.57	1.29	2.71	5.00	1.14	2.00	5.14	4.00	5.71	6.57	6.29	3.37
# DAYS OBSERVED	5	2	5	3	5	6	4	4	7	6	6	6	6	65
# PROCESSED														
	FIRST OF	BSERVED:	August 3		LAST OF	BSERVED:	October 30		PEAK	DATE: Octol	per 23		NUMBER: 2	8

<u>Notes:</u> The only waterfowl species recorded every week of the season. After being conspicuous during the breeding season, Wood Ducks became relatively scarce through August and early September, but then were again much more numerous and active in the second half of the season.

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

		AUG	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14									0.29		0.14	0.57	0.09
# DAYS OBSERVED	1									1		1	1	4
# PROCESSED														0
	FIRST OF	BSERVED:	August 7		LAST OF	BSERVED:	October 26		PEAK [DATE: Octob	oer 26	1	NUMBER: 4	

Notes: Irregular sightings occurring largely in October.

MALL: Mallard / Canard colvert (Anas platyrhynchos)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	1.71		0.86	2.14			0.86	3.57	6.86	27.43	16.86	11.00	5.75
# DAYS OBSERVED	5	3		1	5			2	4	7	7	6	7	47
# PROCESSED														0
	FIRST OF	BSERVED:	August 3		LAST OF	BSERVED:	October 30		PEAK	DATE: Octob	per 13		NUMBER: 6	5

Notes: Irregular, with frequent sightings occurring halfway through the season. A noticeable increase in abundance occurred during weeks 11 and 12 when large flocks of waterfowl were observed feeding in the fields to the east.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK1 WEEK2 WEEK3 WEEK4				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														0
	FIRST OF	BSERVED:	August 29		LAST OF	BSERVED:	August 29		PEAK	DATE: Augu	st 29		NUMBER: 1	

Notes: One individual observed on site.

HOME: Hoode	d Merganser /	/ Harle couronné	(Mergus cucullatus)
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		AUG	GUST			SE	PTEMBE	R			OCTC	BER		
	WEEK 1	WEEK 1 WEEK 2 WEEK 3 WEEK 4				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														0
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	August 2		PEAK [DATE: Augu	st 2		NUMBER: 1	

Notes: One individual observed on site.

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

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14	0.14	0.14	0.29		0.14	0.71					0.43	0.86	0.22
# DAYS OBSERVED	1	1	1	1		1	2					2	2	11
# PROCESSED														0
	FIRST OF	BSERVED:	Auaust 5		LAST OF	BSERVED:	October 30		PEAK	DATE: Octol	per 29		NUMBER: 5	

<u>Notes:</u> Sightings beginning in early August, and scattered through the remainder of the season. On most occasions only a single bird was observed.

OSPR: Osprey / Balbuzard pêcheur (Pandion haliaetus)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		WEEK 1 WEEK 2 WEEK 3 WEEK 4					0.43	0.14		0.86				0.11
# DAYS OBSERVED							1	1		2				4
# PROCESSED														0
	FIRST OF	BSERVED:	September *	17	LAST OF	BSERVED:	October 7		PEAK	DATE: Octo	ber 7		NUMBER: 4	

Notes: A few individuals observed flying over the site at a time, from mid-September to early October.

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

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY				0.86	0.29	0.29		0.29	0.43	0.29	0.14	0.57	0.29	0.27
# DAYS OBSERVED				3	2	1		2	3	1	1	3	2	18
# PROCESSED														0
	FIRST OF	BSERVED:	August 22		LAST OF	BSERVED:	October 29		PEAK	DATE: Augu	ust 26		NUMBER: 4	

Notes: Sightings occurred from late August to late October, consisting of both juveniles and adults flying low over the fields to the east.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.43	1.00	1.00	0.86	0.57	1.00	0.14	0.57	0.29	0.53
# DAYS OBSERVED	1	1	2	1	2	6	5	5	3	4	1	4	2	37
# PROCESSED	1								1					2
	FIRST OF	BSERVED:	August 6		LAST OF	BSERVED:	October 30		PEAK [DATE: 11 da	ites	1	NUMBER: 2	

<u>Notes:</u> One of three raptor species seen every week in the season in small numbers, with a slight peak from mid-September to early October.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.86	0.43	0.86	0.57	0.57	1.57	0.14	0.53
# DAYS OBSERVED	2	0.29 0.14 0.29 0.14 2 1 2 1				3	4	2	3	3	3	4	1	35
# PROCESSED														0
	FIRST OF	BSERVED:	August 4		LAST OF	BSERVED:	October 28		PEAK [DATE: Octob	per 21		NUMBER: 4	

<u>Notes:</u> One of the three raptor species seen every week, but usually in small numbers. A slight peak occurred in late September and again in mid-late October. One Cooper's Hawk was caught but escaped from the net before it could be banded.

		A110	GUST			95	PTEMBE	P			OCTO	BEB		1
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10			WEEK 13	TOTAL
MEAN # BIRDS / DAY	TTEETCT	VEEK 1 WEEK 2 WEEK 3 WEEK 4 V				TILLING	0.14	WEEKO	WEEKO	WEEK 10	WEEKII	WEEK IZ	WEEKTO	0.01
# DAYS OBSERVED							1							1
# PROCESSED														0
	FIRST OF	BSERVED:	September 1	14	LAST OF	BSERVED:	September '	14	PEAK	DATE: Septe	ember 14		NUMBER: 1	1

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

<u>Notes:</u> A single individual observed kicking an American Kestrel off its perch by the gate in order to take its place.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.71	1.14	0.71	0.86	0.71	1.57	1.14	1.29	1.14	1.43	0.57	0.43	0.29	0.92
# DAYS OBSERVED	5	7	4	3	4	7	7	7	7	7	4	3	2	67
# PROCESSED														
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	October 26		PEAK	DATE: Septe	ember 10		NUMBER: 4	

<u>Notes:</u> One of the three raptor species seen every week throughout the season. Many of the sightings probably involved the pair that nested in the Arboretum, and their offspring. One individual was caught but escaped from the net before it could be banded.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	EK 1 WEEK 2 WEEK 3 WEEK 4 \ 0.86 0.57				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY			0.86	0.57	0.14	0.71		0.14						0.19
# DAYS OBSERVED			3	2	1	4		1						11
# PROCESSED														0
	FIRST OF	BSERVED:	August 15		LAST OF	BSERVED:	September *	19	PEAK [DATE: Augu	st 16, 23	١	NUMBER: 3	

<u>Notes:</u> Observed on several days through late August into September, with the majority of individuals passing as singletons.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.57	0.71	3.71	1.29	0.59
# DAYS OBSERVED				1	2	2	1	1	4	3	4	3	5	26
# PROCESSED														0
	FIRST OF	BSERVED:	August 26		LAST OF	BSERVED:	October 30		PEAK [DATE: Octob	per 21		NUMBER: 2	1

<u>Notes:</u> Seen at least weekly beginning in late August, with a slight peak in late October. Twenty-one individuals were observed over the course of a single day in late October.

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

		AUG	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		VEER 1 WEER 2 WEER 3 WEER 4								0.14		0.29		0.03
# DAYS OBSERVED										1		1		2
# PROCESSED														0
	FIRST OF	BSERVED:	October 5		LAST OF	BSERVED:	October 21		PEAK [DATE: Octob	per 21		NUMBER: 2	2

Notes: A rare visitor, with only two sightings in October totaling three birds.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		VEER I WEER 2 WEER 3 WEER 4				0.14	0.14		0.29					0.04
# DAYS OBSERVED						1	1		2					4
# PROCESSED														0
	FIRST OF	BSERVED:	September 7	7	LAST OF	BSERVED:	September 3	30	PEAK [DATE: 4 date	es		NUMBER: 1	

Notes: Observations limited to a small number of migrants, scattered throughout September.

MERL: Merlin / Faucon émerillon (Falco columbarius)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.43					0.29			0.29		0.29		0.14	0.14
# DAYS OBSERVED	3	0.43 0.29 0.14 3 2 1				2			2		2		1	13
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 24		PEAK	DATE: 13 d	ates		NUMBER: 1	

<u>Notes:</u> A few early August sightings probably relate to individuals nesting in the Arboretum; apparent migrants passed through in small numbers from mid-September to late October. All sightings were of single individuals.

PEFA: Peregrine Falcon / Faucon pèlerin (Falco peregrinus)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OF	BSERVED:	September 2	28	LAST OF	BSERVED:	September	28	PEAK	DATE: Sept	ember 28		NUMBER:	1

Notes: A single individual spotted flying over the site one afternoon.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OF	BSERVED:	September 4	1	LAST OF	BSERVED:	September 4	1	PEAK	DATE: Septe	ember 4		NUMBER:	1

Notes: A single individual heard calling from Stoneycrroft pond.

GRYE: Greater Yellowlegs / Grand Chevalier (Tringa melanoleuca)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY						0.29						0.29		0.04
# DAYS OBSERVED						1						2		3
# PROCESSED														0
	FIRST O	BSERVED:	September 6	6	LAST O	BSERVED:	October 22		PEAK	DATE: Septe	ember 6		NUMBER: 2)

Notes: A few individuals flying over the site on three separate days.

SOSA: Solitary Sandpiper / Chevalier solitaire (Tringa solitaria)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OF	BSERVED:	August 12		LAST OF	BSERVED:	August 13		PEAK	DATE: 2 dat	es		NUMBER: 1	

Notes: Two sightings of likely the same individual over two days in mid-August.

SPSA: Spotted Sandpiper / Chevalier grivelé (Actitis macularius)

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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													0.02
# DAYS OBSERVED	3													3
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	August 5		PEAK	DATE: 3 dat	es		NUMBER: 1	

Notes: Only a few sightings, limited to the beginning of August.

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	EK1 WEEK2 WEEK3 WEEK4 V				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		YEEK 1 WEEK 2 WEEK 3 WEEK 4				0.14		0.29						0.03
# DAYS OBSERVED						1		2						3
# PROCESSED														0
	FIRST OF	BSERVED:	September 9	9	LAST OF	BSERVED:	September 2	25	PEAK	DATE: 3 dat	es		NUMBER: 1	

WISN: Wilson's Snipe / Bécassine des marais (Gallinago gallinago)

<u>Notes:</u> A few sightings, all of single individuals flying low over the back ponds and surrounding area.

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

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.29	0.14	0.14											0.04
# DAYS OBSERVED	2	1	1											4
# PROCESSED														0
	FIRST O	BSERVED:	August 2		LAST O	BSERVED:	August 19		PEAK	DATE: 4 dat	es		NUMBER: 1	

Notes: Likely the same individual flushed on four occasions from the census path near C nets and surrounding area.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.57					1.71	6.86	0.71	4.14	10.86	1.29	1.86	3.57	2.64
# DAYS OBSERVED	2	1	2	1	3	4	4	3	3	5	4	5	5	42
# PROCESSED														0
	FIRST OF	BSERVED:	August 3		LAST OF	BSERVED:	October 30		PEAK I	DATE: Octol	per 7		NUMBER: 5	7

<u>Notes:</u> Scarce early in the season, missed more days than not. Thereafter numbers picked up considerably, with a peak in late September to early October. The corn field to the east and others nearby may have attracted gulls to the general area.

HERG: Herring Gull / Goéland argenté (Larus argentatus)

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	EK 1 WEEK 2 WEEK 3 WEEK 4 M				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		EK I WEEK 2 WEEK 3 WEEK 4					0.29	0.29			0.29	0.14	0.14	0.09
# DAYS OBSERVED							1	1			2	1	1	6
# PROCESSED														0
	FIRST OF	BSERVED:	September '	13	LAST OF	BSERVED:	October 29		PEAK	DATE: Septe	ember 13, 2'		NUMBER: 2	2

Notes: Absent during the first month of the season, then sporadically seen flying over the site starting in mid-September.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OF	BSERVED:	September (6	LAST O	BSERVED:	October 7		PEAK I	DATE: Septe	ember 6, Oct	ober 7	NUMBER:	1

Notes: Only observed on two occasions flying high overhead.

CATE: Caspian Tern / Sterne caspienne (Hydroprogne caspia)

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OF	BSERVED:	August 13		LAST OF	BSERVED:	August 13		PEAK	DATE: Augu	st 13		NUMBER: 1	

Notes: Heard only once this season; a first for MBO.

ROPI: Rock Pigeon / Pigeon biset (Columba livia)

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.71	1.14	2.00	1.71	1.14	2.14	3.29	0.71	0.57	1.86	0.57	1.29	1.43	1.37
# DAYS OBSERVED	2	4	5	5	2	7	3	3	2	6	2	4	4	49
# PROCESSED														0
	FIRST OF	BSERVED:	August 2		LAST O	BSERVED:	October 30		PEAK	DATE: Septe	ember 17		NUMBER: 2	20

Notes: Small flocks seen throughout the season flying overhead, but never on the ground or perched within MBO.

MODO: Mourning Dove / Tourterelle triste (Zenaida macroura)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	1.14	0.57	4.00	1.57	4.14	2.71	2.14	2.00	2.29	3.86	4.14	3.00	2.54
# DAYS OBSERVED	4	5	4	5	5	5	5	6	6	7	7	7	6	71
# PROCESSED														0
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	October 30		PEAK	DATE: Augu	st 25. Octob	er 20	NUMBER: 1	2

<u>Notes:</u> Seen on a weekly basis, with small peaks in late August, mid September and late October. Despite being present throughout the season, none were caught.

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

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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 1												1
# PROCESSED	1	1 1 1 1												1
	FIRST OF	BSERVED:	August 6		LAST OF	BSERVED:	August 6		PEAK	DATE: Augu	st 6		NUMBER: 1	

<u>Notes:</u> A single individual, banded on August 6, representing the first time this species has been banded at MBO, and the only sighting of the season.

CHSW: Chimney Swift / Martinet ramoneur (Chaetura pelagica)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.71	0.57	0.71	1.14										0.32
# DAYS OBSERVED	4	1.71 0.57 0.71 1.14 4 2 2 2												10
# PROCESSED		4 2 2 2												0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	August 23		PEAK	DATE: Augu	st 22		NUMBER: 7	

Notes: Seen in small numbers over the first four weeks of the season.

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

		AUG	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	3.42					1.00	0.29							2.10
# DAYS OBSERVED	3	3.42 6.14 7.00 5.43 3 7 7 6				3	2							34
# PROCESSED	3 1 1 0													0 (20)
	FIRST OF	BSERVED:	August 5		LAST OF	BSERVED:	18		PEAK [DATE: Augu	st 13. 16		NUMBER: 1	2

<u>Notes:</u> 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 prior to release. Only one AHY individual was identified, a female on August 30. HY males were numerous (6), as were HY females (7). An additional six individuals were not aged or sexed. 66% fewer birds were netted this season compared to last year.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.43	0.29	0.29		0.29	0.14								0.11
# DAYS OBSERVED	3	2	2		2	1								10
# PROCESSED														0
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	September 7	7	PEAK	DATE: 10 da	ates		NUMBER: 1	

Notes: All sightings are of single individuals, perhaps the same bird, early in the season.

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.14	0.43	0.43	0.71		0.29	0.71					0.27
# DAYS OBSERVED	2	3	1	3	2	4		2	3					20
# PROCESSED	1	2 3 1 3 1							1					2
	FIRST OF	BSERVED:	August 2		LAST O	BSERVED:	October 2		PEAK	DATE: 5 date	es		NUMBER: 2	2

<u>Notes:</u> Scarce throughout the first two-thirds of the season; never more than one or two individuals observed per day. The two banded this fall nearly raised the total for MBO to only five.

DOWO: Downy Woodpecker / Pic mineur (Picoides pubescens)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	3.71	2.86	3.14	2.57	3.28	3.57	3.14	3.57	3.71	2.71	3.14	2.57	3.23
# DAYS OBSERVED	7	7	7	7	6	7	7	6	7	7	7	7	5	87
# PROCESSED	5	3-0-3	0-0-2	0-1-1		0-0-2	1-0-1		1	2-0-1	1-0-2	1-0-1		14-1-13
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 30		PEAK	DATE: Octol	per 24		NUMBER: 8	}

<u>Notes:</u> Observed on 96% of days during FMMP 2006; abundance fairly consistent throughout the season. The 13 repeats represent only five individuals.

HAWO: Hairy Woodpecker / Pic chevelu (Picoides villosus)

		AUG	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.43					0.86	1.14	0.71	0.86	1.57	0.57	1.57	1.00	0.90
# DAYS OBSERVED	2	0.43 0.86 0.43 0.71 2 5 3 5				4	6	4	4	7	4	6	5	61
# PROCESSED		2 5 3 5									1			1
	FIRST OF	BSERVED:	August 5		LAST OF	BSERVED:	October 30		PEAK [DATE: 5 date	es	NUN	ABER: 3	

Notes: Present weekly like the Downy Woodpecker, but in lower numbers, and missed entirely on over one-third of days. Only one, a HY male, was banded.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	2.71					2.43	4.00	4.71	5.00	3.14	1.14	1.00	0.43	2.69
# DAYS OBSERVED	7	2.71 4.43 2.57 2.14 7 7 7 6				7	7	7	7	7	6	5	3	81
# PROCESSED		/ / / 6 1												1
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK I	DATE: Septe	ember 18		NUMBER: 8	}

<u>Notes:</u> Present throughout most of the season, until most of the last migrants left in October. Only a few local individuals were present in August, but numbers swelled with migrants during most of September and into early October. Only one, a HY male, was banded.

PIWO: Pileated Woodpecker / Grand Pic (Dryocopus pileatus)

		AUG	GUST			SE	PTEMBE	R			OCTO)BER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14	0.86	0.57	0.86	0.71	2.57	1.57	2.00	1.29	1.43	1.43	1.00	0.14	1.12
# DAYS OBSERVED	7	5	3	5	4	7	6	6	7	7	6	6	1	70
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK I	DATE: Septe	ember 20		NUMBER: 5	;

<u>Notes:</u> Seen weekly throughout the season on twice as many days as FMMP 2005. Though observations were more frequent throughout September and early October than at other times, it is likely that most, if not all, sightings involved the local family.

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

		AUG	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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 OF	BSERVED:	August 6		LAST OF	BSERVED:	September 4	1	PEAK [DATE: Augu	st 6, Septerr	nber 4	NUMBER: 1	

Notes: With only one sighting and one banding, observations dropped by 92% from FMMP 2005.

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14	0.57	1.43	0.43	0.71	0.14								0.26
# DAYS OBSERVED	1	0.14 0.57 1.43 0.43 1 2 4 2				1								13
# PROCESSED		1 2 4 2 3 3 1				1								11
	FIRST OF	BSERVED:	August 6		LAST OF	BSERVED:	September &	5	PEAK	DATE: Augu	st 16		NUMBER: 6	j

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

<u>Notes:</u> Generally present in small numbers, with more than two per day only twice.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.71	1.14	0.86	0.57	0.43	0.29	0.14							0.40
# DAYS OBSERVED	4	1.71 1.14 0.86 0.57 4 5 3 4				2	1							21
# PROCESSED	5	4	4	2	1	1	1							18
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	September	15	PEAK I	DATE: Augu	st 21		NUMBER: 4	

Notes: Seen only in small numbers, but with a distinct peak in late August, tapering off by mid September.

LEFL: Least Flycatcher / Moucherolle tchébec (Empidonax minimus)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.29							0.25
# DAYS OBSERVED	1	0.14 0.71 0.71 0.86 1 3 3 2			2	2	2							15
# PROCESSED		2	3	3		2	1							11
	FIRST OF	BSERVED:	August 3		LAST OF	BSERVED:	September 1	15	PEAK	DATE: Augu	st 22		NUMBER: 4	

Notes: Seen only in small numbers, but with a distinct peak in the second half of August.

EAPH: Eastern Phoebe / Moucherolle phébi (Sayornis phoebe)

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.71							0.43	0.29	0.43				0.20
# DAYS OBSERVED	4	0.71 0.14 0.14 4 1 1						3	2	3				17
# PROCESSED	1	4 1 1 1 1 1												2
	FIRST OF	BSERVED:	August 2		LAST O	BSERVED:	October 5		PEAK	DATE: Augu	st 7		NUMBER: 2	2

Notes: Seen irregularly until early October. Observed on 58% fewer days than during FMMP 2005.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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													0.37
# DAYS OBSERVED	2	.29 1.29 1.57 0.57 2 7 4 3												20
# PROCESSED		2 7 4 3 1												1
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	September 2	2	PEAK	DATE: 3 date	es		NUMBER: 4	1

<u>Notes:</u> Most observations in August, with a peak around mid- to late in the month. Only two additional birds came through in first days of September. Another species that was seen on 50% fewer days than during FMMP 2005.

EAKI: Eastern Kingbird / Tyran tritri (Tyrannus tyrannus)

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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													1.04
# DAYS OBSERVED	7	3.29 5.00 3.57 1.43 7 7 5 3												23
# PROCESSED	1													1
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	August 30		PEAK	DATE: Augu	ust 10		NUMBER: 8	

<u>Notes:</u> Seen most days in August, with numbers building toward the middle of the month. One of the earliest to leave of the regularly occurring species, with none observed beyond August.

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		WEER I WEER 2 WEER 3 WEER 4												0.01
# DAYS OBSERVED														1
# PROCESSED														0
	FIRST OF	BSERVED:	August 29		LAST O	BSERVED:	August 29		PEAK	DATE: Augu	st 29		NUMBER: 1	

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

Notes: A single individual observed on census at the end of August.

PUMA: Purple Martin / Hirondelle noire (Progne subis)

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	3.14	3.57	3.14	0.43	0.14									0.80
# DAYS OBSERVED	6	6	5	3	1									21
# PROCESSED														0
	FIRST OF	BSERVED.	August 1		LAST OF	BSERVED	August 24		PFAK		st 8		NUMBER 6	

Notes: Seen twice as frequently as during FMMP 2005, with sightings most numerous from early to mid August.

TRES: Tree Swallow / Hirondelle bicolore (Tachycineta bicolor)

		AUG	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	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							0.14			0.14			0.70
# DAYS OBSERVED	5	2.14 2.43 2.14 1.86 5 4 3 2						1			1			17
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 10		PEAK [DATE: Augu	st 22	١	NUMBER: 1	1

Notes: Bred on site and seen relatively frequently through August, with two late migrants observed September 21 and October 10.

BARS: Barn Swallow / Hirondelle rustique (Hirundo rustica)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	2.00	0.29	1.57		0.14	0.43								0.34
# DAYS OBSERVED	4	2	4		1	1								12
# PROCESSED														0
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	September 5	5	PEAK	DATE: Augu	st 7, 16		NUMBER:	7

Notes: Scattered sightings with a slight peak in early August and then again mid August.

BLJA: Blue Jay / Geai bleu (Cyanocitta cristata)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	7.57	10.57	9.57	13.14	15.86	21.57	23.43	23.57	19.14	22.86	19.29	13.86	14.00	14.68
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED				1	1	1	2	1	1	1	5	3		16
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK I	DATE: Septe	ember 23		NUMBER: 5	0

<u>Notes:</u> One of five species seen every day of the season. Birds observed during the first three weeks were likely local residents. Numbers increased in late August and stayed elevated through the remainder of the season, peaking in late September and early October.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	12.29	21.57	26.86	41.43	70.57	178.57	243.57	243.86	126.29	67.49	131.29	152.00	144.00	93.56
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED														0
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK	DATE: Septe	ember 17	Ν	IUMBER: 50	00

<u>Notes:</u> One of five species seen every day of the season. The size of the local flock grew gradually through August, remaining between 100-300 for most of September, then becoming more variable in October.

CORA: Common Raven / Grand Corbeau (Corvus corax)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.71	0.29	0.43	0.29	0.29	0.57		0.14	0.29	0.71	0.57	0.14	0.43	0.37
# DAYS OBSERVED	4	1	3	2	2	4		1	1	5	4	1	3	31
# PROCESSED														0
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	October 26		PEAK [DATE: 3 date	es		NUMBER: 2	

Notes: Present from the beginning of the season, seen regularly in small number through the season. Most observations were of single individuals flying high above the site.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	BER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	15.43					21.57	21.00	16.43	15.71	16.86	15.86	11.86	13.71	15.69
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED	6-0-1	3-1-2	2-0-1		1-1-4	7-1-5	4-1-5	1-0-4	0-2-8	1-0-3	2-0-10	0-1-8	0-2-6	27-10-57
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 30		PEAK	DATE: 4 dat	es		NUMBER: 3	0

<u>Notes:</u> One of five species seen every day of the season. Birds recorded in August were likely local residents and their offspring; all six individuals banded in week 1 were HY and were recaptured at least once later in the season. The significant chickadee migration observed during FMMP 2005 did not occur this year, reducing the number banded by roughly 200 birds.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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			0.19
# DAYS OBSERVED	1	3	1	1	1	1					1			9
# PROCESSED														0
	FIRST OF	BSERVED:	August 5		LAST O	BSERVED:	October 14		PEAK	DATE: Septe	ember 8		NUMBER: 2	2

Notes: Seen weekly throughout August and into September, but only rarely more than one individual per week.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.86					1.71	1.57	1.43	1.29	1.14	1.17	2.14	1.43	1.76
# DAYS OBSERVED	6	1.86 2.00 2.86 3.14 6 7 7 6			3	4	4	6	5	6	7	5	6	72
# PROCESSED				1										1
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK [DATE: Augu	st 22		NUMBER: 9	J

Notes: Observed regularly on a weekly basis throughout the season. The one bird banded, a HY male, was likely a member of the resident family.

BRCR: Brown Creeper / Grimpereau brun (Certhia americana)

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		EER I WEER 2 WEER 3 WEER 4						0.14		0.71	0.14	0.14	0.43	0.12
# DAYS OBSERVED								1		4	1	1	3	10
# PROCESSED										3	1			4
	FIRST OF	BSERVED:	October 5		LAST OF	BSERVED:	October 29		PEAK	DATE: Octob	per 6		NUMBER: 2	

Notes: Arrived in the fourth week of September, and peaked in early October. Sightings restricted to single individuals.

HOWR: House Wren / Troglodyte familier (Troglodytes aedon)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	2.71					1.14	1.86	0.86	0.57	0.57		0.14		1.07
# DAYS OBSERVED	5	7	5	3	6	4	5	4	4	1		1		45
# PROCESSED	4	2	4-0-1	1		1	3-0-1	1				0-0-1		16-0-3
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 21		PEAK	DATE: Augu	st 2		NUMBER: 8	

Notes: Bred on site. Seen on a weekly basis over the first two months, though in fairly small numbers. One HY stayed remarkably late into October, having been banded one month beforehand.

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		PEK I WEEK 2 WEEK 3 WEEK 4				0.14	0.29	0.71	0.29	1.86	0.86	1.14	0.57	0.45
# DAYS OBSERVED						1	2	3	1	5	4	3	3	22
# PROCESSED							2	2		6				10
	FIRST OF	BSERVED:	September &	5	LAST OF	BSERVED:	October 27		PEAK I	DATE: Octol	per 5		NUMBER: 6	

WIWR: Winter Wren / Troglodyte mignon (Troglodytes troglodytes)

<u>Notes:</u> Uncommon, but present weekly throughout the final two months, with small peaks in the first and the third weeks of October.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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														0
	FIRST OF	BSERVED:	August 7		LAST OF	BSERVED:	August 7		PEAK	DATE: Augu	st 7		NUMBER: 1	

Notes: A single individual observed during census at the end of the first week of the season.

SEWR: Sedge Wren / Troglodyte à bec court (Cistothorus platensis)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	EEK 1 WEEK 2 WEEK 3 WEEK 4 0.14 0.14 0.14				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY						0.14								0.03
# DAYS OBSERVED		1	1			1								3
# PROCESSED														0
	FIRST OF	BSERVED:	August 9		LAST OF	BSERVED:	September &	5	PEAK	DATE: 3 dat	es		NUMBER: 1	

Notes: Likely one of the pair that possibly bred in the field south of the main cabin at the Arboretum. A new species for MBO.

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

		AUG	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	K1 WEEK2 WEEK3 WEEK4 W				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		ER I WEER 2 WEER 3 WEER 4 V						2.57	10.0	2.86	17.43	12.14	6.71	3.98
# DAYS OBSERVED								4	6	6	7	7	5	35
# PROCESSED								4	17	7	15-0-1	28	2	73-0-1
	FIRST OF	BSERVED.	September 2	20	LAST OF	BSERVED.	October 30		PFAK	DATE Octob	per 10		NUMBER 3	5

<u>Notes:</u> A couple of early migrants were processed on September 20, but on the whole migration began only in late September, with a notable peak in mid October.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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				1.29	14.0	30.29	42.00	49.14	41.29	20.43	7.57	15.90
# DAYS OBSERVED		1	2	1	1	5	7	7	7	7	7	7	7	59
# PROCESSED		1				2	19-0-1	42-0-3	114-0-4	115-0-6	71-0-13	57-0-9	14	435-0-36
	FIRST O	BSERVED:	August 11		LAST O	BSERVED:	October 30		PEAK	DATE: Octol	per 4		NUMBER: 1	20

Notes: One unusually early individual was banded in mid-August, but otherwise the bulk of migration began in mid-September and built to a big peak in early October, quickly tapering off towards the end of October.

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

		AUC	GUST			SE	PTEMBE	R			OCTC)BER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		VEER I WEER 2 WEER 3 WEER 4								0.14		1.29	0.86	0.18
# DAYS OBSERVED										1		2	3	6
# PROCESSED														0
	FIRST OF	BSERVED:	October 6		LAST OF	BSERVED:	October 30		PEAK	DATE: Octob	per 21		NUMBER: 6	

<u>Notes:</u> A few scattered sightings through October, usually of small flock in the area between the A nets, the Purple Martin condominium and the back ponds.

VEER: Veery / Grive fauve (Catharus fuscescens)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	2.14 1.43 1.43 2.71				0.57	0.14							0.76
# DAYS OBSERVED	7	7	6	7	4	3	1							35
# PROCESSED	2	2-0-1	1	1										6-0-1
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	September 1	18	PEAK	DATE: Augu	st 27		NUMBER: 5)

<u>Notes:</u> The earliest of the *Catharus* thrushes, peaking in late August and gone before the end of September. Several of the early season birds were likely local residents, as a juvenile was banded on August 5.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	2	1					4
# PROCESSED							1	1	1					3
	FIRST OF	BSERVED:	September '	18	LAST OF	BSERVED:	September 3	30	PEAK	DATE: Septe	ember 25		NUMBER:	2

Notes: Present only during a short two-week span, down from last year.

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

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.29	0.43		0.14			0.11
# DAYS OBSERVED					1	1	2	2	3		1			10
# PROCESSED					1		2	2	2					7
	FIRST OF	BSERVED:	September 4	1	LAST OF	BSERVED:	October 12		PEAK	DATE: 10 da	ites		NUMBER: 1	

Notes: Singletons present throughout September, with one late migrant observed in mid-October. Much scarcer than during FMMP 2005, when 36 individuals were banded.

HETH: Hermit Thrush / Grive solitaire (Catharus guttatus)

		AUG	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY									0.57	1.43	3.57	3.57	0.57	0.75
# DAYS OBSERVED								2	6	5	7	2	22	
# PROCESSED									4	10	14-0-5	8-0-5	1	37-0-10
	FIRST OF	BSERVED:	September 3	30	LAST OF	BSERVED:	October 26		PEAK [DATE: Octob	per 16		NUMBER: 1	2

Notes: The latest of the Catharus thrushes, arriving well after the last Veery was seen, and peaking in mid-October.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	13.43	18.00	13.14	5.43	6.71	8.29	15.84	31.71	31.14	99.14	419.00	321.71	136.29	86.14
# DAYS OBSERVED	7	18.00 13.14 5.43 6 7 7 7 7		7	7	7	7	7	7	7	7	7	91	
# PROCESSED	4	3	1				3		1	28	82	143	34-0-1	299-0-1
	FIRST O	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK [DATE: Octob	per 15	Ν	UMBER: 15	08

<u>Notes:</u> One of five species seen every day of the season. Numbers began rising in late September, peaking in mid-October with a minimum of 1000 seen streaming over the south end of the site just after sunrise. Many more were banded this year compared to last year since fewer days were rained out during peak robin migration.

GRCA: Gray Catbird / Moqueur chat (Dumetella carolinensis)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	4.57	7.00	7.14	5.00	7.57	6.71	5.43	6.29	2.86	1.29	0.14		4.55
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	6	7	1		77
# PROCESSED	8-1-3	7 7 7 7 3 2-0-3 4-0-5 2-0			2-0-1	8-0-3	6-1-3	3-0-1	8-0-3	0-0-1				41-2-23
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 17		PEAK [DATE: Augu	st 26	1	NUMBER: 1	3

<u>Notes:</u> Observed daily until mid-October, then dropping off rapidly. A slight peak in numbers occurred from mid-August to mid-September as migrants supplemented the local birds still in the area.

BRTH: Brown Thrasher / Moqueur roux (Toxostoma rufum)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.57	0.86	0.71	0.86	0.71					0.34
# DAYS OBSERVED	1	2	1	1	4	5	3	3	4					24
# PROCESSED				1		1	4-0-1	1-0-1	0-0-1					7-0-3
	FIRST O	1 2 1 1 RST OBSERVED: August 5			LAST O	BSERVED:	October 1		PEAK	DATE: Septe	ember 22		NUMBER: 3	,

Notes: Uncommon, though more regularly seen towards the end of September. All birds banded were HY, recaptured up to 11 days after being banded.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	17.71	1 17.43 14.57 19.43 8 7 7 7 7			8.14	13.86	9.43	11.43	13.86	4.29	31.00	23.43	26.57	16.24
# DAYS OBSERVED	7	1 17.43 14.57 19.43 8 7 7 7 7 7			6	7	6	6	7	5	7	7	6	85
# PROCESSED	4	7 7 7 6 6 1 1 1				3	1		6				1	22
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 30		PEAK	DATE: Octol	ber 24	Ν	UMBER: 94	ł

<u>Notes:</u> Seen weekly until the end of the season, much more abundant than during FMMP 2005. A small peak occurred in August, likely representing locally breeding adults and juveniles, with another larger peak in mid-October.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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				3.00	1.14
# DAYS OBSERVED						1			1				2	4
# PROCESSED														0
	FIRST OF	BSERVED:	September '	10	LAST OF	BSERVED:	October 27		PEAK [DATE: Octob	per 27		NUMBER: 1	8

Notes: Occasional individuals or small flocks passing overhead in September and late October.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY										0.14		0.14	0.43	0.05
# DAYS OBSERVED										1		1	3	5
# PROCESSED														0
	FIRST OF	BSERVED.	October 7		LAST OF	BSERVED.	October 29		PFAK	DATE [,] 5 date	es		NUMBER 1	

Notes: One individual possibly observed repeatedly during the final month of the season.

EUST: European Starling / Étourneau sansonnet (Sturnus vulgaris)

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	9.86	0.14	5.57	1.43	1.29	4.14	5.00	7.26	10.71	9.14	27.29	169.00	103.57	27.26
# DAYS OBSERVED	4	0.14 5.57 1.43 1 1 3 3 3		2	5	3	3	3	6	5	7	6	51	
# PROCESSED		1 3 3 2										1		1
	FIRST OF	BSERVED:	August 3		LAST OF	BSERVED:	October 30		PEAK [DATE: Octob	per 21	N	UMBER: 70)0

<u>Notes:</u> Seen on a weekly basis in low number during the first half of the season, but seen regularly and in good numbers during October. Almost all birds seen were flying over rather than actively using the MBO site. The one banded was only the third to be banded at MBO.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	1.00	0.57	1.29	0.71			0.36
# DAYS OBSERVED						3	5	3	3	4	3			21
# PROCESSED						1	2-0-1	1	2	6-0-1	3-0-1			15-0-3
	FIRST OF	BSERVED:	September &	5	LAST OF	BSERVED:	October 15		PEAK	DATE: Septe	ember 23		NUMBER: 4	

<u>Notes:</u> Seen weekly from mid-September through mid-October. Relatively scarce except during a slight peak in late September and early October.

WAVI:	Warbling	Vireo /	Viréo	mélodieux	(Vireo gilvus)
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		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.29	0.14		0.14	0.29	0.29		0.14						0.10
# DAYS OBSERVED	2	1		1	2	2		1						9
# PROCESSED		1		1	1	2								5
	FIRST OF	BSERVED:	August 3		LAST O	BSERVED:	September 2	24	PEAK	DATE: 9 date	es		NUMBER: 1	

Notes: Seen only occasionally from early August to late September.

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

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.14		0.43	0.43	0.71			0.29				0.14	0.16
# DAYS OBSERVED		0.14 0.43 1 3				3			1				1	12
# PROCESSED		1 3				1			2					5
	FIRST OF	BSERVED.	August 14		LAST O	BSERVED.	October 24		PFAK	DATE [,] 3 dat	es		NUMBER 2	

Notes: Seen sporadically through the first two months, with a late migrant observed towards the end of October.

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

		AUG	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	3.14	3.29	2.14	3.86	4.43	2.43	3.57	1.71	1.71	0.14		0.14		2.04
# DAYS OBSERVED	7	7	6	7	7	7	7	6	4	1		1		60
# PROCESSED	1-1-0		2	6	8	6	10-0-1	4	5-0-2					42-1-3
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 17		PEAK	DATE: Septe	ember 1		NUMBER: 9	•

<u>Notes:</u> Recorded on most days during the first two months of the season, rapidly dropping off in early October with one exceptionally late individual seen October 17. Many of the birds observed in August were likely local breeders and their offspring. The number banded was down by almost 65% compared to FMMP 2005.

TEWA: Tennessee Warbler / Paruline obscure (Vermivora peregrina)

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	1.71	0.29	3.86	3.57	2.86	5.71	0.86	0.14					1.56
# DAYS OBSERVED	3	4	1	7	6	6	7	3	1					38
# PROCESSED	5	3	1	10-0-3	7	9-0-3	20-0-7	1-0-1	1					57-0-14
	FIRST O	BSERVED:	August 2		LAST O	BSERVED:	September 3	30	PEAK	DATE: Septe	ember 13		NUMBER: 1	3

Notes: Present on a weekly basis until disappearing before October, with slight peaks in late August and mid-September. Three individuals were recaptured 24 days after they were banded, indicating a lengthy stopover.

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

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY							0.29	0.71	0.14		1.00	0.43		0.20
# DAYS OBSERVED							2	2	1		4	3		12
# PROCESSED							1	0-0-1	1		4-0-1	1-0-1		7-0-3
	FIRST OF	BSERVED:	September '	17	LAST OF	BSERVED:	October 20		PEAK I	DATE: Septe	ember 23		NUMBER: 4	

Notes: Two small waves of migrants, in mid- to late September and mid-October.

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.57	1.00	2.14	3.57	2.57	4.14	5.17	5.14	2.57	1.43	0.29			2.18
# DAYS OBSERVED	3	4	6	6	5	7	7	7	6	4	1			56
# PROCESSED	2	2	7-0-1	9-0-4	7-0-1	18-0-1	23-0-2	15-0-1	10	5				98-0-10
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 12		PEAK I	DATE: Augu	st 28	1	NUMBER: 1	1

Notes: Observed almost daily for most of the first ten weeks of the season before disappearing rapidly in early October. Roughly 40% fewer birds were banded than during FMMP 2005. Two individuals were re-caught two weeks after being banded, indicating a lengthy stopover.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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		0.29	0.29	0.14				0.12
# DAYS OBSERVED			1		2	1		2	1	1				8
# PROCESSED									1	1				2
	FIRST OF	BSERVED:	August 15		LAST O	BSERVED:	October 4		PEAK	DATE: Augu	st 30		NUMBER: 3	3

<u>Notes:</u> Seen sporadically during the peak of migration in September, with an early migrant observed August 15; far fewer observed and banded than in FMMP 2005.

YWAR: Yellow Warbler / Paruline jaune (Dendroica petechia)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	10.29	9.86	3.71	1.86	0.43	0.57	0.14	0.14						2.08
# DAYS OBSERVED	7	7	7	5	2	3	1	1						33
# PROCESSED	23-0-2	14-0-2	4		1	1								43-0-4
	FIRST O	BSERVED:	August 1		LAST O	BSERVED:	September 2	25	PEAK	DATE: Augu	st 6		NUMBER: 1	8

<u>Notes:</u> Seen daily early in the season, gradually tapering off into early September as local residents departed. A few spring-banded adults were re-caught in early August, suggesting that many of the hatch-year birds banded in August are likely local offspring.

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

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.71	0.43	0.57	0.57	0.57	0.43	0.43	0.14					0.30
# DAYS OBSERVED		3	3	2	3	3	3	2	1					20
# PROCESSED		4	1	2	1	2	1	1	1					13
	FIRST OF	BSERVED:	August 12		LAST OF	BSERVED:	September 3	30	PEAK	DATE: Augu	st 28		NUMBER: 3	3

Notes: Seen in small numbers after the first week and until October, with no real peak observed.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	2.14	10.14	8.00	11.14	4.14	5.14	1.71					3.35
# DAYS OBSERVED	1	2	4	7	6	7	5	6	5					43
# PROCESSED	1	3	12	39	21-0-2	39-0-2	18	16	8					157-0-4
	FIRST OF	BSERVED:	August 7		LAST OF	BSERVED:	October 2		PEAK	DATE: Augu	st 28		NUMBER: 2	4

<u>Notes:</u> Present over a 9-week span, and particularly numerous from late August to mid-September. This species was the second-most banded warbler, behind Myrtle Warblers, yet there were very few recaptures (3% of individuals, compared to 10% of Nashville and 25% of Tennessee Warblers) indicating that this species does not linger at MBO for as long as some others.

CMWA: Cape May Warbler / Paruline tigrée (Dendroica tigrina)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1					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		0.14 0.29 1 1												3
# PROCESSED		1 1												0
	FIRST OF	BSERVED:	August 9		LAST OF	BSERVED:	August 31		PEAK [DATE: Augu	st 24		NUMBER: 2	

Notes: Only four individuals observed between mid August and early September. None were banded.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.14	0.14	0.43	0.43	0.71	0.57	0.43	1.14		0.29			0.33
# DAYS OBSERVED		1	1	2	3	3	2	2	3		2			19
# PROCESSED		1		1	2	2		2	4		2			14
	FIRST OF	BSERVED:	August 14		LAST OF	BSERVED:	October 15		PEAK [DATE: Septe	ember 30		NUMBER: 5	5

<u>Notes:</u> Much scarcer than during FMMP 2005, when this species was observed on almost twice as many days, and more than twice as many individuals were banded. Present this year until mid-October in small numbers, with a slight increase in abundance noted in late September.

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	1.71	0.29	1.14	1.43	0.43	6.14	17.43	76.14	76.14	24.57	10.57	3.29	1.43	16.94
# DAYS OBSERVED	2	1	4	4	2	6	7	6	7	7	7	4	4	61
# PROCESSED				2		8	49	169-0-6	241-0-10	40-0-2	6	6	1	522-0-18
	FIRST OF	BSERVED:	August 5		LAST OF	BSERVED:	October 15		PEAK	DATE: Octol	per 8		NUMBER: 4	4

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

Notes: Although a few early individuals were observed in August and the first half of September, main migration was from mid-September through mid-October, during which they were seen almost daily, and usually in large numbers. This was the most banded species by far during FMMP 2006, over three times last year's total for the species. Based on recaptures, one individual is known to have remained on site for at least two weeks, but overall relatively few (3%) individuals were recaptured.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.71	0.43	0.71	1.57	1.14	1.57	2.71	0.57	0.14				0.73
# DAYS OBSERVED		2	3	5	5	5	4	5	3	1				33
# PROCESSED		1	1-0-1		1	2	2	11	1					19-0-1
	FIRST O	BSERVED:	August 11		LAST OF	BSERVED:	October 4		PEAK	DATE: Septe	ember 25		NUMBER: 7	

<u>Notes:</u> Seen at least once weekly from the second week through to early October, but with a distinct peak in both frequency and abundance during mid-September.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.29	0.71	0.14	1.14									0.10
# DAYS OBSERVED		2	3	1	4									10
# PROCESSED		1	3	1	3									8
	FIRST OF	BSERVED:	August 10		LAST O	BSERVED:	September 4	1	PEAK	DATE: Auau	st 21		NUMBER: 3	j

<u>Notes:</u> Seen sporadically for four weeks from mid August to early September. A substantial increase in observations and birds banded from all other seasons – the only other one ever banded was during SMMP 2005.

PIWA: Pine Warbler / Paruline des pins (Dendroica pinus)

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	EEK1 WEEK2 WEEK3 WEEK4				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														0
	FIRST OF	BSERVED:	August 24		LAST OF	BSERVED:	September '	10	PEAK I	DATE: Augu	st 24, Septe	mber 10	NUMBER: 1	

Notes: Observations limited to two individuals.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY							0.57	0.57	0.57	0.57	0.57			0.22
# DAYS OBSERVED							1	3	2	2	1			9
# PROCESSED								1	3					4
	FIRST OF	BSERVED:	September '	12	LAST O	BSERVED:	October 12		PEAK	DATE: Septe	mber 12, O	ctober 12	NUMBER: 4	ł

Notes: Considerably less abundant than during FMMP 2005. Seen from mid-September to mid-October in small numbers.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY			0.14				0.29	0.86	0.14	0.29				0.13
# DAYS OBSERVED			1				1	4	1	2				9
# PROCESSED							2	2		1-0-1				5-0-1
	FIRST OF	BSERVED:	August 21		LAST OF	BSERVED:	October 7		PEAK [DATE: 3 date	S		NUMBER: 2	2

<u>Notes:</u> Considerably less abundant than during FMMP 2005: 92% fewer birds banded on 63% fewer days. Present slightly earlier in the season than Western Palm Warblers.

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.14		0.14	0.86			0.29						0.11
# DAYS OBSERVED		1		1	4			2						8
# PROCESSED				1	2									3
	FIRST OF	BSERVED:	August 11		LAST OF	BSERVED:	September 2	24	PEAK	DATE: Septe	ember 1, 4		NUMBER: 2	2

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

<u>Notes:</u> Scarce and irregular, with sightings of only ten individuals scattered over the first eight weeks of the season.

BLPW: Blackpoll Warbler / Paruline rayée (Dendroica striata)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	2.14	1.29	0.29						0.40
# DAYS OBSERVED				2	4	6	3	2						17
# PROCESSED				3	4	8	4	2						21
	FIRST OF	BSERVED:	August 26		LAST O	BSERVED:	September 2	25	PEAK	DATE: Septe	ember 16		NUMBER: 7	7

<u>Notes:</u> Seen weekly from late August to late September. Mid-season migrant, peaking in early to mid-September. Ten more individuals banded than last year, representing a 210% increase.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.14	1.00	1.00	1.29	0.71	1.14	1.14		0.29					0.52
# DAYS OBSERVED	1	3	4	3	2	4	4		1					22
# PROCESSED	0	3	3	5	2	4-0-1	1							18-0-1
	FIRST OF	BSERVED:	August 5		LAST OF	BSERVED:	October 1		PEAK	DATE: 5 dat	es		NUMBER: 4	1

<u>Notes:</u> Quite regular over the first five weeks, with peak movement in mid- to late August, but with a second smaller wave moving through in mid-September.

AMRE: American Redstart / Paruline flamboyante (Setophaga ruticilla)

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.71	1.71	2.14	5.43	4.00	2.86	0.57	0.29						1.50
# DAYS OBSERVED	4	5	7	7	5	6	2	1						37
# PROCESSED	3	6	6	12-0-2	10	8	2	1-0-1						48-0-3
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	September 2	20	PEAK [DATE: Septe	ember 2		NUMBER: 1	3

Notes: Among the most common warblers, seen regularly throughout the first half of the season and peaking in late August to early September.

OVEN: Ovenbird / Paruline couronnée (Seiurus atricapilla)

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	2.29	1.86	0.57	1.43	0.57	0.29						0.65
# DAYS OBSERVED	4	5	7	5	4	4	3	2						34
# PROCESSED	4	6	8-0-2	10-0-2	3	9-0-1	4	2						46-0-5
	FIRST OF	BSERVED:	August 2		LAST OF	BSERVED:	September 2	22	PEAK	DATE: Augu	st 23		NUMBER: (3

Notes: Early August records pertain to recently fledged birds, likely from nests within the MBO property. Migrants were recorded in moderate numbers from mid-August through mid-September, peaking in late August.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.86	0.29	3.86	1.57	0.57	0.14							0.56
# DAYS OBSERVED		4	2	7	5	3	1							22
# PROCESSED		4-0-1	2	20	8	4-0-1	1							39-0-2
	FIRST OF	BSERVED:	August 9		LAST OF	BSERVED:	September 1	19	PEAK	DATE: Augu	st 22, 23		NUMBER: 7	

Notes: Seen weekly from early August to mid-September; peaking in late August. Banded 56% more individuals than during FMMP 2005.

MOWA: Mourning Wa	arbler / Paruline triste ((Oporornis philadelphia)	

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	0.49	0.29									0.08
# DAYS OBSERVED			2	3	2									7
# PROCESSED			2	2	2									6
	FIRST OF	BSERVED:	August 16		LAST OF	BSERVED:	September 2	2	PEAK	DATE: 7 date	es		NUMBER: 1	

Notes: Present during a small window from mid-August to early September.

COYE: Common Yellowthroat / Paruline masquée (Geothlypis trichas)

		AUG	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	2.29	3.29	7.14	7.43	9.14	7.29	2.57	2.43					3.62
# DAYS OBSERVED	7	6	7	7	7	7	7	7	7					62
# PROCESSED	1-0-1	1	5-1-2	7-1-1	12	27-0-1	15-0-6	6	3					77-2-11
	FIRST O	BSERVED:	August 1		LAST OF	BSERVED:	October 2		PEAK	DATE: Augu	st 30	1	NUMBER: 1	о С

<u>Notes:</u> Present almost daily through to early October, and consistently among the more abundant warblers on site. Peak migration occurred between early and mid-September.

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

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	2.00	2.00	2.57	0.14							0.57
# DAYS OBSERVED		1	4	4	5	4	1							19
# PROCESSED		1	3	9-0-1	6	9	1							29-0-1
	FIRST OF	BSERVED:	August 10		LAST OF	BSERVED:	September '	16	PEAK	DATE: Septe	ember 6		NUMBER: 8	}

Notes: Migration occurred from mid-August to mid-September, peaking in early September.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		1.14	0.86	0.14	0.57	0.14	0.14							0.49
# DAYS OBSERVED		3	4	1	2	1	1							12
# PROCESSED		6-0-1	4	1	1	1	0-0-1							13-0-2
	FIRST OF	BSERVED:	August 10		LAST OF	BSERVED:	September 1	12	PEAK	DATE: Augu	st 14		NUMBER: 4	

<u>Notes:</u> Relatively uncommon, with a slight peak in numbers between mid-August and early September. One afterhatch-year female remained on site for at least 11 days.

SCTA: Scarlet Tanager / Tangara écarlate (Piranga olivacea)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY		0.14	0.14		0.14	0.14		1.57		0.14				0.17
# DAYS OBSERVED		1	1		1	1		4		1				9
# PROCESSED		1						4						5
	FIRST OF	BSERVED:	August 9		LAST O	BSERVED:	October 3		PEAK [DATE: Septe	mber 24, 25	5	NUMBER: 4	ļ

<u>Notes:</u> Sporadically seen from mid-August to early October. The four banded in the first week of October were all caught together in H2 and were all hatch-year birds likely traveling together.

NOCA: Northern Cardinal / Cardinal rouge (Cardinalis cardinalis)

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	3.00	3.57	5.00	4.43	4.71	3.86	3.43	2.57	2.29	3.14	3.43	3.29	3.60
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED	0-1-2	1-1-0		1	1	1	0-0-1				1	2		7-2-3
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK	DATE: Septe	ember 5		NUMBER: 1	2

Notes: One of five species recorded every day of the season, with a small peak in abundance in late August to early September.

		AUG	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	6.57					2.86	2.43	0.29						2.34
# DAYS OBSERVED	7	7	6	7	6	7	6	2						48
# PROCESSED	8-0-1	17-0-1	2-0-2	4	5	7	2-0-2							45-0-6
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	September 2	25	PEAK I	DATE: Augu	st 30	1	NUMBER: 1	3

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

Notes: Seen almost daily until the end of September. Sightings scarce beyond mid-September, reflecting a fairly steady decline in abundance beginning the third week of August despite a small peak in abundance in late August/early September.

INBU: Indigo Bunting / Passerin indigo (Passerina cyanea)

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	0.71	0.49	2.00	1.86	0.86	0.29					0.14	0.84
# DAYS OBSERVED	7	7	4	3	4	5	3	2					1	36
# PROCESSED	2	4-0-1	1		2	6	2-0-1	2					1	20-0-2
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 27		PEAK	DATE: 3 date	es		NUMBER: 3	}

<u>Notes:</u> Present weekly through late September, though most abundant in early August, with a second wave of migrants in late August/early October. An extremely late after-hatch-year male was banded on the third-last day of the season. Only half as many individuals were banded as during FMMP 2005.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY											0.43	4.43	8.86	1.06
# DAYS OBSERVED											1	6	6	13
# PROCESSED												14	15	29
	FIRST OF	BSERVED:	October 11		LAST OF	BSERVED:	October 30		PEAK	DATE: Octol	ber 28		NUMBER: 1	7

Notes: Seen almost daily over the final half of October, with numbers increasing steadily during this period.

CHSP: Chipping Sparrow / Bruant familier (Spizella passerina)

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	0.71	1.41	0.14	0.57		0.43	0.29	0.57	0.71	0.71				0.43
# DAYS OBSERVED	3	2	1	2		2	2	2	2	3				19
# PROCESSED	1	1					1			2				5
	FIRST OF	BSERVED:	August 4		LAST OF	BSERVED:	October 9		PEAK	DATE: 3 date	es		NUMBER: 4	ŀ

<u>Notes:</u> Observed between early August and early October, with peaks of migration occurring in mid-August and again in late-September. Banded 76% fewer individuals than during FMMP 2005.

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

		AUG	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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					2
	FIRST OF	BSERVED:	September '	13	LAST OF	BSERVED:	September 3	30	PEAK [DATE: Sept	ember 13, 3	0	NUMBER:	1

Notes: The only birds observed were those banded.

FOSP: Fox Sparrow / Bruant fauve (Passerella iliaca)

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY										0.57	0.29	1.86	0.14	0.22
# DAYS OBSERVED										3	2	4	1	10
# PROCESSED										3	0-0-1	2		5-0-1
	FIRST OF	BSERVED:	October 5		LAST OF	BSERVED:	October 30		PEAK	DATE: Octol	oer 21		NUMBER: 8	

Notes: Observed weekly through October. Less abundant than in FMMP 2005, with 80% fewer individuals banded.

SOSP: Song Sparrow / Bruant chanteur (Melospiza melodia)

		A	UGUST				SEPTEM	BER			00	TOBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	35.00	47.43	40.86	32.86	22.86	20.00	17.86	12.57	14.71	12.71	21.43	6.86	3.86	22.23
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	6	90
# PROCESSED	34-2-3	78-2-12	49-1-6	27-0-8	16-0-6	21-1-12	16-0-13	10-0-7	13-0-7	11-1-1	6-2-0	13	8-0-1	302-9-76
	FIRST	OBSERVED	D: August 1		LAS	FOBSERVED	October 29		PEA	AK DATE: A	ugust 16		NUMBER: 5	8

<u>Notes:</u> Present on all days but the last day of the season. One of the most abundant species on site, though most numerous through August, declining towards the end of the season despite a small peak during the second week of October. Mean number of birds per day doubled from FMMP 2005. One of only two species banded each week of the season.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	BER		
	WEEK 1	EEK 1 WEEK 2 WEEK 3 WEEK 4				WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY					0.57	2.86	0.57	1.14	0.43	0.14	0.43	0.29		0.49
# DAYS OBSERVED					3	6	4	4	3	1	2	2		25
# PROCESSED					1	6-0-1	1	5	2	1	1			17-0-1
	FIRST OF	BSERVED:	August 30		LAST OF	BSERVED:	October 21		PEAK I	DATE: Septe	ember 10		NUMBER:	6

<u>Notes:</u> Observed weekly from early September to late October. Most abundant in early September, and then a second, smaller movement was recorded in late September.

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

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	4.29	1.43	1.29	0.29	0.43	1.29	1.57	1.29	1.57	1.43	0.71	0.86		1.66
# DAYS OBSERVED	7	5	4	2	2	5	6	4	5	5	2	5		52
# PROCESSED	4-0-6	3	0-0-3		0-0-1	1-0-2	4-0-1	2-0-1	1-0-2	7	3	3-0-1		28-0-17
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 23		PEAK I	DATE: 3 dat	es		NUMBER: 6	3

<u>Notes:</u> Present weekly until the last week of the season. Local residents common in August but tapered off by early September. Migrants peaked from late-September to early October. Banded 46% fewer individuals than during FMMP 2005.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	BER		
	WEEK 1	WEEK 2	WEEK 3	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	0.86	2.57	4.00	8.14	10.29	14.14	18.00	32.00	25.00	21.14	23.86	11.00	13.55
# DAYS OBSERVED	5	4	5	7	7	7	7	7	7	7	7	7	7	84
# PROCESSED	4	2	2	4-0-1	2-0-1	13-0-1	18-0-6	14-0-2	57-0-6	31-0-2	13-0-3	19-0-2	8	187-0-24
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK I	DATE: Octol	per 3		NUMBER: 4	5

Notes: Much less abundant than during FMMP 2005, though still one of the most abundant small passerines on site, peaking in late September and early October. One of only two species banded each week of the season, though 47% fewer individuals were banded compared to last year.

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

		AUC	GUST			SE	PTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	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	17.86	12.14	9.00	5.14		3.67
# DAYS OBSERVED								6	7	7	7	7		34
# PROCESSED								2	27-0-5	17-0-8	2-0-12	2-0-5		50-0-30
	FIRST OF	BSERVED:	September 2	20	LAST OF	BSERVED:	October 27		PEAK [DATE: Septe	ember 30		NUMBER: 4	15

<u>Notes:</u> Seen almost daily from late September through late-October. Much more abundant than last year, when only 20 individuals were banded. A proportionately large number of repeats, indicating that several birds lingered at MBO, including some individuals recaptured as long as 15-23 days after being banded.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	6.29	8.57	10.71	2.19
# DAYS OBSERVED									2	5	5	7	6	25
# PROCESSED									1	3	5	15-1-0	9-1-0	33-2-0
	FIRST OF	SERVED:	September 2	28	LAST O	BSERVED:	October 30		PEAK I	DATE: Octob	per 27		NUMBER: 2	5

<u>Notes:</u> First observed one month later than last year, becoming steadily more abundant as the season progressed. Much less abundant than during FMMP 2005, with 83% fewer individuals banded. This year migration continued well into November and was therefore not fully captured by the FMMP. The two returns were birds banded last winter, indicating these birds may migrate through the same area every year, or are wintering at MBO regularly.

BOBO: Bobolink / Goglu des prés (Dolichonyx orysivorus)

		AUC	GUST			SE	EPTEMBE	R			OCTO	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 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	8.71	15.29	11.57	8.57	2.43	0.57							3.64
# DAYS OBSERVED	1	6	6	6	6	4	1							30
# PROCESSED														0
	FIRST OF	BSERVED:	August 3		LAST OF	BSERVED:	September '	16	PEAK	DATE: Augu	ust 16, 23		NUMBER: 4	5

<u>Notes:</u> Considerably more abundant this year due to a large flock roosting and feeding in the corn field to the east. Seen almost daily for four weeks, tapering off by mid-September.

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

		AUC	GUST			SE	PTEMBE	R			OCTC	DBER		
	WEEK 1					WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	120.14	34.57	0.71	16.71	0.57	3.00	1.14	20.29	7.57	57.00	132.00	174.43	149.57	54.44
# DAYS OBSERVED	7	6	2	7	1	2	3	3	6	7	7	7	6	64
# PROCESSED	1											2		3
	FIRST OF	BSERVED:	August 1		LAST OF	BSERVED:	October 30		PEAK	DATE: Octob	per 20	Ν	UMBER: 43	0

<u>Notes:</u> August sightings were likely local birds. After these dispersed in mid-August, sightings remained low for most of September, then large flocks returned to the area late in the month and peaked in mid-October. The three birds marked the first time this species has been caught in fall at MBO.

RUBL: Rusty Blackbird / Quiscale rouilleux (Euphagus carolinus)

		AUG	GUST			SE	PTEMBE	R			OCTO)BER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY						1.57	1.86	30.29	11.00	5.00	4.71	4.86	1.43	4.67
# DAYS OBSERVED						1	2	4	5	6	5	4	3	30
# PROCESSED														0
	FIRST OF	BSERVED:	September 6	6	LAST O	BSERVED:	October 27		PEAK [DATE: Septe	ember 25	Ν	UMBER: 16	6

Notes: Small to moderate flocks seen from early September through the end of October, peaking in late September.

COGR: Common Grackle / Quiscale bronzé (Quiscalus quiscula)

		AUC	GUST			SE	EPTEMBE	R			OCTC	DBER		
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL
MEAN # BIRDS / DAY	12.71	10.14	9.57	48.57	205.00	111.0	65.86	83.57	9.29	21.57	3.00	6.71	9.71	45.9
# DAYS OBSERVED	7	7	6	6	7	7	6	6	5	7	4	5	3	76
# PROCESSED					2	33								35
	FIRST OF	BSERVED:	August 1		LAST O	BSERVED:	October 27		PEAK [DATE: Septe	mber 2	N	UMBER: 56	4

<u>Notes:</u> August sightings are thought to have mostly been local birds. From late August through late October, large flocks were observed almost daily, occasionally numbering roughly 550 birds, about half the size of the peak 2005 flock. These flocks either roosted in the tall cottonwoods along the B nets or were seen flying over the woods towards the Arboretum. On September 11, 21 birds were banded after part of the flock flew low through the B/N nets.

	AUGUST					SEPTEMBER					OCTOBER				
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	TOTAL	
MEAN # BIRDS / DAY				0.86	0.29			0.14	8.00	0.43	0.14	1.14	0.43	0.26	
# DAYS OBSERVED				2	1			1	2	2	1	2	1	12	
# PROCESSED														0	
	FIRST OBSERVED: August 24				LAST OF	LAST OBSERVED: October 24 P				PEAK DATE: September 28 NUMBER: 42				2	

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

<u>Notes:</u> Irregular sightings of individuals scattered throughout the season, with a distinct peak at the end of September.

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	9.71	16.14	10.71	9.29	3.29	0.86	0.14	0.14						3.87
# DAYS OBSERVED	7	7	7	7	5	4	1	1						39
# PROCESSED	14-0-2	25-0-4	18-0-6	4-0-2	1-0-3									62-0-17
	FIRST OBSERVED: August 1			LAST O	LAST OBSERVED: September 22 PE					PEAK DATE: August 17 NUMBER: 12				

<u>Notes:</u> Common throughout August, peaking mid-month, then tapering off rapidly and seen only once beyond mid-September. Twice as many individuals were banded than in FMMP 2005.

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	0.14						0.14		0.14					0.03
# DAYS OBSERVED	1						1		1					3
# PROCESSED							1		1					2
	FIRST OBSERVED: August 7			LAST OF	LAST OBSERVED: September 28 P					PEAK DATE: 3 dates NUMBER: 1				

Notes: Scarce throughout the season, with only two individuals banded and one other bird observed.

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											0.14			0.01
# DAYS OBSERVED											1			1
# PROCESSED														0
	FIRST OF	BSERVED:	October 10		LAST OF	LAST OBSERVED: October 10 PEA				PEAK DATE: October 10 NUMBER: 1				1

Notes: Observations limited to a single individual.

AMGO: American Goldfinch / Chardonerret 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	19.57	21.71	17.71	22.00	19.14	20.86	32.57	14.43	8.29	11.57	7.57	2.71	4.86	13.00
# DAYS OBSERVED	7	7	7	7	6	7	7	7	5	6	7	5	4	82
# PROCESSED	1 -1-1	2-2-0	3	7	3	3	14	1	2	4	2	1		43-3-1
	FIRST OBSERVED: August 1				LAST O	LAST OBSERVED: October 30 PE				PEAK DATE: September 13 NUMBER: 100				

Notes: Common to abundant throughout the season, with numbers peaking in mid-September and decreasing in October. However, not quite as numerous as in FMMP 2005, and the number banded dropped by almost half.

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	0.14			0.14		0.57	0.34			0.11
# DAYS OBSERVED				1	1			1		2	2			7
# PROCESSED											1			1
	FIRST OBSERVED: August 28			LAST OF	LAST OBSERVED: October 14 P				PEAK DATE: 4 dates NUMBER: 4					

<u>Notes:</u> Irregular sightings over the entire season despite them having bred on site.

Net location	Net number	Manufacturer	Length / mesh	Dates
A1	ST40	Spidertech	18 m / 30 mm	Aug 1 – Oct 30
A2		Avinet	12 m / 30 mm	Oct 13 – Oct 30
B2	ST1	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
N1	ST12	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
N3	ST14	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
B3	ST2	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
C1	ST20	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
C2	ST21	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
D1	ST41	Spidertech	18 m / 30 mm	Aug 1 – Oct 30
D2	ST22	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
D3	ST23	Spidertech	12 m / 30 mm	Aug 1 – Oct 30
E1	ST3	Spidertech	12 m / 30 mm	Aug 1 – Oct 29
E2	ST15	Spidertech	12 m / 30 mm	Oct 13 – Oct 30
G1	ST30	Spidertech	18 m / 30 mm	Aug 1 – Oct 13
G2	ST11	Spidertech	12 m / 30 mm	Aug 1 – Oct 13
H1	ST10	Spidertech	12 m / 30 mm	Aug 30 – Oct 30
H2	ST13	Spidertech	12 m / 30 mm	Sept 23 – Oct 30
K1		Spidertech	12 m / 30 mm	Aug 1 – Oct 13
K2	ST13	Spidertech	12 m / 30 mm	Aug 1 – Oct 13
L1	ST11	Spidertech	12 m / 30 mm	Aug 1 – Oct 13
L2	ST15	Spidertech	12 m / 30 mm	Aug 1 – Oct 13

Appendix B. Net allocation for FMMP 2006