



McGill Bird Observatory
Fall Migration Monitoring Program
2007 Report

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November 2007



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Front photo: A hatch-year male Sharp-shinned Hawk, one of the five individuals banded this season at the McGill Bird Observatory, a record for the species (photo by Marie-Anne Hudson).

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, a requirement of the CMMN. The CMMN defines 'adequate' coverage as follows: (1) a minimum annual coverage of at least 75% of the days in the species' spring or fall migratory period (the span of dates within which the middle 95% of individuals occur); (2) an average of at least 10 individuals of a species recorded per season on an average of at least five separate days per season; and (3) where the majority of individuals of that species that are detected each day are passage migrants (i.e. the species does not breed or winter in significant numbers at the site).

2007 season coverage

Nearly full coverage of the FMMP 2007 was obtained, with no days missed entirely (i.e. census was conducted on all 91 days). On five days, only census was conducted due to steady rain making it unsafe to open the nets. All but one of these days were in the last three weeks of the season. An extra nine days had significantly shortened net hours (i.e. fewer than 35 net hours per day) due to rain or high winds. On 77 days (85% of the season), there was full coverage, including census, banding, and general observations.

Equipment

Mist nets (30 mm mesh) were used for all trapping. All nets were from Spidertech, and all except the B/N series were new at the start of the season, replacing older sun bleached nets. The standard setup for most of the season involved 15 nets in five groups. Most of these were the same as used in SMMP 2005 and 2006 (Gahbauer 2005a, Hudson and Gahbauer 2006), though both A1 and D1 were previously 18-m nets but were replaced with 12-m nets this season to increase ease of replacement and standardization. Three extra nets (A2, E2 and H2) were added during FMMP 2006, such that all net groups are now at least paired to minimize traveling time between net groups while increasing netting potential. Details of net allocations are summarized in Appendix B.

Weather

Weather can have a significant influence on migration. This fall was one of the warmest and sunniest in years. August and September respectively had 44.5 and 83 more hours of sunshine than average, making them the fifth sunniest August and most sunny September since 1969 (CRIACC 2007). Both months also had above average temperatures, and below average rainfall. The above seasonal temperatures continued through to the end of the season, with the third warmest October since 1969. We believe that the stable weather patterns discouraged southerly migration for the first half of the season, reducing catch rates by 6.2% compared with last year's fall season. When north winds finally began blowing and cold fronts came through, some birds may have opted to fly right over MBO without stopping over as they have in other years, while the continuing mild weather may have encouraged them to continue migrating rather than lingering. The warm, sunny weather also reduced the water level in the ponds to mere inches in some areas, reducing the site's attractiveness to birds. This contrasts with 2006, when high water levels were sustained throughout the season. In early October, a few days of heavy rain restored the water levels to those seen following the spring melt.

Results

Banding

During FMMP 2007, 2876 birds of 77 species were banded. The species total was similar to the 75 banded in 2006 and 78 in 2005, but the number of individuals was lower than the 3268 in 2006 and 3226 in 2005 (Figure 1). With 1384 more net hours this fall than last year, the lower number of new birds banded cannot be ascribed to reduced effort. While numbers differed between years for many species, the drop of Yellow-rumped Warblers from 522 in 2006 to 68 in 2007 alone more than accounts for the difference in season totals.

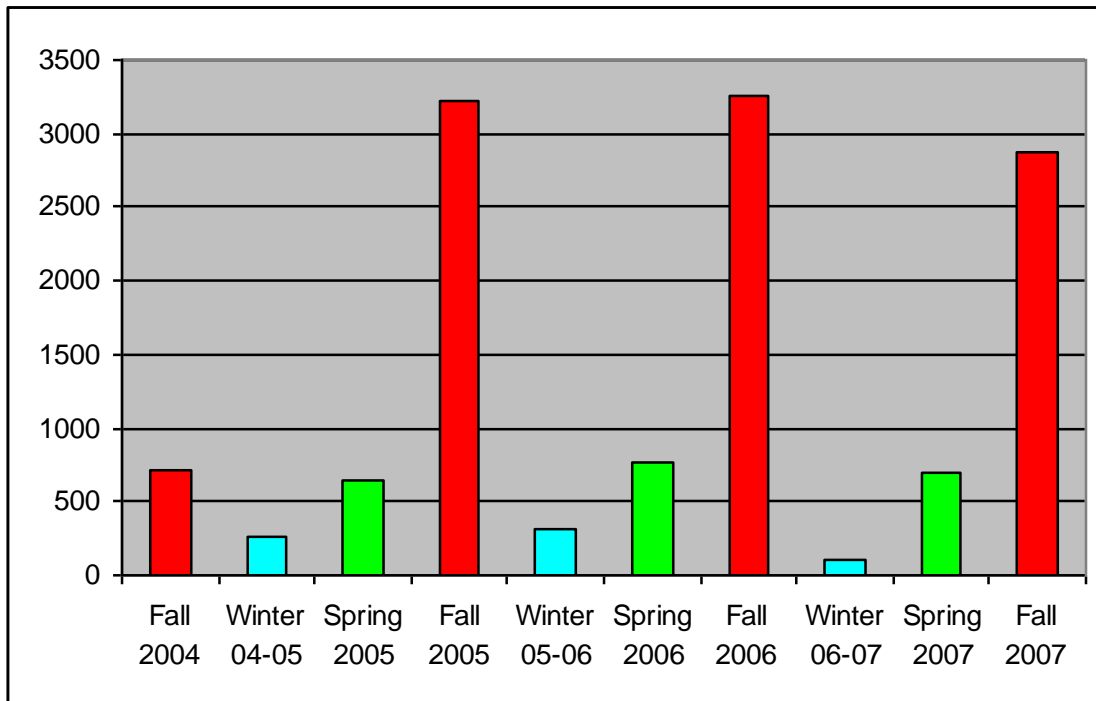


Figure 1. A comparative overview of the total number of new birds banded by year and season. These numbers have not been corrected for number of net hours per season. Spring 2004 was a partial pilot season and was omitted from this graph; Fall 2004 was also a pilot season with limited coverage.

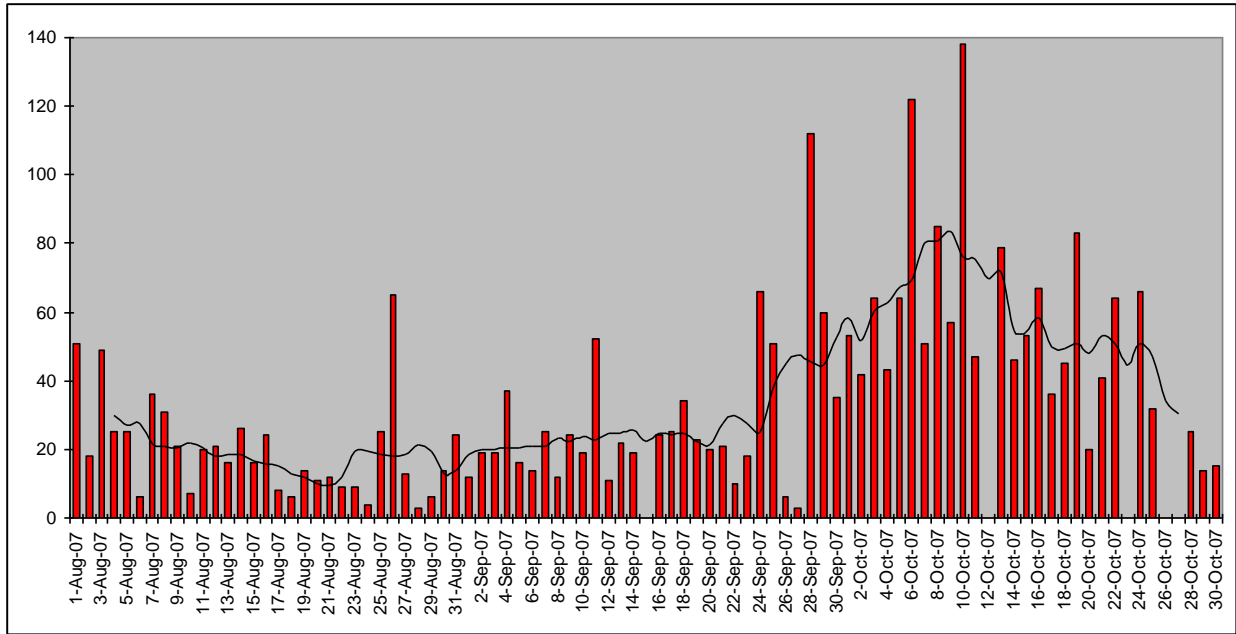


Figure 2. Number of individuals banded per day during the 2007 fall season at MBO, with a running seven-day average in black.

On three occasions, all between September 28 and October 10, over 100 birds were banded in a single day. The busiest day was October 10, with 138 birds banded (Figure 2). 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 86 days of banding was 33.4 birds per day, a decrease from both 2006's average of 39.8 and 2005's average of 48.8 birds per day.

Species richness among banded birds showed no distinct peak, though was highest at the end of September (Figure 3), a distinct shift from last year's pattern which showed a peak from mid-August to late September). The greatest variety banded in a single day was 24 species on September 25th. Overall there were five days on which 20 or more species banded. The mean number of species banded per day was 11.7, comparable to 11.8 in 2006, and down from 15.9 in 2005.

Among the species banded were a surprising five which had not been previously captured at MBO: August's Marsh Wren, Wood Thrush, and Cooper's Hawk (within two days of each other); September's Golden-winged Warbler; and October's Eastern Bluebird. New species observed for the first time at MBO during the fall 2007 season were Least Sandpiper, Common Moorhen, Clay-colored Sparrow, Barred Owl, and White-winged Crossbill. The only species this season captured as a return for the first time was Warbling Vireo.

Thirteen species were banded only once: Cooper's Hawk, Black-billed Cuckoo, Yellow-shafted Flicker, Yellow-bellied Sapsucker, Yellow-bellied Flycatcher, Great Crested Flycatcher, Philadelphia Vireo, Marsh Wren, Wood Thrush, Golden-winged Warbler, Northern Parula, Yellow Palm Warbler, and Common Grackle. Banding only one Common Grackle was especially surprising considering we banded 35 last fall and 7 in 2005. Seven species this season were detected only through banding, as none were recorded on census or during general observations: Marsh Wren, Wood Thrush, Golden-winged Warbler, Bay-breasted Warbler, Cape May Warbler, Mourning Warbler, and Savannah Sparrow.

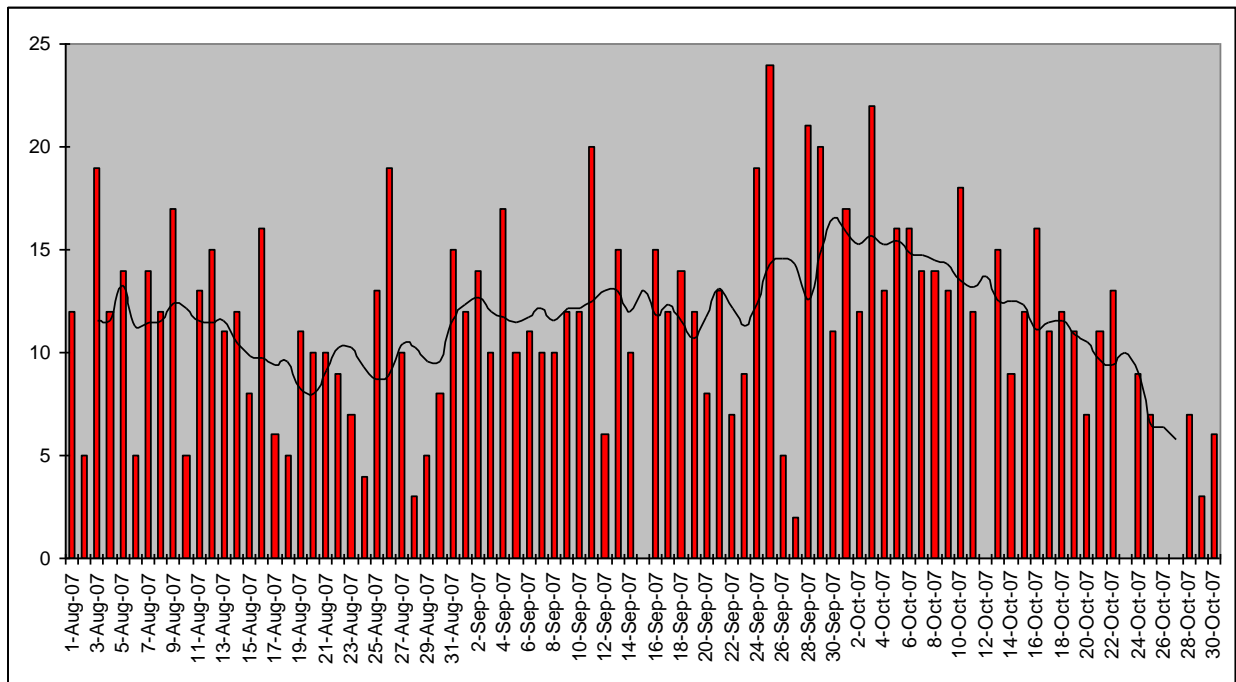


Figure 3. Number of species banded per day during the 2007 fall season at MBO, with a running seven-day average in black.

At the other extreme, Table 1 lists the 10 most frequently banded species. Five of these were also in the top ten in 2006, and seven of them were in the top ten in 2005 and 2004, indicating a fair bit of consistency between years, despite the fact that monitoring began later in the season in 2004. Interestingly, 2007 appears closer to 2005 in terms of species composition, than to 2006. The relative scarcity of Myrtle Warblers this year was surprising considering their top spot last year with 522 individuals banded. Continued monitoring will help address whether this is a real flux in the population or simply variation in migratory strategy, possibly related to weather patterns.

The number of Ruby-crowned Kinglets banded decreased slightly from previous years (note: a large number of RCKIs were left unbanded during a major influx due to a shortage of OA bands, making the number of RCKIs reported during FMMP 2005 biased downwards), but were still abundant enough to take the top spot. American Robin numbers increased slightly with improved coverage during their peak migratory activity in October. Over the past two years, rain caused major interference with October banding, reducing the number of robins banded. There were 70% more White-throated Sparrows than in 2006, but still fewer than in 2005; Song Sparrows showed an opposite pattern, with 35% fewer than in 2006. Black-capped Chickadees migrated in large numbers this year, much like in 2005, possibly indicating a two-year cycle at MBO. Among this year's top ten, Slate-colored Junco and American Goldfinch followed the same pattern, as did American Redstart to a lesser extent. The Eastern White-crowned Sparrow's numbers have increased every year, suggesting the possibility of population growth. Magnolia Warbler rounded out the top 10 for 2007, with drastically lower numbers than during the previous two years of standardized fall coverage. This may be due to an initial delay in migration related to above seasonal temperatures, leading to the sling-shot effect of the birds flying over the site without stopping over to refuel.

Table 1. Top 10 species banded at MBO during FMMP 2007, as well as numbers banded in previous years. Numbers in parentheses indicate past rank within the top 10; dashes represent species not in the top 10 in those years.

Species	# banded			
	2007	2006	2005	2004
1. Ruby-crowned Kinglet	375	435 (2)	245 (2)	89 (3)
2. American Robin	318	299 (4)	119 (9)	145 (1)
3. White-throated Sparrow	318	187 (5)	354 (1)	85 (4)
4. Song Sparrow	198	302 (3)	212 (4)	95 (2)
5. Black-capped Chickadee	172	27 (-)	224 (3)	47 (6)
6. Slate-colored Junco	127	33 (-)	191 (6)	56 (5)
7. American Goldfinch	94	43 (-)	82 (-)	18 (9)
8. Eastern White-crowned Sparrow	80	50 (-)	20 (-)	6 (-)
9. American Redstart	77	48 (-)	66 (-)	0 (-)
10. Magnolia Warbler	74	157 (6)	192 (5)	2 (-)

After three years of standardized monitoring, a few potential patterns can be picked out. While these all require additional years of monitoring before trends can be statistically analyzed, especially for species present in low numbers, we note below examples of several patterns that bear monitoring in the future.

Twelve species show remarkably consistency in their numbers (the numbers banded in 2005, 2006 and 2007 follow each species): Sharp-shinned Hawk (3-4-2-5), Yellow-shafted Flicker (1-1-1), Blue-headed Vireo (20-15-18), Warbling Vireo (3-5-5), Hermit Thrush (22-37-36), Yellow Warbler (39-43-43), Chestnut-sided Warbler (16-13-12), Blackpoll Warbler (11-17-14), Mourning Warbler (10-6-9), Scarlet Tanager (4-5-3), American Tree Sparrow (25-29-34), and Northern Cardinal (9-7-7).

Fourteen species have been consistently declining over the past three years: Eastern Wood-pewee (4-1-0), Great Crested Flycatcher (6-1-1), Philadelphia Vireo (11-5-1), Blue Jay (26-16-8), Veery (12-6-3), Gray Catbird (58-41-39), Nashville Warbler (164-98-50), Northern Parula (10-2-1), Magnolia Warbler (192-157-74), Black-throated Green Warbler (24-19-3), Bay-breasted Warbler (5-3-2), Black-and-white Warbler (22-18-9), Canada Warbler (15-13-9), and Indigo Bunting (39-19-13). The Blue Jay is an example of a species for which the number of birds banded is not representative of the number of individuals on site. Despite flocks numbering upwards of 50 individuals, they kept mainly to the tree tops and rarely were down at net level; this is true for most blackbird species in fall too. Nashville Warbler, Magnolia Warbler, Black-throated Green Warbler, and Indigo Bunting, and to a lesser extent Philadelphia Vireo, Veery, Northern Parula, and Canada Warbler are species that peak in August. It is likely that the stable weather patterns and sun throughout August had some effect on the migratory strategy or alternatively the catch rate of these species. The question remaining is why 2005 was so much higher for some of these species, and if those levels truly represent the norm for these species. Continued monitoring will help address this question.

Seven species have consistently been increasing over the past three years: Downy Woodpecker (8-14-19), Traill's Flycatcher (12-18-22), Least Flycatcher (8-11-14), House Wren (14-16-36), American Robin (119-299-318), Lincoln's Sparrow (11-17-20), and White-crowned Sparrow (20-50-80). The increase in the number of American Robins banded is likely due to better October weather. The most dramatic increase, that of the White-crowned Sparrow, is unexplained at present. It is interesting that the two Empidonax flycatchers have gone steadily

up despite being mostly August migrants (comparing to the warblers above), and also in contrast to the Yellow-bellied Flycatcher that plummeted this year. Weather patterns, changes in the breeding grounds, or changes in migratory pathways may explain these increases, or they may just be artifacts of relatively small sample sizes and short-term monitoring to date.

A rather interesting pattern, that of the two-year cycle, was also noticed in several species. Those peaking in 2005/2007 include: Eastern Phoebe (6-2-6), Red-eyed Vireo (117-42-62), Black-capped Chickadee (222-27-172), Grey-cheeked Thrush (11-3-6), Swainson's Thrush (36-7-15), Cape May Warbler (3-0-3), Black-throated Blue Warbler (34-14-22), Palm Warbler (59-9-30), American Redstart (66-48-77), Chipping Sparrow (21-5-12), Fox Sparrow (26-5-26), Swamp Sparrow (52-28-62), White-throated Sparrow (354-187-318), Slate-coloured Junco (191-33-127), and American Goldfinch (82-43-94). The two-year chickadee cycle is well known in the east (Smith 1993), and captures at MBO help support its occurrence in the region. It is interesting to note that as many as five sparrow species may cycle together. Fox Sparrow, White-throated Sparrow and Slate-colored Junco all breed in the boreal, so whatever affects one positively or negatively may have a similar consequence for the rest. Though Chipping Sparrow is more limited to the lower boreal, it can perhaps be lumped in as well. Swamp Sparrows, far from being boreal breeders, may simply be a coincidence.

A two-year cycle was also noticed for species with peaks in 2006, and lows in 2005 and 2007. These include: Winter Wren (6-10-4), Golden-crowned Kinglet (54-73-22), Ruby-crowned Kinglet (245-435-376), Brown Thrasher (2-7-3), Myrtle Warbler (157-522-68), Blackburnian Warbler (0-8-0), Northern Waterthrush (17-39-16), Song Sparrow (215-302-198), Common Grackle (7-35-1), Baltimore Oriole (31-62-18), and Rose-breasted Grosbeak (30-45-31). Many of these are not quite as dramatic as the potential cycles that peaked this year, but Baltimore Oriole, Song Sparrow, Northern Waterthrush and especially Myrtle Warbler all have a distinct up-and-down pattern so far. The kinglets probably only appear on this list by virtue of not having been able to band the influx in 2005 - if those extra birds were included, the kinglets would likely be on the steadily declining list.

Inexplicably, four species showed a sudden drop this year after fairly consistent numbers in 2005 and 2006: Yellow-bellied Flycatcher (10-11-1), Tennessee Warbler (46-57-18), Ovenbird (34-46-13), and Common Yellowthroat (76-77-51). It is possible that the August weather again influenced these species, but we will be sure to watch these species carefully over the coming seasons.

Sudden increases were also noted this year: Hairy Woodpecker (3-1-8), Orange-crowned Warbler (7-7-12), Wilson's Warbler (27-29-41), and Purple Finch (3-0-11). The nomadic nature of the Purple Finch likely explains this sudden influx, and the warblers are within reasonable variation. Again, some of these changes are based on rather low catch rates, and so may not represent decreases in the population but rather deviations in migratory pathways or strategies. Continued fall monitoring will help address all of these questions, and will help clarify potential patterns.

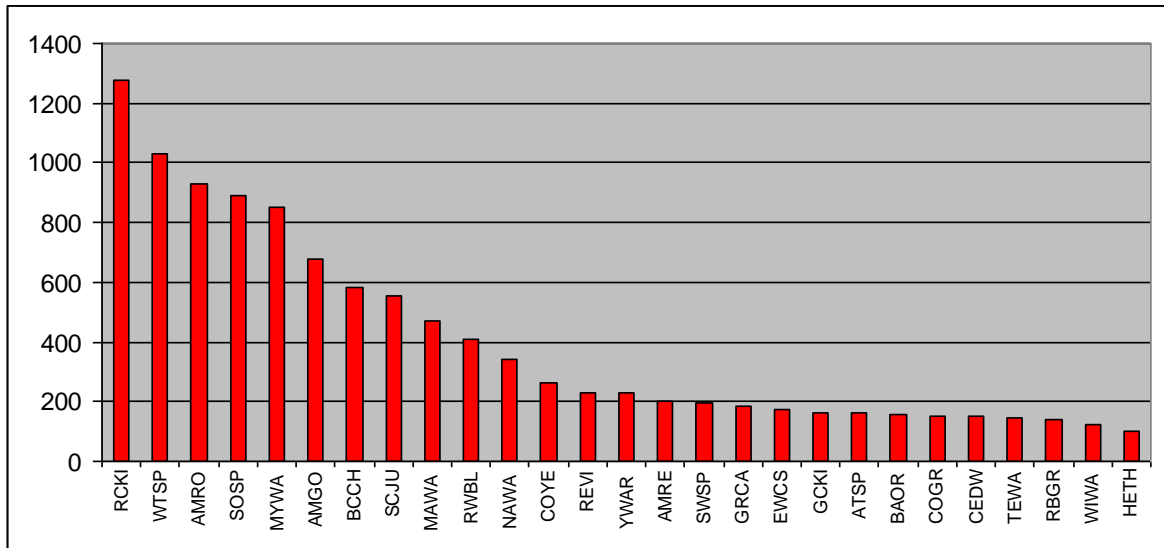


Figure 4. Cumulative total number of individuals of the 27 species banded since MBO's inception in 2004 for which at least 100 individuals have been banded.

Overall, as of the end of the 2007 fall season, 27 species are now in the triple digits banded; over half of those are at 200 or more; and over half of *those* at 500 or more (Figures 4 and 5). The table, largely unchanged from last fall, is fairly stable with the exception of the Yellow-rumped Warbler (MYWA). With their low numbers this fall, they have slipped behind White-throated Sparrow, American Robin and Song Sparrow (which also decreased, allowing the American Robin to overtake its position). Golden-crowned Kinglet also slipped five spots due to a large decrease this fall. New to the table are Wilson's Warbler and Hermit Thrush.

The position of certain species within the table is more likely to change than others, since some species are only caught (or at least mostly caught) in either spring or fall. For example, Red-winged Blackbirds and Tree Swallows are almost exclusively caught in spring.

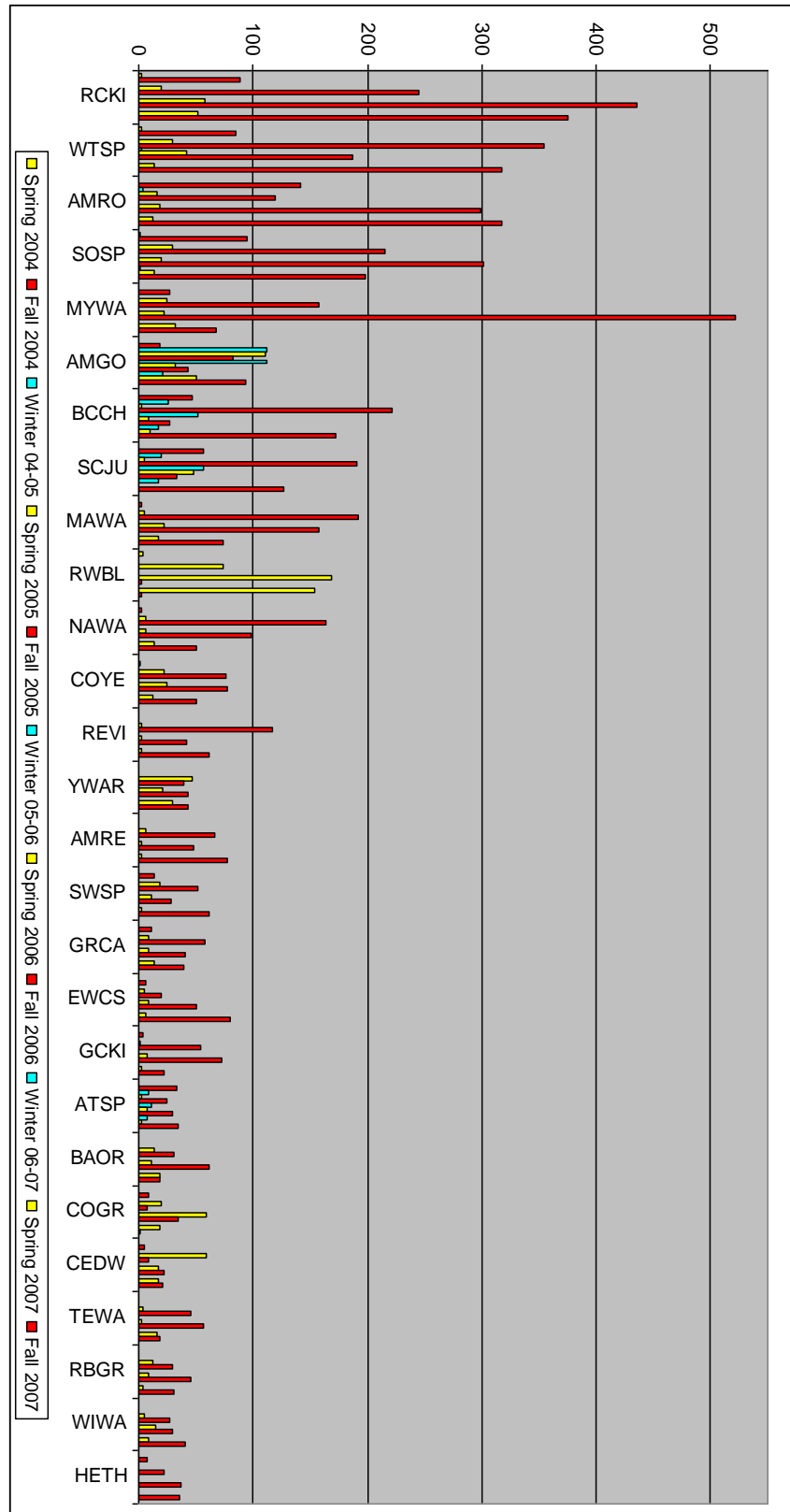


Figure 5. Number of individuals of the top 27 species banded at MBO since its inception broken down by season and year.

Recoveries

There were 562 repeats (individuals caught within three months of banding at MBO) of 43 species this season. These can be subdivided into local residents caught repeatedly, and migrants caught twice or more during their stopover at MBO. This is a large increase from the 412 repeats of last fall, and might be because birds banded last spring (local breeders) may have stuck around longer than they did last fall due to the aforementioned stable weather patterns. Among the residents, Black-capped Chickadees were recaptured most frequently (Table 2). However, the top 10 species recaptured the most often this fall were largely sparrows, representing almost half of all top 10 recaptures. The rest are a mix of true migrants (i.e. those not breeding on site such as the Hermit Thrush), and migrants plus local breeders (e.g. House Wrens). If we take into consideration the fact that only 36 Hermit Thrushes were banded this fall within a six-week period, 17 recaptures of 12 individuals seems quite high, indicating that Hermit Thrushes are using MBO as an important stopover site, and are anything but net shy.

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

Species	# repeats
1. Black-capped Chickadee	96
2. Song Sparrow	87
3. White-throated Sparrow	70
4. Swamp Sparrow	33
5. Gray Catbird	31
6. Ruby-crowned Kinglet	27
7. Common Yellowthroat	22
8. Eastern White-crowned Sparrow	21
9. House Wren	21
10. Hermit Thrush	17

The majority of migrants recorded as repeats were recaptured within a few days of being banded. However, some individuals stayed at MBO for longer, over eight weeks in one case (Table 3). Unlike during FMMP 2005 and FMMP 2006, the sparrows lingered longer than most species. The decline in the number of Tennessee and Nashville Warblers banded is also reflected in the smaller number of recaptures, though two Nashville Warblers remained on site for at least 49 and 39 days.

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. Probable residents such as Northern Cardinals, Black-capped Chickadees, and woodpeckers were excluded. All were hatch-year birds except the three designated with an asterisk.

Species	First capture - last capture (time elapsed)	Species	First capture - last capture (time elapsed)
Swamp Sparrow	Aug 9 – Oct 11 (62 days)	White-throated Sparrow	Aug 13 – Oct 10 (58 days)
Song Sparrow	Aug 8 – Oct 4 (57 days)	Song Sparrow	Aug 1 – Sept 24 (54 days)
Song Sparrow	Aug 2 – Sept 25 (54 days)	Song Sparrow	Aug 25 – Oct 18 (54 days)
Nashville Warbler	Aug 4 – Sept 22 (49 days)	Song Sparrow	Aug 2 – Sept 18 (47 days)
Swamp Sparrow	Aug 2 – Sept 17 (46 days)	Song Sparrow	Aug 4 – Sept 18 (45 days)
Song Sparrow	Aug 8 – Sept 20 (43 days)	Song Sparrow	Aug 3 – Sept 13 (41 days)
Swamp Sparrow	Aug 21 – Oct 1 (40 days)	Nashville Warbler	Aug 3 – Sept 11 (39 days)
Gray Catbird	Aug 20 – Sept 28 (39 days)	Song Sparrow	Sept 13 – Oct 21 (39 days)
Gray Catbird	Aug 11 – Sept 16 (36 days)	Song Sparrow	Aug 16 – Sept 21 (36 days)
Song Sparrow	Sept 24 – Oct 30 (36 days)	Song Sparrow	Aug 2 – Sept 6 (35 days)

Common Yellowthroat	Aug 1 – Sept 4 (34 days)	Swamp Sparrow	Aug 3 – Sept 6 (34 days)
House Wren	Aug 3 – Sept 5 (33 days)	Brown Thrasher	Aug 16 – Sept 18 (33 days)
White-throated Sparrow	Aug 3 – Sept 4 (32 days)	House Wren	Aug 27 – Sept 28 (32 days)
Gray Catbird	Aug 1 – Aug 31 (30 days)	Gray Catbird*	Aug 14 – Sept 13 (30 days)
Nashville Warbler	Aug 19 – Sept 18 (30 days)	Blue-headed Vireo*	Aug 30 – Sept 29 (30 days)
White-throated Sparrow	Sept 14 – Oct 11 (27 days)	House Wren	Aug 31 – Sept 25 (25 days)
House Wren	Aug 25 – Sept 18 (24 days)	Song Sparrow	Aug 1 – Aug 22 (21 days)
Black-and-white Warbler	Aug 3 – Aug 24 (21 days)	Song Sparrow	Aug 5 – Aug 26 (21 days)
Nashville Warbler	Aug 11 – Sept 1 (21 days)	House Wren	Aug 21 – Sept 11 (21 days)
Song Sparrow	Aug 6 – Aug 26 (20 days)	White-throated Sparrow	Sept 10 – Sept 30 (20 days)
Hermit Thrush	Sept 29 – Oct 19 (20 days)	Song Sparrow	Aug 26 – Sept 14 (19 days)
Song Sparrow	Aug 14 – Sept 1 (18 days)	White-throated Sparrow	Sept 28 – Oct 16 (18 days)
Magnolia Warbler	Aug 3 – Aug 20 (17 days)	House Wren	Aug 3 – Aug 20 (17 days)
Gray Catbird	Aug 18 – Sept 4 (17 days)	House Wren	Sept 4 – Sept 21 (17 days)
Swamp Sparrow	Sept 24 – Oct 11 (17 days)	Song Sparrow	Aug 4 – Aug 20 (16 days)
Common Yellowthroat	Aug 3 – Aug 19 (16 days)	Common Yellowthroat	Aug 5 – Aug 21 (16 days)
Common Yellowthroat	Aug 9 – Aug 25 (16 days)	House Wren	Aug 22 – Sept 7 (16 days)
Common Yellowthroat	Aug 24 – Sept 9 (16 days)	Hermit Thrush	Sept 28 – Oct 14 (16 days)
White-throated Sparrow	Sept 28 – Oct 14 (16 days)	White-throated Sparrow	Sept 29 – Oct 15 (16 days)
White-throated Sparrow	Sept 9 – Sept 24 (15 days)	White-throated Sparrow	Sept 14 – Sept 29 (15 days)
White-throated Sparrow	Sept 16 – Oct 1 (15 days)	White-throated Sparrow	Sept 16 – Sept 30 (14 days)
Song Sparrow	Sept 19 – Oct 3 (14 days)	White-throated Sparrow	Oct 1 – Oct 15 (14 days)
Swamp Sparrow	Oct 4 – Oct 18 (14 days)	Nashville Warbler	Aug 3 – Aug 16 (13 days)
House Wren	Aug 3 – Aug 16 (13 days)	House Wren	Aug 26 – Sept 8 (13 days)
White-throated Sparrow	Sept 18 – Oct 1 (13 days)	Swamp Sparrow	Aug 22 – Sept 3 (12 days)
Common Yellowthroat	Sept 6 – Sept 18 (12 days)	Gray Catbird	Sept 12 – Sept 24 (12 days)
White-throated Sparrow	Sept 18 – Sept 30 (12 days)	Yellow-rumped Warbler	Oct 1 – Oct 13 (12 days)
White-crowned Sparrow	Oct 1 – Oct 13 (12 days)	Slate-colored Junco	Oct 6 – Oct 18 (12 days)
House Wren	Aug 26 – Sept 6 (11 days)	White-throated Sparrow	Sept 5 – Sept 16 (11 days)
White-throated Sparrow	Sept 9 – Sept 20 (11 days)	Magnolia Warbler	Sept 13 – Sept 24 (11 days)
White-throated Sparrow	Sept 19 – Sept 30 (11 days)	White-throated Sparrow	Sept 20 – Oct 1 (11 days)
White-throated Sparrow	Sept 29 – Oct 10 (11 days)	Ruby-crowned Kinglet	Oct 13 – Oct 24 (11 days)
Nashville Warbler	Aug 1 – Aug 11 (10 days)	Common Yellowthroat	Aug 9 – Aug 19 (10 days)
House Wren	Aug 31 – Sept 10 (10 days)	White-throated Sparrow	Sept 18 – Sept 28 (10 days)
White-throated Sparrow	Sept 24 – Oct 4 (10 days)	Swamp Sparrow	Sept 27 – Oct 8 (10 days)
White-throated Sparrow	Oct 4 – Oct 14 (10 days)	American Tree Sparrow	Oct 18 – Oct 28 (10 days)
Fox Sparrow	Oct 19 – Oct 29 (10 days)	Gray Catbird	Aug 1 – Aug 10 (9 days)
Song Sparrow	Aug 3 – Aug 12 (9 days)	White-throated Sparrow	Aug 8 – Aug 17 (9 days)
Red-eyed Vireo*	Aug 25 – Sept 3 (9 days)	Nashville Warbler	Aug 30 – Sept 8 (9 days)
Gray Catbird	Aug 31 – Sept 9 (9 days)	White-throated Sparrow	Sept 11 – Sept 20 (9 days)
White-throated Sparrow	Sept 10 – Sept 19 (9 days)	Western Palm Warbler	Sept 24 – Oct 3 (9 days)
White-crowned Sparrow	Oct 4 – Oct 13 (9 days)	White-throated Sparrow	Oct 5 – Oct 14 (9 days)
American Tree Sparrow	Oct 13 – Oct 22 (9 days)	American Tree Sparrow	Oct 19 – Oct 28 (9 days)
Rose-breasted Grosbeak	Aug 7 – Aug 15 (8 days)	Gray Catbird	Aug 11 – Aug 19 (8 days)
Red-eyed Vireo	Aug 26 – Sept 3 (8 days)	White-throated Sparrow	Sept 9 – Sept 17 (8 days)
White-throated Sparrow	Sept 9 – Sept 17 (8 days)	White-throated Sparrow	Sept 23 – Oct 1 (8 days)
Gray Catbird	Sept 24 – Oct 2 (8 days)	Indigo Bunting	Sept 17 – Sept 25 (8 days)
American Redstart	Sept 20 – Sept 28 (8 days)	Lincoln's Sparrow	Sept 24 – Oct 3 (8 days)
American Tree Sparrow	Oct 16 – Oct 24 (8 days)		

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

There were 46 returns (individuals not captured since more than three months) of 12 species (Table 4). The higher number of returns for this year compared with last year (33 returns of nine species) is likely due to the increased number of birds banded as additional years pass. The majority of returns were Black-capped Chickadees (12) and Song Sparrows (12), much like during FMMPs 2005 and 2006. Just under 37% of records were of birds banded or recaptured during SMMP 2007, which almost certainly remained at MBO throughout the summer, though 58.7% of returns were individuals that had not been seen since before this winter. Several of these were species with resident populations (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 12 Song Sparrows, the five Common Yellowthroat, the Red-eyed Vireo, the two Warbling Vireo, the Yellow Warbler, the two Baltimore Oriole, the two Veery, and the Gray Catbird almost certainly departed during winter, returning to breed at or near MBO, or using it as a stop-over site during migration.

The only foreign recovery reported this fall was actually from FMMP 2006: a Yellow-rumped Warbler banded September 30th 2006 was recaptured 17 days later in Chestertown, Maryland, USA. The banding office had to wait until all banding data were submitted before processing the request, accounting for the delay in results.

Table 4. List of returns captured during FMMP 2007, sorted by time elapsed.

Band number	Species	Age/Sex	Banding date	Last capture	Fall recovery date	Time elapsed
2430-42605	AMGO	AHY-F	May 21 2005	-	Sept 9	2 years, 3 months, 19 days
2231-00831	GRCA	AHY-U	Sept 9 2005	Sept 10 2005	Sept 22	2 years, 12 days
2241-30907	VEER	AHY-U	July 22 2005	Aug 3 2005	Aug 7	2 years, 4 days
2231-00801	BAOR	AHY-M	Aug 23 2005	-	Aug 23	2 years
2000-07588	REVI	AHY-U	Aug 8 2005	-	Aug 5	1 year, 11 months, 28 days
2241-31633	SOSP	AHY-U	Sept 1 2005	Sept 25 2005	Sept 7	1 year, 11 months, 13 days
2241-30911	VEER	AHY-U	July 30 2005	Aug 27 2005	Aug 8	1 year, 11 months, 12 days
2430-37204	COYE	AHY-F	Aug 17 2006	-	Aug 5	1 year, 11 months, 9 days
1891-89789	NOCA	AHY-F	Aug 12 2005	Oct 30 2005	Sept 21	1 year, 10 months, 22 days
2400-71122	BCCH	AHY-U	March 5 2005	March 11 2006	Oct 28	1 year, 7 months, 17 days
1541-17949	SOSP	AHY-M	Oct 4 2004	May 10 2006	Aug 1	1 year, 2 months, 22 days
2231-00897	NOCA	AHY-F	April 12 2006	Aug 7 2006	Sept 6	1 year, 30 days
1501-61121	SOSP	AHY-U	April 18 2005	July 24 2006	Aug 6	1 year, 13 days
2241-39557	SOSP	AHY-U	Aug 8 2006	-	Aug 15	1 year, 7 days
2510-81327	WAVI	AHY-U	Aug 25 2006	-	Aug 26	1 year, 1 day
2241-39562	SOSP	AHY-F	Aug 8 2006	-	Aug 9	1 year, 1 day
2430-37203	COYE	AHY-F	Aug 13 2006	-	Aug 8	11 months, 26 days
1951-51439	BAOR	AHY-F	Aug 10 2006	Aug 13 2006	Aug 1	11 months, 19 days
1840-76942	COYE	AHY-M	Aug 10 2005	Aug 28 2006	Aug 2	11 months, 5 days
2160-65344	BCCH	AHY-U	Sept 23 2004	Oct 27 2006	Sept 21	10 months, 25 days
1231-80243	SOSP	AHY-F	Sept 22 2004	Sept 18 2006	Aug 1	10 months, 14 days
2460-40048	BCCH	AHY-U	Aug 21 2006	Oct 4 2006	Aug 16	10 months, 12 days
2261-16165	SOSP	AHY-U	Sept 20 2006	Sept 30 2006	Aug 10	10 months, 11 days
2160-65338	BCCH	AHY-U	Sept 22 2004	Oct 26 2006	Sept 5	10 months, 10 days
2160-65371	BCCH	AHY-U	Oct 3 2004	Dec 14 2006	Oct 18	10 months, 4 days
2460-40364	COYE	AHY-M	May 25 2006	Sept 18 2006	Aug 5	9 months, 18 days
2460-40046	BCCH	AHY-U	Aug 13 2006	Nov 26 2006	Aug 7	8 months, 12 days

2510-81013	AMGO	AHY-M	Jan 3 2007	-	Sept 3	8 months
2510-81009	AMGO	AHY-F	Jan 3 2007	-	Sept 1	7 months, 29 days
2460-40078	BCCH	AHY-U	March 4 2007	-	Aug 16	5 months, 12 days
1951-76605	NOCA	AHY-M	Aug 29 2006	May 20 2007	Oct 14	4 months, 25 days
2261-16008	SOSP	AHY-U	Aug 13 2006	May 13 2007	Oct 5	4 months, 23 days
2160-65355	BCCH	AHY-U	Sept 30 2004	April 24 2007	Sept 3	4 months, 10 days
2460-40038	BCCH	AHY-U	Aug 1 2006	April 20 2007	Aug 17	3 months, 28 days
2160-65356	BCCH	AHY-U	Sept 30 2004	May 20 2007	Sept 14	3 months, 25 days
2460-40005	BCCH	AHY-U	Jan 12 2006	May 2 2007	Aug 27	3 months, 25 days
2231-00857	NOCA	AHY-F	Oct 4 2005	May 1 2007	Aug 23	3 months, 22 days
2261-16529	SOSP	AHY-F	April 22 2007	-	Aug 10	3 months, 19 days
2400-71037	YWAR	AHY-F	May 16 2005	May 11 2007	Aug 26	3 months, 15 days
2490-24732	WAVI	HY-U	May 18 2007	May 22 2007	Sept 6	3 months, 15 days
2241-39543	SOSP	AHY-F	Aug 4 2006	May 23 2007	Sept 7	3 months, 15 days
2400-71033	COYE	AHY-M	May 16 2005	May 30 2007	Sept 13	3 months, 14 days
2241-39525	SOSP	AHY-U	Aug 1 2006	May 26 2007	Sept 5	3 months, 10 days
2460-40086	BCCH	AHY-U	May 11 2007	-	Aug 17	3 months, 6 days
2241-39528	SOSP	AHY-U	Aug 1 2006	May 12 2007	Aug 16	3 months, 4 days
1603-09960	BLJA	AHY-U	May 9 2007	-	Aug 11	3 months, 2 days

Census

One or more experienced observers walked the standardized census route on all 91 days. Almost without exception, they recorded species not otherwise observed during the course of the morning, highlighting the importance of the census in monitoring the presence of migrants at MBO. The following eight species were in fact recorded exclusively on census: American Bittern, Common Moorhen, Virginia Rail, Sora, Least and Spotted Sandpipers, Field Sparrow, and Pine Grosbeak.

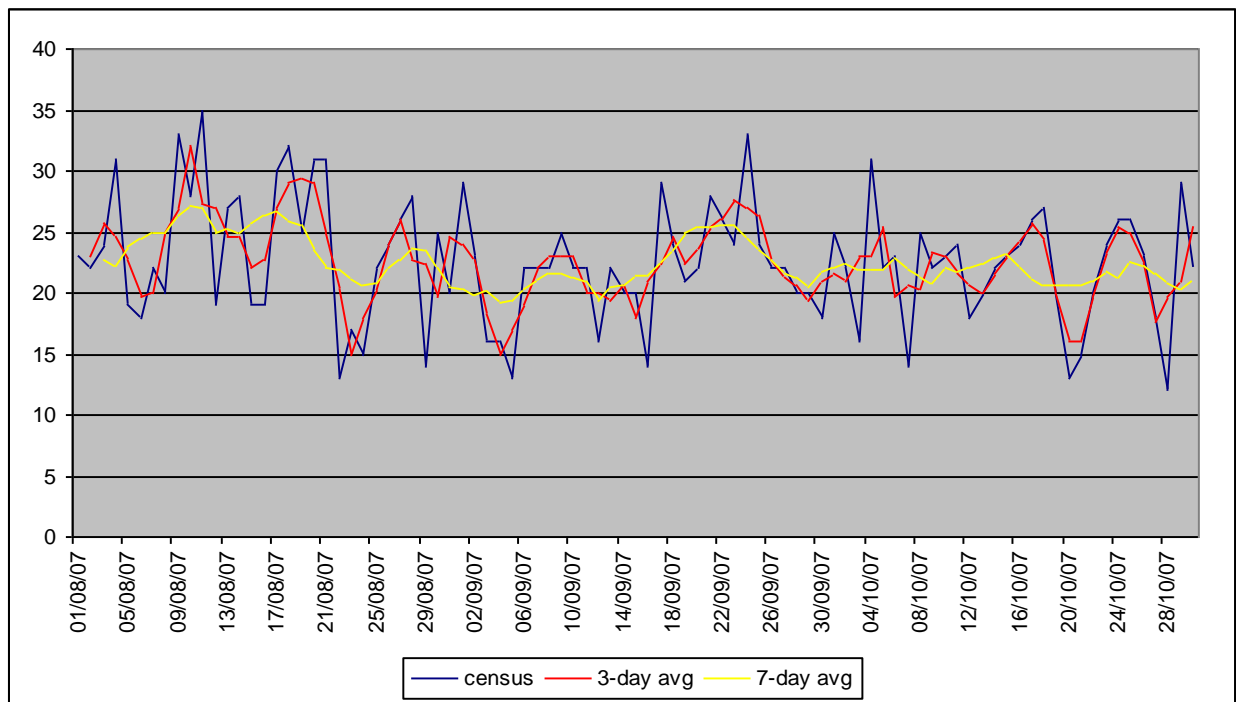


Figure 6. Number of species recorded on the daily census during the 2007 fall season at MBO, including a three-day and seven-day running average.

As shown in Figure 6, there was considerable daily variation in the number of species observed during the census, ranging from a low of 12 on October 28 to a high of 35 on August 11. This reflects not only actual changes in the bird population from day to day, but also variation due to weather, and among observers. To account for this, three-day and seven-day running averages were calculated and plotted. The seven-day running average remained between 20 and 25 species for most of the season, with the exception of two peaks, one in mid-August, and the other in late September.

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. Thirteen species (Common Loon, Double-crested Cormorant, American Green-winged Teal, Turkey Vulture, Osprey, Broad-winged Hawk, Cliff Swallow, Northern Rough-winged Swallow, Pine Warbler, Clay-colored Sparrow, Common Redpoll, Evening Grosbeak, and White-winged Crossbill) were only observed during these incidental observations this fall, reflecting their value to the DET.

During the season, 144 species were recorded, down from 151 during FMMP 2005, but up from 134 during FMMP 2006. Of these, 10 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 was 57 species (as in 2006), which occurred on both August 26 and September 1. The lowest daily total of 21 species was under rainy conditions on October 12; in 2006 the lowest was 18 on September 3 and in 2005 it was 11 on August 31. Figure 7 shows that there was considerable variation in daily estimated totals from day to day. A clearer pattern is shown by the seven-day running average, which peaked at 45 species in mid-August, and declined gradually beginning in early October. Though less pronounced, the seven-day average from the DET data mirrors the pattern seen in the seven-day average from the census data, with two peaks (mid-August and late September). Particularly notable for their absence this year were Snow Goose and Rough-legged Hawk.

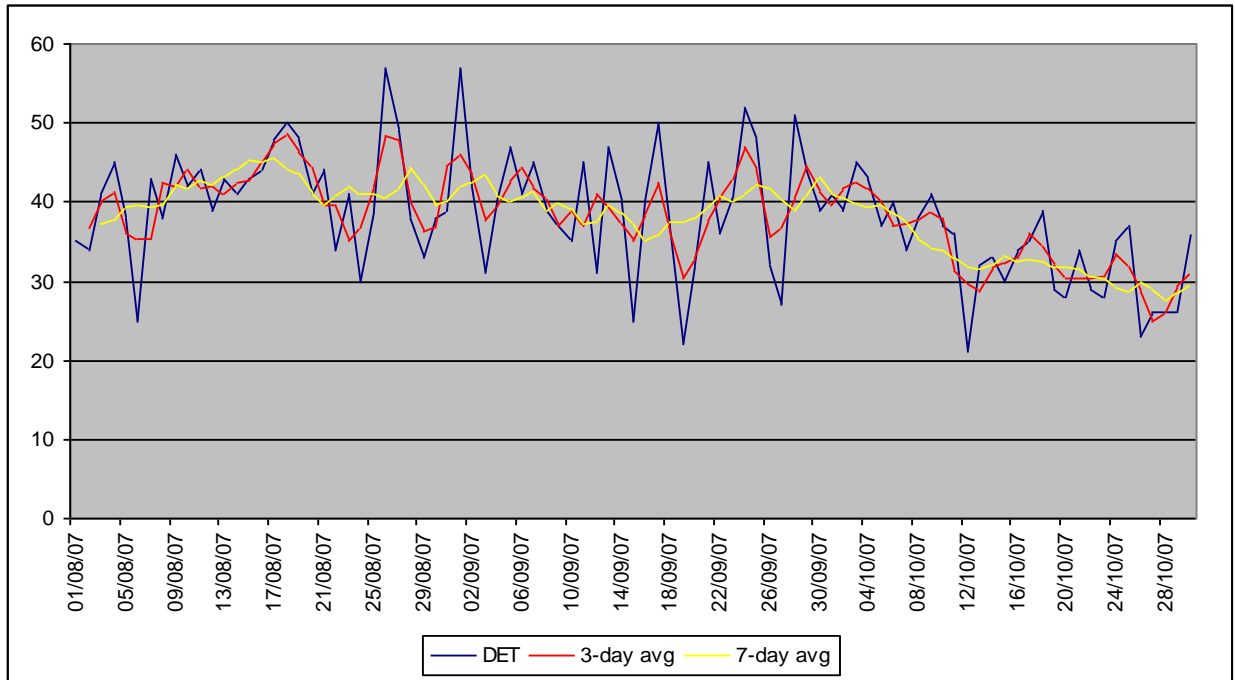


Figure 7. Daily estimated total number of species observed during the fall season at MBO, including a three-day and seven-day running average.

Owl banding

Owl banding was conducted on selected evenings from late September through late October during the 2004 and 2005 fall seasons. 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, we were fortunate to have Shawn Craik head up the owl program. From late September to early November, we owled on 11 nights and captured 15 owls (1.4 owls/night). Of 11 birds of known sex, nine were females. Fifty-three percent of all captures were hatch-year birds. In a year where some sites across North America captured over 200 owls on one night, a total of 15 owls throughout the owling season either indicates the marginal nature of MBO as a Northern Saw-whet Owl migration monitoring station, or that a different location should be tried (e.g. along the now-retired F line which is located between a cedar hedge and a cedar grove). Also of interest, Barred Owls were seen twice and Eastern Screech-owls were heard twice during the owling sessions, but unlike in previous years, Long-eared Owls were not detected.

Analysis

Migration patterns

Twenty-one species were present throughout all 13 weeks of the season, fewer than the 26 during FMMP 2006 but more than the 17 species during FMMP 2005. Nineteen of the species in 2007 were shared with 2006: Wood Duck, Cooper's Hawk, Mourning Dove, Downy Woodpecker, Hairy Woodpecker, Yellow-shafted Flicker, Pileated Woodpecker, Blue Jay, American Crow, Black-capped Chickadee, White-breasted Nuthatch, American Robin, Cedar Waxwing, Northern Cardinal, Song Sparrow, White-throated Sparrow, Red-winged Blackbird, Common Grackle, and American Goldfinch. Common Raven and Swamp Sparrow were added to the list in 2007, while Canada Goose, Sharp-shinned Hawk, Red-shouldered Hawk, Ring-billed Gull, Rock Pigeon, European Starling and Yellow-rumped Warbler dropped off the list, appearing only later in the season or disappearing earlier than in previous years. Of the species

seen on a weekly basis, only Black-capped Chickadee, Song Sparrow and Swamp Sparrow were banded at least once in each week.

The majority of species were observed during a more limited period of migration. Only nine species peaked in abundance during the first week of the season, several of which were local breeders with offspring dispersing thereafter (Chimney Swift, Eastern Kingbird, House Wren, Veery, Warbling Vireo, Yellow Warbler, Common Yellowthroat, Rose-breasted Grosbeak, and Baltimore Oriole). An incredible 19 species, up from last year's five species (Snow Goose, American Pipit, Northern Shrike, American Tree Sparrow, and Slate-colored Junco) peaked in the final week of the season, and seven of these were not observed prior to that week. This large increase in "late" species is likely due to delayed migration in response to stable weather patterns as discussed earlier, as well as the superflight of northern finches occurring this year. The cone and seed crops for many species are simultaneously at the lowest levels in years across much of the central and eastern boreal forest, forcing south many birds that would otherwise overwinter there. Among these are Pine Grosbeak, Common Redpoll, and Evening Grosbeak. Extending the season further could theoretically allow for the migration of these species to be better documented. This year, as additional non-standard banding was not possible due to time constraints, a weekly census was encouraged, allowing an extension of the season with a minimal amount of effort. It is therefore recommended that the current 13-week period from August 1 through October 30 be maintained for FMMP in future years, with non-standard weekly censuses maintained throughout the winter period.

For many species, sex cannot be reliably determined outside the breeding season, explaining the overall sex breakdown among banded birds of 23.4% male, 25.1% female, and 51.4% unknown. A 10% increase in the number of unknowns from last year is likely due to the shift in abundance to sparrows, which are largely monomorphic, from warblers, most of which are sexually dimorphic even in fall. As is to be expected during fall migration, hatch-year individuals dominated, accounting for 77.7% of birds banded, while 22.2% were after-hatch-year, and 0.06% were of unknown age. For several species in fact, all banded birds this season were aged as hatch-years: Cooper's Hawk (1), Sharp-shinned Hawk (5), Black-billed Cuckoo (1), Hairy Woodpecker (8), Yellow-bellied Sapsucker (1), Yellow-shafted Flicker (1), Yellow-bellied Flycatcher (1), Eastern Phoebe (6), Blue Jay (9), Philadelphia Vireo (1), Marsh Wren (1), Eastern Bluebird (2), Veery (3), Wood Thrush (1), Brown Thrasher (3), Golden-winged Warbler (1), Northern Parula (1), Bay-breasted Warbler (2), Black-throated Blue Warbler (22), Black-throated Green Warbler (3), Cape May Warbler (3), Yellow Palm Warbler (1), Scarlet Tanager (3), Chipping Sparrow (12), and Savannah Sparrow (2). Among the top 10 species banded (Table 1), hatch-year birds ranged from 50% (Eastern White-crowned Sparrow) to 95% (Black-capped Chickadee) of the individuals banded (Table 5).

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

Species	HY (% of total)	AHY (% of total)	Male (% of total)	Female (% of total)	Unknown sex (% of total)
1. Ruby-crowned Kinglet	238 (63)	138 (37)	177 (47)	197 (52.5)	2 (0.5)
2. American Robin	281 (88)	37 (12)	95 (30)	142 (45)	81 (25)
3. White-throated Sparrow	212 (67)	106 (33)	-	-	318 (100)
4. Song Sparrow	181 (91)	17 (9)	-	2 (1)	197 (99)
5. Black-capped Chickadee	164 (95)	8 (5)	-	-	172 (100)
6. Slate-colored Junco	87 (69)	40 (31)	68 (54)	59 (46)	-
7. American Goldfinch	85 (90)	9 (10)	48 (51)	44 (47)	2 (2)
8. Eastern White-crowned Sparrow	40 (50)	40 (50)	-	-	80 (100)
9. American Redstart	63 (82)	14 (18)	40 (52)	32 (42)	5 (6)
10. Magnolia Warbler	56 (76)	18 (24)	31 (42)	26 (35)	17 (23)

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

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. Interestingly, all adult American Goldfinch were banded before mid-September with very few hatch-years, after which point hatch-years dominated completely. The Eastern White-crowned Sparrow age classes appear to intermix completely throughout the season, with no discernibly different pattern in occurrence. The pattern seen last year in Ruby-crowned Kinglets (i.e. hatch-year female Ruby-crowned Kinglets peaking 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) was not as clearly indicated this year. Finally, the last AHY Red-eyed Vireo was banded in early September, while the last HY was banded October 24th, with a similar pattern occurring in the Traill's Flycatcher: the last AHY banded roughly one month earlier the last HY.

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.

Of the species on the MBO priority list, 89% were observed during FMMP 2007, and 68% were banded (Table 6), up from 80% and 65% in 2006. Priority species accounted for 87% of individuals banded. Of the top 10 species banded at MBO during FMMP 2007, all except American Goldfinch are designated as priority species, indicating that the program is effective at documenting these otherwise poorly monitored birds. Fitting with the overall pattern of high species diversity coupled with lower levels of abundance seen this fall, each category had more species observed and banded than last fall, but fewer individuals banded.

Table 6. Summary of priority species observed and banded during FMMP 2007. Detailed 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	16	15	20	20
Number of species banded	15	10	14	15
Number of individuals banded	225	1123	327	826

Net productivity

As in previous seasons, the productivity of nets during FMMP 2007 was assessed. Table 7 summarizes the usage and productivity of all nets. The nets are clustered into three main groups. C and D (five nets total) are along the east and north edges of Stoneycroft Pond. Four nets sample the shrubby areas east of Stoneycroft Pond (A and E). H and B/N (six nets total) are along the back ponds. Under normal weather and personnel conditions, all nets are operated for five hours daily. However, the B/N nets are more vulnerable to wind, and are closed when conditions are unfavourable. They are also left out when human resources are limited and/or bird volume is sufficient to warrant operations being scaled back, resulting in a

core group of 11 nets (C-A-D-E-H) that allows for sampling from each area while minimizing walking time.

The overall capture rate for FMMP 2007 was the lowest over the past three years, at 52.5 new birds per 100 net/trap hours. An additional 11.2 birds per 100 net hours were recaptured. After adjusting numbers for 2004-2006 to take into account the fact that A1, D1 and G1 were all 18m nets, the capture rate of new birds is quite a bit lower, though the recapture rate is similar (2004: 84.0, 12.1; 2005: 87.3, 13.1; and 2006: 79.7, 10.6), suggesting that there is a substantial amount of year-to-year variation. All net groups used this year and last year, with the exception of the C and E nets, showed declines in net productivity. This season the net lanes were kept as narrow as possible since last fall's effort to increase the lanes' widths to avoid accidental snagging may have lowered captures. It is possible that if the net lanes had been kept as wide as they were, that catch rates would be even lower this season.

The average total number of birds per 100 net hours for the net groups this season was just under 54. A was slightly under the average, B was quite a bit lower, C was above, D was very slightly above average, E was below average and H was quite a bit above. The J-trap had by far the lowest success, with only 21.2 birds per 100 trap hours.

H1 and H2 had the highest capture rates. While H2 outperformed H1 last fall, this fall the reverse occurred. It is possible that increased foot traffic may be responsible for the drop in H2's productivity, since passing by H2 is a faster way back to the cabin than the previous route next to the windmill. Walking past the net twice each net round (out and back) should be discouraged next season to see if this will affect catch rates. These nets provide an opportunity to monitor birds skirting around the southeast end of the back ponds, and complements the B nets effectively. Though the H nets did recapture a much higher number of birds than the other nets, their proximity to the banding station (<30 m) does not seem to pose a problem since any banded bird found in either of these nets is examined at the net and released immediately if the band number is recognized.

Both at A1 and A2 productivity dropped again this year. This is likely due to exposure after one of the apple trees lining the net lane fell over from old age during FMMP 2005. Despite it continuing to grow from its prone position, it is still far from its previous coverage. It is also possible that the minor clearing done for A2 has affected the overall cover for A1, or that A2 is "stealing" A1's birds, though its productivity was only slightly higher than A1's.

Whereas the D nets were the most productive during FMMP 2004, their capture rate was only very 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 unusually sunny weather experienced this year may have had an impact on its effectiveness. The overall pattern of D3 being the most productive D net and D2 being the least productive, was maintained this season. Expansion of the D lane is possible down the path cleared for viewing Stoneycroft pond, a 90-degree path down from the junction of D1 and D2. If time permits next season, an experimental net should be installed in this lane to take advantage of birds traveling parallel to the D nets.

The productivity of net E1 dropped again for a second fall (continuous decrease from 2005). Though successful at capturing kinglets and warblers, its overall numbers were below average. 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 MBO's only Red-shouldered Hawk in 2005 and this year's Eastern Bluebirds. E2 performed much better, almost leading the nets in terms of productivity. Despite its exposed northern face, it is proving to be a very productive net.

Surprisingly, the C nets performed far beyond the average for the first time in two years. It is possible that their more sheltered and shaded location allowed them to escape the effect of all the sunny weather this season.

As in previous years, the B/N nets had the lowest capture rates, and were the first to be closed when deemed necessary. This year, B2 had lower productivity than either N net, a reversal of the pattern seen in 2006.

Table 7. Net usage and capture rates during FMMP 2007.

Net	Net hours	New captures	Repeats/ Returns	Total birds	Birds / 100 net hours	
					New	Total
A1	392.35	191	24	215	48.7	54.8
A2	391	218	49	267	55.8	68.3
A - TOTAL	783.25	409	73	482	52.2	61.5
B2	265	66	13	79	24.9	29.8
N1	265	76	29	105	28.7	39.6
N3	265	111	22	133	41.9	50.2
B3	265	131	31	162	49.4	61.1
B/N - TOTAL	1060	384	95	479	36.2	45.2
C1	394.25	261	78	339	66.2	86.0
C2	394.25	228	52	280	57.8	71.0
C - TOTAL	788.5	489	130	619	62.0	78.5
D1	394	208	34	242	52.8	61.4
D2	394	175	40	215	44.4	54.6
D3	394	265	40	305	67.3	77.4
D - TOTAL	1182	648	114	762	54.8	64.5
E1	382.75	110	18	128	28.7	33.4
E2	382.75	240	49	289	62.7	75.5
E - TOTAL	765.5	350	67	417	45.7	54.5
H1	393	305	61	366	77.6	93.1
H2	393	267	54	321	67.9	81.7
H - TOTAL	786	572	115	687	72.8	87.4
J-trap	104	22	14	36	21.2	34.6
GRAND TOTAL	5469.25	2874	608	3482	52.5	63.7

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 2007 were aberrantly-coloured Baltimore Orioles and deformed Yellow Warblers.

In addition, photos were taken throughout the season for use in the preparation of a new online resource for bird identification, posted at www.migrationresearch.org/mbo/id.html. The aim is to provide diagnostic photos of the upper body, wing, and tail of each age and sex class of every species banded at MBO. These photos, supplemented by related commentary pointing out key differences between ages and sexes, are intended as a complement to the information presented by Pyle (1997). This is a major ongoing project for MBO, with major updates

reflecting contributions from the migration monitoring programs typically posted in 2007, in addition to minor revisions throughout the year.

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 2007, based on results from FMMP 2005 and 2006, three species were studied: Black-capped Chickadee, American Goldfinch and Song Sparrow.

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. The results to date are summarized on the MRF website as well as in the FMMP 2006 report (Hudson and Gahbauer 2006)

Many American Goldfinches were banded this season, which will allow for a much more robust analysis of the tail colour pattern data collected to date. The analysis has been deferred until the Song Sparrow project is completed. It began on a pilot basis last fall, and continued this fall. Each HY Song Sparrow was examined for evidence of flight feather moult. This screening occurred to determine how common the paired moulting of primary coverts and primaries is in young sparrows. This previously undocumented pattern was noticed last fall in a handful of young birds, and again this year. A paper describing the extent of this moult pattern in wild birds and specimens from the Canadian Museum of Nature is being prepared for publication.

Research on all these species will continue through the next few seasons, followed by a more thorough analysis of the patterns observed. 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 for which 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 2007, with 83 volunteers receiving training during this period. This included 21 members of the McGill ornithology class, all of whom came out at least three times during the season to develop their skills in avian field work.

Training was generally given by the bander-in-charge or assistant banders-in-charge, mostly on a one-on-one basis. Topics covered varied according to the experience level of the volunteers, ranging from instruction in record-keeping to hands-on practice with extraction of netted birds. Experienced extractors able to work independently are a limiting factor for banding operations, and thus helping volunteers improve their skills at extraction is a priority at MBO.

On a few occasions, groups visited MBO for a tour, receiving basic information about the purposes and methods of bird banding, as well as observing ongoing research. The groups involved were visitors from the Arboretum and the Redpath Museum, the McGill Naturalists, several friends and family of MBO volunteers interested in the activities, and the Natural History of Vertebrates class from McGill, totaling approximately 160 people. Also, our second Ageing

and Sexing Workshop was given in August, with 15 people attending the theoretical in-class session on the first day, and the practical field component at MBO on the second day.

Summary

In terms of individuals banded, FMMP 2007 totals were lower than in 2006 except for the number of species observed, but still exceeded the predictions made in the 2004 FMMP report of 125 species observed and 2000 to 3000 birds banded (Gahbauer 2004). A priority for MBO remains to train enough experienced extractors, observers and banders to adequately deal with fall migration, so that full coverage can be maintained without difficulty.

The standard net group comprising of A, C, D, E and H should be complemented whenever possible with B/N, and should be maintained in their present positions in order to establish standardization between years. There is some merit in experimentally testing additional nets perpendicular to D, or at V (the location of the winter nets), as many birds were seen roosting and feeding in these areas. Alternatively, the V nets might be used for target-banding of Rusty Blackbirds using call playback, as is done at l'Observatoire d'Oiseaux de Tadoussac.

Acknowledgments

The 2007 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, 83 volunteers contributed over 2400 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.

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

Marcel Gahbauer

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

Marie-Anne Hudson

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

Barbara Frei

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

Jean Beaudreault, Véronik Campbell, Shawn Craik, Gay Gruner, Sarah Marteinson, Betsy McFarlane, Mike Mayerhofer, André Pelletier, Greg Rand, Katleen Robert

Censusers / observation leaders: Experienced birders able to recognize the majority of local species by sight and sound, responsible for conducting the daily census and playing a leadership role in observing birds throughout the morning, and assisting less experienced volunteers with identification.

Jean Demers, Jeff Harrison, Barbara and Don MacDuff, Chris Murphy, Rodger Titman

Assistants: Volunteers of all levels, responsible for recording data, transporting birds, providing direct assistance to extractors and banders as requested, and helping with any other observation, monitoring, or maintenance tasks that arise.

Nick Ackeson, Brian Bell, Jose Bnchetrit, Kristen Brochu, Natalia Castellanos, **Sophie Cauchon**, Anne Chen, Amélie Constantineau, Diane Demers, Ross Diamond, Diana Dima, Emilie Dion, Melanie Drouin, Simon Duval, Bob Edwards, Kate Farrell, Dominique Fautaux, David Fishman, Linda Fishman, Maria Frei, Val Francella, Tiffany Gamelin, Joelle Guellet, Emily Gray, Peter Hall, Isaac Hébert, Lacey Hébert, Marie-Melissa Kalamaras, Gillian Kinsman, Demetrios Kobiliris, Aless Kockel, Marie-Pier Lambert, Joelle Lapalme,

Helen Leroux, Steph Letendre, Alex Liautaud, Geneviève Lussier, Alyssa Macleod, Jennifer MacWilliam, Francine Marcoux, Eve Marshall, Sophie Mazowita, Heather Milligan, Leigh Piercey-Brunet, Daniel Oyama, Annie-Claude Paradis, Jennifer Pearson, Julie Pépin, Mark-André Robert, Emilie Roy-Dufresne, Brittney Roughan, Christina Saliba, Helena Scheffer, Brian Schmucker, Daniel Schmucker, **Anna Solecki, Clémence Soulard**, Stephanie Steeves, Krystal Swift, Rachel Theoret-Gosselin, Rae Trenchard, Sandra Warren, Shona Watt, Sarah Woods

We would also like to thank the Canadian Migration Monitoring Network, Bird Studies Canada and the Canadian Wildlife Service for logistical, analytical and financial support provided to MBO.

Finally, we extend our sincere thanks to the following organizations that donated materials or funds to MBO:

MBO Baillie Birdathon Team, who raised over \$11,539 for MBO and Bird Studies Canada (Jean Beaudreault, Barbara Frei, Marcel Gahbauer, Marie-Anne Hudson, Barbara Frei, Barbara MacDuff, Gay McDougall-Gruner, and Betsy McFarlane) and all those who participated in the MBO Baillie Birdathon Outing: Marie-Anne Hudson, Barbara Frei, Rodger Titman, David Bird, Sophie Cauchon, Jean Demers, Bob Edwards, Dylan Letchuk, Morgan Letchuk, Penny Letchuk, Barbara MacDuff, Chris Murphy, André Pelletier, Clémence Soulard, Sarah Martinson, Anthi Mimidakis, and Oliver Rind.

Bird Protection Quebec, which provided a grant in support of MBO's education and training efforts, and continued to encourage members to become MBO volunteers

Sun-Mar, which donated half of the cost of MBO's composting toilet

Canada Steamship Lines, for a donation in support of MBO

Mountain Equipment Co-op, which provided an Environment Fund grant in support of MBO in 2006

James L. Baillie Memorial Fund of Bird Studies Canada, for past grants supporting MBO

Avian Science and Conservation Centre, for logistical and equipment support

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Appendix A. Seasonal distribution charts

The charts below summarize the pattern of occurrence of each species observed during FMMP 2007. 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. The total of the mean # birds/day is the sum of each mean divided by 13 weeks.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.14		0.14					0.43			0.14		0.07
# DAYS OBSERVED		1		1					1			1		4
# PROCESSED														
FIRST OBSERVED: August 8				LAST OBSERVED: October 17				PEAK DATE: 28 September			NUMBER: 3			

Notes: Singles observed flying overhead from early August to mid-October, often heard calling in flight.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.29	0.14	0.14		0.29						0.07
# DAYS OBSERVED				1	1	1		2						5
# PROCESSED														
FIRST OBSERVED: August 23				LAST OBSERVED: September 22				PEAK DATE: Aug 23 and Sept 22			NUMBER: 2			

Notes: Single individuals flying overhead from late August through late September.

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

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

Notes: Only one individual seen during the season.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.57	0.57	0.86	0.43	0.57	1.14			0.57		0.14		0.37
# DAYS OBSERVED		3	3	4	2	4	6			4		1		27
# PROCESSED														
FIRST OBSERVED: August 8				LAST OBSERVED: October 18				PEAK DATE: 7 dates			NUMBER: 2			

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

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.14	3	1.14	0.43	0.29	0.29				0.14				0.49
# DAYS OBSERVED	6	7	4	1	2	2				1				23
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: October 6				PEAK DATE: 3 dates			NUMBER: 3			

Notes: Usually one or two individuals seen per day, sometimes three or four; all but one sighting took place before mid-September.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			4.43	1	0.57	13.57	13.71	132.57	433.14	901	800	945.71	1669.86	378.12
# DAYS OBSERVED			4	1	1	4	4	5	7	7	7	7	7	54
# PROCESSED														
FIRST OBSERVED: August 16					LAST OBSERVED: October 30				PEAK DATE: October 28				NUMBER: 2510	

Notes: Fairly small groups seen until mid-September, increasing in abundance until peaking at the end of the season. Though peak number were half that of FMMP 2005, this season's mean # birds/day is the highest of all three years, and the species was seen on more days this season than during FMMP 2005.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY													1.29	0.1
# DAYS OBSERVED													2	2
# PROCESSED														
FIRST OBSERVED: October 24				LAST OBSERVED: October 29				PEAK DATE: October 29				NUMBER: 6		

Notes: Two small groups conspicuous within a flock of Canada Geese in late October. Despite our efforts to detect them, it is probable that others occurred among the many flocks of Canada Geese and were missed, especially those counted at a distance.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.71	1.29	1.43	1.14	0.29	1.14	1.57	0.57	0.29	0.57	1.43	4.86	1.21
# DAYS OBSERVED	2	4	4	5	3	1	4	2	2	1	2	3	3	36
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 28				NUMBER: 22		

Notes: The only waterfowl species recorded every week of the season. Overall less abundant and seen in much smaller flocks than last fall, possibly due to low water levels on site until late October.

AGWT: American Green-winged Teal / Sarcelle à ailes vertes (*Anas crecca carolinensis*)

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

Notes: Observations limited to a single individual flushed from Stoneycroft late in the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY													2.86	0.22
# DAYS OBSERVED													5	5
# PROCESSED														
FIRST OBSERVED: October 24				LAST OBSERVED: October 30				PEAK DATE: October 30				NUMBER: 10		

Notes: Observations limited to individuals and/or small groups mixed in with large flocks of Mallards during the last week of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2.14	0.29	0.43	4.43	1.29	1.43		2.86	0.29	0.57	0.29	12.43	138.71	12.7
# DAYS OBSERVED	2	2	2	6	4	1		1	1	1	1	5	7	33
# PROCESSED														
FIRST OBSERVED: August 2				LAST OBSERVED: October 30				PEAK DATE: October 30				NUMBER: 346		

Notes: Irregular sightings occurring in the first and last thirds of the season. A noticeable increase in abundance occurred during weeks 12 and 13 after a few days of heavy rain flooded Stoneycroft and the fields to the east.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.86					11.43					0.95
# DAYS OBSERVED				1					1					2
# PROCESSED														
FIRST OBSERVED: August 28					LAST OBSERVED: September 27					PEAK DATE: September 27				NUMBER: 80

Notes: Observations restricted to two sightings: a flock of six in late August, and a flock of 80 in late September. Much less frequently seen than in past fall seasons.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.14						0.01
# DAYS OBSERVED								1						1
# PROCESSED														
FIRST OBSERVED: September 25					LAST OBSERVED: September 25					PEAK DATE: September 25				NUMBER: 1

Notes: Sightings limited to a single individual in late September. It is likely that the early morning observation period limited our ability to detect migrating vultures, since a real decline in the population is extremely unlikely given the Montreal Hawk Watch stated that this was a record high year for Turkey Vultures.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.14	0.14	0.14		0.14		0.04
# DAYS OBSERVED								1	1	1		1		4
# PROCESSED														
FIRST OBSERVED: September 24					LAST OBSERVED: October 21					PEAK DATE: 4 dates				NUMBER: 1

Notes: Singletons observed flying over the site from late September to mid-October.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14		0.43		0.29	0.29	0.71	0.43	0.71	0.29	0.14	0.43	0.29	0.31
# DAYS OBSERVED	1		1		2	1	4	3	3	2	1	1	2	21
# PROCESSED														
FIRST OBSERVED: August 7					LAST OBSERVED: October 29					PEAK DATE: September 21				NUMBER: 3

Notes: Sightings spread throughout the season, usually of a single individual flying over the ponds or adjacent fields.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.14	0.71	1.57	1.43	0.71	1.29	0.71	0.14	0.71	0.29	1	0.67
# DAYS OBSERVED			1	4	4	6	5	6	5	1	4	2	3	41
# PROCESSED					1		2	1			1			5
FIRST OBSERVED: August 18					LAST OBSERVED: October 29					PEAK DATE: August 31				NUMBER: 6

Notes: Spread almost throughout the season with a slight peak in September. Five banded, a single-season record for MBO; all were HY birds.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.29	0.14	1.29	0.14	0.86	0.71	0.86	0.57	0.71	0.71	0.86	0.29	0.29	0.59
# DAYS OBSERVED	2	1	6	1	4	4	5	4	3	5	4	2	2	43
# PROCESSED		1												1
FIRST OBSERVED: August 4					LAST OBSERVED: October 29					PEAK DATE: August 18				NUMBER: 4

Notes: The only raptor species seen every week, but usually in small numbers. A slight peak occurred in late August. The one banded this year was the first ever at MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.14			0.14		0.14	0.14			0.14		0.14	0.06
# DAYS OBSERVED		1			1		1	1			1		1	6
# PROCESSED														
FIRST OBSERVED: August 10					LAST OBSERVED: October 25				PEAK DATE: 6 dates				NUMBER: 1	

Notes: Observations limited to singletons flying over the site or over the adjacent fields.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.86	1	0.29	0.43	0.86	0.57	0.29	0.14	0.14			0.14	0.36
# DAYS OBSERVED		6	6	2	3	5	4	2	1	1			1	31
# PROCESSED														
FIRST OBSERVED: August 9				LAST OBSERVED: October 29				PEAK DATE: Aug 20 and Sept 9				NUMBER: 2		

Notes: Many of the sightings probably involved the pair that nested in the Arboretum, though it does not appear they were successful this year.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							7.29	0.71	0.29					0.64
# DAYS OBSERVED							5	1	1					7
# PROCESSED														
FIRST OBSERVED: September 12				LAST OBSERVED: September				PEAK DATE: September 16				NUMBER: 25		

Notes: Observed in mid to late September, with the majority of individuals passing over MBO in large kettles over just a few days. Record number of birds observed this year (58).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14		0.14	0.29	0.14	0.14	1.43	0.57	0.29	1.29	0.71	1.43	1.86	0.65
# DAYS OBSERVED	1		1	2	1	1	5	2	1	3	3	5	5	30
# PROCESSED														
FIRST OBSERVED: August 5				LAST OBSERVED: October				PEAK DATE: October 25				NUMBER: 7		

Notes: Seen weekly beginning in mid-August, with a slight peak in mid-September and again in late October.

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

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

Notes: Observations limited to a small number of migrants scattered throughout the first half of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY					0.14	0.14	0.29	0.14				0.14		0.07
# DAYS OBSERVED					1	1	2	1				1		6
# PROCESSED														
FIRST OBSERVED: September 11				LAST OBSERVED: October 20				PEAK DATE: 6 dates				NUMBER: 1		

Notes: Single migrants passed through from mid-September to late October. An additional individual was observed feeding on a European Starling after the end of the season on November 7th.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.29		0.14									0.03
# DAYS OBSERVED			2		1									3
# PROCESSED														
FIRST OBSERVED: August 17					LAST OBSERVED: August 31				PEAK DATE: 3 dates			NUMBER: 1		

Notes: Observations limited to singletons flying over the site early in the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.14	0.14										0.02
# DAYS OBSERVED			1	1										2
# PROCESSED														
FIRST OBSERVED: August 21				LAST OBSERVED: August 27					PEAK DATE: August 21 and 27			NUMBER: 1		

Notes: Likely a single individual heard calling from Stoneycroft pond on two occasions.

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

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

Notes: Two sightings, likely of two different individuals, in early August and early September.

COMO: Common Moorhen / Gallinule poule d'eau (*Gallinula chloropus*)

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

Notes: Observations limited to one individual in Stoneycroft pond, a first for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.43		0.14	0.14								0.05
# DAYS OBSERVED			3		1	1								5
# PROCESSED														
FIRST OBSERVED: August 15				LAST OBSERVED: September 11					PEAK DATE: 5 dates			NUMBER: 1		

Notes: Observations limited to singletons flying and calling over the fields to the east.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.57	0.86	0.71	1.14	1.14	0.14					0.35
# DAYS OBSERVED				2	4	4	5	7	1					23
# PROCESSED														
FIRST OBSERVED: August 25				LAST OBSERVED: September 26					PEAK DATE: August 25			NUMBER: 3		

Notes: Seen almost daily during September skirting around the mud in the back pond.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							0.14							0.01
# DAYS OBSERVED							1							1
# PROCESSED														
FIRST OBSERVED: September 14					LAST OBSERVED: September 14					PEAK DATE: September 14				NUMBER: 1

Notes: Observations limited to a single individual seen in mid-September.

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

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

Notes: Observations limited to a single individual seen in the mud along the C nets, a first for MBO.

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

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

Notes: A few sightings, all of single individuals flushed from beyond C or flying low over Stoneycroft.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		7.29	6.57	3	0.71	1.57	1.71	2	2.14	0.86	4.14	4	3.71	2.9
# DAYS OBSERVED		6	6	6	2	4	4	2	4	2	4	3	4	47
# PROCESSED														
FIRST OBSERVED: August 8				LAST OBSERVED: October 30					PEAK DATE: August 18				NUMBER: 31	

Notes: More common earlier in August, tapering slightly for the remainder of the season. The field to the east and others nearby may have attracted gulls to the general area.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL	
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13		
MEAN # BIRDS / DAY		0.14				0.14	0.14	0.14	0.14				0.43	1.43	0.20
# DAYS OBSERVED		1				1	1	1	1				1	4	10
# PROCESSED															
FIRST OBSERVED: August 9				LAST OBSERVED: October 30					PEAK DATE: 3 dates				NUMBER: 3		

Notes: Absent during the first month of the season (with the exception of one individual in early August), then sporadically seen flying over the site starting in mid-September and peaking at the end of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.29				0.29	0.14	0.06
# DAYS OBSERVED								2				1	1	4
# PROCESSED														
FIRST OBSERVED: September 24				LAST OBSERVED: October 29					PEAK DATE: October 23				NUMBER: 2	

Notes: Observed on four occasions over the second half of the season, all flying high overhead.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.71	0.57	2.43	3.86	2.57	0.71			0.14	0.29		2.43	1.05
# DAYS OBSERVED		2	2	3	5	3	2			1	1		2	21
# PROCESSED														
FIRST OBSERVED: August 8				LAST OBSERVED: October 30				PEAK DATE: Sept 16 and Oct 28				NUMBER: 16		

Notes: Small flocks seen flying overhead throughout most of the season.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.57	1.14	1	2.86	0.71	1.57	2.14	3.43	1.57	2.71	2.14	4.57	6.86	2.47
# DAYS OBSERVED	4	4	5	5	4	6	4	7	4	6	5	6	6	66
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: October 30				PEAK DATE: October 30				NUMBER: 16		

Notes: Seen on a weekly basis, with small peaks in late August, late September and late October. Despite being present throughout the season as in past years, none have yet been caught during any fall season.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.29	0.14									0.03
# DAYS OBSERVED				2	1									3
# PROCESSED				1	0-0-1									1-0-1
FIRST OBSERVED: August 27				LAST OBSERVED: September 1				PEAK DATE: September 1				NUMBER: 1		

Notes: Observations limited to a single individual banded on August 27, recaptured September 1, and seen on census.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.14											0.14	0.02
# DAYS OBSERVED		1											1	2
# PROCESSED														
FIRST OBSERVED: August 10				LAST OBSERVED: October 28				PEAK DATE: Aug 10 and Oct 28				NUMBER: 1		

Notes: Only heard twice at dawn at the beginning and the end of the season.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2	1.43	1	0.57		0.14								0.4
# DAYS OBSERVED	5	4	4	2		1								16
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: September 8				PEAK DATE: August 3 and 4				NUMBER: 4		

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

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2.71	3.14	2	3	1.29	1								1.01
# DAYS OBSERVED	6	7	7	7	6	6								39
# PROCESSED														(33)
FIRST OBSERVED: August 1				LAST OBSERVED: September 10				PEAK DATE: August 9 and 10				NUMBER: 5		

Notes: Observed almost daily throughout the first half of the season, and also caught some of those days. Though they were not banded, an effort was made to quickly age and sex them whenever possible prior to release. Eight AHYs were identified, five females and three males. HY males were numerous (6), as were HY females (7), the same number as last year. An additional nine individuals were not aged or sexed, and three HY birds were not sexed. It is quite likely that many were caught repeatedly, as most captures were from the C nets.

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

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

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

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43					0.14	0.43	1.29	0.29	1				0.28
# DAYS OBSERVED	2					1	2	7	1	5				18
# PROCESSED										1				1
FIRST OBSERVED: August 2				LAST OBSERVED: October 8					PEAK DATE: 7 dates				NUMBER: 2	

Notes: Virtually absent throughout the season with the exception of a five-week period in September/October. There were never more than one or two individuals observed per day. The single bird banded this season was during the last week they were observed on site.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2.71	3.57	3	1.71	1.86	2.29	3.29	3.29	3.14	4	3.71	3.14	3.29	3
# DAYS OBSERVED	6	6	7	6	6	6	7	7	6	7	7	7	7	85
# PROCESSED	5	9-0-2	0-0-2	1-0-1			1	0-0-1	1-0-2	0-0-1	1-0-1	0-0-1	1	19-0-11
FIRST OBSERVED: August 1				LAST OBSERVED: October 30					PEAK DATE: August 13 and 14				NUMBER: 7	

Notes: Observed almost daily across the season; relatively stable abundance throughout. The 11 repeats represent only six individuals, one of which was caught four times. The number of birds banded has steadily increased over three fall seasons: 8 (2005), 14 (2006), 19 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.14	0.71	1.14	0.29	0.86	1.29	1.43	2.14	2.57	2.29	2.57	1.43	2.86	1.59
# DAYS OBSERVED	3	4	5	1	4	6	4	5	7	6	7	7	7	66
# PROCESSED	1						1		1-0-2	1	1	1	2	8-0-2
FIRST OBSERVED: August 4				LAST OBSERVED: October 30					PEAK DATE: October 3 and 10				NUMBER: 6	

Notes: Present weekly like the Downy Woodpecker, but in lower numbers. Slight peak in abundance in late October. Eight individuals were banded this fall, substantial more than last year's single HY.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2.29	3	2.57	1.86	3	2	3.14	2.71	1.43	1.14	0.86	0.71	0.14	1.91
# DAYS OBSERVED	6	7	7	7	7	7	7	7	6	4	5	3	1	74
# PROCESSED		1-0-1												1-0-1
FIRST OBSERVED: August 1				LAST OBSERVED: October 27					PEAK DATE: 3 dates				NUMBER: 5	

Notes: Present weekly throughout the season, until most of the last migrants left in mid-October. Only one, a HY male, was banded and recaptured four days later.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1	1.57	1.71	0.86	1.71	1.29	1.14	1	1.14	1.43	1.57	1.57	1.29	2.02
# DAYS OBSERVED	4	7	7	5	7	7	5	3	5	6	6	7	6	75
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: October 30					PEAK DATE: September 20				NUMBER: 4	

Notes: Seen weekly throughout the season and during five of those weeks recorded daily. It is likely that most, if not all, sightings involved the local family.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.29		0.43	0.14				0.14	0.14	0.14				0.1
# DAYS OBSERVED	2		1	1				1	1	1				7
# PROCESSED														
FIRST OBSERVED: August 4					LAST OBSERVED: September				PEAK DATE: August 17				NUMBER: 3	

Notes: Observations limited to individuals heard calling from the woods adjacent to MBO during August and late records from September/early October, perhaps of a single late lingering migrant. The number of birds banded has steadily decreased over three fall seasons: 4 (2005), 1 (2006), 0 (2007).

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

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

Notes: The latest of the *Empidonax* flycatchers. Observations were limited to two sightings and one banded bird in early September. Roughly 90% fewer birds banded and observed this year compared with FMMP 2005 and 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.71	1.43	0.71	1.43	0.14	0.14								0.35
# DAYS OBSERVED	5	5	3	4	1	1								19
# PROCESSED	5	10	1	4	1	1								22
FIRST OBSERVED: August 3					LAST OBSERVED: September 11				PEAK DATE: August 8 and 26				NUMBER: 4	

Notes: Seen only in small numbers with a distinct peak in early August, and disappearing by mid September. The number of birds banded has steadily increased over three fall seasons: 12 (2005), 18 (2006), 22 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.29	0.29	1.29	0.43	0.57	0.14							0.23
# DAYS OBSERVED		2	2	5	2	2	1							14
# PROCESSED		2		6	3	3								14
FIRST OBSERVED: August 11					LAST OBSERVED: September 12				PEAK DATE: August 25				NUMBER: 4	

Notes: Seen only in small numbers, but with a distinct peak in the last week of August. The number of birds banded has steadily increased over three fall seasons: 8 (2005), 11 (2006), 14 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.86	0.57		0.29		0.14	0.29	0.71	0.29	0.14		0.25
# DAYS OBSERVED			3	3		2		1	2	4	2	1		18
# PROCESSED			1	1		1				1	1	1		6
FIRST OBSERVED: August 16					LAST OBSERVED: October 20				PEAK DATE: August 21				NUMBER: 4	

Notes: Seen irregularly from mid-August until late October. This year's last sighting was 15 days later than last year's.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.29	2	1.57	0.86	0.14	0.14								0.46
# DAYS OBSERVED	4	7	5	5	1	1								23
# PROCESSED			1											1
FIRST OBSERVED: August 2					LAST OBSERVED: September 7				PEAK DATE: August 2 and 13				NUMBER: 4	

Notes: Most observations in August, with a peak early to mid-month. Only one additional bird came through in first few days of September.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	4.29	3.43	1.71	0.14										0.74
# DAYS OBSERVED	7	7	7	1										22
# PROCESSED	0-0-1													0-0-1
FIRST OBSERVED: August 1					LAST OBSERVED: August 23				PEAK DATE: August 1 and 7				NUMBER: 5	

Notes: Seen most days in August, with numbers dropping gradually throughout the month. One of the earliest to leave of the regularly occurring species, with none observed beyond August. The one recapture of the season was one of the nestlings from the nest near C1 that was banded in July. Most observations were likely of the breeding pair and their offspring.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			5.14	0.29										0.42
# DAYS OBSERVED			4	1										5
# PROCESSED														
FIRST OBSERVED: August 15				LAST OBSERVED: August 26					PEAK DATE: August 15				NUMBER: 25	

Notes: Sightings restricted to a few days in mid- to late August when small flocks were seen flying over the site. Observed on 85% fewer days than during FMMP 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.71	1.14	10.71	1.29			0.57	0.14						1.12
# DAYS OBSERVED	3	3	5	3			1	1						16
# PROCESSED														
FIRST OBSERVED: August 2				LAST OBSERVED: September 19					PEAK DATE: August 18				NUMBER: 58	

Notes: Bred on site and seen relatively frequently through August, with a small flock of late migrants seen September 13, and one last migrant observed September 19.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.43											0.03
# DAYS OBSERVED			1											1
# PROCESSED														
FIRST OBSERVED: August 18				LAST OBSERVED: August 18					PEAK DATE: August 18				NUMBER: 3	

Notes: Observations limited to a small flock flying around Stoneycroft on a single day.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			3.14											0.24
# DAYS OBSERVED			1											1
# PROCESSED														
FIRST OBSERVED: August 15				LAST OBSERVED: August 15					PEAK DATE: August 15				NUMBER: 22	

Notes: Observations limited to a single flock flying high above the site.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.43	0.86	3	4.43	0.14									0.76
# DAYS OBSERVED	4	2	1	4	1									12
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: August 30					PEAK DATE: August 26				NUMBER: 25	

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

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	5.43	5.43	5.86	7.29	5.86	13.57	27.43	17.71	28.43	16.43	8	8	7.43	13
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED		0-1-0						2	4	2				8-1-0
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: September 29			NUMBER: 72		

Notes: One of four species seen every day of the season. Birds observed during the first five weeks were likely local residents. Numbers increased in mid-September and stayed elevated through to mid-October. The number of birds banded has steadily decreased over three fall seasons: 26 (2005), 16 (2006), 8 (2007), and the mean number of individuals seen daily has also declined slightly, from 15.2 to 14.7 to 13.0.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	13.3	26.43	54	84.57	132.29	74	139.29	137.86	106	106.29	110	179.29	167.29	102.35
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED														
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: October 21			NUMBER: 349		

Notes: One of four species seen every day of the season. The size of the local flock grew gradually through August, remaining over 100 until the end of the season, with the exception of week 6.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.29	0.43	0.71	1.14	1	0.71	0.71	0.71	0.86	0.14	1.29	0.29	0.67
# DAYS OBSERVED	2	1	2	3	4	5	3	4	4	5	1	3	2	39
# PROCESSED														
FIRST OBSERVED: August 4					LAST OBSERVED: October 30				PEAK DATE: October 21			NUMBER: 6		

Notes: Seen regularly in small numbers on a weekly basis. Most observations were of a pair flying high above the site, vocalizing. Considerably more common than during the 2005 and 2006 fall seasons.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	16.4	14.71	16.71	16.71	17.43	14.86	15	18.57	21.86	25.71	18.43	15.14	16.14	17.5
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED	7-1-1	7-0-2	4-4-4	1-1-4	2-1-11	2-1-9	4-1-3	7-1-6	16-0-15	52-0-13	34-0-11	21-1-7	15-1-10	172-12-96
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: October 2			NUMBER: 50		

Notes: One of four species seen every day of the season. Birds recorded in August were likely local residents and their offspring, while the peak seen in late September and early October was likely part of the cyclical two-year chickadee migration also observed during FMMP 2005. One of three species banded every week.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.14	0.86	0.14	0.43	0.29		0.29		0.57	0.14		0.14	0.26
# DAYS OBSERVED	2	1	5	1	3	2		2		3	1		1	21
# PROCESSED														
FIRST OBSERVED: August 2					LAST OBSERVED: October				PEAK DATE: 3 dates			NUMBER: 2		

Notes: Seen weekly throughout August and into the first half of September, then occasionally until the end of season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.71	1.86	1.57	1.29	1.14	1.29	0.71	0.57	0.86	0.71	0.57	0.86	0.29	0.96
# DAYS OBSERVED	4	4	6	7	5	6	4	3	3	4	3	4	2	55
# PROCESSED														
FIRST OBSERVED: August 1					LAST OBSERVED: October 25				PEAK DATE: August 9			NUMBER: 8		

Notes: Observed on a weekly basis throughout the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14		0.14			0.14	0.29	0.29	0.29	0.14				0.11
# DAYS OBSERVED	1		1			1	1	2	2	1				9
# PROCESSED						1	1	2	1	1				6
FIRST OBSERVED: August 2					LAST OBSERVED: October 3			PEAK DATE: September 16			NUMBER: 2			

Notes: Two individuals observed in August, but more regularly observed from the second week of September to early October. Sightings restricted to single individuals, but observations mostly due to banded individuals.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	6	6	5.86	6	2.86	3	2.43	1.71	2	0.14	0.43			2.8
# DAYS OBSERVED	7	7	7	7	7	7	6	5	6	1	3			63
# PROCESSED	11	3-0-2	4-0-5	5-0-1	6	3-0-7	0-0-2	1-0-2	2-0-2		1			36-0-21
FIRST OBSERVED: August 1				LAST OBSERVED: October 14			PEAK DATE: August 9			NUMBER: 13				

Notes: Bred on site. Seen weekly over the first two months, peaking early and trailing off in the second week of October. Twenty more birds were banded this season than last season, likely due to an increase in the number of local breeders. The 21 repeats represent 17 individuals (6 AHYs), all banded within roughly one month of recapture. The number of birds banded has steadily increased over three fall seasons: 14 (2005), 16 (2006), 36 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							0.14	0.86	0.14	1.14		0.29	0.14	0.21
# DAYS OBSERVED							1	2	1	5		2	1	12
# PROCESSED							1	1		2				4
FIRST OBSERVED: September 13				LAST OBSERVED: October 24			PEAK DATE: September 24			NUMBER: 4				

Notes: Uncommon, but present almost weekly throughout the second half of the season, with a small peak in the first week of October.

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

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

Notes: A single individual banded in early August, a first for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.71	3.71	6.29	2.86	3	1.57	1.4
# DAYS OBSERVED								1	5	6	5	5	4	23
# PROCESSED								3	3-0-1	6	3	5	2	22-0-1
FIRST OBSERVED: September 25				LAST OBSERVED: October			PEAK DATE: October 6			NUMBER: 30				

Notes: A couple of early migrants were processed on September 25, but on the whole migration began in late September, with a notable peak in early October. 70% fewer birds were banded than in FMMP 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY						0.14	0.29	4.29	14.71	29.71	38.14	20.43	2.14	8.45
# DAYS OBSERVED						1	2	7	6	7	7	7	5	42
# PROCESSED						1		12	44-0-4	98-0-12	145-0-4	73-0-6	1-0-1	375-0-27
FIRST OBSERVED: September 10				LAST OBSERVED: October 30			PEAK DATE: October 10			NUMBER: 116				

Notes: Migration began in mid-September and built to a peak in early October, quickly tapering off towards the end of October. 14% fewer birds were banded this season than in FMMP 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							0.14		2.43	0.86	0.71	0.29	2	0.49
# DAYS OBSERVED							1		5	3	3	1	5	18
# PROCESSED										2				2
FIRST OBSERVED: September 18					LAST OBSERVED: October 30				PEAK DATE: September 29				NUMBER: 8	

Notes: Observations limited to one sighting in mid-September, then weekly throughout October, usually of small flocks seen and heard flying over the central pasture. Much more frequently observed than in previous years. Two HYs were banded together, a first for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.86	0.71	0.57	0.43	0.57	0.14								0.25
# DAYS OBSERVED	4	3	2	2	3	1								15
# PROCESSED	1-1-0	0-1-0	0-0-1	2	0-0-1									3-2-2
FIRST OBSERVED: August 3					LAST OBSERVED: September 7				PEAK DATE: August 8				NUMBER: 3	

Notes: The earliest of the *Catharus* thrushes, peaking in early August and gone before the middle of September. Several of the early season birds were likely local breeders. The number of birds banded has steadily decreased by half each fall season: 12 (2005), 6 (2006), 3 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.43	0.43	0.29				0.09
# DAYS OBSERVED								2	3	2				7
# PROCESSED								3	1	2				6
FIRST OBSERVED: September 23					LAST OBSERVED: October 6				PEAK DATE: September 24				NUMBER: 2	

Notes: Present only during a short three-week span. Twice as many birds were banded this season as during FMMP 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.57	0.14	0.29		0.43	0.57	0.57	0.43	0.14	0.14		0.25
# DAYS OBSERVED			4	1	2		2	3	3	2	1	1		19
# PROCESSED			4		2		2	1	3-0-1	2-0-1	1	0-0-1		15-0-3
FIRST OBSERVED: August 15					LAST OBSERVED: October 21				PEAK DATE: 4 dates				NUMBER: 2	

Notes: Singletons present beginning in mid-August, two weeks earlier than last year, with one late migrant observed in late October. Twice as many banded as last year, but half as many as during FMMP 2005.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.14	0.29			0.14	0.29	0.29	0.57	2	4.43	2.43	0.57	0.86
# DAYS OBSERVED		1	1			1	2	1	3	4	6	5	2	26
# PROCESSED								1	4	7-0-1	21-0-4	3-0-11	0-0-1	36-0-17
FIRST OBSERVED: August 9					LAST OBSERVED: October 25				PEAK DATE: October 14				NUMBER: 8	

Notes: The latest of the *Catharus* thrushes despite a few unusually early arrivals in mid-August, peaking in mid-October. Previously the earliest fall record was September 25.

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

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

Notes: Observations limited to a single individual banded in the second week of August, a first for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	11.3	15.43	9	4.86	6.43	6	7	28.14	42.43	115.86	347.43	333.43	234.29	89.35
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	7	7	91
# PROCESSED	2	2				1	1	5	6	54	80	68	99	318
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: October 23			NUMBER: 1150		

Notes: One of four species seen every day of the season. Numbers began rising in late September, peaking in mid-October with hundreds streaming overhead just after sunrise. Many more were banded this year compared to 2006 and especially 2005, since fewer days were rained out during peak robin migration. The number of birds banded has steadily increased over three fall seasons: 119 (2005), 299 (2006), 318 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	3.86	6.14	7.71	4.86	4.86	5.86	6.43	6.43	4.29	1.86	0.14			4.03
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	6	1			70
# PROCESSED	4-0-2	7-0-3	2-0-5		2-0-3	5-0-4	10-0-5	6-1-5	3-0-4					39-1-31
FIRST OBSERVED: August 1				LAST OBSERVED: October 14				PEAK DATE: September 28			NUMBER: 11			

Notes: Observed daily until mid-October, then dropped off rapidly. A slight peak in numbers occurred from mid-August and again in mid-September as migrants supplemented the local birds still in the area. The number of banded GRCA's has slightly but steadily dropped over the past three fall seasons: 58 (2005), 41 (2006), 39 (2007). The 31 recaps this season were 20 different individuals.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14	0.14	0.14			0.43	0.43	0.14	0.14					0.12
# DAYS OBSERVED	1	1	1			2	2	1	1					9
# PROCESSED			1			1-0-1	1-0-2							3-0-3
FIRST OBSERVED: August 1				LAST OBSERVED: September 26				PEAK DATE: September 6 and 18			NUMBER: 2			

Notes: Seen almost once a week from the beginning of the banding season to the end of September. All birds banded were HY, re-caught up to 32 days after being banded.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY													1.29	0.1
# DAYS OBSERVED													2	2
# PROCESSED														
FIRST OBSERVED: October 29				LAST OBSERVED: October 30				PEAK DATE: October 29			NUMBER: 6			

Notes: Two small flocks seen flying over the station on only two occasions at the very end of the banding season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	13.9	18.29	7.57	13.43	11.57	19.86	11.86	20.71	6.71	5.57	10.14	7.43	2.43	11.5
# DAYS OBSERVED	7	7	7	7	7	7	6	7	7	4	6	6	4	82
# PROCESSED	6-0-1	5				3	1	6						21-0-1
FIRST OBSERVED: August 1				LAST OBSERVED: October 29				PEAK DATE: September 20			NUMBER: 78			

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

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

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

Notes: Observations limited to two individuals seen and heard flying over the site.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY												0.57	0.86	0.11
# DAYS OBSERVED												4	5	9
# PROCESSED												2	1	3
FIRST OBSERVED: October 18					LAST OBSERVED: October 30				PEAK DATE: October 25				NUMBER: 2	

Notes: At least three individuals observed repeatedly during the final month of the season. One of the HY birds was resighted several times after being banded.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.71			0.14	0.86	6.71	3.29	9.57	12.29	31.71	56.14	38.14	63.29	17.14
# DAYS OBSERVED	2			1	2	3	2	5	6	7	4	6	7	45
# PROCESSED														
FIRST OBSERVED: August 2					LAST OBSERVED: October 30				PEAK DATE: October 24				NUMBER: 275	

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

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY					0.29	0.29	0.71	0.29	2.14	1.29	0.14			0.4
# DAYS OBSERVED					2	2	5	2	5	4	1			21
# PROCESSED					1	1	2-0-1	1	8-0-1	5				18-0-2
FIRST OBSERVED: August 30					LAST OBSERVED: October 14				PEAK DATE: September 2				NUMBER: 5	

Notes: Seen weekly from early September through mid-October. Relatively scarce except during a slight peak in late September and early October. Number of banded birds remarkably consistent over three fall seasons: 20 (2005), 15 (2006), 18 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1	0.43	0.29	0.43	0.29	0.14	0.14	0.14						0.22
# DAYS OBSERVED	4	3	2	2	1	1	1	1						15
# PROCESSED	2	2	0-0-1	1-1-0		0-1-0								5-2-1
FIRST OBSERVED: August 3					LAST OBSERVED: September 19				PEAK DATE: August 4				NUMBER: 3	

Notes: Seen weekly from early August to late September. Number of banded birds low but remarkably consistent over three fall seasons: 3 (2005), 5 (2006), 5 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.57			0.29				0.29					0.09
# DAYS OBSERVED		3			2				1					6
# PROCESSED					1									1
FIRST OBSERVED: August 9					LAST OBSERVED: September 28				PEAK DATE: August 9 and September 28				NUMBER: 2	

Notes: Seen sporadically through the first two months. Number of banded birds steadily declining over three fall seasons: 11 (2005), 5 (2006), 1 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2.43	2.57	3.57	5.29	4.86	4.14	0.71	0.57	0.43	0.29	0.14		0.14	1.93
# DAYS OBSERVED	6	5	7	7	7	7	3	3	2	2	1		1	51
# PROCESSED	3-1-2	8-0-1	5	11-0-3	13-0-2	16-0-4	1-0-1	2	1	1	0-0-1		1	62-1-14
FIRST OBSERVED: August 1					LAST OBSERVED: October				PEAK DATE: August 26			NUMBER: 17		

Notes: Recorded on most days during the first two months of the season, rapidly dropping off in early October with the exception of one individual banded October 24. Many of the birds observed in August were likely local breeders and their offspring. Those banded in September (25) and October (2) were all HYs.

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

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

Notes: A HY male banded this season was a first for MBO, and only the second observation on site after a male high up in the canopy north of the B/N nets in the fall of 2004.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.29	0.29	0.71	0.29	0.71	0.57	0.57	0.86	0.14	0.14	0.14			0.36
# DAYS OBSERVED	1	2	3	1	3	4	3	4	1	1	1			24
# PROCESSED		2	2-0-1	1	2	2	3	4	0-0-1	1	1			18-0-2
FIRST OBSERVED: August 4					LAST OBSERVED: October 10				PEAK DATE: 9 dates			NUMBER: 2		

Notes: Present on a weekly basis until disappearing in mid-October, two weeks later than last year. 69% fewer birds banded than in fall 2006, and seen on 37% fewer days.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							0.14	0.43	1.14	0.86	0.57			0.24
# DAYS OBSERVED							1	2	4	4	3			14
# PROCESSED							1	2	5-0-1	2	2-0-1			12-0-2
FIRST OBSERVED: September 17					LAST OBSERVED: October 16				PEAK DATE: September 28			NUMBER: 4		

Notes: Seen weekly from mid-September to mid-October. Banded double the number this year compared to last year.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2.29	2.29	1.86	1.14	1	2	2.71	2.14	0.43	0.29	0.43			1.28
# DAYS OBSERVED	6	6	5	3	3	4	6	5	3	2	2			45
# PROCESSED	7-0-1	5-0-2	4-0-2	5	3-0-1	5-0-2	8-0-1	10-0-1	1	1	1			50-0-10
FIRST OBSERVED: August 1					LAST OBSERVED: October 16				PEAK DATE: September 11 and 12			NUMBER: 10		

Notes: Observed weekly for the first 11 weeks of the season before disappearing rapidly in mid-October. Number of banded birds steadily declining over three fall seasons: 164 (2005), 98 (2006), 50 (2007). Several individuals were re-caught over one month after being banded, indicating a lengthy stopover.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY					0.14		0.29							0.03
# DAYS OBSERVED					1		1							2
# PROCESSED					1									1
FIRST OBSERVED: August 31					LAST OBSERVED: September 17				PEAK DATE: September 17			NUMBER: 2		

Notes: Three individuals observed in September. The number of birds banded has steadily decreased over three fall seasons: 10 (2005), 2 (2006), 1 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	8.14	5.29	2.29	0.57		0.14								1.26
# DAYS OBSERVED	7	7	6	3		1								24
# PROCESSED	27-1-0	9-1-1	6	0-1-0		1								43-3-1
FIRST OBSERVED: August 1					LAST OBSERVED: September 5				PEAK DATE: August 5				NUMBER: 15	

Notes: Seen daily early in the season, gradually tapering off at the end of August as local residents departed. Three spring-banded adults were re-caught in early August (two of which were banded in the spring of 2005), suggesting that many of the hatch-year birds banded in August are likely local offspring. The last observed date this year is two weeks earlier than the two previous years. Number of birds banded has been remarkably consistent over the past three seasons: 39 (2005), 43 (2006), 43 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.71	0.43	0.57	0.71	0.29	0.57								0.25
# DAYS OBSERVED	4	3	2	2	2	4								19
# PROCESSED	3	1	4	3	1	2								12
FIRST OBSERVED: August 3				LAST OBSERVED: September 11				PEAK DATE: August 26				NUMBER: 3		

Notes: Seen in small numbers from the beginning of the season until mid-September, with no real peak observed. Number of birds banded has been fairly consistent over the past three seasons: 16 (2005), 13 (2006), 12 (2007). Last observed date two to three weeks earlier this year than in previous years.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.86	0.57	4.86	3.14	1.29	3.43	1	0.14	0.14				1.22
# DAYS OBSERVED	2	3	3	6	6	5	5	5	1	1				37
# PROCESSED	1	3-0-1	2-0-1	24-0-2	19-0-1	5-0-3	14-0-1	4-0-2	1	1				74-0-11
FIRST OBSERVED: August 2				LAST OBSERVED: October 5				PEAK DATE: August 26				NUMBER: 19		

Notes: Present over a ten-week span, and particularly numerous from late August to mid-September. The number of individuals banded has steadily dropped over the past three fall seasons: 192 (2005), 157 (2006), 74 (2007). Though most of the recaptures were one or two days after banding, two individuals lingered on site for at least 11 and 17 days each.

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

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

Notes: The only individuals observed were those banded, a complete reversal from last year's pattern when none were banded, but four others were seen.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.14	0.29	0.71	0.71	0.29	0.86	0.71	0.29	0.29				0.33
# DAYS OBSERVED		1	2	2	3	1	4	3	1	1				18
# PROCESSED				4	5	2	5	4	2					22
FIRST OBSERVED: August 11				LAST OBSERVED: October 4				PEAK DATE: August 26				NUMBER: 4		

Notes: Present from the second week of August until early October in small numbers, with a slight increase in abundance noted in mid-September. The number of birds banded has rebounded from 2006 (14) but still falls short of the count in 2005 (34).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.43		0.29	1	0.43		3.43	12.43	15.14	6.29	1	0.29	3.13
# DAYS OBSERVED		2		1	4	1		5	7	7	5	2		41
# PROCESSED				1	1				12	46-0-2	7-0-1	1		68-0-3
FIRST OBSERVED: August 10					LAST OBSERVED: October				PEAK DATE: September 27 and October 6				NUMBER: 40	

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. Numbers were far lower than last fall, with 87% fewer banded, and an 82% reduction in the mean number of birds seen per day. One individual remained on site for at least 12 days, but overall few were recaptured (4%).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.14	0.29	0.43	0.57	0.86	0.14	0.14				0.2
# DAYS OBSERVED				1	1	2	1	3	1	1				10
# PROCESSED							1	2						3
FIRST OBSERVED: August 26				LAST OBSERVED: October 3				PEAK DATE: September 17				NUMBER: 4		

Notes: Seen at least once weekly from late August through to early October, but with a small peak in mid-September. Number of banded birds steadily declining over three fall seasons: 24 (2005), 19 (2006), 3 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.14	0.14										0.02
# DAYS OBSERVED			1	1										2
# PROCESSED														
FIRST OBSERVED: August 19				LAST OBSERVED: August 25				PEAK DATE: August 19 and 25				NUMBER: 1		

Notes: Observations limited to two individuals over two weeks in late August; observed on 75% fewer days than in 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY									0.14	0.14				0.02
# DAYS OBSERVED									1	1				2
# PROCESSED														
FIRST OBSERVED: October 2				LAST OBSERVED: October 5				PEAK DATE: October 2 and 5				NUMBER: 1		

Notes: Observations restricted to two individuals in early October, four weeks later than the last observed date last year.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							0.14	4	1.71	1.43				0.56
# DAYS OBSERVED							1	4	4	4				13
# PROCESSED							1	16-0-1	6-0-1	6-0-1				29-0-3
FIRST OBSERVED: September 16				LAST OBSERVED: October 7				PEAK DATE: September 24				NUMBER: 17		

Notes: Observations restricted to a four-week period from mid-September to early October. Twenty-five more individuals banded than last year, when only four were banded.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY							1	0.57	0.29					0.14
# DAYS OBSERVED							2	3	2					7
# PROCESSED									1					1
FIRST OBSERVED: September 24				LAST OBSERVED: October 6				PEAK DATE: September 25				NUMBER: 3		

Notes: Observations limited to a three-week period in late September to early October. Number of banded birds drastically declining over three fall seasons: 48 (2005), 5 (2006), 1 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.29										0.02
# DAYS OBSERVED				2										2
# PROCESSED				2										2
FIRST OBSERVED: August 25				LAST OBSERVED: August 26				PEAK DATE: August 25 and 26			NUMBER: 1			

Notes: Quite scarce this season, with only two individuals banded on consecutive days in late August. The number of birds banded has steadily decreased over three fall seasons: 5 (2005), 3 (2006), 2 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY				0.29	0.71	1.14	0.71	0.14						0.23
# DAYS OBSERVED				1	3	4	3	1						12
# PROCESSED				2	4	4	3	1						14
FIRST OBSERVED: August 26				LAST OBSERVED: September 22				PEAK DATE: 3 dates			NUMBER: 3			

Notes: Seen weekly from late August to late September. Mid-season migrant, peaking in early to mid-September. 33% fewer birds banded than during FMMP 2006, back to levels similar to FMMP 2005 (11).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.86	1.86	2	1.14	0.29	0.14	0.14							0.57
# DAYS OBSERVED	6	6	6	6	2	1	1							28
# PROCESSED	3	2	1	2-0-2	1									9-0-2
FIRST OBSERVED: August 1				LAST OBSERVED: September 12				PEAK DATE: August 19			NUMBER: 5			

Notes: Seen weekly over the first seven weeks, with peak movement in early August. Number of banded birds steadily declining over three fall seasons: 22 (2005), 18 (2006), 9 (2007) despite being observed on roughly the same number of days. One recapture was 21 days after banding, suggesting it, an AHY male, is likely a local breeder.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.71	3.29	3.57	5.29	3	2.57	0.71	0.71	0.14					1.61
# DAYS OBSERVED	6	7	7	7	6	7	4	4	1					49
# PROCESSED	9	15	12-0-1	14-0-2	14-0-1	10-0-2	1	2-0-1	0-0-1					77-0-8
FIRST OBSERVED: August 1				LAST OBSERVED: September 28				PEAK DATE: August 26			NUMBER: 10			

Notes: Among the most common warblers, seen regularly throughout the first half of the season and peaking in late August. Twenty-nine more individuals banded this fall compared with last fall, representing 60% more birds.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.29	0.43	0.57	0.71	0.29	0.14							0.22
# DAYS OBSERVED	2	2	3	3	5	2	1							18
# PROCESSED	1	2	2	2	3	2	1							13
FIRST OBSERVED: August 3				LAST OBSERVED: September 16				PEAK DATE: August 3 and 26			NUMBER: 2			

Notes: Early August records pertain to recently fledged birds, likely from nests within or adjacent to MBO. Migrants were recorded in small numbers from mid-August through mid-September, peaking in early September. 72% fewer birds banded than in FMMP 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14	0.71	0.14	0.86	0.71	0.57	0.43	0.14						0.28
# DAYS OBSERVED	1	3	1	5	5	4	3	1						23
# PROCESSED	1	2-0-1	1	5	4-0-1	2	0-0-3	1						16-0-5
FIRST OBSERVED: August 7				LAST OBSERVED: September 21				PEAK DATE: 3 dates in August			NUMBER: 2			

Notes: Seen weekly from early August to late September, peaking in late August. 59% fewer individuals banded than during FMMP 2006, but only one bird less than during FMMP 2005, suggesting a possible two-year population or migration cycle.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.71	0.29	0.14	0.14								0.1
# DAYS OBSERVED			3	2	1	1								7
# PROCESSED			5	2	1	1								9
FIRST OBSERVED: August 16					LAST OBSERVED: September 11				PEAK DATE: August 16				NUMBER: 3	

Notes: Surprisingly frequently observed, given that none had been recorded at MBO prior to FMMP 2005. Present during a four-week window from mid-August to mid-September. Number of banded birds fairly consistent over three fall seasons: 10 (2005), 6 (2006), 9 (2007).

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	5.29	4.43	4.86	2.57	3.71	3.71	3.86	2.57	1.29	0.57		0.14		2.54
# DAYS OBSERVED	7	7	7	7	6	7	7	6	5	3		1		63
# PROCESSED	6-3-3	5-1-1	8-0-5	4-0-2	7-0-3	9-0-3	4-1-3	3-0-1	4-0-1	1				51-5-22
FIRST OBSERVED: August 1					LAST OBSERVED: October 18				PEAK DATE: August 19				NUMBER: 11	

Notes: Present almost daily until early October, with one late migrant seen October 18. Migration peaked in early August, with a smaller peak in mid-September. 35% fewer birds banded compared with 2006.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY			0.14	1.29	2.29	3	1.43	0.14	0.14	0.14				0.66
# DAYS OBSERVED			1	3	6	7	4	1	1	1				24
# PROCESSED				8	9-0-3	17-0-2	5	1	1					41-0-5
FIRST OBSERVED: August 21					LAST OBSERVED: October 3				PEAK DATE: September 7				NUMBER: 8	

Notes: Migration occurred from mid-August to early October, peaking in early September, and remaining two to three weeks later than in previous years. Number of banded birds increasing over three fall seasons: 27 (2005), 29 (2006), 41 (2007).

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.29	0.29	0.86	0.14									0.12
# DAYS OBSERVED		1	2	4	1									6
# PROCESSED		2	2	4	1									9
FIRST OBSERVED: August 12					LAST OBSERVED: September 4				PEAK DATE: August 26				NUMBER: 4	

Notes: One of the earliest warblers to depart, present for a four-week window from mid-August to early September. Last observed date for this fall two weeks earlier than previous years. The number of birds banded has steadily decreased over three fall seasons: 15 (2005), 13 (2006), 9 (2007).

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14		0.14	0.29	0.43	0.14		0.29						0.11
# DAYS OBSERVED	1		1	2	2	1		2						9
# PROCESSED	1			1		1								3
FIRST OBSERVED: August 7					LAST OBSERVED: September 25				PEAK DATE: September 2				NUMBER: 2	

Notes: Sporadically seen from early August to late September. The three birds banded this fall were all HYs, as have been all individuals banded in previous years.

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

	AUGUST				SEPTEMBER				OCTOBER					TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	3.57	2.86	4	3.43	2.14	2.71	3.43	3	2.29	2	2.57	2	3.29	2.87
# DAYS OBSERVED	7	7	7	7	6	7	7	6	6	7	6	7	7	87
# PROCESSED	1-1-0	1-0-1		0-1-0		0-1-1	0-0-2	0-1-0		1	2-1-0		2-0-2	7-5-6
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: August 17				NUMBER: 8	

Notes: Seen on almost a daily basis throughout the season. The only commonly-caught species that has more recaptures than new bandings, suggesting a stable resident population.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	5.14	4.14	3.57	1.43	2.86	0.71	0.86	0.14			0.14			1.46
# DAYS OBSERVED	7	7	7	5	6	4	3	1			1			41
# PROCESSED	14	4	8-0-2	1	3-0-1			1						31-0-3
FIRST OBSERVED: August 1				LAST OBSERVED: October 13				PEAK DATE: August 7			NUMBER: 12			

Notes: Seen almost daily until the end of August. 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, and a very late migrant in mid-October.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.29	0.14		0.29	0.43	1.57	1.29	1.29	0.43				0.47
# DAYS OBSERVED	3	2	1		2	3	3	4	4	1				23
# PROCESSED					2	2	2	2-0-1	5					13-0-1
FIRST OBSERVED: August 3				LAST OBSERVED: October 3				PEAK DATE: September 18			NUMBER: 6			

Notes: Much patchier distribution than seen in previous years, with a later seasonal distribution this year. Number of birds banded, and mean number observed per day both decreasing over three fall seasons: 39 / 1.1 (2005), 20 / 0.8 (2006), 13 / 0.5 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY									0.14	0.14	3.43	5.29	6.43	1.19
# DAYS OBSERVED									1	1	4	7	7	20
# PROCESSED										10	16-0-3	8-0-4		34-0-7
FIRST OBSERVED: October 1				LAST OBSERVED: October 30				PEAK DATE: October 25			NUMBER: 15			

Notes: Seen daily over the final half of October, with numbers increasing steadily during this period. Number of banded birds increasing slightly over three fall seasons: 25 (2005), 29 (2006), 34 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14	0.43	0.14		0.57	0.14	1.14	1.29	0.43	1.71	1.57	0.14		0.59
# DAYS OBSERVED	1	2	1		1	1	2	5	3	4	3	1		24
# PROCESSED							4	1	2	3	2			12
FIRST OBSERVED: August 3				LAST OBSERVED: October 18				PEAK DATE: October 15			NUMBER: 7			

Notes: Observed almost weekly between early August and mid-October, with the peak of migration occurring in mid-September. Number of birds banded has rebounded from the low of 5 last fall, but still lower than 21 in 2005.

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

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

Notes: Sightings restricted to a single individual skulking at the base of a willow off H1, a first for MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.29						0.02
# DAYS OBSERVED								1						1
# PROCESSED														
FIRST OBSERVED: September 21				LAST OBSERVED: September 21				PEAK DATE: September 21			NUMBER: 2			

Notes: Observations restricted to two individuals seen on census towards the end of September.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY						0.29								0.02
# DAYS OBSERVED						1								1
# PROCESSED						2								2
FIRST OBSERVED: September 14					LAST OBSERVED: September 14				PEAK DATE: September 14				NUMBER: 2	

Notes: The only birds observed were those banded on September 14.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY										0.43	2.29	3.29	2.71	0.67
# DAYS OBSERVED										2	5	7	7	21
# PROCESSED										2	10	9-0-2	5-0-1	26-0-3
FIRST OBSERVED: October 8					LAST OBSERVED: October 30				PEAK DATE: October 13				NUMBER: 7	

Notes: Observed weekly starting in early October. Number of birds banded five times greater than in 2006, but on par with FMMP 2005, suggesting the possibility of a two-year cycle.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	25	18	9.86	10.43	5.86	8	7.71	9.14	8.57	11.29	7.71	6.86	3.43	10.14
# DAYS OBSERVED	7	7	7	7	7	7	6	7	7	7	7	7	7	90
# PROCESSED	57-3-15	20-4-20	9-2-6	9-0-5	6-0-2	7-3-3	9-0-4	11-1-4	15-0-5	18-2-9	17-1-3	16-0-5	4-0-2	198-16-83
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: August 3				NUMBER: 32	

Notes: Present on all days but one mid-season. One of the most abundant species on site, declining towards the end of the season despite a small peak during the first week of October. One of only three species banded each week of the season, though 35% fewer were banded this year than last.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.14	0.57		0.14	0.57	0.86	0.57	0.57	0.86	0.29			0.35
# DAYS OBSERVED		1	1		1	2	4	2	2	5	2			20
# PROCESSED					1	4	2-0-3	3	4	4-0-2	2			20-0-5
FIRST OBSERVED: August 9					LAST OBSERVED: October 13				PEAK DATE: August 21				NUMBER: 4	

Notes: Observed weekly from early September to mid-October, with some early migrants in mid-August. Most common in mid-September, with a second peak recorded in early October. Recaptures were within roughly one week of banding. The number of birds banded has steadily increased over three fall seasons: 11 (2005), 17 (2006), 20 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	2	1.86	0.71	0.71	0.57	0.57	0.43	1.29	4	3.14	2	1.14	0.57	1.46
# DAYS OBSERVED	5	7	4	4	3	2	2	3	6	7	6	6	2	57
# PROCESSED	10-0-2	3-0-7	3	1-0-2	2-0-1	0-0-1	2-0-1	7	13-0-6	10-0-5	5-0-5	4-0-2	2-0-1	62-0-33
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: 4 dates				NUMBER: 6	

Notes: Present weekly throughout the season. Local residents common in August but tapered off by mid-September. Migrants peaked from late-September to early October. Banded over twice as many birds as last fall; one of only three species banded every week. The 33 recaptures were only 19 individuals, some caught several times.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	1.29	0.86	0.57	0.71	4.43	11.14	31.86	40.71	60.14	38.29	35.57	17	7.57	19.24
# DAYS OBSERVED	4	2	3	2	6	7	7	7	7	7	7	7	7	73
# PROCESSED	2	3	0-0-1		2-0-1	21-0-5	32-0-9	60-0-8	96-0-24	54-0-11	25-0-10	21-0-1	2	318-0-70
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: September 28				NUMBER: 90	

Notes: One of the most abundant passerines on site, peaking from mid-September to mid-October. Number of birds banded up 70% from last fall, but similar to FMMP 2005 (354), suggesting a possible two-year cycle in population levels or migration strategy.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.57	10.86	20.29	15	1.43	0.43	3.74
# DAYS OBSERVED								2	5	7	7	5	2	28
# PROCESSED								2	22	35-0-9	18-0-11	3-0-1		80-0-21
FIRST OBSERVED: September 21				LAST OBSERVED: October				PEAK DATE: October 8				NUMBER: 42		

Notes: Seen almost daily from late September through late October, peaking in early October. A proportionately large number of repeats, indicating several birds remained on site for at least one week after being banded. Number of banded birds increasing over three fall seasons: 20 (2005), 50 (2006), 80 (2007).

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY						0.43	1	1	4.14	29.29	22.43	36.57	9.57	8.03
# DAYS OBSERVED						2	4	3	6	7	7	6	6	42
# PROCESSED						2	3	1	6	44-0-1	29-0-2	38-0-3	4	127-0-6
FIRST OBSERVED: September 9				LAST OBSERVED: October 30				PEAK DATE: October 6				NUMBER: 90		

Notes: First observed three weeks earlier than last year and one week later than in 2005, peaking in mid-October. Number of birds banded almost quadrupled over last fall, but relatively similar to FMMP 2005 (191), suggesting a possible two-year cycle in population levels or migration strategy.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.14			0.71										0.07
# DAYS OBSERVED	1			3										4
# PROCESSED														
FIRST OBSERVED: August 1				LAST OBSERVED: August 28				PEAK DATE: August 26				NUMBER: 3		

Notes: Seen on 87% fewer days this season than last, likely due to the lack of corn in the field adjacent to MBO.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	71.1	10.57	2.29	0.14	0.43	0.86	5.43	14.86	75.43	36.86	201.86	219.71	699.71	103.0
# DAYS OBSERVED	7	7	3	1	1	3	6	6	7	7	7	7	7	69
# PROCESSED	1											1	1	3
FIRST OBSERVED: August 1				LAST OBSERVED: October				PEAK DATE: October 24				NUMBER: 2501		

Notes: August sightings are likely local birds. These virtually disappeared in mid-August. Large mixed blackbird flocks mostly composed of RWBLs returned to the area late in September, peaking in at the end of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY								0.57	9.71	3.14	0.86	7.86		1.70
# DAYS OBSERVED								3	3	4	2	3		15
# PROCESSED														
FIRST OBSERVED: September 22				LAST OBSERVED: October 22				PEAK DATE: September 30				NUMBER: 52		

Notes: Small to moderate flocks seen from mid-September through to late October, peaking in late September and again in late October. Observed on half as many days as last fall.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	19	14.29	10.29	8.71	10.29	10.43	13.57	48.86	56	5.57	20.14	108.43	80.57	31.24
# DAYS OBSERVED	7	7	7	6	6	5	5	6	7	4	4	4	6	74
# PROCESSED												1		1
FIRST OBSERVED: August 1					LAST OBSERVED: October 30				PEAK DATE: October 18			NUMBER: 502		

Notes: August sightings were likely local birds. From late August through late October, flocks of varying size were observed almost daily, but half the size of 2005's flock. These flocks either roosted in the tall cottonwoods along the B/N nets or were seen flying over the woods towards the Arboretum. The one bird banded this fall represents a 97% lower total than in 2006.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.14						1		0.14	0.43	0.71	0.14	0.19
# DAYS OBSERVED	1	1						2		1	1	1	1	8
# PROCESSED														
FIRST OBSERVED: August 2				LAST OBSERVED: October 24				PEAK DATE: October 22			NUMBER: 5			

Notes: Irregular sightings of individuals scattered throughout the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	7.71	5.43	2.29	2.43	0.43	0.29				0.14				1.44
# DAYS OBSERVED	6	7	7	7	2	2				1				32
# PROCESSED	17-1-0	1-1-1	0-0-1	0-1-0										18-3-2
FIRST OBSERVED: August 1				LAST OBSERVED: October 8				PEAK DATE: August 5			NUMBER: 23			

Notes: Common throughout August, peaking early in the month, then tapering off rapidly and not seen beyond mid-September with the exception of a very late migrant seen October 8. Mean number per day down only 15% from 2006, but 71% fewer birds banded.

PIGR: Pine Grosbeak / Durbec des sapins (*Pinicola enucleator*)

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY													0.29	0.02
# DAYS OBSERVED													1	1
# PROCESSED														
FIRST OBSERVED: October 29				LAST OBSERVED: October 29				PEAK DATE: October 29			NUMBER: 2			

Notes: Observations restricted to two individuals seen flying during census on the second to last day of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.29		0.43		0.71	1	0.57	1.43	0.86	1.43	0.86	0.43		0.62
# DAYS OBSERVED	1		2		3	3	2	5	4	4	3	2		29
# PROCESSED					2	1			2	3	3			11
FIRST OBSERVED: August 4				LAST OBSERVED: October 23				PEAK DATE: September 5			NUMBER: 5			

Notes: Observed sporadically throughout the season, peaking from late September to early October. None at all were observed last fall, reflecting their nomadic nature. Also considerably more common than in fall 2005, when just three individuals were banded.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	0.43	0.29	0.14	0.29						0.71			0.57	0.19
# DAYS OBSERVED	1	1	1	1						2			2	8
# PROCESSED														
FIRST OBSERVED: August 3				LAST OBSERVED: October 29				PEAK DATE: August 3 and October 4			NUMBER: 3			

Notes: Observed sporadically at the beginning and the end of the season, though none were banded.

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

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

Notes: Observations limited to two individuals heard while flying over the spruce grove near Stoneycroft, a first for MBO.

CORE: Common Redpoll / Sizerin flammé (*Carduelis flammeus*)

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY													0.43	0.03
# DAYS OBSERVED													1	1
# PROCESSED														
FIRST OBSERVED: October 29					LAST OBSERVED: October 29					PEAK DATE: October 29				NUMBER: 3

Notes: Observations restricted to three individuals seen during census on the second to last day of the season.

PISI: Pine Siskin / Tarin des pins (*Carduelis pinus*)

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY												1.43	2.71	0.32
# DAYS OBSERVED												2	2	4
# PROCESSED														
FIRST OBSERVED: October 17					LAST OBSERVED: October 28					PEAK DATE: October 28				NUMBER: 12

Notes: Observations limited to a few flocks seen flying over the site towards the end of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY	22.7	23	23.71	22.57	20.14	25	19.43	17.57	14.57	13.71	15	10	13.29	18.51
# DAYS OBSERVED	7	7	7	7	7	7	7	7	7	7	7	6	7	90
# PROCESSED	2-1-0	3-1-0	1-0-3		3-2-0	20-1-0	4	17	15	16	6	5	2	94-5-3
FIRST OBSERVED: August 1					LAST OBSERVED: October 30					PEAK DATE: September 7				NUMBER: 50

Notes: Common to abundant throughout the season, seen almost daily. Numbers peaked in September and decreased in October. More than twice as many banded as in FMMP 2006, but numbers similar to FMMP 2005, suggesting a possible two-year cycle in population levels or migration strategy.

EVGR: Evening Grosbeak / Gros-bec errant (*Hesperiphona vespertina*)

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY													0.43	0.03
# DAYS OBSERVED													1	1
# PROCESSED														
FIRST OBSERVED: October 30					LAST OBSERVED: October 30					PEAK DATE: October 30				NUMBER: 3

Notes: Observations limited to three individuals flying over the banding station on the last day of the season.

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

	AUGUST				SEPTEMBER					OCTOBER				TOTAL
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	
MEAN # BIRDS / DAY		0.57	0.14		0.29			0.14	0.14	0.14				0.11
# DAYS OBSERVED		3	1		1			1	1	1				8
# PROCESSED														
FIRST OBSERVED: August 9					LAST OBSERVED: October 9					PEAK DATE: August 12 and September 4				NUMBER: 2

Notes: Irregular sightings until early October despite them having bred on site.

Appendix B. Net allocation for FMMP 2007

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