

# McGill Bird Observatory Spring Migration Monitoring Program 2007 Report

Prepared by Marie-Anne R. Hudson and Barbara Frei July 2007



# **Table of Contents**

| About the Mo | cGill Bird Observatory        | 2  |
|--------------|-------------------------------|----|
| The Spring N | Aigration Monitoring Program  | 2  |
|              | ı coverage                    | 2  |
|              |                               | 2  |
|              |                               | 2  |
|              |                               |    |
|              | Banding                       | 3  |
|              | Recoveries                    | 7  |
|              | Census                        | 10 |
|              | Daily estimated totals        | 10 |
|              | Nest monitoring               | 11 |
| Analysis     |                               | 11 |
| - <b>,</b>   | Migration patterns            | 11 |
|              | Sex and age                   | 12 |
|              | Priority species              | 13 |
|              | Net productivity              | 14 |
|              | Photo documentation           | 16 |
|              | Research projects             | 16 |
| Education ar | nd training                   | 17 |
| Summary      |                               | 18 |
|              | ments                         | 19 |
|              |                               | 20 |
| Appendix A:  | Seasonal distribution charts  | 21 |
|              | Net allocation for SMMP 2007. | 44 |

Front photo: This second-year male Blackpoll Warbler was one of 47individuals banded during our first ever Blackpoll invasion at the McGill Bird Observatory. (Photo by Barbara Frei)

# 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 provisional 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 Spring Migration Monitoring Program

The Spring Migration Monitoring Program (SMMP) 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 SMMP season at MBO extends from March 28 through June 5. This ten-week period encompasses the majority of spring passerine migration.

# 2007 season coverage

The first 21 days and final four days of the season were set aside for census only, as banding in late March and early April is greatly limited by cold, and by early June it results primarily in the capture of breeding birds. For the 45 days in between, the goal was to open the nets for five hours daily, in addition to conducting census and incidental observations. During this period, banding took place on 35 (78%) of days, being canceled due to rain four times. The absence of one of the banders-in-charge for a three-week period from mid-April to early May, resulted in banding being cancelled an additional six days. Finally, rain and/or strong winds limited the hours of operation on eight of the 35 days during which banding took place and short-staffing limited operations on three days, leaving 24 days of full operation according to the site protocol, comparable to the 26 days during SMMP 2006.

#### Equipment

Mist nets (30 mm mesh from Spidertech) were used for all trapping. Virtually all nets, with the exception of A2 which was replaced, were previously used during FMMP 2006, but were mostly in good condition. The standard setup for most of the season involved 11 nets in five groups. Most of these were the same as used in SMMP 2005 and 2006 (Gahbauer 2005a). Three extra nets (A1, E2 and H2) were added during FMMP 2006, making it such that all net groups are now at least paired. This was designed to minimize travel time between net groups while increasing netting potential. Details of net allocations are summarized in Appendix B.

## Weather

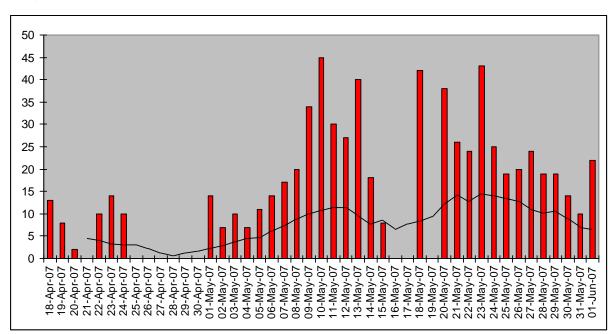
Weather can have a significant influence on migration, especially in spring. Strong northwest winds in early May seemed to stall migration, a phenomenon documented by Richardson (1978, 1990). In late May, there was a series of cold and rainy days spanning almost a week which largely prevented banding. Earlier in the season, however, it was more the lack of staff that affected the number of banding days than inclement weather.

Late fall and winter weather can also have an impact on spring conditions at MBO in terms of flooding. The ponds were extensively flooded throughout the season, the waters receding enough to install net H1 only in mid-May. Not only did the high water levels prevent access to one of the net lanes, it also modified some habitat enough to influence the presence/absence of certain species. Whereas the larger surface area of the ponds was attractive to a number of ducks early in the season, it eliminated virtually all the habitat usually available to shorebirds in spring, and the extensive flooding of the cattails may have also deterred species such as Piedbilled Grebe and Marsh Wren that were observed in previous years, but were absent this year.

#### Results

# Banding

During SMMP 2007, 704 birds of 61 species were banded, a decrease of two species and 55 individuals compared to SMMP 2006, and one less species but 57 more individuals than SMMP 2005. The 2006 banding season began April 6<sup>th</sup>, two weeks earlier than in 2007 and therefore allowing a greater variety of migrants to be caught. However, the number of birds banded per 100 net hours increased from 25.8 in 2006 to 28.6 in 2007, supporting the notion that the first few weeks of spring are relatively unproductive, and that banding should be restricted to the last half of April and all of May to maximize the return on effort. Interestingly, 2007 had just over 900 hours more than in 2005, and yet only 57 more birds were caught. This translates to 12.8 fewer birds per 100 net hours. It should be noted, however, that figures from 2005 have not been adjusted to account for the longer nets installed at A and D, making the difference seem slightly larger than it should be. As well, the 2005 SMMP was not standardized in that banding days were selected based on good weather and/or migration conditions, further biasing such a comparison.

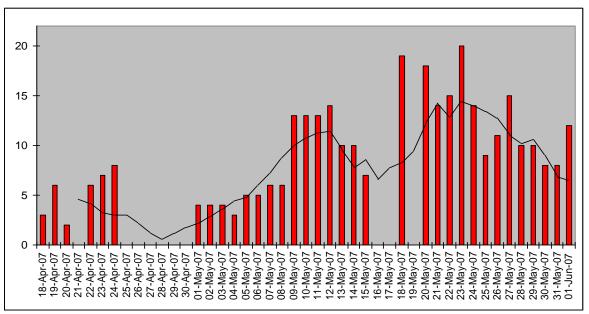


**Figure 1.** Number of individuals banded per day during the spring season at MBO, with a running sevenday average in black.

The busiest day of the spring 2007 season was May 10<sup>th</sup>, with 45 birds banded (Figure 1), 11 days earlier than the 2006 peak. Other near-peak days include May 23<sup>rd</sup> with 43 birds banded, and May 18<sup>th</sup> with 42 birds banded. The mean over 35 days of banding was 15.6 birds per day.

an increase of about two birds per day over 2006. It appears that this year, spring migration was more concentrated around the two middle weeks of May, as opposed to last year, when it seemed more protracted. It is possible that weather (steady northerly winds) in late April and early May may have caused a migratory bottleneck, leading many birds to build up at migratory stop-over sites until favourable south winds blew northward. The dip in the seven-day average in mid-May is due to the fact that banding was necessarily cancelled due to heavy rain over a two-day period, with an additional cancellation due to the Baillie Birdathon two days later. Had these cancellations not occurred, the graph would likely show a steadier average.

Species richness among banded birds peaked during the end of May, just as in 2006 (Figure 2). The greatest variety banded in a single day was 20 species on May 23. The mean number of species banded per day was 7.4, a 0.5 bird increase from 2006. Again, had the cancellation of banding activities in mid-May not occurred, the graph would likely show a steadier average in species richness.



**Figure 2.** Number of species banded per day during the spring season at MBO, with a running sevenday average in black.

Two species among the 61 species banded were new captures for MBO: Merlin and Eastern Towhee. An additional ten species were also banded just once during the season: Yellow-shafted Flicker, Pileated Woodpecker, Northern Rough-winged Swallow, House Wren, Blueheaded Vireo, Black-throated Green Warbler, Black-throated Blue Warbler, Veery, Indigo Bunting, and Purple Finch. Two of these species (Eastern Towhee and Mourning Warbler), were detected only through banding, as they were never observed incidentally or on census.

At the other extreme, Table 1 lists the ten most frequently banded species, which account for just under 60% of all birds banded this season. Despite the differences in weather and sampling effort between 2007, 2006, and 2005, seven species were in the top ten in all three years. Red-winged Blackbirds again dominated the top ten this year with three times as many of them banded as the Ruby-crowned Kinglet in second position (though the kinglets retain their number one position overall (Figure 3) by virtue of their higher numbers during fall migration). Interestingly, there were only 12 Red-winged Blackbird returns from previous years, possibly indicating a very large number of birds passing through MBO, since so few birds were

recaptured (out of a possible 405 banded individuals). These large numbers may have a 'dilution effect' on the number of returns seen. American Goldfinches bounced back slightly from 2006, but were nowhere near their 2005 numbers. The surprising entry this year was the influx of Blackpoll Warblers, which catapulted them into fourth position. The number of Yellow Warblers banded held relatively steady since last year, and can be at least partly attributed to the fact that many locally breeding individuals were previously banded in 2005 and 2006. Similar to last year (12 returns), there were 11 individual returns, making the number processed comparable to 2005 (47 banded). Common Grackles were substantially fewer than last year, while Baltimore Orioles increased slightly. Cedar Waxwings were ranked third in 2005, but are an erratic migrant and were relatively scarce this year with again only 17 banded. It should be noted that they were all banded within the last 6 days of the season, highlighting their nomadic nature, and suggesting that more might have been banded had the season continued longer. Yellow-rumped Warblers were banded slightly more often than in the previous two seasons. Honorable mentions go to Tennessee Warbler and Northern Waterthrush, which were also among the forefront of the warbler influx observed this spring, in addition to the four species of warbler in this year's top ten.

**Table 1.** Top ten species banded at MBO during SMMP 2007, as well as the numbers for 2006 and 2005. Numbers in parentheses indicate the rank within the top ten in past years. Dashes represent species not in the top ten in 2005 and 2006.

| Species                           |      | # banded |         |
|-----------------------------------|------|----------|---------|
| Species                           | 2007 | 2006     | 2005    |
| 1. Red-winged Blackbird           | 154  | 169 (1)  | 74 (2)  |
| 2. Ruby-crowned Kinglet           | 52   | 58 (3)   | 20 (9)  |
| 3. American Goldfinch             | 51   | 32 (6)   | 111 (1) |
| 4. Blackpoll Warbler              | 47   | 3 (-)    | 3 (-)   |
| 5. Yellow-rumped (Myrtle) Warbler | 32   | 22 (8)   | 25 (7)  |
| 6. Yellow Warbler                 | 29   | 21 (10)  | 47 (4)  |
| 7. Baltimore Oriole               | 18   | 11 (-)   | 14 (-)  |
| 7. Common Grackle                 | 18   | 59 (2)   | 20 (10) |
| 9. Cedar Waxwing                  | 17   | 17 (-)   | 59 (3)  |
| 9. Magnolia Warbler               | 17   | 22 (9)   | 5 (-)   |

Overall, this spring belonged to the warblers, with only three species banded less frequently than last year (Magnolia and Wilson's Warblers, and Common Yellowthroat), and four species banded for the first time in spring (Northern Parula, Black-throated Green warbler, Ovenbird, and Mourning Warbler). At the opposite end of the spectrum, the sparrows were far scarcer than in 2006, with only three species (Lincoln's, Chipping, and Savannah) banded more frequently than last spring, and only by one, two, and three individuals, respectively. The increase of Savannah Sparrows is likely due to the presence of a large hayfield adjacent to the site that was previously row-cropped for maize. For most sparrow species the number of individuals banded was 25-70% lower than in 2006. Two early migrants (Fox Sparrow and Slate-coloured Junco) were completely absent from this year's banding efforts. Fewer blackbirds were banded this year as well, with Baltimore Orioles being the only exception (18 banded, up from 11). After a record 59 birds banded last year, Common Grackle numbers (18 banded) returned to 2005 levels (20 banded). The reasons for these declines are unknown at this time, though it is possible that flood levels and/or changes in the type of nearby crops may have influenced the grackles' on-site abundance. They may also be artifacts of the reduced net hours early in the season, or they may reflect real changes in the population levels or migratory strategies of these species. Additional spring monitoring will help address these questions.

Overall, there were 11 species for which there was a 50% or greater reduction between SMMP 2006 and 2007 (in bold): Golden-crowned Kinglet (7/2), Common Yellowthroat (25/12), American Tree Sparrow (7/2), Fox Sparrow (9/0), Swamp Sparrow (11/3), White-throated Sparrow (42/13), Slate-coloured Junco (48/0), Common Grackle (59/18), Rose-breasted Grosbeak (9/4), Purple Finch (3/1), and House Sparrow (8/0). On the positive side, there were also 11 species for which double the number (or greater) was banded during SMMP 2007 (in bold) than during SMMP 2006: Warbling Vireo (0/9), Tennessee Warbler (2/16), Nashville Warbler (6/14), Chestnut-sided Warbler (1/7), Blackpoll warbler (3/47), Black-and-white Warbler (2/4), Ovenbird (0/2), Northern Waterthrush (5/15), Mourning Warbler (0/4), Canada Warbler (2/5), and Savannah Sparrow (2/5). These include only species that were banded at least twice in either season.

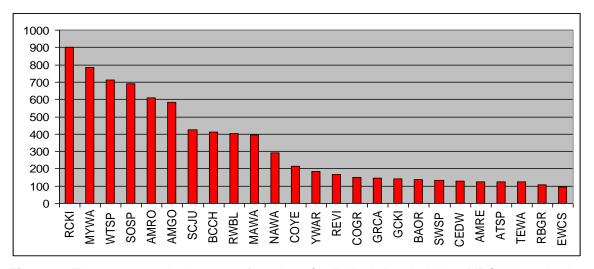
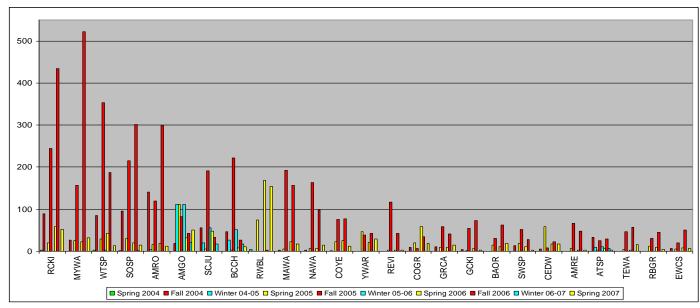


Figure 3. The top 25 species in terms of number of individuals banded since MBO's inception in 2004.



**Figure 4.** The top 25 species in terms of number of individuals banded at MBO since 2004. broken down by season and year.

The spring 2007 season has brought the cumulative total of birds banded at MBO to just over 10,000 birds, though the top 25 banded species have not changed significantly since the 2006 fall season (Figure 3). New to the list is the White-crowned Sparrow at number 25, and some slight re-shuffling of species has occurred between the bottom 18 species. As shown in Figure 4, some species exhibit extreme seasonality, with the bulk of those banded in one season or another (e.g. Red-winged Blackbirds are commonly banded in spring but rarely in fall), whereas other are similarly abundant across all seasons (e.g. American Goldfinch).

#### Recoveries

There were 106 repeats (individuals caught within 3 months of banding at MBO) of 20 species during SMMP 2007. These can be subdivided into local residents caught repeatedly, and migrants captured twice or more during their stopover at MBO. We had 38 fewer repeats than last spring (Gahbauer and Hudson 2006). It is possible that some of the local breeders have learned to avoid our standard net lanes, but more likely is that migrants did not linger, opting instead to continue their migration instead of using the site for a lengthy stopover.

**Table 2.** Top ten species recaptured most often during SMMP 2007. These represent the same individuals caught repeatedly in some cases.

| Species                   | # repeats |
|---------------------------|-----------|
| 1. American Goldfinch     | 16        |
| 1. Song Sparrow           | 16        |
| 3. Baltimore Oriole       | 14        |
| 4. Red-winged Blackbird   | 12        |
| 4. Yellow Warbler         | 12        |
| 6. Black-capped Chickadee | 6         |
| 7. Gray Catbird           | 5         |
| 7. Ruby-crowned Kinglet   | 5         |
| 9. Northern Cardinal      | 4         |
| 10. Common Grackle        | 3         |

Among the residents, American Goldfinch caught up with the Song Sparrow as the most frequently recaptured, with 11 individuals caught a total of 16 times, and with nine individuals captured 16 times, respectively (Table 2). Baltimore Orioles came in at number three with seven individuals captured 14 times. Unlike last year, Swamp Sparrows were barely handled (four times; three banded and one return) indicating that our local breeding pairs may have moved on from their usual territory near the C nets. Unlike in fall, migrants passing through MBO in spring do not linger for long, explaining the much lower number of repeats, compared to the 412 during FMMP 2006. Among species not breeding at MBO (e.g. Blackpoll Warbler, Northern Waterthrush, and Ruby-crowned Kinglet), none were recaptured this spring more than three days after being banded.

There were 79 returns (individuals not captured since more than three months) of 21 species (Table 3). This is well over double the number of returns for last fall (Hudson and Gahbauer 2006). The four most common species accounted for over half of all returns: Song Sparrow (13), Red-winged Blackbird (12), Yellow Warbler (11), and American Goldfinch (10). Almost two-thirds of returns involved birds banded during SMMP 2005 or SMMP 2006 (n = 47), indicating that these are likely individuals that breed at MBO annually. Some of these birds are known or suspected of having overwintered at MBO, but 13 of the species for which returns were recorded are obligate migrants.

Among the returns were several noteworthy records. The after-second-year female Red-winged Blackbird caught on May 31 is the one of oldest recaptures at MBO, second only to last year's female Baltimore Oriole recaptured four years to the day after she was banded. This female

blackbird was one of just nine birds banded during a brief pilot banding session in the spring of 2004, making her recapture all the more significant. Also of note, the second-year male Slate-coloured Junco recaptured in April after being banded in December, suggesting that it overwintered at MBO.

Table 3. List of returns captured during SMMP 2007, sorted by time elapsed.

| Band number | Species | Age/Sex | Banding date | Last capture | Spring recovery date | Time elapsed             |
|-------------|---------|---------|--------------|--------------|----------------------|--------------------------|
| 0861-10694  | RWBL    | ASY-F   | Apr 26 2004  | May 18 2004  | May 31 2007          | 3 years 13 days          |
| 1891-89705  | RWBL    | ASY-F   | May 7 2005   | -            | May 15 2007          | 2 years 8 days           |
| 1891-89711  | RWBL    | ASY-F   | May 10 2005  | May 26 2005  | Jun 1 2007           | 2 years 6 days           |
| 2430-42612  | AMGO    | ASY-F   | May 21 2005  | -            | May 26 2007          | 2 years 5 days           |
| 1891-89729  | RBGR    | ASY-F   | May 16 2005  | May 18 2005  | May 20 2007          | 2 years 2 days           |
| 2430-42641  | AMGO    | ASY-M   | May 26 2005  | =            | May 23 2007          | 1 year 11 months 27 days |
| 2430-42669  | AMGO    | ASY-M   | May 27 2005  | =            | May 24 2007          | 1 year 11 months 27 days |
| 2201-54801  | GCFL    | ASY-U   | May 11 2005  | May 26 2005  | May 23 2007          | 1 year 11 months 27 days |
| 2400-71067  | AMGO    | SY-F    | May 17 2005  | =            | May 2 2007           | 1 year 11 months 15 days |
| 1891-89755  | BAOR    | ASY-M   | May 30 2005  | -            | May 10 2007          | 1 year 11 month 10 days  |
| 1840-76931  | YWAR    | ASY-F   | Aug 8 2005   | -            | May 18 2007          | 1 year 9 months 10 days  |
| 2241-30934  | SOSP    | ASY-M   | Aug 6 2005   | =            | Apr 24 2007          | 1 year 8 months 18 days  |
| 1541-17908  | SOSP    | SY-M    | Oct 1 2004   | Sep 16 2005  | May 1 2007           | 1 year 7 months 15 days  |
| 2241-39409  | DOWO    | TY-M    | Oct 15 2005  | -            | Apr 22 2007          | 1 year 6 months 7 days   |
| 2241-39430  | HOSP    | AHY-M   | Jan 23 2006  | =            | May 27 2007          | 1 year 4 months 4 days   |
| 2460-40002  | BCCH    | ASY-U   | Dec 11 2005  | Mar 23 2006  | May 14 2007          | 1 year 1 month 21 days   |
| 1152-34043  | AMRO    | ASY-M   | Apr 18 2005  | Apr 29 2006  | May 22 2007          | 1 year 23 days           |
| 2460-40128  | AMGO    | ASY-M   | Apr 17 2006  | Apr 21 2006  | May 2 2007           | 1 year 10 days           |
| 2221-20585  | PUFI    | ASY-M   | May 8 2006   | -            | May 18 2007          | 1 year 10 days           |
| 1222-70362  | RWBL    | ASY-M   | May 3 2006   | -            | May 12 2007          | 1 year 9 days            |
| 2460-40145  | AMGO    | ASY-F   | May 15 2006  | -            | May 24 2007          | 1 year 9 days            |
| 1222-70326  | RWBL    | ASY-M   | Apr 25 2006  | -            | May 3 2007           | 1 year 8 days            |
| 1222-70343  | RWBL    | ASY-M   | Apr 29 2006  | -            | May 6 2007           | 1 year 7 days            |
| 1152-34042  | AMRO    | ASY-F   | Apr 12 2005  | May 14 2006  | May 18 2007          | 1 year 4 days            |
| 2460-40147  | AMGO    | ASY-F   | May 22 2006  | -            | May 25 2007          | 1 year 3 days            |
| 1951-51535  | RWBL    | ASY-F   | May 11 2006  | -            | May 13 2007          | 1 year 2 days            |
| 2221-20594  | TRES    | AHY-F   | May 23 2006  | -            | May 21 2007          | 11 months 28 days        |
| 1840-76953  | YWAR    | ASY-M   | Aug 12 2005  | May 29 2006  | May 26 2007          | 11 months 27 days        |
| 2430-42633  | AMGO    | ASY-M   | May 25 2005  | May 25 2006  | May 21 2007          | 11 months 26 days        |
| 1891-89721  | BAOR    | ASY-F   | May 16 2005  | May 22 2006  | May 18 2007          | 11 months 26 days        |
| 2160-65355  | BCCH    | ASY-U   | Sep 30 2004  | Apr 29 2006  | Apr 24 2007          | 11 months 26 days        |
| 2160-65356  | BCCH    | ASY-U   | Sep 30 2004  | May 25 2006  | May 20 2007          | 11 months 25 days        |
| 2460-40515  | YWAR    | ASY-F   | May 26 2006  | -            | May 21 2007          | 11 months 25 days        |
| 2201-54815  | VEER    | ASY-U   | May 24 2005  | May 30 2006  | May 24 2007          | 11 months 24 days        |
| 2400-71037  | YWAR    | ASY-F   | May 16 2005  | May 19 2006  | May 11 2007          | 11 months 22 days        |
| 2241-39470  | GCFL    | SY-U    | June 2 2006  | -            | May 23 2007          | 11 months 21 days        |
| 1152-34059  | RWBL    | ASY-M   | Apr 28 2005  | May 16 2006  | May 6 2007           | 11 months 20 days        |
| 1951-51562  | RBGR    | AHY-F   | May 25 2006  | May 31 2006  | May 20 2007          | 11 months 19 days        |
| 1222-70287  | RWBL    | ASY-M   | May 17 2006  | -            | May 6 2007           | 11 months 19 days        |
| 2400-71040  | YWAR    | SY-M    | May 16 2005  | May 22 2006  | May 11 2007          | 11 months 19 days        |
| 1891-89740  | RBGR    | ASY-M   | May 21 2005  | May 26 2006  | May 11 2007          | 11 months 15 days        |
| 1951-51550  | RWBL    | ASY-F   | May 18 2006  | -            | May 2 2007           | 11 months 14 days        |
| 2460-40332  | EAPH    | ASY-M   | May 9 2006   | -            | Apr 22 2007          | 11 months 13 days        |

| Band number | Species | Age/Sex | Banding date | Last capture                   | Spring recovery date | Time elapsed      |
|-------------|---------|---------|--------------|--------------------------------|----------------------|-------------------|
| 2400-71047  | YWAR    | ASY-M   | May 16 2005  | May 28 2006                    | May 11 2007          | 11 months 13 days |
| 2241-39459  | BHCO    | ASY-F   | May 14 2006  | May 19 2006                    | May 1 2007           | 11 months 12 days |
| 1232-05907  | RWBL    | ASY-M   | May 24 2006  | -                              | May 4 2007           | 11 months 10 days |
| 1840-76918  | COYE    | ASY-M   | Aug 6 2005   | Jun 2 2006                     | May 26 2007          | 11 month 24 days  |
| 1951-51566  | RWBL    | ASY-F   | Jul 24 2006  | -                              | Jun 1 2007           | 10 months 8 days  |
| 1891-89732  | GRCA    | ASY-U   | May 18 2005  | Aug 1 2006                     | May 21 2007          | 9 months 20 days  |
| 2241-39480  | VEER    | ASY-M   | Aug 8 2006   | =                              | May 27 2007          | 9 months 19 days  |
| 1891-89745  | BAOR    | ASY-F   | May 25 2005  | Aug 1 2006                     | May 18 2007          | 9 months 17 days  |
| 2460-40144  | AMGO    | ASY-M   | May 12 2006  | Aug 7 2006                     | May 23 2007          | 9 months 16 days  |
| 2400-71033  | COYE    | ASY-M   | May 16 2005  | 3 2005 Jul 24 2006 May 10 2007 |                      | 9 months 16 days  |
| 2460-40138  | AMGO    | ASY-M   | May 9 2006   |                                |                      | 9 months 13 days  |
| 2460-40524  | YWAR    | ASY-M   | July 26 2006 | -                              | May 9 2007           | 9 months 13 days  |
| 1951-51427  | BAOR    | SY-M    | Aug 8 2006   | -                              | May 20 2007          | 9 months 12 days  |
| 2460-40555  | YWAR    | SY-M    | Aug 10 2006  | -                              | May 22 2007          | 9 months 12 days  |
| 2221-20596  | SWSP    | SY-U    | May 26 2006  | Aug 2 2006                     | May 12 2007          | 9 months 10 days  |
| 2400-71017  | YWAR    | ASY-M   | May 12 2005  | Aug 4 2006                     | May 14 2007          | 9 months 10 days  |
| 2460-40514  | YWAR    | ASY-M   | May 26 2006  | Aug 14 2006                    | May 21 2007          | 9 months 7 days   |
| 2460-40540  | YWAR    | ASY-M   | Aug 6 2006   | -                              | May 9 2007           | 9 months 3 days   |
| 1212-58624  | NOCA    | AHY-M   | Sep 15 2005  | Aug 4 2006                     | May 4 2007           | 9 months          |
| 2241-39533  | SOSP    | SY-M    | Aug 2 2006   | Aug 12 2006                    | May 12 2007          | 9 months          |
| 1501-61136  | SOSP    | ASY-F   | Apr 20 2005  | Aug 9 2006                     | May 6 2007           | 8 months 27 days  |
| 1951-51414  | BAOR    | SY-F    | Aug 4 2006   | Aug 24 2006                    | May 18 2007          | 8 months 24 days  |
| 2241-39528  | SOSP    | AHY-U   | Aug 1 2006   | -                              | Apr 19 2007          | 8 months 18 days  |
| 2241-39543  | SOSP    | AHY-U   | Aug 4 2006   | -                              | Apr 22 2007          | 8 months 18 days  |
| 1501-61113  | SOSP    | ASY-M   | Apr 12 2005  | Aug 7 2006                     | Apr 24 2007          | 8 months 17 days  |
| 2241-39598  | SOSP    | SY-U    | Aug 11 2006  | -                              | Apr 19 2007          | 8 months 8 days   |
| 2231-00857  | NOCA    | AHY-F   | Oct 4 2005   | Aug 14 2006                    | Apr 20 2007          | 8 months 6 days   |
| 2261-16162  | SOSP    | ASY-M   | Sep 20 2006  | -                              | May 20 2007          | 8 months          |
| 2261-16141  | SOSP    | SY-U    | Sep 11 2006  | -                              | May 8 2007           | 7 months 27 days  |
| 2241-39517  | SOSP    | ASY-U   | Jul 26 2006  | Aug 25 2006                    | Apr 19 2007          | 7 months 25 days  |
| 2261-16008  | SOSP    | ASY-M   | Aug 13 2006  | Oct 2 2006                     | May 13 2007          | 7 months 11 days  |
| 2241-39525  | SOSP    | SY-M    | Aug 1 2006   | Sep 13 2006                    | Apr 22 2007          | 7 months 9 days   |
| 1951-76605  | NOCA    | AHY-M   | Aug 29 2006  | Nov 19 2006                    | May 20 2007          | 6 months 1 day    |
| 2460-40005  | BCCH    | SY-M    | Jan 12 2006  | Nov 19 2006                    | May 2 2007           | 5 months 13 days  |
| 2460-40039  | BCCH    | SY-U    | Aug 1 2006   | Dec 14 2006                    | Apr 19 2007          | 5 months 5 days   |
| 2460-40683  | SCJU    | SY-M    | Dec 10 2006  | -                              | Apr 18 2007          | 4 months 8 days   |

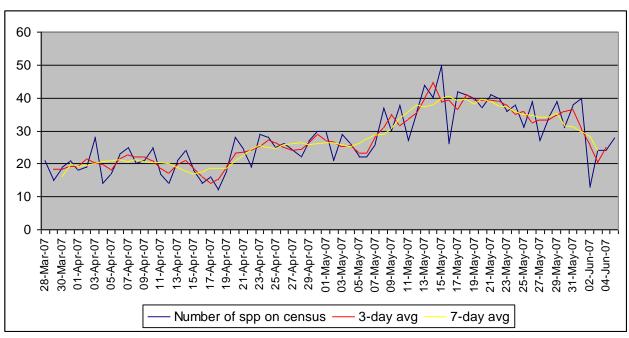
Four foreign recoveries were recorded during SMMP 2007. A Canada Goose wearing an orange neck collar "H1F1" was once again spotted at the beginning of the season. It was banded approximately 50 km to the northeast of MBO at Boucherville, Quebec as an after-hatch-year bird in July 2005. This marks its second year in the area. The second recovery was of an after-hatch-year male Tree Swallow banded by the University of Sherbrooke as a hatch-year in June of 2006 near St-Guillaume and St-David (about 130 km northeast of MBO). It is likely that this bird remained at MBO to breed in one of our many nest boxes.

The other two were not recoveries made at MBO, but were rather made elsewhere of birds banded at MBO. The first was an American Robin found along Chemin-Ste-Marie, just south of MBO. The robin was found one year and a day after it had been banded as a young male in April of 2006. The second was the recovery of a Tree Swallow in Cayuga, Ontario. The after-

hatch-year male was banded last June (2006), and recovered in mid-April of this year. Since only 4% of males and 14% of females dispersed to new breeding grounds between years in Ithaca, New York (Winkler et al. 2004), we wonder if these male Tree Swallows were simply blown off course during migration, or whether birds farther north may behave differently than in the experimental population studied.

# Census

One or more experienced observers walked the standardized census route every day during the 70-day 2007 SMMP. Almost daily, they recorded species not otherwise observed during the course of the morning, contributing greatly to the overall documentation of migration through the area. Eight species this spring, American Green-winged Teal, Hooded Merganser, Spotted Sandpiper, Western Palm Warbler, Brown Creeper, Wood Thrush, Northern Shrike, and Scarlet Tanager, were recorded only on census.



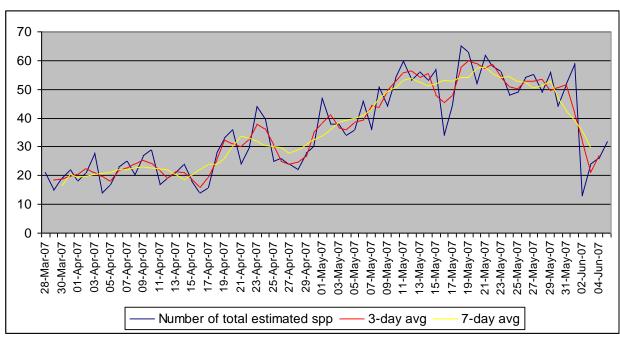
**Figure 5.** Number of species recorded on the daily census during the spring season at MBO, including a three-day and seven-day running average.

As shown in Figure 5, there was considerable daily variation in the number of species observed during the census, ranging from a low of 12 on April 18, to a high of 50 on May 15. 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. There was a rapid increase in species diversity in the first half of May, peaking in mid-May, followed by a very rapid decrease in early June. This reduced number of species likely represents the birds remaining at MBO to breed.

# Daily estimated totals (DET)

The DET reflects not only banding and census data, but also all supplemental observations made by participants throughout each morning. It is particularly important for waterfowl and raptors, which are not targeted by the banding program, and are only marginally sampled by the census, since many are more active later in the morning. However, the DET is also valuable for passerines, both to monitor infrequently captured species, and as a means to evaluate the

percentage of individuals of each species that are caught and banded. Thirteen species, Sandhill Crane, Greater Scaup, American Wigeon, Turkey Vulture, Rough-legged Hawk, Osprey, Golden Eagle, Greater Yellowlegs, Chimney Swift, Black-billed Cuckoo, Yellow Palm Warbler, Willow Flycatcher, and Vesper Sparrow, were only observed during these incidental observations this spring, highlighting their importance for the DET.



**Figure 6.** Number of species observed during the spring season at MBO, including a three-day and seven-day running average.

The highest single day total, 65 species, was recorded on May 18, with close seconds on May 19 and 21 (63 and 62, respectively, Figure 6). The lowest daily totals occurred during the first few weeks and the last week of the season, when there were fewer than 15 species on four occasions. The DET, after a small increase in mid-April, began to increase steadily in early May, peaking in late May. However, there was considerable variation in daily estimated totals from day to day, again due to weather and observer effects. A clearer pattern is shown by the seven-day running average (shown in yellow on Figure 6), which peaked at 58 on May 21, the same day as last year (though with a peak of 65 species), after which numbers tapered off rapidly.

During SMMP 2007, 135 species were recorded, on par with FMMP 2006 (134 species), and substantially more than SMMP 2005 (112 species), but somewhat lower than SMMP 2006 (148 species). Of these, nine were seen on just a single day, and six of them were represented by a single individual, highlighting the importance of full daily coverage throughout the season. There were six new additions to MBO's site list this year: Sandhill Crane, Greater Scaup, Ringnecked Duck, Vesper Sparrow, Eastern Towhee, and Eastern Meadowlark, bringing the cumulative checklist to 186 species since 2004.

## Nest monitoring

In early April of 2006, four Wood Duck boxes were installed, but they have yet to house Wood Ducks. A Red Squirrel appears to have taken up one of the boxes for a second year, while the others remain empty. However, a Wood Duck brood of 13 ducklings was spotted regularly on

Stoneycroft, so they are breeding somewhere on site – no doubt in one of the many old snags on the property.

This year, as part of a Master's thesis project examining arthropod communities in nest boxes, additional Tree Swallow boxes were added to the network that were previously installed, increasing the number from 34 to 42. These were monitored periodically throughout the spring season. Overall occupancy was much greater than during SMMP 2006. Tree Swallows used six of the new boxes, producing 25 young from 31 eggs (though two chicks died in the nest). House Wrens occupied five boxes, producing six young from one box (all others were dummy nests). A Great-crested Flycatcher occupied one box, producing five eggs that hatched in early July. House Sparrows displaced a couple of early nesting Tree Swallows, but had limited success with only three young from one nest. There were very few empty boxes, with most unused boxes showing some degree of occupancy (e.g. bits of straw or moss, beginnings of a nest cup, etc).

# **Analysis**

# Migration patterns

Just 23 species were present throughout all ten weeks of the season: Canada Goose, Wood Duck, Mallard, Red-shouldered Hawk, Ring-billed Gull, Mourning Dove, Downy Woodpecker, Hairy Woodpecker, Pileated Woodpecker, Eastern Phoebe, Blue Jay, American Crow, Black-capped Chickadee, White-breasted Nuthatch, American Robin, European Starling, Northern Cardinal, Song Sparrow, Red-winged Blackbird, Brown-headed Cowbird, Common Grackle, American Goldfinch, and House Sparrow. The only difference with SMMP 2006 is that Rock Pigeon dropped off the list, being absent for the first three weeks of the 2007 season. Only Red-winged Blackbird and American Goldfinch were banded in seven different weeks.

The dates for SMMP were picked to cover the extent of spring migration for the majority of species. While a few early migrants arrived before the start of the season, these were primarily local breeders that were well-documented once observations began in late March. Starting earlier would permit the arrival dates of these birds to be recorded, but there is no question that conditions are more reflective of winter than spring until the end of March, and banding opportunities are often limited by snow. Even in the first two weeks of April, weather can greatly limit banding, and as results have consistently shown, relatively few migrants are on the move vet at that time. Thus, it is recommended that the first three weeks of the season remain limited to census and incidental observations. At the end of the season, numbers were low for the last few days, and included few migrants. To make the most effective use of limited resources, it is therefore recommended that the length of the spring season be maintained at 70 days, 45 of which will have banding scheduled to occur (season: March 28 - June 5; banding: April 18 -June 1). However, the top priority at MBO remains the fall migration season, and if budgetary limitations require reduction of the spring season, it is recommended that banding be restricted to four weeks in month of May (May 2 - May 29), with census and incidental observations conducted throughout the season (March 28 - June 5).

# Sex and age

The sex was determined for 83.2% of birds banded this spring (Table 4), very similar to the 82.7 that were sexed in spring 2006. This is much higher than the rate of 59.0% recorded in fall 2006, as many more species can be reliably sexed in spring, due to plumage differences and/or the presence of physical breeding characters. Of the known sex birds, 54.7% were male, and 45.3% were female. The reasons for such an imbalance are not entirely apparent. Perhaps among early breeders such as Common Grackle and American Robin, females were already

sitting tight on the nest and were therefore less likely to be caught, while males circulate widely around their territory.

**Table 4.** Number of individuals of the top ten banded species banded broken down by age and sex.

| Species                           | SY  | ASY | AHY | Male | Female |
|-----------------------------------|-----|-----|-----|------|--------|
| 1. Red-winged Blackbird           | 102 | 52  | -   | 71   | 83     |
| 2. Ruby-crowned Kinglet           | 27  | 25  | -   | 32   | 20     |
| 3. American Goldfinch             | 39  | 26  | -   | 34   | 31     |
| 4. Blackpoll Warbler              | 33  | 14  | -   | 28   | 19     |
| 5. Yellow-rumped (Myrtle) Warbler | 22  | 10  | -   | 14   | 18     |
| 6. Yellow Warbler                 | 15  | 14  | -   | 16   | 13     |
| 7. Baltimore Oriole               | 11  | 7   | -   | 12   | 6      |
| 8. Common Grackle                 | 6   | 7   | 5   | 16   | 2      |
| 9. Cedar Waxwing                  | 9   | 8   | -   | 7    | 9      |
| 10. Magnolia Warbler              | 12  | 5   | -   | 13   | 4      |

The majority (94.2%) of birds banded were aged precisely, but 45 individuals (mostly Common Grackle, Tree Swallow, flycatcher, and sparrow species) were recorded as after-hatch-year. In 2006, age was determined for 85.8% of birds, the percentage in 2007 perhaps being higher due to the reduced number of sparrows. Among birds for which age was determined, second-year birds outnumbered older birds, 65.2% to 34.8%; the pattern was similar in 2006, but not quite as pronounced, with 59% of birds identified as second-year.

# 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.

**Table 5.** Summary of priority species observed and banded during SMMP 2007. Detailed category definitions are provided in Gahbauer and Hudson (2004).

|                               | Priority A | Priority B | Priority C | Priority D |
|-------------------------------|------------|------------|------------|------------|
| Number of species in category | 17         | 19         | 22         | 22         |
| Number of species observed    | 11         | 10         | 17         | 20         |
| Number of species banded      | 10         | 6          | 15         | 12         |
| Number of individuals banded  | 126        | 108        | 98         | 242        |

Seventy-three percent of species on the MBO priority list were observed during SMMP 2007, and 53.7% of the species were banded (Table 5). Priority species accounted for 77% of individuals banded, a rate slightly lower than the 87% recorded during FMMP 2006 and 86% during SMMP 2006. This spring the largest number (32.5%) of birds banded fell under Category D (n = 242), though this is mostly due to the overwhelming number of Red-winged Blackbirds banded (n = 154). Last year, the two categories with the most banded birds were Priority D and B, however this shifted to D and A this year, largely due to the increase in Blackpoll Warblers, which are a top priority species for monitoring. Of the top ten species banded at MBO during SMMP 2007, all except the American Goldfinch and Baltimore Oriole are designated as priority species, indicating that the program is effective at documenting these otherwise poorly monitored birds. It should be noted that four of the top ten are Priority A and B species: Blackpoll, Magnolia, and Yellow-rumped Warblers, and Ruby-crowned Kinglet.

# Net productivity

As in previous seasons, the productivity of nets during SMMP 2007 was assessed. Table 6 summarizes the usage and productivity of all nets. For SMMP, the nets were clustered into 4 main groups. A, D, and E (9 nets total) are connected by a loop on the east side of Stoneycroft Pond. C (2 nets total) samples the north end of Stoneycroft Pond. B/N (4 nets total) is in 2 pairs along the east edge of the back ponds. H (2 nets total) is located in the edge habitat just west of the banding cabin. B/N is particularly sensitive to wind, and was often shut down while other nets remained open.

The overall capture rate for SMMP 2007 was 27.1 new birds per 100 net hours, up 1.3 birds from 2006. An additional seven birds per 100 net hours were recaptured. The average total number of birds per 100 net hours for the standard net groups this season was 34.4, up slightly from SMMP 2006. A, E and H had higher than average capture rates, while B/N, C, and D were below average, C by a considerable amount (Table 6).

 Table 6. Net usage and capture rates during SMMP 2007. Nest-box captures and other non-nets, such

as the J-Trap, are listed separately. \* There were 3 recaptures listed without provenance.

| Net         | Net hours | New captures | Repeats/ | Total birds | Birds / 10 | 0 net hours |
|-------------|-----------|--------------|----------|-------------|------------|-------------|
|             |           | -            | Returns  |             | New        | Total       |
| A1          | 250.1     | 31           | 8        | 39          | 12.4       | 15.6        |
| A2          | 165.8     | 87           | 33       | 120         | 52.5       | 72.4        |
| A - TOTAL   | 415.9     | 118          | 41       | 159         | 28.4       | 38.2        |
| B2          | 134.3     | 36           | 11       | 47          | 26.8       | 35.0        |
| N1          | 134.3     | 30           | 9        | 39          | 22.3       | 29.0        |
| N3          | 134.3     | 37           | 11       | 48          | 27.6       | 35.7        |
| B3          | 134.3     | 42           | 8        | 50          | 31.2       | 37.2        |
| B/N - TOTAL | 537.2     | 145          | 39       | 184         | 27.0       | 34.3        |
| C1          | 170.3     | 35           | 10       | 45          | 20.6       | 26.4        |
| C2          | 170       | 27           | 7        | 34          | 15.9       | 20          |
| C – TOTAL   | 340.3     | 62           | 17       | 79          | 18.2       | 23.2        |
| D1          | 254.3     | 61           | 11       | 72          | 24.0       | 28.3        |
| D2          | 169.5     | 28           | 10       | 38          | 16.5       | 22.4        |
| D3          | 169.5     | 69           | 22       | 91          | 40.7       | 53.7        |
| D – TOTAL   | 593.3     | 158          | 43       | 201         | 26.6       | 33.9        |
| E1          | 167.3     | 40           | 9        | 49          | 23.9       | 29.3        |
| E2          | 167.3     | 80           | 6        | 86          | 47.8       | 51.4        |
| E - TOTAL   | 334.6     | 120          | 15       | 135         | 35.9       | 40.3        |
| H1          | 72.3      | 16           | 5        | 21          | 22.1       | 29.0        |
| H2          | 166.8     | 61           | 8        | 69          | 36.6       | 41.4        |
| H - TOTAL   | 239.1     | 77           | 13       | 90          | 32.2       | 37.6        |
| SUBTOTAL    | 2460.4    | 680          | 168      | 848         | 27.6       | 34.4        |
| Nest Boxes  | -         | 10           | -        | 10          | -          | -           |
| J-Trap      | 139.5     | 14           | 15       | 29          | 10.0       | 20.8        |
| GRAND TOTAL | 2599.9    | 704          | 183*     | 887         | 27.1       | 34.1        |

These numbers are comparable to the rates seen during SMMP 2006, but still considerably lower than the rates of 41.4 new and 14.1 recaptured birds per 100 net hours recorded during SMMP 2005. The declines in productivity were primarily at the A, C and D nets, which were considerably more productive than the others in 2005, but were not particularly active in 2006 or 2007.

In fall 2006, some of the net lanes were widened considerably to ease passage and prevent volunteers from getting their clothing snagged in the nets. This perhaps increased the nets' exposure and thus decreased catch rates. Nets with the narrowest net lanes (e.g. A2 and H2) were the most productive, and so we kept vegetation management to a minimum this season. The results of this management will most likely only manifest itself during the fall 2007 season, as the vegetation only begins growing significantly in late May, by which point spring banding is almost at an end.

Under normal conditions, all nets are operated for 5 hours daily. However, when human resources are limited and/or bird volume is sufficient to warrant operations being scaled back, a core group of 11 nets (A, C, D, E and H) is used, thereby sampling from each area while minimizing walking time.

The A group represents both extremes this season. In contrast to previous years, A1 was by far the least productive of the nets. This is likely due to the wideness of the net lane and increased exposure after one of the apple trees lining the net lane fell over from old age last fall. The tree continues to grow from its prone position, suggesting perhaps that the cover will be restored after a few seasons. A2, located perpendicular to A1 amidst a patch of goldenrod and raspberry and bordered on one side by hawthorns, was by far the best net with almost five times A1's total productivity.

The D nets were just below average in terms of capture rate. In contrast to last season where D2 was the most productive of this series, D3 was by far the most productive, making up for the sub-par performance of D1 and D2. No changes in habitat were observed to account for this difference between years.

The E series produced above average results over the course of this migration monitoring season, due to the addition of E2 last fall. E1's productivity was lower than average, though was again successful at capturing kinglets and warblers. 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. E2 performed much better than E1, though still fell short of A2 which is situated right around the corner. Half of E2's north-facing side is much more exposed than the other nets, but the net is productive nonetheless.

The C nets brought up the rear this year, producing far below average numbers. The very opposite happened last spring, as they had the highest mean capture rate of any of the net groups. Whereas they were responsible for just under half of all Common Yellowthroats caught, and 58% of all Swamp Sparrows caught last year, this year they caught only a single Common Yellowthroat. It should be noted, however, that the number of Swamp Sparrows plummeted this year, from 11 banded in spring 2006 to just three, and that observations also indicated the population to be much lower than in the past.

Given its proximity to the back ponds, H1's opening for the spring season was delayed until May 14, when the area was dry enough to allow the net to be set up. In future, H1 should be moved up roughly 3 m from the water's edge (in spring) and back down in fall so that its position relative to the water's edge remains consistent between seasons. However, its capture rate was one of the lowest of all the nets, suggesting that perhaps it is best to reserve the net for fall use only. Located perpendicular from H1 between hawthorns and goldenrod, H2 was the fourth most productive behind A2, D3 and E2. Though it did not perform as incredibly as last fall -- likely due to the lack of ground cover in early spring -- it was nonetheless productive.

For the first time in MBO's history, the B/N nets did not have the lowest capture rate of any of the groups. This is likely due to the large flocks of Red-winged Blackbirds that hit this series of nets throughout the season. They also proved their worth by effectively capturing species encountered infrequently or not at all at other nets, most notably Eastern Phoebe, Goldencrowned Kinglet, Veery, Warbling Vireo, and Black-throated Blue Warbler. The nets were relatively equal in terms of productivity, with the exception of N1 which was slightly lower.

This season marked the first time a non-net was used at MBO (with the exception of nest boxes). The J-trap was operated nearly every day there was banding, but only proved to be marginally useful, trapping 14 news birds and retrapping an additional 15. Interestingly, this is the highest new/recapped bird ratio seen in any trapping method at MBO. Vegetation growth was a problem, and so for best attracting ground-feeders, the grass within and surrounding the J-trap should be kept quite short. This, as well as time for the birds to become acclimated to the trap, and a change in the type of seed used (corn, leftover oats and nyjer seeds were used this season), may increase trap efficiency.

# 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 individuals photographed during SMMP 2007 were several which had never been banded at MBO or had never been captured in spring (e.g. Eastern Towhee, Merlin, Black-throated Green Warbler, Mourning Warbler, and Northern Parula).

Photos were taken throughout the season for use in the preparation of an online resource for bird identification, posted at <a href="www.migrationresearch.org/mbo/id.html">www.migrationresearch.org/mbo/id.html</a> (50 species accounts are now posted, with many more under development). 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.

These photos are also in demand for talks and presentations by other researchers, students, and organizations. We received three requests for use of MBO photos this season, and these will likely increase as the photo library expands.

# Research projects

Great potential exists to refine the accuracy of ageing and sexing of many species banded regularly at MBO, using plumage characteristics and/or morphological measurements not currently described by Pyle (1997). During SMMP 2007, data collection continued for three undergraduate projects initiated in September 2005 (Gahbauer 2005b), and two larger-scale projects initiated this spring.

For Black-capped Chickadees, the pattern of the upper mouth lining and tail length are being recorded to test the hypotheses that sexes can be distinguished (to some extent) by a discriminant function incorporating tail length and wing chord, and that a white roof is indicative of older birds. For the Black-capped Chickadee, Pyle (1997) has suggested that a white roof lining might be indicative of an older bird, based on preliminary research on the Mountain Chickadee. We developed a 4 point scale to categorize each individual:

- Code 1: roof lining entirely white
- Code 2: roof lining entirely dark (never observed)

- Code 3: roof lining white, with a complete black chevron
- Code 4: roof lining white, with an incomplete black chevron

The results to date suggest that, contrary to what is proposed in Pyle (1997), a completely white roof lining is more typical of hatch-year birds. Of 115 hatch-year birds examined, 66% had an entirely white roof lining. On the contrary, of 50 after-hatch-year birds, 72% had at least some dark marks on the roof (code 3 or 4). However, of the remaining 28%, some were known after-hatch-year birds (by original banding date) and clearly had a completely white roof lining. Therefore, while a weak pattern seems to exist, it does not appear to be sufficiently consistent to be used as an indicator of age.

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

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

Many American Goldfinches were banded during SMMP 2007 (n = 51) indicating the potential for continued research and an increased data set. Data analysis is scheduled to begin in fall.

MBO also participated in two collaborative research efforts involving bird observatories across Canada. Engorged ticks were collected from two individuals, both female Common Yellowthroats. Researchers in Canada and the United States have teamed up on a project studying the different species of ticks found on neotropical migrants in Canada, and are looking at the migration pattern of these bird-tick associations. Some of the ticks are transported from as far south as the northern part of South America, and may be vectors of tick-borne diseases. The second project involved collecting feather samples from 20 target species for the Canadian Migration Monitoring Network for their new isotope project aiming to determine where these species overwinter. Overall, 114 samples were collected from 13 species, providing good coverage of the target species.

# **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 SMMP 2007, with 40 volunteers receiving training during this period.

Training was generally given by the banders-in-charge, mostly on a one-on-one basis. Topics covered varied according to the experience level of the volunteer, ranging from instruction in record-keeping to hands-on practice with extraction of birds from the nets. 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 the Club d'ornithologie d'Ahuntsic, a small group of ecology students from Bishops University, and a group from the Arboretum, totaling approximately 40 people.

# Summary

The number of species observed, species banded, and individuals banded during each SMMP has been remarkably consistent: 647 individuals of 62 species in 2005, 759 individuals of 63 species in 2006, 704 individuals of 61 species in 2007. While banding success this spring appears to have been somewhat hindered by the lack of staff and some bad weather, it is nonetheless apparent that spring migration monitoring at MBO, though much quieter than fall migration, has merit.

It remains evident that the FMMP should be the top priority for research at MBO. In the event of limited resources, efforts should be made to ensure consistent operation of FMMP continues, even if at the expense of SMMP. However, if funding permits, maintaining SMMP as well is desirable. Though it does not generate numbers comparable to FMMP, it allows banding and observation of many of MBO's target species, and the two seasons sample different subsets of this list (refer back to Figure 4). As local breeders are also caught during SMMP, it provides an opportunity to track these individuals over the course of multiple years, providing valuable information on longevity and site fidelity. Another important benefit of maintaining SMMP is that it provides ongoing training for volunteers, thereby ensuring there is a more experienced team of assistants ready for FMMP.

If necessary, it is recommended that the SMMP banding season be shortened to the month of May, to focus more closely on the main period of migration. This year, 88.8% of all birds were banded in May. While this would result in some early season migrants being largely or entirely missed for banding, it would overall permit for the majority of birds to be caught while greatly reducing effort and cost. However, in such a case, it would be critical to ensure that the daily census is maintained throughout the entire spring season, and that additional casual observations be encouraged as often as possible.

# **Acknowledgments**

The 2007 Spring Migration Monitoring Program would not have been possible without the support of the many dedicated people who generously volunteered their time at MBO. In total, 40 participants contributed about 1200 hours on site during the season. Names in bold indicate those who were out on average at least once every two weeks (five or more mornings) during the season (note that many volunteers fulfilled many roles, but are listed under only the first heading that applies to them). Special thanks to all those who put in additional hours fundraising, planning, and assisting with site maintenance, and to the banders-in-charge, who each contributed many additional hours off-site.

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

Marcel Gahbauer

Director, bander-in-charge: Sub-permit holder, responsible for overseeing research activities and reporting, directing the activities of all volunteers, ensuring adherence to protocols, prioritizing the safety of birds at all times, banding birds, and directly supervising other trainees who are banding birds.

#### **Marie-Anne Hudson**

Assistant Director, bander-in-charge: Sub-permit holder, responsible for directing the activities of all volunteers, ensuring adherence to protocols, prioritizing the safety of birds at all times, banding birds, and directly supervising other trainees who are banding birds.

#### Barbara Frei, Lance Laviolette

Extractors: Experienced volunteers trained specifically in extraction, capable of safely removing birds from nets with minimal or no supervision. These volunteers are usually seasoned observers able to conduct the census as well.

# Shawn Craik, Gay Gruner, Betsy McFarlane, André Pelletier

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 Beaudreault, David Bird, Martin Bowman, Jean Demers, Barbara and Don MacDuff, Chris Murphy, Clémence Soulard, Rodger Titman

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

Chris Alsop, Sylvie Bazinet, Gilles Burelle, Leonardo Cabrera, **Sophie Cauchon**, Natalia Castellanos, Gérard Fréchette, Mike, Maria and Kurt Frei, Christine and Emily Gray, **Amy Henderson**, Andrée and Meghan Laviolette, **Helen Leroux**, Sarah Marteinson, Poonam Maskeri, Heather and Marina Milligan, Mark O'Connor, Jérôme Petigny, Andrew Plimer, Greg Rand, Réal Ste-Marie, **Rachel Theoret-Gosselin**, Denis Vachon, Rachel Verkade.

In addition, we extend our sincere thanks to all who donated materials or funds to MBO in 2007, especially:

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

The MBO Baillie Birdathon Team, who raised roughly \$10,000 for MBO and Bird Studies Canada (Marcel Gahbauer, Marie-Anne Hudson, Barbara Frei, Rodger Titman, David Bird, Barbara MacDuff, Chris Murphy, André Pelletier, Sophie Cauchon, Jean Demers, Clémence Soulard, Sarah Marteinson, Anthi Mimidakis, Bob Edwards, Penny, Dylan, and Morgan Letchuk, and Oliver Rind), as well as all the sponsors and solo-birdathoners such as Gay Gruner, Lance Laviolette, and Betsy Macfarlane.

**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

Canada Steamship Lines, for a donation in support of MBO

The Avian Science and Conservation Centre, for logistical and equipment support

#### References

Gahbauer, M.A. 2003. Northern Saw-whet Owl migration monitoring report 2003. Innis Point Bird Observatory, Ottawa, Ontario.

Gahbauer, M.A. 2004. McGill Bird Observatory Fall Migration Monitoring Program 2004 Report. McGill Bird Observatory, Montreal, Quebec.

Gahbauer, M.A. 2005a. McGill Bird Observatory Spring Migration Monitoring Program 2005 Report. McGill Bird Observatory, Montreal, Quebec.

Gahbauer, M.A. 2005b. McGill Bird Observatory Fall Migration Monitoring Program 2005 Report. McGill Bird Observatory, Montreal, Quebec.

Gahbauer, M.A. and M-A.R. Hudson. 2004. McGill Bird Observatory Field Protocol for Migration Monitoring Program. McGill Bird Observatory, Montreal, Quebec.

Hudson, M.-A.R. and M.A Gahbauer. 2006. McGill Bird Observatory Fall Migration Monitoring Program 2006 Report. McGill Bird Observatory, Montreal, Quebec.

Richardson, W.J. 1978. Timing and amount of bird migration in relation to weather: a review. Oikos 30: 224–272.

Richardson, W.J. 1990. Timing of bird migration in relation to weather: updated review. *Bird migration: physiology and ecophysiology* (ed. E. Gwinner), pp. 78–101. Springer Verlag, Berlin.

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

Winkler, D.W., P.H. Wrege, P.E. Allen, T.L. Kast, P.S., M.F. Wasson, P.E. Llambías, V. Ferretti, and P.J. Sullivan. 2004. Breeding dispersal and philopatry in the Tree Swallow. Condor 106: 768–776

# Appendix A. Seasonal distribution charts

The charts below summarize the pattern of occurrence of each species observed during SMMP 2007. The mean # birds observed/day is calculated using the number of days of observation each week (seven days/week throughout the season for SMMP 2007). 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 ten weeks.

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

| MARCH              |               | APRIL  |        |  |        |        | MAY    |        |        |         | JNE   |
|--------------------|---------------|--------|--------|--|--------|--------|--------|--------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4   | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        |  | 0.29   | 0.14   | 0.57   |        | 0.29   | 0.14    | 0.14  |
| # DAYS OBSERVED    |               |        |        |  | 2      | 1      | 4      |        | 2      | 1       | 10    |
| # PROCESSED        |               |        |        |  |        |        |        |        |        |         |       |
| FIRST OBSERV       | /ED: April 30 |        | LAS    | LAST OBSERVED: May 30 PEAK DATE(s): 10 occasions NUM |        |        |        | 3ER: 1 |        |         |       |

Notes: Singles observed flying overhead from late-April to early June, and often heard calling in flight.

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

| MARCH              |                                       |        | APRIL  |          |                      | MAY    |        |        |        |         | UNE   |
|--------------------|---------------------------------------|--------|--------|----------|----------------------|--------|--------|--------|--------|---------|-------|
|                    | WEEK 1                                | WEEK 2 | WEEK 3 | WEEK 4   | WEEK 5               | WEEK 6 | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                                       |        |        |          | 0.29                 | 0.14   | 1.29   | 0.14   | 0.14   |         | 0.20  |
| # DAYS OBSERVED    |                                       |        |        |          | 2                    | 1      | 1      | 1      | 1      |         | 6     |
| # PROCESSED        |                                       |        |        |          |                      |        |        |        |        |         |       |
| FIRST OBSERV       | ERVED: April 25 LAST OBSERVED: May 19 |        |        | : May 19 | PEAK DATE(s): May 14 |        |        |        | NUMBE  | R: 9    |       |

Notes: One flock of 9 birds flying overhead on May 14, and a few additional sightings of one migrant at a time.

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

| MARCH              |            | APRIL  |                       |        |        |                           | MAY    |        |           |         |       |
|--------------------|------------|--------|-----------------------|--------|--------|---------------------------|--------|--------|-----------|---------|-------|
|                    | WEEK 1     | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6                    | WEEK 7 | WEEK 8 | WEEK 9    | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |        |                       |        |        | 0.14                      |        |        | 0.14      | 0.14    | 0.04  |
| # DAYS OBSERVED    |            |        |                       |        |        | 1                         |        |        | 1         | 1       | 3     |
| # PROCESSED        |            |        |                       |        |        |                           |        |        |           |         |       |
| FIRST OBSER        | VED: May 3 |        | LAST OBSERVED: May 30 |        |        | PEAK DATE(s): 3 occasions |        |        | NUMBER: 1 |         |       |

Notes: Scattered sightings of a lone bird flying around Stoneycroft Pond.

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

| MARCH              |              |        | APRIL                 |        |        | MAY                  |        |        |        |         | JUNE   |  |
|--------------------|--------------|--------|-----------------------|--------|--------|----------------------|--------|--------|--------|---------|--------|--|
|                    | WEEK 1       | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6               | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |  |
| MEAN # BIRDS / DAY |              | 0.43   |                       | 1.43   | 0.86   | 4.14                 | 3.29   | 2.29   | 4.86   | 2.57    | 1.99   |  |
| # DAYS OBSERVED    |              | 3      |                       | 5      | 4      | 6                    | 6      | 7      | 7      | 7       | 45     |  |
| # PROCESSED        |              |        |                       |        |        |                      |        |        |        |         |        |  |
| FIRST OBSER        | /ED: April 8 |        | LAST OBSERVED: June 5 |        |        | PEAK DATE(s): May 27 |        |        |        | NUMB    | ER: 10 |  |

Notes: Seen singly or in small flocks from the second week of April through to the end of the season.

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

| MARCH              |            |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE     |
|--------------------|------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|---------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |            |        |        |            |          |        |              | 0.71   | 0.29   | 0.14    | 0.11    |
| # DAYS OBSERVED    |            |        |        |            |          |        |              | 4      | 2      | 1       | 7       |
| # PROCESSED        |            |        |        |            |          |        |              |        |        |         |         |
| FIRST OBSER\       | ED: May 16 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): May | / 22   |        | NUN     | IBER: 2 |

Notes: Likely a pair but usually seen singly a few times per week beginning in mid-May.

#### CANG: Canada Goose / Bernache du Canada (Anser canadensis)

| MARCH              |                |        | APRIL                       |            |          |        |             | MAY     |        | JI      | JNE    |
|--------------------|----------------|--------|-----------------------------|------------|----------|--------|-------------|---------|--------|---------|--------|
|                    | WEEK 1         |        |                             |            |          | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 1098.86        | 178.29 | 178.29 198.43 321.57 109.14 |            |          |        | 13.29       | 9.29    | 11     | 3.71    | 237.43 |
| # DAYS OBSERVED    | 7              | 7      | 7 7 7                       |            |          | 7      | 7           | 7       | 7      | 5       | 68     |
| # PROCESSED        |                |        |                             |            |          |        |             |         |        |         |        |
| FIRST OBSERV       | RVED: March 28 |        | LAS                         | T OBSERVED | : June 5 | PEAK   | DATE(s): Ma | arch 31 |        | NUMBER  | 2007   |

Notes: The most abundant species by far for much of the season with an average of several hundred birds per day as late as the first week of May, and over 1000 individuals on several occasions. The migrants disappeared abruptly after May 7, but by the third week of May some non-breeders were being seen frequently in the fields adjacent to MBO. One pair bred successfully on Stoneycroft Pond, with seven goslings first spotted on May 21, one week later than last year.

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

| MARCH              |                          |  | APRIL        |            |          |        |             | MAY     |        | ,       | UNE     |
|--------------------|--------------------------|--|--------------|------------|----------|--------|-------------|---------|--------|---------|---------|
|                    | WEEK 1                   |  |              |            |          | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |                          |  | 27.86 791.43 |            |          | 57.14  |             |         |        |         | 87.64   |
| # DAYS OBSERVED    |                          |  | 1 3          |            |          | 1      |             |         |        |         | 5       |
| # PROCESSED        |                          |  |              |            |          |        |             |         |        |         |         |
| FIRST OBSER\       | FIRST OBSERVED: April 14 |  | LAS          | T OBSERVED | ): May 3 | PEAK   | DATE(s): Ap | oril 19 |        | NUMBE   | R: 4500 |

Notes: Five flocks of Snow Geese were observed over the course of the season, four of them in mid-April, and one more in the first week of May. All were flying high, heading northeast.

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

| MARCH              |                         |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE   |
|--------------------|-------------------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 3                       | 7.71   | 5.43   | 6.43       | 7.57     | 9.86   | 7.86        | 13     | 16.86  | 4.86    | 8.26  |
| # DAYS OBSERVED    | 2                       | 7      | 6 7 6  |            |          | 7      | 7           | 7      | 7      | 6       | 62    |
| # PROCESSED        |                         |        |        |            |          |        |             |        |        |         |       |
| FIRST OBSER        | FIRST OBSERVED: April 2 |        |        | T OBSERVED | : June 5 | PE     | AK DATE(s): | May 25 |        | NUMBEI  | R: 26 |

<u>Notes:</u> Common throughout the season. Small flocks were seen flying over the ponds almost daily. At least one brood was produced in mid-late May, but was only seen occasionally after the first few sightings.

#### AMWI: American Wigeon / Canard siffleur (Anas americana)

| MARCH              |                         |  | APRIL |            |            |        |              | MAY     |        | JI      | UNE   |
|--------------------|-------------------------|--|-------|------------|------------|--------|--------------|---------|--------|---------|-------|
|                    | WEEK 1                  |  |       |            |            | WEEK 6 | WEEK 7       | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.29                    |  |       |            |            |        |              |         |        |         | 0.03  |
| # DAYS OBSERVED    | 1                       |  |       |            |            |        |              |         |        |         | 1     |
| # PROCESSED        |                         |  |       |            |            |        |              |         |        |         |       |
| FIRST OBSER        | FIRST OBSERVED: April 9 |  | LAS   | T OBSERVED | ): April 9 | PE     | EAK DATE(s): | April 9 |        | NUMBER  | R: 2  |

Notes: Two wigeons spotted April 9 were the only ones recorded at MBO this spring.

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

| MARCH              |                         |  | APRIL |            |          |      |               | MAY     |        | Jl      | UNE   |
|--------------------|-------------------------|--|-------|------------|----------|------|---------------|---------|--------|---------|-------|
|                    | WEEK 1                  |  |       |            |          |      | WEEK 7        | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 3.29                    |  | 0.71  | 0.29       |          | 0.29 |               | 0.14    | 0.14   |         | 0.49  |
| # DAYS OBSERVED    | 2                       |  | 1 2   |            |          | 1    |               | 1       | 1      |         | 8     |
| # PROCESSED        |                         |  |       |            |          |      |               |         |        |         |       |
| FIRST OBSER        | FIRST OBSERVED: April 2 |  | LAS   | T OBSERVED | : May 26 | PE/  | AK DATE(s): / | April 3 |        | NUMBER  | R: 14 |

Notes: An uncommon species from early April to the end of the season, with small numbers seen about once a week.

# MALL: Mallard / Canard colvert (Anas platyrhynchos)

| MARCH                    |           |      | APRIL      |          |      |               |         | MAY    |         | JI      | JNE   |  |
|--------------------------|-----------|------|------------|----------|------|---------------|---------|--------|---------|---------|-------|--|
|                          | WEEK 1    |      |            |          |      | WEEK 6        | WEEK 7  | WEEK 8 | WEEK 9  | WEEK 10 | TOTAL |  |
| MEAN # BIRDS / DAY       | 13.29     | 7.71 | 7.57       | 14.14    | 7.71 | 10.71         | 8.71    | 7.29   | 5.43    | 2.29    | 8.49  |  |
| # DAYS OBSERVED          | 3 6 6 7 7 |      |            |          | 7    | 7             | 7       | 7      | 7       | 5       | 62    |  |
| # PROCESSED              |           |      |            |          |      |               |         |        |         |         |       |  |
| FIRST OBSERVED: March 28 |           | LAS  | T OBSERVED | : June 4 | PE/  | AK DATE(s): A | April 3 |        | NUMBER: | 56      |       |  |

<u>Notes:</u> A common species throughout the season, peaking many times throughout early April to late May. Only a few individuals (mostly males) were seen using the ponds at MBO; the others were flying over or on the adjacent fields.

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

| MARCH              |                          |  | APRIL |           |        |        |               | MAY      |        | JI      | UNE   |   |
|--------------------|--------------------------|--|-------|-----------|--------|--------|---------------|----------|--------|---------|-------|---|
|                    | WEEK 1                   |  |       |           |        | WEEK 6 | WEEK 7        | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL | _ |
| MEAN # BIRDS / DAY | 0.29                     |  |       |           |        |        | 0.14          |          |        |         | 0.04  |   |
| # DAYS OBSERVED    |                          |  | 1     |           |        |        | 1             |          |        |         | 2     |   |
| # PROCESSED        |                          |  |       |           |        |        |               |          |        |         |       |   |
| FIRST OBSER\       | FIRST OBSERVED: April 23 |  | LAST  | OBSERVED: | May 13 | PE/    | AK DATE(s): / | April 23 |        | NUMBER  | ₹: 2  |   |

Notes: Sightings limited to one pair in week 4, and a single bird flying over the station in week 7.

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

| MARCH              |                         |  | APRIL |            |         |        |             | MAY     |        | J       | UNE   |
|--------------------|-------------------------|--|-------|------------|---------|--------|-------------|---------|--------|---------|-------|
|                    | WEEK 1                  |  |       |            |         | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 1.57                    |  | 0.14  | 0.29       | 0.43    |        |             |         |        |         | 0.24  |
| # DAYS OBSERVED    | 2                       |  | 1 1 1 |            |         |        |             |         |        |         | 5     |
| # PROCESSED        |                         |  |       |            |         |        |             |         |        |         |       |
| FIRST OBSER        | FIRST OBSERVED: April 2 |  | LAS   | T OBSERVED | : May 1 | PE/    | AK DATE(s): | April 2 |        | NUMBER  | R: 7  |

<u>Notes:</u> Small flocks seen sporadically from early April to early May, in sharp contrast to 2006 when this species was recorded on 29 days, with flocks numbering up to 66 individuals.

## GWTE: Green-winged Teal / Sarcelle à ailes vertes (Anas crecca carolinensis)

| MARCH              |                         |        | APRIL  |            |           |        |             | MAY     |        | JI      | UNE   |
|--------------------|-------------------------|--------|--------|------------|-----------|--------|-------------|---------|--------|---------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5    | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.57                    |        |        |            |           |        |             |         |        |         | 0.06  |
| # DAYS OBSERVED    | 1                       |        |        |            |           |        |             |         |        | 1       |       |
| # PROCESSED        |                         |        |        |            |           |        |             |         |        |         |       |
| FIRST OBSER        | FIRST OBSERVED: April 3 |        | LAS    | T OBSERVED | : April 3 | PE.    | AK DATE(s): | April 3 |        | NUMBER  | : 4   |

Notes: A single flock of four individuals observed on April 3.

#### GRSC: Greater Scaup / Fuligule Milouinan (Aythya marila)

| MARCH              |                   |        | APRIL  |           |        |        |              | MAY    |        | J       | UNE   |
|--------------------|-------------------|--------|--------|-----------|--------|--------|--------------|--------|--------|---------|-------|
|                    | WEEK 1            | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                   |        |        |           |        |        |              | 25     |        |         | 2.5   |
| # DAYS OBSERVED    |                   |        |        |           |        |        |              | 1      |        |         | 1     |
| # PROCESSED        |                   |        |        |           |        |        |              |        |        |         |       |
| FIRST OBSERV       | ED: May 22 LAST O |        |        | OBSERVED: | May 22 | PEA    | K DATE(s): M | lay 22 |        | NUMBER  | : 175 |

Notes: A single stretched-out flock of 175 individuals flying north observed on May 22.

# RNDU: Ring-necked Duck / Fuligule à collier (Aythya folaris)

| _                  |               | _      | =      |            | -       |        |               |          |        |         |       |  |
|--------------------|---------------|--------|--------|------------|---------|--------|---------------|----------|--------|---------|-------|--|
| MARCH              |               |        | APRIL  |            |         |        |               | MAY      |        | J'      | UNE   |  |
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5  | WEEK 6 | WEEK 7        | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL |  |
| MEAN # BIRDS / DAY |               | 1.14   | 0.57   | 0.86       |         | 0.14   |               |          |        |         | 0.27  |  |
| # DAYS OBSERVED    |               | 4 2 1  |        |            |         | 1      |               |          |        |         | 8     |  |
| # PROCESSED        |               |        |        |            |         |        |               |          |        |         |       |  |
| FIRST OBSER        | RVED: April 4 |        | LAS    | T OBSERVED | : May 2 | PE/    | AK DATE(s): A | April 22 |        | NUMBER  | ₹: 6  |  |

Notes: Sightings consist of a pair spotted on and off on Stoneycroft for the first two weeks of April, a flock of six on April 22, and a singleton May 2. Not observed at MBO prior to this spring.

# COME: Common Merganser / Grand harle (Mergus merganser)

|                    | _                        |        | =                       | _      | -      |        |              |          |        |         |       |  |
|--------------------|--------------------------|--------|-------------------------|--------|--------|--------|--------------|----------|--------|---------|-------|--|
| MARCH              |                          |        | APRIL                   |        |        |        |              | MAY      |        | JI      | UNE   |  |
|                    | WEEK 1                   | WEEK 2 | WEEK 3                  | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL |  |
| MEAN # BIRDS / DAY | 1                        |        |                         | 0.71   |        |        |              |          |        |         | 0.17  |  |
| # DAYS OBSERVED    | 1                        |        |                         | 2      |        |        |              |          |        |         | 3     |  |
| # PROCESSED        |                          |        |                         |        |        |        |              |          |        |         |       |  |
| FIRST OBSERV       | FIRST OBSERVED: March 31 |        | LAST OBSERVED: April 21 |        |        | PEA    | K DATE(s): N | farch 31 |        | NUMBE   | R: 7  |  |

Notes: A few sightings, most notably a flock of seven flying over MBO within the first few days of the season.

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

| MARCH              |                         |        | APRIL  |                         |        |        |             | MAY     |        | J       | UNE   |  |
|--------------------|-------------------------|--------|--------|-------------------------|--------|--------|-------------|---------|--------|---------|-------|--|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4                  | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |  |
| MEAN # BIRDS / DAY | 0.43                    |        | 0.43   |                         |        |        |             |         |        |         | 0.09  |  |
| # DAYS OBSERVED    | 1 2                     |        |        |                         |        |        |             |         | 3      |         |       |  |
| # PROCESSED        |                         |        |        |                         |        |        |             |         |        |         |       |  |
| FIRST OBSER        | FIRST OBSERVED: April 2 |        |        | LAST OBSERVED: April 17 |        |        | AK DATE(s): | April 2 |        | NUMBER  | : 3   |  |

Notes: A few sightings scattered early in the season.

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

| MARCH              |                          |        | APRIL  |           |          |        |             | MAY    |        | Jl      | JNE   |
|--------------------|--------------------------|--------|--------|-----------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                          | 0.14   |        | 0.29      | 0.29     | 1.71   | 0.57        | 0.14   | 0.57   | 0.14    | 0.39  |
| # DAYS OBSERVED    |                          | 1      |        | 2         | 1        | 6      | 4           | 1      | 2      | 1       | 18    |
| # PROCESSED        |                          |        |        |           |          |        |             |        |        |         |       |
| FIRST OBSERV       | FIRST OBSERVED: April 10 |        |        | OBSERVED: | : May 30 | PE     | AK DATE(s): | May 6  |        | NUMBER  | : 5   |

Notes: Seen throughout the season, but usually infrequently. Slight peak in early May.

# OSPR: Osprey / Balbuzard pêcheur (Pandion haliaetus)

| MARCH              |                          |        | APRIL  |                      |        |        |              | MAY             |        | J       | UNE   |
|--------------------|--------------------------|--------|--------|----------------------|--------|--------|--------------|-----------------|--------|---------|-------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4               | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8          | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                          |        |        | 0.43                 | 0.43   | 0.29   | 0.14         |                 |        |         | 0.13  |
| # DAYS OBSERVED    | 1 1                      |        |        |                      | 2      | 1      |              |                 |        | 5       |       |
| # PROCESSED        |                          |        |        |                      |        |        |              |                 |        |         |       |
| FIRST OBSERV       | FIRST OBSERVED: April 23 |        |        | LAST OBSERVED: May 8 |        |        | CDATE(s): Ap | oril 23 and May | / 1    | NUMB    | ER: 3 |

Notes: A short migration period, extending from the third week of April to the second week of May.

# GOEA: Golden Eagle / Aigle royale (Aquila chrysaetos)

| MARCH              |                        |        | APRIL  |                       |        | MAY    |              |        |        |         | JUNE  |
|--------------------|------------------------|--------|--------|-----------------------|--------|--------|--------------|--------|--------|---------|-------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                        |        |        |                       |        |        | 0.14         |        |        |         | 0.01  |
| # DAYS OBSERVED    |                        |        |        |                       |        |        | 1            |        |        |         | 1     |
| # PROCESSED        |                        |        |        |                       |        |        |              |        |        |         |       |
| FIRST OBSER\       | FIRST OBSERVED: May 10 |        |        | LAST OBSERVED: May 10 |        |        | K DATE(s): N | 1ay 10 |        | NUMBI   | R: 1  |

Notes: A single individual flying east over the station May 10.

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

| MARCH              |                               |        | APRIL  |           |        |                                 |        | MAY    |        | Jl      | UNE   |
|--------------------|-------------------------------|--------|--------|-----------|--------|---------------------------------|--------|--------|--------|---------|-------|
|                    | WEEK 1                        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6                          | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                               |        | 0.14   | 0.29      | 0.29   |                                 | 0.14   | 0.14   | 0.14   |         | 0.11  |
| # DAYS OBSERVED    |                               |        | 1      | 2         | 2      |                                 | 1      | 1      | 1      |         | 8     |
| # PROCESSED        |                               |        |        |           |        |                                 |        |        |        |         |       |
| FIRST OBSER\       | OBSERVED: April 16 LAST OBSER |        |        | OBSERVED: | May 24 | PEAK DATE(s): 8 occasions NUMBE |        |        |        | FR: 1   |       |

Notes: Scattered observations of singletons throughout most of the season.

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

| =                        |        | -      | •                     | -      | •      |        |             |          |        |           |       |
|--------------------------|--------|--------|-----------------------|--------|--------|--------|-------------|----------|--------|-----------|-------|
| MARCH                    |        |        | APRIL                 |        |        |        |             | MAY      |        | Jl        | JNE   |
|                          | WEEK 1 | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8   | WEEK 9 | WEEK 10   | TOTAL |
| MEAN # BIRDS / DAY       |        | 0.14   |                       | 0.43   |        | 1      |             |          | 0.14   | 0.14      | 0.19  |
| # DAYS OBSERVED          |        | 1 3    |                       |        |        | 4 1    |             |          |        | 1         | 10    |
| # PROCESSED              |        |        |                       |        |        |        |             |          |        |           |       |
| FIRST OBSERVED: April 10 |        |        | LAST OBSERVED: May 31 |        |        |        | PEAK DATE(s | ): May 5 |        | NUMBER: 3 | 3     |

Notes: Occasional sightings scattered between early April and late May.

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

| MARCH                   |        |        | APRIL                 |        |        | MAY    |               |             |        |         | JUNE  |
|-------------------------|--------|--------|-----------------------|--------|--------|--------|---------------|-------------|--------|---------|-------|
|                         | WEEK 1 | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY      |        | 0.14   |                       | 0.29   | 0.14   | 0.43   | 0.29          | 0.14        | 0.14   |         | 0.16  |
| # DAYS OBSERVED         |        | 1 2 1  |                       |        |        | 3      | 1             | 1           | 1      |         | 10    |
| # PROCESSED             |        |        |                       |        |        |        |               |             |        |         |       |
| FIRST OBSERVED: April 6 |        |        | LAST OBSERVED: May 27 |        |        | PEA    | AK DATE(s): 1 | 0 occasions |        | NUME    | ER: 1 |

Notes: Sightings of single birds scattered throughout the season.

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

| MARCH              |                          |        | APRIL  |                       |        |        |              | MAY         |        | JI      | UNE   |
|--------------------|--------------------------|--------|--------|-----------------------|--------|--------|--------------|-------------|--------|---------|-------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.71                     | 0.71   | 0.57   | 0.43                  | 0.43   | 0.71   | 0.14         | 0.71        | 0.14   | 0.14    | 0.47  |
| # DAYS OBSERVED    | 5 5 3 3 2                |        |        |                       |        | 4      | 1            | 4           | 1      | 1       | 29    |
| # PROCESSED        |                          |        |        |                       |        |        |              |             |        |         |       |
| FIRST OBSERV       | FIRST OBSERVED: March 30 |        |        | LAST OBSERVED: May 30 |        |        | EAK DATE(s): | 4 occasions |        | NUMBER  | : 2   |

<u>Notes:</u> The most frequently observed raptor this spring. Most records pertain to the local pair, presumed to be nesting somewhere on the north side of MBO or in the Arboretum beyond.

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

| MARCH              |                          |        | APRIL  |                      |        |        |              | MAY     |        | J       | UNE   |
|--------------------|--------------------------|--------|--------|----------------------|--------|--------|--------------|---------|--------|---------|-------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4               | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                          |        |        | 0.71                 | 0.29   | 0.29   | 0.14         |         |        |         | 0.14  |
| # DAYS OBSERVED    | 2 2                      |        |        |                      | 2      | 1      |              |         |        | 7       |       |
| # PROCESSED        |                          |        |        |                      |        |        |              |         |        |         |       |
| FIRST OBSERV       | FIRST OBSERVED: April 23 |        |        | LAST OBSERVED: May 8 |        |        | K DATE(s): A | pril 24 |        | NUMBE   | R: 3  |

Notes: Short migratory period between mid-April and mid-May.

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

| MARCH              |                         |        | APRIL  |           |        | MAY    |              |         |        |         | JUNE  |
|--------------------|-------------------------|--------|--------|-----------|--------|--------|--------------|---------|--------|---------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                         | 0.43   | 0.14   | 0.86      | 0.14   | 0.14   | 0.14         | 0.14    |        |         | 0.20  |
| # DAYS OBSERVED    |                         | 2      | 1      | 2         | 1      | 1      | 1            | 1       |        |         | 9     |
| # PROCESSED        |                         |        |        |           |        |        |              |         |        |         |       |
| FIRST OBSERV       | FIRST OBSERVED: April 7 |        |        | OBSERVED: | May 18 | PEA    | K DATE(s): A | pril 23 |        | NUME    | ER: 4 |

Notes: Scattered sightings throughout the season, mostly involving singletons, except for a small movement April 23.

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

| MARCH              |                          |        | APRIL  |                      |        | MAY    |               |             |        |         | UNE     |
|--------------------|--------------------------|--------|--------|----------------------|--------|--------|---------------|-------------|--------|---------|---------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4               | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |                          |        |        | 0.14                 |        | 0.14   |               |             |        |         | 0.03    |
| # DAYS OBSERVED    |                          |        |        |                      |        | 1      |               |             |        |         | 2       |
| # PROCESSED        |                          |        |        |                      |        |        |               |             |        |         |         |
| FIRST OBSERV       | FIRST OBSERVED: April 22 |        |        | LAST OBSERVED: May 2 |        |        | DATE(s): Apri | l 22, May 2 |        | NUM     | IBER: 1 |

Notes: Only two records of individuals migrating northeast over MBO.

# MERL: Merlin / Faucon émerillon (Falco columbarius)

| MARCH              |               |        | APRIL  |           |        |        |              | MAY         |        | J       | UNE   |
|--------------------|---------------|--------|--------|-----------|--------|--------|--------------|-------------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        | 0.14      |        | 0.14   | 0.29         |             |        |         | 0.06  |
| # DAYS OBSERVED    |               |        |        | 1         |        | 1      | 2            |             |        |         | 4     |
| # PROCESSED        |               |        |        | 1         |        |        |              |             |        |         | 1     |
| FIRST OBSERV       | /ED: April 19 |        | LAST   | OBSERVED: | May 12 | PE     | EAK DATE(s): | 4 occasions |        | NUMBER: | 1     |

Notes: A few sightings scattered between mid-April and mid-May. First Merlin ever banded at MBO on April 19.

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

| MARCH              |            |        | APRIL  |            |          |        |             | MAY            |        | JUNE    |       |
|--------------------|------------|--------|--------|------------|----------|--------|-------------|----------------|--------|---------|-------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8         | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |        |        |            |          | 0.29   |             |                | 0.14   | 0.04    |       |
| # DAYS OBSERVED    |            |        |        |            |          | 2      |             |                |        | 1       | 3     |
| # PROCESSED        |            |        |        |            |          |        |             |                |        |         |       |
| FIRST OBSER        | VED: May 5 |        | LAS    | T OBSERVED | : June 1 | PEAK   | DATE(s): Ma | y 5 and 6, Jun | e 1    | NUMB    | ER: 1 |

Notes: Likely the same individual heard and seen from the edge of Stoneycroft Pond and in the reeds north of C nets.

# SACR: Sandhill Crane / Grue du Canada (Grus canadensis)

| MARCH              |               |        | APRIL  |           |        |        |               | MAY          |        | JUNE    |       |
|--------------------|---------------|--------|--------|-----------|--------|--------|---------------|--------------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               | 0.14   |        |           |        |        | 0.14          |              |        |         | 0.03  |
| # DAYS OBSERVED    |               |        | 1      |           |        |        | 1             |              |        |         | 2     |
| # PROCESSED        |               |        |        |           |        |        |               |              |        |         |       |
| FIRST OBSERV       | /ED: April 24 |        | LAST   | OBSERVED: | May 12 | PEAK   | DATE(s): Apri | I 24, May 12 |        | NUMB    | ER: 1 |

Notes: Single birds seen flying overhead on two occasions; a new species for MBO.

# KILL: Killdeer / Pluvier kildir (Charadrius vociferus)

| MARCH              |              |        | APRIL  |            |          |        |               | MAY          |        | JI        | JUNE  |  |
|--------------------|--------------|--------|--------|------------|----------|--------|---------------|--------------|--------|-----------|-------|--|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8       | WEEK 9 | WEEK 10   | TOTAL |  |
| MEAN # BIRDS / DAY | 0.29         | 0.43   |        | 1          | 0.29     | 0.57   | 1.14          | 0.57         | 0.57   | 0.29      | 0.52  |  |
| # DAYS OBSERVED    | 2            | 1      |        | 6          | 2        | 3      | 5             | 4            | 3      | 1         | 27    |  |
| # PROCESSED        |              |        |        |            |          |        |               |              |        |           |       |  |
| FIRST OBSERV       | ED: March 28 |        | LAS    | T OBSERVED | : June 1 | PEAK   | DATE(s): Apri | I 10, May 10 |        | NUMBER: 3 |       |  |

Notes: Fairly regular throughout the season in the neighbouring field; occasionally seen flying overhead.

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

| MARCH              |               |        | APRIL  |           |        |        |               | MAY         |        | JI      | UNE   |
|--------------------|---------------|--------|--------|-----------|--------|--------|---------------|-------------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        | 0.14      |        | 0.14   | 0.29          |             |        |         | 0.06  |
| # DAYS OBSERVED    |               |        | 1      |           |        | 1      | 2             |             |        |         | 4     |
| # PROCESSED        |               |        |        |           |        |        |               |             |        |         |       |
| FIRST OBSER\       | /ED: April 22 |        | LAST   | OBSERVED: | May 15 | PE     | AK DATE(s): 4 | 4 occasions |        | NUMBER  | ₹: 1  |

Notes: Likely the same individual seen sporadically between mid-April and mid-May.

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

| MARCH              |             |        | APRIL  |           |        |        |              | MAY           |        | J       | UNE   |
|--------------------|-------------|--------|--------|-----------|--------|--------|--------------|---------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8        | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |           |        |        | 0.29         |               |        |         | 0.03  |
| # DAYS OBSERVED    |             |        |        |           |        | 2      |              |               |        | 2       |       |
| # PROCESSED        |             |        |        |           |        |        |              |               |        |         |       |
| FIRST OBSER\       | /ED: May 10 |        | LAST   | OBSERVED: | May 11 | PEAK   | CDATE(s): Ma | ay 10, May 11 |        | NUMBI   | ER: 1 |

Notes: Likely the same individual seen over 2 days in mid-May.

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

| MARCH              |             |        | APRIL  |            |          |        |             | MAY    |        | Jl      | JNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        | 0.14        | 0.71   | 0.14   |         | 0.10  |
| # DAYS OBSERVED    |             |        |        |            |          |        | 1           | 4      | 1      |         | 6     |
| # PROCESSED        |             |        |        |            |          |        |             |        |        |         |       |
| FIRST OBSER\       | /ED: May 15 |        | LAS    | T OBSERVED | : May 23 | PE     | AK DATE(s): | May 22 |        | NUMBEI  | R: 2  |

Notes: Infrequently observed over just one week this spring, as opposed to last spring when it was seen throughout May.

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

| MARCH              |             |        | APRIL  |           |          |        |             | MAY          |        | J       | IUNE   | 1 |
|--------------------|-------------|--------|--------|-----------|----------|--------|-------------|--------------|--------|---------|--------|---|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL  |   |
| MEAN # BIRDS / DAY |             |        |        |           |          |        | 0.14        |              | 0.14   |         | 0.03   |   |
| # DAYS OBSERVED    |             |        |        |           |          |        | 1           |              | 1      |         | 2      |   |
| # PROCESSED        |             |        |        |           |          |        |             |              |        |         |        |   |
| FIRST OBSER\       | /ED: May 15 |        | LAST   | OBSERVED: | : May 23 | PEAK   | DATE(s): Ma | y 15, May 23 |        | NUM     | BER: 1 |   |

Notes: Again rare this spring, with just two sightings on May 15 and May 23.

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

| MARCH              |              |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE    |
|--------------------|--------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|--------|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 16.86        | 13.43  | 7.57   | 31.57      | 6.43     | 24.43  | 24.29       | 11.14  | 9      | 4.71    | 14.94  |
| # DAYS OBSERVED    | 6            | 7      | 7      | 6          | 6        | 7      | 7           | 7      | 7      | 5       | 65     |
| # PROCESSED        |              |        |        |            |          |        |             |        |        |         |        |
| FIRST OBSERVI      | ED: March 28 |        | LAS    | T OBSERVED | : June 4 | PEAK   | DATE(s): Ap | ril 24 |        | NUMBER  | R: 102 |

<u>Notes:</u> Consistently among the most abundant species throughout the season, often seen streaming overhead in large numbers, or walking around the field adjacent to MBO.

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

| MARCH              |              |        | APRIL  |          |          |        |              | MAY           |        | J       | UNE   |
|--------------------|--------------|--------|--------|----------|----------|--------|--------------|---------------|--------|---------|-------|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4   | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8        | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 1            | 0.29   |        | 1        | 0.29     |        | 1.71         | 0.43          |        | 0.29    | 0.50  |
| # DAYS OBSERVED    | 3            | 1      |        | 4        | 1        |        | 3            | 2             |        | 1       | 15    |
| # PROCESSED        |              |        |        |          |          |        |              |               |        |         |       |
| FIRST OBSERVI      | ED: March 28 |        | LAS    | OBSERVED | : June 1 | PEA    | K DATE(s): M | ay 10, May 11 |        | NUMBE   | R: 5  |

Notes: Several sightings of birds flying overhead.

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

| MARCH              |               |        | APRIL  |           |        |        |              | MAY    |        | J          | UNE   |  |
|--------------------|---------------|--------|--------|-----------|--------|--------|--------------|--------|--------|------------|-------|--|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10    | TOTAL |  |
| MEAN # BIRDS / DAY |               |        |        | 1.43      | 0.86   | 0.43   | 2.43         | 0.86   | 2.14   | 0.86       | 0.90  |  |
| # DAYS OBSERVED    |               |        |        | 4         | 1      | 1      | 4            | 2      | 3      | 1          | 16    |  |
| # PROCESSED        |               |        |        |           |        |        |              |        |        |            |       |  |
| FIRST OBSERV       | /ED: April 18 |        | LAST   | OBSERVED: | May 31 | PEA    | K DATE(s): I | May 29 |        | NUMBER: 12 |       |  |

Notes: Fairly common throughout the season; seen flying in small flocks overhead.

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

| MARCH              |              |                     |        |           |        | MAY    |               |        |        |         | UNE   |
|--------------------|--------------|---------------------|--------|-----------|--------|--------|---------------|--------|--------|---------|-------|
|                    | WEEK 1       | WEEK 2              | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.57         | 0.57 0.71 3.57 1.14 |        |           |        | 1.57   | 1.29          | 1.71   | 0.14   | 1.31    |       |
| # DAYS OBSERVED    | 4            | 3                   | 3      | 7         | 3      | 6      | 5             | 5      | 5      | 1       | 42    |
| # PROCESSED        |              |                     |        |           |        |        |               |        |        |         |       |
| FIRST OBSERV       | ED: March 30 |                     | LAST   | OBSERVED: | May 31 | PE/    | AK DATE(s): I | May 21 |        | NUMBER  | ₹: 8  |

Notes: Present throughout the season, but often relatively inconspicuous.

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

| MARCH              |                        |        | APRIL  |                       |        |        |             | MAY    |        | J       | UNE   |
|--------------------|------------------------|--------|--------|-----------------------|--------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                        |        |        |                       |        |        |             | 0.14   |        |         | 0.01  |
| # DAYS OBSERVED    |                        |        |        |                       |        | 1      |             |        |        |         | 1     |
| # PROCESSED        |                        |        |        |                       |        |        |             |        |        |         |       |
| FIRST OBSER\       | FIRST OBSERVED: May 22 |        |        | LAST OBSERVED: May 22 |        |        | AK DATE(s): | May 22 |        | NUMBE   | R: 1  |

Notes: A single individual calling from the woods beyond C.

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

| MARCH              |                        |        | APRIL  |           |          |        |             | MAY    |        | J       | UNE   |   |
|--------------------|------------------------|--------|--------|-----------|----------|--------|-------------|--------|--------|---------|-------|---|
|                    | WEEK 1                 | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL | L |
| MEAN # BIRDS / DAY |                        |        |        |           |          |        |             | 0.43   |        |         | 0.04  |   |
| # DAYS OBSERVED    |                        |        |        |           |          |        |             | 1      |        |         | 1     |   |
| # PROCESSED        |                        |        |        |           |          |        |             |        |        |         |       |   |
| FIRST OBSER\       | FIRST OBSERVED: May 19 |        |        | OBSERVED: | : May 19 | PE     | AK DATE(s): | May 19 |        | NUMBER  | ₹: 3  |   |

Notes: Rare, with only one sighting of three individuals in late May.

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

| MARCH              |                        |        | APRIL                 |        |        |        |               | MAY    |        | JI      | UNE   |
|--------------------|------------------------|--------|-----------------------|--------|--------|--------|---------------|--------|--------|---------|-------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                        |        |                       |        |        |        | 0.14          | 0.43   | 1.86   | 0.57    | 0.3   |
| # DAYS OBSERVED    |                        |        |                       |        |        |        | 1             | 2      | 6      | 4       | 13    |
| # PROCESSED        |                        |        |                       |        |        |        |               |        |        |         |       |
| FIRST OBSER\       | FIRST OBSERVED: May 11 |        | LAST OBSERVED: June 5 |        |        | PE/    | AK DATE(s): I | May 23 |        | NUMBER  | R: 4  |

Notes: Uncommon throughout the final third of the season, peaking around the third week of May. Generally missed on rainy or cloudy days and seen in small numbers under dry conditions.

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

| MARCH              |                          |        | APRIL                 |        |        |        |            | MAY       |        | J       | UNE    |
|--------------------|--------------------------|--------|-----------------------|--------|--------|--------|------------|-----------|--------|---------|--------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7     | WEEK 8    | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                          |        | 0.29                  | 0.14   | 0.14   |        |            |           | 0.14   |         | 0.07   |
| # DAYS OBSERVED    |                          |        | 2 1 1                 |        |        | 1      |            |           |        |         | 5      |
| # PROCESSED        |                          |        |                       |        |        |        |            |           |        |         |        |
| FIRST OBSERV       | FIRST OBSERVED: April 12 |        | LAST OBSERVED: May 29 |        |        | PEAR   | DATE(s): 5 | occasions |        | NUME    | BER: 1 |

Notes: Scattered sightings throughout some of the season, but rarely more than once per week.

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

| MARCH                   |        |        | APRIL  |           |        |        |               | MAY    |        | J       | UNE   |
|-------------------------|--------|--------|--------|-----------|--------|--------|---------------|--------|--------|---------|-------|
|                         | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY      |        | 0.14   |        | 0.57      | 1.29   | 2      | 1.29          | 0.86   | 0.29   | 0.14    | 0.66  |
| # DAYS OBSERVED         |        | 1      |        | 3         | 5      | 7      | 5             | 4      | 2      | 1       | 28    |
| # PROCESSED             |        |        |        |           |        |        |               |        |        |         |       |
| FIRST OBSERVED: April 7 |        |        | LAST   | OBSERVED: | May 30 | PEA    | AK DATE(s): N | May 1  |        | NUMBE   | R: 5  |

Notes: Seen regularly in small numbers throughout most of the season. Most sightings likely pertain to the local breeding pair.

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

| MARCH              |                          |        | APRIL  |                       |         |        |             | MAY    |        | J       | UNE   |
|--------------------|--------------------------|--------|--------|-----------------------|---------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5  | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 1.57                     | 1.29   | 1      | 2.29                  | 0.86    | 3      | 1.29        | 0.71   | 1.43   | 0.71    | 1.42  |
| # DAYS OBSERVED    | 4 4 5 7 5                |        |        |                       | 7 5 4 6 |        |             |        | 3      | 50      |       |
| # PROCESSED        |                          |        |        | 3-1-0                 |         | 2-0-0  | 2-0-0       |        |        |         | 7-1-0 |
| FIRST OBSERVI      | FIRST OBSERVED: March 29 |        |        | LAST OBSERVED: June 5 |         |        | AK DATE(s): | May 7  |        | NUMBER  | : 5   |

Notes: Present throughout the season, but particularly active and vocal during late April and early May.

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

| MARCH              |                         |        | APRIL  |                       |                  |        |             | MAY     |        | Jl      | JNE   |
|--------------------|-------------------------|--------|--------|-----------------------|------------------|--------|-------------|---------|--------|---------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5           | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.57                    | 0.71   | 0.14   | 0.29                  | 0.14             | 1      | 1           | 1.14    | 0.86   | 0.29    | 0.61  |
| # DAYS OBSERVED    | 1 3 1 2 1               |        |        |                       | 5                | 4      | 6           | 2       | 30     |         |       |
| # PROCESSED        |                         |        |        |                       | 1-0-0 1-0-0 1-0- |        |             |         |        | 3-0-0   |       |
| FIRST OBSER        | FIRST OBSERVED: April 3 |        |        | LAST OBSERVED: June 1 |                  |        | AK DATE(s): | April 3 |        | NUMBER  | : 4   |

Notes: Present throughout the season, but uncommon at best, and often not seen or heard for a few days at a time.

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

| MARCH              |                         |        | APRIL  |                       |        |        |               | MAY    |        | J       | UNE   |
|--------------------|-------------------------|--------|--------|-----------------------|--------|--------|---------------|--------|--------|---------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                         | 0.14   |        | 1.86                  | 2.86   | 2.14   | 1.14          | 0.71   | 1.43   | 1       | 0.91  |
| # DAYS OBSERVED    |                         | 1      |        | 6                     | 7      | 7      | 5             | 3      | 6      | 4       | 39    |
| # PROCESSED        |                         |        |        |                       |        |        |               |        | 1-0-0  | 1-0-0   |       |
| FIRST OBSER        | FIRST OBSERVED: April 7 |        |        | LAST OBSERVED: June 4 |        |        | AK DATE(s): N | /lay 1 |        | NUMBER  | 2: 6  |

Notes: Seen almost daily after migrants returned in early-mid April, but rarely more than 1-3 individuals per day.

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

| MARCH              |                          |                | APRIL                 |        |        |        |               | MAY       |        | JI      | UNE   | ì |
|--------------------|--------------------------|----------------|-----------------------|--------|--------|--------|---------------|-----------|--------|---------|-------|---|
|                    | WEEK 1                   | WEEK 2         | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8    | WEEK 9 | WEEK 10 | TOTAL |   |
| MEAN # BIRDS / DAY | 0.57                     | 0.57 0.43 0.14 |                       |        | 0.57   | 1.14   | 1.71          | 0.86      | 0.86   | 0.29    | 0.77  |   |
| # DAYS OBSERVED    | 4                        | 3              | 1                     | 6      | 4      | 6      | 5             | 4         | 4      | 2       | 39    |   |
| # PROCESSED        |                          |                |                       | 1-0-0  |        |        |               |           |        |         |       |   |
| FIRST OBSERV       | FIRST OBSERVED: March 28 |                | LAST OBSERVED: June 1 |        |        | PE     | AK DATE(s): 4 | occasions |        | NUMBER  | : 3   |   |

Notes: Present throughout the season. Some days as many as 3 individuals were present and highly conspicuous around H, while at other times days passed without any being seen. Activity peaked from mid-April through mid-May.

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

| MARCH              |                        |        | APRIL                 |        |        |        |             | MAY          |        | J       | UNE    |
|--------------------|------------------------|--------|-----------------------|--------|--------|--------|-------------|--------------|--------|---------|--------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                        |        |                       |        |        |        |             | 0.57         |        | 0.57    | 0.11   |
| # DAYS OBSERVED    |                        |        |                       |        |        |        |             | 3            | 6      |         |        |
| # PROCESSED        |                        |        |                       |        |        |        |             |              |        |         |        |
| FIRST OBSERV       | FIRST OBSERVED: May 18 |        | LAST OBSERVED: May 31 |        |        | PEAK   | DATE(s): Ma | y 18, May 31 |        | NUM     | BER: 2 |

Notes: Heard occasionally calling from the woods north of MBO during the final 3 weeks of the season.

# ALFL: Alder Flycatcher / Moucherolle des aulnes (Empidonax alnorum)

| MARCH                     |        |        | APRIL  |            |          | MAY    |            |                |        |         | UNE   |
|---------------------------|--------|--------|--------|------------|----------|--------|------------|----------------|--------|---------|-------|
|                           | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7     | WEEK 8         | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY        |        |        |        |            |          |        |            | 0.14           | 1.29   | 0.14    |       |
| # DAYS OBSERVED           |        |        |        |            |          |        |            |                | 1      | 4       | 5     |
| # PROCESSED               |        |        |        |            |          |        |            |                |        |         |       |
| FIRST OBSERVED: May 29 LA |        |        | LAS    | T OBSERVED | : June 5 | PEA    | K DATE(s): | June 1, June 3 |        | NUMBE   | R: 3  |

Notes: A few confirmed (by call) records of Alder Flycatcher, all in the final 2 weeks of the season. Most of the banded TRFL are likely ALFL.

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

| MARCH              |                        |        | APRIL  |                       |        |        |              | MAY    |        | Jl      | JNE   |
|--------------------|------------------------|--------|--------|-----------------------|--------|--------|--------------|--------|--------|---------|-------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                        |        |        |                       |        |        |              | 0.43   | 0.29   | 0.29    | 0.10  |
| # DAYS OBSERVED    |                        |        |        |                       |        |        |              | 2      | 2      | 6       |       |
| # PROCESSED        |                        |        |        |                       |        |        |              | 3-0-0  | 2-0-0  | 2-0-0   | 7-0-0 |
| FIRST OBSER\       | FIRST OBSERVED: May 20 |        |        | LAST OBSERVED: June 1 |        |        | CDATE(s): Ma | ay 21  |        | NUMBE   | R: 2  |

Notes: All records of Traill's Flycatcher pertain to captured birds.

#### WIFL: Willow Flycatcher / Moucherolle des saules (Empidonax traillii)

| MARCH              |             |        | APRIL  |           |        |        |              | MAY    |        | J       | UNE    |
|--------------------|-------------|--------|--------|-----------|--------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |             |        |        |           |        |        |              |        | 0.43   |         | 0.04   |
| # DAYS OBSERVED    |             |        |        |           |        |        |              |        | 2      |         | 2      |
| # PROCESSED        |             |        |        |           |        |        |              |        |        |         |        |
| FIRST OBSERV       | VED: May 26 | •      | LAST   | OBSERVED: | May 27 | PEAK D | DATE(s): May | 26     |        | NUM     | BER: 2 |

Notes: A few Willow Flycatchers were heard giving their distinctive call on May 26-27.

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

| MARCH              |             |        | APRIL  |            |          |        |               | MAY    |        | JI      | UNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|---------------|--------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        | 1             | 1.29   | 0.57   |         | 0.29  |
| # DAYS OBSERVED    |             |        |        |            |          |        | 4             | 5      | 3      |         | 12    |
| # PROCESSED        |             |        |        |            |          |        | 3-0-0         | 3-0-0  | 1-0-0  |         | 7-0-0 |
| FIRST OBSER\       | /ED: May 10 |        | LAS    | T OBSERVED | : May 29 | PE/    | AK DATE(s): 1 | May 18 |        | NUMBE   | R: 4  |

Notes: Regularly seen during a brief migration period from mid to late May.

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

| MARCH              |               |        | APRIL  |            |          |        |              | MAY    |        | JI      | UNE    |
|--------------------|---------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 1.29          | 0.71   | 1.29   | 2          | 1.14     | 1.14   | 1.29         | 0.86   | 0.43   | 0.29    | 1.04   |
| # DAYS OBSERVED    | 5             | 5      | 6      | 7          | 6        | 6      | 7            | 6      | 3      | 2       | 53     |
| # PROCESSED        |               |        |        | 3-1-0      | 0-0-1    |        |              |        |        |         | 3-1-1  |
| FIRST OBSER        | /ED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): Mai | rch 31 |        | NUME    | BER: 3 |

<u>Notes:</u> Present in small numbers throughout the season. Most sightings involved a pair nesting in the old blind in the back pond, but occasionally a few other individuals were observed and banded as well.

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

| MARCH              |             |        | APRIL  |            |          |        |             | MAY            |        | J       | UNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|-------------|----------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8         | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        | 0.57        | 0.71           | 1.71   | 1.14    | 0.41  |
| # DAYS OBSERVED    |             |        |        |            |          |        | 3           | 3              | 6      | 4       | 16    |
| # PROCESSED        |             |        |        |            |          |        |             |                | 0-2-0  |         | 0-2-0 |
| FIRST OBSERV       | /ED: May 10 |        | LAS    | T OBSERVED | : June 5 | PE     | AK DATE(s): | May 22, 28, ai | nd 31  | NUMBER  | : 3   |

Notes: Fairly regular, but uncommon during the final third of the season.

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

| MARCH              |             |        | APRIL  |            |          |        |             | MAY            |        | Jl      | JNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|-------------|----------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8         | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        | 2.14        | 1.71           | 2.71   | 1.86    | 0.84  |
| # DAYS OBSERVED    |             |        |        |            |          |        | 6           | 6              | 7      | 7       | 26    |
| # PROCESSED        |             |        |        |            |          |        |             | 1-0-0          | 1-0-0  |         | 2-0-0 |
| FIRST OBSER\       | /ED: Mav 10 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): Ma | v 15. 20 and 2 | 9      | NUMB    | ER: 4 |

<u>Notes:</u> Fairly regular throughout the last three weeks of May. Likely most of the observations were of the same two breeding pairs.

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

| MARCH              |             |        | APRIL  |           |        |        |             | MAY         |        | JI      | JNE    |
|--------------------|-------------|--------|--------|-----------|--------|--------|-------------|-------------|--------|---------|--------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |             |        |        |           |        |        |             | 0.14        |        | 0.14    | 0.03   |
| # DAYS OBSERVED    |             |        |        |           |        |        |             | 1           |        | 1       | 2      |
| # PROCESSED        |             |        |        |           |        |        |             |             |        |         |        |
| FIRST OBSER\       | /ED: May 19 |        | LAST   | OBSERVED: | May 31 | PEAK   | DATE(s): Ma | y 19 and 31 |        | NUME    | BER: 1 |

Notes: Two individuals seen flying overhead on May 19 and 31.

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

| MARCH                    |        |        | APRIL  |          |          |        |             | MAY    |        | J       | UNE     |
|--------------------------|--------|--------|--------|----------|----------|--------|-------------|--------|--------|---------|---------|
|                          | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4   | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY       |        |        |        | 5.71     | 16       | 26.57  | 27.86       | 22.43  | 22.43  | 16.14   | 13.71   |
| # DAYS OBSERVED          |        |        |        | 5        | 7        | 7      | 7           | 7      | 7      | 7       | 47      |
| # PROCESSED              |        |        |        | 1-0-0    | 1-0-0    | 1-0-0  | 7-1-0       | 1-1*-1 | 3-0-0  |         | 14-1-1  |
| FIRST OBSERVED: April 19 |        |        | LAS    | OBSERVED | : June 5 | PEAK D | ATE(s): May | 20     |        | NUMI    | BER: 45 |

<u>Notes:</u> Seen daily from early/mid-April onward. Numbers peaked just before mid-May; after that some abandoned the site, while others that did nest in the boxes were less active than previously and might not have been counted every day. \* One return is a foreign recapture from University of Sherbrooke.

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

| MARCH              |            |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE     |
|--------------------|------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|---------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |            |        |        |            |          | 0.14   | 0.71        | 0.29   | 1.86   | 0.43    | 0.34    |
| # DAYS OBSERVED    |            |        |        |            |          | 1      | 4           | 1      | 4      | 2       | 12      |
| # PROCESSED        |            |        |        |            |          |        |             |        | 1-0-0  |         |         |
| FIRST OBSER        | VED: May 6 |        | LAS    | T OBSERVED | : June 1 | PEAK D | ATE(s): May | 26     |        | NUM     | IBER: 7 |

Notes: Pairs seen fairly regularly throughout May.

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

| MARCH              |            |        | APRIL  |            |          |        |             | MAY            |        | JI      | UNE   |
|--------------------|------------|--------|--------|------------|----------|--------|-------------|----------------|--------|---------|-------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8         | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |        |        |            | 0.14     |        |             |                | 0.57   | 0.29    | 0.10  |
| # DAYS OBSERVED    |            |        |        |            | 1        |        |             |                | 2      | 1       | 4     |
| # PROCESSED        |            |        |        |            |          |        |             |                |        |         |       |
| FIRST OBSER        | VED: May 1 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): Ma | y 27 and 29, J | une 5  | NUMB    | ER: 2 |

Notes: Occasional sightings, always involving one or two individuals.

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

| MARCH              |            |        | APRIL  |            |          |        |              | MAY      |        | J       | UNE     |
|--------------------|------------|--------|--------|------------|----------|--------|--------------|----------|--------|---------|---------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |            |        |        |            | 7.14     | 20.71  | 13.43        | 7.57     | 13.4   | 5.71    | 6.80    |
| # DAYS OBSERVED    |            |        |        |            | 1        | 6      | 5            | 2        | 5      | 4       | 23      |
| # PROCESSED        |            |        |        |            |          |        |              |          |        |         |         |
| FIRST OBSER        | VED: May 1 |        | LAS    | T OBSERVED | : June 4 | PEAK D | DATE(s): May | 1 and 22 |        | NUME    | BER: 50 |

<u>Notes:</u> An irregular visitor to the site throughout the second half of the season, with most individuals observed from a distance coming and going from their nests under the radar station to the south.

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

| MARCH              |               |        | APRIL  |            |          |        |               | MAY     |        | JI      | UNE    |
|--------------------|---------------|--------|--------|------------|----------|--------|---------------|---------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |               |        |        | 0.14       | 0.43     | 1.43   | 1.71          | 1.57    | 1      | 0.14    | 0.64   |
| # DAYS OBSERVED    |               |        |        | 1          | 2        | 3      | 5             | 5       | 5      | 1       | 22     |
| # PROCESSED        |               |        |        |            |          |        |               |         |        |         |        |
| FIRST OBSER\       | /ED: April 24 |        | LAS    | T OBSERVED | : June 1 | PEAK I | DATE(s): 4 oc | casions |        | NUME    | BER: 4 |

Notes: Fairly regular sightings, always involving just a few individuals.

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

| MARCH              |               |        | APRIL  |            |          |        |               | MAY      |        | J       | UNE    |
|--------------------|---------------|--------|--------|------------|----------|--------|---------------|----------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 10            | 7      | 9      | 8.71       | 5.43     | 5.43   | 4.71          | 3.57     | 3.57   | 2.57    | 6.0    |
| # DAYS OBSERVED    | 7             | 7      | 7      | 7          | 7        | 7      | 7             | 6        | 7      | 5       | 67     |
| # PROCESSED        |               |        |        |            |          |        | 1-0-0         | 1-0-0    | 2-0-0  |         | 4-0-0  |
| FIRST OBSER        | /ED: March 28 |        | LAS    | T OBSERVED | : June 3 | PEAK   | DATE(s): Apri | 3 and 12 |        | NUMBI   | ER: 18 |

Notes: Observed almost daily throughout the season, usually in moderate numbers. Migration appeared to peak in early April, as opposed to early May last year.

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

| MARCH              |                          |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE     |
|--------------------|--------------------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|---------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY | 17.29                    | 22.14  | 19.86  | 32.71      | 25.43    | 28.29  | 18.86        | 21.57  | 20.57  | 19.86   | 22.66   |
| # DAYS OBSERVED    | 7                        | 7      | 7      | 7          | 7        | 7      | 7            | 7      | 7      | 7       | 70      |
| # PROCESSED        |                          |        |        |            |          |        |              |        |        |         |         |
| FIRST OBSERV       | FIRST OBSERVED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEAK I | DATE(s): May | 1      |        | NUME    | BER: 60 |

Notes: Observed on every day of the season, and consistently among the most abundant species present.

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

| MARCH              |               |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE    |   |
|--------------------|---------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|--------|---|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  | L |
| MEAN # BIRDS / DAY |               |        |        | 0.29       | 0.29     | 1      | 0.14        | 0.43   |        | 0.29    | 0.24   |   |
| # DAYS OBSERVED    |               |        | 2 2    |            |          | 5      | 1           | 3      |        | 2       | 15     |   |
| # PROCESSED        |               |        |        |            |          |        |             |        |        |         |        |   |
| FIRST OBSERV       | /ED: April 20 |        | LAS    | T OBSERVED | : June 1 | PEAK   | DATE(s): Ma | y 6    |        | NUM     | BER: 3 |   |

<u>Notes:</u> One individual seen or heard irregularly from mid-April onward, usually coming from or heading toward the Arboretum. On one occasion, three individuals were confirmed.

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

| MARCH              |               |        | APRIL  |            |          |        |             | MAY     |        | JI      | UNE    |
|--------------------|---------------|--------|--------|------------|----------|--------|-------------|---------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 6.43          | 8.57   | 8.86   | 14         | 8.48     | 10.57  | 9           | 9.14    | 6.43   | 4.14    | 8.56   |
| # DAYS OBSERVED    | 7             | 6      | 7      | 7          | 7        | 7      | 7           | 7       | 7      | 4       | 66     |
| # PROCESSED        |               |        |        | 3-2-5      |          | 1-1-0  | 4-1-1       | 1-1-0   | 1-0-0  |         | 10-5-6 |
| FIRST OBSERV       | /ED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEA    | DATE(s): Ap | oril 18 |        | NUMBER  | R: 24  |

Notes: Seen almost daily throughout the season, but becoming less abundant (or at least less conspicuous) in late May.

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

| MARCH              |                       |        | APRIL  |            |         |        |             | MAY    |        | J       | UNE   |
|--------------------|-----------------------|--------|--------|------------|---------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5  | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                       |        |        |            |         | 0.14   |             |        |        |         | 0.14  |
| # DAYS OBSERVED    |                       |        |        |            |         | 1      |             |        |        |         | 1     |
| # PROCESSED        |                       |        |        |            |         |        |             |        |        |         |       |
| FIRST OBSER        | FIRST OBSERVED: May 7 |        | LAS    | T OBSERVED | : May 7 | PEAK   | DATE(s): Ma | y 7    |        | NUMB    | ER: 1 |

Notes: Sighting restricted to one individual seen May 7.

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

| MARCH              |               |           | APRIL  |            |          |        |                | MAY    |        | J       | UNE    |
|--------------------|---------------|-----------|--------|------------|----------|--------|----------------|--------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2    | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7         | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 0.57          | 1         | 0.14   | 0.57       | 0.43     | 1      | 0.86           | 0.43   | 0.14   | 0.14    | 0.53   |
| # DAYS OBSERVED    | 3             | 3 3 1 4 3 |        |            | 4        | 3      | 3              | 1      | 1      | 26      |        |
| # PROCESSED        |               |           |        |            |          |        |                |        |        |         |        |
| FIRST OBSER\       | /ED: March 28 |           | LAS    | T OBSERVED | : June 1 | PEAK D | DATE(s): April | 7      |        | NUM     | BER: 4 |

Notes: Seen or heard several times each week throughout the season.

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

| MARCH              |                         |        | APRIL  |           |        |        |              | MAY              |        |      | JU    | INE   |
|--------------------|-------------------------|--------|--------|-----------|--------|--------|--------------|------------------|--------|------|-------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8           | WEEK 9 | WEEK | (10   | TOTAL |
| MEAN # BIRDS / DAY |                         | 0.14   |        | 0.14      |        |        |              | 0.14             |        |      |       | 0.04  |
| # DAYS OBSERVED    |                         | 1      |        | 1         |        |        |              | 1                |        |      |       | 3     |
| # PROCESSED        |                         |        |        |           |        |        |              |                  |        |      |       |       |
| FIRST OBSER        | FIRST OBSERVED: April 9 |        | LAST   | OBSERVED: | May 22 | PEAK   | DATE(s): Apr | ril 9, 21 and Ma | ay 22  | ١    | NUMBE | R: 1  |

Notes: Sightings restricted to three individuals spread throughout the season.

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

| MARCH              |             |        | APRIL  |            |          |        |             | MAY          |        | JI      | JNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|-------------|--------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        | 1.43        | 1            | 0.71   | 0.86    | 0.40  |
| # DAYS OBSERVED    |             |        |        |            |          |        | 5           | 6            | 5      | 4       | 20    |
| # PROCESSED        |             |        |        |            |          |        | 1-0-1       |              |        |         | 1-0-1 |
| FIRST OBSER        | VED: May 11 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): Ma | y 13, June 1 |        | NUMB    | ER: 3 |

Notes: Regularly observed throughout the last half of the season, though most of these observations are likely of the same individuals breeding near the MBO gate.

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

| MARCH              |                          |        | APRIL  |           |        |        |               | MAY          |        | J       | UNE    |
|--------------------|--------------------------|--------|--------|-----------|--------|--------|---------------|--------------|--------|---------|--------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                          |        |        | 0.14      |        |        |               | 0.14         |        |         | 0.03   |
| # DAYS OBSERVED    |                          |        | 1      |           |        |        | 1             |              |        | 2       |        |
| # PROCESSED        |                          |        |        |           |        |        |               |              |        |         |        |
| FIRST OBSERV       | FIRST OBSERVED: April 23 |        | LAST   | OBSERVED: | May 17 | PEAK [ | DATE(s): Apri | l 23, May 17 |        | NUM     | BER: 1 |

Notes: Only two sightings scattered across the season, involving birds heard singing in the distance.

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

| MARCH              |                         |        | APRIL  |           |          |        |             | MAY    |        | J       | UNE   |
|--------------------|-------------------------|--------|--------|-----------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                  | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.14                    | 2.57   | 1.43   | 0.43      | 0.57     |        |             |        |        |         | 0.51  |
| # DAYS OBSERVED    | 1                       | 5      | 3      | 1         | 1        |        |             |        |        |         | 11    |
| # PROCESSED        |                         |        |        | 2-0-0     |          |        |             |        |        |         | 2-0-0 |
| FIRST OBSE         | FIRST OBSERVED: April 3 |        | LAST   | OBSERVED: | April 27 | PEAK   | DATE(s): Ap | ril 6  |        | NUMBE   | R: 11 |

Notes: Fairly common at the beginning of the season, disappearing by the end of April.

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

| MARCH              |               |        | APRIL  |           |        |        |             | MAY    |        | J       | UNE    |
|--------------------|---------------|--------|--------|-----------|--------|--------|-------------|--------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |               |        |        | 3.14      | 11.57  | 17.71  | 4.14        | 1.43   |        |         | 3.80   |
| # DAYS OBSERVED    |               |        |        | 2         | 7      | 7      | 5           | 4      |        |         | 25     |
| # PROCESSED        |               |        |        | 6-0-0     |        | 31-0-5 | 10-0-0      | 5-0-0  |        |         | 52-0-5 |
| FIRST OBSERV       | /ED: April 23 |        | LAST   | OBSERVED: | May 21 | PEAK   | DATE(s): Ma | y 6    |        | NUMBE   | R: 30  |

Notes: Common from mid-April through early May, rapidly disappearing after the peak in early May.

# VEER: Veery / Grive fauve (Catharus fuscescens)

| MARCH              |             |        | APRIL  |            |          |        |             | MAY    |        | JI      | UNE    |
|--------------------|-------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|--------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |             |        |        |            |          |        |             | 0.14   | 1.71   | 0.71    | 0.26   |
| # DAYS OBSERVED    |             |        |        |            |          |        | 1           | 5      | 3      | 9       |        |
| # PROCESSED        |             |        |        |            |          |        |             | 1-2-2  |        | 1-2-2   |        |
| FIRST OBSER\       | /ED: May 18 |        | LAS    | T OBSERVED | : June 1 | PEAK   | DATE(s): Ma | y 27   |        | NUME    | BER: 4 |

<u>Notes:</u> The most common of the *Catharus* thrushes, but still relatively uncommon, though seen regularly during the final two weeks of the season once the breeding pairs settled on territory and began calling frequently.

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

| MARCH              |                        |        | APRIL  |            |          |        |             | MAY             |        |         | JUNE    |   |
|--------------------|------------------------|--------|--------|------------|----------|--------|-------------|-----------------|--------|---------|---------|---|
|                    | WEEK 1                 | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8          | WEEK 9 | WEEK 10 | TOTAL   | _ |
| MEAN # BIRDS / DAY |                        |        |        |            |          |        |             |                 | 0.29   | 0.14    | 0.04    |   |
| # DAYS OBSERVED    |                        |        |        |            |          |        |             |                 | 2      | 1       | 3       |   |
| # PROCESSED        |                        |        |        |            |          |        |             |                 | 2-0-0  |         | 2-0-0   | · |
| FIRST OBSER\       | FIRST OBSERVED: May 23 |        |        | T OBSERVED | : June 1 | PEAK   | DATE(s): Ma | y 23 and 25, Ji | une 1  | NU      | MBER: 1 |   |

Notes: Rare, with only three individuals observed, all in the week of May and first day of June.

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

| MARCH              |                                     |        | APRIL  |                           |        |        |        | MAY       |        | J       | UNE   |
|--------------------|-------------------------------------|--------|--------|---------------------------|--------|--------|--------|-----------|--------|---------|-------|
|                    | WEEK 1                              | WEEK 2 | WEEK 3 | WEEK 4                    | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8    | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                                     |        | 0.14   |                           |        |        |        | 0.43      | 0.14   |         | 0.07  |
| # DAYS OBSERVED    |                                     |        | 1      |                           |        |        | 3 1    |           |        |         | 5     |
| # PROCESSED        |                                     |        |        |                           |        |        |        |           |        |         |       |
| FIRST OBSERV       | VED: April 29 LAST OBSERVED: May 21 |        |        | PEAK DATE(s): 5 occasions |        |        |        | NUMBER: 1 |        |         |       |

Notes: Rare this spring, with only five individuals recorded.

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

| MARCH              |                        |        | APRIL  |                       |        |        |                      | MAY    |        | JI      | JNE     |
|--------------------|------------------------|--------|--------|-----------------------|--------|--------|----------------------|--------|--------|---------|---------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7               | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |                        |        |        |                       |        |        |                      | 0.14   |        |         | 0.01    |
| # DAYS OBSERVED    |                        |        |        |                       |        |        | 1                    |        |        |         | 1       |
| # PROCESSED        |                        |        |        |                       |        |        |                      |        |        |         |         |
| FIRST OBSER\       | FIRST OBSERVED: May 20 |        |        | LAST OBSERVED: May 20 |        |        | PEAK DATE(s): May 20 |        |        |         | IBER: 1 |

Notes: A scarce migrant, observed only once.

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

| MARCH                    |        |                       | APRIL  |        |                        |                         |         | MAY    |        | JI      | UNE    |
|--------------------------|--------|-----------------------|--------|--------|------------------------|-------------------------|---------|--------|--------|---------|--------|
|                          | WEEK 1 | WEEK 2                | WEEK 3 | WEEK 4 | WEEK 5                 | WEEK 6                  | WEEK 7  | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY       | 13.29  | 10                    | 12.57  | 26     | 10.57                  | 7.29                    | 5.57    | 4.14   | 5.57   | 3.40    | 9.84   |
| # DAYS OBSERVED          | 7      | 7                     | 7      | 7 7 7  |                        |                         | 7 7 7 7 |        |        | 7       | 70     |
| # PROCESSED              |        |                       | 8-0-1  |        |                        | 1-0-0 1-0-0 1-2-0 0-0-1 |         |        |        | 1-0-0   | 12-2-2 |
| FIRST OBSERVED: March 28 |        | LAST OBSERVED: June 5 |        |        | PEAK DATE(s): April 20 |                         |         |        | NUMBE  | ER: 50  |        |

Notes: Observed daily. Migration peaked in mid-late April this year, as opposed to mid-May last year, with numbers steadily tapering off thereafter. Only a few breeding pairs remained by the end of the season.

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

| MARCH              |                       |        | APRIL                 |        |             |                      |        | MAY    |        | J       | UNE   |
|--------------------|-----------------------|--------|-----------------------|--------|-------------|----------------------|--------|--------|--------|---------|-------|
|                    | WEEK 1                | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5      | WEEK 6               | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                       |        |                       |        |             | 0.71                 | 1.71   | 4.43   | 5.86   | 1.43    | 1.41  |
| # DAYS OBSERVED    |                       |        |                       |        |             | 3                    | 5      | 6      | 7      | 5       | 26    |
| # PROCESSED        |                       |        |                       |        | 1-0-0 5-1-2 |                      | 5-1-2  | 8-0-3  |        | 14-1-5  |       |
| FIRST OBSER        | FIRST OBSERVED: May 3 |        | LAST OBSERVED: June 5 |        |             | PEAK DATE(s): May 26 |        |        |        | NUMBE   | R: 15 |

Notes: Common through the final half of the season, but always in moderate numbers. Migration peaked in mid-late May.

#### NOMO: Northern Mockingbird / Moqueur polyglotte (Mimus polyglottos)

| MARCH              |                        |        | APRIL                 |        |        |                             |        | MAY    |        |         | JUNE    |
|--------------------|------------------------|--------|-----------------------|--------|--------|-----------------------------|--------|--------|--------|---------|---------|
|                    | WEEK 1                 | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6                      | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |                        |        |                       |        |        |                             | 0.14   | 0.14   |        |         | 0.03    |
| # DAYS OBSERVED    |                        |        |                       |        |        |                             | 1      | 1      |        |         | 2       |
| # PROCESSED        |                        |        |                       |        |        |                             |        |        |        |         |         |
| FIRST OBSER\       | FIRST OBSERVED: May 12 |        | LAST OBSERVED: May 18 |        |        | PEAK DATE(s): May 12 and 18 |        |        |        | NUN     | IBER: 1 |

Notes: Observed on only two occasions, and only seen once at MBO previously.

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

| MARCH              |                       |        | APRIL                 |        |        |                     |        | MAY    |        | J       | UNE    |
|--------------------|-----------------------|--------|-----------------------|--------|--------|---------------------|--------|--------|--------|---------|--------|
|                    | WEEK 1                | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6              | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                       |        |                       |        | 0.43   | 0.29                | 0.86   | 0.43   | 0.14   | 0.14    | 0.23   |
| # DAYS OBSERVED    |                       |        | 1                     |        | 2      | 2 5 2               |        | 1      | 1      | 12      |        |
| # PROCESSED        |                       |        |                       |        | 1-0-0  |                     | 2-0-1  |        |        |         | 3-0-1  |
| FIRST OBSER        | FIRST OBSERVED: May 1 |        | LAST OBSERVED: May 31 |        |        | PEAK DATE(s): May 1 |        |        |        | NUM     | BER: 3 |

Notes: Uncommon and irregular, with scattered sightings from late April through the end of the season.

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

| MARCH              |                          |        | APRIL                 |        |        |                      |        | MAY    |        | J       | UNE     |
|--------------------|--------------------------|--------|-----------------------|--------|--------|----------------------|--------|--------|--------|---------|---------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6               | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY |                          |        |                       | 2.29   |        |                      | 0.71   | 2.57   | 9.29   | 9       | 2.39    |
| # DAYS OBSERVED    |                          |        | 1                     |        |        |                      | 2 3    |        |        | 5       | 17      |
| # PROCESSED        |                          |        |                       |        |        |                      |        |        | 10-0-0 | 7-0-0   | 17-0-0  |
| FIRST OBSER\       | FIRST OBSERVED: April 20 |        | LAST OBSERVED: June 5 |        |        | PEAK DATE(s): May 30 |        |        |        | NUM     | BER: 38 |

<u>Notes:</u> Like in 2006, a small number was present once in mid-April, and then there were no sightings at all until the second week of May. Towards the end of the season, waxwings were seen almost daily, and usually in good numbers. These late birds may have been migrants passing through that wintered further south, or else nomads arriving to breed at MBO.

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

| MARCH              |                          |        | APRIL                   |        |        |                        |        | MAY    |        | JUNE    |       |  |
|--------------------|--------------------------|--------|-------------------------|--------|--------|------------------------|--------|--------|--------|---------|-------|--|
|                    | WEEK 1                   | WEEK 2 | WEEK 3                  | WEEK 4 | WEEK 5 | WEEK 6                 | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |  |
| MEAN # BIRDS / DAY | 0.14                     |        |                         |        |        |                        |        |        |        |         | 0.01  |  |
| # DAYS OBSERVED    | 1                        |        |                         |        |        |                        |        |        |        |         | 1     |  |
| # PROCESSED        |                          |        |                         |        |        |                        |        |        |        |         |       |  |
| FIRST OBSERV       | FIRST OBSERVED: March 29 |        | LAST OBSERVED: March 29 |        |        | PEAK DATE(s): March 29 |        |        |        | NUME    | ER: 1 |  |

Notes: A single sighting on the second day of the spring season.

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

| MARCH              |                          |           | APRIL                 |        |         |                     |        | MAY    |        | JI      | UNE   |
|--------------------|--------------------------|-----------|-----------------------|--------|---------|---------------------|--------|--------|--------|---------|-------|
|                    | WEEK 1                   | WEEK 2    | WEEK 3                | WEEK 4 | WEEK 5  | WEEK 6              | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 5                        | 4.71      | 1.71                  | 2.29   | 0.71    | 6.14                | 1.29   | 0.57   | 1.29   | 0.29    | 2.4   |
| # DAYS OBSERVED    | 6                        | 6 6 2 3 3 |                       |        | 3 4 3 2 |                     |        |        | 1      | 33      |       |
| # PROCESSED        |                          |           |                       |        |         |                     |        |        |        |         |       |
| FIRST OBSER\       | FIRST OBSERVED: March 28 |           | LAST OBSERVED: June 4 |        |         | PEAK DATE(s): May 6 |        |        |        | NUMBE   | R: 40 |

Notes: Seen fairly regularly in small numbers throughout the season, often flying over the station.

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

| MARCH              |              |        | APRIL                 |        |        |                      |        | MAY    |        | Jl      | JNE   |
|--------------------|--------------|--------|-----------------------|--------|--------|----------------------|--------|--------|--------|---------|-------|
|                    | WEEK 1       | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6               | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |              |        |                       |        |        | 0.14                 | 0.43   | 0.43   | 0.14   | 0.14    | 0.13  |
| # DAYS OBSERVED    |              |        |                       |        |        |                      | 2      | 3      | 1      | 1       | 8     |
| # PROCESSED        |              |        |                       |        |        |                      | 1-0-0  |        |        |         | 1-0-0 |
| FIRST OBSER        | ERVED: May 8 |        | LAST OBSERVED: May 31 |        |        | PEAK DATE(s): May 13 |        |        |        | NUMB    | ER: 2 |

Notes: Uncommon to rare throughout May.

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

| MARCH              |            |        | APRIL  |            |                  |        |             | MAY     |        | J       | UNE   |
|--------------------|------------|--------|--------|------------|------------------|--------|-------------|---------|--------|---------|-------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5           | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |        |        |            |                  |        | 1.43        | 2.29    | 4      | 0.86    | 0.86  |
| # DAYS OBSERVED    |            |        |        |            | 7 6 7            |        |             |         | 5      | 25      |       |
| # PROCESSED        |            |        |        |            | 3-0-0 4-0-1 2-0- |        | 2-0-0       |         | 9-0-1  |         |       |
| FIRST OBSER        | VED: May 9 |        | LAS    | T OBSERVED | : June 5         | PEAK   | DATE(s): Ma | y 22-24 |        | NUMB    | ER: 5 |

<u>Notes:</u> Much more common and abundant than last year through the last three weeks of May and into June. The most consistent sightings are likely of a pair breeding near B/N.

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

| MARCH              |            |        | APRIL                 |        |        | MAY    |              |        |        |         | JUNE   |   |
|--------------------|------------|--------|-----------------------|--------|--------|--------|--------------|--------|--------|---------|--------|---|
|                    | WEEK 1     | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  | _ |
| MEAN # BIRDS / DAY |            |        |                       |        |        | 0.14   |              |        | 2.29   | 2.29    | 0.47   |   |
| # DAYS OBSERVED    |            |        |                       |        |        |        | 1 6          |        |        | 6       | 13     |   |
| # PROCESSED        |            |        |                       |        |        |        |              | 3-0-0  |        | 3-0-0   | ·      |   |
| FIRST OBSER\       | ED: May 21 |        | LAST OBSERVED: June 5 |        |        | PEAK   | DATE(s): Mag | y 31   |        | NUMI    | BER: 6 |   |

Notes: The latest of the vireos -- observed almost daily from mid-May onward, but in small numbers.

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

| MARCH              |                           |        | APRIL  |        |          |                      |        | MAY    |        | JI      | UNE    |
|--------------------|---------------------------|--------|--------|--------|----------|----------------------|--------|--------|--------|---------|--------|
|                    | WEEK 1                    | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5   | WEEK 6               | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                           |        |        |        |          |                      | 0.86   | 7      | 1.43   | 0.43    | 0.97   |
| # DAYS OBSERVED    |                           |        |        |        |          |                      | 2      | 7      | 3      | 1       | 13     |
| # PROCESSED        |                           |        |        |        |          |                      | 1-0-0  | 12-0-0 | 3-0-0  |         | 16-0-0 |
| FIRST OBSER\       | /ED: May 13 LAST OBSERVED |        |        |        | : June 1 | PEAK DATE(s): May 21 |        |        |        | NUMBE   | :R: 17 |

Notes: Fairly common during a short period of migration in mid to late May. Much more abundant than last year.

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

| MARCH              |            |                            | APRIL  |        |        |             |        | MAY    |        |         | JUNE  |   |
|--------------------|------------|----------------------------|--------|--------|--------|-------------|--------|--------|--------|---------|-------|---|
|                    | WEEK 1     | WEEK 2                     | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6      | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |   |
| MEAN # BIRDS / DAY |            |                            |        |        | 0.14   | 0.14        | 2.57   | 4.86   | 0.57   |         | 0.83  |   |
| # DAYS OBSERVED    |            |                            |        |        | 1      | 1           | 7      | 6      | 3      |         | 18    |   |
| # PROCESSED        |            |                            |        |        |        |             | 5-0-0  | 8-0-0  | 1-0-0  |         | 14-0- | 0 |
| FIRST OBSER        | VED: May 1 | ay 1 LAST OBSERVED: May 25 |        |        | PEA    | CDATE(s): M | ay 18  |        | NUME   | ER: 17  |       |   |

Notes: Relatively common migrant throughout May, peaking around the middle of the month.

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

| MARCH              |                       |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE   |
|--------------------|-----------------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1                | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                       |        |        |            |          | 0.14   | 1           | 1.71   | 0.43   | 0.29    | 0.36  |
| # DAYS OBSERVED    |                       |        |        |            |          | 1      | 3           | 3      | 2      | 1       | 10    |
| # PROCESSED        |                       |        |        |            |          |        |             | 1-0-0  | 1-0-0  |         | 2-0-0 |
| FIRST OBSER        | FIRST OBSERVED: May 8 |        |        | T OBSERVED | : June 1 | PEAK   | CDATE(s): M | ay 17  |        | NUMBE   | R: 6  |

<u>Notes:</u> Present during a brief period of migration throughout May. Two individuals were banded for the first time in spring.

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

| MARCH              |            |           | APRIL  |                       |        |        |              | MAY    |        | J       | UNE      |
|--------------------|------------|-----------|--------|-----------------------|--------|--------|--------------|--------|--------|---------|----------|
|                    | WEEK 1     | WEEK 2    | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL    |
| MEAN # BIRDS / DAY |            |           |        |                       |        | 0.57   | 17.86        | 15.57  | 15.14  | 8.71    | 5.79     |
| # DAYS OBSERVED    |            |           |        |                       |        | 2      | 7            | 7      | 7      | 7       | 30       |
| # PROCESSED        |            |           |        |                       |        |        | 16-6-2       | 5-4-5  | 7-1-5  | 1-0-0   | 29-11-12 |
| FIRST OBSER        | VED: May 7 | ED: May 7 |        | LAST OBSERVED: June 5 |        | PEAK [ | DATE(s): May | 13     |        | NUMB    | ER: 25   |

Notes: Common and seen daily over the final 30 days of the season.

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

| MARCH              |             |        | APRIL                 |        |        |             |        | MAY    |        | Jl      | UNE   |
|--------------------|-------------|--------|-----------------------|--------|--------|-------------|--------|--------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6      | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |                       |        |        |             | 0.57   | 1.57   | 2.57   | 0.29    | 0.5   |
| # DAYS OBSERVED    |             |        |                       |        |        |             | 4      | 6      | 7      | 2       | 19    |
| # PROCESSED        |             |        |                       |        |        |             |        | 1-0-0  | 6-0-0  |         | 7-0-0 |
| FIRST OBSER\       | /ED: May 10 |        | LAST OBSERVED: June 5 |        | PEAK   | DATE(s): Ma | v 20   |        | NUMB   | ER: 5   |       |

Notes: Fairly common over the final third of the season, with a definite peak in the third week of May.

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

| MARCH              |               |        | APRIL                 |        |        |        |              | MAY    |        | J       | UNE    |
|--------------------|---------------|--------|-----------------------|--------|--------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |               |        |                       |        |        | 0.14   | 2.43         | 3.86   | 2.71   | 0.86    | 1.0    |
| # DAYS OBSERVED    |               |        |                       |        |        | 1      | 6            | 6      | 5      | 2       | 20     |
| # PROCESSED        |               |        |                       |        |        |        | 5-0-0        | 4-0-0  | 5-0-0  | 3-0-0   | 17-0-0 |
| FIRST OBSER        | SERVED: May 8 |        | LAST OBSERVED: June 1 |        |        | PEAK   | DATE(s): May | 17     |        | NUME    | BER: 8 |

Notes: Common in mid-late May, with a few individuals seen before and after the peak of migration.

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

| MARCH              |            |        | APRIL                 |        |        |        |               | MAY      |        | J       | UNE    |
|--------------------|------------|--------|-----------------------|--------|--------|--------|---------------|----------|--------|---------|--------|
|                    | WEEK 1     | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7        | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |        |                       |        |        |        | 0.29          | 0.29     |        |         | 0.06   |
| # DAYS OBSERVED    |            |        |                       |        |        |        | 2             | 2        |        |         | 4      |
| # PROCESSED        |            |        |                       |        |        |        | 1-0-0         | 1-0-0    |        |         | 2-0-0  |
| FIRST OBSER        | VED: May 9 |        | LAST OBSERVED: May 22 |        |        | PEAK   | DATE(s): 4 or | ccasions |        | NUME    | BER: 1 |

Notes: Single individuals seen in mid-May, including two singing males and two females that were caught and banded.

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

| MARCH              |            |        | APRIL  |           |          |                      |        | MAY    |        | Jl      | JNE    |
|--------------------|------------|--------|--------|-----------|----------|----------------------|--------|--------|--------|---------|--------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6               | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |        |        |           |          |                      | 1.14   | 0.86   | 0.71   | 0.14    | 0.29   |
| # DAYS OBSERVED    |            |        |        |           |          |                      | 5      | 3      | 3      | 1       | 12     |
| # PROCESSED        |            |        |        |           |          |                      | 1-0-0  |        |        |         | 1-0-0  |
| FIRST OBSER        | VED: May 9 |        | LAST   | OBSERVED: | : May 31 | PEAK DATE(s): May 17 |        |        |        | NUMI    | BER: 4 |

<u>Notes:</u> Fairly common during the peak of migration in mid-May; otherwise uncommon over the course of the last third of the season.

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

| MARCH              |                          |        | APRIL  |                       |        |        |             | MAY    |        | J       | UNE    |
|--------------------|--------------------------|--------|--------|-----------------------|--------|--------|-------------|--------|--------|---------|--------|
|                    | WEEK 1                   | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                          |        |        | 0.14                  | 0.57   | 4.43   | 8.86        | 5.86   | 1.71   | 0.14    | 2.17   |
| # DAYS OBSERVED    |                          |        |        | 1                     | 2      | 5      | 7           | 5      | 2      | 1       | 24     |
| # PROCESSED        |                          |        |        |                       |        |        | 19-0-0      | 6-0-0  | 7-0-0  |         | 32-0-0 |
| FIRST OBSER\       | FIRST OBSERVED: April 23 |        |        | LAST OBSERVED: June 1 |        |        | DATE(s): Ma | ıy 15  |        | NUMBE   | R: 34  |

Notes: A common migrant throughout the first half of May, with early migrants passing through in late April, and late migrants hanging around MBO throughout the end of May and beginning of June.

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

| MARCH              |                       |        | APRIL  |                       |        |        |             | MAY    |        | J       | UNE    |
|--------------------|-----------------------|--------|--------|-----------------------|--------|--------|-------------|--------|--------|---------|--------|
|                    | WEEK 1                | WEEK 2 | WEEK 3 | WEEK 4                | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |                       |        |        |                       |        | 0.29   | 2           | 0.43   | 0.57   | 0.14    | 0.34   |
| # DAYS OBSERVED    |                       |        |        |                       |        | 1      | 6           | 2      | 2      | 1       | 12     |
| # PROCESSED        |                       |        |        |                       |        |        |             |        |        | 1-0-0   | 1-0-0  |
| FIRST OBSER        | FIRST OBSERVED: May 8 |        |        | LAST OBSERVED: June 1 |        |        | DATE(s): Ma | y 26   |        | NUME    | BER: 3 |

<u>Notes:</u> A generally uncommon migrant during the final third of the season, somewhat more numerous during the peak of its migration in early to mid-May.

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

| MARCH              |            |        | APRIL                 |        |        |        |              | MAY      |        | J       | UNE   |  |
|--------------------|------------|--------|-----------------------|--------|--------|--------|--------------|----------|--------|---------|-------|--|
|                    | WEEK 1     | WEEK 2 | WEEK 3                | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL |  |
| MEAN # BIRDS / DAY |            |        |                       |        |        | 0.14   | 0.14         |          | 0.29   |         | 0.06  |  |
| # DAYS OBSERVED    |            |        |                       |        |        |        | 1            |          | 2      |         | 4     |  |
| # PROCESSED        |            |        |                       |        |        |        |              |          |        |         |       |  |
| FIRST OBSER        | VED: May 8 |        | LAST OBSERVED: May 28 |        |        | PEAK   | DATE(s): 4 o | ccasions |        | NUME    | ER: 1 |  |

Notes: Four individuals seen sporadically thoughout May.

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

| MARCH              |                                      |        | APRIL  |        |             |                |        | MAY    |        | J       | UNE   |
|--------------------|--------------------------------------|--------|--------|--------|-------------|----------------|--------|--------|--------|---------|-------|
|                    | WEEK 1                               | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5      | WEEK 6         | WEEK 7 | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |                                      |        |        |        | 0.14        |                | 0.14   |        |        |         | 0.03  |
| # DAYS OBSERVED    |                                      |        |        |        | 1           |                | 1      |        |        |         | 2     |
| # PROCESSED        |                                      |        |        |        |             |                |        |        |        |         |       |
| FIRST OBSERV       | RVED: April 28 LAST OBSERVED: May 11 |        |        | PEAK   | DATE(s): Ap | ril 28 and May | 11     | NUME   | ER: 1  |         |       |

<u>Notes:</u> Surprisingly rare compared to fall, with just two individuals observed in late April and mid-May, but fairly consistent with the lone individual seen during SMMP 2006.

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

| MARCH              |            |                                  | APRIL                                    |  |  |      |           | MAY    |        | J       | UNE   |
|--------------------|------------|----------------------------------|--|--|--|------|-----------|--------|--------|---------|-------|
|                    | WEEK 1     | WEEK 1 WEEK 2 WEEK 3 WEEK 4 WEEK |  |  |  |      | WEEK 7    | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |                                  |  |  |  | 0.14 |           |        |        |         | 0.01  |
| # DAYS OBSERVED    |            |                                  |  |  |  | 1    |           |        |        |         | 1     |
| # PROCESSED        |            |                                  |  |  |  |      |           |        |        |         |       |
| FIRST OBSER        | VED: May 6 |                                  | LAST OBSERVED: May 6 PEAK DATE(s): May 6 |  |  |      | NUMBER: 1 |        |        |         |       |

Notes: Surprisingly rare compared to fall, with just one individual observed in early May.

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

| MARCH              |             |        | APRIL  |            |          |        |               | MAY    |        | JI      | JNE    |
|--------------------|-------------|--------|--------|------------|----------|--------|---------------|--------|--------|---------|--------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |             |        |        |            |          |        |               | 1      | 9.29   | 3.57    | 1.39   |
| # DAYS OBSERVED    |             |        |        |            |          |        |               | 2      | 7      | 3       | 12     |
| # PROCESSED        |             |        |        |            |          |        |               | 3-0-0  | 34-0-2 | 10-0-0  | 47-0-2 |
| FIRST OBSER\       | /ED: May 21 |        | LAS    | Γ OBSERVED | : June 1 | PEA    | K DATE(s): Ju | une 1  |        | NUMBER  | R: 12  |

Notes: A surprisingly abundant migrant seen regularly and in fairly large numbers over the final 2.5 weeks of the season.

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

| MARCH              |            |                                    | APRIL |            |          |        |              | MAY             |        | JI        | UNE   |
|--------------------|------------|------------------------------------|-------|------------|----------|--------|--------------|-----------------|--------|-----------|-------|
|                    | WEEK 1     | WEEK 1 WEEK 2 WEEK 3 WEEK 4 WEEK 5 |       |            |          | WEEK 6 | WEEK 7       | WEEK 8          | WEEK 9 | WEEK 10   | TOTAL |
| MEAN # BIRDS / DAY |            |                                    |       |            |          | 0.14   | 0.86         | 1.57            | 0.14   | 0.14      | 0.29  |
| # DAYS OBSERVED    |            |                                    |       |            |          | 1      | 4            | 5               | 1      | 1         | 12    |
| # PROCESSED        |            |                                    |       |            |          |        |              | 3-0-0           | 1-0-0  |           | 4-0-0 |
| FIRST OBSER        | VED: Mav 8 |                                    | LAS   | T OBSERVED | : June 5 | PEAK   | (DATE(s): Ma | av 11, 19 and 2 | 21     | NUMBER: 3 |       |

Notes: Present over the second half of the season, but fairly common only for a brief period in mid-May.

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

| MARCH              |             |        | APRIL  |           |        |        |             | MAY    |        | JI      | UNE   |
|--------------------|-------------|--------|--------|-----------|--------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |           |        |        |             | 0.29   | 0.86   |         | 0.12  |
| # DAYS OBSERVED    |             |        |        |           |        |        |             | 2      | 3      |         | 5     |
| # PROCESSED        |             |        |        |           |        |        |             |        | 3-0-0  |         | 3-0-0 |
| FIRST OBSER\       | /ED: May 16 |        | LAST   | OBSERVED: | May 29 | PEAK   | DATE(s): Ma | y 24   |        | NUMB    | ER: 3 |

Notes: Much scarcer than last year, only present in small numbers during two weeks in mid-late May.

# OVEN: Ovenbird / Paruline couronnée (Seiurus aurocapillus)

| MARCH              |            |        | APRIL  |           |          |        |             | MAY    |           | JI      | UNE   |
|--------------------|------------|--------|--------|-----------|----------|--------|-------------|--------|-----------|---------|-------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9    | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |        |        |           |          | 0.29   | 0.43        | 0.14   | 0.27      |         |       |
| # DAYS OBSERVED    |            |        |        |           |          | 1      | 1           | 4      | 3         | 1       | 10    |
| # PROCESSED        |            |        |        |           |          |        |             | 1-0-0  | 1-0-0     |         | 2-0-0 |
| FIRST OBSER        | VED: May 8 |        | LAST   | OBSERVED: | : May 31 | PEAK   | DATE(s): Ma | y 24   | NUMBER: 4 |         |       |

Notes: An uncommon species present over the final third of the season.

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

| MARCH              |            |                                  | APRIL |             |          |       |             | MAY    |        | JI      | UNE    |
|--------------------|------------|----------------------------------|-------|-------------|----------|-------|-------------|--------|--------|---------|--------|
|                    | WEEK 1     | WEEK 1 WEEK 2 WEEK 3 WEEK 4 WEEK |       |             |          |       | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |                                  |       |             |          | 0.14  | 0.57        | 0.29   | 1.86   | 0.29    | 0.32   |
| # DAYS OBSERVED    |            |                                  |       |             |          | 1     | 3           | 2      | 5      | 2       | 13     |
| # PROCESSED        |            |                                  |       |             |          | 1-0-0 | 1-0-0       | 2-0-0  | 9-0-1  | 2-0-0   | 15-0-1 |
| FIRST OBSER        | VED: May 5 |                                  | LAS   | T OBSERVED: | : June 1 | PEAK  | DATE(s): Ma | y 25   |        | NUMB    | ER: 5  |

Notes: A farily common migrant during the final third of the season.

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

| MARCH              |             |        | APRIL  |           |        |        |              | MAY    |           | JI      | UNE   |
|--------------------|-------------|--------|--------|-----------|--------|--------|--------------|--------|-----------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9    | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |           |        |        |              | 0.14   | 0.43      |         | 0.06  |
| # DAYS OBSERVED    |             |        |        |           |        |        |              | 1      | 2         |         | 3     |
| # PROCESSED        |             |        |        |           |        |        |              | 1-0-0  | 3-0-0     |         | 4-0-0 |
| FIRST OBSER\       | /ED: May 18 |        | LAST   | OBSERVED: | May 28 | PEAK [ | DATE(s): May | 23     | NUMBER: 2 |         |       |

Notes: Three isolated sightings of 4 individuals during mid-late May – all banded.

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

| MARCH              |            |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE    |
|--------------------|------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |        |        |            |          | 0.29   | 1.71         | 5.43   | 8.86   | 6.14    | 2.24   |
| # DAYS OBSERVED    |            |        |        |            |          | 1      | 6            | 7      | 7      | 7       | 28     |
| # PROCESSED        |            |        |        |            |          |        | 1-1-0        | 4-0-0  | 4-1-0  | 3-0-1   | 12-2-1 |
| FIRST OBSER        | VED: May 8 |        | LAS    | T OBSERVED | : June 5 | PEA    | K DATE(s): N | 1ay 31 |        | NUMBER  | R: 13  |

Notes: Common and seen daily over the final three, almost four weeks of the season.

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

| MARCH              |             |        | APRIL  |            |          |        |             | MAY         |        | Jl      | JNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|-------------|-------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        |             | 0.71        | 1.71   | 0.43    | 0.29  |
| # DAYS OBSERVED    |             |        |        |            |          |        |             | 3           | 4      | 2       | 9     |
| # PROCESSED        |             |        |        |            |          |        |             | 1-0-0       | 7-0-0  | 1-0-0   | 9-0-0 |
| FIRST OBSERV       | /ED: May 19 |        | LAS    | COBSERVED: | : June 1 | PEAK   | DATE(s): Ma | v 27 and 29 |        | NUMBI   | ER: 5 |

Notes: Fairly common during the short peak of migration in late May.

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

| MARCH              |             |        | APRIL  |            |          |        |              | MAY    |        | JI        | UNE   |  |
|--------------------|-------------|--------|--------|------------|----------|--------|--------------|--------|--------|-----------|-------|--|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10   | TOTAL |  |
| MEAN # BIRDS / DAY |             |        |        |            |          |        |              | 0.57   | 0.57   | 0.14      | 0.13  |  |
| # DAYS OBSERVED    |             |        |        |            |          |        |              | 3      | 2      | 1         | 6     |  |
| # PROCESSED        |             |        |        |            |          |        |              | 3-0-0  | 1-0-0  | 1-0-0     | 5-0-0 |  |
| FIRST OBSER\       | /ED: May 17 |        | LAS    | T OBSERVED | : June 1 | PEAK [ | DATE(s): May | / 27   |        | NUMBER: 3 |       |  |

Notes: A few individuals observed during a short migration period in late May.

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

| MARCH              |             |                | APRIL  |           |          |        |              | MAY    |        | J         | UNE   |  |
|--------------------|-------------|----------------|--------|-----------|----------|--------|--------------|--------|--------|-----------|-------|--|
|                    | WEEK 1      | WEEK 2         | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10   | TOTAL |  |
| MEAN # BIRDS / DAY |             | 0.14 0.29 0.14 |        |           |          |        |              |        |        | 0.06      |       |  |
| # DAYS OBSERVED    |             |                |        |           |          |        | 1            | 2      | 1      |           | 4     |  |
| # PROCESSED        |             |                |        |           |          |        |              |        |        |           |       |  |
| FIRST OBSER\       | /ED: May 13 |                | LAST   | OBSERVED: | : May 29 | PEAK [ | DATE(s): May | 29     |        | NUMBER: 1 |       |  |

Notes: Four individuals heard on the slope of the Arboretum northwest of C in mid-late May.

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

| MARCH              |               |        | APRIL  |            |          |        |               | MAY     |        | Jl        | JNE   |  |
|--------------------|---------------|--------|--------|------------|----------|--------|---------------|---------|--------|-----------|-------|--|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8  | WEEK 9 | WEEK 10   | TOTAL |  |
| MEAN # BIRDS / DAY | 3.71          | 3.57   | 3      | 5.14       | 3.71     | 4.71   | 4.57          | 3.29    | 3.86   | 2.86      | 3.84  |  |
| # DAYS OBSERVED    | 7             | 7      | 6      | 7          | 7        | 7      | 7             | 6       | 7      | 7         | 68    |  |
| # PROCESSED        |               |        |        | 0-1-0      | 0-0-1    | 0-1-0  | 0-0-1         | 0-1-1   |        | 0-0-1     | 0-3-4 |  |
| FIRST OBSER\       | /ED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEAK   | ( DATE(s): Ap | oril 10 |        | NUMBER: 9 |       |  |

Notes: Observed almost daily throughout the season, with little change in numbers over time.

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

| MARCH              |            |        | APRIL  |            |          |        |              | MAY    |        | Jl      | JNE   |
|--------------------|------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|-------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |            |        |        |            |          | 0.43   | 4.86         | 5.43   | 2.57   | 1.0     | 1.43  |
| # DAYS OBSERVED    |            |        |        |            |          | 1      | 7            | 7      | 7      | 4       | 26    |
| # PROCESSED        |            |        |        |            |          |        | 1-1-0        | 3-2-0  |        |         | 4-3-0 |
| FIRST OBSER        | VED: May 8 |        | LAS    | T OBSERVED | : June 5 | PEAK   | CDATE(s): Ma | ay 18  |        | NUMBE   | R: 9  |

Notes: Common over the final half of the season.

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

| MARCH              |             |        | APRIL  |            |          |        |              | MAY           |        | Jl      | JNE   |
|--------------------|-------------|--------|--------|------------|----------|--------|--------------|---------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8        | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |            |          |        |              | 0.43          | 0.29   | 0.43    | 0.12  |
| # DAYS OBSERVED    |             |        |        |            |          |        |              | 2             | 2      | 2       | 6     |
| # PROCESSED        |             |        |        |            |          |        |              |               |        | 1-0-0   | 1-0-0 |
| FIRST OBSER\       | /ED: May 17 |        | LAS    | Γ OBSERVED | : June 2 | PEAR   | CDATE(s): Ma | ay 17, June 1 |        | NUMBE   | R: 2  |

Notes: A rare migrant over the last 3 weeks of the season.

#### EATO: Eastern Towhee / Tohi à flancs roux (Pipilo erythrophthalmus)

| MARCH              |             |        | APRIL  |           |          |        |              | MAY      |        | JI      | UNE   |
|--------------------|-------------|--------|--------|-----------|----------|--------|--------------|----------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8   | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |           |          |        | 0.14         |          |        |         | 0.01  |
| # DAYS OBSERVED    |             |        |        |           |          |        | 1            |          |        |         | 1     |
| # PROCESSED        |             |        |        |           |          |        | 1-0-0        |          |        |         | 1-0-0 |
| FIRST OBSER\       | /ED: May 11 |        | LAST   | OBSERVED: | : May 11 | F      | PEAK DATE(s) | : May 11 |        | NUMBER: | 1     |

Notes: A first record for MBO: the only sighting was that of a female that was banded.

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

| MARCH              |              |        | APRIL  |           |          |        |              | MAY        |        | J       | UNE   |
|--------------------|--------------|--------|--------|-----------|----------|--------|--------------|------------|--------|---------|-------|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8     | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 2.86         | 1.29   | 1.57   | 2         |          |        |              |            |        |         | 0.57  |
| # DAYS OBSERVED    | 6            | 3      | 5      | 6         |          |        |              |            |        |         | 20    |
| # PROCESSED        |              |        |        | 2-0-0     |          |        |              |            |        |         | 2-0-0 |
| FIRST OBSERV       | ED: March 28 |        | LAST   | OBSERVED: | April 23 | P      | EAK DATE(s): | : April 19 |        | NUMBER: | 7     |

Notes: Relatively common for the first four weeks, then tapering off until the last individual took off in late April.

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

| MARCH              |               |        | APRIL  |            |          |        |             | MAY    |        | JI      | UNE   |
|--------------------|---------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        | 0.29       | 0.14     | 0.43   | 1.14        | 0.57   | 1.29   | 0.29    | 0.42  |
| # DAYS OBSERVED    |               |        |        | 1          | 1        | 3      | 6           | 4      | 4      | 2       | 21    |
| # PROCESSED        |               |        |        |            |          |        | 1-0-0       |        |        | 1-0-0   | 2-0-0 |
| FIRST OBSER\       | /ED: April 24 |        | LAS    | T OBSERVED | : June 1 | PEAK   | DATE(s): Ma | y 26   |        | NUMB    | ER: 5 |

<u>Notes:</u> Observed roughly once a week from mid-late April through to the end of the season, with a peak in mid-May. Most observations are most likely from a pair breeding in the fir stand by Stoneycroft.

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

| MARCH              |               |        | APRIL  |            |         |        |             | MAY    |        |         | JUNE   |
|--------------------|---------------|--------|--------|------------|---------|--------|-------------|--------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5  | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |               |        |        | 0.29       |         | 0.14   |             |        |        |         | 0.04   |
| # DAYS OBSERVED    |               |        |        | 1          |         | 1      |             |        |        |         | 2      |
| # PROCESSED        |               |        |        |            |         |        |             |        |        |         |        |
| FIRST OBSER\       | /ED: April 24 |        | LAS    | T OBSERVED | : May 6 | PEAK   | DATE(s): Ap | ril 24 |        | NUN     | BER: 2 |

Notes: Observed for the first time at MBO this spring, and only on two occasions.

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

| =                  |               |        |        |           |          |        | -            |        |        |         |       |
|--------------------|---------------|--------|--------|-----------|----------|--------|--------------|--------|--------|---------|-------|
| MARCH              |               |        | APRIL  |           |          |        |              | MAY    |        | Jl      | JNE   |
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        | 0.57      | 1.43     | 3.86   | 2.71         | 2      | 0.86   |         | 1.14  |
| # DAYS OBSERVED    |               |        |        | 2         | 4        | 7      | 7            | 7      | 5      |         | 32    |
| # PROCESSED        |               |        |        |           |          | 2-0-0  | 1-0-0        |        | 2-0-0  |         | 5-0-0 |
| FIRST OBSER        | VED: April 23 |        | LAST   | OBSERVED: | : May 28 | PEAK   | (DATE(s): Ma | ay 5   |        | NUMBE   | R: 6  |

<u>Notes:</u> Much more frequently observed than last year: seen every day for a three-week period in May. Present from mid-April through late May. One female with a well-developed brood patch at the time of banding indicated that they are breeding nearby.

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

| MARCH              |              |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE     |   |
|--------------------|--------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|---------|---|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   | _ |
| MEAN # BIRDS / DAY | 7            | 8.86   | 6.43   | 24.14      | 14.86    | 16.86  | 12.71        | 9.14   | 8      | 5.71    | 11.37   |   |
| # DAYS OBSERVED    | 7            | 7      | 7      | 7          | 7        | 7      | 7            | 7      | 7      | 6       | 69      |   |
| # PROCESSED        |              |        |        | 9-7-6      | 0-1-1    | 0-2-1  | 3-2-3        | 0-1-0  | 2-0-5  |         | 14-13-1 | 6 |
| FIRST OBSERV       | ED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): Apr | il 24  |        | NUMBI   | ER: 35  |   |

<u>Notes:</u> Observed on practically a daily basis throughout spring, and consistently among the most common species observed.

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

| MARCH              |             |        | APRIL  |           |        |        |              | MAY          |        | JI      | JNE   |
|--------------------|-------------|--------|--------|-----------|--------|--------|--------------|--------------|--------|---------|-------|
|                    | WEEK 1      | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7       | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |             |        |        |           |        |        | 0.71         | 0.29         |        | 0.14    | 0.11  |
| # DAYS OBSERVED    |             |        |        |           |        |        | 3            | 2            |        | 1       | 6     |
| # PROCESSED        |             |        |        |           |        |        | 4-0-0        | 1-0-0        |        | 1-0-0   | 6-0-0 |
| FIRST OBSER\       | /ED: May 12 |        | LAST   | OBSERVED: | May 31 | PEAI   | K DATE(s): M | ay 13 and 15 |        | NUMBE   | R: 2  |

Notes: A fairly rare migrant this spring. Interestingly, only two individuals were detected on census – the rest were banded.

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

| MARCH              |               |        | APRIL  |             |          |        |               | MAY         |        | J       | UNE    |
|--------------------|---------------|--------|--------|-------------|----------|--------|---------------|-------------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4      | WEEK 5   | WEEK 6 | WEEK 7        | WEEK 8      | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |               |        |        | 0.42        | 1.29     | 1.57   | 0.57          | 0.57        | 0.29   | 0.14    | 0.49   |
| # DAYS OBSERVED    |               |        |        | 2           | 4        | 7      | 3             | 3           | 1      | 1       | 21     |
| # PROCESSED        |               |        |        | 2-0-0       |          |        | 0-1-0         | 1-0-0       |        |         | 3-1-0  |
| FIRST OBSERV       | /ED: April 21 | •      | LAS    | T OBSERVED: | : June 4 | PEAK I | DATE(s): Apri | l 28 and 29 | •      | NUM     | BER: 3 |

Notes: Surprinsingly scarce compared to last spring, but still seen weekly from mid-April onward.

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

| MARCH              |               |        | APRIL  |           |        |        |             | MAY     |        | J       | UNE   |
|--------------------|---------------|--------|--------|-----------|--------|--------|-------------|---------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8  | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        | 0.14   | 1         | 8.43   | 4.86   | 3.29        | 1.57    | 1      |         | 2.03  |
| # DAYS OBSERVED    |               |        | 1      | 1         | 6      | 3      | 7           | 2       | 1      |         | 21    |
| # PROCESSED        |               |        |        |           |        | 7-0-0  | 5-0-0       | 1-0-0   |        |         | 13    |
| FIRST OBSERV       | /ED: April 13 |        | LAS1   | OBSERVED: | May 26 | PEAK   | DATE(s): Ap | oril 28 |        | NUMBE   | R: 31 |

<u>Notes:</u> Surprisingly rare this year, only occurring from mid-April through May, but peaking in late April. The average number of individuals observed was only around 40% of the numbers recorded in 2006.

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

| MARCH              |            |        | APRIL  |           |          |        |              | MAY       |        | J       | UNE    |
|--------------------|------------|--------|--------|-----------|----------|--------|--------------|-----------|--------|---------|--------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8    | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |        |        |           |          | 0.14   | 2            | 0.57      | 0.43   |         | 0.31   |
| # DAYS OBSERVED    |            |        |        |           |          | 1      | 4            | 3         | 1      |         | 9      |
| # PROCESSED        |            |        |        |           |          |        | 3-0-0        | 3-0-0     |        |         | 6-0-0  |
| FIRST OBSER        | VED: May 8 |        | LAST   | OBSERVED: | : May 26 | PEAK I | DATE(s): May | 10 and 15 |        | NUMI    | BER: 5 |

Notes: A fairly common migrant for a very short period in mid-May, with a few early and late birds in early and late May.

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

| MARCH              |               |        | APRIL  |            |         |        |              | MAY    |        | J       | UNE    |
|--------------------|---------------|--------|--------|------------|---------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5  | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 4.42          | 3      | 0.29   | 3          | 0.71    | 0.14   |              |        |        |         | 1.15   |
| # DAYS OBSERVED    | 6             | 4      | 2      | 7          | 2       | 1      |              |        |        |         | 22     |
| # PROCESSED        |               |        |        | 0-1-0      |         |        |              |        |        |         | 0-1-0  |
| FIRST OBSERV       | /ED: March 28 |        | LAS    | T OBSERVED | : May 2 | PEAK   | DATE(s): Mar | ch 28  |        | NUMB    | ER: 11 |

Notes: Most abundant on the first day of the spring season, rapidly tapering off in early May.

# BOBO: Bobolink / Goglu des prés (Dolichonyx orysivorus)

| MARCH              |            |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE    |
|--------------------|------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |        |        |            |          | 0.14   | 1.86         | 3.86   | 5.29   | 2.71    | 1.39   |
| # DAYS OBSERVED    |            |        |        |            |          | 1      | 4            | 6      | 7      | 6       | 24     |
| # PROCESSED        |            |        |        |            |          |        |              |        |        |         |        |
| FIRST OBSER        | VED: May 6 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): May | / 25   |        | NUME    | BER: 8 |

<u>Notes:</u> Much more abundant than last year: likely breeding in the fields adjacent to MBO. Seen on almost a daily basis after the second week of May.

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

| MARCH              |               |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE       |
|--------------------|---------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|-----------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL     |
| MEAN # BIRDS / DAY | 47.14         | 43.57  | 31     | 72.57      | 65       | 96.86  | 124.57       | 56.71  | 48.86  | 34.85   | 62.11     |
| # DAYS OBSERVED    | 7             | 7      | 7      | 7          | 7        | 7      | 7            | 7      | 7      | 7       | 70        |
| # PROCESSED        |               |        |        | 4-0-0      | 11-0-0   | 27-6-3 | 65-3-4       | 21-0-2 | 12-0-2 | 6-3-1   | 154-12-12 |
| FIRST OBSERV       | /ED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEAK   | (DATE(s): Ma | v 10   |        | NUMBER  | R: 225    |

<u>Notes:</u> Abundant throughout the season, though migration peaked noticeably from mid-April to mid-May. By far the most frequently banded species this spring. Males began arriving in March, while most females did not appear until at least late April.

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

| MARCH              |            |        | APRIL  |           |        |        |             | MAY        |        | J       | UNE    |
|--------------------|------------|--------|--------|-----------|--------|--------|-------------|------------|--------|---------|--------|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5 | WEEK 6 | WEEK 7      | WEEK 8     | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY |            |        |        |           |        | 0.14   |             | 0.14       |        |         | 0.03   |
| # DAYS OBSERVED    |            |        |        |           |        | 1      |             | 1          |        |         | 2      |
| # PROCESSED        |            |        |        |           |        |        |             |            |        |         |        |
| FIRST OBSER        | VED: May 3 |        | LAST   | OBSERVED: | May 19 | PEAK   | DATE(s): Ma | y 3 and 19 |        | NUME    | BER: 1 |

Notes: A first for MBO, heard singing twice from the fields adjacent to MBO.

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

| MARCH              |               |        | APRIL  |            |         |        |              | MAY    |        | J       | UNE   |
|--------------------|---------------|--------|--------|------------|---------|--------|--------------|--------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5  | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        | 0.43       | 0.43    | 0.29   | 0.57         |        |        |         | 0.17  |
| # DAYS OBSERVED    |               |        |        | 2          | 3       | 1      | 1            |        |        |         | 7     |
| # PROCESSED        |               |        |        |            |         |        |              |        |        |         |       |
| FIRST OBSERV       | /ED: April 23 |        | LAS    | T OBSERVED | : May 9 | PEA    | K DATE(s): M | ay 9   |        | NUMBE   | R: 4  |

Notes: An occasional migrant from mid-April through mid-May, largely confined to the tops of the cottonwoods over B/N.

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

| MARCH              |              |        | APRIL  |           |          |        |              | MAY    |        | J       | UNE    |
|--------------------|--------------|--------|--------|-----------|----------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 1.57         | 2.71   | 0.14   | 5.29      | 3.29     | 8.29   | 13.43        | 8.57   | 9.43   | 2.71    | 5.54   |
| # DAYS OBSERVED    | 5            | 4      | 1      | 6         | 6        | 7      | 7            | 7      | 7      | 5       | 55     |
| # PROCESSED        |              |        |        |           |          | 5-0-0  | 4-0-0        | 4-0-0  | 5-0-3  |         | 18-0-3 |
| FIRST OBSERV       | ED: March 29 |        | LAS    | OBSERVED: | : June 4 | PEAK D | DATE(s): May | 13     |        | NUME    | ER: 20 |

Notes: Common and abundant throughout the season, but with significant migratory peaks in early to mid-May.

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

| MARCH              |              |        | APRIL  |             |          |        |              | MAY    |        | JI      | UNE    |
|--------------------|--------------|--------|--------|-------------|----------|--------|--------------|--------|--------|---------|--------|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4      | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |
| MEAN # BIRDS / DAY | 1.29         | 1      | 0.43   | 3.57        | 0.86     | 5.14   | 7.57         | 3.14   | 3.57   | 2.57    | 2.91   |
| # DAYS OBSERVED    | 3            | 2      | 1      | 6           | 3        | 6      | 7            | 7      | 7      | 7       | 49     |
| # PROCESSED        |              |        |        |             | 0-1-0    | 1-0-0  | 1-0-0        |        | 2-0-0  | 1-0-0   | 5-1-0  |
| FIRST OBSERV       | ED: March 28 |        | LAS    | T OBSERVED: | : June 5 | PEAK   | DATE(s): May | / 14   |        | NUMBE   | ER: 16 |

<u>Notes:</u> Common throughout the season, but increasing in abundance in early May. Some observations are likely of the same group of breeding individuals, with at least one male almost always calling from the windmill.

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

| MARCH              |            |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE    |   |
|--------------------|------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|--------|---|
|                    | WEEK 1     | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL  |   |
| MEAN # BIRDS / DAY |            |        |        |            |          |        | 7.14         | 7.86   | 9.29   | 4.40    | 2.87   |   |
| # DAYS OBSERVED    |            |        |        |            |          |        | 7            | 7      | 7      | 6       | 27     |   |
| # PROCESSED        |            |        |        |            |          |        | 8-1-3        | 3-4-5  | 7-0-4  | 0-0-2   | 18-5-1 | 4 |
| FIRST OBSER        | VED: Mav 9 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): May | 11     |        | NUMBE   | ER: 17 |   |

Notes: Arriving 'en masse' for the second week of May and seen almost daily for the remainder of the season.

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

| MARCH              |               |        | APRIL  |           |          |        |              | MAY          |        | Jl      | JNE   |
|--------------------|---------------|--------|--------|-----------|----------|--------|--------------|--------------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4    | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8       | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.14          | 0.57   | 0.14   | 0.29      | 0.14     |        | 0.14         | 0.43         |        |         | 0.19  |
| # DAYS OBSERVED    | 1             | 3      | 1      | 2         | 1        |        | 1            | 2            |        |         | 11    |
| # PROCESSED        |               |        |        |           |          |        |              | 1-1-0        |        |         | 1-1-0 |
| FIRST OBSER        | RVED: April 3 |        | LAST   | OBSERVED: | : May 20 | PEAK   | DATE(s): Apr | il 9, May 20 |        | NUMB    | ER: 2 |

Notes: Sporadically present throughout April, disappearing then briefly reappearing in mid-late May.

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

| MARCH              |               |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE   |
|--------------------|---------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY |               |        |        | 0.14       | 0.43     |        |             |        | 0.57   | 0.14    | 0.13  |
| # DAYS OBSERVED    |               |        |        | 1          | 1        |        |             |        | 1      | 1       | 4     |
| # PROCESSED        |               |        |        |            |          |        |             |        |        |         |       |
| FIRST OBSERV       | /ED: April 24 |        | LAS    | T OBSERVED | : June 1 | PEAK   | DATE(s): Ma | ay 26  |        | NUMB    | ER: 4 |

Notes: A very scarce and irregular visitor to the site this spring.

#### AMGO: American Goldfinch / Chardonerret jaune (Carduelis tristis)

| MARCH              |               |        | APRIL  |            |          |        |              | MAY    |        | J       | UNE     |
|--------------------|---------------|--------|--------|------------|----------|--------|--------------|--------|--------|---------|---------|
|                    | WEEK 1        | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7       | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL   |
| MEAN # BIRDS / DAY | 2.86          | 3.29   | 2.14   | 14.57      | 13       | 15.29  | 19.86        | 15.71  | 12     | 10.40   | 10.91   |
| # DAYS OBSERVED    | 6             | 6      | 5      | 7          | 7        | 7      | 7            | 7      | 7      | 7       | 66      |
| # PROCESSED        |               |        |        | 4-0-1      | 1-0-0    | 6-2-3  | 18-0-2       | 11-1-4 | 8-7-4  | 3-0-2   | 51-10-1 |
| FIRST OBSER\       | /ED: March 28 |        | LAS    | T OBSERVED | : June 5 | PEAK   | DATE(s): May | y 13   |        | NUMBE   | ER: 36  |

Notes: Present almost daily throughout the season, but considerably more abundant in May.

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

| MARCH              |              |        | APRIL  |            |          |        |             | MAY    |        | J       | UNE   |
|--------------------|--------------|--------|--------|------------|----------|--------|-------------|--------|--------|---------|-------|
|                    | WEEK 1       | WEEK 2 | WEEK 3 | WEEK 4     | WEEK 5   | WEEK 6 | WEEK 7      | WEEK 8 | WEEK 9 | WEEK 10 | TOTAL |
| MEAN # BIRDS / DAY | 0.86         | 0.86   | 1.14   | 0.86       | 0.29     | 3.43   | 2.57        | 1.71   | 3.14   | 0.86    | 1.57  |
| # DAYS OBSERVED    | 3            | 3      | 6      | 4          | 2        | 7      | 7           | 6      | 7      | 4       | 46    |
| # PROCESSED        |              |        |        |            |          |        |             |        | 0-1-0  |         | 0-1-0 |
| FIRST OBSER\       | ED: March 28 |        | LAS    | T OBSERVED | : June 4 | PEAK   | DATE(s): Ma | y 8    |        | NUMB    | ER: 6 |

<u>Notes:</u> Observed on most days this season, becoming increasingly present as the season progressed (the opposite trend than last year). Several pairs showed an interest in nesting in one or more Tree Swallow boxes throughout the season, but only one nest was confirmed.

Appendix B. Net allocation for SMMP 2007

| Net location | Net number | Manufacturer | Length / mesh | Dates           |
|--------------|------------|--------------|---------------|-----------------|
| <b>A1</b>    | ST40       | Spidertech   | 18 m / 30 mm  | Apr 18 - June 1 |
| A2           | -          | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| B2           | ST1        | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| N1           | ST12       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| N3           | ST14       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| B3           | ST2        | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| C1           | ST20       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| C2           | ST21       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| D1           | ST41       | Spidertech   | 18 m / 30 mm  | Apr 18 - June 1 |
| D2           | ST22       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| D3           | ST23       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| E1           | ST3        | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| E2           | ST15       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |
| H1           | ST10       | Spidertech   | 12 m / 30 mm  | May 14 - June 1 |
| H2           | ST13       | Spidertech   | 12 m / 30 mm  | Apr 18 - June 1 |