

Annual Report 2015

2015 was again a productive year for the Migration Research Foundation. As usual, McGill Bird Observatory was the biggest focus, this year including not only routine operations, but also a detailed review of the program's first decade. We also continued with Frontenac Bird Studies, and our research on Peregrine Falcons, Short-eared Owls, and Snow Buntings. This report summarizes highlights of our work in 2015; additional details on current and past projects are available on the MRF website at www.migrationresearch.org, which is updated frequently throughout the year.

McGill Bird Observatory (<u>www.oommbo.org</u>)

2015 was the eleventh full year of operation for McGill Bird Observatory. The winter began with an extra week of full operation (Oct 31 – Nov 6, 2014) following the standard fall migration monitoring protocol. The results confirmed our suspicion that migration was still active during that period, with 234 birds banded of 18 species. While January and February were among the coldest months in MBO's history, the effort in early and late winter was good, resulting in a season total of 710 birds banded of 25 species, including the extra effort in the first week. The Spring Migration Monitoring Program (Mar 28 - Jun 5) was also very successful; the season total of 1117 birds banded was far above the long-term average, and only behind last year's record of 1356, while the 69 species banded matches last year's record. The 147 species observed was also above the long-term mean, only behind the 149 in 2006. In summer, the seventh year of the Monitoring Avian Productivity and Survivorship (MAPS) program yielded 167 birds banded of 32 species, also above the mean for the period. The highlight was the banding of a juvenile American Woodcock, confirming the breeding status of the species at MBO.

The Fall Migration Monitoring Program (Aug 1 - Nov 6) was again the busiest of the programs at MBO. Based on the experimentation in late 2014, an extra week (Oct 31 - Nov 6) was officially added to extend the season to 14 weeks. The number of species banded (84) was far above average, just behind the record of 86 in 2012, but the number of individuals banded (3151) was well below normal. The 151 species observed tied the record of 2005. Daily banding totals were fairly steady throughout the second half of the fall, without any distinct peak. The additional week 14 was again successful, helping to document the late fall migrants that are still moving into early November. Meanwhile, the Northern Saw-whet Owl program operated nightly for six weeks (Sep 26 - Nov 6) for the sixth year in a row, banding a record 272 individuals, plus an Eastern Screech-Owl, and recapturing three foreign-banded owls. This year also marked the first time we offered a more structured owl education program, held in partnership with the Morgan Arboretum. The program was a huge success, as we welcomed 126 visitors over the course of 8 evenings. A detailed report of all research at MBO from November 2014 through October 2015 will be published on the MBO home page in early 2016, and as usual, MBO results have been shared with the Canadian Migration Monitoring Network

The expanded effort at MBO this year was in part possible due to having Simon Duval on board for a second year as a full-time site coordinator, and to the continued strong engagement of our other banders-in-charge: Gay Gruner, Lisa Keelty, and Nicolas Bernier managing the owl program. Malcolm Johnson again worked hard at keeping net lanes, storage areas, and all other facilities in top condition throughout the year. This year's funding was provided by grants from Bird Protection Quebec and TD Friends of the Environment Foundation, donations from the John Hackney Foundation for the Noosphere and Canada Steamship Lines, the many participants and supporters of our Birdathon teams, and our other loyal individual donors. And we are of course very grateful to the 100+ volunteers who spent nearly 5000 hours on site in 2015!

Frontenac Bird Studies (www.migrationresearch.org/fbs.html)

Frontenac Bird Studies operated its breeding bird monitoring and research program in the Frontenac Arch of Eastern Ontario for a seventh consecutive year in 2015. Overall results of offroad and roadside point count surveys were similar to last year but remain substantially lower than in 2009 and 2010 when surveys began. Three species were recorded for the first time, most notably Red-bellied Woodpecker, a species on the rise in the region. While many species have declined since our first two seasons, Red-eyed Vireo is exceptional for having increased in abundance during the period.

Data from seven years at our MAPS station at Maplewood Bog (MABO) in many ways mirror those detected by point count surveys. This year was a near record low season for both abundance and diversity of species sampled. A total of 86 individuals were captured this year, which was the second lowest season total since 2009 – unexpected given that record high productivity was detected in 2014. Overall population density within the 20-hectare MAPS station was less than half of the level sampled in 2009, our first season. An analysis of demographics indicates low adult survivorship in recent years for many species, including Veery, whose numbers have fallen at MABO by roughly 50% since our first year. Pileated Woodpecker and Brown Thrasher were banded for the first time at the site in 2015.

Meanwhile, our annual efforts to track species at risk provided more positive results this year. In collaboration with Bird Studies Canada, an impressive 455 offroad point count surveys were conducted for Cerulean Warbler within Frontenac Provincial Park (FPP) and Queen's Biological Station properties (QUBS). Cerulean Warblers were found at 21% of points within FPP. In all, 126 singing males were detected at FPP – a significant increase over previous assessments by FBS/BSC in recent years, largely due to an expanded effort.

This year was marked by our first dedicated search of suitable habitat for Red-headed Woodpecker in FPP. This follows several randomly encountered active nesting sites in recent years. Using aerial photography, thirteen potential sites were chosen for survey in June. Red-headed Woodpeckers were found at eight of thirteen sites, including one site where two pairs and an immature were detected on July 7, 2015. As a result of these surveys, the known population of the species in the park increased threefold in 2015. These studies of Cerulean Warbler and Red-headed Woodpecker, both rapidly declining species, provided further support for Frontenac Provincial Park as a site of significance to species of conservation concern. Funding for Frontenac Bird Studies was provided by the John Hackney Foundation for the Noosphere and through private donations from FBS supporters.

Other research programs

Outside of MBO and FBS, MRF's main contribution this year was ongoing participation in the Canadian Snow Bunting Network, with team members near Montreal at Coteau-du-lac, Mirabel and Saint-Roch-Ouest banding another 3147 individuals from November 2014 through April 2015, as well as 39 Horned Larks and 33 Lapland Longspurs. There was no Short-eared Owl field work again this year, but efforts continued toward publication and awareness, as described below. Peregrine Falcon work was again limited to banding of three juveniles at one Montreal nest site.

Conferences, presentations, and publications (www.migrationresearch.org/publications.html)

2015 was a busy year of public outreach for the MBO team. In addition to the new Saw-whet Owl education program already described under the MBO report, Marcel Gahbauer and Simon Duval provided a sneak preview of MBO's ten-year report through presentations to local naturalist groups. As well, Marcel had two research papers published on Peregrine Falcons, in the Journal of Wildlife Management (*Productivity, mortality, and management of urban Peregrine Falcons in Northeastern North America*) and the Journal of Raptor Research (*Origin, growth, and composition of the recovering Peregrine Falcon population in Ontario*). Marcel also attended the Raptor Research Foundation conference in California, where he and co-author Travis Booms presented a poster based on last year's Short-eared Owl review paper in the Journal of Wildlife Management and held preliminary discussions on organizing another symposium on the species.

Websites

In early 2015, a new fully bilingual website was launched for McGill Bird Observatory at www.oommbo.org, thanks to extensive design and development by Richard Gregson and Geneviève Gélinas, as well as translation by Simon Duval. It features all the content from the "old" website, but with improved navigation and new content. Meanwhile, all other MRF programs remain on the original website. We thank Milburn Innovations Ltd. for continued technical support throughout the year, most notably with facilitating the transition to the new MBO website. MBO's Facebook page also remains very popular, now with over 3400 followers checking in for regular program updates and highlights throughout the year.

Organizational news

The MRF board remained unchanged in 2015, and all roles were reconfirmed for 2016 at the Annual General Meeting in September. Early in the year, MRF received a generous bequest from the estate of Ian Dalton, a former volunteer. This donation has been earmarked to start an endowment fund to provide financial security for MRF programs into the future, and efforts will be increased in 2016 to encourage others to contribute to the fund, either directly, or through committing to a legacy donation. Also planned for 2016 is publication of at least one Short-eared Owl manuscript and participation in the Fifth World Owl Conference in Italy in October, as well as preparation of another 20 species accounts for Environment Canada's *Piranga* (www.natureinstruct.org/piranga/). Meanwhile, Frontenac Bird Studies will continue its ongoing research, and McGill Bird Observatory will enter its 12th year of operation, with all programs scheduled to operate fully, and efforts underway to increase analysis and reporting of results in partnership with McGill University faculty and students.

Donations of any amount are always welcome, whether in support of specific projects (please specify on your cheque), toward general operations, or in support of MRF's endowment fund. All donations are eligible for charitable income tax receipts. Please make cheques payable to "The Migration Research Foundation Inc.", and send to the address below, or click on the "Paypal donate" button at www.migrationresearch.org to use our secure online donation option using a Paypal account or credit card. Thank you for your support!

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