

2006 was another busy and successful year for the Migration Research Foundation. In addition to continuing with all of our existing research programs, we have laid the groundwork for what we hope will be some exciting new developments in 2007. Below are brief reports on the highlights of the past 12 months; additional details on all projects are available on the MRF website at <u>www.migrationresearch.org</u>, and are updated periodically throughout the year.

McGill Bird Observatory: (www.migrationresearch.org/mbo.html)

Again this year, the biggest project undertaken by MRF was the operation of McGill Bird Observatory (MBO) in Montreal, Quebec. In spring, MBO was accepted as a provisional member of the Canadian Migration Monitoring Network (CMMN), through which migrant bird population trends are collaboratively assessed on a national basis, with particular emphasis on boreal birds, as they are difficult to monitor on their breeding grounds. As the only CMMN station in southwestern Quebec, MBO plays an important role in documenting the passage of migrants in this region. 2006 was MBO's third year of operation, and the first with full daily coverage of both the spring and fall migration seasons, thanks to grants from Mountain Equipment Co-op and the James L Baillie Memorial Fund of Bird Studies Canada. Bird Protection Quebec and Canada Steamship Lines also provided generous donations to help us cover additional expenses. Of course we greatly appreciate the nearly 100 volunteers who collectively contributed several thousand hours to the operation of MBO, as only a fraction of the work could be done without them. Resident banders this year were Marcel Gahbauer, Marie-Anne Hudson, and Barbara Frei, while Seabrooke Leckie came in from Toronto to run the first six weeks of the fall season.

MBO banded 4121 birds in 2005, and in 2006 that total increased slightly to 4265. In both years 84 species were banded. The consistency of these numbers, despite variability in weather and other factors, suggests that MBO is well placed to allow for effective long-term monitoring of trends in migrants. This year the Spring Migration Monitoring Program operated daily for 10 weeks from March 28 to June 5. 759 birds of 63 species were banded during that period, far fewer than the 3268 birds of 76 species banded during the 13 weeks of the Fall Migration Monitoring Program, from August 1 to October 30. However, such a discrepancy is not unexpected, as the number of birds alive is much higher in fall just after the breeding season, and southbound migrants are also more likely to linger and fatten up on the abundant food resources at MBO. Despite the smaller numbers, the spring season provided valuable data, and is worth continuing. Detailed 40+ page reports for each of the migration seasons are available on the MRF website, along with briefer summaries for each week of the year.

Unlike in 2005, no out-of-range species were observed at MBO in 2006. Nonetheless, there were plenty of memorable encounters throughout the year, including the addition of another 10 species to the list of birds observed at MBO, bringing the total to 180. More importantly from the perspective of migration monitoring, we again banded very large numbers of some of our dominant species. The Yellow-rumped Warbler was this year's most abundant bird, with over 500 individuals banded in fall alone, the majority during a three-week period in late September and early October. Another highlight was learning of MBO's first foreign recovery, a Slate-coloured Junco we banded in November 2004 that was recaptured alive and well in New Jersey 11 months later. This is just one of the pleasant surprises we've had as a result of our rather unconventional (in the cold Canadian climate) practice of banding during winter, at least on the warmer days.

Our top priority for 2007 and beyond is to ensure that standardized operation of the entire fall migration season continues. We hope that fundraising will be sufficient to also permit for ongoing coverage of the spring season, as it has the potential to significantly boost our ability to analyze trends for a number of species. Continuing with year-round operations also aids our secondary goal of using MBO to train students and other volunteers in banding and other avian research techniques. Already two MBO banders have graduated to having their own subpermits, and we are currently blessed with a large group of bright and eager trainees. In early December, nearly two dozen of them participated in a workshop on ageing by moult, led by Marcel Gahbauer and Marie-Anne Hudson. We hope that this group represents not only the future of research at MBO, but also at other observatories. Meanwhile, we are also continuing to expand our online photo reference library for the benefit of banders and other researchers across North America.

Swainson's Hawk research: (www.migrationresearch.org/research/swainson.html)

In 2005, MRF established a partnership with raptor biologist Bill Clark and the Cape May Raptor Banding project in New Jersey to research the movements of Swainson's Hawks in eastern North America. Although typically a bird of western North America, there are a number of sightings in the east during fall migration each year, raising questions about the origin and destinations of these birds. To address these questions, we acquired a satellite transmitter, sponsored by

Swarovski Optics. Unfortunately, while Swainson's Hawks were spotted at Cape May in both 2005 and 2006, none responded to the lures. Since several have been successfully banded at this location in the past, we are hopeful that our luck will change for the better in 2007.

Peregrine Falcon research: (www.migrationresearch.org/research/peregrine.html)

MRF was less actively involved in Peregrine Falcon research this year. Unlike in 2004 and 2005 no new satellite tracking was undertaken. Monitoring an additional Peregrine Falcon was considered, as there is still much to learn about the movements of these birds. In light of limited financial resources, however, MRF's priority is to focus such research on other species remaining very poorly understood, such as the Short-eared Owl (see below). Nonetheless, we continued to analyze the data from the past two years of Peregrine Falcon research, including our analyses of nesting success and dispersal, and hope to submit articles on these subjects for publication in 2007.

Short-eared Owl research: (www.migrationresearch.org/research/shortear.html)

After having spent two summers investigating the distribution and habitat use of Short-eared Owls in southern Ontario, we largely switched our work from the field to the office in 2006. Project Director Leslie Hunt completed a report on our 2005 research, which is now available on the website. In November, Research Director Marcel Gahbauer participated in the inaugural meeting of the Canadian Short-eared Owl Working Group in Winnipeg, Manitoba, joining biologists from federal and provincial governments, as well as other non-profit organizations. MRF's findings in Ontario are reflective of an apparent continent-wide decline in Short-eared Owls, and there is growing interest by many parties in pursuing research that will enable us to understand what is needed to reverse the current trend. MRF's initial contributions to the group include a review of all reported band recoveries in North America (currently underway), and an offer to archive reference material for researchers on the MRF website. Also, MRF has just purchased a new lightweight (12-gram) satellite transmitter for a Short-eared Owl. It will first be deployed on a captive bird at the Owl Foundation in Vineland, Ontario to determine the best attachment technique for this species. Once a reliable method has been found, the unit will be transferred to a releasable bird, whereupon we hope to document its movements in detail as it completes its life cycle in the wild. In partnership with other agencies, we plan to expand the satellite telemetry research in subsequent years.

Conferences and presentations:

MRF believes strongly in the value of collaborative research, and as such makes an effort each year to participate in a variety of meetings and conferences. This way we can not only share the results of our research, but also learn new skills, remain informed about the latest discoveries in migration and conservation science, and develop new partnerships for future work. In addition to the events mentioned above, several others of note took place this year. In November, Marcel Gahbauer presented a summary of recent Peregrine Falcon research to the annual meeting of the Canadian Peregrine Falcon Recovery Team in Winnipeg, Manitoba, and also to the Northeast Peregrine Falcon Management Team in Concord, New Hampshire. He and Marie-Anne Hudson both attended the North American Ornithological Congress in Veracruz, Mexico in October, which provided an opportunity to learn about and discuss a wealth of new ideas regarding migration research with some of the leading experts in the field. Earlier in the year, Marcel exchanged tips with many other banders at the 50th anniversary meeting of the Ontario Bird Banding Association. Meanwhile, a number of local birding clubs and other organized groups learned about migration research via tours of MBO throughout the year.

Organizational news:

A number of changes occurred within MRF this year. At our November board meeting, Linda Boutwell stepped down as Executive Director, but stayed on the board as Treasurer, and also remains responsible for promoting MRF interests within the United States. Marcel Gahbauer is the new Executive Director, and will also continue as Webmaster, but is reducing his involvement with McGill Bird Observatory to an advisory role. Much of his previous work is being taken over by Marie-Anne Hudson, who officially joins the board as Director of McGill Bird Observatory, though she has already been very involved in its operation since MBO's inception in 2004. Lastly, the Canadian headquarters of MRF have moved to Alberta (North Hill RPO, P.O. Box 65055, Calgary AB, T2N 4T6). We hope this will give MRF an opportunity to expand research into western provinces and states, while maintaining the ability to continue with projects in the east through our base of operations at MBO and also via our American headquarters in Rochester, New York.

Acknowledgments:

As a registered charity, MRF is dependent on the generous donations of many supporters, as well as the dedicated efforts of many loyal and hard-working volunteers. In addition to the sponsors acknowledged in the project reports above, we would like to extend our most sincere thanks to the many individuals who have made donations toward specific research programs, or as general funds for MRF operations. We greatly value everyone's contributions, and hope that we can count on your continued support to help us further advance our research and conservation efforts.