

2005 was another productive year for the Migration Research Foundation. Below are brief summaries of our key activities over the past twelve months; detailed reports on all projects are updated regularly throughout the year on the MRF website at www.migrationresearch.org.

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

Launched in 2004, the McGill Bird Observatory (MBO) in Montreal, Quebec, was the major focus for MRF in 2005. As the only full-time migration monitoring station in southwestern Quebec, MBO has the potential to play an important role in documenting population trends among migratory birds, especially those nesting in the boreal forest for which breeding success is often difficult to monitor directly.

Following a successful fall 2004 pilot season, activities were expanded for 2005. In April and May, a trial Spring Migration Monitoring Program was operated, with banding on roughly half the days. 650 birds of 62 species were banded, and 134 species observed, great results for the limited effort invested. In summer, nesting species were monitored.

Beginning on August 1, a full 13-week Fall Migration Monitoring Program was conducted, with only three days missed due to particularly severe storms. The results exceeded our most optimistic expectations: 3226 birds of 78 species banded, and 151 species observed. A 43-page report summarizing the season has been published on the MRF website, detailing overall results and the seasonal occurrence of each species recorded. Among the highlights of the fall were a Blue-winged Warbler and a Yellow-billed Cuckoo, both north of their usual range, unusually high numbers of kinglets and chickadees in October, and surprisingly late records for many warblers and vireos. Thanks to local store Wildlifers donating free seed to stock several feeders, MBO is one of very few Canadian bird observatories to continue active research throughout the winter.

With the value of MBO for migration monitoring having been established, the priority is now to ensure that standardized protocols can be followed annually for years to come, to allow for meaningful trend analysis. While all work to date has been done on a volunteer basis, this is not sustainable over the long term, especially as the Bander-in-Charge must be experienced and willing to commit a significant amount of time to MBO. MRF has just received a grant from Mountain Equipment Coop that will allow us to hire a Bander-in-Charge for the entire fall 2006 season, and we will continue fundraising to ensure the spring season can be covered as well. Even so, volunteers will always be important to MBO, as the volume of birds and site layout require that 3-6 people be involved daily during migration. Fortunately, McGill University students and Bird Protection Quebec members in particular have shown great interest in MBO. The nearly 100 people currently on the volunteer list contributed over 3500 hours to MBO in 2005, and we are very grateful to them all for their support. An important goal of MBO is to provide advanced training to all who are interested in developing their skills as banders, and we are pleased that already Marie-Anne Hudson and Barbara Frei have progressed to the point of obtaining their own banding subpermits and acting as Assistant Banders-in-Charge.



MRF Research Director, and acting MBO Bander-in-Charge Marcel Gahbauer with the largest bird banded at MBO to date, a Red-shouldered Hawk (photo by Barbara MacDuff).

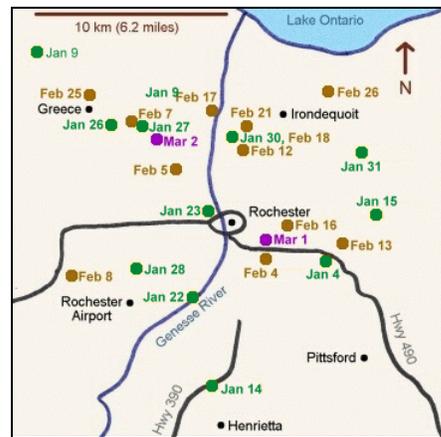
Swainson's Hawk research: (www.migrationresearch.org/research/swainson.html)

Renowned raptor biologist and author Bill Clark has for over three decades been studying the fall migration of raptors past Cape May, New Jersey. Over the years, he has banded and otherwise counted a surprising number of Swainson's Hawks, leading him to believe there may be a small undocumented breeding population in the eastern Arctic. This hypothesis is supported by some historical data, and by the recovery of one of his banded Swainson's Hawks in Nova Scotia the following spring. Early this year, Bill asked for MRF's assistance in using satellite telemetry to investigate this further. Thanks to Swarovski Optics funding a transmitter and a generous private donation from Elaine Kampmueller to cover satellite costs, we were able to launch the project this fall. We visited Cape May in September to demonstrate to the field crew how to safely apply a satellite transmitter harness to raptors. Unfortunately, only one Swainson's Hawk was observed during this year's migration and it avoided the traps, so the project has been deferred to fall 2006.

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

In 2004, MRF began using satellite telemetry to monitor the movements of Hafoc, a juvenile male Peregrine Falcon raised naturally by a wild pair nesting on the Kodak Tower in Rochester, New York. With the exception of three brief fall excursions, none of which took him more than 125 km away, Hafoc consistently remained within 20 km of the nest box on where he was raised. Some observers were disappointed that he didn't undertake a dramatic migration south for the winter. However, the fact that he remained local is in itself significant. Unfortunately, Hafoc was found dead in early March, apparently from a vehicle collision. As such, we cannot know whether he stayed in the Rochester area with the intention of establishing a second territory there, or would have finally moved elsewhere in spring.

Under the leadership of Executive Director Linda Boutwell, MRF was able to track a second Rochester Peregrine Falcon in 2005, again in partnership with the New York State Department of Environmental Conservation, the Genesee Valley Audubon Society, and Eastman Kodak. This time we monitored a female named Skye. She took flight in June, and in contrast to Hafoc, began ranging away from Rochester within six weeks, and soon thereafter crossed Lake Ontario. She spent the next few weeks between Toronto and Lake Huron, often in the vicinity of Luther Marsh, a large wetland with an abundance of waterfowl. In September, Skye's fascinating travels came to an even more premature end than Hafoc's, when she fell victim to a predator. Though these losses have been disappointing and frustrating, roughly two-thirds of Peregrine Falcons do not survive their first year, so such results are to be expected. Even the limited data provided by these two birds have done much to advance our limited understanding of the lives of juvenile Peregrine Falcons.



Hafoc's movements, Jan – Mar 2005

Meanwhile, MRF was again actively involved in monitoring the Peregrine Falcon population in southern Quebec this summer. Among the highlights was the downtown Montreal nest, which had five healthy chicks, a first for the province. All were banded by Marcel Gahbauer, as were another three chicks from a nest box under a nearby bridge, thanks to the climbing exploits of Dr. David Bird. In the office, work continues on analyzing the relationships between genetics, nest site selection, and dispersal.

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

Project Director Leslie Hunt continued MRF's Short-eared Owl research this summer in southern Ontario, thanks to a grant from the McLean Foundation. The plan was to document breeding success and to evaluate habitat differences between occupied and unoccupied sites. Efforts were focused on the Quinte/Kingston region near the east end of Lake Ontario, which has supported the greatest concentration of breeding pairs in recent years. Unfortunately this year we were unable to confirm even a single breeding attempt despite extensive searches. Instead, we conducted point counts and habitat inventories to characterize the properties studied, to be compared against historical and future owl records. Pending funding, plans are underway to track one or two Short-eared Owls by satellite telemetry in 2006.

Conferences and presentations:

MRF makes an effort each year to attend several scientific meetings, to share the results of our own research, learn about advances being made elsewhere, and develop partnerships for new projects. This year, Marcel Gahbauer gave presentations about the preliminary work at MBO to the Ontario Bird Banding Association in February, and the Canadian Migration Monitoring Network in October. Marie-Anne Hudson presented a poster on MBO's first year at the Society of Canadian Ornithologists meeting in Halifax in October. Linda Boutwell coordinated poster presentations at the Eastern Bird Banding Association's annual meeting in Rochester, while Marcel also attended it to participate in discussions about research priorities regarding the Saw-whet Owl. In October, Marcel's preliminary research on the genetic structure of the southern Ontario Peregrine Falcon population and how it relates to dispersal and migration patterns was presented to the Raptor Research Foundation in Green Bay, Wisconsin by Dr. David Bird. In addition, MRF has given presentations or banding demonstrations to a variety of community organizations and youth groups in Ontario and Quebec over the past year. In 2006, MRF will be attending the North American Ornithological Congress, among other meetings.

Acknowledgments:

MRF projects are possible only thanks to the support of generous donors and dedicated volunteers. While the full list of supporters is too long to include here, we do sincerely appreciate all contributions, big or small, and have posted full acknowledgments on the website in relation to each project. In addition to those recognized in the project accounts above, special thanks are due to Joan Boardman for her continued generous support of MRF, and to Bird Protection Quebec and Canada Steamship Lines for providing the funding needed to get MBO off the ground.

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