

## Québec Marsh Monitoring Program:

### *Summary report for 2007*



## **Thank You, Participants!**

Because of participants like you and your assistants, this fourth year of the Québec Marsh Monitoring Program (QMMP) was a great success. Thank you very much! The time you have dedicated to the QMMP and the data you have collected in the field are important, and allow us to study the distribution of species that often go by unnoticed during leisure walks. The “secret” lives of these species are being revealed! For the past four years, data have been transferred at the end of each season to the Canadian Wildlife Service of Environment Canada (EC, Québec region). Each bird you have reported to us can be considered by EC biologists in their studies, research projects and reports. Environment Canada’s support is crucial in the implementation of the QMMP since EC awards financial support to Bird Studies Canada (BSC) for the program, and also kindly offers a BSC regional office in Québec. On behalf of Bird Studies Canada, I dearly thank Environment Canada for their support of the Québec MMP over the past five years (2003-2008).

An analysis of the first four years of the Québec MMP (2004-2007) is presently underway. A report will be submitted to EC in March 2008. Highlights of this analysis will also be presented at a weekly meeting of EC biologists in Québec on 10 April at 9:30. Members of the public are invited to attend. Please get in touch with me if you would like to come to this presentation.

Happy reading!

Catherine Poussart, QMMP Coordinator

## **Marshes Surveyed**

In 2007, 118 routes were assigned to 95 participants. (Similar numbers to the 2006 season.) Of these, 71 marshes were surveyed in 2007 (data submitted by mid-January): 57 marshes following the methodology, and another 14 marshes with disparities from the prescribed protocol. Only marshes surveyed following the program protocol are included in the analysis below. Table 1 presents the number of marshes surveyed between 2004 and 2007, and the total number of stations. Most of the stations are surveyed on foot, and others by canoe. All marshes except five are fresh water marshes. Table 2 presents the number of years routes were surveyed between 2004 and 2007. A graphical representation of the location of the marshes is available in Figure 1.



Photo : Sylvia Marshall Wees  
Averill Craig and Mary Ellen Graham conducting a survey at the marsh of Parc-nature du Bois-de-Liesse

Table 1. Number of marshes and stations surveyed during the first four years of the Québec Marsh Monitoring Program. Numbers in brackets are those of marshes surveyed without respecting all conditions of the bird survey protocol.

	Number of marshes	Number of stations surveyed
2004	32 (4)	104 (15)
2005	52 (3)	141 (7)
2006	59 (9)	151 (18)
2007 *	57 (14)	139 (40)

\* data received by mid-January 2008

Table 2. Route distribution according to number of years they were surveyed (2004-2007).

Number of years surveyed	Routes	
	Number	%
0*	11	10
1	42	38
2	27	24
3	20	18
4	11	10

\*Means that the route has been surveyed but that data are not considered in population trend analyses since the protocol has not been followed.

When looking at Tables 1 and 2, we can see that many marshes have not been surveyed according to the prescribed protocol. The main reason: only one survey has been conducted instead of two. In 2007, a greater proportion of surveys were also done after the identified survey period ended (12 July). All of the data submitted through the years has been entered in the main database, but only information gathered following the protocol can be used for population trend analyses. It is extremely important to follow the survey protocol.

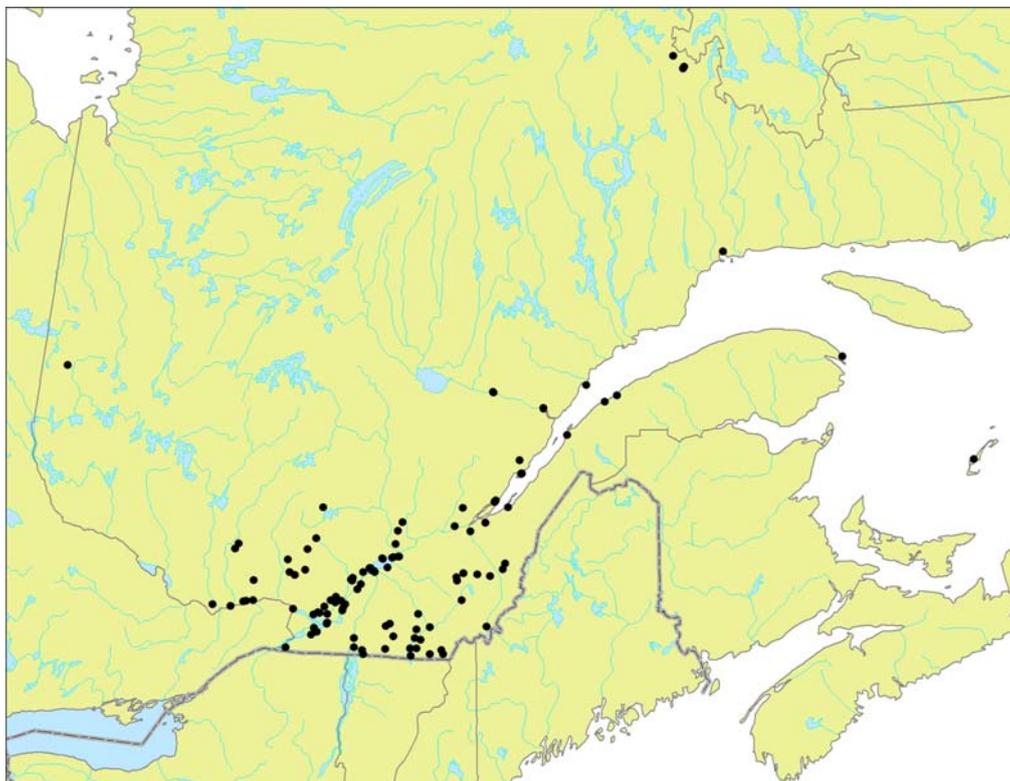


Figure 1. Location of marshes surveyed between 2004 and 2007.

## Marsh Birds

On 2007 QMMP surveys, participants identified 129 bird species. (Similar to numbers reported in 2004 and 2006, but higher than numbers reported in 2005.) When we look at data recorded for broadcast species, Virginia Rail was the species most often recorded (51 % of marshes), followed by the Pied-billed Grebe (42 % of marshes) and the Sora (17 % of marshes). The species that wins as the one in the most marshes is the Red-winged Blackbird. There were only four marshes in 2007 in which the species was not seen or heard: the three marshes in the Mont-Wright area (south of Fermont) and the marsh in the Marguerite Bay, in Saguenay National Park.



Photo : Luc Caron  
Virginia Rail at the Pointe-Fortune marsh

## Other Species of Particular Interest to Québec Bird Managers

Surveys conducted for the Marsh Monitoring Program provide information on species of particular interest to Québec bird managers, mainly because these species are considered at risk in the province. In 2007, the Least Bittern was monitored in 12 different marshes (+1 outside the survey hours), the Caspian Tern in one marsh, and the Bald Eagle in two marshes (+1 outside the survey hours). Least Bitterns and Caspian Terns were individuals recorded inside or near survey stations, while Bald Eagles were observations of flying birds outside survey stations. Information on these sightings was sent to the person in charge of the SOS-POP database in December 2007. This database, managed by Regroupement QuébecOiseaux, is linked to the *Centre de données sur le patrimoine naturel du Québec* (Québec Conservation Data Centre). It helps ensure the monitoring of known nesting sites of species at risk in Québec.

## Survey Stations

In order to correctly record the habitats in which bird species have been monitored, the MMP survey protocol for Québec (and the Great Lakes) states that survey stations be characterized each year. In 2007, 136 of the 179 stations (76 %) were described. This information is also very important in order to follow the evolution within the marsh's structure. Moreover, many marshes have structures that regulate water levels. Each year, proportions of open water and emergent vegetation will be determined by water levels, which then will influence which species of birds will breed within the marsh. Habitat descriptions are an extremely important component of bird surveys.

## Conference and BSC Booth in 2007

Only one presentation on the QMMP was given in 2007. Andrew P. Coughlan, coordinator of the program during the 2006 season, gave a talk to the members of Bird Protection Québec on 2 April 2007 in Montréal. Many people who already participate in the QMMP were present, and some people joined the program following the talk.

Bird Studies Canada had a booth at the environmental gathering Carrefour TerraTerre, held on October 12-14 in the Québec City Area. As Bird Studies Canada's representative at this event, I shared information on the Marsh Monitoring Program and other BSC programs with visitors.

## Survey Material to Borrow in the Montréal Area

In summer 2006, the TD Friends of the Environment Foundation (Montréal / Laval Chapter) awarded a \$1,870 grant to the Québec Marsh Monitoring Program. This amount allowed BSC to purchase equipment to help participants do their surveys: two CD players, two portable speakers, two portable wires, and some batteries. Bird Protection Québec and the Club d'ornithologie d'Ahuntsic are holding the equipment, which is available for surveyors interested in using it. If you live in the Montréal area and would like to borrow the equipment, do not hesitate to contact one of the two groups. It's for you!



- \* Bird Protection Québec: Averill Craig, 514-484-6575, [ak.craig@sympatico.ca](mailto:ak.craig@sympatico.ca)
- \* Club d'ornithologie d'Ahuntsic : Joël Coutu, [co\\_ahuntsic@hotmail.com](mailto:co_ahuntsic@hotmail.com), 514-387-8331 (answering machine)

## The Team “behind” the Québec Marsh Monitoring Program

Although BSC's Québec Projects Coordinator, Catherine Poussart, is responsible for coordinating the MMP in Québec, quite a few other BSC staff members at the Port Rowan, Ontario office are involved in the program during the year. Read on to learn more about who they are and the work they do.

Steve Timmermans Kathy Jones Ryan Archer	Team of biologists working for the Great Lakes Marsh Monitoring Program. Steve, Kathy and Ryan help the Québec MMP coordinator in many aspects, for example by sharing information, answering questions, commenting on funding proposals, and helping with data analyses.
Denis Lepage	Senior biologist responsible for the development and ongoing maintenance of BSC's central database. A very important person considering he is the “guardian” of data submitted by you and thousands of others! Originally from the province of Québec, Denis is also a valuable resource when it comes to revising French texts.
Ellen Kempmann	Since summer 2006, Ellen has been in charge of processing scannable forms for all BSC's programs. For the QMMP, a first validation is done in Québec directly on the paper forms. The original forms are next sent to Ellen who scans them. Data are then transferred to the central database. Another validation is done to make sure all information is complete and mistake-free.
Rosie Kirton	Rosie takes care of BSC's membership database, and maintains up-to-date address information for all program participants. Any changes to your coordinates are sent to her. She tracks everyone using their observer ID #.
Ron Ridout	Ron does many things within BSC, from facilities and IT management to layout and design for our communications materials. He is, among others, responsible for our web site.
Elaine Secord	Elaine is responsible for communications at BSC. She's the lead for many documents, including press releases, newsletter, annual reports, and marketing and fundraising materials.

## BSC Launches Prairies Marsh Monitoring Program

In January 2008, Bird Studies Canada hired a biologist, Dr. Kiel Drake, to set up a Marsh Monitoring Program in the Prairie region. A pilot season will run this summer. As Dr Drake develops the program, he will benefit from the experience of the Great Lakes and Québec

programs, as well as other programs underway in the United States (see following article). The Prairies MMP will be coordinated from the new BSC regional office in Saskatoon, Saskatchewan.

## **Standardization of Marsh Bird Surveys in North America**

Since 1999, American and Canadian specialists have been working together to develop a standard protocol to survey marsh birds in North America. In 2006, following many years of discussion and studies undertaken by the United States Geological Survey, the study group agreed on a series of standard protocols to monitor marsh birds. The Québec MMP protocol is compatible with this standard protocol, although a few modifications must be made so that data gathered in Québec is comparable to that from other North American programs. Here are a few elements that will need to be considered:

*Surveys for new MMP routes can be done in the early morning or early evening.*

People establishing new routes will be able to choose between morning and evening for their surveying time. Once decided, surveys for that route will always be done during the same time period.

*Order of broadcast calls.*

The order of the broadcast calls will be as follows: Least Bittern, Sora, Virginia Rail, Common Moorhen/American Coot, and Pied-billed Grebe. The order has been adjusted (especially for Virginia Rail and Least Bittern), to help adopt the preferred sequence for continent-wide surveys. Some studies have also shown that when Virginia Rails express their presence in a marsh, Least Bitterns have the tendency to reduce or suppress their calling activities.

*A set of focal species will be recorded more closely.*

The presence of a set of focal species (birds closely associated with marshes) will be noted minute by minute during the first ten minutes of the survey, instead of recorded as either present or absent in 5-minute periods. To do this, the observer will be asked to indicate during which minute(s) each bird was seen or heard. Distance between each bird and the observer will also be noted.

## **Thank You Corner**

The success of the Marsh Monitoring Program relies on the commitment of people devoted to surveys. Every single observation is important, and I would like you to take a few minutes to thank your field assistants on my behalf. I would also like to highlight the participation of the following people, who have been submitting data to the program for three or four years.

*Participants who have submitted data for four years:*

- \* Jacques Benoît
- \* Geof Burbidge
- \* Annie Cabana
- \* Gérard Cyr
- \* Association pour la protection de l'environnement du lac Saint-Charles et des Marais du Nord (Catherine Gagnon, Karine Gagnon, Mélanie Poulin, Philippe Beaupré, Isabelle Nault)
- \* Parc national d'Oka (Monique Théoret, France Blanchette, Robert Lapensée, Mathieu Lemay)
- \* Parc national des Iles-de-Boucherville (Danielle Chatillon, Denis Henri)
- \* Parc national du Bic (Marlène Dionne, Camil Langlois)
- \* Diane Gadbois
- \* Brian Hayes
- \* Claudine Lafrance
- \* Rachel Papineau-Pepin
- \* Renaud Poulin
- \* Jean Lemoyne
- \* Keith Rogers
- \* Benoît Turgeon

*Participants who have submitted data for three given years:*

- \* Jean Beaudreault
- \* Gilles Chapdelaine
- \* Gilles Cyr
- \* Daniel Dussureault
- \* Michel Langlois
- \* Club des ornithologues de la région de l'Amiante (Anne-Marie Galand, Berthe Paul, Regent Jacques)
- \* Eco-Nature (Robert Bisson, Isabelle Mathieu, Véronique Gauvin, Maryse Blanchette)
- \* Anne-Marie Galand
- \* Ghislaine Groulx
- \* Marcel Harnois
- \* Sheldon Harvey
- \* Barbara MacDuff
- \* Gabriel Samson
- \* Luc Tremblay
- \* Louis Vaillancourt

## **Coming Up**

The analysis of data gathered between 2004 and 2007 will provide useful information on the Marsh Monitoring Program's strong points and weaknesses. For some abundant species, a first population trend analysis might even be possible, although a four-year dataset does not allow for statistically strong results.

The analysis of data and the program as a whole will also allow Bird Studies Canada and the Canadian Wildlife Service to discuss the future of the program in Québec. Some adjustments are to be expected, at least for the methodology as it needs to be consistent with the one recently developed for North America. You will be informed of these changes in spring, when the 2008 season is being prepared.

For further information on the Québec Marsh Monitoring Program, you can contact the coordinator at the following address:

Catherine Poussart  
Québec Projects Coordinator  
Bird Studies Canada / Études d'Oiseaux Canada, Québec regional office  
1141, route de l'Église, P.O. Box 10 100, 8<sup>th</sup> floor  
Québec, Québec G1V 4H5  
1-866-518-0212 (toll-free); 418-649-6062  
[cpoussart@bsc-eoc.org](mailto:cpoussart@bsc-eoc.org)  
<http://www.bsc-eoc.org/volunteer/qcmmp>