SCIENCE FOR WETLAND CONSERVATION



2018 Field Season

MARITIMES MARSH MONITORING PROGRAM

2018 Field Season

With seven years of the Maritime Marsh Monitoring Program (MMMP) under our belts, we celebrate the 2018 season and all our accomplishments! Our technicians and generous volunteers rose early in the morning between late May and mid-July to survey 34 routes in NB, NS, and PEI, with a total of 436 point counts after multiple visits. Out of those 34 routes, 29 of them had at least one of our target species! There are 12 target species in total that we are looking for: American Bittern, Least Bittern, Sora, Virginia Rail, Pied-billed Grebe, Nelson's Sparrow, Common Gallinule, American Coot, Willet,

Black Tern, Marsh Wren, and Yellow Rail. With the exception of American Coots and Yellow Rails, we had over 1000 detections of these species!



A Marsh Wren, in typical cattail habitat. Photo: Louise Nichols

2018 Survey Highlights:

- We detected 2 rare and at-risk Least Bitterns on surveys. The record is still for 2016, when 6 were observed!
- We began a study to determine how reliable automatic recording units are at detecting birds compared to a human technician (no results yet though!)
- Best year so far for Virginia Rail; 100 individuals in 2018, compared to 44 - 77 in previous years (average of 58)



Glorious early morning scene. Photo: Cody Pytlak

Inside this issue:

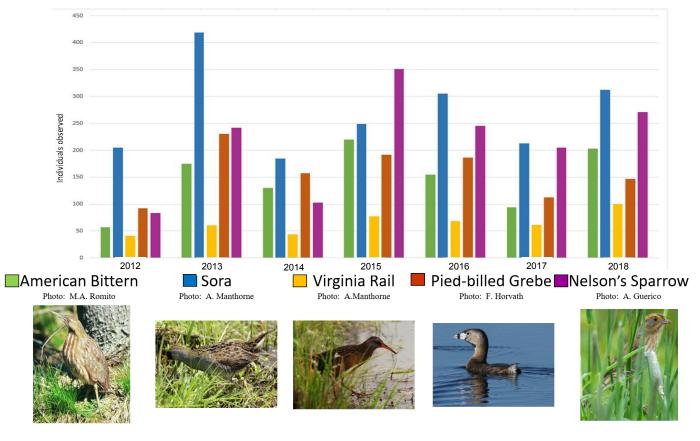
Program Summary	2
Volunteer Spotlight	3
Wetland Highlight	4
Become a Marsh Monitor	4
About the Maritimes Marsh Monitoring Program	5

Canada is covered by more wetlands than any other country

25% of the world's wetlands are found within Canada's borders. Bird Studies Canada has current or previous marsh monitoring programs in the Great Lakes region, Quebec, the Prairies, and of course the Maritimes.

Program Summary

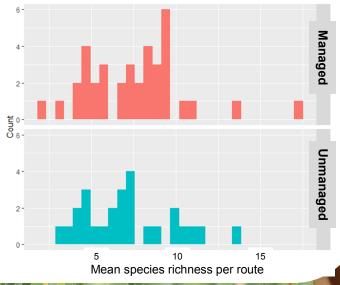
The most reported species each year continues to be the Sora! With one exception in 2015, this trend hasn't changed since the program's inception in 2012. The next most commonly reported species this year are Nelson's Sparrow, American Bittern, Pied-billed Grebe, Marsh Wren (clocking in at 127 individuals), and Virginia Rail. This year no American Coots or Yellow Rails were detected; in fact, no Yellow Rails have been detected during a survey in this program. This is likely due to their nocturnal schedule, secretive nature, and suspected low population numbers. The closest we've come is a recording: this year, we made progress in transcribing the huge number of files from automated recording units that have been gathering data over the years, which included a crystal clear rendition of the Yellow Rail's eerie, percussive call from 2012.



Early trend analyses from last year found that some species, including Nelson's Sparrows, were arriving later to our marshes than previously believed. As a science- and evidenced-based program, we've updated our protocols accordingly and started the program about 10 days later than our typical schedule.

We've also been taking notice of differences between managed wetlands, such as those under the protection of Ducks Unlimited Canada, and unmanaged marshes. Perhaps unsurprisingly, we found that across all years, in general more species (i.e. higher species richness) were found in managed wetlands.

 $continued \rightarrow$



Program Summary

continued

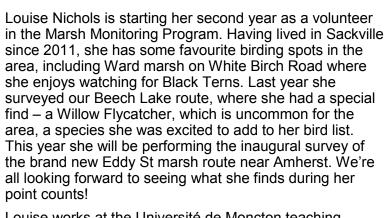
What's next? Over the next few months, we'll be working hard to create comprehensive statistical analyses to improve our understanding about what the data is saying about the abundance and habitat associations of these birds. We'll soon be preparing a report with extensive details that will showcase the efforts of all involved in this program. Also this year, we will be partnering with groups in NS to compare before and after snapshots in coastal wetlands slated for restoration.

Stay tuned!



Yellow Warbler singing his song. Photo: Allison Manthorne

Volunteer Spotlight



Louise works at the Université de Moncton teaching English literature, and is in the process of scaling back her classes to ease into an early retirement. She plans to take the opportunity to spend more time in nature and do more birding. She's thankful for the incentive to be outside during sunrise (though it does make duck identification tricky when they insist on flying in front of it...), and we're grateful to Louise who is willing to do it!



The new Eddy St marsh survey route — what will Louise find here this year?

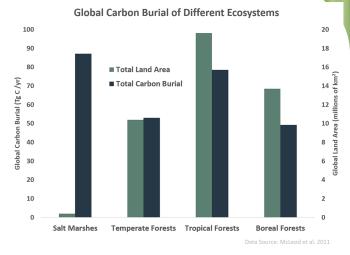
Our volunteers' efforts help us reach more marshes and contribute more pieces of the puzzle to discover trends and understand these cryptic species.

Thank you!

Wetland type highlight: Salt marshes

Salt marshes are important habitats for many species. Aside from being favoured habitat of our Nelson's Sparrows, they are important areas for species of numerous taxa, and generate large amounts of nutrients that are exported to other ecosystems.

Salt marshes are one of our most important tools against climate change. Despite covering a relatively small global area, they are highly efficient carbon traps; they bury and break down organic matter more than 50 times faster than tropical rainforests. They also provide an important buffer zone to inland areas against sea-level rise and increases in the frequency and severity of storm surges.





Become a Marsh Monitor!

Would you like to help conserve marshes? Do you have basic bird identification skills? As long as you feel comfortable learning the songs and calls of our primary species, even fairly beginner birders can be Marsh Monitors!

Between late May and early July, volunteers take two mornings to survey their routes, record the birds they see or hear, and collect basic information on habitat.

Want to join our ranks of citizen scientists?

To volunteer, contact Lucas Berrigan [berrigan@bsc-eoc.org]



About the Maritimes Marsh Monitoring Program

Many wetland ecosystems are in jeopardy, with increasing pressure from development and resource extraction. Bird Studies Canada leads the Maritimes Marsh Monitoring Program, as well as similar programs in Québec and Ontario. These programs are designed to assess and monitor wetland-associated species and their habitats. The results document long-term population trends of secretive marsh birds, which are not easily detected by other survey methods. In turn, results help to identify conservation and management priorities for wetlands in the Maritimes and beyond. Bird Studies Canada is a partner in the Eastern Habitat Joint Venture (www.ehjv.ca), which aims to conserve wetland habitat for the survival of waterfowl and all migratory birds.

For more information or to volunteer, contact:

Maritimes Marsh Monitoring Program Coordinator Lucas Berrigan

Bird Studies Canada 17 Waterfowl Lane Sackville, NB, E4L 1G6 506-364-5185 Iberrigan@birdscanada.org











Bird Studies Canada is Canada's leading national charitable organization dedicated to bird science and conservation. Our mission is to conserve wild birds of Canada through sound science, on-the-ground actions, innovative partnerships, public engagement, and strategic informed advocacy.

www.birdscanada.org

Project Partners and Funders

This project was undertaken with the financial support of the Government of Canada. Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.



















