

# SCIENCE FOR WETLAND CONSERVATION



## MARITIMES MARSH MONITORING PROGRAM

### 2019 Field Season

With the 8th year of the Maritimes Marsh Monitoring Program behind us, it's time once again to reflect on the hard work and efforts that go into making this project successful. A heartfelt thank you goes out to our tireless volunteers, without whom our scope would certainly shrink — this year we had 13 volunteers survey 11 routes, and almost a dozen additional folks signed up to survey in future years! In total, we conducted 272 bird surveys and 120 vegetation surveys at 139 individual freshwater and coastal marsh points.

To our volunteers — THANK YOU! We couldn't do this without you

#### 2019 Highlights:

- Bird Studies Canada has had a name change — we are now Birds Canada!
- A new survey route near Amherst had a previously undiscovered resident Least Bittern, detected by volunteer Louise Nichols (see photo below)
- We partnered with two organizations doing salt marsh restoration in Nova Scotia to provide pre-and post-restoration monitoring — read more about that on page 2



Least Bittern - Louise Nichols

This Least Bittern was captured on camera by Louise Nichols. In 2019 we detected 3 of these rare birds. We placed automatic recording devices at 4 other locations where we had heard them in previous years, to determine if they were present and to study their calling behaviour.

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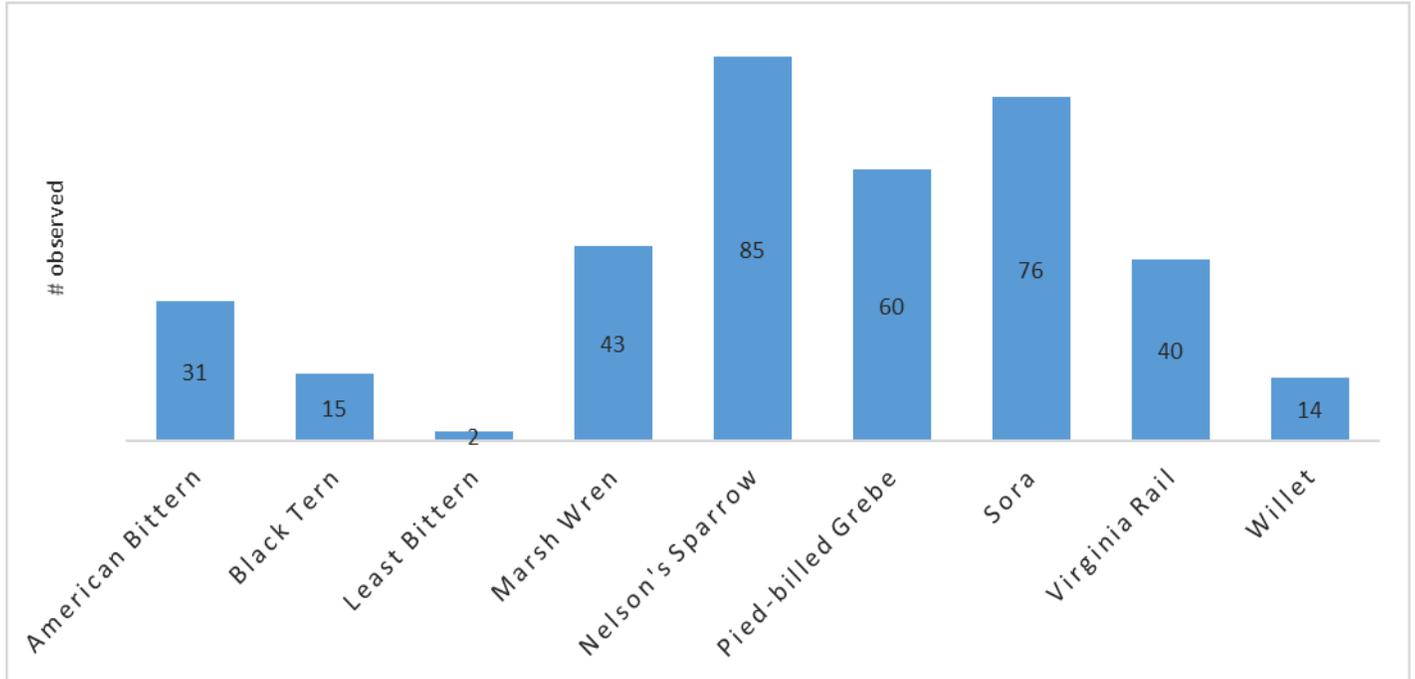
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#### Outdoor Work Policy under COVID-19

For the safety of our volunteers, employees, and communities at large, Birds Canada has limited afield surveys requiring travel until further notice. We encourage you to keep birding on your property, and check [birdscanada.org](http://birdscanada.org) for how you can contribute to bird conservation while committing to social distancing!

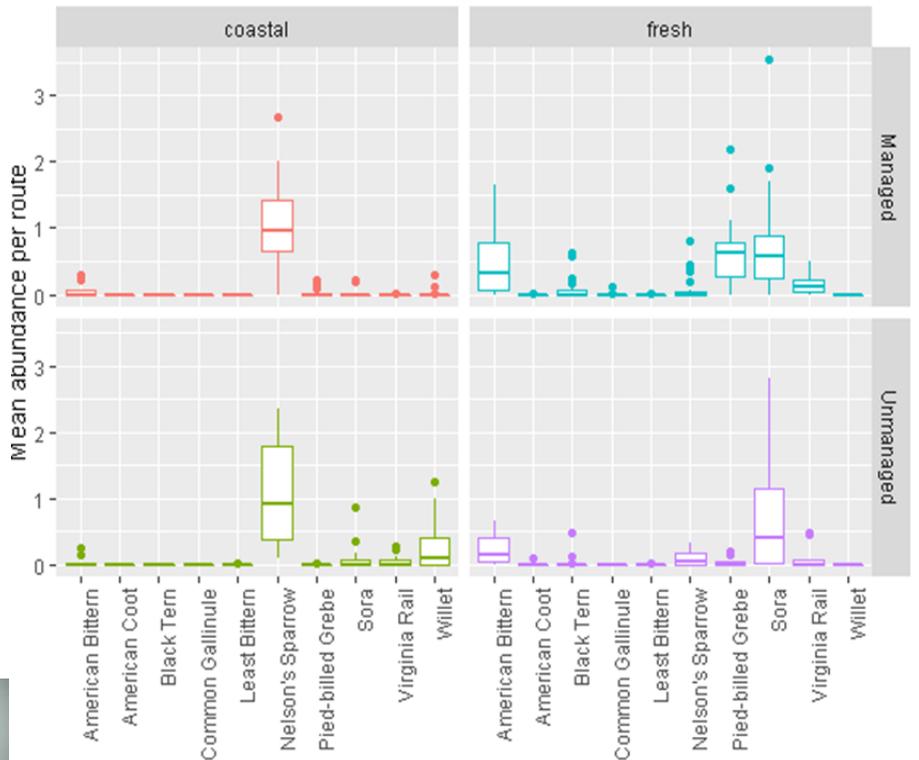
## Program Summary

Though fewer marshes were surveyed this year (largely the result of a smaller technician team), we still found a wide variety of species and a hefty count of our primary focal species, of which we found 366 unique individuals (see figure below). Of the secondary species (i.e., everything else), we detected over 3500 individuals from 93 confirmed species.



One of our goals is to determine if species in protected (or otherwise managed) wetlands fare better overall than those in unmanaged wetlands, to ensure that efforts to conserve habitat have a positive effect on the species within. Our preliminary analysis (see figure on right) suggests that for many species, this might be the case (i.e., higher abundance in managed areas), though there are some exceptions.

In this figure, taller boxes in the plots = more individuals found. Compare these measures of abundance between the “Managed” and “Unmanaged” rows, in coastal and freshwater habitats.



## Program Summary

*continued*

This year, we partnered with the Clean Foundation and the Mi'kmaw Conservation Group (MCG) to monitor field sites before and after salt marsh restoration in Nova Scotia. This year the monitoring consisted of deploying automated recording devices (ARUs) to record a snapshot of the birds already living in the areas to be restored. Next season, we're hoping to recruit more volunteers to visit the sites and complement the ARU data.

Through this partnership, we're also expanding our engagement with the Mi'kmaw communities of Nova Scotia. In these early stages, we have had meetings and consultations to produce an

educational booklet on salt marsh birds, with an emphasis on each species' Indigenous cultural significance, including having the bird names in the Mi'kmaw language. As we want to make sure the booklet is properly consulted on, the process is slow and thorough, so stay tuned in the coming seasons for more information!

What's next? Over the next few months, we will develop statistical analyses to compare pre- and post- restoration information on bird communities in these salt marshes. As well, with our partners at Clean Foundation and MCG, we will plan for next year's saltmarsh surveys and ARU deployments where possible, as restoration work by our partners continues.

## Volunteer Spotlight

Bill Winsor has been a program volunteer since 2016, when he started monitoring two marshes in Salisbury, NB. An avid birder, he spends much of his free time strolling through the Salisbury Wetlands Reserves (what our program names Salisbury East and West), and over the better part of fifteen years has seen over 150 species there. This year on his surveys he noted 42 species, including a Marsh Wren, which had only been reported

there once before in 2015. Making the most of his retirement -- he worked as an engineer researching cold-ocean development -- he and his wife have traveled extensively through Canada and the United States on birdwatching trips. Most recently they were in Okanagan, BC (highlights include a Sage Thrasher and Williamson's Sapsucker). Handily answering the impossible question, Bill's favourite bird is the Barn Swallow.



Salisbury West



Marsh Wren - *Cephas*



Salisbury East

**Volunteers like Bill help us reach more marshes and contribute more pieces of the puzzle to discover trends and understand these cryptic species.**

**Thank you!**

## Species highlight: Sora

Soras were the most commonly occurring primary species on our marsh surveys! Though our technicians and volunteers regularly hear their descending whinnies and “sor-a” calls, they can be extremely hard to spot; keep a lookout for their bright yellow beaks and funky long-toed feet. For a bird that produces such big sounds, it’s surprising to see them and realize that they are only about the size of an American Robin.



Sora - Rodrigo Argenton

Soras nest at the marsh edge in cattails and sedges, either on top of old vegetation or suspended over shallow water among the standing plants. These nests are well-hidden; the female will sometimes even fold the tips of the surrounding vegetation into the weave of the nest itself to provide an umbrella of cover. Their courtship ritual is somewhat bizarre; males and females will preen each other before mating....but first, they’ll have a staring contest that can last up to 30 minutes.

### The Eastern Habitat Joint Venture

Birds Canada is a partner in the EHJV, which is dedicated to protecting and stewarding wetland habitat from Ontario to Newfoundland. Since 1989 it has focused primarily on habitat and waterfowl conservation, research, and monitoring (including our marsh monitoring!), and more recently has branched out to include other bird guilds such as shorebirds and landbirds.

## Become a Marsh Monitor!

Do you want to help wetland conservation? Do you have basic bird identification skills? As long as you feel comfortable learning the songs and calls of our focal species, even fairly beginner birders can be Marsh Monitors!

Between late May and mid-July, volunteers take two mornings to survey their routes, record the birds they see or hear, and collect basic information on habitat (chest waders not required!).

Want to join our stylish ranks of citizen scientists?

**To volunteer, contact**  
**Laura Achenbach**  
**[lachenbach@birdscanada.org](mailto:lachenbach@birdscanada.org)**  
**(902) 579-4734**



Jon Ellis

## About the Maritimes Marsh Monitoring Program

Many wetland ecosystems are in jeopardy, with increasing pressure from development and resource extraction. Birds 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. Birds Canada is a partner in the Eastern Habitat Joint Venture ([www.ehfv.ca](http://www.ehfv.ca)), which aims to conserve wetland habitat for the survival of waterfowl and all migratory birds.

### For more information or to volunteer, contact:

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**Birds 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](http://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.

