

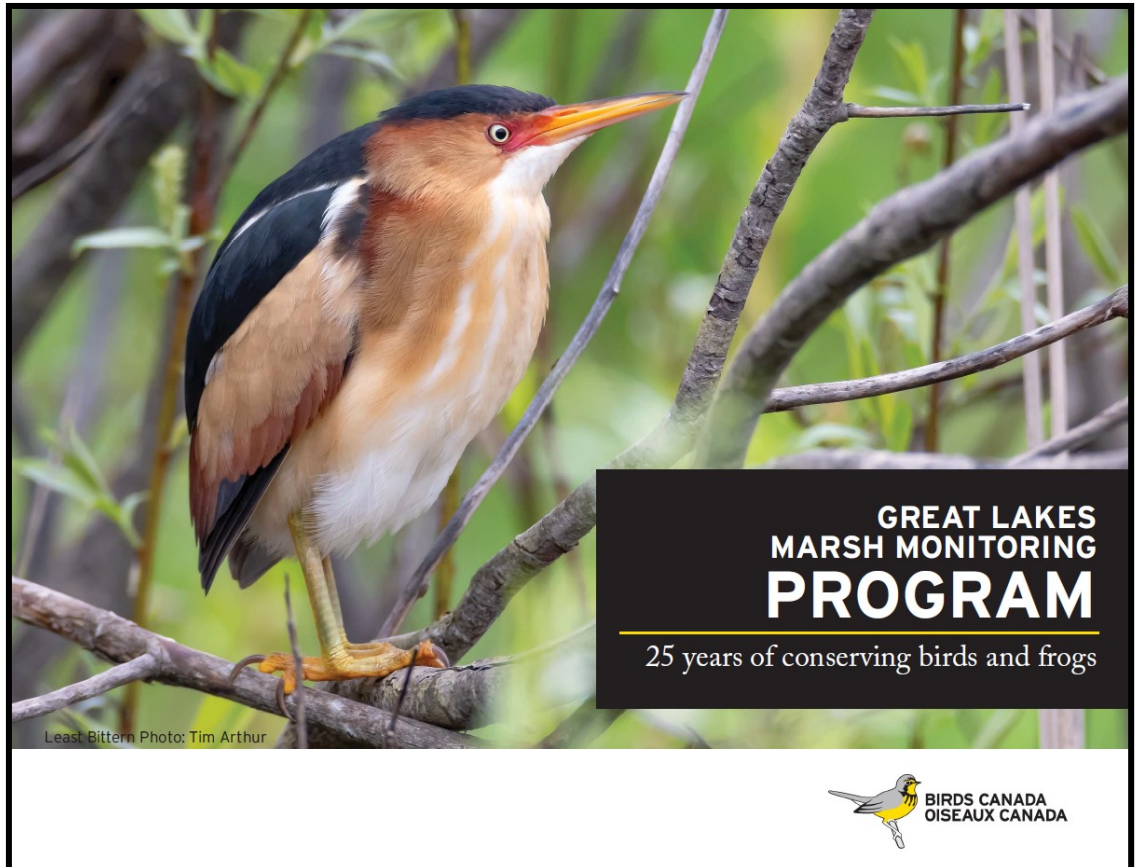
Still going strong!

Highlights

- 25-year report
- Bird and frog trends and annual abundance
- Accomplishments

Inside this issue:

| | |
|---------------------------------|----|
| Survey activity | 2 |
| Bird trends | 4 |
| Frog trends | 4 |
| Annual bird abundance | 5 |
| Annual frog occupancy | 6 |
| Presentations, data and reports | 7 |
| Ontario Atlas-3 | 9 |
| Marsh monitors in action | 10 |
| Contact information | 12 |

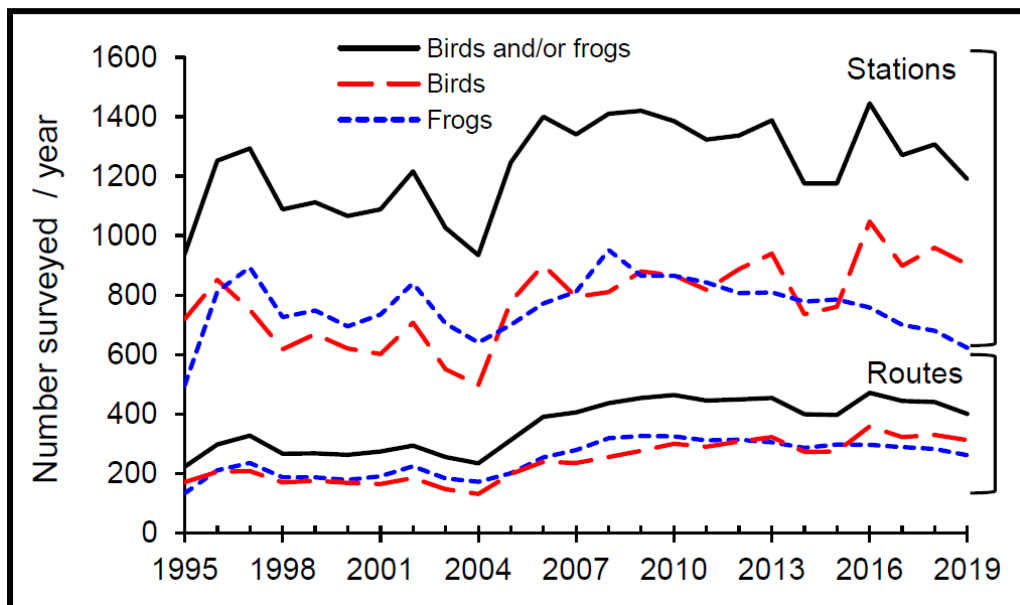


The Great Lakes Marsh Monitoring Program (GLMMP) continues to effectively conserve marsh birds and frogs. The program's achievements are described best in our 25-year report, released in June this year. In it you will find 24 packed pages showcasing the GLMMP's accomplishments based on your data. Please take a look online at the link provided. We thank you and all of our volunteer participants for making the program an outstanding success. Read on and see the many recent ways we've been busy putting your survey results to good use.

birdscanada.org/glmp25

How are we doing?

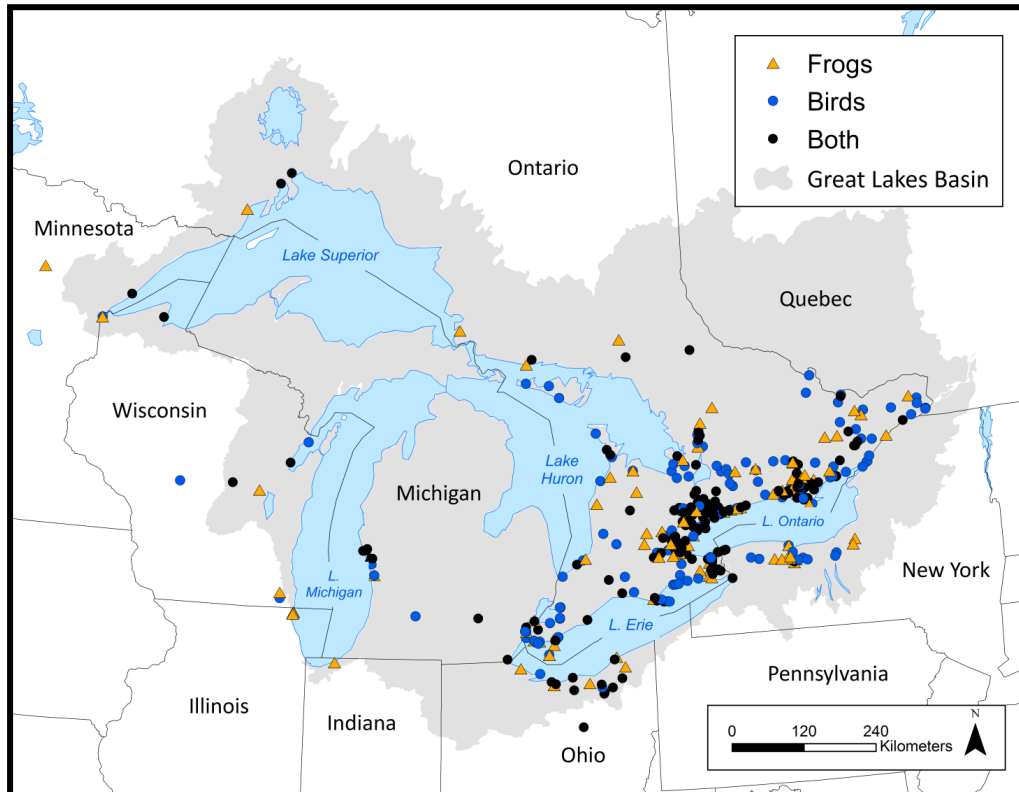
In the 2019 season, we completed bird surveys at 312 routes and 903 stations, and frog surveys at 261 routes and 623 stations. Over 450 volunteers contributed nearly 5500 hours of work. The number of routes and stations surveyed for birds and frogs varies from year to year, but is always in the hundreds (see graph). Using your contributions, we draw important conclusions on the status and trends of species and help guide conservation actions. Thank you!



Great Lakes Marsh Monitoring Program Surveys From 1995 to 2019

How are birds and frogs doing?

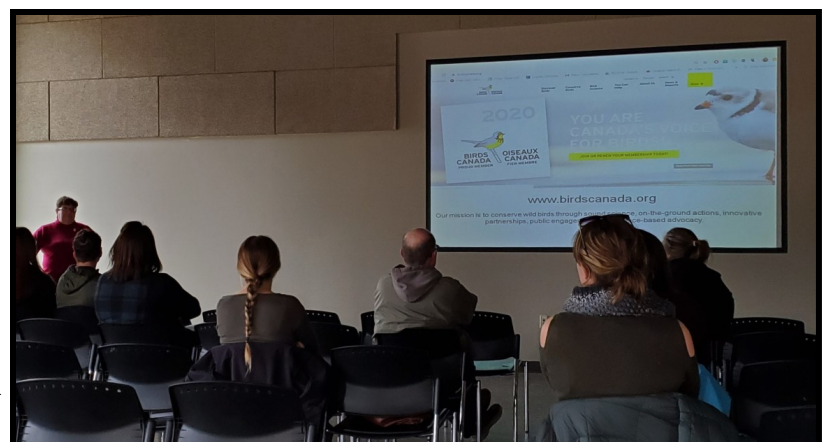
The latest trends show that populations of 8 of 18 (44%) marsh-associated bird species significantly declined between 1995 and 2019, and 1 of 8 (13%) marsh-associated frog species significantly declined (see page 4). On the up side, 6 of 18 (33%) bird species, including the endangered Least Bittern (hooray!), and 3 of 8 (38%) frog species significantly increased. These trends tell us how populations change over many years. To get a sense of year-to-year differences, take a look at the annual abundance indices for birds (see page 5) and occupancy for frogs (see page 6).



Great Lakes Marsh Monitoring Program Routes Surveyed in 2019

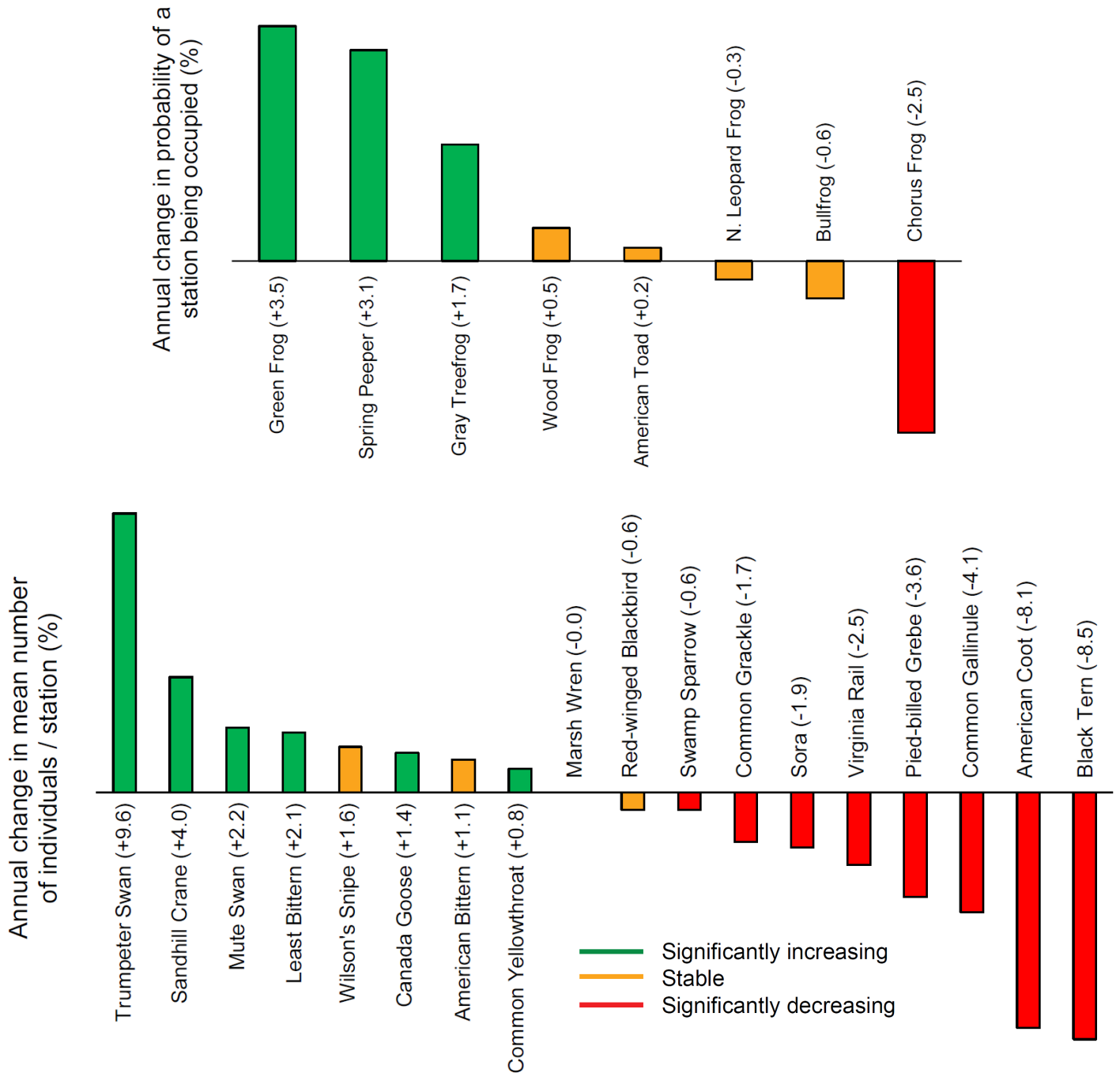
Accomplishments

With the tremendous effort of volunteer surveyors and financial assistance from supporters (see last page), we have accomplished many important activities and outcomes over the past year. These include presentations, filling requests for raw data, and reports, which summarize and draw conclusions from your hard-earned data. We also responded to media inquiries (continued on page 7).

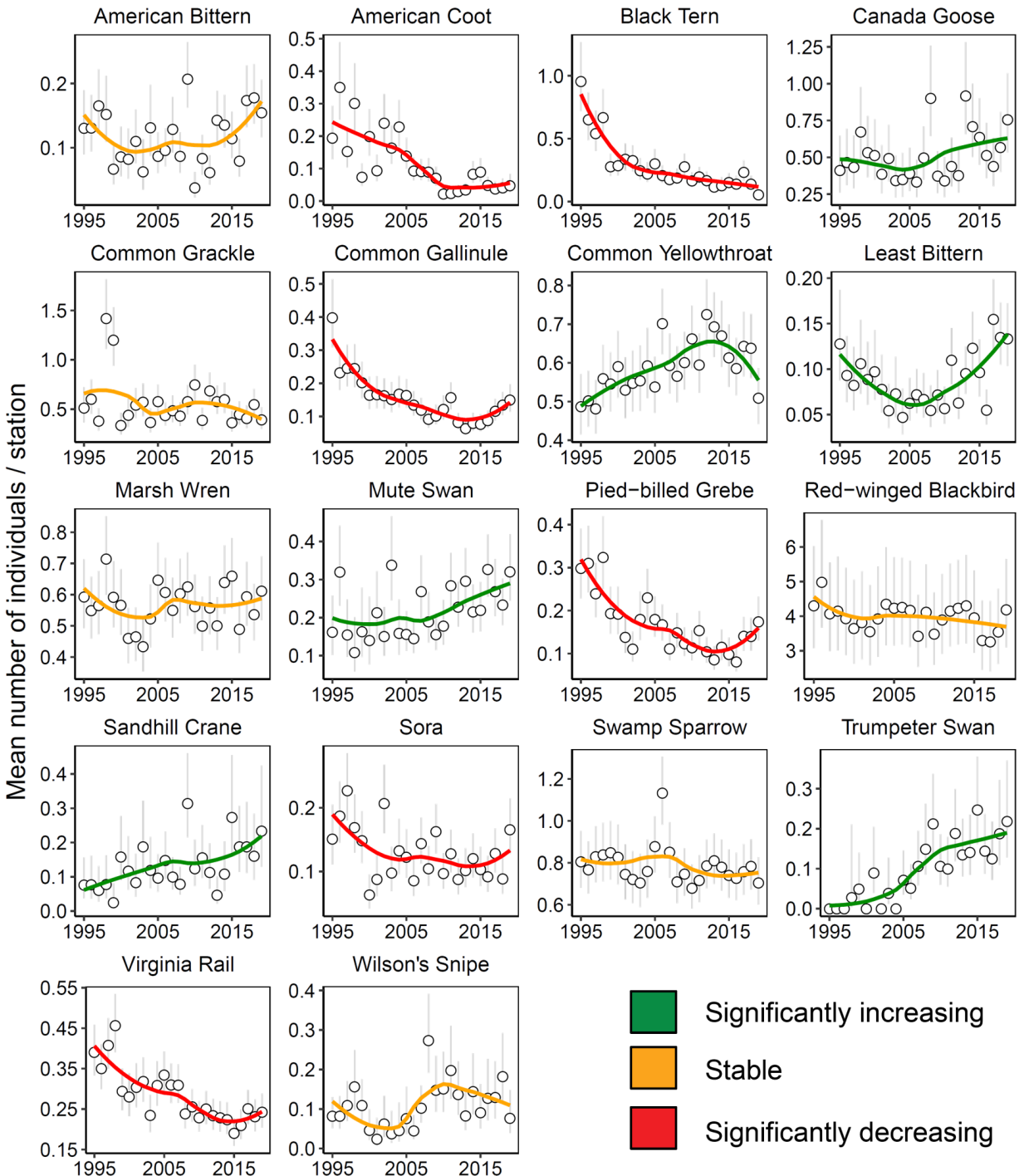


Windsor/Essex Great Lakes Marsh Monitoring Program Training Session March 2020

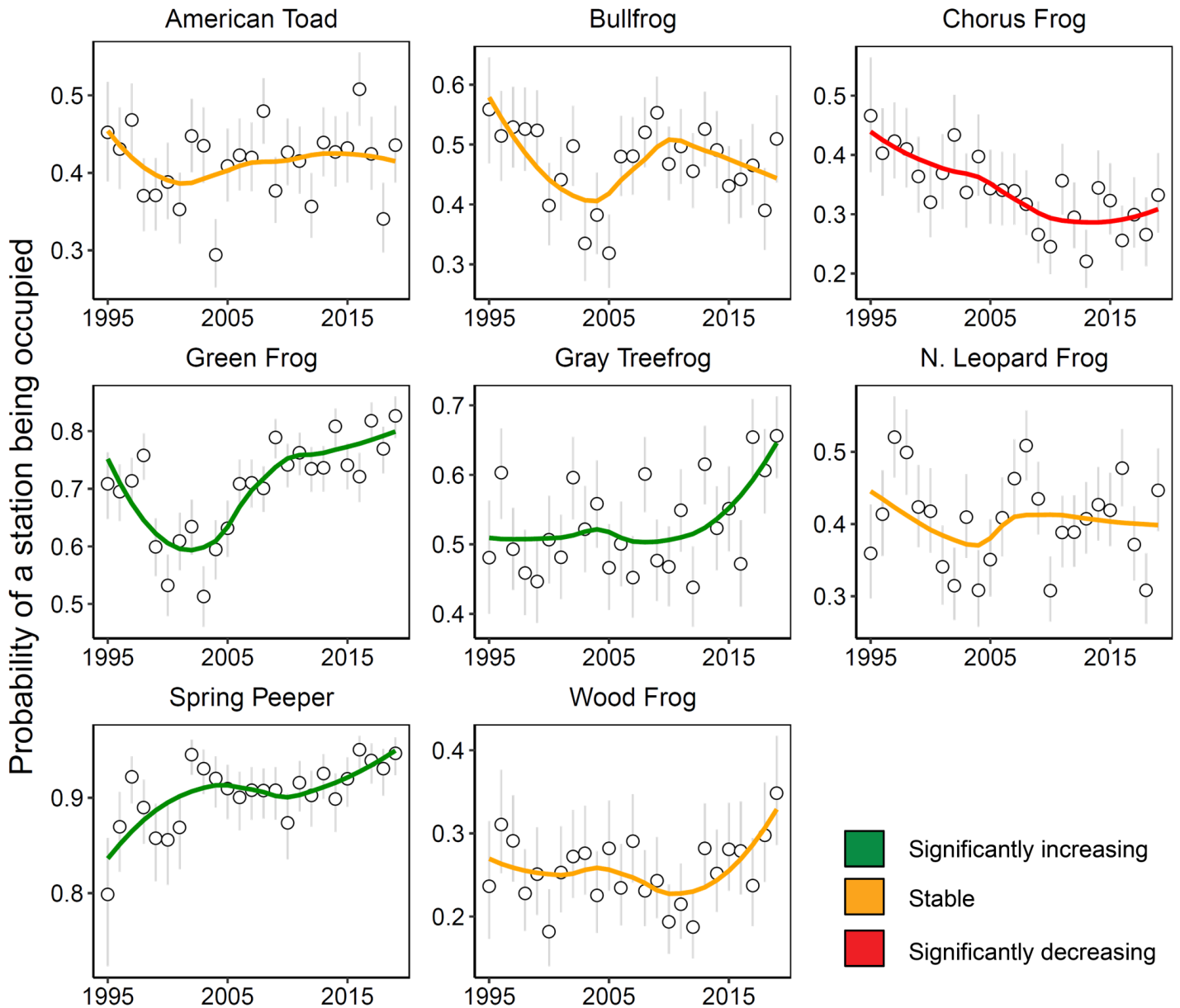
Great Lakes Marsh Monitoring Program Trends for Birds and Frogs 1995 – 2019



Great Lakes Marsh Monitoring Program Annual Abundance for Marsh Birds 1995 – 2019



Great Lakes Marsh Monitoring Program Annual Occupancy for Frogs 1995 – 2019



Need Marsh Monitoring Program Data for a research project? Would you like a copy of the information that you have collected? See the download tab at birdscanada.org/birdmon/.

Presentations:

Conserving lakes and wetlands through waterbird citizen science. Lake Links, Perth, ON.

Applied waterbird conservation. Western University, London, ON.

Control of invasive *Phragmites* increases marsh birds but not frogs. Research and Conservation Conference, Long Point World Biosphere Reserve Foundation, Simcoe, ON; Annual Meeting, Ontario Invasive Plant Council, London, ON.

Great Lakes Marsh Monitoring Program: recent research and protocol developments. Online webinar hosted by Birds Canada, available here: <https://youtu.be/GlLtc9wRa6o?t=31>

Windsor /Essex Great Lakes Marsh Monitoring Program Training Session. Hosted by City of Windsor and Essex Region Conservation Authority.


Data:

We supplied the following partners with your hard-earned data to achieve and advance wetland conservation: Credit Valley Conservation Authority; Ducks Unlimited Canada; Environment and Climate Change Canada; Nature Conservancy of Canada; Niagara River Remedial Action Plan; Ontario Nature; Ontario Ministry of the Environment, Conservation and Parks; Ontario Natural Heritage Information Centre; Parks Canada; Quinte Field Naturalists; Royal Botanical Gardens; Raisin Region Conservation Authority; US Environmental Protection Agency; and various consultants for environmental assessments and students for research projects.

Reports:

Control of invasive *Phragmites* increases breeding marsh birds but not frogs. Published in *Canadian Wildlife Biology and Management*, and based in part on GLMMP data, this analysis shows that control of invasive *Phragmites* or Common Reed has a significant positive effect on marsh-breeding bird species of conservation concern. The study is being used to expand habitat restoration efforts for these species.

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Original Research

Control of Invasive *Phragmites* Increases Marsh Birds but not Frogs

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Abstract

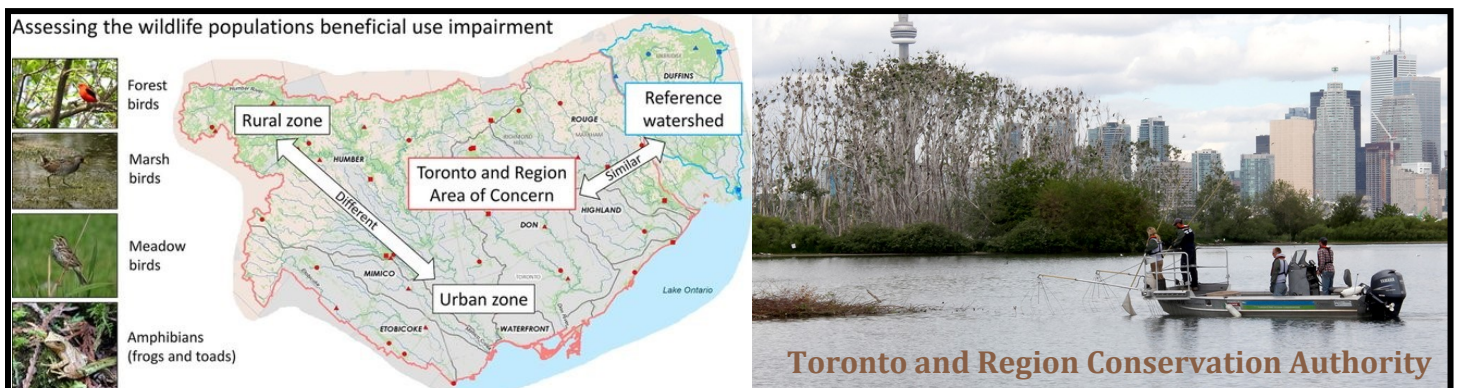
The non-native invasive form of common reed (*Phragmites australis australis*; hereafter "invasive *Phragmites*") negatively affects certain flora and fauna throughout North America. As a result, much effort is spent in some locations controlling invasive *Phragmites*, although few estimates of the expected benefits of these efforts are available. We used data from Bird Studies Canada's Great Lakes Marsh Monitoring Program and Central Michigan University's Great Lakes Coastal Wetland Monitoring Program to estimate changes in 1) species richness, 2) total abundance, and 3) occurrence of 9 breeding marsh bird species and 8 breeding marsh frog species before and after control of invasive *Phragmites*. Our study took place between 2011 and 2018 throughout 3 Great Lakes coastal wetland complexes located on Lake Huron and Lake Erie in southern Ontario. We found at sample sites where invasive *Phragmites* was controlled that species richness of 5 breeding marsh bitterns (e.g., *Botaurus* sp.) and rails (e.g., *Rallus* sp.) of conservation concern increased by 1.1 species, and that total abundance of these species combined increased by 1.8 individuals. By contrast, we observed no change in these responses at nearby sample sites where no *Phragmites* control occurred. We found no change in occurrence of any frog species or species richness or crude calling frequency of all frog species combined in relation to control of *Phragmites*, although we lacked the ability to detect subtle changes in abundance of frogs, so more information would be helpful before firm conclusions can be made in relation to frogs and control of invasive *Phragmites* in our study system. Our study shows that control of invasive *Phragmites* has a significant positive effect on breeding marsh bird species of conservation concern and suggests that continued effort to restore habitat for these species is warranted, particularly in areas where former breeding marsh bird biodiversity was high.

Species-habitat relationships and priority areas for marsh-breeding birds in Ontario. Published in the *Journal of Wildlife Management*, and based entirely on GLMMP data, this study identifies where the best places are for future wetland conservation work that benefits marsh-breeding birds throughout southern Ontario. The analysis is being used to restore and protect additional wetlands in the region.

State of the Great Lakes 2019. Published by the Governments of Canada and the United States under the Great Lakes Water Quality Agreement, and based in part on GLMMP data, this document provides an overview of the status and trends of numerous components of the Great Lakes ecosystem. Across all of the Great Lakes, marsh-breeding bird and frog species—when considered together as a group—are currently “fair” and are improving over time. Although some species—when considered individually—are decreasing over time, as we show in this newsletter. The information is being used to attract further investment in restoring and protecting Great Lakes wetlands, especially for declining species.



Assessing terrestrial wildlife populations in the Toronto and Region Area of Concern. Published in the *Journal of Great Lakes Research*, and based in part on GLMMP data, this paper shows that marsh bird and frog populations in the Toronto area fluctuate within a range similar to populations in a nearby but less urbanized watershed. The results are being used to further conserve wildlife and their habitats in Toronto, and will encourage similar conservation efforts in other large cities.





Learning Resources

Free Online Bird Identification Resources

Stay Tuned for the Ontario Breeding Bird Atlas – 3

Data collection for the Ontario Breeding Bird Atlas-3 starts in January 2021. Volunteer Citizen Scientists will count and record the presence of breeding birds across Ontario – from the south to the north – for five years. Atlas-3 is a partnership between Birds Canada, Canadian Wildlife Service (Environment and Climate Change Canada), Ministry of Natural Resources and Forestry (Government of Ontario), Ontario Field Ornithologists, and Ontario Nature. Atlas-3 will be a grand adventure for the province's birders! Anyone can participate! Birders make it possible! If you are interested in participating in the breeding bird atlas please:

- ⇒ Stay tuned to birdsontario.org for further details
- ⇒ Wait for registration to open then register to participate and download the NatureCounts Atlas data entry and point count apps
- ⇒ Refresh your skills and build your knowledge using the online resources recommended at birdsontario.org/atlas/learning.jsp



Please remember that your Marsh Monitoring Program data will be incorporated into the atlas.

Look for this Canada Jay to find the NatureCounts/ breeding bird atlas app at the App Store or on Google Play.

Marsh Monitors in Action!



 **borealmama** The Sora is a secretive marsh bird that you will hear before you are lucky enough to see it. Their call is a loud descending whinny - sounds like a crazy bird . . .

#sora #ontariobirds #birdsofontario #birdwatching #birdstudiescanada #audubonsociety #oh_canada_ #sharecangeo #marshmonitoring

 Liked by kimtoewsphotography and 88 others

JULY 9, 2019

Add a comment...



**Sandra C Hawkins,
Hamilton Region Ontario**

An #fieldnote from #MMPSurvey participant Sandy: "Glad I carried my phone on my morning stroll today". Learn more about the Great Lakes Marsh Monitoring Program at birdscanada.org/gl_mmp



Beth Goeppinger, Michigan



[Click here for the 2020 #MMPSurvey Social Media Photo!](#)

Our little friends are slowly returning! I was talking to a colleague through Skype yesterday and I'm like "hear that deafening noise behind your house? Those are Chorus Frogs!"
Corina Brdar, Bay of Quinte, Ontario

When Karen K checked out her #MMPSurvey site last weekend this American Coot was checking it out as well. #CitizenScience #wetlands #habitat
birdscanada.org/gl_mmp



Liz Smith, Waterloo, Ontario



The Marsh Monitoring Program has given me some memorable moments. Without it I would be less likely to hike in the gloom of twilight seeing the stars emerge or the flicker of fireflies. I've enjoyed hearing the calls of woodcock and cuckoos, the startle of deer, and of course the frogs and toads. Fred Arnold
New York State





**BIRDS CANADA
OISEAUX CANADA**

THE MARSH MONITOR



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Launched in 1995, the Great Lakes Marsh Monitoring Program is:

- A bi-national, long-term monitoring program developed by Birds Canada and its many partners;
- Built on the commitment of individuals, foundations, governments, and non-governmental organizations that work in partnership towards effective conservation;
- A coordination of skills, interests, and stewardship of hundreds of citizens across the Great Lakes basin.

Contact Kathy Jones, volunteer@birdscanada.org, for more information about the Great Lakes Marsh Monitoring Program and other Birds Canada volunteer opportunities.

Visit the **volunteer portal** at www.birdscanada.org/bird-science/gl_mmp

**For all your
Marsh Monitoring Needs**



**Thank-you to all the Great Lakes Marsh Monitoring Program
Participants who make this program possible!**

The Great Lakes Marsh Monitoring Program is a program of Birds Canada supported by:

This project was undertaken with the financial support of the Government of Canada.

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