





Ontario Owl Survey Newsletter February 2019



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2019 Marks our 25th Ontario Owl Survey Season!

Thank you to those who have been part of the team for over two decades of surveys and to the many who have joined our team since.

Effort for the Ontario Owl Survey remained at a high level with surveys increasing to 206 — up by a whopping 8 routes (Fig. 1, Fig. 2). Unfortunately, data for 6 of these surveys arrived late and won't be included in the dataset

or analysis until 2020. Completed northern Ontario surveys increased to 87 and central Ontario surveys increased to 119. When we looked at the compiled data (200 routes), the overall number of owls reported was down, with 745 owls of nine species recorded. Northern Ontario routes clearly had fewer owls during the 2018 survey with the number of owls recorded per route decreasing to 1.99 (3.3/route during 2017). However, even though the total number of owls is down, there was an increase in owls present in central Ontario, with 4.95/route (4.4/route in 2017).

Ken McIlwrick's St. Joseph Island route recorded the most owls of all routes in central Ontario with a total of 22, including Barred, Northern Saw-whet, Boreal, Long-eared and Great Horned Owls. The highest count in northern Ontario was Melissa Mosley and Christine Kent's Turtle River route, just west of Mine Centre, where they recorded 5 Northern Saw-whet Owls and 4 Boreal Owls.

Overall, there is considerable annual variation in the route occupancy trends for many owl species in northern and central Ontario between 1995 and 2018, as shown in Fig. 4. Barred, Great Gray, Great Horned and Northern Saw-whet owls continue to be stable in northern Ontario with no significant trends in the proportion of stops occupied per route

(Fig 3). By contrast, the proportion of stops occupied per route by Boreal Owl in northern Ontario decreased by -2.4% per year between 1995 and 2018. The data show that Barred Owls in central Ontario increased by 2.3% per year between 1995 and 2018 (Fig. 3). Central Ontario's Great Horned and Northern Saw-Whet owls decreased significantly. Great Horned Owls decreased by -4.4% per year and the Northern Saw-Whet Owl's decreasing trend remained the same at -3.7% per year (Fig. 3). Game bird species, including American Woodcock, Ruffed Grouse and Wilson's Snipe, continue to show a large amount of year-to-year variation with no obvious patterns over time (Fig. 5).

A big "*thank-you*" to the dedicated Owl Survey Participants, volunteers who travel Ontario's remote roads to collect important data and rearrange their schedules to match road conditions and weather patterns. Thanks also to the Ontario Ministry of Natural Resources and Forestry for its continued support.

Happy owling!

Kathy Jones, Ontario Nocturnal Owl Survey Coordinator

Table 1. Most Productive Ontario Owl Survey Routes in 2018 for Northern and Central Ontario.

Route Name	Route	Total Owls	Surveyor		
Northern Ontario					
Turtle River	23	9	Melissa Mosley and Christine Kent		
Upper Nungesser Road	172	8	Morgan Ewan		
Deadhorse Road	65	7	Chris Robinson and Candace DesChamps		
Eagle Lake North	415	6	Darlene Salter		
Steep Rock	407		Sheldon Haw, Alyssa Masseo, Peter Sorenson and Tom Nash		
North Road	173		Devin Turner and Danielle Gough		
Foleyet Timber Road	210		Stan Vasiliauskas, Vicki Bernstein and Kara Gavreau		
Snake Bay Road	43	5	Dorothy Brunner		
Phillips Creek Road	409		Tammie Haché		
Central Ontario					
Fort St. Joseph	162	22	Ken McIlwrick and Stan Phippen		
Canoe Lake	205	20	Mike Burrell and Donald Sutherland		
Opinicon Rd	371	16	Carolyn Bonta and Michael Johnson		
Limerick Forest and Area	401	15	Josh VanWieren and Josh Hevenor		
Mactier	121		Stephen Romaniuk, Lorne Punshon, Sue Pilling and Lucy Emmott		
Ottertail Lake	5	14	Ken McIlwrick and Stan Phippen		
Green Acres Rd	273		Gary, Connie and Rachel Sturge with Matt Procunier		

2018 Owl Results

Table 2 shows the total number of individuals of each species detected, and the average number of owls detected per route for each species, as detected during the 2018 Ontario Owl Survey in central and northern Ontario.

Table 2. 2018 Ontario Owl Survey Results

Region	Central Onta	ario (n=117)	Northern Ontario (N=83)		
	Individuals	Owls/Route	Individuals	Owls/Route	
Barred Owl	498	4.26	26	0.31	
Boreal Owl	5	0.04	58	0.70	
Eastern Screech Owl	5	0.04	0	0	
Great Gray Owl	3	0.03	14	0.17	
Great Horned Owl	9	0.08	23	0.28	
Long-eared Owl	8	0.07	4	0.05	
Northern Hawk Owl	0	0	5	0.06	
Northern Saw-Whet Owl	49	0.42	34	0.41	
Short-eared Owl	1	0.01	0	0	
Unknown Owl	6	0.05	9	0.11	
Additional Species					
Ruffed Grouse	52	0.44	91	1.10	
Wilson's Snipe	75	0.64	103	1.24	
American Woodcock	190	1.63	87	1.05	

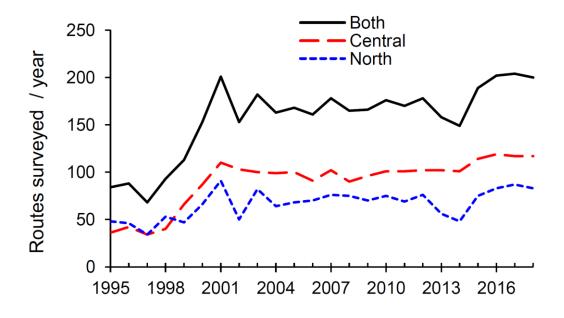


Figure 1: Number of Ontario Owl Survey routes sampled per year between 1995 and 2018 as a function of region (central, north) and combined (both).

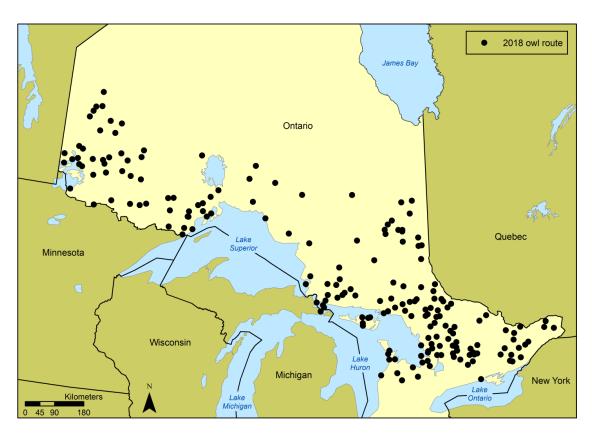
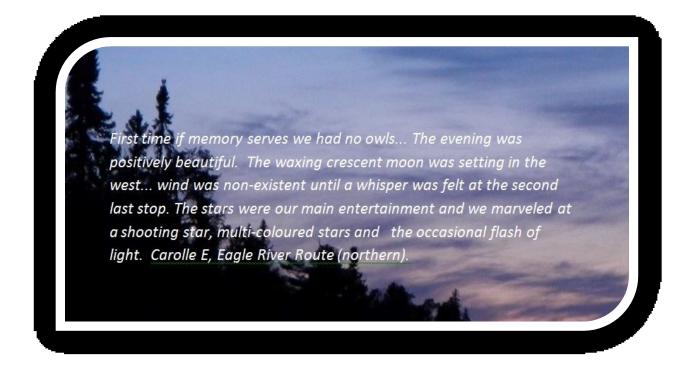


Fig. 2. Map of Ontario Owl Survey routes sampled in 2018 (n = 200 routes).



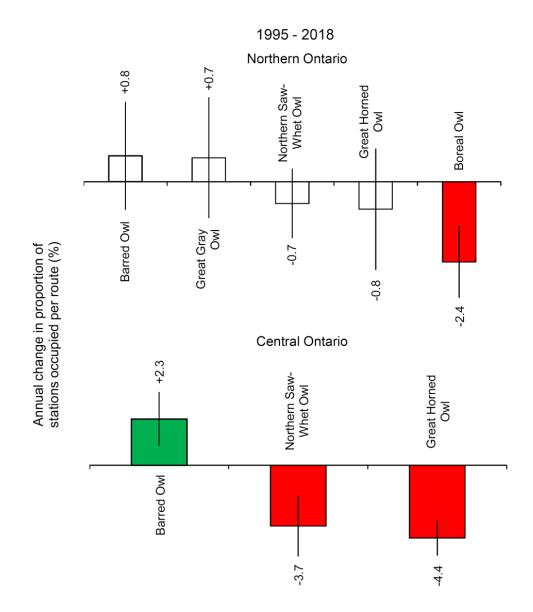


Figure 3: Ontario Owl Survey Trends in distribution of owls between 1995 and 2018 in northern and central Ontario. Statistically significant trends are shown with green bars (positive trends) or red bars (negative trends), whereas white bars indicate statistically stable trends. Vertical lines are 95% confidence intervals.

Scurrying movement heard. Squirrel? Faint geese noise. Robin S, Panel Mine Road (central)

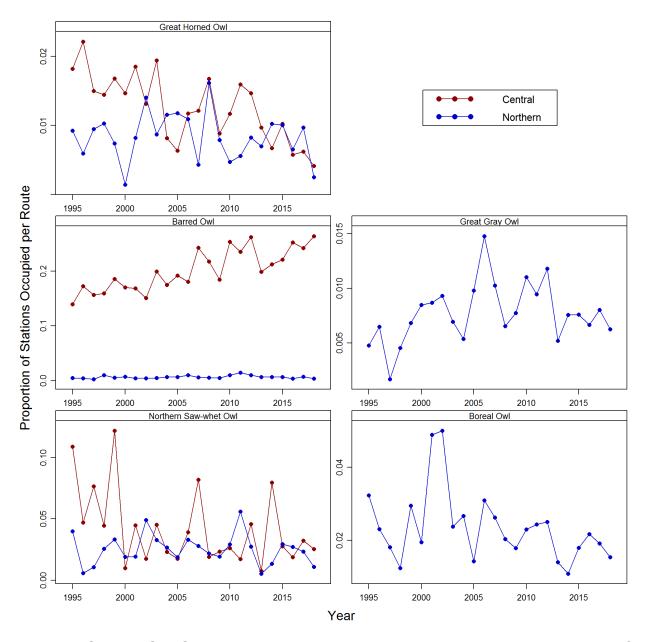


Figure 4: Ontario Owl Survey Trends, 1995-2018, showing the mean proportion of stations occupied (with owls) per route in central and northern Ontario.

Ideal weather conditions. Wolves howling after Great Gray Owl call.
Michael L, Peshu Lake Road North Route (northern)

2018 Additional Species

The numbers of "non-owl" target species were varied with 178 Wilson's Snipe (175 in 2017; 213 in 2016), 143 Ruffed Grouse (81 in 2017, 227 in 2016) and 277 American Woodcock (509 in 2017, 533 in 2016). These numbers portray the great fluctuation in the presence and number of these species at the time of the owl survey.

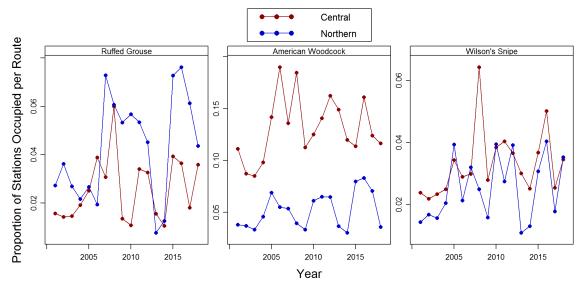
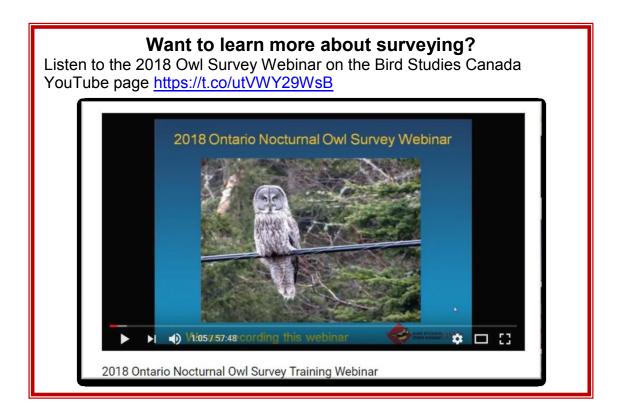


Figure 5: Trends for Ruffed Grouse, American Woodcock and Wilson's Snipe, 2001-2017, showing the mean proportion of stations occupied per route in central and northern Ontario.



Try the newly refreshed Nature Counts Web portal!

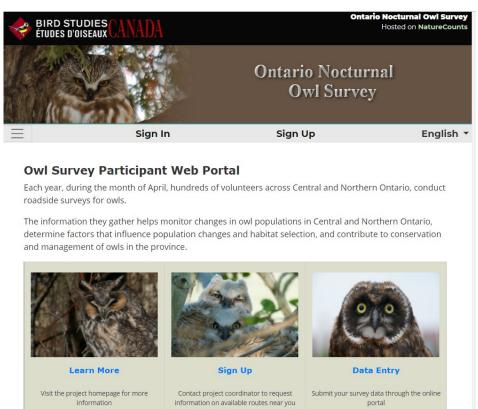
Sign in or sign up at www.birdscanada.org/birdmon/onowls and use the NatureCounts website for:

- ✓ Data submission
- ✓ Training CD MP3 files
- ✓ MP3 broadcast files

- ✓ Data forms
- ✓ Protocols
- ✓ Owl survey vehicle sign

- ✓ Newsletters
- ✓ Contacting Kathy
- ✓ Stop coordinates
- ✓ Owl surveyor in action cards (to hand out to concerned citizens).

Please register in advance to ensure you have approval before you need those last-minute resources.



Perfect night with tons of owls. Mike B, Central Ontario Route

Hooray! Most owls ever! Stan V. Northern Ontario Route

We were extremely happy with our results this year. Best ever since we began surveying this route. Observed mating pairs at 3 stops and an owl attempted to land on the car at stop 8. Carol C, central Ontario, 12th survey season.

Quotes from the field

The 25th survey season is here, and with it comes a chance to celebrate our long term participants. We have ten people who have surveyed since 1995, four since 1996, and another twelve who began later in the 90s. In February I asked some of these folks to provide a few words regarding their owl experiences.

Rob Swainson, 1995 (33 surveys, 61 Owls)

Thanks for the owl survey reminder..... or as my coworker MNR "friends" used to lovingly call it..... my "Owless Survey". Doesn't seem all that long ago that we were out there testing the protocols by doing it every month from Feb to May.... and freezing our butts off!

Richard Tafel, 1996 (28 surveys, 101 Owls)

Owl surveys in the utter darkness of night, upon a seldom used road with no cars, nor dogs barking, such as at my route north-east of North Bay, can be very exciting. This is especially when you have two noisy Barred Owls suddenly screeching and diving past the top of your car, where the owl-voiced speaker is located. During my 24 years of following such occasions those moments are not to be forgotten. The one owl seems to be chasing the other and complaining loudly "why do you persist in seeking him" (as they have heard the song through the speaker); "why not just stay at home with me", he is yelling. At least that is what it all sounds like. Hopefully they manage to enjoy life even better back at their nearby, quiet nesting area, with renewed love and comfort, after their brief encounters with us.

Brian Ratcliff, 1996 (28 surveys, 86 Owls)

It is hard to believe that it has been 24 years since Ellen and I first started surveying Route #71, Arrow River. Back in the early years we had to do two surveys, one in March, and the other in April. Here in the north that March survey could be very cold, and often very quiet. We have had the great fortune to bring along many young people to experience the owl survey. We had always hoped that this interaction would help ignite a passion for wildlife. One such person was a young Lakehead University student by the name of Jody Allair [now Bird Studies Canada's Director of Citizen Science and Community Engagement!]. Jody already had the passion.

Each year we look forward to the Nocturnal Owl Survey as you just never know what you will see or hear. It is exciting standing on the side of a bush road, in the middle of the night, just listening. Any sounds are a treat to our ears, and on a moonless night, the stars are amazing.

Looking forward to another 25 years.

A special shout-out to our other active participants who started in 1995 or 1996: Chris Bell, Carol Dersch, Rob Foster, Ron Tozer, Tom Nash, Randy Moratz, Christy MacDonald, Ray Schott, Melody Kiss, Doug Gilmore, James Trottier, Evan Armstrong,

Alice Avison, as well as the many early survey assistants. Say hello if you see these folks as they are beginning to retire from the survey and **deserve** a **thank-you** and **handshake** for all their help and support throughout the last 2 ½ decades.

Science Report: Citizen Scientist Volunteers Report Feeling Happy and Connected to Nature

By Dr. Lisa Nisbet, Environmental Psychology Researcher, Trent University (Reprinted from Bird Studies Canada eNews)



Christmas Bird Count volunteers Photo: Kelsey Bourgeois

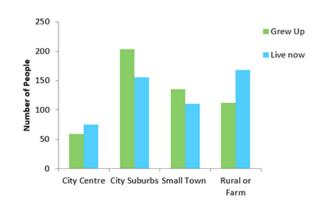
In fall of 2018, Bird Studies Canada invited volunteers like you from across the country to participate in a research study I was conducting. Over 500 people completed a survey that inquired about wellbeing, connection to the natural environment and experiences as Citizen Scientists (collecting and contributing information about birds or other species to add to scientific knowledge). A huge thank-you to all those who took time to contribute!

While the analysis of participants' very detailed and thoughtful essays on their

motives for engaging in Citizen Science is ongoing due to the large volume of responses, we are happy to report some preliminary results.

The 510 respondents range in age from 9 to 85 years, with the average age being 52.1. The majority (63.5%) are female and live either in city suburbs (30.6%), a small town

(21.8%), or a rural/farm area (32.9%). It seems many Bird Studies Canada volunteers reside in places with good opportunities for viewing wildlife, whether they have a backyard feeder or are able to hike, walk, or paddle in nearby nature areas. Participants are engaged in a variety of Bird Studies Canada projects, with the Christmas Bird Count, Great Backyard Bird Count, and Project FeederWatch being some of the most popular. Many volunteers submit data to eBird Canada, and contribute to bird surveys and breeding bird atlases.



Where Participants Grew Up and Currently Live

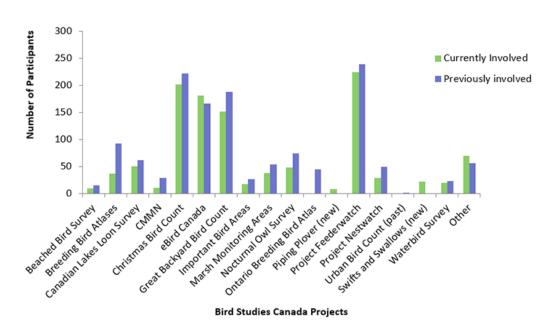
Overall, the survey respondents reported high levels of connectedness with nature (average score = 4.46). Typical scores for community members or students range from 3 to 3.5, with environmental educators and activists often scoring somewhat higher on a

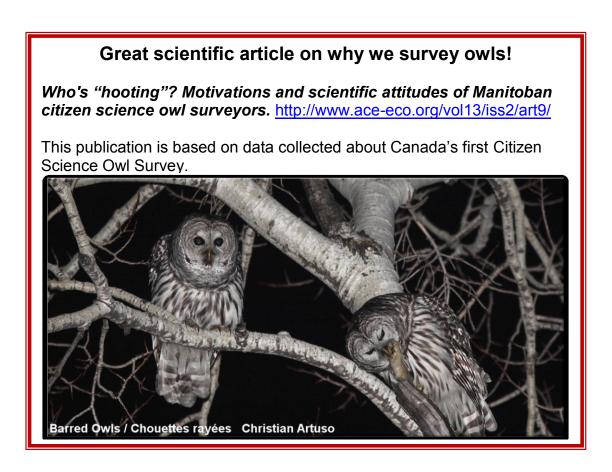
possible 1-to-5 scale. Unsurprisingly, these findings suggest that Bird Studies Canada volunteers have a strong bond with the natural environment. This includes a sense of identity or self-concept that includes the natural world, as well as a comfort with and desire to be in nature. Our relationship with animals such as birds is an important part of our connection with nature; survey respondents reported concern for all aspects of the biosphere. Participants' environmental concern for all living things was strongest, followed by altruistic concern for other people and future generations, and concern for how the environment affects one's self interests.

Bird Studies Canada volunteers also reported being happy. They have more positive than negative moods, feel vital and alive, and also experience feelings of awe, curiosity, and fascination (emotions often associated with time spent in nature). Although all survey respondents reported high levels of wellbeing, overall, people who feel the strongest bonds with the natural environment are also the happiest (connectedness with nature positively correlated with happiness indicators). It is possible that being happy causes us to feel more connected to nature (as opposed to the other way around), but research on nature's benefits for human mental and physical health suggest the effect is likely in the alternate direction. That is, spending time in nature and developing a sense of connection with the natural world enhances our health and happiness.

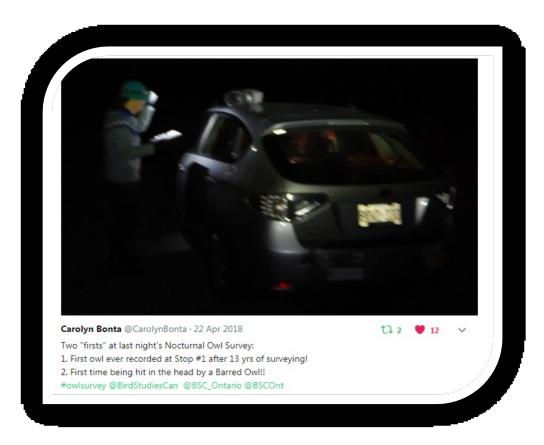
The links between nature connectedness and environmental concern also tell us that spending time observing and learning about birds and other wildlife is essential for helping people to develop a conservation ethic.

The hundreds of personal stories contributed by Bird Studies Canada volunteers in this study will help us to better understand the experience of Citizen Scientists and how to inspire more people to learn about, connect with, and protect the natural world. Thank you once again to all those who responded to the survey!





Survey tip from Carolyn: Don't stand beside your broadcast speaker!



It's already March of 2019... Participants should have already received their Owl Survey packets in the mail earlier in March. Participants who are new or have requested maps will receive them by the end of March.

Online resources:

For survey protocols and data sheets: www.birdscanada.org/volunteer/onowls. For downloadable MP3 audio files login into: http://www.bsc-eoc.org/birdmon/onowls. Owl Route locations and activity (available until December 2019): https://www.google.com/fusiontables/DataSource?snapid=S853701MXCA.

If you see an available route near you and are interested in surveying, or have a team member who is ready to survey on their own, call us and register for that route. Note that new participants need to contact me directly before I can register them to survey.

Be Social! Bird Studies Canada is on Facebook, Twitter and Instagram and I am on Facebook, Twitter & am slowly embracing Instagram, so post about your evening. Include lots of pictures about the good, the bad and the out of focus. We LOVE people photos but owl photos are great as well. Tag us or use the hashtag: #owlsurvey so we can find and share your story. **See last year's memories at:**https://twitter.com/i/moments/1057351913640022017

Thanks to our volunteers and sponsors!

We heartily thank the volunteers, who have become far too numerous to mention by name, for their participation in the 1995-2018 surveys. These people generously donated their valuable time and equipment (broadcast systems, vehicles, flashlights, etc.) to venture forth on cold, dark nights to survey owls. They are making essential contributions to owl conservation across Ontario. We would also like to thank the Ontario Ministry of Natural Resources and Forestry – Provincial Wildlife Monitoring Program for their support of this program, and our local Wiggan's Foodland in Port Rowan who supplied our volunteers with much appreciated hot chocolate.

Kathy Jones, <u>volunteer@birdscanada.org</u>; @BSCOnt; <u>www.facebook.com/VolunteerBSCOntario</u>; https://www.instagram.com/bsc_ont_volunteer

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