



For Birds' Sake

The National Audubon Society's 2018-19 Christmas Bird Count is North America's longest-running citizen science project.

BY VANESSA FARNSWORTH





Kids join in on the fun with the Kingston Youth Naturalists' Christmas Bird Count for Kids (CBC4Kids), Kingston, Ontario.

If you think that citizen science is for the birds, you're not far off.

The National Audubon Society's 2018-19 Christmas Bird Count marks the 119th year that Canadians can participate in what has become North America's longest-running citizen science project. Not bad for an event that started back in 1900 in response to a traditional Christmas "side hunt," during which hunters would compete to see who could shoot the most birds. American ornithologist Frank Chapman thought that counting birds would be a far better way to spend the day. Many birders on both sides of the border agreed.

"There were 25 Christmas Bird Counts held that first year and one of them was in Toronto," says Liz Purves, coordinator of the Christmas

Bird Count for Bird Studies Canada. "So Canada has been involved since the roots. And it's grown from there. Now we have thousands of counts across North America."

Bird Studies Canada coordinates the Christmas Bird Count in Canada, overseeing the more than 400 counts that take place throughout the country each year.

"These counts span coast to coast," says Purves. "The bulk of the counts are in southern Canada—southern Ontario, the Maritimes, all across southern Quebec—and we have scattered counts in the northern areas of these regions. The farthest northerly count is in Arctic Bay, Nunavut."

Each year between December 14 and January 5, participants

gather on a date determined by local organizers to count every bird they see and hear within their designated section of the 24 km (15 mile) diameter circle earmarked for local birders to survey.

"Each circle has a centre point, and that centre point stays the same year after year so that we are sampling the same area year over year, allowing us to look at how bird populations are changing over time," says Purves.

Each circle also has a coordinator, known as a compiler, whose job it is to recruit volunteers and organize the count, ensuring that participants understand which part of the circle they are to cover, pairing novices with more experienced birders, and collecting participants' observations at the end of the day. From there the

data is submitted to Bird Studies Canada for review before eventually making its way into Audubon's publically accessible database, where it can be utilized by anyone, including research scientists and government agencies.

Jim Cameron knows the value of that data. He has been running the Sheet Harbour Christmas Bird Count in Nova Scotia since its inception in 2009. It's the only count on the eastern shore of Nova Scotia, which is why he wanted to start it.

"It fills an area where there isn't any data regarding bird populations," Cameron says. "And it's an area probably about 200 to 250 kilometres long, so it's quite a gap in the data."

Cameron estimates that each year his count typically draws around 20 participants, who are assigned to cover six or sometimes seven routes within the circle.

"Usually I have the same leaders doing the same routes every year so they know what birds to expect and they know the route and the weather and the hazards and the whole bit," he says. "And 99 percent of the birds they know right to species just by looking at them. They never have to look at a guide."

Even so, there are times when trying to identify individual bird species can be challenging.

"Usually we walk along the coastline and use scopes. Now sometimes a bird may be so far out that you can't tell for sure what species it is," says Cameron. "During the Christmas Bird Count, we have the great cormorant and the double-crested cormorant. From a distance, they look almost identical."

Cameron encourages participants to bring a camera for those times when birds are hard to identify either because they are similar to a closely related species or because they are rare.

Data from the Christmas Bird Count has been used to monitor the decline of western screech owls in British Columbia, track the movements of ring-billed gulls in the Maritimes, assess poleward shifts in the winter ranges of North American birds, and investigate species diversity in urban bird populations.

This is a situation that biologist Dick Cannings, author of many bird books, including *Birds of British Columbia and the Pacific Northwest*, knows well. Cannings has been the compiler for the Christmas Bird Count in Penticton, British Columbia, since the late 1970s, having taken over from his father, who started the count in 1958. Over the decades he's been involved with the count, there have been many surprises.

"That's the exciting thing," he says. "Part of the job of being the compiler of a count is to make sure those surprises are real. That they actually did see an unusual bird and not mistakenly identify a common bird for something unusual."

One of the more memorable reports Cannings has received in recent years came from his son, who was participating in the Penticton count when he called his father to report that he'd spotted a black-throated blue warbler.

"Well, that's a very rare bird. I'd never seen one in British Columbia before," says Cannings, who spends much of his time these days in Ottawa, serving as Member of Parliament for South Okanagan-West Kootenay. "They're an eastern warbler. They're here in Ottawa in the summer, not in British Columbia in the winter."

Several birders snapped photos of that rare eastern visitor before Cannings himself spotted the warbler the next day, definitively confirming the sighting. But Cannings cautions against placing too much emphasis on rare and unusual finds.

"To be honest, the real scientific value in these counts is not in the black-throated blue warblers that show up in B.C. It's in the common birds that people see every day and that are most likely correctly identified," he says. "When you have a count like this that happens all over North America every year, and has been going on for over a hundred years, you get some really valuable data on bird population numbers that just isn't found anywhere else on Earth."

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With the 2018–19 Bird Count upon us, we'll soon discover what changes the past year has brought to our feathered friends. One thing is certain: getting local communities involved and heightening awareness can only be a good thing. **H**

If you would like to participate in the Christmas Bird Count, you can do so by going to the Bird Studies Canada website (birdscanada.org/volunteer/cbc) and using their handy interactive map to find a count near you.
