

# 2012 GBBC Summary

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## Overview

The 2012 Great Backyard Bird Count (GBBC) was one of stark contrasts. Arctic-dwelling Snowy Owls and redpolls irrupted into the Great Plains and the West in the largest numbers ever recorded in the 15-year history of the Great Backyard Bird Count. Participants reported Eurasian Collared-Doves and Great-tailed Grackles in northerly locations, a sign of the species' continuing range expansion. And spring migration was already underway for several species including Red-winged Blackbirds, Sandhill Cranes, and Snow Geese. Even the Blue Jay, a species often thought to be resident, showed unusual patterns with low numbers recorded in much of the East.

## By the Numbers

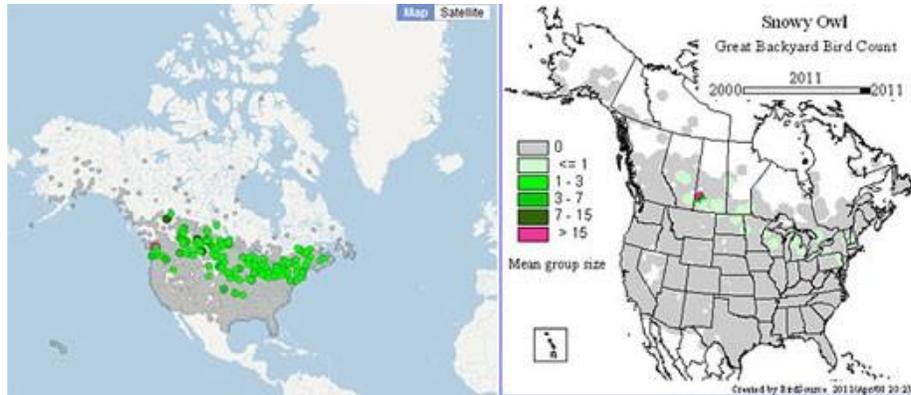
First, let's look at the raw numbers. GBBC participants submitted a record-smashing 104,151 checklists with 17.4 million individual bird observations! Participants set new checklist records in 22 states and in 6 Canadian provinces. Across the continent and in Hawaii, participants identified 623 species. The 100,000th checklist was submitted by Denise St. Pierre and her family from Lac Du Bonnet, Manitoba.

Participants reported the Northern Cardinal on more checklists than any other species for the eighth year in a row, closely followed by the Mourning Dove. The most numerous bird reported during this year's count was the Snow Goose, followed by the Tree Swallow, with its first-ever top-10 appearance. The reason: A massive flock of swallows reported in Ruskin, Florida. (Read the [Tampa Tribune](#) article about it.) To get an idea of what a huge flock of swallows looks like, check out some of these [YouTube videos](#).

Now, let's take a closer look at some of the trends and more notable findings of this year's GBBC.

## The Winter of the Snowy Owl

The Snowy Owl invasion in the winter of 2011-12 made headlines this year beginning with [increased reports of the species to eBird](#) starting last November. Numbers have been above average nationwide. The GBBC data show this well: compare the maps below for 2012 (left) and 2011 (right). In addition to the overall greater numbers, Snowy Owl records were set throughout the Great Plains south to Kansas and in the Pacific Northwest of the United States. Canadian bird watchers were treated to many more views of Snowy Owls this year too, with 428 owls reported to the GBBC—four times the number reported in 2011!

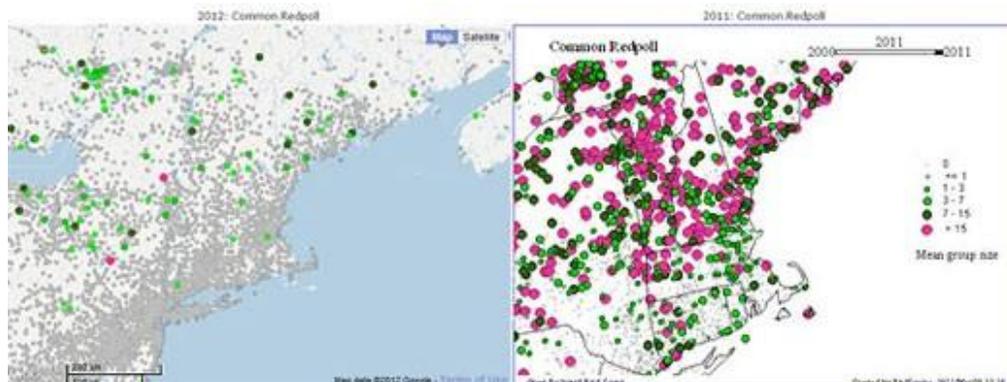


Maps: (left) Google; Map data © MapLink, Tele Atlas--[Terms of Use](#); (right) Birdsource

But why would Snowy Owls irrupt in numbers that recall Harry Potter’s magical world more than anything we’ve recently witnessed in North America? The most likely explanation is that movements of Snowy Owls are closely linked with the abundance of prey, such as lemmings, in the Arctic. The populations of these prey rise and fall in cycles. At times, prey populations grow very large and support large numbers of Snowy Owls and other predators. But when these prey populations crash, the owls may be forced to wander in search of food.

### Rambling Redpolls

Like Snowy Owls, small finches called Common Redpolls also range widely in some years in response to fluctuating food supplies in the arctic. (In this case, seeds rather than lemmings.) Typically, their movements are restricted to the mountains of the West as well as their other normal wintering areas. This year’s invasion brought large numbers of redpolls to Montana, Idaho, and the eastern portions of Washington and Oregon, with a few stragglers making it as far south as California! Common Redpolls are exceedingly rare south of northeastern Oregon in any year, and in some years they do not occur Northwest of the Rockies much at all. Conversely, redpolls did not move much into the Northeast this year, and compared with last year the differences on the maps below are astounding.



Maps: (left) Google; Map data © MapLink, Tele Atlas--[Terms of Use](#); (right) Birdsource

Canada was missing some of its redpolls this year, with numbers down significantly from 61,850 last year to just under 45,000 this year. Hoary Redpolls reported to the GBBC from Canada were down by more than half this year.

## Coots on the Loose

In a normal year, American Coots would be expected only in more southerly areas that do not freeze, but counts this year were off the charts, with coots overwintering well to the north and the species occurring in elevated numbers across the continent. The reason is twofold: a banner breeding year during 2011 and a milder winter that left favorite habitats such as freshwater ponds, lakes, and rivers unfrozen.



*(Left) American Coot by Vicky Carwile, Virginia, 2012 GBBC; (right) American Coot reported for the GBBC; Map: Google; Map data © MapLink, Tele Atlas--[Terms of Use](#)*

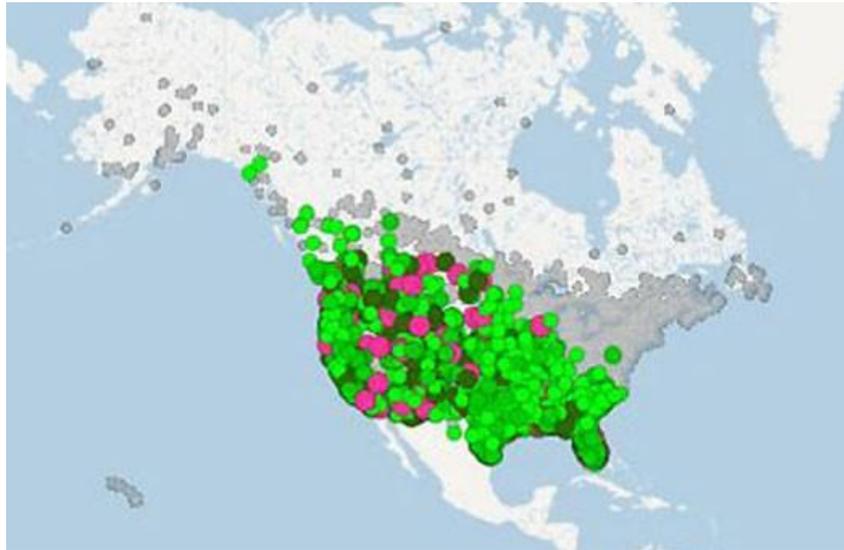
This general pattern of freshwater species overwintering farther north has been obvious in many species this year, including many ducks (e.g., Mallard, Ring-necked Duck, Hooded Merganser etc.), Pied-billed Grebe, Belted Kingfisher and others.

In the Canadian provinces bordering the Great Lakes, reports of waterbirds were way up this year, and not just because of greater numbers of participants. The warmer weather and lack of ice bumped up reports of Tundra Swans from 222 last year to 3,735 this year. There were also huge jumps in the numbers of Canvasbacks, Redheads, and Sandhill Cranes reported from Canada. Try exploring the GBBC maps to look for similar patterns in these species and other freshwater waterfowl.

## Doves & Grackles on the March

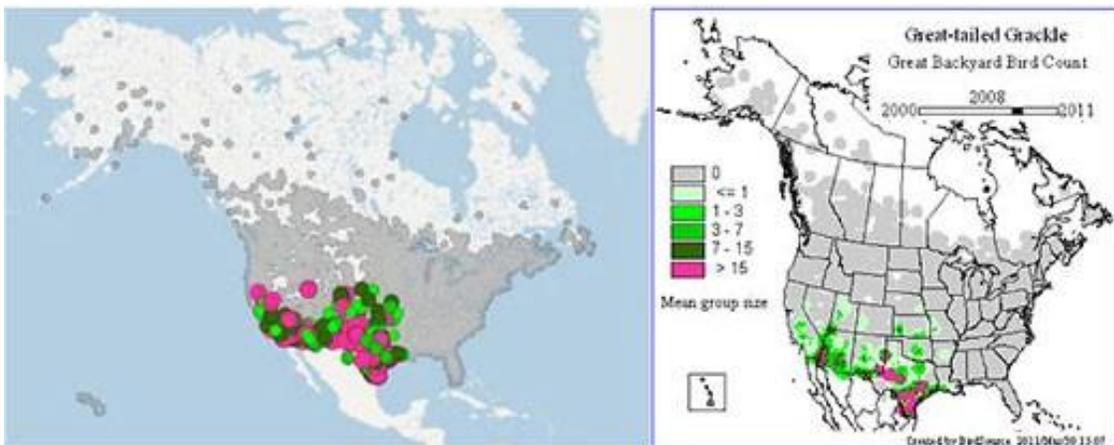
The arrival of the Eurasian Collared-Dove in North America is perhaps the most striking change in North American avifauna in the past two decades. First released in the Bahamas around 1980, they colonized Florida within a few years and spread across the country in a little more than a decade, reaching California by 2001. In the GBBC map room you can watch this progression using our [multi-year animation feature](#). As you watch, notice how the spread of Eurasian Collared-Dove seems to proceed north and west. In 2012, it is obvious that the species has largely colonized the Pacific Northwest, even reaching Alaska, yet it remains strikingly absent

from New England. The number of Eurasian Collared-Doves reported in Canada jumped from 367 last year to 864 this year.



Map: Google; Map data © MapLink, Tele Atlas--[Terms of Use](#)

The Eurasian Collared-Dove is not the only species to expand its range northward. Great-tailed Grackles continue to push northward in the West and on the Great Plains. In the comparison of two GBBC results maps below, look at how the winter range of this species has extended farther north in California and on the southern Great Plains. Another key difference is the increased mean group size throughout the winter range, showing that Great-tailed Grackles are not only expanding in range, but in abundance. In this case, the abundance of food and cattle feed-yards has allowed them to expand northward. Mild winters probably help the species too.



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## Whither the Blue Jay?

Although many people consider Blue Jays to be resident birds present year-round in consistent numbers, this is not the case. Not only are Blue Jays migratory (thousands or tens of thousands can be seen moving along migration concentration points in spring and fall, especially on the Great Lakes), but their numbers also fluctuate substantially from year to year. The cause for these fluctuations is probably tied to cycles in wild food abundance (specifically acorns). These patterns are apparent in the last three years of Great Backyard Bird Count data (2010-12), and this year was a “down” year for Blue Jays across much of the country.

In New England, especially coastal Massachusetts and Rhode Island, Blue Jay numbers were as low as one-third of totals in either of the past two years. They were significantly down in the Mid-Atlantic and across much of the Midwest and Great Lakes states as well, although they were stable in southerly areas that don't get many migrant Blue Jays (e.g., Florida) and some northern regions like Ontario. In western Canada, Alberta, Manitoba, and Saskatchewan each show slightly different patterns, but numbers generally seem consistent over the last three years. In Quebec, Blue Jay numbers in 2012 (2.4 jays/list) were well-above the previous two years (1.5 jays/list); inexplicably, in Arkansas, 2012 was also a peak year relative to the past two years.

## **Early Movers**

Mid-February is usually the time of year when most birds are on their wintering grounds--but not all. Sandhill Cranes and Red-winged Blackbirds are moving north in considerable numbers. This year, one of the most amazing spectacles was the large numbers of Snow Geese on the move, with some of the highest counts ever recorded in New York and Pennsylvania. Perhaps the most impressive counts of all were from Squaw Creek National Wildlife Refuge in northeastern Missouri where two counts together recorded two million Snow Geese!

## **More to Explore**

We invite you to do some data exploring on your own! See what others in your state or province reported and note how your own observations may have changed over time. Go to the GBBC website and click "Explore the Results" to start browsing through the data from all 15 years of the GBBC.

The Great Backyard Bird Count allows us to look at birdlife across the continent over a single weekend. No other effort to count birds gathers as much data in such a short period of time. To understand long-term bird populations and movements also requires data about bird populations throughout the year. That's why the Cornell Lab of Ornithology and Audubon also invited you to report the birds you see anywhere in the world on any day of the year, by participating in the free [eBird](http://www.ebird.org) project. If you enjoyed the Great Backyard Bird Count, please head over to [www.ebird.org](http://www.ebird.org) and enter your next checklists now or anytime!