

Where Are All the Birds?

by Phil Brown, Bird Conservation Director

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Barn Swallow nestlings. photo © Phil Brown

It's 4:38 a.m. in mid-June. I set my timer for three minutes and step out of the car with binoculars and a data sheet, ready to find out who's singing. Thus begins the annual Breeding Bird Survey.

Conservation biologists estimate that North America has lost an astounding 3 billion birds in the past half-century, and that over half of all species are in decline. This toll has left our landscapes a quieter and less-colorful place. But this loss didn't come all at once, and changes like this aren't typically noticeable from year-to-year. Yet, anecdotal evidence suggests that the spring has been a quieter-than-normal one in terms of birds. The colorful songbirds that adorn our backyards and natural areas with song and beauty and serve as natural pest control (among their other ecosystem attributes) seem less bountiful, according to many reports. This spring's reports have captured my attention.

As a bird biologist, I field questions from the general public and scrutinize them through the lens of science, using available data to inform potential answers. Anecdotal observations, though, lack data and are generated randomly, making these harder to question. Fortunately, a method to analyze bird population trends exists – the Breeding Bird Survey.

The Breeding Bird Survey

The Breeding Bird Survey (or BBS) was begun in 1966 by Chandler Robbins, a biologist at the U.S. Geological Survey, to measure bird declines due to the pesticide DDT. The BBS is an annual survey that uses “point counts” to detect birds by sound and sight. In a standardized format, birders drive a 25-mile route, stopping every half-mile to find, identify and tally (mainly by listening) every individual bird during three-minute periods repeated over 50 stops. The route starts before sunrise and typically takes five hours to complete. Expert birders conduct these surveys and pass along their routes typically when age takes a toll on their hearing. For over 50 years, we have relied on data from thousands of volunteer observers and seen considerable changes in bird distribution and abundance.

My BBS route – which traverses back roads between Walpole and Nelson – is among 23 survey routes in New Hampshire alone and 4,100 in North America. I inherited it in 2012 from a local birder and complete it annually in mid-June, choosing days with similar weather conditions and traffic patterns to reduce variability in timing and weather that could skew the data. At each stop, I record the number of total individuals of all species.

Aside from the data generated, the BBS is among my favorite and longest-standing traditions. It has allowed me to see the constants and changes in the bird life and landscape, connecting me better to the region, its bird life and more. I’ve twice encountered black bears along the route, once watched a moose browsing in a nearby field and have witnessed a dozen beautiful sunrises. A year at a time, I’ve watched fields slowly regrow into forests, forests converted to fields, and both all too quickly converted to houses. Rarely does this trend in the reverse direction. New cell towers dot the landscape; overgrown fields turn into lawns, and more lake houses pop up, reducing habitat for all but the handful of birds well-adapted to a heavy human footprint. These are just a few of the many threats to our region’s diverse breeding bird life.

The State of New Hampshire's Birds

According to the “State of New Hampshire’s Birds,” a 2020 NH Audubon publication, about 193 species breed in New Hampshire, with over half likely in the Monadnock Region alone. Many songbirds, including grassland and shrubland-dependent species, have trended downward. Generalists can better cope with anthropogenic changes and the conversion to suburbia. Specialists, though, like flycatchers, swallows and other “aerial insectivores” have suffered, as have the Canada warblers of wetlands, wood thrushes of unfragmented woodlands and the bobolinks of large fields, all species which have lost half their global populations in 50 years.

Despite these alarming declines, I still found plenty of birds on survey day – 78 species, and 599 total individuals. Over the past decade, I’ve seen new arrivals like the Red-bellied Woodpecker and Carolina Wren from the south, accounting for some of the increases. But I’ve seen fewer Eastern Kingbirds, Bobolinks, Scarlet Tanagers, Barn Swallows and American Kestrels.

To do our part, the Harris Center recently installed 25 kestrel nest boxes in large fields across the Monadnock region to help expand the population of this declining species. Thankfully, our conserved landscapes still support many breeding birds, but we must all act accordingly to keep this possible.

Steps You Can Take To Protect Our Bird Communities

There are steps you can take to protect our diverse bird communities:

- Prevent bird-window collisions. Buildings (including residences) are the leading cause of songbird mortality. [Visit NYC Audubon](#) to learn more.
- Keep cats indoors. Cats are the second-leading cause of songbird death.
- Reduce or eliminate the use of chemicals.
- Plant native plants as a source of food and habitat.
- Manage your land in a way that protects native wildlife. If you have a field or a forest, consider leaving it alone during the breeding bird months of May through July. A delayed mow of large fields will promote successful nesting birds like bobolinks. Cut trees and conduct timber operations outside these months. Help conservation organizations protect key parcels of bird habitat from development.
- Become more bird-aware and literate. Join the Harris Center and other groups on [bird-related outings and programs](#).



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