Backyard Birds Open a Window on Science

ACROSS THE CONTINENT, PROJECT FEEDERWATCH CELEBRATES A QUARTER-CENTURY OF FEEDING CURIOSITY

Celebrating 25 Years

If you keep bird feeders, you're keeping an eye on the natural world—and you can use what you see to help extend the reach of science. More than 15,000 people do that each year as part of Project FeederWatch, which begins its 25th year on November 12. The combined data all those FeederWatchers have sent in—on just over 100 million individual birds so far—have made it a resoundingly successful citizen-science project.

The data have helped scientists understand the rhythms of bird irruptions, trace the course of emerging diseases, and get a handle on sudden population changes, like the seemingly unstoppable expansion of the Eurasian Collared-Dove or, more worryingly, the unexplained decline of the magnificent Evening Grosbeak.

Over the years, FeederWatchers have been privy to many memorable sightings, from misguided European finches turning up in North America to the perennial anticipation of the winter's first siskin, redpoll, crossbill, or nuthatch.

FeederWatch takes the memories and highlights at your own feeder and, by combining them with thousands of others, finds extra meaning in them. To date, nearly two dozen peer-reviewed scientific publications have drawn on Project FeederWatch data to explore subjects including seed choice, disease dynamics, predation by cats and hawks, and the emerging effects of climate change.

If you're already a FeederWatcher, thank you for helping us understand winter birds better. To the millions of others who keep feeders, we extend a warm invitation to join the project and take part in what has become an annual pleasure for many participants.

Learn more: www.feederwatch.org

▲ Dark-eyed Junco (slate-colored form)

▲ Dark-eyed Junco (Oregon form)

Presenting the All-Time #1 Feeder Bird

At feeders all over the continent, one bird towers above all others, at least in terms of occurrence. The Dark-eyed Junco visits more than 80 percent of all FeederWatchers in any given year. In any of its forms (the "slate-colored" and "Oregon" are the most widespread), this plucky little snowbird is the perennial feeder champion.

What's in the FeederWatch Kit?

Project FeederWatch is a winter-long survey, and anyone can do it: children, families, teachers and students, retirees, coworkers on lunch breaks, nature centers, and more. Participants count birds at their feeders from November to early April on two consecutive days as often as once a week, then send us their data. Join up and we'll send you a kit with everything you need:

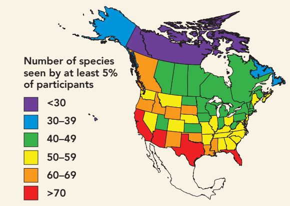
- **Handbook and instructions** with tips for attracting birds to your yard.
- **FeederWatch calendar** for planning count days, illustrated with participants' photos.
- **"Common Feeder Birds"** poster with more than 30 illustrations by field-guide artist Larry McQueen, including many of those on this page.
- **Access to the FeederWatch forums**, where participants share, discuss, and exchange help.

A small annual fee, about the price of half a bag of sunflower seed, provides essential support for staff time, website maintenance, data analysis, and materials.

▲ White-breasted Nuthatch

How Many Birds Could You See?

The more you look at your feeders, the more species you'll see. Though northern winters are quiet, several dozen species are still the norm at many feeders. Farther south, winter can mean peak birding—Arizona reports 85 species on its FeederWatch list.* No matter where you are, we need your data to help fill in trends in occurrence and distribution. In particular, the states of Nevada and Hawaii need more participants.



*Figures reflect the total number of species reported by at least 5 percent of FeederWatchers in each state or province.

All illustrations by Larry McQueen except: Eurasian Collared-Dove by Evaristo Hernandez-Fernandez; Sharp-shinned and Cooper's hawks by Evan Barbour

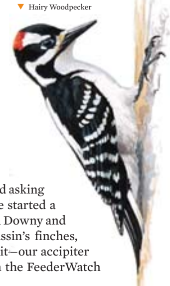
▶ Left to right: American Tree Sparrow, White-crowned Sparrow, White-throated Sparrow

▲ Top to bottom: Chestnut-backed Chickadee, Carolina Chickadee, Black-capped Chickadee, Mountain Chickadee

Variations on a Theme

If you've got a feeder, you've probably got a chickadee. But which one? Feeder birds are a celebration of diversity and unity, joining a continent in shades of jays, bluebirds, towhees, and chickadees.

▼ Downy Woodpecker



▼ Hairy Woodpecker

Getting Help with Similar Species

Soon after FeederWatch began, people started asking us for help with tough identifications. So we started a Tricky Bird IDs webpage to help people with Downy and Hairy woodpeckers, House, Purple, and Cassin's finches, and other easily confused species. It was a hit—our accipiter page alone is the third-most-visited page on the FeederWatch site, with more than 60,000 views per year.

▶ Sharp-shinned Hawk (not to scale)

◀ Cooper's Hawk (not to scale)

Seed Preference Tests

In **1993** a study finally put hard numbers to the question of what kinds of seed birds like. FeederWatchers sent data from 5,000 locations, helping our researchers discover that whereas black oil sunflower seed is beloved among tree-living birds such as chickadees and finches, ground-foragers such as Mourning Doves and many sparrows are more fond of millet. Even red milo has its place, edging out sunflower and millet in the choices of Gambel's Quail, Curve-billed Thrasher, and Steller's Jay.

Predation at Your Feeders

A **1994** study found that predators probably do not kill any more birds at feeders than elsewhere. The most common predators at feeders were Sharp-shinned and Cooper's hawks, closely followed by domestic cats. Window strikes outpaced deaths from predation, highlighting the importance of good feeder placement.

Top Movers

In the last 25 years, a few birds have dramatically expanded their ranges. Red-bellied Woodpeckers and Carolina Wrens have pushed northward and now regularly spend winters in New England, possibly because of changing climate or the growing popularity of birdfeeding.

◀ Steller's Jay

◀ Blue Jay

◀ Red-bellied Woodpecker

▲ Carolina Wren

The Dove No One Saw Coming

One of the most common birds at feeders today—the Eurasian Collared-Dove—wasn't even in your field guide when FeederWatch started. In the early 90s it was a curiosity mostly restricted to south Florida. Since then it has rocketed across the continent, appearing everywhere except the Northeast. Last year, a FeederWatcher even recorded one in Alaska.

◀ Eurasian Collared-Dove

▼ Red-breasted Nuthatch

Busting the Top Five Myths About FeederWatch

1. **Ho-hum days *are* important data.** "Predictable" counts are at the heart of FeederWatch data—it's exciting to report a rare bird, but counting common birds—or even no birds—is every bit as important.
2. **Robins *aren't* just birds of spring.** We think of robins as a sign of spring, but many gather into large, nomadic flocks in winter, even far in the north. You could see them at any time.
3. **Feeding birds *won't* delay their migration.** The main trigger for a bird's migratory urge is day length. When it's time to go, your feeders won't keep birds from leaving—but they might give them the energy to go.
4. **Birds *don't* get addicted to feeders.** Birds may visit your feeder every day, but they actually get most of their food from natural sources.
5. **You *are* allowed to take your eyes off your feeder.** Lots of people travel for the holidays. If you'll be gone for part of the winter, you can still collect valuable data during the time that you're home.

You'll Likely See More Than You Expect

A host of common birds come to feeders (see map, above, for the number of species that visit feeders in your area). Each year FeederWatchers find the unexpected too, from escaped parrots to national rarities.

▼ House Finch

▼ Eastern Towhee

▼ American Goldfinch (transitional)

▲ Northern Flicker

▶ American Robin

▼ Varied Thrush

▲ Pine Siskin

Understanding Irruptions

Part of feeding birds is guessing what will show up each year. Irruptions—large-scale movements that don't happen every year—are hard to pin down. Are high counts part of a major invasion—or do you just happen to have the best seed on your block? FeederWatch data are great for delineating such patterns. Studies published in **1996** and **1999** clarified irruption cycles in Varied Thrushes and winter finches.

Monitoring Disease

FeederWatchers have been indispensable at discovering and tracking bird diseases. In **1994** they discovered House Finch eye disease, which cut the eastern North American population of House Finches in half as it spread across the continent. FeederWatchers helped track West Nile virus as it spread, too, and in **2002** their data helped estimate the disease's heavy toll on crows and jays. Since then, FeederWatchers have been equally crucial in recording population recoveries.

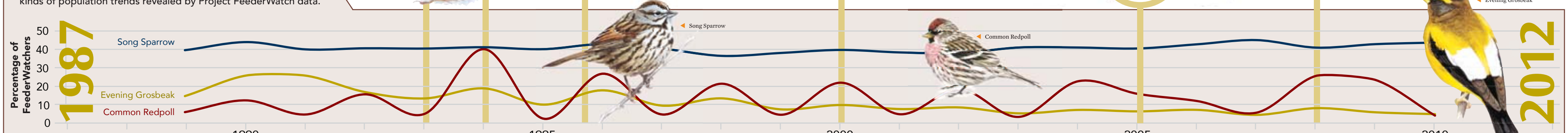
PFW checklist No. 1,000,000 received

Evening Grosbeak Declines

Birds move over vast areas, making population changes impossible to detect from isolated counts. Widespread, long-term records like those of Project FeederWatch are essential for distinguishing normal population fluctuations from true declines. FeederWatchers' data have helped researchers document this spectacular bird's decline—a 50 percent drop in the number of locations hosting this species over 20 years—giving us a handle on the problem.

Timelines: A Quarter-Century of Perspective

There's only one way to discover a long-term trend, and that's to collect data for a long time. Below, three species illustrate three kinds of population trends revealed by Project FeederWatch data.



Lines show the percentage of FeederWatchers reporting each species, a measure of continentwide abundance.

BLUE: Some birds, such as the Song Sparrow, have stable populations and are regularly seen.

RED: Common Redpolls, like many seed-eating finches, are irruptive species—every couple of years they range widely in response to changes in food supplies. FeederWatchers help map these irruptions across the continent.

YELLOW: In the 1990s, Evening Grosbeaks showed an irruptive pattern similar to Common Redpolls, but by the 2000s overall counts were much lower, with less year-to-year fluctuation.