Backyard Birds Open a Window on Science

Across the continent, Project FeederWatch celebrates a quarter-century of feeding curiosity.

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 5,000 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 highlights at your own feeder and, by combining them with thousands of others, finds extra meaning in them. To date, they’ve shared more than 6.5 million bird observations from 5,000 locations, helping our researchers discover that where’s black-on-sunflower seed is beloved among tree-living birds such as chickadees and finches, ground-feeders such as Mourning Doves and many sparrows are more fond of millet. Even red milo has its place, along with sunflower oil and millet in the choices of Gambel’s Quail, Curve-billed Thrasher, and Steller’s Jay.

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 90 percent of all FeederWatchers in any given year. In any of its forms—the “dusky-colored” and “Oregon” are the most widespread, this plucky little junco is the perennial feeder champ.

What’s in the FeederWatch Kit?

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

• Handbook and instructions with tips for attracting birds to your yard.
• FeederWatch Planner for planning count days, illustrated with participants’ photos.
• “Common Feeder Bird” 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.

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 distant species are still the norm at many feeders. Further 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 the tales of occurrence and distribution. In particular, the states of Nevada and Hawaii need many participants.

How to Get Started

Get a kit with everything you need from your local Audubon Nature Center or bird store.

Learn more: www.feederwatch.org

Containing the Most Feeder Birds

White-breasted Nuthatch

Eurasian Collared-Dove

Red-breasted Nuthatch

Dark-eyed Junco (Oregon form)

Timelines: A Quarter-Century of Perspective

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

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 migration—or do you just happen to have the best seed on your block? FeederWatch data are helping to address such questions. Studies published in 1994 and 1999 clarified irruption cycles in Varied Thrushes and winter finches.

Playing 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 surpassed deaths from predation, highlighting the importance of good feeder placement.

Predation at Your Feeders

Eurasian Collared-Dove

Eurasian Collared-Dove

Empty Nesters

Species that nest at feeders:

Red-winged Blackbird

Dark-eyed Junco

Western Bluebird

Cedar Waxwing

Predation by cats and hawks, and the emerging effects of climate change.

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 maccath.

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.

Getting Help with Similar Species

Some of the first fruits of Project FeederWatch began people interested in solving these kinds of population trends revealed by Project FeederWatch data.

Seed Preference Tests

In 1994 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-feeders such as Mourning Doves and many sparrows are more fond of millet. Even red milo has its place, along with sunflower oil and millet in the choices of Gambel’s Quail, Curve-billed Thrasher, and Steller’s Jay.

Top Movers

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

Building the Top Five Myths About FeederWatch

1. Ho-hum days are important. “Busting the Top Five Myths About FeederWatch” (BPFW) revealed that “a round 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.

2. Robins aren’t just birds of spring. BPFW revealed that robins are a celebration of diversity and unity, allowing “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.

3. You won’t 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 surpassed deaths from predation, highlighting the importance of good feeder placement.

4. The main trigger for a bird’s migratory urge is 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 deadly toll on crows and jays. Since then, FeederWatchers have been equally crucial in recording population recoveries.

Predation at Your Feeders

Understanding Irruptions

Presenting the All-Time #1 Feeder Bird

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 began. These beautiful doves appear from Florida to northern New York and across the continent, appearing everywhere except the Northeast. Last year, a FeederWatcher even recorded one in Alaska.

Getting Help with Similar Species

Some of the first fruits of Project FeederWatch began people interested in solving these kinds of population trends revealed by Project FeederWatch data.

Variations on a Theme

If you’re a feeder, you’re probably got a chickadee. But which one? Feeder birds are a collection of diversity and mystery, joining a continent in shades of jays, bluebirds, towhees, and chickadees.

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 began. These beautiful doves appear from Florida to northern New York and across the continent, appearing everywhere except the Northeast. Last year, a FeederWatcher even recorded one in Alaska.

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 occupied nests to natural rarities.

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 deadly toll on crows and jays. Since then, FeederWatchers have been equally crucial in recording population recoveries.

Busting the Top Five Myths About FeederWatch

1. Ho-hum days are important. “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. “Busting the Top Five Myths About FeederWatch” (BPFW) revealed that robins are a celebration of diversity and unity, allowing “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.

3. You won’t 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 surpassed deaths from predation, highlighting the importance of good feeder placement.

4. The main trigger for a bird’s migratory urge is 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 deadly toll on crows and jays. Since then, FeederWatchers have been equally crucial in recording population recoveries.

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 the spectacular bird decline—a 50 percent drop in the number of locations hosting this species over 20 years—giving us a handle on the problem.

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 the spectacular bird decline—a 50 percent drop in the number of locations hosting this species over 20 years—giving us a handle on the problem.

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 the spectacular bird decline—a 50 percent drop in the number of locations hosting this species over 20 years—giving us a handle on the problem.

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 the spectacular bird decline—a 50 percent drop in the number of locations hosting this species over 20 years—giving us a handle on the problem.