FOCUS ON CITIZEN SCIENCE • VOLUME 18

Winter Bird Highlights

FROM PROJECT FEEDERWATCH 2021–22

The Cornell Lab of Ornithology

BIRDS CANADA
OISEAUX CANADA

New Project Assistants

Last fall Project FeederWatch added two new assistants at the Cornell Lab: Heidi Faulkner and Lisa Galford. Heidi grew up watching birds on her family's bird feeders at home, and her love of birds inspired her to pursue a career in science and ornithology. She is eager to help people engage in citizen science and learn more about birds. Lisa has also been interested in birds for many years, but her field of study has been botany and botanical collections. Taxonomy and binomial nomenclature (taxonomical names) for animals and plants are two of her favorite areas of research. She attended Cornell as an undergraduate and worked with FeederWatch as a student. After living and working in several regions of the country, she is excited to return to the Cornell Lab and Project FeederWatch

New FeederWatch assistants Heidi Faulkner (left) and Lisa Galford (right).

Heidi and Lisa join Anne Marie Johnson who assists with Project FeederWatch part-time. Holly Grant, who used to split her time between FeederWatch and NestWatch has shifted to NestWatch full-time. We were sad to see Holly go but happy that she is still nearby, and we are delighted to have Heidi and Lisa on the FeederWatch team!

Cover: Acorn Woodpecker by Joan Tisdale.
Below: White-breasted Nuthatch by Dan Garber.

Focus on Citizen Science is a publication highlighting contributions of citizen scientists. This issue, *Winter Bird Highlights 2022,* is brought to you by Project FeederWatch, a research and education project of the Cornell Lab of Ornithology and Birds Canada. Project FeederWatch is made possible by the efforts and support of thousands of citizen scientists. Thank you!

Project FeederWatch Staff

Cornell Lab of Ornithology

Emma Greig
Project Leader and Editor

Anne Marie Johnson
Project Assistant

Heidi Faulkner
Project Assistant

Lisa Galford
Project Assistant

David Bonter and **Mya Thompson**
Directors, Center for Engagement in Science and Nature

Wesley Hochachka
Senior Research Associate

Birds Canada

Kerrie Wilcox
Project Leader

Rosie Kirton
Project Support

Kristine Dobney
Project Assistant

Lynn Batty
Project Assistant

Jody Allair
Director of Citizen Science

Danielle Ethier
Bird Population Scientist

Join Project FeederWatch!

Anyone in the U.S. and Canada with an interest in birds is welcome to join. Help monitor winter bird populations while you learn about the birds in your neighborhood. To join, contact the FeederWatch office in your country.

United States

Cornell Lab of Ornithology
159 Sapsucker Woods Road
Ithaca, NY 14850
feederwatch@cornell.edu

Canada

Birds Canada
P.O. Box 160
Port Rowan, ON N0E 1M0
pfw@birdscanada.org

Planting for Birds

American Beautyberry

BY LISA GALFORD, CORNELL LAB OF ORNITHOLOGY

Sujata Roy

American Robin on American Beautyberry.

When most people think about feeding birds, they imagine bird feeders that hold various types of seeds, nuts, fruits, and suet. However, there are other ways you can feed birds and attract them to your site. Although most FeederWatchers use at least one traditional bird feeder in their count site, you do not need to have a feeder to participate in FeederWatch. One of the best ways to attract birds is with plants that yield berries, seeds, or other types of food that last into the winter. A diverse offering of plants, especially native plants, also attracts insects that birds eat and that can serve as important pollinators. Additionally, plants provide birds with critical nesting habitat while creating shelter from inclement weather and predators.

An outstanding example of a bird-friendly plant is *Callicarpa americana* L. or American beautyberry. This species is native to the southeastern United States from Oklahoma at the west end of its range all the way east to Maryland. The plant will grow in cultivation outside of its native range as far north as southern New England, Nova Scotia, and the Great Lakes in the Northeast to Kansas in the Midwest and along the West Coast as far north as British Columbia (USDA Plant Hardiness Zone 6 to 10). Beautyberry is a woody perennial shrub that grows fast and tolerates heavy pruning. It grows best in full sun to part shade and typically needs a low amount of water, although ideally, the soil should remain moist.

C. americana produces spectacular masses of blue, pink, purple, or white flowers in summer that attract and feed pollinators like butterflies and native bees. In fall the plant's namesake clusters of bright pinkish-purple fruit appear, lasting into early winter.

More than 40 species of birds will feed on American beautyberry fruit including quails, robins, cardinals, catbirds, finches, mockingbirds, thrashers, and towhees. The fruit is also consumed by mammals such as raccoon, foxes, squirrels, and even armadillo. American beautyberry is easy to maintain, looks exceptional almost year-round, and provides sustenance to insects, birds, and mammals, making it a great choice for any FeederWatch count site.

New Site List With Nearby Reports

BY ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

In May 2021, we surveyed FeederWatchers asking for their favorite option among three new ideas for viewing submitted counts: a list of nearby counts, which 40% of respondents favored; a list of species reported at their own site over time, which 30% favored; or a visualization of bird trends at their own site, which 27% favored. Thanks to that feedback, last year we created a Site List feature that shows your counts and how they compare to counts from nearby FeederWatch sites.

For each species you have reported at your site, you can see the percentage of counts in the current season that include that species, the percentage of all your counts that include that species, and the percentage of counts at sites within a 50 km (about 31 mi) radius that include that species (see image, right). The top portion of the list shows species reported at this site in the current season followed by species only reported at this site in past seasons. At the bottom of the page, you can see up to five species you have never reported at this site but that nearby participants have reported in the current season, so that you can watch for these potential new species.

To access the Site List on the FeederWatch website, click on the Site List Interactive button below the four primary buttons on the Your Data home page. To access the Site List in the mobile app, tap the Site List icon below the Start New Count button. Learn more about the Site List on the FeederWatch blog at feederwatch.org/blog/new-site-list-feature/.

Species Last seen date	My counts 2019-20	My counts All time	Nearby counts 133 sites
Chipping Sparrow Apr 18, 2020	4%	<1%	3%
Brown Creeper Nov 23, 2019	4%	3%	1%
American Crow Feb 1, 2020	4%	5%	28%
Accipiter sp. Dec 21, 2019	4%	2%	<1%

Site List in FeederWatch mobile app.

FeederWatch Data Shed Light on Impact of Social and Competitive Behavior

BY ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

During the 2016–17 season, FeederWatch began inviting project participants to report behavioral interactions between birds that they observed during their counts. The data set of submitted observations has grown to include more than 230,000 interactions. One of the interactions participants report is displacement: when one bird tries to take over a resource (food or perch) that is occupied by another bird.

Ruth Harteneck

House Finch and White-crowned Sparrow fighting for a spot on Ruth Harteneck's feeder last December in Oakland, California.

Recently, researchers Ilias Berberi and Roslyn Dakin of Carleton University and Eliot Miller, who launched the behavior interactions component of FeederWatch and is currently collections development manager at the Cornell Lab, used the displacement data to examine how a bird's sociability impacts its competitive ability. The researchers found that more social species—birds that tend to visit bird feeders in groups in winter, based on flock sizes reported by FeederWatch participants—are less likely to succeed in displacement interactions with other similarly sized birds. So being social might come with the tradeoff of being more mild-mannered for your size, compared to other species. However, the researchers also found that birds from more social species are more likely to succeed in displacing other birds when members of their own species are nearby—what the researchers called "the conspecific effect." In other words, individuals from more social species have less displacement success when alone but more success when in a group. The researchers theorize that birds that have evolved to be more social have also evolved to be less aggressive. Additionally, the researchers theorize that competitors from other species respond to competition from individuals in a group differently than they respond to competition from individuals at a feeder alone. Perhaps having lots of allies wearing their team colors helps bolster an individual's clout when fighting over a sunflower seed.

Berberi, I.; Miller, E. T.; and Dakin, R. (2022). The effect of sociality on competitive interactions among birds. *bioRxiv*, doi.org/10.1101/2022.05.09.491173.

Blue Jay by Harry Foster

Your Legacy for Birds

Contributing data to Project FeederWatch is an important way to leave a lasting legacy. A pledge of financial support through a gift in your estate plans is a way to help ensure that FeederWatch thrives into the future.

To learn more about planned giving, in the U.S. please visit birds.cornell.giftplans.org, and in Canada please visit birdscanada.org/legacy. Or donate to FeederWatch by visiting feederwatch.org and clicking on the "Donate" button on the home page. Thank you!

A Look at Species Displacment Last Season

Using FeederWatch Data to Create a Dominance Hierarchy

BY LAURA VANDER MEIDEN, CORNELL LAB OF ORNITHOLOGY

Project FeederWatch's species interactions database is continuing to grow with more than 25,000 new observations of dominance behavior this past season. Nearly 2,000 participants submitted observations of displacement behavior—letting us know which species displaced which other species at feeders.

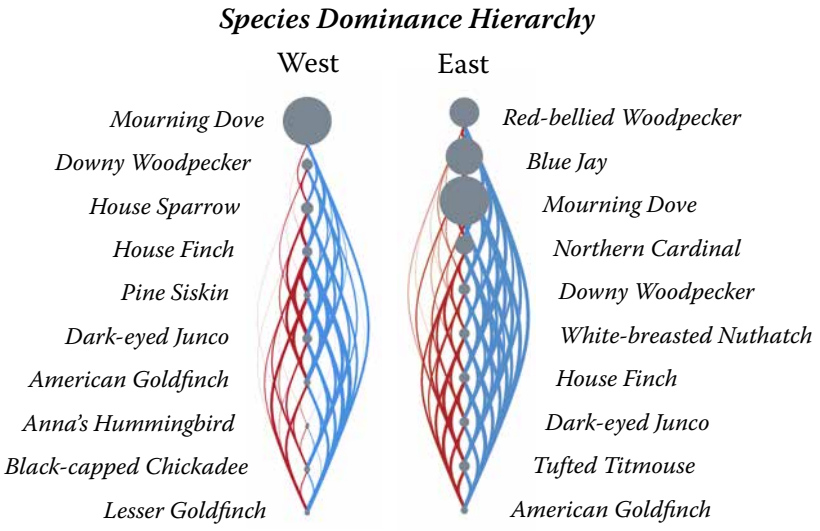
We can use these observations to determine a species dominance hierarchy—basically a list of which species is likely to outcompete which other species—for all the species seen interacting at feeders. We do so by tallying up the number of times a species was the aggressor versus the recipient of aggression in interactions between two species and calculating which species comes out on top. However, we don't have interaction observations of every possible species matchup. Instead, we used a ranking system that allows us to take the wins and losses of the interactions that were observed and extrapolate them across the entire set of participant bird species—much like ranking systems used to rank chess players or sports teams in a league.

But just what does it mean to be dominant? A study by researchers at the University of Exeter showed that more dominant bird species stayed longer on feeders than less dominant species. They also spent a higher percentage of their time at feeders with higher "value" seed—in this case shelled sunflower seeds as opposed to harder-to-eat sunflower seeds still in shells—than less dominant species. Perhaps less dominant species were attempting to avoid higher rates of competition at the better feeders.

In the figure, you can see some preliminary dominance hierarchies for common feeder birds in the United States and Canada, split between the West and East. Birds at the top of the list are the most dominant, birds at the bottom are the least, with the size of the circles showing the relative body mass of each species. Typically, the bigger a bird is, the higher it is in the hierarchy; typically, the larger species is more likely to be dominant over a smaller species.

However, there are important exceptions! According to analyses done on the entire FeederWatch dataset, some groups of species, such as warblers and orioles, tend to be more dominant than predicted by their body size. Others, like buntings, grosbeaks, and doves, are less dominant than expected. As you can see in the figure, Mourning Doves are less dominant at feeders than Red-bellied Woodpeckers and Blue Jays despite weighing more. Anna's Hummingbirds, on the other hand, are more dominant than several larger species. Factors such as territoriality, within-species sociality, and foraging behavior may provide additional clues to why some species are more dominant than others.

Thank you to all the FeederWatch participants who provided interaction data for us again last season, making this kind of research possible!



Dominance patterns of the top 10 species reported by FeederWatchers in the West and the East. More dominant individuals are at the top and less dominant individuals are at the bottom. The size of the circles represents the relative body size of each species. The width of the blue lines connecting species represents the number of times the dominant species "won" against a less dominant species in an interaction. The red lines on the left represent the number of times the less dominant species "won" against the more dominant species.

Francis, M.L., Plummer, K.E., Lythgoe, B.A., Macallan, C., Currie, T.E. and Blount, J.D., 2018. Effects of supplementary feeding on interspecific dominance hierarchies in garden birds. *PLOS ONE*, 13(9), p.e0202152.

Northern Flickers in Canada

BY KERRIE WILCOX, BIRDS CANADA

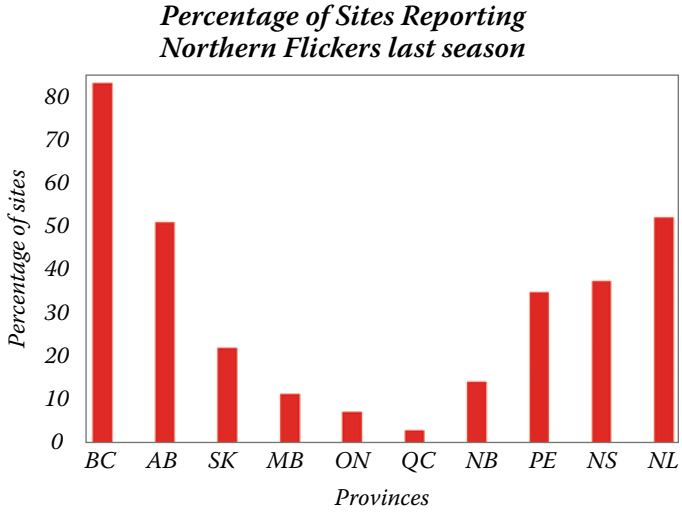
When you think of woodpeckers, you probably imagine a bird clinging to the side of a tree, pounding for insects. You may even forget that Northern Flickers are woodpeckers because instead of pecking wood, they spend most of their time on the ground foraging for ants.

Katherine Corkery

Red-shafted race of Northern Flicker in Red Meadows, Alberta.

Nearly all Northern Flickers in Canada migrate on a regular basis, unlike many other woodpecker species that are either resident or engage in occasional irregular movements. Most flickers that breed in northeastern Canada migrate in late September through early October into the southeastern United States, and most flicker populations in western Canada move south to overwinter west of the Rocky Mountains. Northern Flickers are also one of the first birds to return in May.

Interestingly, while the Northern Flicker's winter range includes all of southern Canada, there are many more FeederWatch reports of flickers in coastal regions and in Alberta than in interior provinces. In fact, Northern Flickers were reported at 86% of FeederWatch sites in British Columbia this past winter, and 57% of sites in Alberta. Likewise on the East Coast of Canada, Northern Flickers were reported at more than 53% of sites in Newfoundland and more than 30% of sites in Prince Edward Island and Nova Scotia. Data from the last three weeks of April were excluded so that only resident winter birds were counted.



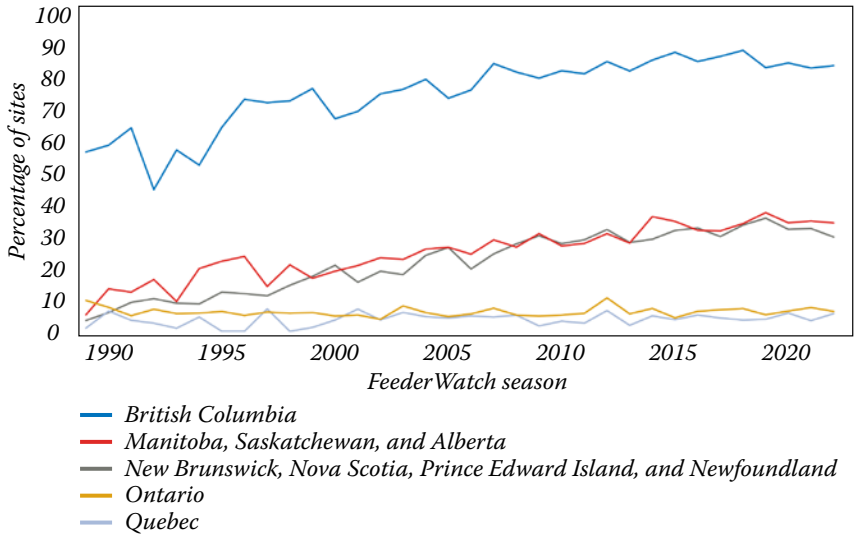
Last season more Northern Flickers were reported at FeederWatch sites in Alberta (AB) and coastal Canadian provinces of British Columbia (BC), Newfoundland (NL), Nova Scotia (NS), and Prince Edward Island (PE) than in the interior provinces of Saskatchewan (SK), Manitoba (MB), Ontario (ON), Quebec (QC), and New Brunswick (NB).

It appears that climate change might be playing a role in the winter distribution of Northern Flickers. More flickers were reported in British Columbia in winter than in any other province. According to Karen Wiebe (Northern Flicker researcher, University of Saskatchewan), British Columbia tends to be milder than other parts of Canada and has less snow depth—making the flicker's favorite food (ants) more accessible. These ground foraging specialists likely migrate because they have difficulty living in places with deep and persistent snow. On the East Coast, high numbers of Northern Flickers were reported in Newfoundland, with more than 50% of sites visited, and in Nova Scotia and Prince Edward Island, both with flickers visiting more than 30% of sites. The coastal climate in these provinces may be playing a role.

More than 50% of the FeederWatch sites in Alberta also reported Northern Flickers. The high number in Alberta appears to be an outlier as the province has very cold winter temperatures and deep snow. Continued reports of Northern Flickers visiting sites in Alberta will help us understand these high numbers.

It appears from photos I receive from FeederWatchers that Northern Flickers aren't just visiting FeederWatch sites—they're eating from feeders. Perhaps the wintering populations discovered feeders during extreme winter weather events and have become accustomed to this new and reliable food source.

Percentage of sites reporting Northern Flickers by season



Northern Flicker reports have remained steady at FeederWatch sites in Ontario and Quebec but have gradually increased throughout the rest of Canada.

Bob Leonhardt

An intergrade Northern Flicker with orange feather shafts that visited Bob Leonhardt's feeders in Calgary, Alberta, in the hybrid zone. Bob wrote, "We have been getting at least six different flickers on a regular basis. Most of them have very distinctive markings, which allows us to identify them individually."

Yellow-shafted Versus Red-shafted

There are two, easy-to-distinguish subspecies of Northern Flickers: Yellow-shafted and Red-shafted. The Red-shafted race occurs on the West Coast and is separated from the Yellow-shafted race by the Rocky Mountains in Canada—a hybrid zone occurs in the Great Plains. (See "Hybridization in the Great Plains" on page 5 of the **2017 *Winter Bird Highlights***). The most noticeable difference in their appearance is the color of the flight-feather shafts (the long, slender central part of the feather), which are either a lemon yellow or a rosy red. Yellow-shafted forms have tan faces, gray crowns, and a red crescent on the nape; males have a black mustache stripe. Red-shafted forms have a gray face, brown crown, and no crescent on the nape, with males showing a red mustache stripe. FeederWatchers in the hybrid zone may see some unique looking individuals. Hybrid flickers usually have a red patch on the back of their heads, a reddish moustache, a bi-coloured moustache, orange feather shafts, or some combination of field marks that doesn't fit either Yellow-shafted or Red-shafted form.

Population Status

While Northern Flickers remain common and widespread in Canada, their numbers are declining. Breeding Bird Survey data indicate that the population in Canada diminished by an estimated 33% between 1970 and 2017. Possible reasons for the decline include competition from European Starlings for nest cavities, declining availability of nest cavities, and pesticides on golf courses, suburban lawns, and agricultural fields. Despite the declines, FeederWatch data show an increasing number of FeederWatch sites being visited by flickers, particularly in British Columbia.

Feeding Flickers

Northern Flickers mainly eat ants and other insects that they gather from the ground. Their tongues are very long, extending about 5 cm (2 in) beyond the length of their bill, and have extra sticky saliva for picking up ants! In winter, Northern Flicker diets also include fruits and seeds. At feeders Northern Flickers prefer suet and fats, nuts, seeds, plain or sugar water, and bits of fruit.

Cheryl Fagner

Yellow-shafted race of Northern Flicker in Paradise, Newfoundland.

Regional Roundup

Trends and Highlights from the 2021–22 FeederWatch Season

BY EMMA GREIG, CORNELL LAB OF ORNITHOLOGY

Another year of FeederWatch is in the books! Thank you to everyone who contributed your support and time to the program—you made it a great year. You counted 9,781,195 birds on 234,205 checklists—that's a lot of counting! You reported birds from 16,267 different counting locations, giving us a fantastic view of how birds were doing across the United States and Canada.

Last season, 114 of you counted from locations without bird feeders. You may ask yourself, "What?! No bird feeders? But it's called FeederWatch!" However, we encourage people without feeders to participate because counts of birds in yards and gardens without bird feeders are important too. In fact, if enough people count without bird feeders, we will be able to answer some very important questions about the impacts of feeding birds on bird abundance and distribution. So tell your non-feeding friends to consider FeederWatching, and if you decide to take down your own feeders, don't let that stop you from participating in FeederWatch. Just make sure to fill in the site description form and indicate that you don't have feeders for all or part of the season.

We have one more big update: as of November 2022, the FeederWatch season will begin on November 1. No more second Saturday start date—it's now easy to remember when to start your counts. We hope you all enjoy this extra time to count your winter birds.

Now, let's dive into the data from last season and see how our feathered friends were doing. As in previous Roundups, the Trend column of the Top-25 tables shows how a species was doing in the most recent FeederWatch season compared to the average across previous seasons. One arrow (up or down) indicates an increase or decrease in percentage of sites visited by 5–10%, and two arrows indicates an increase or decrease by more than 10%. You can use these arrows to get an idea of how different the counts were last season compared to what is typical for that species.

Thank you for sharing your observations with FeederWatch and building this amazing dataset, it wouldn't be possible without all your counts!

2021–22 FeederWatch season statistics

30,495 PARTICIPANTS
234,205 CHECKLISTS
9,781,195 BIRDS

HAWAII TOP-10 LIST: 3 SITES

Rank	Species	*Average flock size*	*Percent of sites*
1	Zebra Dove	8	100
2	House Sparrow	3	100
3	Java Sparrow	12	67
4	Spotted Dove	6	67
5	Red-whiskered Bulbul	3	67
6	Common Myna	2	67
7	Red-vented Bulbul	2	67
8	House Finch	2	67
9	Northern Cardinal	1	67
10	Red-crested Cardinal	1	67

Thank you to the three participants that counted from two islands last season: Oahu and Maui. As is always the case with Hawaiian counts, introduced granivorous species were the most common at feeders. Doves and Common Mynas were the top species reported, in addition to sparrows, cardinals and bulbuls. One interesting species seen last season was the Red-billed Leiothrix, also known as the Pekin Robin, which is native to southern China and the Himalayas. It is a gorgeous bird that is sometimes kept as a caged pet, and it feeds on fruit and insects.

The Red-billed Leiothrix is a type of babbler introduced to all the islands of Hawaii. The species isn't found anywhere else in the United States or Canada.

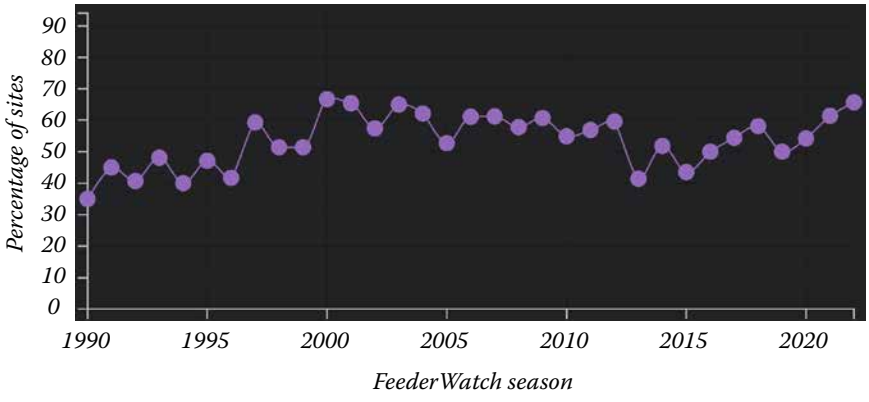
©Kathryn Hart/Macaulay Library at the Cornell Lab of Ornithology (ML438561841)

Far North Region

TOP-25 LIST: 65 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Black-capped Chickadee	4	89	
2	Common Redpoll	10	77	
3	Red-breasted Nuthatch	2	74	
4	Downy Woodpecker	1	65	
5	Black-billed Magpie	2	60	
6	Hairy Woodpecker	1	58	
7	Boreal Chickadee	2	54	
8	Common Raven	2	54	
9	Pine Grosbeak	7	52	
10	Canada Jay	2	43	
11	Dark-eyed Junco	4	40	
12	Steller's Jay	2	31	
13	Northern Shrike	1	22	
14	Pine Siskin	9	17	
15	Red Crossbill	6	17	
16	Chestnut-backed Chickadee	3	17	
17	Hoary Redpoll	3	17	
18	Bald Eagle	1	14	
19	Song Sparrow	1	14	
20	Bohemian Waxwing	29	12	
21	American Crow	11	12	
22	Sharp-shinned Hawk	1	12	
23	American Robin	10	11	
24	European Starling	5	11	
25	Ruffed Grouse	3	9	

Percentage of Sites Reporting Downy Woodpecker



Downy Woodpeckers are fairly consistent in their feeder visitation in the Far North, though they are a bit on the upswing lately.

This past season we received reports from 65 participants in the Far North region. We were surprised to see that Common Redpolls were still reported at a high proportion of feeders because they were also very abundant the year before. In the past, finch irruptions used to be more regular—one year high and the next year low—but in more recent years their boom-and-bust cycles have been more sporadic. Finch irruptions track food abundance, which in turn tracks climate patterns, so these more irregular finch population trends may be linked to increasingly irregular climate fluctuations.

Following suit with the redpolls, Red-breasted Nuthatches and Downy Woodpeckers also showed an increase in the Far North last season. These species love feasting on insects in the warmer months and tree nuts (e.g. conifer seeds and acorns) in cooler months, and of course, they love the seeds and suet that you offer around your homes.

One species that is creeping northward, but that is not on the Far North Top-25 list, is the Anna's Hummingbird. You may be shocked to learn that hummingbirds ever show up in the Far North, let alone in winter months, but Anna's Hummingbirds are an exceptional species among hummers because many individuals stay in cold locations through the winter. Twenty years ago there were no FeederWatch reports of Anna's Hummingbirds in the Far North region, but now most years a few are reported.

Robert Hechler

Anna's Hummingbirds, especially males, can sometimes be found as far north as Alaska. This one posed for a shot in British Columbia, just south of the Far North region.

Northeast Region

The Northeast always has the highest number of participants among our FeederWatch regions, with 9,293 people sending in counts last season. Thank you all! One species that is showing some consistent changes is the Chipping Sparrow, which is slowly becoming more abundant in the Northeast in winter. Chipping Sparrows are a more warm-adapted species than many common feeder birds in the Northeast, so they may be tracking climate change and becoming more abundant as temperatures warm.

Another sparrow in the Northeast is the Song Sparrow, which shows a flatter population trend than the Chipping Sparrow. Song Sparrows are among the most frequently observed sparrows in FeederWatch. Perhaps because they are so widespread, there are many subspecies of Song Sparrows; currently 24 subspecies are recognized in North America! Song Sparrows are an interesting example of something called "Gloger's Rule," which states that animals should have darker pigments in more humid environments. It holds up in Song Sparrows, with subspecies in the Pacific Northwest being much darker than subspecies in the Southwest, for example. The reason for the color differences is multifaceted, but one aspect is that the darker pigments are more resistant to feather-degrading bacteria that are more abundant in humid conditions. Another reason is that paler pigments may be better for camouflage in more open, arid environments.

A Song Sparrow foraging among dry plant stalks in Middleway, West Virginia.

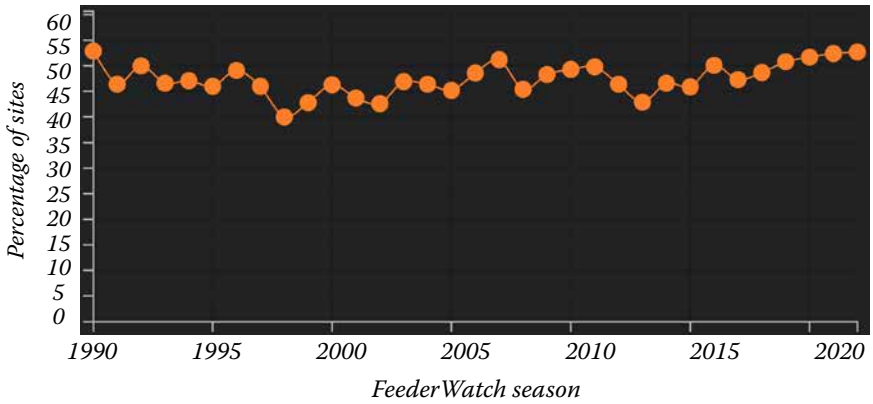
Laura Frazier

TOP-25 LIST: 9,293 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Chickadee*	2	94	
2	Dark-eyed Junco	4	91	
3	Downy Woodpecker	1	90	
4	Northern Cardinal	2	90	
5	Blue Jay	3	88	
6	Mourning Dove	4	88	
7	American Goldfinch	4	82	
8	White-breasted Nuthatch	1	80	
9	House Finch	4	75	
10	Red-bellied Woodpecker	1	71	
11	American Robin	2	66	▲
12	European Starling	4	65	
13	Tufted Titmouse	2	63	
14	House Sparrow	6	61	
15	Hairy Woodpecker	1	60	
16	Song Sparrow	1	48	
17	Carolina Wren	1	48	
18	Common Grackle	4	47	
19	Red-winged Blackbird	3	47	
20	American Crow	2	46	
21	White-throated Sparrow	3	45	▲
22	Brown-headed Cowbird	3	43	▲
23	Red-breasted Nuthatch	1	36	
24	Chipping Sparrow	2	35	▲▲
25	Purple Finch	2	31	

*Chickadee combines Black-capped Chickadee and Carolina Chickadee

Percentage of Sites Reporting Song Sparrows



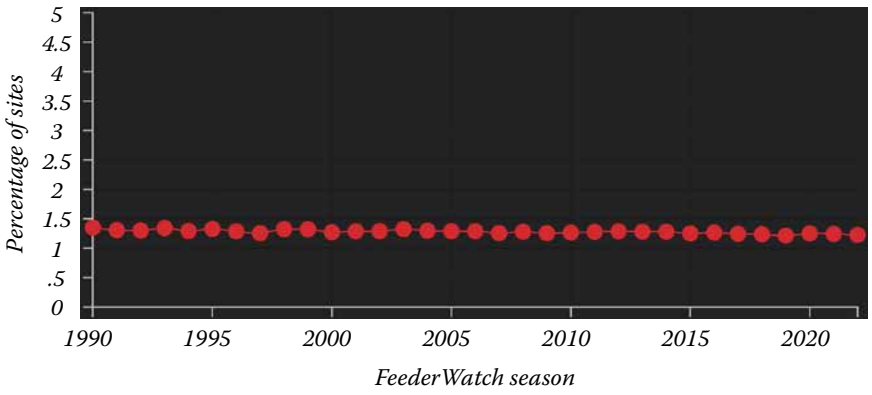
Song Sparrow counts remain high and steady in the Northeast.

Southeast Region

TOP-25 LIST: 2,006 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Northern Cardinal	3	95	
2	Carolina Chickadee	2	82	
3	Carolina Wren	1	79	
4	Mourning Dove	3	77	↘
5	House Finch	3	76	
6	Tufted Titmouse	2	76	
7	Blue Jay	2	73	
8	Red-bellied Woodpecker	1	72	
9	Downy Woodpecker	1	67	
10	American Goldfinch	3	67	↘↘
11	Northern Mockingbird	1	60	
12	Dark-eyed Junco	3	52	↘
13	Chipping Sparrow	4	51	
14	Eastern Bluebird	2	50	
15	American Robin	2	48	↘↘
16	Yellow-rumped Warbler	2	47	
17	American Crow	2	43	
18	White-throated Sparrow	2	42	↘
19	Pine Warbler	2	42	↗
20	White-breasted Nuthatch	1	40	
21	Brown-headed Cowbird	4	39	
22	Red-winged Blackbird	5	39	
23	Brown Thrasher	1	36	
24	Ruby-crowned Kinglet	1	34	
25	House Sparrow	4	33	

Average Flock Size for Northern Mockingbirds



When seen, Northern Mockingbirds are almost always seen solo or in pairs because they are territorial year-round. That's why their graph of "average flock size" is such a perfectly straight line hovering just above 1.

The Southeast saw an increase in Pine Warblers this past season, which is a common winter warbler that often feeds on suet when the weather is chilly. They are gorgeous birds with a yellow eye ring and white wing bars. They get their name from eating pine seeds, and their ability to eat seeds is why they also eat seeds from feeders on occasion. It is one of the few warblers that doesn't leave North America in winter for warmer weather down south, which is why the species often shows up in FeederWatch counts.

The Southeast also has a subtle long-term pattern of an increasing percentage of sites hosting Northern Mockingbirds. These birds are sometimes considered a nuisance because they can be territorial, even to other species, and sometimes decide that your feeders are within their territory! Their territoriality is evident in the average flock size observed by FeederWatchers: it hovers just slightly above 1, because usually it is just one mockingbird or a sometimes a pair that you will have in your yard. It's pretty amazing to be able to see patterns of bird behavior just from FeederWatch counts!

Sean Clinning

Pine Warblers are one of the few warblers that will eat seeds and visit feeders in winter.

Northwest Region

This past season in the Pacific Northwest we noticed that the steady increase in White-crowned Sparrows hit an all-time high. These birds are a striking sparrow to have visit your feeders with their crisp black and white striped crowns. But they don't always have such striking features: in fall you may notice a completely unrecognizable sparrow at your feeders, with a pinkish orange bill and rusty brown crown stripes. Too big to be a Chipping Sparrow, no spot on the chest so it can't be an American Tree Sparrow. It's a juvenile White-crowned Sparrow!

If you live in the Pacific Northwest, you also have the potential to host a very special visitor that doesn't show up in many other FeederWatch regions: the Varied Thrush. This species is seen all along the West Coast, but it is most abundant in the Pacific Northwest, where they are year-round residents in many locations. They will often visit backyards, especially in winter when they are not breeding, but during the nesting season they are partial to old growth forests. Their populations show a slight "boom and bust" pattern like irruptive finches (e.g. siskins and redpolls), and this past season they were on a downswing compared to previous years.

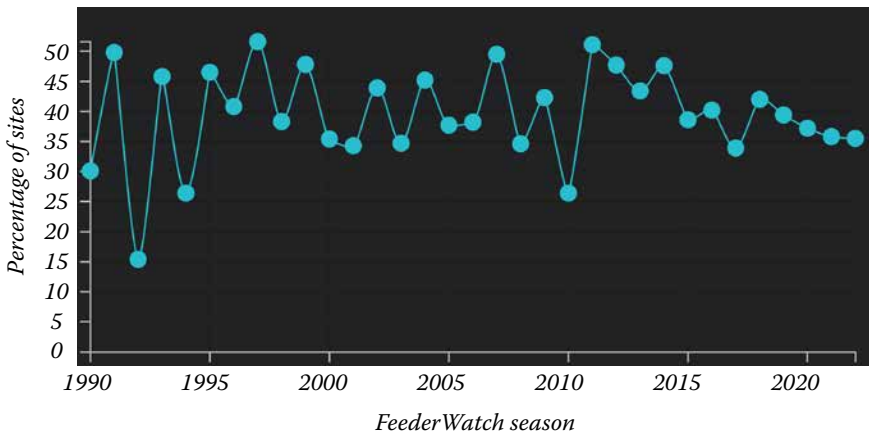
Alan Barnard

Juvenile White-crowned Sparrows look very different from the adults, but once you know to look for them, they are not such mystery birds.

TOP-25 LIST: 1,486 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Dark-eyed Junco	6	85	
2	Black-capped Chickadee	2	81	
3	Northern Flicker	1	76	
4	House Finch	4	72	
5	Downy Woodpecker	1	64	
6	Red-breasted Nuthatch	1	61	
7	Song Sparrow	1	60	
8	Pine Siskin	5	59	↑
9	Spotted Towhee	2	56	
10	American Robin	2	56	
11	Anna's Hummingbird	2	55	↑
12	Chestnut-backed Chickadee	2	47	
13	Steller's Jay	2	47	↓
14	House Sparrow	5	43	
15	European Starling	3	42	↓
16	American Crow	2	40	
17	Bushtit	8	39	
18	American Goldfinch	4	36	
19	Varied Thrush	1	35	↓
20	Golden-crowned Sparrow	3	30	↑
21	Hairy Woodpecker	1	30	
22	White-crowned Sparrow	2	28	↑↑
23	Fox Sparrow	1	28	
24	Eurasian Collared-Dove	3	26	
25	Bewick's Wren	1	25	

Percentage of Sites Reporting Varied Thrush



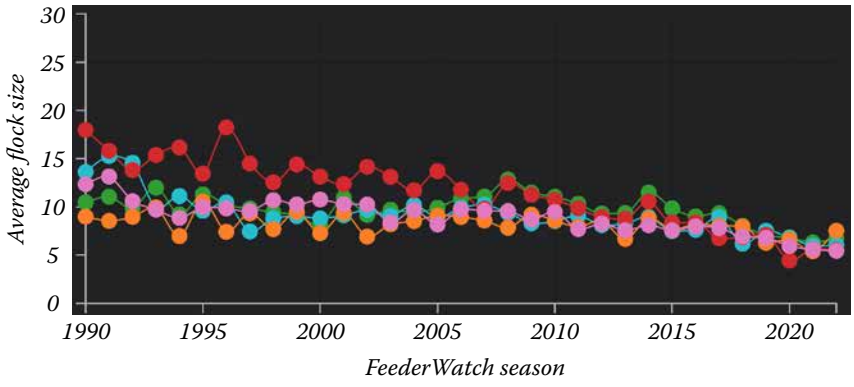
Varied Thrushes show a "boom and bust" pattern similar to irruptive finches.

Southwest Region

TOP-25 LIST: 1,383 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	House Finch	5	90	
2	Dark-eyed Junco	3	76	
3	Mourning Dove	4	56	
4	Lesser Goldfinch	4	56	
5	White-crowned Sparrow	5	54	
6	Northern Flicker	1	48	
7	Anna's Hummingbird	2	46	
8	Eurasian Collared-Dove	2	44	
9	American Robin	2	43	↘
10	Spotted Towhee	1	41	
11	House Sparrow	4	41	↘
12	American Goldfinch	3	38	↘
13	White-breasted Nuthatch	1	37	
14	Downy Woodpecker	1	36	
15	Pine Siskin	4	36	
16	Bushtit	5	35	
17	American Crow	3	34	
18	Cooper's Hawk	1	34	
19	California Scrub-Jay	2	33	
20	California Towhee	1	31	
21	Yellow-rumped Warbler	1	31	
22	Black-capped Chickadee	2	30	
23	Oak Titmouse	1	24	
24	Bewick's Wren	1	23	
25	European Starling	4	22	

Average Flock Sizes for American Goldfinch in the Northeast, Central, Southwest, Northwest, and Southeast Regions



American Goldfinch reports at feeders have been declining in all regions where they are found: Northeast (orange), Central (green), Southwest (pink), Northwest (blue), and Southeast (red).

In the Southwest region we noticed some slight declines in American Robins, House Sparrows, and American Goldfinches this past season. Declines in one season don't necessarily mean long-term declines, and for American Robins, it was probably just an off year; overall their numbers are increasing in North America. However, American Goldfinch and House Sparrow reports show slow but steady declines across the continent, and it's most evident when looking at the average flock size. You may be just as likely to have goldfinches at your feeders now as you were 20 years ago, but the flock size is likely smaller now.

What might be causing the declines? For some species habitat loss is an obvious culprit, but goldfinches thrive around people. Goldfinches are a very special species because they are vegetarian, so when they are raising nestlings they only eat seeds (not insects, like most other species). This means they are sensitive to the timing of wild seeding plants such as thistle and milkweed. It may be that as the climate changes and the plants seed at slightly different times of year, it doesn't match up with when goldfinches nest. The good news is that there are so many American Goldfinches that they aren't in danger of becoming rare any time soon, but it's still important to recognize that even abundant species can be struggling.

American Goldfinches feed seeds to their young such as this thistle, unlike most other small birds, which feed insects to their young.

Nikki Buchalski

Central Region

The Central region encompasses some of the most evolutionarily interesting areas in North America. It is where the Eastern and Western forms of many species meet and, sometimes, hybridize. Species such as Baltimore and Bullock's Orioles, Indigo and Lazuli Buntings, and Black-headed and Rose-breasted Grosbeaks interact in this region and sometimes form pairs and reproduce. Of course, these species only show up in the spring and summer because they migrate to Central and South America for the winter, so they aren't on the Top-25 list for FeederWatch. Nonetheless, in spring and summer they are fairly common feeder birds so you've probably encountered some of them even if not during your FeederWatch counts.

One species that did make it to the Top 25 last season, and which showed up at more feeders in the Central region than it has since 2013, was the Common Redpoll. This species had a big year in the Far North as well, showing up at more feeders than usual. Common Redpolls are a real treat to have at your feeders or around your home, with their (sometimes) rosy bellies and busy, high-pitched calls. You may even be lucky enough to see them foraging on wild foods such as dried seed pods in a meadow. Redpolls are truly a cold weather specialist, capable of surviving temperatures as low as -65 Fahrenheit! They do it by having a supremely insulated downy feather "coat," as well as a bit of ingenuity; redpolls will burrow into the snow to make sleeping nests for themselves so they can avoid chilly exposure at night. That's quite a smart snow bird.

Maureen Hills-Urbat

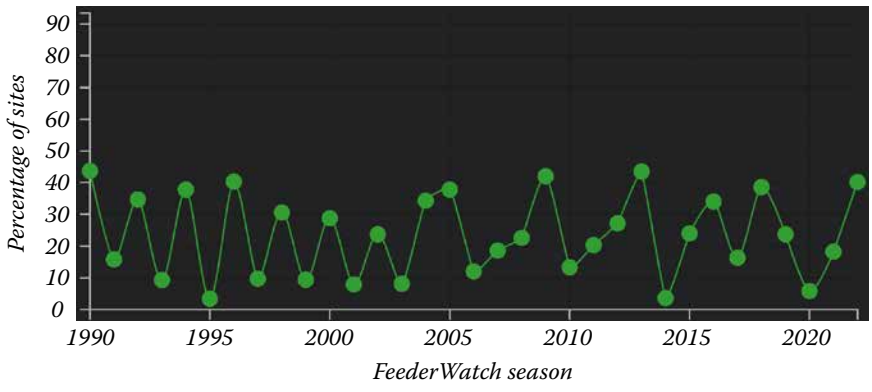
Common Redpolls are a gorgeous winter treat to have in your yard.

TOP-25 LIST: 1,077 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Chickadee*	3	93	
2	Downy Woodpecker	2	91	
3	Dark-eyed Junco	4	87	
4	Blue Jay	2	83	
5	White-breasted Nuthatch	1	81	
6	House Finch	4	73	
7	Northern Cardinal	2	72	
8	American Goldfinch	4	69	
9	House Sparrow	6	69	
10	Red-bellied Woodpecker	1	66	
11	Hairy Woodpecker	1	62	↘
12	American Robin	2	56	
13	Mourning Dove	3	50	
14	European Starling	3	43	
15	American Crow	2	42	
16	Common Redpoll	9	40	↗↗
17	Northern Flicker	1	33	
18	Red-breasted Nuthatch	1	33	
19	Purple Finch	3	31	
20	Common Grackle	3	29	
21	Red-winged Blackbird	3	29	↗
22	Pileated Woodpecker	1	27	
23	Tufted Titmouse	2	27	
24	White-throated Sparrow	2	25	↗
25	Carolina Wren	1	22	

*Chickadee combines Black-capped Chickadee and Carolina Chickadee

Percentage of Sites Reporting Common Redpolls



Common Redpoll reports were high in the Central region; they haven't been seen at so many feeders since 2013.

The Most Common Brown Sparrows in Your Region

BY HEIDI FAULKNER, CORNELL LAB OF ORNITHOLOGY

During your FeederWatching counts, you may notice many small, brown birds that are harder to distinguish than some of the other species that visit your feeders. There's a good chance that these seemingly nondescript birds are sparrows. While you may find them difficult to identify, knowing which sparrows are most common in your area can help.

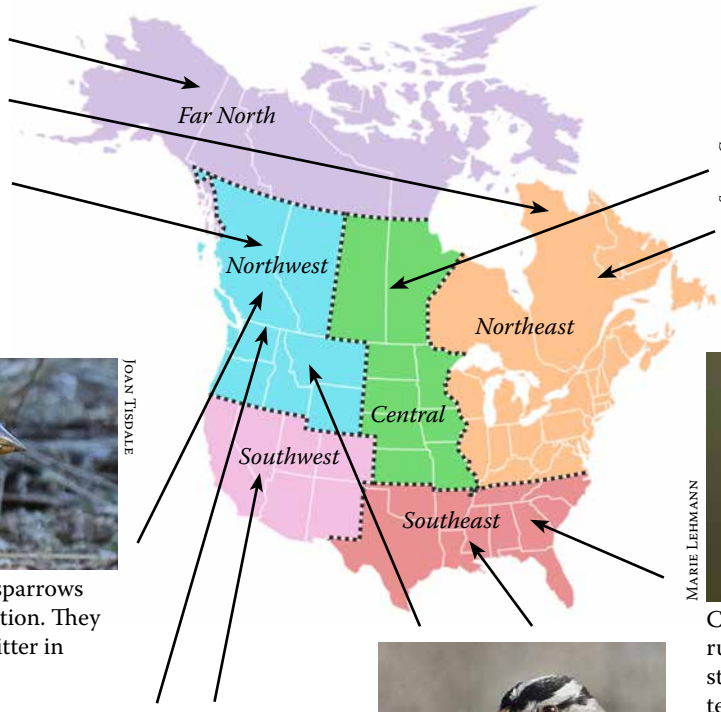
The most frequently recorded sparrow visitors vary by FeederWatch region. During this past 2021–22 season, in the **Far North region**, Song Sparrows were the most commonly reported sparrow species. In the **Central region**, House Sparrows were the most commonly reported sparrows and White-throated Sparrows were the second most reported sparrow in this region. **Northeast region** reports from last season showed that House Sparrows and Song Sparrows were the most common, with White-throated Sparrows the third most common sparrow reported. Chipping Sparrows were the most commonly reported sparrow species in the **Southeast region**. Behind Chipping Sparrows in this region were White-throated Sparrows and House Sparrows. The **Southwest region** reported White-crowned Sparrows most commonly, along with House Sparrows. Song Sparrows and House Sparrows were the most commonly reported sparrows in the **Northwest region**. This region notably saw an additional three other sparrow species that frequently visited feeders: Golden-crowned Sparrows, White-crowned Sparrows, and Fox Sparrows.

Cheryl Fagner

While these ubiquitous, non-native, and often-considered-nuisance birds are one of the most common birds in North America, four out of six FeederWatch regions saw slight decreases in percentages of sites visited by House Sparrows last season compared to the previous season.

Gary Mueller

Song Sparrows, a conspicuous species with a variable appearance, typically have coarse streaks on their breast that lead to a central point.



Scott Clark

White-throated Sparrows sing a wavering "Oh-sweet-Canada" whistle, and often forage in large flocks.

Joan Tisdale

Fox Sparrows are large chunky sparrows with rich, reddish-brown coloration. They tend to be seen kicking up leaf litter in search of food.

Marie Lehmann

Chipping Sparrows have a bright rufous cap, an eyeline, and an unstreaked belly. This sparrow is often heard trilling in both woodland areas and suburbs.

Joan Tisdale

Golden-crowned Sparrows, with their yellow crown patch atop a black cap, were once referred to as the "no gold here" bird by woeful gold rush miners because their song resembled the phrase.

Joan Tisdale

True to its name, the adult White-crowned Sparrow has bold white and black stripes on its head. This feature makes the sparrow rather easy to identify.

FeederWatcher Stories: How It All Began

When FeederWatchers submit counts through the Your Data section of the FeederWatch website, they are invited to submit stories in response to monthly prompts and be entered in a drawing to win prizes. One of the prompts asked participants how they became interested in birds. We posted all the drawing winners at **feederwatch.org/blog**, but we received so many delightful responses to this prompt that we decided to share a few more.

Birdwatching for Nearly a Century

Joanna is my almost-92-year-old mother. So the story goes, she first identified a bird (a crow?) at 18 months old! Joanna's grandmother gave her a lovely little bird book for identifying the birds she saw as a child, encouraging her to become a lifelong birder. (She still has that bird book!) Joanna's memory is very spotty now. She seldom remembers what she did just 5 minutes ago. Except for the birds she sees! She spends several hours each day carefully recording the date, atmospheric conditions, time, and how many of each species she sees visiting her balcony feeders. Using her carefully handwritten records, it is very easy for me to enter her two-day counts each week for Project FeederWatch. Birdwatching has been my mother's joy for 90+ years, something special she passed on to her children. Even though, at age 92, so many things are no longer possible for her to do, birdwatching continues to be one thing she's still really good at and that brings her joy every day. And because it brings her joy, it brings me joy too!

—Martha Sadler-Stine, Elizabethtown, Pennsylvania

House Finch by Kelly Morgan, Aliso Viejo, California

Great Blue Heron by Jean-François Desmeules, Forestville, Quebec

Anything Colorful Will Do

I was always interested in the colorful birds I saw in books, but I didn't start birdwatching in earnest until my husband and I lived in a 3rd floor apartment in New Haven, Connecticut. I put some crumbs out on our windowsill hoping to attract... something! After seeing some amazing acrobatics from squirrels and some drab brown birds (probably sparrows), I was delighted to see some birds with red on them. Not knowing what they might be, I bought my first Peterson's guide and determined that they were House Finches! A birdwatcher was born!

—Jill Thompson, Bradford, New Hampshire

A Pterodactyl?

My interest in birds began when we moved to a small lake in North Texas, and a very large bird flew right by us. It looked magnificent, flying amazingly close to the water, but it sounded prehistoric. We called it "Dac," short for pterodactyl. We later learned it was a Great Blue Heron. What a magnificent bird! One Great Blue Heron became two, a nesting pair, and then three, when the pair had a successful hatchling. We have followed birds ever since! Great Blue Herons, along with Great Egrets, other waterfowl, and the many songbirds that frequent our property, are the reason that we watch and protect birds today.

—Roberta Vasenden, Midlothian, Texas