FOCUS ON CITIZEN SCIENCE • VOLUME 17

Winter Bird Highlights

FROM PROJECT FEEDERWATCH 2020–21

The Cornell Lab of Ornithology

BIRDS CANADA
OISEAUX CANADA

Participant Numbers Jump

During the 2020–21 FeederWatch season, more than 34,000 people signed up across the U.S. and Canada, almost 9,000 more than the prior season, which was already a record high! As people spent more time at home due to the pandemic, they enjoyed FeederWatching and submitted more checklists than ever before. These data will provide great insights about changing bird populations. Read some of what we learned from the 2020–21 counts in the Regional Roundup starting on page 8.

2020–21 FeederWatch season statistics

34,671 PARTICIPANTS
247,862 CHECKLISTS
10,751,690 BIRDS

Cat Bezubiak from Dryden, Ontario, posted this photo of a Summer Tanager in FeederWatch's Participant Photos Gallery, writing, "While participating in Project Feederwatch I spotted something unusual at my feeder, something I had never seen before. I took many pictures and checked my guides and then posted to Facebook groups and determined that it was a female Summer Tanager well outside her range and hanging out in my yard eating peanuts. What a wonderful treat and so glad she appeared on a count day!"
Cover: Red-bellied Woodpecker by Nikki Buchalski.

Focus on Citizen Science is a publication highlighting contributions of citizen scientists. This issue, *Winter Bird Highlights 2021*, 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!

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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

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You Don't Need a Birdfeeder to FeederWatch

BY HOLLY GRANT, CORNELL LAB OF ORNITHOLOGY

Are feeders necessary in order to FeederWatch? It seems obvious, right—it's in the name! Project *Feeder*Watch. However, it may come as a surprise to many that bird feeders are not required for participation in Project FeederWatch and that participating without feeders is an incredibly valuable contribution in its own right.

Bird feeders are by-and-large one of the best ways to attract birds. Just adding sunflower seeds will encourage more species to visit; there are 70+ species in North America that will eat sunflower seeds at feeders. Also, research shows that many species that visit feeders have stable or increasing populations, which suggests that there may be some benefit to providing this supplemental food. The energy-rich foods like sunflower seeds, suet, nyjer, peanuts, and sugar water can be invaluable to exhausted birds that are passing through your yard during migration or experiencing extreme winter weather.

There are many benefits to providing feeders for birds, but there are some concerns as well. Fortunately, some concerns have been debunked. For example, feeders will not keep a bird from migrating, nor will birds come to depend exclusively on feeders. However, some concerns are valid. For example, providing bird seed in your yard can attract mammals like squirrels, deer, rabbits, and bears. While smaller mammals may be easier to deal with, attracting bears to your yard can be dangerous both for you and the bear. If you live in a bear-prone area, we recommend providing a feeder only when the bears are hibernating. Feeders can also increase the spread of some diseases. It's important to remember that proper feeder hygiene can greatly reduce this risk. We recommend that you clean feeders every 1-2 weeks. You can learn more on our **Sick Birds and Bird Diseases** webpage.

Golden-crowned Sparrow at Joan Tisdale's FeederWatch site in Carmel, California.

From a data perspective, you might be wondering how we can compare count sites with feeders to those without. Remember the count site description form that you fill out each year? That's where participants inform us of how many and which kinds of feeders they have, which allows us to account for feeders in analyses. Simply select the newly added options in the form to indicate that you don't provide supplemental food. We can use these data to get a better idea of how impactful bird feeding is on a continental scale—maybe plants and water attract more species than we expect!

So if you want to participate in Project FeederWatch without a bird feeder, please do! Just add a water feature (even a shallow trash can lid works!) or cultivate some native plants and start watching. You might not get the same volume of birds that visit feeders, but you'll likely be surprised at what you do see!

FeederWatching Without Feeders

If you prefer not to offer bird feeders, participation in FeederWatch is not only still possible, it's encouraged! One of the best ways to understand the impact of feeding birds is by comparing sites with feeders to sites without feeders, but we can only do this if some people count without feeders. You can provide other things for birds, like water and native plants, and count the birds that are attracted to whatever you provide. Adding a birdbath to your count site can help birds and attract them just as well as food can. Adding a water dripper or sprayer might help make your bath even more attractive. Natural food sources can also draw in birds. Perhaps you've added native plants and shrubs to your garden, varieties that produce seeds and/or berries for the birds to snack on, or flowers that can feed hungry hummingbirds and other nectar-loving species such as Verdins. Even if your garden plants don't provide food directly, native plant species often support healthy insect populations, and protein-rich insects are especially important for supporting birds and their nestlings during the breeding season. Having a yard full of native plants, as opposed to non-native ornamentals, is one of the best ways to make your yard more wildlife friendly. Take it one step further and avoid using pesticides and herbicides, too.

FeederWatch Data Help Shed Light on a Noisy World

Noise and Light Pollution Can Change Which Birds Visit Our Yards

With advances in technology in the past century, humans have transformed the environment, including lighting up the night and broadcasting our sounds across much of the globe. Although night lighting has many benefits to society and the noise we generate is a byproduct of the benefits of modern life, bright nights and the rumble of human activity may not be beneficial for our avian neighbors.

A new study led by Ashley Wilson,[1] a graduate student at California Polytechnic State University, reports on how the light and noise we create can impact common bird species that use backyard bird feeders. These sensory pollutants can affect how animals sense important environmental cues and signals, for better or for worse, explains Wilson. "Broadly speaking, we are just starting to dive into the consequences of light and noise for wild animals. Yet, we don't know which species are sensitive and how noise and light could be influencing which birds we see in our backyards and neighborhoods."

By using data from Project FeederWatch, Wilson and her team analyzed more than 3.4 million observations of 140 different bird species across the continental United States and discovered that birds tend to avoid feeders in louder areas. Common bird species such as American Goldfinches, Cedar Waxwings, and White-Breasted Nuthatches were shown to avoid areas with excessive noise.

However, light and noise are often both prevalent in the same areas, overlapping during certain times of the day, season, or across landscapes. Wilson and her team found that the additional presence of light enhanced the effect of noise, essentially making bright and loud backyards less appealing and suitable for birds. While bird species may be able to cope with one pollutant, the addition of a second might overwhelm their coping capabilities and cause birds to avoid these areas. The researchers were surprised to find that the number of birds observed for certain species only changed when noise and light occurred together. "These responses to a combination of noise and light would have been overlooked completely if we only focused on the influence of light or noise individually rather than considering the total exposure to both sensory pollutants," stated Wilson. "The overall influence on sensitive species could be more widespread than we originally thought."

Sujata Roy

American Goldfinch, one of the species shown to avoid areas with excessive noise.

An interesting twist to the influence of noise and light pollution is that context can matter. For example, birds that live in forested environments tend to be more sensitive to noise and light, which matches some of the team's previous work. Additionally, Wilson and her team found that, for about 50 species, the number of birds visiting feeders increased with light pollution when nights were long. Senior author and Cal Poly Professor in Biological Sciences Clint Francis explains, "That many species are more abundant in lit areas when nights are longer could be because winter nights present challenging conditions, especially farther north where temperatures drop below freezing and birds use a lot of energy to stay warm and survive. It is possible that light at night provides the opportunity to stay active and continue eating into the nighttime hours. Still, exposure to light could create problems that we could not measure in this study, like altered sleep patterns and increased stress."

Globally, light and noise levels are continuing to grow and spread each year. The looming presence of these pollutants can impact not only urban areas where we work and live, but they are starting to leak into protected natural areas as well, explains Wilson. “If birds cannot tolerate the increased intensity and presence of these pollutants, then we may end up seeing fewer species in loud and brightly lit places.”

There’s still a lot more work to be done to understand and learn how to manage these pollutants, added Wilson. How species respond to noise and light may also be influenced by a species’ innate ability to detect and comprehend sensory cues. Additionally, studying light and noise together will allow new studies to potentially identify "sensory danger zones," areas that have the highest risk of impacting vulnerable and rare species.

The research was funded by NASA and the Alexander von Humboldt Foundation. Article provided by Ashley Wilson and Clinton Francis.

[1]Wilson, A. A, Ditmer, M. A., Barber J. R., Carter, N. H., Miller, E. T., Tyrrell, L. P., and Francis, C. D. (2021). Artificial night light and anthropogenic noise interact to influence bird abundance over a continental scale. *Global Change Biology*, doi.org/10.1111/gcb.15663.

Does Feeder Color Matter?

BY ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

Last spring researchers from the University of Natural Sciences and Humanities in Siedlce, Poland, published a study in the *Journal of Ornithology*[1] that compared how often birds visit green feeders vs. yellow feeders in winter in east-central Poland. The researchers looked at preferences in both rural and urban birds. They hypothesized that since urban birds come in contact with novel, colored objects more than rural birds, they would be more likely to feed at a new feeder regardless of the color than rural birds.

The researchers set up feeders in 21 rural and 22 urban sites where feeder birds were frequently observed and conducted 43 observation sessions during good weather conditions. They used hopper-type feeders that were painted either green or yellow and placed one of each color one meter apart at each site, filling the feeders with sunflower seeds. The researchers found that there were more visits to feeders in urban habitats regardless of feeder color, and more birds visited green feeders than yellow feeders in both habitats. But the researchers were surprised to find that birds did not display a preference for either color feeder when approaching for the first time, nor did habitat have any effect on color preference. Given the small size of the study, further research is required to be certain about preferences between green and yellow, not to mention other colors. Nevertheless, it seems likely that green-colored feeders are more appealing to birds than yellow.

Bob Vuxinic

Northern Cardinal on a green feeder. Researchers found that birds visit green feeders more than yellow feeders.

[1]Golawski, A. and Sytykiewicz, H. (2021). How urban and rural birds respond to the colour of bird feeders? *Journal of Ornithology,* doi.org/10.1007/s10336-021-01907-8.

A Closer Look at Dark-Eyed Juncos in Canada

They Have Remarkable Variations

BY KERRIE WILCOX, BIRDS CANADA

Slate-colored form of Dark-eyed Junco by Donald Hurd.

Many people know juncos as "snowbirds." Like Canadian retirees with winter homes in the South, juncos have earned this nickname because they have southern winter homes as well. Even in areas where they can be found year round, juncos are more likely to visit feeders during snowy weather, and their return from northern breeding areas signals that cold temperatures are coming.

Dark-eyed Juncos were number three on the FeederWatch top-10 list across all years in Canada, appearing at an average of 76.4% of sites each season. This past season they were reported at 82% of sites with an average flock size of 3.9. These social butterflies spend their winters in flocks ranging from just a few birds to 30 or more, and stay in these groups through the whole winter. Each flock is governed by a hierarchy that puts adult males at the top, then young males, adult females, and finally young females. The more dominant birds have greater access to food (dominant males feed in the center of the food patch) and spend less time looking around for predators. As a result, they may gain more body fat than those lower in the pecking order, meaning they may have more insulation from the cold weather and more energy.

Slate-colored form of Dark-eyed Junco by Michael Hayes.

Junco Prevalence at Feeders Across Canada

Juncos typically begin migrating from the Far North region in September through late October and, like our Canadian retirees, typically arrive in their winter range around the first of the December. In British Columbia, Dark-eyed Juncos are the top bird, visiting 90% of FeederWatch sites at least once in the season and consistently appearing at more than 80% of sites every week of the season. In the Prairies (Alberta, Saskatchewan, and Manitoba) juncos visited an average of 58% of sites at least once during the last season, but numbers were higher during migration at the start and end of the FeederWatch season. Mid-season juncos typically move out of the Prairies and are reported at fewer than 20% of sites. In Ontario and Quebec, a high percentage of sites were visited at least once in the season with 90% of sites visited in Ontario and 83% in Quebec—but both provinces had typical counts of around 70% of sites mid-season. The Atlantic Provinces of Nova Scotia, Prince Edward Island, New Brunswick, and Newfoundland, and Labrador report-

Tips for Feeding Juncos: ***At feeders, juncos prefer mixed seed, millet, hulled sunflower seeds, safflower, and cracked corn. Try offering food for juncos on the ground, in a large hopper, or on a platform feeder.***

Dark-Eyed Junco Subspecies

Slate-colored: slate-gray back and head. This subspecies breeds in boreal forests from Alaska to Newfoundland and south to the Appalachian Mountains, wintering throughout most of the U.S.

Oregon: black hood, chestnut-brown back, and buff-brown flanks. They winter in the Pacific Northwest but can be found anywhere in the West.

Gray-headed: gray head, rump, breast and sides, rusty-brown back. This form breeds in the southern Rocky Mountains from Colorado to central Arizona and New Mexico, and winters into northern Mexico.

Red-backed: gray head, dark face and bright reddish-brown back. The upper mandible is darker gray than the lower. This subspecies is found in central Arizona and New Mexico.

Pink-sided: blue-gray with dark wings and pink-gray flanks. This subspecies breeds in the Rocky Mountains from southern Alberta to eastern Idaho and western Wyoming and winters in central Idaho and nearby Montana and from southwestern South Dakota, southern Wyoming, and northern Utah to Mexico's northern Sonora and Chihuahua states.

White-winged: blue gray overall with two white wing bars. This subspecies is a common breeder in the Black Hills area of South Dakota, Wyoming, Nebraska, and Montana, and winters south to northeastern New Mexico.

Cassiar: distinctive integrade between Oregon and slate-colored. This form breeds from central Yukon south through northern British Columbia and into central Alberta.

Pink-sided form of Dark-eyed Junco by Jody Allair.

Females of each form resemble the males but are paler. Juveniles are heavily streaked brown with darker heads, white bellies, and white outer tail feathers.

ed 89% of sites visited by juncos and fairly consistent numbers throughout the season.

So Many Varieties!

There are two species of juncos in North America—the Yellow-eyed Junco and the Dark-eyed Junco. Dark-eyed Juncos are a medium-sized sparrow with a long tail, small pale bill, and prominent white outer tail feathers. Subspecies include: Slate-colored, Oregon, Pink-sided, Cassiar, Gray-headed, Red-backed, and White-winged. See sidebar for descriptions and ranges.

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!

Blue Jay by Harry Foster

Until the 1970s, Dark-eyed Juncos were split into five distinct species, three of them comprising two or more subspecies. However, new genetic information, the way they communicate, and the fact that they all interbreed led the American Ornithological Society (AOS) to designate them as the same species. But because each Dark-eyed Junco subspecies is unique in appearance, the AOS recognized their distinctiveness by designating subspecies and informal "groups." In Canada in winter, Dark-eyed Juncos in the Pacific Northwest may have a reddish back and a dark "hood" (Oregon race), while Dark-eyed Juncos in the Northeast are generally a slate-gray color, without a hood (slate-colored race).

How to Report a Subspecies in Your FeederWatch Counts

While the Slate-colored, Oregon, Pink-sided, Cassiar, Gray-headed, Red-backed, and White-winged races are all considered Dark-eyed Juncos, Project FeederWatch welcomes participants to report which subspecies you see. Your reports allow us to map the geographic distribution of the various races in the winter. Although subspecies do not automatically appear on the FeederWatch checklist of likely species found in your region, when you enter your counts, you can add subspecies by clicking the "Add a Species" button on our website or using the search bar in our app and then entering "junco" to bring up a list of available junco subspecies.

Regional Roundup

Trends and Highlights from the 2020–21 FeederWatch Season

BY EMMA GREIG, CORNELL LAB OF ORNITHOLOGY

What an amazing year! Thank you to everyone who watched their birds and contributed their counts this past season. The number of birds reported was the highest number ever: 10,751,690 birds on a whopping 247,862 checklists! That was an increase in checklists by 25% over the previous season, and we thank all the new and returning participants for making last year such a tremendous success.

In the spring of 2020, we extended the FeederWatch season through the end of April, hoping that people would enjoy the extra time counting their birds while spending more time at home during the pandemic. We received such positive feedback about the extension that we decided in the spring of 2021 to make that extension permanent! From now on, you can plan to record those spring migrants as they arrive at your count site. It will take some time before we build up a large enough dataset of spring counts to provide trends for spring, but with two years now counted, we have made a great start. In the meantime, we will present data from the traditional season dates for the Regional Roundup, so that data from recent years remain comparable to data from the past.

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%.

Thank you for sharing your observations with FeederWatch and building this amazing dataset!

Find More FeederWatch Trend Graphs Online

All the graphs on the following pages came from the Explore section of the FeederWatch website.

See the trends for your favorite birds at feederwatch.org/explore/trend-graphs.

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

We are grateful to the three participants who counted from two islands last season: Oahu and Hawaii. Granivorous species are often in the spotlight in Hawaiian FeederWatch counts, and last year was no exception. Doves, sparrows, and cardinals were among the most commonly observed birds, which is reasonable given that they thrive around people and enjoy the bird seed that people often provide. Two species of bulbul were also counted by participants, the Red-whiskered and Red-vented Bulbuls. These species are native to South/Southeast Asia but have found a home in Hawaii after escaping from the pet trade.

YVONNE BURCH-HARTLEY

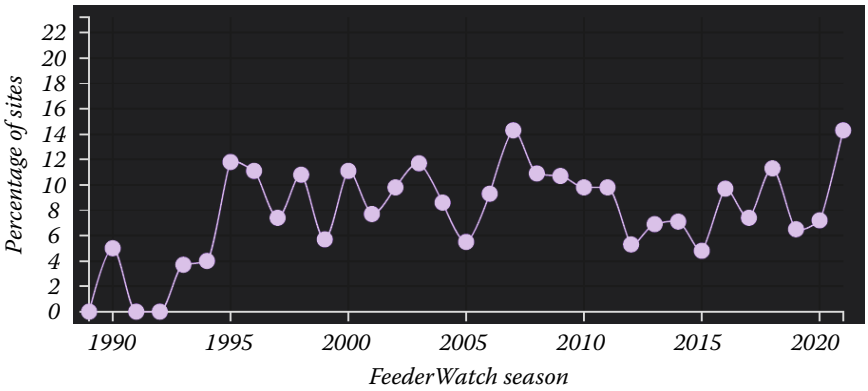
Red-whiskered Bulbuls were introduced on the island of Oahu, as well as around Los Angeles, California, and Miami, Florida.

Far North Region

TOP-25 LIST: 71 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Black-capped Chickadee	5	80	
2	Common Redpoll	15	77	▲▲
3	Red-breasted Nuthatch	2	66	▲▲
4	Black-billed Magpie	2	65	▲
5	Pine Grosbeak	8	63	▲
6	Downy Woodpecker	1	61	▲
7	Hairy Woodpecker	1	59	▲
8	Boreal Chickadee	2	51	▼
9	Dark-eyed Junco	4	44	
10	Common Raven	2	44	▼
11	Canada Jay	2	39	▼
12	Steller's Jay	2	39	▲
13	Pine Siskin	11	24	
14	Bohemian Waxwing	10	23	▲
15	Chestnut-backed Chickadee	4	23	
16	American Robin	3	17	
17	Song Sparrow	1	15	
18	Hoary Redpoll	2	14	▼
19	Brown Creeper	1	14	▲
20	Sharp-shinned Hawk	1	14	
21	White-crowned Sparrow	3	13	
22	White-winged Crossbill	2	13	
23	Northern Shrike	1	13	
24	European Starling	6	11	
25	Golden-crowned Kinglet	3	11	▲

Percentage of Sites Reporting Brown Creepers



Brown Creepers were reported at an almost record-high proportion of sites in the Far North last season. The only other year that had such a high proportion of reports was in 2007.

This past season we received reports from 71 participants in the Far North region—a record number of participants for that sparsely populated area of Canada and Alaska. It may come as no surprise that Common Redpolls showed a big increase in the Far North this past season. There were finch irruptions across the continent, and you may have noticed Pine Siskins or Common Redpolls at your feeders in larger numbers than usual. Irruptions occur when birds move from their remote tundra and boreal forest habitats to more southerly locations in search of food, and often to our backyards and feeders. Red-breasted Nuthatches are among the species that exhibit this irruptive behavior, and they also showed a big increase at feeders in the Far North region, suggesting that natural foods were in short supply all around.

One species that almost never makes the Top-25 list in the Far North, but that ranked at #19 last year, was the Brown Creeper. These inconspicuous birds are masters of camouflage and blend in perfectly with tree bark, which is useful because they spend most of their time climbing up tree trunks in search of food. Like woodpeckers, they use their stiff tails to brace themselves while they poke and probe for insects with their slender bills.

Joan Wittanen

The Brown Creeper in this photo is hard to see, which illustrates their great camouflage against tree bark.

Northeast Region

Some things never change: last year in the Northeast, the top 10 species were the same species that have comprised the top 10 for nearly a decade. It just goes to show that you don't need to know how to identify hundreds of bird species to be familiar with the common visitors around your home. Knowing how to identify 10-20 species will cover most of your visitors the vast majority of the time. In fact, the average number of species reported at sites across the U.S. and Canada last year was only 11.7 species per count site!

One new arrival to the Top-25 list in the Northeast this past season was the Red-breasted Nuthatch. They ranked at #29 the previous season but skyrocketed to rank #16 during this most recent season. Why the change? As we saw in the Far North, last year was an irruptive year for many species, Red-breasted Nuthatches included.

Unlike Red-breasted Nuthatches, the White-breasted Nuthatches are a lot more sedentary and tend to have a much more stable presence at FeederWatch sites. You may have noticed a White-breasted Nuthatch or two hanging around your home for many winters, especially if you live in an area with large deciduous trees. If you have one, keep your eyes open for two, because pairs will often spend the entire year together. You may notice titmice and chickadees as well, because nuthatches like to join winter flocks of titmice and chickadees. Those species are great sentinels; when they see danger, they give alarm calls that lots of species recognize.

Jocelyn Anderson

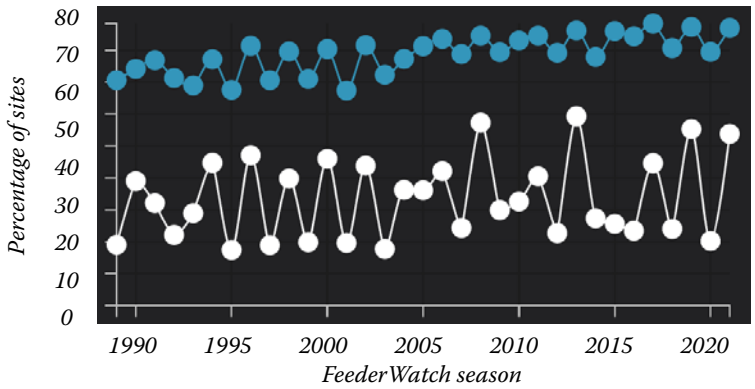
Joining winter flocks of chickadees and titmice also means that White-breasted Nuthatches might have to defend a pile of seeds from being raided by a chickadee!

TOP-25 LIST: 10,277 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Chickadee*	3	96	
2	Dark-eyed Junco	4	92	
3	Downy Woodpecker	2	91	
4	Northern Cardinal	3	91	
5	Mourning Dove	4	88	
6	Blue Jay	3	88	
7	White-breasted Nuthatch	1	87	
8	American Goldfinch	4	83	
9	House Finch	4	76	
10	Red-bellied Woodpecker	1	73	
11	Tufted Titmouse	2	67	
12	European Starling	4	67	
13	Hairy Woodpecker	1	63	
14	American Robin	2	63	
15	House Sparrow	6	62	
16	Red-breasted Nuthatch	1	55	▲▲
17	Carolina Wren	1	54	▲
18	Song Sparrow	1	51	
19	Common Grackle	4	46	
20	Red-winged Blackbird	4	46	
21	American Crow	2	46	▼
22	White-throated Sparrow	3	46	
23	Brown-headed Cowbird	3	36	
24	Cooper's Hawk	1	32	
25	Purple Finch	2	28	

*Chickadee combines Black-capped Chickadee and Carolina Chickadee

Percentage of Sites Reporting White-breasted and Red-breasted Nuthatches



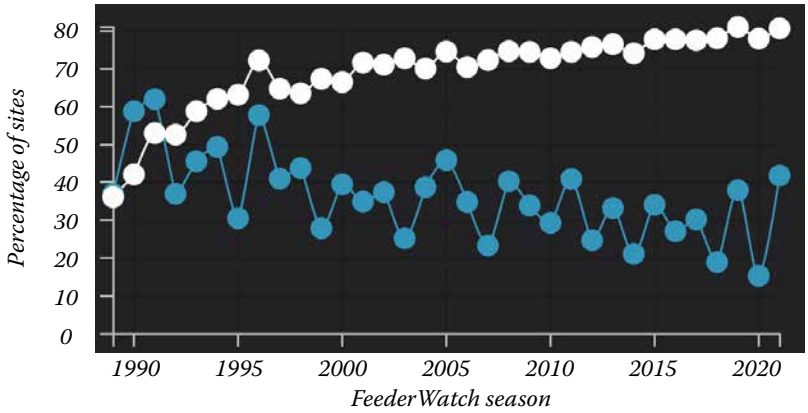
White-breasted Nuthatches (blue) have a stable presence at feeders in the Northeast compared to Red-breasted Nuthatches (white), which fluctuate annually.

Southeast Region

TOP-25 LIST: 2,176 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Northern Cardinal	3	95	
2	Carolina Chickadee	2	87	
3	Carolina Wren	1	83	
4	House Finch	3	81	
5	Mourning Dove	3	80	↓
6	American Goldfinch	4	80	
7	Tufted Titmouse	2	78	
8	Blue Jay	2	77	
9	Red-bellied Woodpecker	1	73	
10	Downy Woodpecker	1	69	
11	Northern Mockingbird	1	69	
12	American Robin	3	68	↑
13	Pine Siskin	7	56	↑↑
14	Dark-eyed Junco	3	56	
15	Eastern Bluebird	2	54	
16	Yellow-rumped Warbler	2	53	
17	Chipping Sparrow	4	52	
18	Purple Finch	3	43	↑↑
19	White-throated Sparrow	3	42	↓
20	American Crow	2	41	
21	White-breasted Nuthatch	1	41	
22	Brown-headed Cowbird	4	40	
23	Pine Warbler	2	40	
24	Brown Thrasher	1	40	
25	Red-winged Blackbird	5	38	

Percentage of Sites Reporting Purple Finches and House Finches



Purple Finches (blue) have an irruptive up-and-down pattern to their presence at feeders, but House Finches (white) have a steady and slowly increasing prevalence at feeders in the Southeast.

Northern Cardinals remain the most frequently reported species in the Southeast since the beginning of FeederWatch in 1988. But there is one species that is creeping up in the ranking: the Carolina Wren. They have never made it to rank #3 before, but they did this past season, having been reported at 83% of count sites. Carolina Wrens are becoming increasingly common in the eastern half of North America as the climate warms and winters become milder. They have been slowly and steadily on the rise in both the Southeast and Northeast regions.

Following the trend in other regions, irruptive species made a big showing last year in the Southeast. Purple Finches and Pine Siskins both showed big increases—showing up in the Top 25 last year—compared to the season before, when they ranked in the 40s. Purple Finches look like House Finches but a bit supercharged: females have bolder white and dark streaking on their faces and chests than female House Finches, and males have a more rich and widespread purple-red hue over their bodies than male House Finches. You can compare Purple Finches and House Finches (and their relative, the Cassin's Finch) on our Tricky Bird ID pages in the Learn section of the FeederWatch website. There are a few other tricky species you can compare as well, including Downy and Hairy Woodpeckers, some easily confused doves, and some confusing winter sparrows.

Bob Vuxinic

At first glance these may look like the same species, but they are not! The bird in front is a male House Finch, and the bird in back is a male Purple Finch. Notice the richer purple color on the Purple Finch, lending them their name.

Northwest Region

Dark-eyed Juncos in the Northwest have claimed the top spot in our Top-25 ranking since FeederWatch began in 1988. As we learned in Kerrie Wilcox's article (pages 6–7), there are many subspecies of junco across the continent, and in the Northwest the most common is the "Oregon" form, which has a dark hood and brown body. It looks surprisingly different from the eastern "slate-colored" form, where the males are dark gray all over except for a white belly.

As part of the irruption of finches across the continent, the Northwest experienced an especially big influx of Pine Siskins last season. Along with all these flocking finches came an outbreak of *Salmonella* infections, and the Northwest region was hit particularly hard. Many participants wrote to us noticing sick finches around their feeders, and many took down their feeders to encourage the birds to disperse and reduce the spread of infection. As upsetting as these outbreaks can be, it is helpful to know that they are not a new phenomenon. *Salmonella* outbreaks have been happening for many decades, particularly affecting irruptive finches, and the populations do recover. We thank everyone who reported sick birds and who made their count site as safe for birds as possible, even if it meant removing feeders. Keep in mind that even if you take down your bird feeders for an extended period of time, you can continue counting birds for FeederWatch. Just record in your site description form what months of the year that you did not provide food.

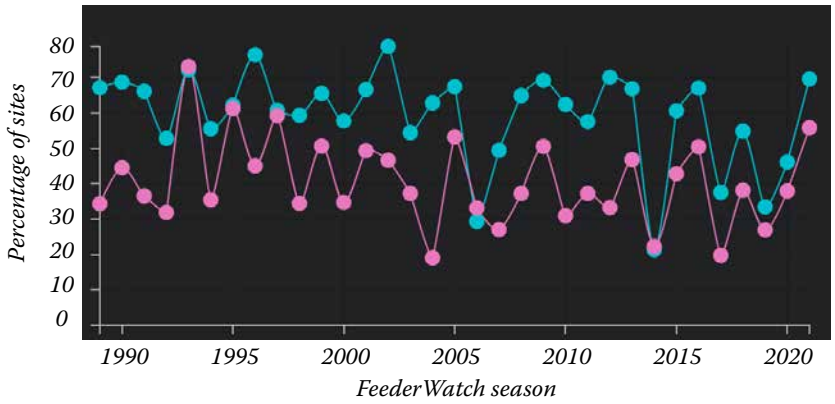
Joan Tisdale

Pine Siskins and goldfinches love feeders with thistle or sunflower seeds and will visit trays, hoppers, or tubes, as these siskins and goldfinch are doing in Carmel, California.

TOP-25 LIST: 1,705 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Dark-eyed Junco	6	90	
2	Black-capped Chickadee	3	84	
3	Northern Flicker	2	80	
4	House Finch	4	74	
5	Red-breasted Nuthatch	2	72	↑
6	Pine Siskin	8	72	↑↑
7	Downy Woodpecker	1	65	
8	Song Sparrow	1	60	
9	Spotted Towhee	2	58	
10	American Robin	2	57	↓
11	Anna's Hummingbird	2	56	↑
12	Steller's Jay	2	50	
13	European Starling	3	47	
14	Chestnut-backed Chickadee	2	45	
15	House Sparrow	6	42	
16	Bushtit	10	41	
17	American Goldfinch	4	39	
18	American Crow	2	38	
19	Varied Thrush	2	37	↓
20	Hairy Woodpecker	1	33	
21	Bewick's Wren	1	29	↑
22	Golden-crowned Sparrow	3	29	
23	Eurasian Collared-Dove	3	27	
24	White-crowned Sparrow	2	27	
25	Cooper's Hawk	1	25	

Percentage of Sites Reporting Pine Siskins in the Northwest and Southwest Regions



Pine Siskins showed up in huge numbers at feeders across the continent, especially in the Northwest (blue) and Southwest (pink).

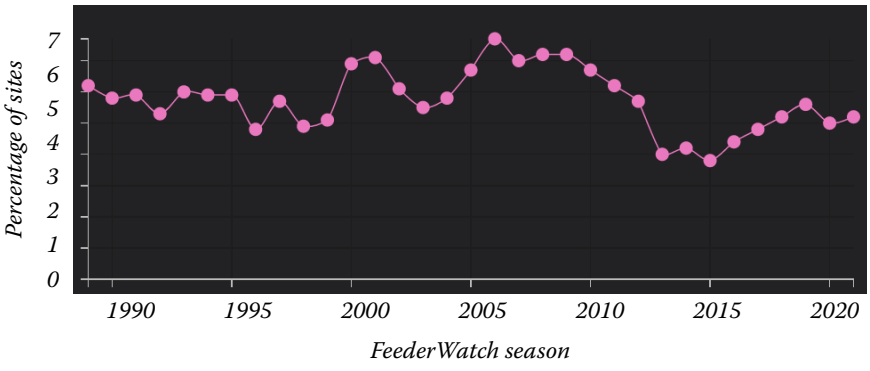
Southwest Region

TOP-25 LIST: 1,598 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	House Finch	5	91	
2	Dark-eyed Junco	4	79	
3	White-crowned Sparrow	5	60	
4	Mourning Dove	4	58	↘
5	Lesser Goldfinch	5	58	
6	Pine Siskin	5	56	↗↗
7	Northern Flicker	1	49	
8	Anna's Hummingbird	2	47	
9	Eurasian Collared-Dove	3	46	
10	House Sparrow	4	46	↘
11	American Goldfinch	4	45	
12	American Robin	2	44	↘
13	Spotted Towhee	1	41	
14	Downy Woodpecker	1	39	
15	Bushtit	6	39	↗
16	White-breasted Nuthatch	1	39	
17	American Crow	3	35	
18	Scrub-Jay*	2	35	↘↘
19	Cooper's Hawk	1	35	
20	California Towhee	1	32	
21	Yellow-rumped Warbler	1	32	
22	Mountain Chickadee	2	32	↗
23	Black-capped Chickadee	2	32	
24	Bewick's Wren	1	31	↗
25	Oak/Juniper Titmouse	1	30	

*Scrub-Jay combines California Scrub-Jay and Woodhouse's Scrub-Jay

Percentage of Sites Reporting Cactus Wrens



Cactus Wrens have relatively stable counts based on FeederWatch data, though Breeding Bird Surveys show subtle declines over the past several decades.

Who was at the top of the list for the Southwest last season? It's the House Finch, ranking at #1… again! House Finches have always been at the top of the list in the Southwest region. The range of habitats these birds can thrive in is astonishing—some live through the freezing cold temperatures of a midwestern winter, and some live in the hottest habitat in the Sonoran Desert. Some even live on the Hawaiian Islands! How one species can manage such remarkable adaptation to different habitats and climates is still being studied by researchers.

Pine Siskins were remarkably abundant at feeders in the Southwest this past season, which was not surprising given their abundance across the continent. Much like in the Northwest, many people in the Southwest noticed sick siskins, most of which were probably infected with the *Salmonella* bacteria that caused outbreaks across North America.

Although they have never made it to the Top-25 list, Cactus Wrens are a special species found almost solely in the Southwest region. They love the hot, arid habitats of the Sonoran and Chihuahuan deserts and the unique plant life found there, such as columnar cacti and desert shrubs. They have relatively stable populations based on FeederWatch counts but have shown declines based on Breeding Bird Surveys. The more you can nurture desert habitat around your home, the better it is for Cactus Wrens and other southwestern desert specialists.

Rick Williams

Cactus Wrens love cacti! This one is enjoying an insect meal while standing atop the buds of a saguaro in Tucson, Arizona.

Central Region

Last season in the Central region we noticed an uptick in Red-breasted Nuthatches, Purple Finches, and Pine Siskins compared to the season before. These increases were no surprise, because irruptive species were making an appearance at feeders in all the FeederWatch regions. Even Common Redpolls showed up at 18% of Central region sites, which wasn't enough to make the Top-25 list but was much more than the year before

Another species on the rise in the Central region is the Carolina Wren. This species is increasing across their range and gaining the ability to survive northern winters. When people think of wrens, they often think of House Wrens, which are a common species in spring and summer that will nest happily around people's homes. However, if you notice a wren in winter east of the Rockies, it is much more likely to be a Carolina Wren than a House Wren. You can distinguish these two species visually. House Wrens are extremely petite, almost entirely brown birds, whereas Carolina Wrens have a distinct eye stripe and dark back that contrasts with a buff-colored belly and chest. One interesting thing about Carolina Wrens is that they will duet! Males sing the familiar "tea kettle, tea kettle, tea kettle" song, and females will sometimes chime in with a buzzy little phrase. Pairs mate for life and duetting may help them solidify their pair bond.

Marie Lehmann

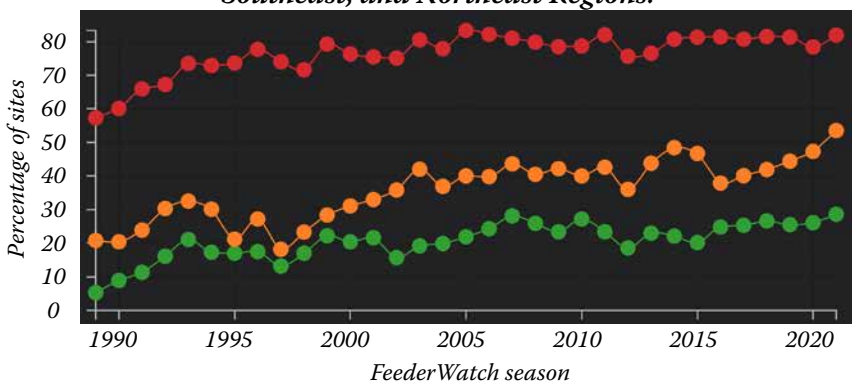
Carolina Wrens will visit suet feeders in winter.

TOP-25 LIST: 1178 SITES REPORTING

Rank	Species	*Average flock size*	*Percent of sites*	*Trend*
1	Chickadee*	3	95	
2	Downy Woodpecker	2	92	
3	Dark-eyed Junco	4	90	
4	Blue Jay	2	85	
5	White-breasted Nuthatch	1	80	
6	Northern Cardinal	3	76	
7	House Finch	4	75	
8	House Sparrow	6	71	
9	Red-bellied Woodpecker	1	70	
10	American Goldfinch	4	69	↓
11	Hairy Woodpecker	1	63	↓
12	American Robin	2	57	
13	Mourning Dove	3	53	
14	Red-breasted Nuthatch	1	49	↑↑
15	European Starling	4	47	
16	American Crow	2	41	
17	Northern Flicker	1	37	
18	Purple Finch	3	35	
19	Pine Siskin	4	33	
20	White-throated Sparrow	3	32	
21	Common Grackle	3	31	
22	Red-winged Blackbird	4	30	
23	Pileated Woodpecker	1	30	
24	Carolina Wren	1	30	↑
25	Tufted Titmouse	2	30	

*Chickadee combines Black-capped Chickadee and Carolina Chickadee

Percentage of Sites Reporting Carolina Wrens in the Central, Southeast, and Northeast Regions.



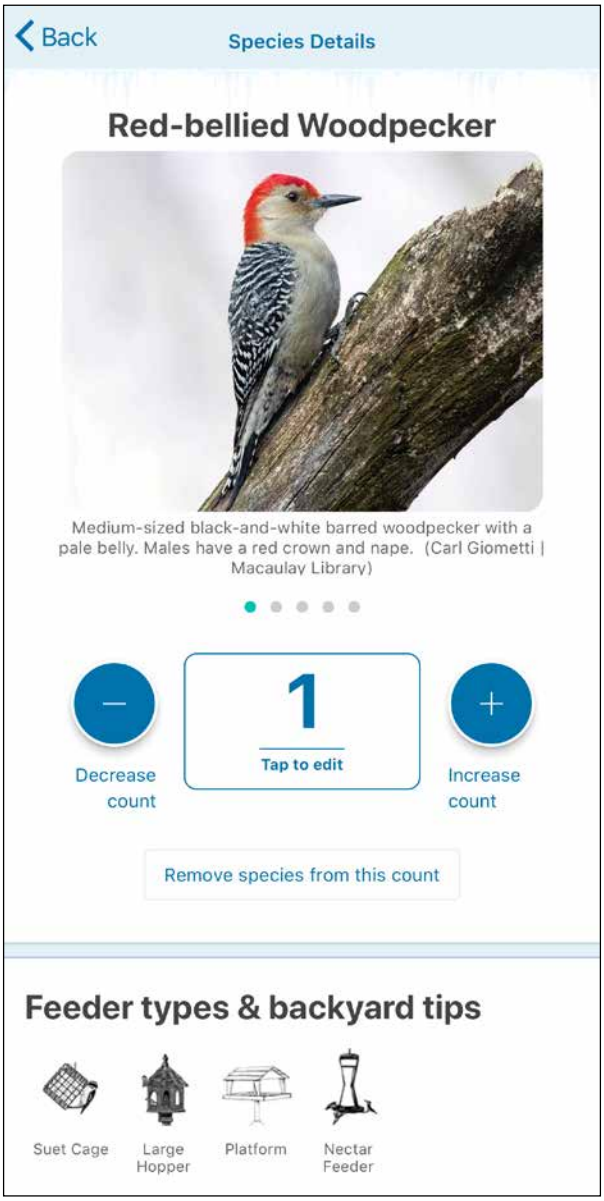
Carolina Wrens have been slowly and steadily increasing in the Central (green), Southeast (red) and Northeast (orange) regions.

Have You Tried the FeederWatch Mobile App?

BY ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

Last season FeederWatch officially launched a mobile app for both Apple and Android devices. You can use the app to keep track of your counts, note your snow depth and effort, and submit your counts directly to our database, eliminating the need for a paper tally sheet or to transfer counts to the website.

The app is connected to the Cornell Lab's All About Birds online guide, which means that you have access to the rich resources of this guide right from within the app. Just press and hold any species and you can see detailed information, including photos, identification tips, natural history, and a range map.



Access detailed information about common birds right from the app.

Keep track of your counts with our mobile app.

Although the app has everything you need to submit counts for FeederWatch, you need to go to our website to report behavior interactions, describe your count site, or submit photos. To find information about how to add this information through our website after using the app, as well as to find additional tips for using the FeederWatch mobile app, go to the FeederWatch Mobile App page in the About section of our website at **feederwatch.org/about/feederwatch-app/.**

BirdSpotter Photo Contest Highlights

BY HOLLY GRANT, CORNELL LAB OF ORNITHOLOGY

Project FeederWatch ran its 9th annual BirdSpotter photo contest during the 2020–21 season. Participants in the contest had a lot to share! Almost 2,000 entries were submitted, and they earned more than 6,700 votes in total.

This year's categories had some old favorites, like "Birds with Food or at the Feeder" and "Birds in Flight" as well as some new ones: "Avian Antics," "Rainbow Birds," and "Fantastic Females." You can find all contest entries on our website (click on "BirdSpotter Galleries and Contests" in the "Community" tab) and get the full stories behind the winning photos, classrooms, and data entry responses on our blog.

Thank you to all BirdSpotter participants, and thank you to Wild Birds Unlimited for their support for BirdSpotter and for Project FeederWatch.

Last Year's Winners

Pam Garcia won the top Grand Prize last year with this stunning photo of a Red-bellied Woodpecker, a Baltimore Oriole, and a Blue Jay squabbling over grape jelly.

A Few of Our Favorite Eyecatchers from Last Season

Clockwise from top left: Northern Mockingbird by Anita Bhala, Evening Grosbeak by Tom Fenske, Northern Flicker by Larry Keller, and Painted Bunting by Andrew Mills.

The second place Grand Prize went to Deborah Yaworsky for this beautiful photo of a female Northern Cardinal.

This photo of an Anna's Hummingbird earned Robert Hechler the third place Grand Prize.