Winter Bird Highlights

FROM PROJECT FEEDERWATCH 2008-09



eeping our birds safe is a theme running through this issue of Winter Bird Highlights. In addition to a summary of findings and exciting research related to Project FeederWatch, this issue focuses on some of the survival challenges that birds face. Disease, predators, and windows all pose significant threats to the birds in our yards and neighborhoods. Creating a safe bird-feeding area involves reducing the challenges birds face and limiting unnecessary deaths. When we invite birds into our backyards, it is important that we provide a safe environment for them.

This issue also highlights the results of a remarkable long-term study on the impacts of a disease affecting finch populations in North America. Observations from FeederWatchers spawned an investigation into a novel disease spreading among House Finches in the early 1990s. After 15 years of year-round research involving FeederWatchers and other citizen scientists, the House Finch Disease Survey is transitioning back to its FeederWatch roots. See pages 4–5 for a summary of what has been learned from this research program.

Purple Finch by Gary Mueller. Cover photo of Pine Siskins by Errol Taskin.



Focus on Citizen Science is a publication highlighting the contributions of citizen scientists. This issue, Winter Bird Highlights 2009, is brought to you by Project FeederWatch, a research and education project of the Cornell Lab of Ornithology and Bird Studies Canada. Project FeederWatch is made possible by the efforts and support of thousands of citizen scientists.

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Join Project FeederWatch!

Anyone in the United States and Canada with an interest in birds and a feeder to watch is welcome to join. Help scientists monitor winter bird populations while you learn more about the birds in your neighborhood. To join, contact the FeederWatch office in your country.

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FeederWatchers open homes to researchers

BY ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

Pinyon Jay survival in Arizona

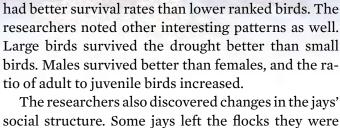
Serendipity brought researchers to the home of FeederWatch participant Pam Koch in Flagstaff, Arizona. Pam is in law enforcement, and in 2000 she stopped to check on a car parked on the side of the road. She found a student in the car with binoculars counting cones on a pinyon pine. When she discovered that he was conducting research for Russell Balda, an ornithologist who has been studying Pinyon Jays at Northern Arizona University since the 1960s, she told the student that she had at least three different flocks of Pinyon Jays coming to her feeders. The research team came out to Pam's home and have been banding jays there ever since.

Russell is a Regents' Professor Emeritus and formerly directed the Avian Cognition Laboratory at the university. In 2000, the same year they started banding in Pam's yard, Russell and his team initiated a comprehensive study to determine flock structure and the cohesiveness of seven flocks of Pinyon Jays. Russell wrote, "Just after the study began, the area underwent an extreme drought. Hundreds of thousands of pinyon pine trees died, and those that survived failed to produce pine seeds (a major source of food for Pinyon Jays). These factors had a huge impact on the local Pinyon

Jay population."

After taking measurements on more than 3,700 jays, the researchers detected changes as a result of the drought. Pinyon Jays are very social, and not surprisingly,

Above: Banded Pinyon Jays feed with Redwinged Blackbirds at the home of FeederWatch participant Pam Koch in Flagstaff, Arizona. Left: Ornithologist Russell Balda measures a Pinyon Jay.



birds with higher ranks in the jay social hierarchy

The researchers also discovered changes in the jays' social structure. Some jays left the flocks they were born into. Usually the dispersal rates for Pinyon Jays is low, but after the drought, large numbers of birds dispersed from some flocks while other flocks took in a high number of these transients.

Pam has enjoyed watching the research unfold in her own yard. She wrote, "In the winter we can have 200–300 Pinyon Jays at the feeders from different flocks. The flocks have been color-banded red, purple, light pink, and dark pink, and all wear aluminum U.S. Fish and Wildlife Service bands. I also have birds every year that come in from other Pinyon Jay flocks that have been banded in other areas of Flagstaff." Russell noted, "Pam Koch's yard has been a key location for trapping, banding and measuring jays for the last nine years. The research has been possible only because of the collaboration of scientists and dedicated members of the community who support and participate in avian ecological research."

Glaciers and the ranges of birds

For the past two springs, several FeederWatch participants in portions of Alaska, Montana, Colorado, Utah, Washington, and Oregon opened their feeder areas to researchers studying woodpeckers, chickadees, crows, and jays. The researchers, led by John Hindley, are graduate students studying with Dr. Theresa Burg at the University of Lethbridge in Lethbridge, Alberta. Using hard-to-see nets called "mist nets" set up around the feeders, the researchers caught birds, took measurements and blood samples, banded the birds, and then released them.

Back in the lab, the researchers will look at DNA in the blood samples they collected to better under-



stand how different populations are related and to understand how birds that were isolated in ice-free areas during the last ice age expanded into the areas previously covered by glaciers. By learning how these species were able to respond to historic changes in climate, researchers hope to create models that can predict future responses to habitat fragmentation and global warming.

John is extremely grateful to the FeederWatch participants, many of whom provided camping locations, accommodations, and wonderful home-cooked meals. Dorothy Gibbs was one of the participants who housed John Hindley this past spring at her home in Estes Park, Colorado. John was accompanied by Lethbridge University senior Karley Campbell, who assisted John in the field. Dorothy wrote, "It was absolutely fascinating to watch John handle the tiny birds while Karley recorded weight and length and other data and took care of the blood samples." John wrote, "We thoroughly enjoyed sharing birds up-close with so many wonderful people."



Researcher John Hindley inspects a Brown-headed Nuthatch captured in a mist net at the home of FeederWatch participant Dorothy Gibbs in Estes Park, Colorado. Field assistant Karley Campbell records the birds' measurements in the background.

15 years of the House Finch Disease Survey: Its progress and plans for the future

BY GENNA KNIGHT, CORNELL LAB OF ORNITHOLOGY

In the winter of 1993–94, observers in Washington D.C., Maryland, and Virginia began seeing a new disease affecting House Finches, with birds having red and swollen eyes. Scientists at the Cornell Lab of Ornithology soon developed a survey and requested that FeederWatchers systematically record their observations of diseased birds so that the spread of the disease and its impacts on House Finches could be understood. The severity of the epidemic was soon apparent, with bird watchers reporting affected birds throughout the Mid-Atlantic states within one year.

Despite the obvious external symptoms focused around the eyes of a sick bird, the disease also causes a respiratory infection that originates from a unique strain of *Mycoplasma gallisepticum*, a bacterium previously found in poultry. As the epidemic swept the East Coast, it brought with it a slew of questions: Why is the infection so prevalent in House Finches? Can sick birds recover? Which other species are affected?

In an effort to answer these questions and more, Cornell Lab scientists called upon FeederWatchers and other citizen scientists to collect and report observations of sick and healthy birds as part of the House Finch Disease Survey. For the past 15 years, participants have helped scientists gather information about where the epidemic has spread and to quantify its impact on wild bird populations. Although the disease is predominantly found in House Finches, mycoplasmal conjunctivitis has been confirmed in American Goldfinches, Purple Finches, Evening Grosbeaks, and Pine Grosbeaks, all members of the family Fringillidae. Laboratory studies indicate that other species of small songbirds, such as House Sparrows, can be carriers of the bacteria, without clear signs of disease.

Data from the House Finch Disease Survey revealed that it took nearly a decade for the disease to reach native populations of House Finches in the West. The disease began spreading in the Northwest in early 2004, 10 years after the first signs of infection in the East and 2 years after an isolated outbreak in Montana. It appears likely that only a small population was infected in Montana because House Finch populations are more isolated inland, reducing the risk of transmission. Surprisingly, western House Finches are not as strongly affected as their eastern counterparts.

Why are eastern House Finches most strongly affected by the disease? Originally, House Finches were only found in western North America and were illegally sold

House finch with conjunctivitis, a common symptom of Mycoplasma infection.

in the East as pet "Hollywood Finches."

In the 1940s, some of these captive birds were released into the wild. Since then, House Finches have successfully bred and multiplied throughout the East, becoming a common feeder bird. Because they originated from a small number of birds, eastern House Finch populations are inbred, exhibit low genetic diversity, and are therefore potentially more susceptible to infection. Researchers, however, are also investigating the possibility that the bacteria has evolved and become less virulent as it traveled west.

Current research is aimed at understanding the persistence of the disease in eastern North America. Scientists are determining whether some infected birds may recover from the illness but continue to carry the bacteria throughout their life. They are also investigating whether previously infected birds are immune to future infections. Additional laboratory studies and further examination of data already gathered from the House Finch Disease Survey are being used to investigate the influence of alternate, asymptomatic host species in maintaining the disease in House Finches, seasonal dynamics in disease outbreaks, and the long-term impact of the disease on House Finches.

House Finch Disease Survey ends

After a remarkable 15-year run, the House Finch Disease Survey came to an end this past summer as an independent project. Instead, the House Finch Disease Survey is returning to its FeederWatch roots, with participants gathering information on sick birds during the November–April FeederWatch season. FeederWatchers are asked to continue to report the number of House Finches they see on their designated count days during the winter months, indicating how many birds, if any, appear to have symptoms of the infection.

Data already collected by the House Finch Disease Survey will continue to help scientists for years to come to better understand the dynamics of the disease and its prevalence in House Finch populations. Thanks to FeederWatchers and House Finch Disease Survey participants, an incredible amount has been learned about this novel disease, resulting in more than 50 scientific articles. The level of research and understanding about the disease would not have been achieved without the efforts of our devoted participants. We are grateful to all of our citizen scientists for your valuable role in our research.

Disease outbreak strikes FeederWatch Cam site in Colorado

This past spring, FeederWatch participants David Smith and Shanna Rendon of Grand Junction, Colorado, experienced a disease outbreak in the House Finches at their feeders, which are displayed on the Internet via a live FeederWatch Cam. Upon seeing signs of disease at their count site, David and

Shanna immediately took down their finch feeders for several days to clean their site and allow the sick birds to disperse. Because disease can spread among birds, particularly when they form large flocks, transmission around feeders is a concern. Studies indicate, however, that bird feeding does not necessarily increase the

The Colorado FeederWatch Cam focused on House Finches.

rate of infection, particularly if food is offered in a safe and clean environment. During the pause in normal feeding operations, David and Shanna situated the FeederWatch Cam on the ground to offer a view of the local groundfeeding birds—Gambel's Quail, juncos, and doves. Weeks later, they noticed several new cases of finches with red and swollen eves and chronicled their efforts to reduce contamination on the FeederWatch Cam online forum. Read more about David and Shanna's experience and see live action at their count site by clicking on the Live Cam link at www.feederwatch.org.



roject FeederWatch participants provide a wealth of information about the kinds and numbers of birds visiting feeders each season, and they also shed light on illnesses that are affecting some feeder birds.

Sick birds:

Because FeederWatch participants have a close view of birds at their feeders, and because birds seek easy meals when they are feeling ill, FeederWatchers occasionally observe sick birds. FeederWatchers can minimize the spread of diseases through responsible bird-feeding practices. Participants are also encouraged to submit reports of sick birds to help scientists track infections. In addition to mycoplasmal conjunctivitis (see pages 4-5), four diseases that commonly affect birds that visit feeders are salmonellosis, trichomoniasis, aspergillosis, and avian pox.



Common diseases of feeder birds

Salmonellosis, caused by Salmonella bacteria, is one of the most common diseases affecting feeder birds and may cause significant die-offs. Infected birds can pass the bacteria to healthy birds through their droppings, which may contaminate food or water. Because the salmonella that sickens songbirds can cause illness if ingested by people and pets, maintaining a clean birdfeeding area is important for you and the birds.

EVENING GROSBEAKS BY JEAN AUBE

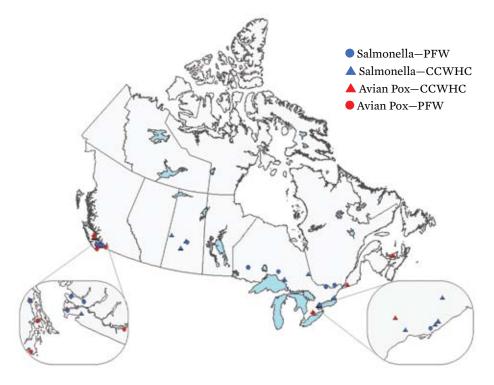
Definitive diagnosis of salmonellosis requires laboratory isolation and identification. Commonly reported salmonella symptoms, however, include ruffled feathers, droopy wings, diarrhea, and severe lethargy. Chronically infected birds often appear emaciated and may be easy to approach. Sick birds may also experience seizures.

Trichomoniasis is the term used to describe an illness caused by any of a group of parasites. The disease affects a variety of animals including humans. The strains that affect birds are different from those that affect people. Mourning Doves and their relatives are particularly susceptible. Afflicted birds usually develop sores in the mouth and throat. Unable to swallow, infected birds drop food, and the disease spreads when other birds pick up the contaminated food. Trichomoniasis is now thought to be an emerging disease in the Canadian Maritimes, where multiple incidents of the disease were diagnosed in wild finches for the first time during the summers of 2007 and 2008*.

Left: Sick birds tend to be lethargic, easy to approach, and may fluff out their feathers like this Pine Grosbeak. * Forzán, M.J., Vanderstichel, R., Melekhovets, Y.F., and S.

McBurney. In press. Trichomoniasis in finches from the Canadian Maritime Provinces, an emerging disease. Canadian

Veterinary Journal.



Birds sent to the Canadian Cooperative Wildlife Health Centre (CCWHC) and subsequently diagnosed with trichomoniasis showed symptoms including lethargy, ruffled feathers, labored breathing, and poor flight ability prior to dying.

Birds develop **aspergillosis**, a respiratory disease, by inhaling spores from certain molds. The genus *Aspergillus* includes many species of mold that grow on damp feed and on the debris beneath feeders. The fungi spread through the lungs and air sacs of infected birds, causing bronchitis and pneumonia. Symptoms include difficulty in breathing, emaciation, and increased thirst. When a bird's eyes are infected, there may be a white opacity in one or both eyes, accompanied by discharge.

Avian pox is a viral disease that has two forms. One form causes wart-like growths on featherless area of a bird's face, wings, legs, and feet. The second form causes plaques to develop on the mucous membranes of the mouth, throat, trachea, and lungs, resulting in impaired breathing and difficulty in feeding. Secondary infections may develop in birds infected with pox, which often lead to the bird's death. The virus that causes avian pox is spread by direct contact with infected birds, by healthy birds picking up the virus on food or surfaces, or by blood-feeding insects.

FeederWatch sick-bird reports

Salmonella outbreaks and other bird diseases are commonly reported in late winter. Last year, outbreaks of salmonella infection in wild birds were widely reported in Canada and the United States. These outbreaks had particularly negative consequences for the Pine Siskins that moved south in large numbers **Map**: Locations of sick birds reported to Project FeederWatch in Canada and the Canadian Cooperative Wildlife Health Centre (CCWHC) during the winter of 2008–09. CCWHC data courtesy CCWHC Headquarters, University of Saskatchewan, SK.

(see page 8). When birds feed and roost in tight flocks (as siskins do during irruption years), outbreaks of salmonella often occur. Salmonella circulates regularly at low levels in the wild bird population, and sporadic outbreaks involving large numbers of sick and dead birds are periodically encountered.

The total number of birds that die from contagious diseases will never be known. You can do your part to help prevent the spread of disease by following careful bird feeding practices and by reporting sick or

dead birds. Thank you, FeederWatchers, for following responsible feeding practices and for submitting reports of sick birds. FeederWatchers can report any sick bird online by following the "Report rare, unusual, or sick birds" link on the data entry home page or by submitting a note with your paper data forms. **Canadians**: The CCWHC encourages people who find dead birds to call 1-800-567-2033 with your report.

Keeping your birds healthy

Follow these simple steps in order to create a safer environment for your birds:

- Clean feeders and birdbaths weekly with a 10% chlorine bleach solution (one part bleach to nine parts water). Rinse thoroughly and allow to completely dry before refilling. Only use feeders that are easy to clean.
- Rake and discard seed debris and bird droppings under your feeders regularly.
- Move your feeders around to limit the concentration of fecal material and seed wastes.
- Temporarily remove feeders when sick birds appear.
- Fecal material is more likely to come into contact with food on open trays and platform feeders. Consider using feeders that do not allow the birds to stand or defecate in their food.
- Always discard any seed that has become wet. Harmful molds can grow on wet seeds.

For more information about bird diseases and what to do if you see a sick bird at your feeder, visit: www.feederwatch.org/AboutBirdsandFeeding/DiseasedBirds.htm.

Regional round-up

Trends and highlights from the 2008–09 FeederWatch season

BY DAVID BONTER,
CORNELL LAB OF ORNITHOLOGY

NICK SAUNDERS

eederWatch participants submitted nearly 117,000 checklists during the winter of 2008–09, with observations submitted from all U.S. states and Canadian provinces. The big story of the 2008–09 season involved a remarkable movement of Pine Siskins throughout much of North America. In many regions, siskin numbers last winter exceeded those seen at any time in the last two decades.

In the northeastern quarter of North America, siskin reports were truly unprecedented. FeederWatchers reported siskins at a record-high 59% of locations (1988-2008 average=20%), with flocks averaging nearly 8 birds (1988-2008 average=4.7 birds). In the Southwest, these small finches reached their second highest level in the last decade. Siskins were seen at more FeederWatcher locations in the center of the continent than in any year since 1990. More FeederWatchers reported siskins in the Pacific Northwest and Rocky Mountains than in any season since 2002. Participants in the Southeast were amazed by large flocks as far south as the coast of the Gulf of Mexico and northern Florida. In many areas, the siskins nested before the winter ended, with young birds visiting feeders in March and April!

Pine Siskins are known to breed earlier than most species, with nest construction taking place in February and March. A well-insulated nest helps to keep the eggs warm in cold temperatures, and the female rarely leaves the nest during incubation. Males feed incubating females, allowing for near-continuous incubation. The erratic movements of siskins indicate that individuals generally do not return to the same breeding and wintering areas year after year. Rather, birds colonize areas with adequate habitat and food supplies, nest when food supplies are abundant, and move on when food supplies dwindle.

In addition to the remark-

able siskin movements, several rare birds thrilled participants during the 2008–09 season. Highlights included a large number of Dickcissels found wintering at FeederWatch locations from Newfoundland to Florida to Missouri. This species is a widespread grassland-nesting bird of the tall grass prairies, but generally spends the winter in the savannahs of South America. Rose-breasted Grosbeaks, a species that nests in eastern and central North America and typically winters in Central and South America, were confirmed at many western locations (California, Utah, Oregon, Arizona). Several other Rose-breasted Grosbeaks lingered within their breeding range, with winter records confirmed in New Jersey, New York, and Ontario.

Regional Top-25 tables

The regional summaries found on the following pages group states and provinces that share similar feeder-bird communities. The Top-25 lists are based on the percentage of FeederWatch locations in that region that hosted each species at least once between November 2008 and April 2009. The tables also include the average rankings for each species over the history of FeederWatch.

More details online

For more detailed information, including Top-25 lists from individual states and provinces and additional rare bird reports and photos, please visit the Explore Data section of the FeederWatch website.

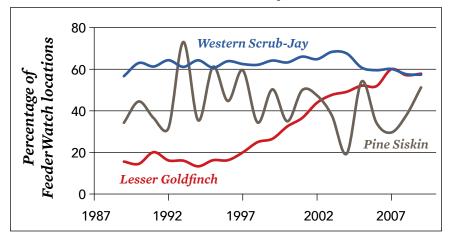
Above: White-winged Crossbills irrupted into many parts of North America during the 2008–09 season. Remarkably tame, this species allows humans to approach closely. **Left**: One of the millions of Pine Siskins that visited backyard bird feeders last season.



TOP-25 LIST: 788 SITES REPORTING

Rank			Percentage of Sites	
2008-09	Average	Species	2008-09	Average
1	1	House Finch	91	88
2	2	Dark-eyed Junco	78	81
3	4	Mourning Dove	72	63
4	5	White-crowned Sparrow	60	59
5	20	Lesser Goldfinch	58	33
6	4	Western Scrub-Jay	57	62
7	6	House Sparrow	57	59
8	10	American Goldfinch	56	47
9	8	American Robin	55	52
10	9	Northern Flicker	52	48
11	12	Pine Siskin	51	43
12	9	Anna's Hummingbird	50	49
13	12	Spotted Towhee	38	40
14	15	European Starling	34	33
15	14	California Towhee	33	36
16	21	Sharp-shinned Hawk	33	27
17	27	American Crow	33	23
18	24	Downy Woodpecker	32	25
19	29	Cooper's Hawk	32	21
20	19	"Plain" Titmouse*	30	29
21	18	White-breasted Nuthatch	29	29
22	31	Bushtit	28	20
23	25	Yellow-rumped Warbler	27	24
24	23	Northern Mockingbird	26	25
25	18	Golden-crowned Sparrow	26	30

^{* &}quot;Plain" Titmouse includes Oak Titmouse and Juniper Titmouse.





Hummingbirds are not the only species that enjoy a sip of nectar. This Verdin shows off its agility for a taste of sugar.

ouse Finch populations elsewhere suffered dramatic declines following the spread of mycoplasmal conjunctivitis, but populations in the native southwestern range remain strong. The House Finch has topped the list of the most common feeder birds in the region each year since FeederWatch began. With maximum flock sizes averaging more than 7 birds, the House Finch continues to be the best known feeder bird in the region.

The slow decline in reports of Western Scrub-Jays since 2002 continued in 2008-09, as the species was recorded at only 57% of locations (an all-time low) and average flock sizes dropped to below two birds for the second consecutive year. Reports of Lesser Goldfinch and Eurasian Collared-Doves, however, continued to soar. A remarkable jump was detected in the proportion of sites reporting collared-doves in 2008-09 (25%) compared to the previous two seasons (17% and 13%). Watch for this species to enter the regional Top 25 next season.

7hite-throated Sparrows and Dark-eyed Juncos are two species that generally spend the breeding season in northerly locales. Because juncos and White-throated Sparrows prefer similar habitat and foods, and both tend to feed on the ground, their distribution in winter is likely determined by weather conditions and the amount of snow cover in the northern portion of their winter range. These species are likely to move farther south in years with harsh weather or low natural food supplies in the north. FeederWatch data from the Southeast and south-central regions show a synchronized pattern of peaks and valleys in the abundance of these two species (see graph), suggesting that both species are influenced by similar factors.

Red-breasted Nuthatches were scarce in 2008–09 after a wide-spread movement into the South during the previous season. Only 6% of FeederWatchers in the region hosted this species last season, compared with 30% in 2007–08.

White-winged Doves and Eurasian Collared-Doves are becoming increasingly common feeder birds in the south (seen at 20% and 13% of FeederWatch locations, respectively).

Rare bird highlights in the region included a Yellow-headed Blackbird visiting the feeders of Doug Sphar in Cocoa, Florida, well outside of the normal range for this species.

Southeast & South-Central Regions

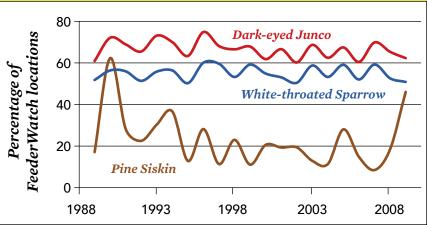


TOP-25 LIST: 1,204 SITES REPORTING

Rank			Percentage of Sites	
2008-09	Average	Species	2008-09	Average
1	1	Northern Cardinal	96	97
2	2	Mourning Dove	91	90
3	4	American Goldfinch	85	84
4	6	Carolina Chickadee	82	79
5	4	Tufted Titmouse	81	83
6	4	Blue Jay	80	83
7	7	Carolina Wren	79	75
8	8	Red-bellied Woodpecker	75	73
9	11	House Finch	75	65
10	12	Downy Woodpecker	68	61
11	12	Northern Mockingbird	65	60
12	10	Dark-eyed Junco	62	67
13	13	American Robin	61	59
14	13	White-throated Sparrow	51	55
15	19	Chipping Sparrow	48	42
16	33	Pine Siskin	46	23
17	26	Eastern Bluebird	44	33
18	22	American Crow	44	36
19	22	White-breasted Nuthatch	42	38
20	15	Common Grackle	42	50
21	20	Red-winged Blackbird	42	42
22	23	Yellow-rumped Warbler	41	36
23	18	Brown-headed Cowbird	40	44
24	20	"Rufous-sided" Towhee*	39	40
25	22	Brown Thrasher	37	39

^{*} Combines Eastern Towhee and Spotted Towhee.







Pacific Northwest & Rocky Mountain Regions

TOP-25 LIST: 903 SITES REPORTING

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Rank			Percentage of Sites	
2008-09	Average	Species	2008-09	Average
1	1	Dark-eyed Junco	87	88
2	2	Black-capped Chickadee	80	80
3	5	Northern Flicker	77	66
4	4	House Finch	72	70
5	6	Pine Siskin	70	63
6	7	American Robin	67	58
7	9	Red-breasted Nuthatch	65	55
8	10	Downy Woodpecker	63	53
9	9	Song Sparrow	59	54
10	9	Spotted Towhee	57	54
11	11	European Starling	55	51
12	10	Steller's Jay	54	52
13	10	House Sparrow	53	52
14	15	Chestnut-backed Chickadee	45	41
15	15	Varied Thrush	43	40
16	17	American Goldfinch	38	33
17	21	Fox Sparrow	35	27
18	19	American Crow	33	30
19	19	Hairy Woodpecker	33	30
20	40	Anna's Hummingbird	30	12
21	21	Sharp-shinned Hawk	30	27
22	27	Bushtit	29	20
23	28	Mourning Dove	28	19
24	20	Red-winged Blackbird	27	27
25	27	Golden-crowned Sparrow	27	20



Red-breasted Nuthatches were difficult to find in much of North America last winter, but the species was seen by more Feeder Watchers (65%) in the Pacific Northwest and Rocky Mountain region than at any time in Feeder Watch history. Anna's Hummingbirds moved into the regional Top 20 for the first time, with nearly one in three Feeder Watchers now hosting this species at some point between November and early April. Fox Sparrows were relatively common during 2008–09, with more locations reporting this species than at any time since 1991. Likewise, Golden-crowned Sparrows were abundant, reported at an all-time high of 27% of locations. Mourning Dove numbers appear to have stabilized following a period of expansion

in the region during the 1990s. Reports of Evening Grosbeaks have also stabilized following a dramatic decline over the past 20 years, but only 16% of locations in the region hosted Evening Grosbeaks during the winter of 2008–09, compared with 40–60% two decades ago.

Birds seen in unexpected locations last winter included a Band-tailed Pigeon in Casper, Wyoming, and a Yellow-throated Warbler in Medicine Hat, Alberta. The warbler is typically found in the southeastern United States and should not have been in Alberta at any time of the year. It did not stay long, but FeederWatcher Pat Harding was fortunate to snap a quick photo in order to document this unusual find.

Mid-Atlantic, East-Central, Northeast, Great Lakes, Allegheny, & Atlantic Canada Regions



Arerica, was an unexpected surprise for FeederWatcher Peggy McDevit in Collingswood, New Jersey (photo below). This lost bird spent much of the winter at Peggy's feeders and was enjoyed by bird watchers from around the region. Summer Tanagers photographed by FeederWatchers in St. Lawrence, Newfoundland, and Blue Hill, Maine, were also surprising highlights.

Region-wide, the Red-breasted Nuthatch fell out of the Top-25 last winter following an unprecendented movement by this species into the region in 2007-08. Reports of Common Redpolls remained strong for the second consecutive season, contrary to the typical biennial movements of redpolls into the region. Red-bellied Woodpeckers, American Robins, and Cooper's Hawks were readily seen in many areas, approaching all-time highs for each species. Both the average flock size (5.9) and proportion of sites reporting American Goldfinches (92%) reached new record-highs in the region in 2008-09. The percentage of sites hosting Evening Grosbeaks fell last winter to only 6% of sites following a brief resurgence in 2007-08.

TOP-25 LIST: 6,120 SITES REPORTING

Rank			Percentage of Sites	
2008-09	Average	Species	2008-09	Average
1	1	Chickadee*	97	95
2	3	Dark-eyed Junco	94	90
3	2	Mourning Dove	94	92
4	7	American Goldfinch	92	84
5	5	Downy Woodpecker	91	87
6	4	Blue Jay	90	90
7	6	Northern Cardinal	87	84
8	8	White-breasted Nuthatch	80	76
9	9	House Finch	74	76
10	11	Tufted Titmouse	67	63
11	10	European Starling	64	68
12	17	Red-bellied Woodpecker	63	48
13	12	House Sparrow	63	64
14	17	American Robin	63	48
15	15	Hairy Woodpecker	62	52
16	30	Pine Siskin	59	20
17	16	American Crow	56	52
18	15	Common Grackle	53	52
19	17	Song Sparrow	49	47
20	20	Red-winged Blackbird	46	42
21	20	White-throated Sparrow	45	41
22	24	Carolina Wren	43	32
23	22	American Tree Sparrow	41	37
24	22	Purple Finch	38	36
25	22	Brown-headed Cowbird	35	35

^{*} Combines Black-capped Chickadee and Carolina Chickadee.





TOP-25 LIST: 651 SITES REPORTING

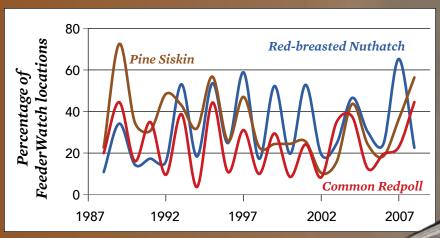
Rank		nk		Percentag	ge of Sites
20	008-09	Average	Species	2008-09	Average
	1	3	Downy Woodpecker	92	89
	2	1	Chickadee*	90	95
	3	3	Dark-eyed Junco	90	90
	4	3	Blue Jay	86	89
	5	6	American Goldfinch	80	76
	6	7	White-breasted Nuthatch	79	74
	7	11	House Finch	72	61
	8	8	Northern Cardinal	71	71
	9	6	House Sparrow	70	77
	10	14	American Robin	66	52
	11	10	Hairy Woodpecker	65	63
	12	12	Red-bellied Woodpecker	62	55
	13	14	Mourning Dove	59	52
	14	20	Pine Siskin	56	34
	15	11	European Starling	54	61
	16	26	Common Redpoll	45	24
	17	17	Purple Finch	41	40
	18	16	American Crow	41	44
	19	15	Common Grackle	40	45
	20	19	Northern Flicker	39	36
	21	21	Red-winged Blackbird	33	29
	22	22	American Tree Sparrow	31	27
	23	21	Tufted Titmouse	27	30
	24	24	White-throated Sparrow	26	23
	25	27	Carolina Wren	24	19

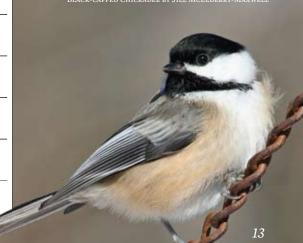
^{*} Combines Black-capped Chickadee and Carolina Chickadee.

A merican Crows were reported at fewer locations in the center of North America last winter than at any time since 1994. American Robins, on the other hand, were seen at more locations last season than in any previous season except 1999–2000. Nearly one in four locations reported Cedar Waxwings last winter, the largest percentage in the history of FeederWatch.

The Red-breasted Nuthatch fell out of the regional Top-25 last winter after a record-setting season in 2007–08. Red-breasted Nuthatches often follow a pattern of moving into the region during the same years as Pine Siskin irruptions, but the pattern was broken last winter (see graph). Common Redpolls joined siskins at many locations in the region, and were seen at more locations than in any year since 1995–96.

Among the region's rare bird highlights, a Cape May Warbler lingered in Saskatchewan when it should have been wintering somewhere in the Caribbean or Central America. A Fox Sparrow also lingered in Manitoba when it should have been wintering in the United States. FeederWatcher Lorie Conrey of Bellevue, Nebraska, hosted both a Hermit Thrush and a Yellow-bellied Sapsucker at her feeders far later into the season than these species would be expected in her part of the country.





Alaska & Northern Canada

ecause Pine Siskins moved out of Alaska and Northern Canada into the rest of North America during the 2008-09 FeederWatch season, the relative lack of siskins in the north was expected (seen at only 30% of locations). Common Redpoll numbers remained strong, however, with this species topping the regional list for the third consecutive year. Pine Grosbeaks were seen at 10% more locations in 2008-09 than in 2007-08. Dark-eyed Juncos were reported by more FeederWatchers in the region last winter than in any season since 1992, while Bohemian Waxwings were reported at more locations than at any other time since FeederWatch began. Steller's Jays visited fewer FeederWatch locations last season than in any of the past seven years, while the other corvids (Gray Jay, Black-billed Magpie) remained stable.

Surprising reports included a Purple Finch visiting a FeederWatch site in Homer, Alaska, north and west of its typical range.

TOP-10 LIST: 57 SITES REPORTING

Rank			Percentage of Sites	
2008-09	Average	Species	2008-09	Average
1	2	Common Redpoll	89	80
2	1	Black-capped Chickadee	81	83
3	4	Pine Grosbeak	67	60
4	6	Downy Woodpecker	60	52
5	5	Black-billed Magpie	58	55
6	8	Hairy Woodpecker	58	49
7	5	Boreal Chickadee	54	57
8	7	Red-breasted Nuthatch	54	50
9	9	Dark-eyed Junco	51	43
10	11	Common Raven	42	36

This Gray-crowned Rosy-Finch, photographed by FeederWatcher Robert Lewis in Whitehorse, Yukon, was found farther north than expected in winter.

Hawaii



Northern Cardinals, one of the most common feeder birds in the eastern half of North America, also topped the charts in Hawaii last season. Hawaii is the only place, however, where FeederWatchers are able to report Northern Cardinals in addition to Red-crested Cardinals and Yellow-billed Cardinals (both are South American species that are actually not closely related to the Northern Cardinal). Like these three cardinals, the vast majority of birds reported by our five participants in Hawaii last season were introduced from other parts of the world. Hawaiian Goose (Nēnē) and Pacific Golden-Plover were the only native species reported by FeederWatchers in the state, with each species seen at only one FeederWatch location.



hree common feeder birds that are easy to confuse include Song Sparrows, female House Finches, and Pine Siskins. All three are relatively nondescript, but observing their behaviors and fine details in size, plumage, and bill structure can be useful in solving these tricky identification challenges.

Song Sparrow

- The largest of the three: approximately 6.25" long
- Relatively stout and chunky bill
- · Strongly defined streaks on the chest and back, with a large, dark spot often visible in the center of the chest
- Feeds almost exclusively on the ground, usually a solitary bird

House Finch (female)

- Slightly smaller than the Song Sparrow: 6" long
- Stout, stubby bill that appears curved on top
- Prefers feeding above ground-level, often at tube or hopper feeders
- Usually seen in flocks with male House Finches (identified by the raspberry color on their heads)

Pine Siskin

- Smallest of the three: approximately 5" long
- Thin bill that comes to a sharp point
- Usually shows a small amount of yellow in the wing
- Prefers nyjer seed, almost always in flocks, may associate with goldfinches

Note that female Cassin's Finch and Purple Finch are also similar in appearance. Help for distinguishing species can be found in the FeederWatch Tricky Bird ID pages on the web site.





Windows can be a threat to the birds at our feeders

BY ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

esearchers estimate that more than 100 million birds are killed and many more are injured by flying into windows in North America every year.

Birds fly into windows because they either do not see the glass or they see vegetation reflected in the glass as a continuation of the habitat surrounding the building. A predator can compound the problem by startling birds, causing them to flee quickly. Project FeederWatch participant July Alabakoff of Vancouver, Washington, wrote that a Cooper's Hawk in her yard had "learned to spook the doves out of my front vegetable garden and into the picture window in the front of the house." She had watched the hawk repeatedly fly in and then pick up any stunned birds from below the window—likely a more energy efficient hunting strategy than trying to catch the birds on the fly.

Several strategies have proven effective in preventing window strikes or reducing mortality when strikes occur. The strategies include placing feeders less than 3 feet from windows so that birds cannot gain enough speed before hitting the window to cause injury. Another option is to place feeders more than 30 feet away from windows, far enough that birds are



This Northern Shrike was one of the lucky window-strike survivors. It hit a window at the home of Suzanne Oliver in Crete, Illinois, but survived and flew off after about 20 minutes. The shrike was also fortunate to have Suzanne and her husband (whose finger is in the photo) there to watch the bird and make sure no larger predators captured it before it was able to recover.



Dan Hunt of Pocatella, Idaho, sent us this photo of a Northern Pygmy Owl. He wrote that the owl "hit our window so hard it was knocked unconscious into the snow and looked dead, but we saw it was still breathing so we put it in a box and watched over it until it recovered well enough to fly away, about an hour later."

unlikely to seek a path through your home when trying to escape a predator. On particularly problematic windows, try stretching netting across the window with several inches of space between the net and the window. The net will create an effective trampoline, allowing the birds to bounce off safely without coming in contact with the window. Netting designed to keep deer from eating shrubs works well for this purpose.

The Wilson Journal of Ornithology published two articles by Daniel Klem and colleagues on the problem of window-strikes in their March 2009 issue. Klem reviewed methods for preventing strikes—the key is to break-up the reflection of the surrounding landscape. Covering windows with a grid of strips that absorb and reflect ultraviolet light was very effective at reducing window strikes because birds can see farther into the ultraviolet spectrum than humans. Thus, the strips of UV-reflecting tape create an unnatural pattern that is visible to birds, allowing them to "see" the window. Films that made the outer surface of windows opaque while still appearing transparent from inside were also effective. Placing decals or other objects on the glass with no more than 10 cm of space between the objects also breaks up the reflection of the surrounding landscape and helps prevents window strikes.