

FOCUS ON CITIZEN SCIENCE • VOLUME 4

Supplement to BirdScope

Winter Bird Highlights

FROM PROJECT FEEDERWATCH 2007-08



CORNELL LAB of ORNITHOLOGY



BIRD STUDIES CANADA
ÉTUDES D'OISEAUX



“We have a wild and overgrown bush along our back fence, which has become a haven for the more timid birds such as thrashers, towhees, and juncos. More recently, we’ve planted bird-friendly perennials and were rewarded this summer as several sunny yellow American Goldfinches hung upside down to eat the seed heads on our garden’s coneflowers.”

—FeederWatcher Debra Tyre, Norcross, Georgia

Conserving energy is not only beneficial for your wallet, it has become imperative to ease the impact we have on the environment. **Why not conserve energy while helping the birds?**

One simple step toward reducing your reliance on fossil fuels while making your neighborhood more attractive to birds is to give your lawn mower a rest. Mow less often, set the cutting deck at a higher level, or better yet, stop mowing altogether. A monoculture of turfgrass may be aesthetically pleasing to some, but it is a desert-like habitat for most birds. Consider planting perennials, shrubs, and trees that are native to your area. The habitat that you create is guaranteed to attract more birds. Making your yard more friendly for birds and wildlife doesn’t have to take place all at once—convert 10% of your lawn per year, and you will soon oversee a wildlife oasis in your neighborhood.

“We just moved here and are in the process of adding native plants to our yard—hoping to attract more birds by providing better habitat and natural foods.”

—FeederWatcher Alexandra Florimonte, Denver, Colorado



*White-breasted Nuthatch (on cover)
by Gary Mueller, Rolla, Missouri*

*Song Sparrow (above)
by Jennifer Taggart, Newburg, Pennsylvania*

Focus on Citizen Science is a publication dedicated to highlighting the contributions of citizen scientists. This issue, *Winter Bird Highlights 2008*, 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 in the United States and Canada.

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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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Participant highlights

BY ANNE MARIE JOHNSON & GENNA KNIGHT, CORNELL LAB OF ORNITHOLOGY

Eurasian finch engages students in Alaska

In the small village of Shageluk, Alaska, Joyanne Hamilton teaches her students the importance of understanding seasonal and environmental changes and how they affect local wildlife. Joyanne's observations led to the discovery of something extraordinary in her own backyard when a Brambling ventured to her village on the Innoko River. This Eurasian finch typically winters in Europe, northern Pakistan, northern India, China, and Japan, though occasionally a few will wander into Alaska along the western Aleutian Islands. In the past, four sightings were reported on the mainland in the coastal villages of Anchorage, Homer, on Kodiak Island, and in Petersburg in the Southeast, but this was a first for Shageluk.

In September 2007, the Brambling made its first appearance at Joyanne's feeders and stayed for about a month before moving on. For more than a decade, Joyanne has participated in citizen-science projects like Project FeederWatch, in which her students, levels K–12, engage in the study of wildlife migration and local habitat. FeederWatching from their classroom windows, they study the “flyways” and feeding patterns of the birds that visit. Having studied the weather systems that roll up the Aleutians, her students concluded that the Brambling was probably blown off course in one of the storms. According to Joyanne, her students “get a real kick” out of submitting their findings to Project FeederWatch and were thrilled to report their rare visitor, adding it to their list of “first seen” birds.

Read the complete story of Joyanne's Brambling online in the *Featured FeederWatchers* section at www.feederwatch.org.

“Original” FeederWatcher shares thoughts

Longtime FeederWatcher Jim Russell of Grand Prairie, Texas, writes a monthly column for *Nature Society News*, a publication dedicated to promoting healthy populations of North American songbirds. Jim is proud to be one of a small group of FeederWatchers that has been with the project since it became a continent-wide effort in 1987. Recounting how he first became involved with Project FeederWatch in his May 2008 article, Jim remembers wondering how his observations could make a difference. Now he realizes the value of coordinating observations from people across the continent. In the article, Jim highlights some memorable observations of the birds and mammals that have visited his yard, including Indigo Buntings, White-winged Doves, and coyotes. The doves are relatively new to the area, expanding their range north from Mexico. Jim wrote, “I marvel at the White-winged Doves...today their numbers in our backyard equal and often exceed those of our Mourning Doves.” Read excerpts from Jim's article as well as stories and comments from other original FeederWatchers at www.feederwatch.org/Members/OriginalFeederWatchers.htm.

Sandhill Crane braves Wyoming winter

A Sandhill Crane unexpectedly spent the winter in Powell, Wyoming, several hundred miles north of the usual winter range for this species. FeederWatchers Dave and Germaine Bragonier hosted the crane in their yard for much of the winter, where it ate grain from beneath their feeders.

Sandhill Cranes discovered the Bragoniers' feeders years ago when the cranes returned to a nearby wetland during the northward spring migration. Last fall, one crane family lingered for three weeks after all the other cranes had left for their wintering grounds. Dave wrote, “Often, we observed all three cranes airborne during those weeks, but invariably, the male would always break formation and glide back to the wetland, even though it seemed he could fly quite well.” Finally, after Thanksgiving the female crane and their colt left, but the male stayed behind, survived the winter, and successfully nested this past summer. 🐦

Student Charity Workman, grade 4, from the Innoko River School in Shageluk, Alaska, studies birds and participates in FeederWatch with her teacher and classmates.



PHOTO BY JOYANNE HAMILTON

Recent research about the birds at our feeders

BY GENNA KNIGHT & ANNE MARIE JOHNSON, CORNELL LAB OF ORNITHOLOGY

Hide-and-seek with chickadees

The Black-capped Chickadee, which seems to us to have a sunny disposition in even the harshest environments, perhaps can attribute its cheerfulness to its fabulous memory. Chickadees have an innate ability to hide food in thousands of locations for later consumption and then return, remembering nearly every hiding place. In northern climates especially, a sharp memory for finding food effectively and efficiently in winter is critical in order to avoid death by starvation. According to a recent study comparing chickadees in Colorado and Alaska,¹ this hide-and-seek technique is an adaptive survival skill found to be more advanced in the higher and harsher latitudes where the weather is more unpredictable and the reliance on stored food is greater. The study, performed in a University of California, Davis, laboratory using identical cache-recovery tasks, found that Black-capped Chickadees from Alaska stored significantly more food than those from Colorado and had an easier time remembering where to find it. Practice, pressure, and the environment are all factors that may make northern chickadees better equipped for harsh conditions.

In addition to having more practice in dealing with limited food supplies in severe weather, Alaskan chickadees also have less time to find food due to minimal available daylight hours. The average day length in Anchorage, Alaska, on December 22 is 5 hours and 27 minutes, compared with 9 hours and 16 minutes of daylight on the same date in Windsor, Colorado. Beyond their ability to locate food in almost half the time of their low-latitude counterparts, Alaskan chickadees have a knack for re-

membering where they hid it in the first place. Further examination found that this ability correlates with the size of the hippocampus, the portion of the brain involved in memory, which was larger and contained more neurons in the chickadees living in Alaska. Whether the behavioral and brain differences are genetic is yet to be determined, but the study confirmed that the distinction is not simply a result of environment. The differences between the Alaska and Colorado chickadees remained the same after spending more than a month in captivity under identical conditions in California. Researchers concluded that Black-capped Chickadees in higher latitudes developed survival skills as natural and critical adaptations for hiding and finding food in even the most inclement conditions. Thanks to bigger brains and better memories, Black-capped Chickadees were able to extend their range far north and survive.

Are falcons and parrots cousins?

Your old, reliable field guides may soon become out-of-date according to a study published in a June 2008 issue of *Science*.² The study examined DNA sequences from 169 species of birds and found genetic evidence of relationships previously considered unlikely. Likewise, several species that ornithologists believed to be similar were found to be only distantly related. Grebes and loons, for example, both known for their short legs and diving ability, apparently have less in common than scientists originally thought. The study links the evolutionary history of grebes with the long-legged, wading flamingos as their closest relative. Another peculiar combination involves the falcons, which we now know have a more intimate history with parrots than with hawks and eagles. Who would have thought a falcon would have more in common with a parrot than with birds that share similar lifestyles, beaks, and talons to hunt prey? In addition, New World vultures are not closely related to the storks, as previously believed. The conclusions from the study have shuffled our current scientific classifications and will undoubtedly change the way we think about relationships among species, not to mention the way we order them in our field guides.

Digging through the evolutionary history of birds is no easy task, particularly when the results turn out to be contrary to the existing and well-researched avian family tree. Scientists historically relied on external characteristics and behaviors of birds to make comparisons and classifications about how various species are



BLACK-CAPPED CHICKADEE BY GORD BEYEA, LAKE OF BAYS, ONTARIO

related. Genetic analyses provide a unique perspective by allowing researchers to compare DNA. Scientists at the Chicago Field Museum and seven other institutions dedicated five years to studying the genetic relationships among species. As a result, the study found that few species groups were related in ways that scientists previously believed. Potentially, it could take years to transition guidebooks to reflect the revised lineages. These changes will need to be approved by the American Ornithologists' Union, which releases an updated checklist of bird species each year. Typically, approval requires that researchers duplicate the new findings before classifications are reconsidered. Accepted changes will alter the order in which species appear in our field guides, and will remind us of the wonder of the avian world and the mysteries yet to be solved.

How does bird-feeding affect birds?

Remarkably little research has been conducted to evaluate the effects of bird-feeding on birds, but the existing studies were recently surveyed in an article in the journal *Frontiers in Ecology and the Environment*.³ The analysis highlighted many potential benefits of bird feeding, with the biggest impacts recorded in cold years, on low quality territories, and for younger birds. Some studies have documented increased breeding success following supplemental feeding, with increases in the numbers of eggs laid, the size and quality of the eggs, hatching success, growth rate of the chicks, and ultimately the number of young that leave the nest.

Although research demonstrates some clear benefits, there are also some concerns. Feeders may concentrate the activity of predators or increase the likelihood of disease transmission. Further, supplemental feeding may lead birds to lay eggs earlier in the breeding season. Earlier nesting can be beneficial and often contributes to a better survival rate for the young, but it can also reduce reproductive success if breeding earlier leads to a mistiming of nesting with peaks in food availability. Additional studies on the effects of bird-feeding are clearly needed. 🦉

¹Pravosudov, V. V. and N. S. Clayton. 2002. A test of the adaptive specialization hypothesis: Population differences in caching, memory, and the hippocampus in Black-capped Chickadees. *Behavioral Neuroscience* 116: 515–522.

²Hackett, S. J., R. T. Kimball, *et al.* 2008. A phylogenomic study of birds reveals their evolutionary history. *Science* 320: 1763–1768.

³Robb, G. N., R. A. McDonald, D. E. Chamberlain, and S. Bearhop. 2008. Food for thought: Supplementary feeding as a driver of ecological change in avian populations. *Frontiers in Ecology and the Environment*. www.frontiersin ecology.org



RED-MASKED CONURE BY MITCHELL YEE, DAILY CITY, CALIFORNIA

Are parrots (above) and falcons (below) related? New genetic research is forcing scientists to reconsider relationships among species. The results will probably make the order of species in your current field guides out-of-date.



MERLIN BY CATHY COWAN, EL DORADO, CALIFORNIA

Unwanted Visitors in Canada?

How European Starlings, House Sparrows, and Rock Pigeons are faring in light of their unpopularity

**BY KERRIE WILCOX,
BIRD STUDIES CANADA**



European Starlings, House Sparrows, and Rock Pigeons are generally unpopular birds at feeders in Canada because of their nonnative status, poor manners at feeders, and large flocks. Although their population status is often overlooked, these foreign birds are important to monitor because they, and other common species, are important indicators of the health of our environment. FeederWatchers across Canada have helped record the status of these nonnatives. Recent concern over precipitous declines in House Sparrow populations in their native European range has raised questions about our birds of foreign ancestry. Are we seeing population declines in Canada as well?

European Starlings

European Starlings first arrived in North America in 1890 when birds were released in New York City's Central Park by people who wanted to introduce all of the birds mentioned in the works of Shakespeare. Starlings quickly spread across the continent, readily colonizing human-dominated landscapes. There are early records of starlings on the east coast of Canada in 1915 in Nova Scotia, and they spread to British Columbia over the next 30 years.

Starlings, however, quickly became unpopular in Canada for a number of reasons. People who feed birds dislike starlings because of their bad behavior at feeders. Farmers dislike them because they can cause damage to crops. Others worry about their impact on native birds. Intensely competitive for nesting cavities, starlings often out-compete many native species. Despite their reputation, starlings aren't all bad as they do eat a lot of unwanted insect pests in gardens, lawns, and fields.

In North America, the European Starling population is estimated at over 200 million. In Canada, both Christmas Bird Count and Breeding Bird Survey data

show declines in European Starlings counted. Likewise, FeederWatch counts show that European Starling numbers are decreasing in Canada (see graph), although they are still very common feeder birds. Starlings are near the top of the list of common feeder birds in Atlantic Canada, appearing at 73% of FeederWatch locations in the region this past season.

House Sparrows

House Sparrows were first released in Brooklyn, New York, in 1851 and quickly spread across the continent. The first House Sparrow recorded in Canada was found in Quebec City in 1858. Seed from feeders makes up a large proportion of their winter diet in many areas. House Sparrows in rural areas subsist primarily on waste grain. Like the European Starling, House Sparrows have earned a poor reputation due to monopolizing food supplies and for their tendency to fight. Studies show that as their flock size grows, so does their aggression. House Sparrows are also unpopular because of their impact on native birds. They are aggressive around potential nesting sites and forcibly evict the occupants of cavities, sometimes building their nest directly on top of another

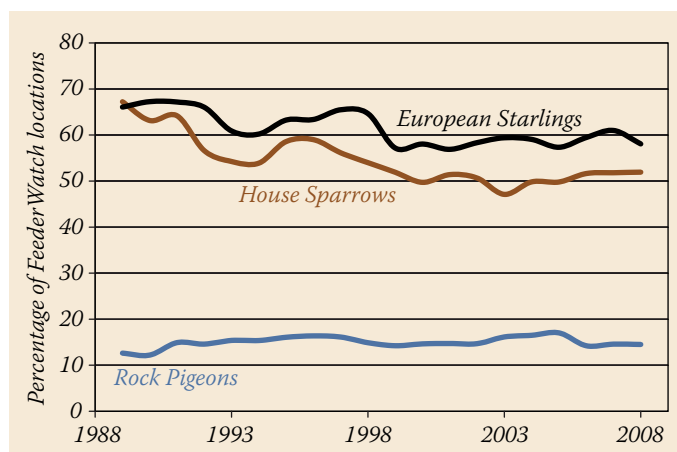
active nest. On a positive note, House Sparrows do eat insect pests and give people an opportunity to see birds in urban areas with few species—many enjoy watching sparrow behavior.

In Europe, the House Sparrow is one of the most well known and best loved birds. In the 1970s, the sparrow population in the United Kingdom was estimated to be 12 million. Recently, however, populations have experienced a rapid decline, dropping by 62% in the UK in the last 25 years.

HOUSE SPARROW BY FRANK AND SANDRA HORVATH, GRIMSBY, ONTARIO



In North America, the population of House Sparrows was estimated to be 150 million in 1943. In Canada, declines are being documented in both the Breeding Bird Survey and the Christmas Bird Count. FeederWatch data compiled over the past 20 years also show a steady decline in the percentage of feeders visited, from 67% of locations in 1989 to only 52% of locations last season. Declines have been even more dramatic in the Atlantic provinces, falling from 57% of feeders in 1989 to only 17% in 2008. A 2006 article in *Canadian Field-Naturalist* noted that the decline in the Maritime provinces approaches 90% in most areas of human settlement (except around farms and livestock). In Ontario, the Ontario Breeding Bird Atlas showed a decline in the observation probability of 20% between the first atlas (1981–85) and second atlas (2001–05).



Rock Pigeons

Domestic Rock Pigeons (formerly known as Rock Doves) were brought to North America in the 1600s by Northern Europeans who settled in Nova Scotia. Rock Pigeons are now feral and can be found from southern British Columbia to Newfoundland, south throughout the continent to Central America. Details on their population status throughout their 400 years in Canada are, however, unclear as they were not actively monitored for much of this period. In fact, Rock Pigeons did not even appear on checklists for the Christmas Bird Count until the 1950s.

In Canada, Rock Pigeons are unaffectionately referred to as “feathered rats” by some because of their reputation as scroungers of garbage. Large numbers of pigeons also foul buildings with their waste each year. On the positive side, they are not known to compete with native species. Much of our knowledge on avian flight mechanics, thermoregulation, metabolism, and orientation has come from studies of Rock Pigeons. They are also enjoyed by many who like to feed and observe them in urban areas.

Despite often taking handouts in parks, Rock Pigeons are relatively uncommon at feeders. They were reported at less than 20% of FeederWatch locations in Canada from 1988 through 2008, with prevalence remaining essentially stable over time. The Christmas Bird Count and the Breeding Bird Survey also show a stable or slightly growing population in Canada.

Although not originally present in North America, all three of these nonnative species are here to stay and Project FeederWatch needs reports of all birds (or their absence) in order to track changes in populations. Monitoring all wildlife, including common species, is important—declines in common species are often more visible, and we can learn a great deal by studying the underlying causes of change.

“FeederWatch has provided us with a deep satisfaction and appreciation for the natural things that share our urban environment. Our mealtimes are extended periods of time watching nature outside. Neighbors and passersby also stop to look.”

—Barrie Vickers, Vancouver, British Columbia

Graph: Percentage of FeederWatch locations in Canada reporting European Starlings (black), House Sparrows (brown), and Rock Pigeons (blue) at least once per season from 1989–2008.

Regional Round-Up

Trends and highlights from the 2007–08 FeederWatch season

BY DAVID BONTER, CORNELL LAB OF ORNITHOLOGY



More than 6.6 million bird observations were submitted on 115,466 checklists from 9,748 participants for the 2007–08 season of Project FeederWatch.

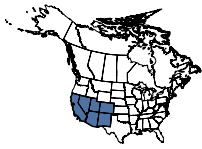
Every year checklists are added to an ever-growing database, helping us document and better understand trends in the numbers and changes in the distributions of the birds that we all enjoy watching.

Highlights from last season included the most impressive southward movement of Red-breasted Nuthatches in the 21-year history of the project, with record counts reported in nearly all regions. Additional notable observations are detailed in the regional summary reports on the following pages.

Regional Top-25 tables

The regional round-up groups states and provinces sharing 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 2007 and April 2008. The tables also include the average rankings for each species over the history of FeederWatch. For more detailed information including Top-25 lists from individual states and provinces, please visit the Explore Data section of the FeederWatch website.

American Goldfinches and House Finch in Portland, Oregon. Photo by FeederWatcher Seth Reams.



Southwest & California Regions

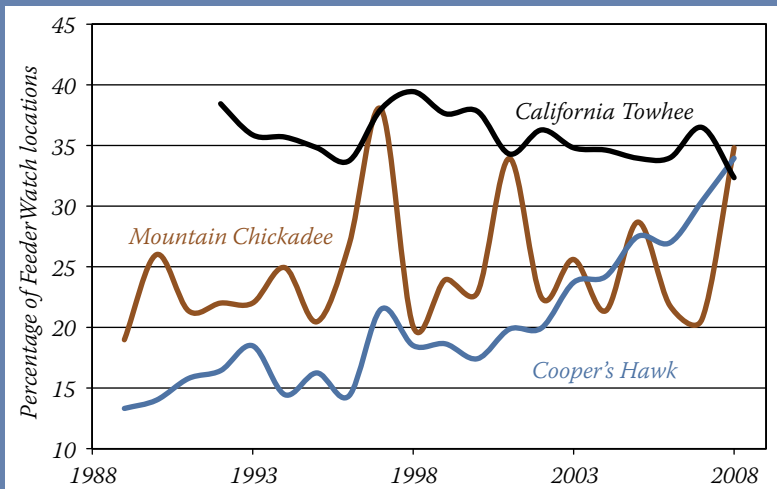
TOP-25 LIST: 810 SITES REPORTING

Rank			Percentage of Sites	
2007-08	Average	Species	2007-08	Average
1	1	House Finch	93	88
2	2	Dark-eyed Junco	79	82
3	5	Mourning Dove	74	62
4	5	White-crowned Sparrow	65	59
5	5	House Sparrow	60	59
6	4	Western Scrub-Jay	58	63
7	22	Lesser Goldfinch	57	30
8	10	American Goldfinch	56	47
9	8	American Robin	53	52
10	9	Northern Flicker	50	48
11	9	Anna's Hummingbird	50	48
12	12	Spotted Towhee	39	40
13	12	Pine Siskin	38	43
14	19	White-breasted Nuthatch	35	29
15	24	Mountain Chickadee	35	24
16	24	Downy Woodpecker	34	24
17	31	Cooper's Hawk	34	20
18	15	European Starling	33	33
19	14	California Towhee	32	36
20	28	American Crow	32	22
21	16	Steller's Jay	30	33
22	21	Sharp-shinned Hawk	30	27
23	25	Yellow-rumped Warbler	29	23
24	32	Bushtit	28	20
25	23	Northern Mockingbird	27	25

Loveland, Colorado, was the site of three remarkable reports last winter as FeederWatch Connie Kogler hosted a Streak-backed Oriole, a Chipping Sparrow, and a Western Tanager at her feeders. The oriole is a Mexican species and a first state record.

Lesser Goldfinches continue to become fixtures at feeding stations in parts of the region, seen at more locations than American Goldfinches for the second consecutive season. A record high number of sites recorded Downy Woodpecker and Cooper's Hawk, while Mountain Chickadees were seen at 15% more locations than last season and achieved their second highest reporting rate in the 21 years of FeederWatch (see graph below).

On the down side, Ruby-crowned Kinglets fell back from their unprecedented high last season, dropping from #13 to #28 on the regional list. California Towhees were seen at only 32% of sites, the lowest on record. Western Scrub-Jays were also less common last winter, seen at the lowest percentage of sites in the region since FeederWatch began. West Nile virus is always a concern when counts of birds in the crow family decline (see pages 12-13); however reports of American Crow and Steller's Jay were comparable to previous winters, suggesting that the disease may not be responsible for the scrub-jay decline.



MOUNTAIN CHICKADEE BY DAVID F. SMITH, GRAND JUNCTION, COLORADO



Graph: Percentage of Feederwatch locations in the Southwest reporting Mountain Chickadee (brown), Cooper's Hawk (blue), and California Towhee (black) at least once per season.

Nuthatches of all types entertained FeederWatchers across the southern tier of states during the 2007–08 FeederWatch season. Reports of White-breasted Nuthatches reached the highest point in the 21-year history of the project, seen at nearly half of all sites in the region. Red-breasted Nuthatches irrupted from the north and colonized feeding stations in the south, appearing at 30% of sites in the region after going nearly unreported in 2006–07. Numbers of the nonmigratory Brown-headed Nuthatch were also strong, matching the previous record high (seen at 31% of locations).

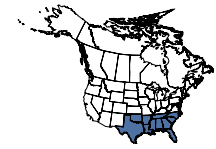
Purple Finches also moved out of the north last winter, visiting 41% of FeederWatchers in the southern states (up from 25% during 2006–07). Blackbirds, however, were not as common as expected in the region. Reports of Common Grackles fell to their lowest point in FeederWatch history (42% of sites), and the average flock size at sites hosting grackles declined as well. Other blackbirds, including the Red-winged Blackbird and Brown-headed Cowbird, were also seen at fewer sites last winter than in recent years; however, reports of these species were well within the typical range of variation.

The biennial peak and valley in abundance of American Robins continued, with robin reports dropping from 74% of sites in 2006–07 to 55% in 2007–08. Expect to see more robins and fewer nuthatches in the region during the coming winter.

The unprecedented expansion of Eurasian Collared-Doves appears to have slowed a bit last winter. Although average flock sizes continued to increase, the percentage of sites reporting this non-native dove remained steady (11%).

Map: Average number of Red-breasted Nuthatches reported per count during the 2007–08 FeederWatch season. Values include zero counts from sites not reporting the species.

Southeast & South-Central Regions

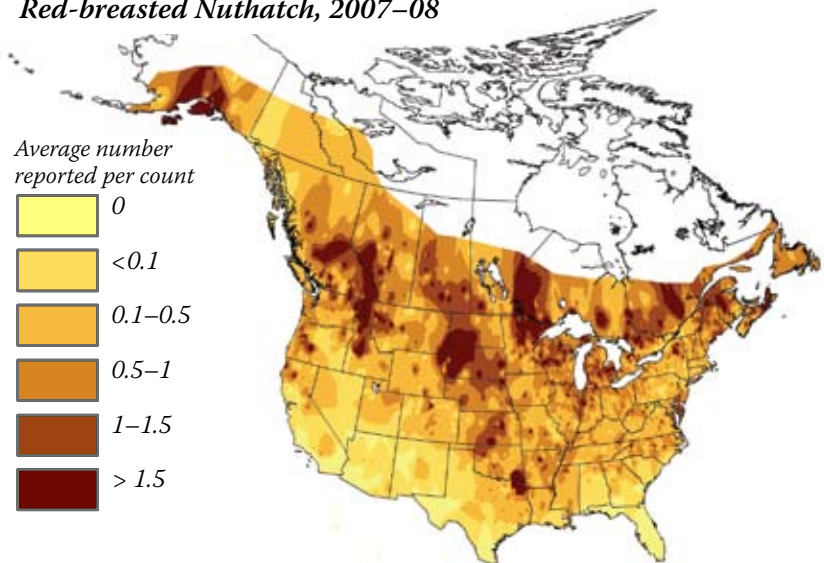


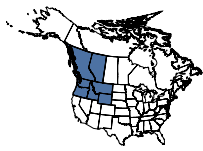
TOP-25 LIST: 1,200 SITES REPORTING

Rank		Species	Percentage of Sites	
2007–08	Average		2007–08	Average
1	1	Northern Cardinal	97	97
2	2	Mourning Dove	92	90
3	4	American Goldfinch	85	84
4	6	Carolina Chickadee	81	79
5	7	Carolina Wren	80	74
6	4	Tufted Titmouse	79	83
7	4	Blue Jay	77	84
8	11	House Finch	75	64
9	8	Red-bellied Woodpecker	71	73
10	12	Downy Woodpecker	69	60
11	10	Dark-eyed Junco	66	67
12	12	Northern Mockingbird	65	59
13	13	American Robin	58	59
14	13	White-throated Sparrow	53	55
15	19	Chipping Sparrow	47	42
16	27	Eastern Bluebird	46	31
17	22	White-breasted Nuthatch	46	37
18	22	American Crow	43	36
19	23	Yellow-rumped Warbler	43	35
20	14	Common Grackle	42	51
21	20	Red-winged Blackbird	41	42
22	18	Brown-headed Cowbird	41	44
23	21	Purple Finch	41	41
24	20	“Rufous-sided” Towhee*	37	41
25	21	House Sparrow	36	41

*“Rufous-sided” Towhee includes Eastern Towhee and Spotted Towhee.

Red-breasted Nuthatch, 2007–08





Pacific Northwest & Rocky Mountain Regions

TOP-25 LIST: 902 SITES REPORTING

Rank		Species	Percentage of Sites	
2007–08	Average		2007–08	Average
1	1	Dark-eyed Junco	89	88
2	2	Black-capped Chickadee	81	80
3	5	Northern Flicker	78	64
4	4	House Finch	74	70
5	7	American Robin	65	58
6	6	Pine Siskin	65	62
7	9	Red-breasted Nuthatch	63	54
8	10	Downy Woodpecker	63	52
9	9	Spotted Towhee	58	53
10	9	Song Sparrow	56	53
11	10	Steller's Jay	55	51
12	11	European Starling	54	50
13	10	House Sparrow	52	52
14	18	American Goldfinch	43	33
15	15	Chestnut-backed Chickadee	41	41
16	19	American Crow	35	29
17	15	Varied Thrush	35	41
18	19	Hairy Woodpecker	35	29
19	20	Red-winged Blackbird	29	27
20	21	Purple Finch	29	26
21	28	Bushtit	29	19
22	29	Mourning Dove	29	18
23	21	Sharp-shinned Hawk	28	27
24	21	Fox Sparrow	27	26
25	41	Anna's Hummingbird	27	12

Large numbers of two irruptive species apparently moved south from Alaska and northern Canada last winter to colonize backyards in the Pacific Northwest and Rocky Mountain regions. Pine Siskins were reported from 65% of sites in the region in 2007–08, up from 51% during the previous season. Red-breasted Nuthatches also made a good showing, hitching up trees in the northwest and into the regional Top 10.

American Goldfinches continued to become more common and were seen at a greater percentage of FeederWatch locations in 2007–08 than in any previous year. Likewise, Anna's Hummingbirds are becoming regular fixtures at many FeederWatch locations in coastal Washington and Oregon, seen at more than one in four sites last winter.

"Rare birds" are individuals seen out of their typical range, as well as species that are simply out of their expected range at a given time of the year. Photo documentation helped confirm numerous rare reports last winter. British Columbia led the way with a White-breasted Nuthatch (Prince George), a Northern Mockingbird (Halfmoon Bay), an Orange-crowned Warbler (Victoria), a Vesper Sparrow (Nuksup), and a Harris's Sparrow (Kitimat). Other notable reports included a Rose-breasted Grosbeak in Shoshoni, Wyoming, and a Harris's Sparrow in Drumheller, Alberta.



Document rare birds

Unexpected visitors delight FeederWatchers every winter. Keeping a digital camera handy can be an excellent way to document unusual sightings, allowing scientists to confirm your surprise observations. Even distant or blurry images can often be enough to identify a species. FeederWatch staff are always happy to look at photos and help identify mystery birds. See a complete list of confirmed rare bird reports (and photos!) online in the *Explore Data* section at www.feederwatch.org.

FeederWatcher Cheryl Huizinga documented this Lincoln's Sparrow in Caldwell, Idaho—a rare winter sighting.

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



FeederWatchers in the northeastern quadrant of the continent had reason to be excited about the upcoming season last fall as an early irruption of Red-breasted Nuthatches out of northern Canada brought more of these small, energetic birds to feeders in the region than at any time in project history. Following the nuthatch movement, Common Redpolls filtered into the region, with good numbers seen at feeders as far south as Virginia. By season end, 35% of sites had hosted redpolls (up from 5% during 2006–07). Pine Siskins also appeared at more than twice as many FeederWatch sites than in the previous season.

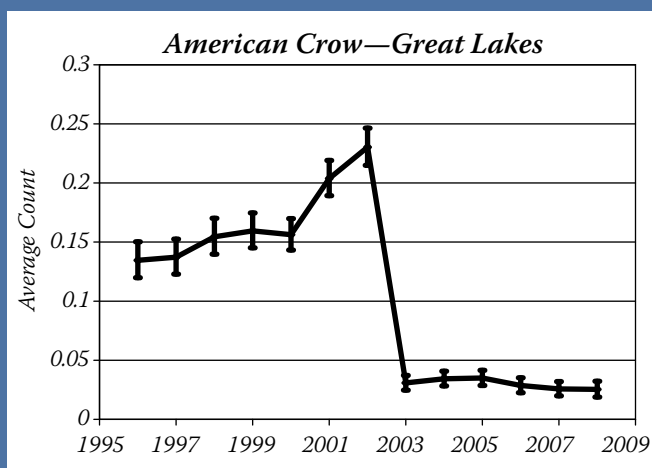
Concern continues over Evening Grosbeak populations (see back cover), but scattered flocks delighted some participants in the region. One in 10 sites hosted these raucous finches last winter, a considerable improvement over recent counts. Where seen, however, average flock sizes continued to dwindle.

Winter rare bird highlights included a Cape May Warbler in Ephrata, Pennsylvania, a Summer Tanager in Devlin, Ontario, a Scarlet Tanager in Tunkhannock, Pennsylvania, and an Indigo Bunting in Long Lake, Ontario.

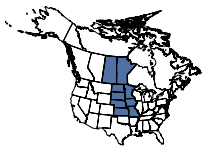
TOP-25 LIST: 6,108 SITES REPORTING

Rank			Percentage of Sites	
2007–08	Average	Species	2007–08	Average
1	1	Chickadee*	97	95
2	2	Mourning Dove	93	92
3	3	Dark-eyed Junco	93	90
4	5	Downy Woodpecker	91	87
5	4	Blue Jay	89	90
6	7	American Goldfinch	87	83
7	6	Northern Cardinal	87	84
8	9	White-breasted Nuthatch	85	76
9	8	House Finch	73	76
10	11	Tufted Titmouse	65	63
11	15	Hairy Woodpecker	63	51
12	12	House Sparrow	63	64
13	10	European Starling	62	68
14	17	Red-bellied Woodpecker	60	47
15	23	Red-breasted Nuthatch	58	32
16	17	American Robin	57	46
17	16	American Crow	55	51
18	15	Common Grackle	49	52
19	17	Song Sparrow	46	47
20	20	White-throated Sparrow	44	41
21	20	Red-winged Blackbird	43	41
22	24	Carolina Wren	41	31
23	22	American Tree Sparrow	40	37
24	35	Common Redpoll	35	15
25	22	Brown-headed Cowbird	33	35

* Combines Black-capped Chickadee and Carolina Chickadee.



Several years after West Nile virus was first discovered in North America, FeederWatch data are revealing the likely long-term effect of the virus on bird populations. Birds in the Family *Corvidae*, like Blue Jays and American Crows, are particularly susceptible to the disease. FeederWatch reports from around the Great Lakes reveal the significant and long-term effect of West Nile virus on crow populations (graph at left). Blue Jay populations (graph at right) also crashed—the peaks following the initial decline in 2002 are most likely due to migrants moving into the region from the north for the winter. Jays do not migrate every year, and the populations to the north may not have been affected by the disease. Much remains unknown about jay migrations and the effects of West Nile virus on birds.



North-Central & Mid-Central Regions

TOP-25 LIST: 665 SITES REPORTING

Rank	2007–08		Percentage of Sites	
	Average	Species	2007–08	Average
1	3	Downy Woodpecker	93	89
2	1	Chickadee*	92	95
3	3	Dark-eyed Junco	88	90
4	3	Blue Jay	86	89
5	7	White-breasted Nuthatch	83	73
6	6	American Goldfinch	80	76
7	8	Northern Cardinal	73	70
8	11	House Finch	71	60
9	10	Hairy Woodpecker	70	62
10	6	House Sparrow	70	78
11	13	Red-bellied Woodpecker	67	54
12	21	Red-breasted Nuthatch	65	31
13	14	Mourning Dove	62	51
14	11	European Starling	54	61
15	14	American Robin	53	52
16	16	American Crow	43	44
17	17	Purple Finch	40	40
18	15	Common Grackle	37	45
19	21	Pine Siskin	36	33
20	19	Northern Flicker	36	35
21	21	Red-winged Blackbird	31	29
22	20	Tufted Titmouse	28	30
23	22	American Tree Sparrow	26	27
24	27	Carolina Wren	26	18
25	29	Pileated Woodpecker	26	16

* Combines Black-capped Chickadee and Carolina Chickadee.

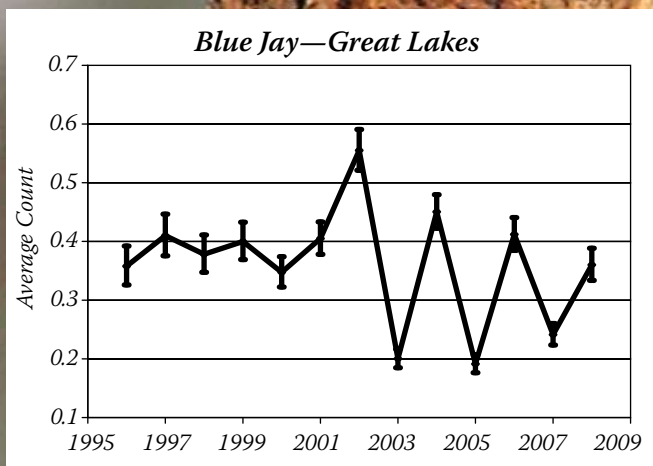
BLUE JAY BY MARIA CORCACAS, MIDDLETOWN, NEW YORK

Cooper's Hawks were reported at more FeederWatch locations in the center of North America last winter than in any previous season, with one in five sites hosting these hawks. Cooper's Hawks and Sharp-shinned Hawks are becoming more common at northern latitudes as more individuals are braving the winter weather rather than migrating.

Reports of nuthatches were unprecedented in the central portion of the continent during the 2007–08 season. White-breasted Nuthatches visited 83% of FeederWatch locations, bringing this species into the regional Top 5. Red-breasted Nuthatches were seen at two-thirds of locations, also exceeding previous records.

FeederWatch counts show that non-native species are trending in different directions in the central portion of the continent. Reports of European Starlings dropped to an all-time low, whereas Eurasian Collared-Doves continued their recent range expansion. More than 7% of participants in the region hosted Eurasian Collared-Doves last winter—watch for more of this species in coming years.

Rare bird highlights included a Red-bellied Woodpecker in Brandon, Manitoba (north of the typical range). Many birds wintered farther north than usual, including several Yellow-bellied Sapsuckers in Minnesota.



TOP-10 * LIST: 60 SITES REPORTING

Rank		Species	Percentage of Sites	
2007-08	Average		2007-08	Average
1	2	Common Redpoll	85	79
2	1	Black-capped Chickadee	78	84
3	11	Common Raven	58	34
4	4	Pine Grosbeak	57	60
5	8	Hairy Woodpecker	57	48
6	5	Black-billed Magpie	55	55
7	7	Downy Woodpecker	55	52
8	5	Boreal Chickadee	50	57
9	7	Red-breasted Nuthatch	50	50
10	9	Dark-eyed Junco	47	42

Alaska & Northern Canada



Common Ravens are living up to their name in Alaska and Northern Canada, continuing an upward trend and breaking into the regional Top 5 for the first time. Known for their intelligence and ability to exploit novel food resources, ravens visited more than half of the FeederWatchers in the region last winter. Pine Siskins were also relatively common, seen at twice as many locations last winter than in either of the previous two winters. However, fewer Red-breasted Nuthatches visited feeders along the northern tier of the continent as this species was reported at the lowest percentage of sites last winter than in any season since 1994. Red-breasted Nuthatches have been reported by as many as 75% of FeederWatchers in the region in previous years—they were only seen at half of the 60 locations last winter. Several notable rare bird reports came from Alaska, including Harris’s Sparrows in Homer and Wrangell, and Bramblings visiting feeders in Gustavus and Shageluk (see story on page 3).



COMMON REDPOLL BY JILL MCELDERRY-MAXWELL, BENTON, MAINE

* Only the Top 10 species are listed for this region because the diversity of birds in the far North in winter is lower than in the rest of North America.

Hawaii

The House Finch has become one of the Top 10 most common feeder birds in Hawaii since its introduction.

The three FeederWatchers submitting counts from Hawaii are indeed a pioneering group, and they are reporting a number of exotic species unfamiliar to many of us on the mainland. Introduced species from around the globe such as the Java Sparrow and Saffron Finch are locally common in Hawaii. More familiar to mainland birders are the House Finch, House Sparrow, Northern Cardinal, and Wild Turkey—often seen at feeders in Hawaii and all introduced from North America. One introduced Asian species gaining a foothold on the islands and on the mainland is the Nutmeg Mannikin, reported by a number of FeederWatchers in Hawaii and California last season.

HOUSE FINCH BY DAVID F. SMITH, GRAND JUNCTION, COLORADO

Which Species Is It?

Distinguishing between the nearly identical Downy Woodpecker and Hairy Woodpecker

BY ANNE MARIE JOHNSON,
CORNELL LAB OF ORNITHOLOGY

Downy and Hairy woodpeckers are among the most common feeder birds in North America, and they can be very difficult to distinguish from one another.

These black-and-white woodpeckers are the only common woodpeckers that show a vertical white stripe on the back. Males have a red patch on the back of the head; females lack the red spot. Juveniles of either sex may show a smudge of red, orange, or (rarely) yellow on the crown. In the Rockies and Northwest, both species show much less white on the wings than birds seen elsewhere, and the white on the Northwestern birds may appear dingy with some black spots or streaks.

Downy Woodpecker

- Smaller size: approximately 6.5" long
- Short, dainty bill, about one-third as long as the distance from the base of the bill to the back of the head
- Black barring on white outer tail feathers, sometimes only on the underside of the feathers
- Weaker, squeakier call and slower drumming

Hairy Woodpecker

- Larger size: approximately 9.5" long
- Hefty, chisel-like bill, about the same length as the distance from the base of the bill to the back of the head
- Well-developed comma-shaped black mark extending from the shoulder onto the breast
- Completely white outer tail feathers in most of the Eastern U.S.; black bars can be found on tail feathers in western birds and in Newfoundland
- Louder, more powerful calls and a faster drumming

Identification tips

- Check the heaviness and **length of the bill compared with the head**. If the bill looks small, much smaller than the length of the head, the bird is a Downy Woodpecker.
- Try to assess the **overall size** of the bird. Size is a reliable field mark, but it can be difficult to judge. Some FeederWatchers have measured their feeders to help them judge the size of their woodpeckers.

Hear the calls of these woodpeckers and see more photos and identification tips in the Tricky Bird IDs section of the FeederWatch website.

DOWNY WOODPECKER BY MARIA CORCACAS, MIDDLETOWN, NEW YORK



HAIRY WOODPECKER BY GARY MUELLER, ROLLA, MISSOURI



FeederWatch Data in Action

Flocks of Evening Grosbeaks dwindle

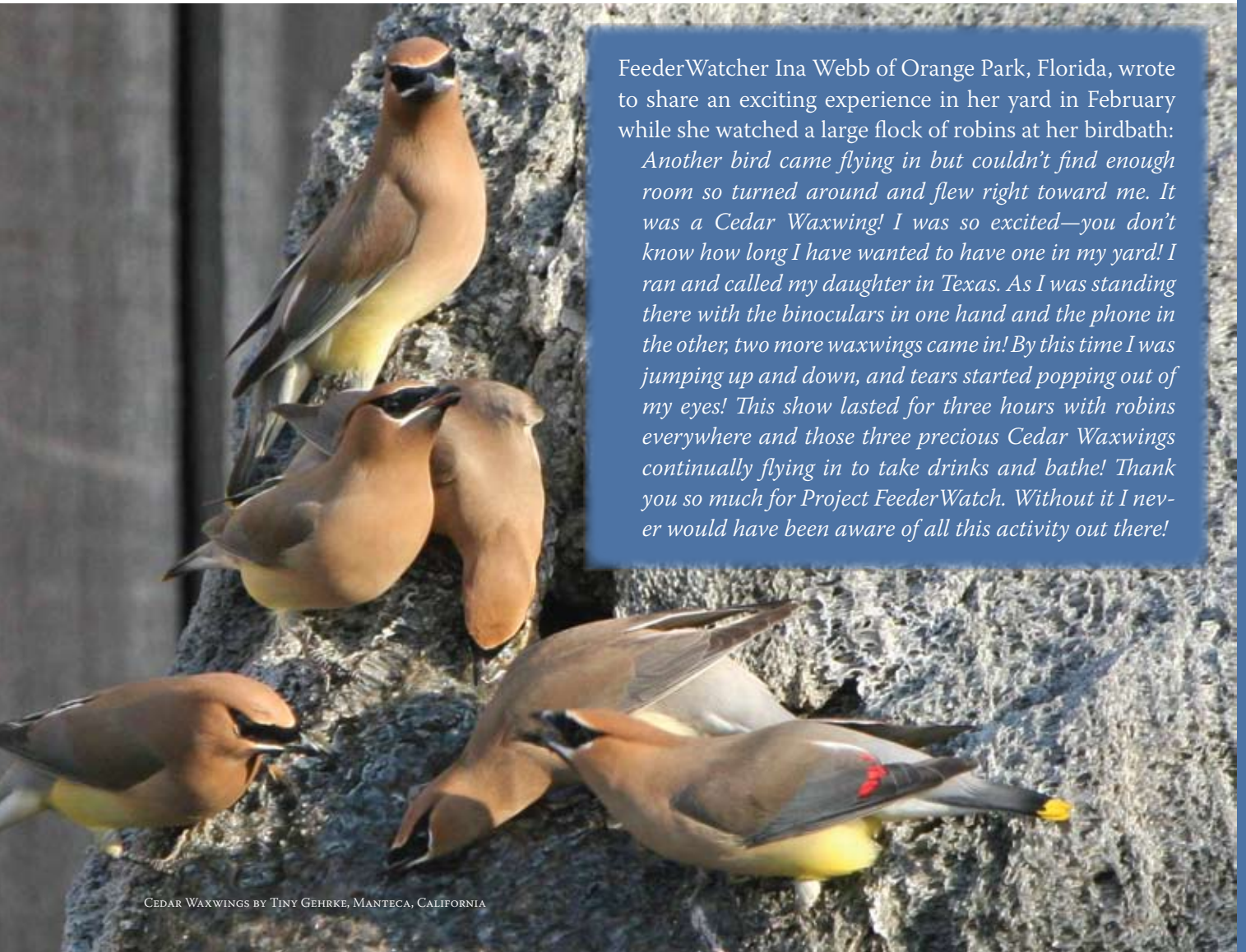
One of the most common species visiting backyard feeding stations when Project FeederWatch began in 1987, the Evening Grosbeak is now becoming difficult to find throughout much of its range.



EVENING GROSBEEK BY GREG AND BRENDA KELLOCK, CALGARY, ALBERTA

Analysis of data from the first 18 years of FeederWatch has recently been published in *The Condor*, an international scientific journal of avian biology.* The article quantifies the changes observed by FeederWatchers who have noted smaller winter flocks and less frequent southward irruptions of this gregarious finch. FeederWatch data gathered between 1988 and 2006 indicated a 50% decline in the percentage of sites hosting Evening Grosbeaks survey-wide. At locations where the species continued to be seen, average flock sizes decreased by 27%. At 391 locations where FeederWatchers have participated for at least 10 years and have hosted Evening Grosbeaks, significant declines were detected at 76 locations. None of the long-term FeederWatch sites detected increases in the number of grosbeaks. These changes are particularly alarming as populations of most other common feeder birds are either stable or increasing and the cause of the decline in Evening Grosbeak populations remains unknown. FeederWatch data have raised the profile of the species, and will hopefully instigate further research in order to identify the factors causing the decline.

* Bonter, D. N. and M. G. Harvey. 2008. Winter survey data reveal rangewide decline in Evening Grosbeak populations. *The Condor* 110: 379-381.



FeederWatcher Ina Webb of Orange Park, Florida, wrote to share an exciting experience in her yard in February while she watched a large flock of robins at her birdbath: *Another bird came flying in but couldn't find enough room so turned around and flew right toward me. It was a Cedar Waxwing! I was so excited—you don't know how long I have wanted to have one in my yard! I ran and called my daughter in Texas. As I was standing there with the binoculars in one hand and the phone in the other, two more waxwings came in! By this time I was jumping up and down, and tears started popping out of my eyes! This show lasted for three hours with robins everywhere and those three precious Cedar Waxwings continually flying in to take drinks and bathe! Thank you so much for Project FeederWatch. Without it I never would have been aware of all this activity out there!*

CEDAR WAXWINGS BY TINY GEHRKE, MANTECA, CALIFORNIA