



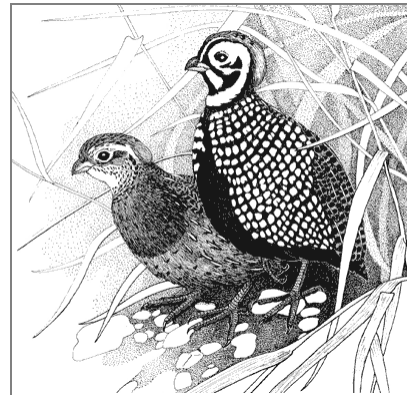
The Contents of American Birds, Summary of the 100th Christmas Bird Count, December 16, 1999 to January 3, 2000

Your humble Christmas Bird Count Director is now faced with the rather daunting task of coming up with a succinct and perhaps meaningful review of the One-hundredth Christmas Bird Count—and the completion of 100 years, a Century, of the Christmas Bird Count. When Frank Chapman thought up the original "Christmas Bird Census" in the fall of 1900 it seems unlikely he expected his brainchild to out-last the "Side Hunt" he hoped it would replace. The origins of the Side Hunt may be steeped in the fogs of time, but over the last 100 years participants in the Christmas Bird Counts have certainly counted far more birds than were ever shot on all Christmas Day hunts combined.

Far from having evolved into "just" another holiday tradition, the Christmas Bird Count is increasingly accepted by ornithologists and conservationists alike as the best, if not only, tool available for assessing the long-term trends in the early winter bird populations of North America. The names on the hundred-year roster of Christmas Bird Counts include many prominent ornithologists and conservationists—Charles Rogers, Witmer Stone, and of course Frank Chapman himself in the early years, followed by the likes of Roger Tory Peterson, Alan Cruickshank, and Chan Robbins in the middle of the century. While well-known participants add spice to the roster, their inclusion can be likened to the avian rarities turned up on CBC's—great for inclusion as highlights, but not providing the true value of the Count. It is the vast pool of observers, recently becoming known as citizen scientists, that provides the power to collect data on the status of common birds in the early-winter season. Rarities can provide the catalyst to get us out in the field at 00:dark hundred on a cold and windy December's day, but we're counting all the birds that should be around at that time of year while we're in search of the Boldfaced Birds. Thus meaningful data are amassed.

And now all those data are on-line, available for ready access and analysis. The 100th CBC was the second Count with the data generated on-line; this season the vast majority—about three-quarters—of all North American counts were submitted directly on-line by compilers. In the cumulative historical CBC database, there are now 65,532 individual Christmas Bird Counts spanning the period from December 25, 1900 through January 3, 2000 available for perusal. That's a lot of bird data, and represents a tremendous investment in party-hours and party-miles by hundreds of thousands of observers like you and me.

For the second century of the Christmas Bird Count, we plan on conducting a thorough scientific review of the CBC, seeking input from ornithologists on how best to improve CBC data for future use. One possible protocol change would be to tally of field and feeder bird data separately. For decades the observer effort data (party-hours and party-miles) have been partitioned; it may enhance the value of the CBC to attach specific bird numbers to those effort data. As stated last season, beginning with the upcoming 101st CBC the official count period will be 14 December



A birding visitor to the arid southwest may well have Montezuma Quail high on any potential "want list." Patience, and a bit of knowledge of behavior, are often key to catching a glimpse of this elegant, shy, and crepuscular quail. Original artwork by Narca Moore-Craig.

through 5 January, each and every year. Compilers are of course still free to choose their count day within that period. Also, beginning with the 101st CBC, field observers 18 years and under will not be asked to pay the participant fee. Our hope is to encourage budding young birders—and capitalize on those birding child prodigies—whenever possible!

As part of the celebration of reaching the Century mark for the Christmas Bird Count, in this volume are a number of special articles in addition to the usual features. Six special articles are included celebrating both the science and lore of the Count. Also, Brent Ortego has picked up the tradition left off when Burt Monroe died in 1994 and compiled the 100-year all-time high tallies for all species in the United States and Canada included in the cumulative Christmas Bird Count database. And it wouldn't be a celebration without some great artwork—the first thing you probably noticed was the stunning painting on the cover, done specifically for the 100th CBC issue by renowned wildlife artist Charley Harper. In addition, throughout the issue you'll find several beautiful line drawings by Narca Moore-Craig. Narca's work has appeared in the past in CBC issues, and we're very happy to include her art again for the 100th Count. Deepest thanks go to both Charley and Narca for allowing the inclusion of their artwork in this volume.

Beginning with the upcoming 101st Christmas Bird Count, an important step forward has been finalized—Bird Studies Canada is now the official Canadian partner in the Christmas Bird Count. BSC will handle communications with Canadian compilers and participants and organize the editing process for Canadian counts through their offices in Port Rowan, Ontario. Data will of course still flow into the BirdSource website, and all compilers and subscribers will continue to receive the printed results generated from CJS Lancaster Press in Lancaster, Pennsylvania. The partnership will greatly streamline the flow of the Count in Canada, and should help facilitate the increasing level of participation seen in the CBC for the past decades. This is a long-anticipated step, and we heartily welcome Bird Studies Canada aboard for the future.



Unusual gulls provide a major catalyst for some birders to get out in the field—especially in on a CBC. This Glaucous Gull, representative of the largest of the "white-winged gull" species, was photographed on the Lake Monroe, Indiana CBC. Photo/Lee Sterrenburg.

The 100th Count itself was a study in superlatives. The effort was unsurpassed by all measures—record-high numbers of both counts and participants. In the 100th CBC 52,471 observers participated on 1823 Christmas Bird Counts across the Western Hemisphere and in the Pacific Islands. In the United States and Canada 42,422 field participants and 9231 feeder watchers participated in 1779 CBC's and tallied 78,636,382 birds. In Latin America, Guam and Saipan, and the Caribbean 815 field observers and three feeder watchers conducted 44 counts and tallied 204,462 birds. These effort numbers shatter the former records of number of counts (1780 in the 98th CBC) and observers (49,122, also in the 98th Count). In Canada and the United States, a record-shattering 676 species was tallied in total, breaking the old record (again

in the 98th CBC) by 19; additionally, 22 listed forms and 21 exotic species were found by the army of astute CBC observers. Four new species are included in that record total, Christmas Shearwater at Johnson Atoll, Hawaii, Gunnison Sage-Grouse at Delta, Colorado, Common Ringed Plover at Midway Atoll, Hawaii, and Puaiohi at Waimea, Kauai, Hawaii. The Gunnison Sage-Grouse is a new split from "Sage Grouse" (now Greater Sage-Grouse), and the new Delta, Colorado CBC was set up in part to help monitor this little-understood species. The inclusion of Christmas Shearwater (how appropriate!) and Common Ringed-Plover illustrate the importance of island counts to our understanding of the distribution of birds along the oceanic flyways. And the Puaiohi is a very rare endemic to Kauai, with very few living individuals around to be counted. The moral of the story here may be if you want to find species never included on an American Ornithologists' Union area CBC, go to Hawaii. Bob Pyle, Hawaiian bird guru and our Regional Editor for the Island Pacific Region, would certainly agree.

In Latin America and the Caribbean, as always, the story is quite different. In North America, over

1800 CBC's included over 78 million birds of 676 species. On the 44 Tropical Counts, 204,462 birds were tallied—of 1658 species. Far too many of those species were new to the CBC list to be enumerated here. Illustrated once again is the incredible species richness in Tropical areas. The moral of the story, part two, could be to find new species for the Christmas Bird Count cumulative list (and sometimes even truly new, undescribed species) go to the Tropics. There's an exciting and much-anticipated development in the world of "Tropical" Christmas Bird Counts—the list of bird species of the entire CBC area of coverage is now included in BirdSource. The significance of this is that beginning with the upcoming 101st Count all CBC's conducted will be available and viewable through BirdSource, <http://www.birdsource.org>. Currently the web pages themselves are being re-designed to better access the new and improved bird list, and direct on-line data entry should be available for all counts in the approaching season.

As always, new Christmas Bird Count circles add to the quality and variety of coverage within the great geographic scope of the CBC. In the 100th Count, 39 new circles are included, as listed in **Table 1** (page 7). For many of the observers on all those counts both new and old, the big question at the tally at the end of the census day is "What is our species total?" The ever-present quest to break "our" old record, or tally the highest species total in the region, or maybe even make the 150 species list, can be a driving force for observers. **Table 2** (page 7) lists those counts that did manage to equal or break the 150 species mark this season. The two counts at the top of the species total list are once again Mad Island Marsh, Texas at 228 species for North America and Monteverde, Costa Rica at 357 in the neotropics.

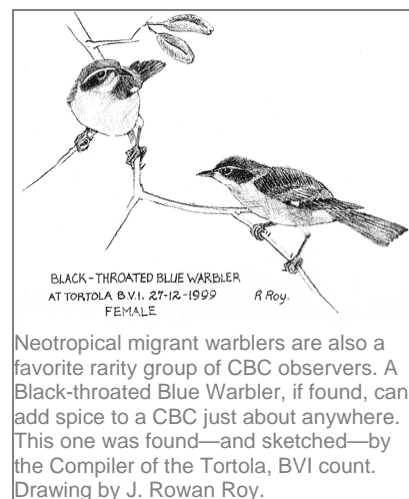
To have adequate coverage within the 177-square mile CBC area, one guideline often used is the inclusion of at least ten observers on any given count. However, several counts each year have their own race for the record books—recruiting the largest possible pool of both field and feeder birders. More people on a count in general means a higher percentage of the birds within that circle tallied on the census—an admirable goal. **Table 3** (page 10) lists the areas in the 100th CBC that had 100 or more total participants in the field and at feeders. For a fascinating perspective on this aspect of organizing a Christmas Bird Count, please make sure to read Geoff Holroyd's article, "A Pebble of a Christmas Bird Count," included in this volume.

The chances are that most people with this volume in their hands are competitive in some portion of their nature. Certainly participating on a CBC can bring out that aspect of many observers. This competition helps ensure the passion that is part and parcel of so many aspects of the Count. It also provides the emotional fuel for observers to collect the sea of data each season that is a Christmas Bird Count. One tally that keeps people going is the shot at garnering the highest species total in the region—a worthy goal whether there's one count included from there or 112.

Table 4 (page 11) is the roster of CBC's that by luck, skill, or sheer effort had the highest species tally in each CBC region during the 100th Count.

So far it seems the 100th Christmas Bird Count is characterized by setting record-high numbers in participation, coverage, and species totals.

The 100th CBC also perhaps set another record, one more difficult to quantify. The weather seems to have been the mildest ever experienced, especially when viewed on a Continental basis. The trend for the past several years has been for increasingly warm temperatures and open-water conditions in many areas included in the Count, but usually there are a few regions that make up for others' fortunate luck. In the 100th Count season, virtually every Regional Editor mentions "exceptionally mild weather," "record warmth and



record late first measurable snowfall," "one of the mildest winters ever," or similar a description of the weather leading up to, and during, the CBC period. Keith Arnold in Texas, while not specifically calling the season mild, remarks about the continuing drought—very likely amplified by warmer-than-usual temperatures. The weather plays a huge role in the results of every Christmas Bird Count, affecting many aspects of the Count. Preceding spring and summer seasons often dictate the availability of wild food crops in the fall and early winter. The severity of the fall helps define where half-hardy species linger in good numbers. And the fall and Count Day conditions determine whether lingering neotropical migrant birds can survive to be counted.

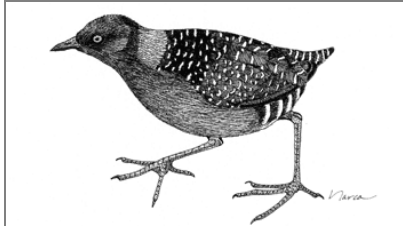
And, of course, the weather affects the Christmas Bird Counters, and the likelihood of detecting birds present in the circle. On a lovely fall day with light winds, more observers are likely to be out in the field—and more birds are likely to be found, no matter how many people are looking for them. That Yellow-breasted Chat may be sunning itself at the top of a thicket, instead of hunkered down in the depths.

Given the confluence of all the aforementioned positive factors, it's not surprising the 100th Count was such a success. Some species—irruptive ones, moving in response to food availability in the regions where they spent the summer and early fall, took off to areas of the continent where they aren't usually abundant, and in some instances were absent from their usual CBC haunts. Many lingering neotropical migrant species were able to survive the mild fall, and were still present to be accounted for on the 100th Count. Many waterfowl remained north in record numbers, taking advantage of open water conditions. And other species such as Grasshopper Sparrow, ones that if present north of their usual haunts may only be found when concentrated by cold conditions in specific areas that birders can detect them, were widely dispersed and censused in low numbers.

Let's look at a few species of specific interest in the 100th Count, beginning with the example of Grasshopper Sparrow. As seen first in **Table 5**, (page 12) the pattern predicted by the above weather discussions is borne out. This species is often difficult to detect (some birders might say that's an understatement), especially in seasons where males are not singing. In the 100th Count, Grasshopper Sparrows were found in 14 widely scattered regions, with their strongholds in the expected wintering areas of Florida and the Southwestern States. This species was detected on more counts than last season (81 versus 70 counts), but in significantly lower total numbers (268 versus 383 birds). Given the widespread mildness of the fall and during the CBC period, these results are not unexpected. This species of low detectability was able to linger northward, not concentrated into its winter havens. Mild and open conditions on a continent-wide basis facilitated Grasshopper Sparrows' presence in many count areas, but did not concentrate them into locally habitable spots where they were more likely to be found by observers—no matter how diligently the searches were conducted. And, since this species was able to survive northward into the winter period, they weren't concentrated in as large numbers as some seasons on the counts conducted in the species' true wintering area. It's an interesting enigma that for a species like Grasshopper Sparrow harsh fall and winter seasons may lead to more birds of this species being found—they would become concentrated into locally mild spots, and found in larger numbers on their expected wintering grounds.

The next species highlighted in **Table 5** (page 12), Bohemian Waxwing, is an enigmatic wanderer that often seems to live up to its given English name. In the 100th CBC season, there was a large push of Bohemian Waxwings into eastern Canada and the northeastern United States. There were also pulses of birds in other regions—the northwestern quadrant of the continent (Alberta, British Columbia, and Alaska) and in Montana. They seemed to be heading toward the periphery of their continental range in large numbers. By contrast, in the 99th Count season the center of the North American continent seemed to be their region of choice. The implication is that the availability of winter food, primarily in the form of wild and non-harvested cultivated fruits and berries, was unavailable to Bohemian Waxwings and other frugivorous bird species in many areas of the heartland of North America in the fall of 1999. It seems that the in season leading up to the 100th Count, and during the Count period itself, Bohemian Waxwings were dispersing outward from the center of the continent in search of food. In total, this species was tallied on

more CBC's (287 counts in 31 regions, versus 222 counts in 24 regions) than in the 99th Count. The total number of birds available in the 100th Count circles was quite a bit higher as well—95,620 compared to just over 75 thousand last season. Christmas Bird Counters were witnessing an example of the behavior that irruptive species are famous for—dispersal away from their "normal" range in search of food resources.



The Black Rail is one of the most difficult species to see in North America—but usually it is turned up somewhere by dedicated and determined Christmas Bird Count observers. Original artwork by Narca Moore-Craig.

The 100th Christmas Bird Count turned out to be an interesting year for "winter finches." Though the scope of the movement did not rank as a superflight, such as seen in the 98th Count, several species in this group made their presence known in some areas where they are not usually found. The remaining three species tallied in **Table 5** (page 12) illustrate differences in the flights of Common Redpoll, Red Crossbill, and Evening Grosbeak in the 100th CBC.

What turned out to be the beginning stages of a big movement of Common Redpolls was documented during the 100th Christmas Bird Count. This species led the way for the irruptive winter finches over the winter of 1999-2000. Scanning the

redpoll numbers in **Table 5** (page 12) it is very easy to tell where the main portion of the wave of Common Redpolls was during the CBC period, as it washed its way across North America. Even more Common Redpolls were found on CBC's in the 100th Count than in the superflight of the 98th CBC; more total redpolls were censused in more count circles in the 100th Count, but in the same number of regions (42). This season, the center of abundance of redpolls was just about along the United States—Canada border. From the Maritimes and New England westward through the Great Lakes region, the northern Great Plains, and into Alberta and British Columbia thousands of redpolls livened up observers' lives during their counts. South of that line, across a great swath of the middle latitudes of the United States from Virginia to Colorado and Oregon, Common Redpolls were widespread but found only in small numbers—the precursor of the main flight to the north. Redpolls feed on small seeds, such as those found in the seed heads of annual and perennial plants—plus, of course, niger and thistle feeders set out by humans. Often when this resource is found, it is available in high density, and able to support the large numbers of redpolls that are often part of these flights.

Red Crossbills moved during the winter of the 100th Count, a flight quite similar to that they staged in the superflight of the 98th CBC. Red Crossbills were found in the same number of state/province regions as redpolls (42), but spread over a wider geographic area on roughly one-third as many counts, and in far fewer total numbers. Red Crossbills' breeding range extends much farther south (in Appalachians and western mountains south to Central America) than that of Common Redpolls, giving crossbills a closer point of origin to many CBC's. Unlike the redpolls concentrated in a swath across the mid-northern latitudes of the CBC area, Red Crossbills seemed to be spread thinly across much of the continent. The taxonomy of Red Crossbills in North America is not completely understood; based upon varying call notes and bill sizes there may be as many as eight species included in the birds now carrying that label. Red Crossbills feed on the seeds in conifer cones, and varying regional environmental conditions in the growing season prior to the 100th Count are likely to have produced varying cone crops in different regions of their breeding range. Various populations (or species) of Red Crossbills may have responded to different environmental conditions, either remaining locally or dispersing in search of cones. Consider the Red Crossbills reported in Iowa or Missouri—was their origin from the Rockies, Ontario, the Appalachians, or some other pine woods? Right now we can discuss the apparent dispersal of what is currently called Red Crossbill across the continent by looking at CBC data. As the taxonomy and field identification (mostly by call) of different populations within this fascinating group is defined, future Christmas Bird Count seasons may help further the understanding of their patterns of dispersal.

Finally listed in **Table 5** (page 12) is that king of seed consumers, the Evening Grosbeak. This species was found in larger numbers, on more counts, and in more areas than in the 99th Count, but staged less of a flight than in the superflight of the 98th Count. This season the grosbeaks' center of abundance was in British Columbia and in the northeast quadrant of the continent—central and eastern Canada and the northeastern states. Unlike the past two seasons, very few were found in the Rocky Mountain States. Could it be that Evening Grosbeaks just stayed north of the general area of Christmas Bird Count coverage? Steve Kelling has done an analysis of Evening Grosbeak numbers as reflected on Christmas Bird Counts over the past 40 years. In that feature on the BirdSource website, <http://www.birdsource.org>, Steve's graphs illustrate the biannual pattern of abundance of Evening Grosbeaks, with a peak year usually followed by an off season. However, over the past three decades the mean number of Evening Grosbeaks found on CBC's has constantly declined, with an especially dramatic drop-off in the northeastern United States. What's going on with these golden seed gobblers? Indeed, they may just be staying farther north with the generally milder winters of recent years. However, as we've seen, most irruptive winter finch species move in response to changes in food availability, not winter temperatures or even snow cover. It could be that changing forestry practices, forest regeneration, or some unknown natural or human-induced factor is resulting in an overall decline in Evening Grosbeak numbers. Future Christmas Bird Counts will show if the trend continues.

So what does the conclusion of 100 years of Christmas Bird Counts—65,532 individual "Christmas Bird Censuses"—actually mean to the birdlife of the areas covered? Consider a Common Loon, hatched on a pristine lake somewhere in northern Ontario in 1970. Unlike the budding life in most eggs laid, this bird passed the significant milestones of both hatching and surviving it's first year. The first five years of this bird's life were probably spent on the ocean—perhaps in the Gulf of Mexico, or off the Atlantic Coast. During those years it may have spent most of its time within sight of land, possibly making forays inland to lakes. Quite possibly during those years it encountered humans with binoculars and spotting scopes—counting birds instead of shooting them. Hence it survived to return to Ontario, stake claim to a territory, find a mate, and breed. Due to the understanding nature of the humans on the lake this loon and its mate only needed to fend off natural threats to their own young. These understanding humans perhaps became aware of birds, and their needs, through a local birding group, after being recruited to go on a Christmas Bird Count.



Lumping and splitting, splitting and lumping. . . so the Rufous-sided Towhee has come and gone. A bit of sparrowish CBC spice in the west or east can be supplied by out-of-range Spotted and Eastern towhees. This Eastern Towhee was found on the Penrose Colorado CBC. Photo/Jeff Webster.

And so this Common Loon, its mate, and a few of their young have survived over the decades. In this particular example, that loon is quite probably still alive in the year 2000—not being directly threatened by humans due to their interest in birds and wildlife, and quite possibly being counted every year on a Christmas Bird Count. The CBC greatly assists in our understanding of the status of bird populations across the hemisphere, and plays an important role in raising human's awareness of the needs of wildlife—just by getting them started in birding. Frank Chapman never could have dreamed his "Christmas Bird Census" would be so important to birds, and evolve to be the cornerstone of something called Citizen Science.

—Geoffrey S. LeBaron

Table 1. New Counts in the 100th (1999-2000) Christmas Bird Count	
ONCV	Carden Alvar, Ontario
ONKI	Killarney P.P., Ontario
ONKW	Kawartha, Ontario
ONPN	Penokean Hills, Ontario
ONSO	South Huron, Ontario
ABBR	Brule, Alberta
ABSL	Slave Lake, Alberta
ABSM	Smoky Lake, Alberta
BCDC	Dawson Creek British Columbia
BALI	Langara Island, British Columbia
BCNH	Naden Harbour, British Columbia
NTFS	Fort Simpson, Northwest Territories
YTMA	Mayo, Yukon Territory
YTWL	Watson Lake, Yukon Territory
METO	Topsfield, Maine
NYCO	Corning, New York
WVMC	McDowell County, West Virginia
TNCY	Clay County, Tennessee
MSEL	Eagle Lake, Mississippi-Louisiana
MIEH	Eagle Harbor, Michigan
WIPP	Portage Pardeeville, Wisconsin
MNPI	Pillager, Minnesota
LACL	Cheneyville?Lecompte, Louisiana
TXVC	Village Creek Drying Beds, Texas
MTMS	McNeil Slough, Montana
CODE	Delta, Colorado
NVMU	Muddy River, Nevada
AZCH	Chino Valley, Arizona
AZGC	Glen Canyon, Arizona
WACO	Colville, Washington
WASA	Satsop, Washington
WAVA	Vashon, Washington
ORAI	Airlie, Oregon
ORST	Sisters, Oregon
CACR	Calero Morgan Hill, California
CACU	Cachuma, California
HIIA	I'ao Valley, Maui, Hawaii
CLIB	Ibague, Tolima, Colombia
CHPP	Parque Nacional Puyehue, Chile

Table 2. Counts with 150 or more species recorded on the 100th (1999-2000) Christmas Bird Count			
Table 2a: Counts North of the United States—Mexican border			
Count Code	Rank	Count Name	Species Recorded
TXMM	1	Mad Island Marsh, TX	228
CASB	2	Santa Barbara, CA	213
TXCC	3	Corpus Christi, TX	206
TXFR	3	Freeport, TX	206
CAMR	4	Morro Bay, CA	201

CAPR	5	Point Reyes Peninsula, CA	200
CAMD	6	Moss Landing, CA	197
CASC	7	Santa Cruz County, CA	196
CAOC	8	Orange County (coastal), CA	190
CASD	9	San Diego, CA	188
CAOV	10	Oceanside—Vista—Carlsbad, CA	187
CAWS	11	Western Sonoma County, CA	186
LASA	11	Sabine N.W.R., LA	186
CACS	12	Crystal Springs, CA	184
TXCT	13	Coastal Tip, TX	183
CAAR	14	Arcata, CA	181
CAMP	14	Monterey Peninsula, CA	181
CAVE	14	Ventura, CA	181
TXCF	14	Corpus Christi (Flour Bluff), TX	181
CACB	15	Centerville Beach to King Salmon, CA	178
TXBP	15	Bolivar Peninsula, TX	178
TXGA	16	Galveston, TX	177
CAOA	17	Oakland, CA	176
NCSB	17	Southport, Bald Head & Oak Islands, NC	176
TXSB	18	San Bernard N.W.R., TX	175
CARS	19	Rancho Santa Fe, CA	172
CALU	20	La Purisima, CA	168
CAON	20	Orange County (northeastern), CA	168
NCWI	20	Wilmington, NC	168
CAHF	21	Hayward--Fremont, CA	167
TXLS	21	La Sal Vieja, TX	167
TXAR	22	Aransas N.W.R., TX	166
CATO	23	Thousand Oaks, CA	165
VACC	23	Cape Charles, VA	165
CASF	24	San Francisco, CA	164
CASJ	24	San Jose, CA	164
SCHH	24	Hilton Head Island, SC	164
CAMU	25	Malibu, CA	163
TXRO	25	Rockport, TX	163
CAPP	26	Palos Verdes Peninsula, CA	162
LALT	26	Lacassine N.W.R.--Thornwell, LA	162
NJCM	26	Cape May, NJ	162
TXFD	26	Falcon Dam and S.P., TX	162
TXPA	26	Port Aransas, TX	162
CABE	27	Benicia, CA	161
FLCO	27	Cocoa, FL	161
FLMI	27	Merritt Island N.W.R., FL	161
CAAN	28	Año Nuevo, CA	160
FLJA	28	Jacksonville, FL	160
TXHO	28	Houston, TX	160

TXLA	28	Laguna Atascosa N.W.R., TX	160
CADN	29	Del Norte County, CA	159
CAPA	29	Palo Alto, CA	159
CASS	30	Salton Sea (south), CA	158
MSSH	30	Southern Hancock County, MS	158
VACI	30	Chincoteague N.W.R., VA	158
CARC	31	Rio Cosumnes, CA	157
CASG	31	Santa Maria—Guadalupe, CA	157
MDOC	31	Ocean City, MD	157
SCLP	31	Litchfield—Pawleys Island, SC	157
TXKI	31	Kingsville, TX	157
LAJB	32	Johnsons Bayou, LA	156
TXAP	32	Attwater Prairie Chicken N.W.R., TX	156
CACC	33	Contra Costa County, CA	155
ORCB	33	Coos Bay, OR	155
SCMC	33	McClellanville, SC	155
CALB	34	Long Beach--El Dorado, CA	154
ORCV	34	Coquille Valley, OR	154
CASM	35	Sacramento, CA	153
FLAB	35	Aripeka—Bayport, FL	153
FLZE	35	Zellwood—Mount Dora, FL	153
TXSA	35	Santa Ana N.W.R., TX	153
TXSR	35	Sea Rim S.P., TX	153
TXST	35	San Antonio, TX	153
FLNR	36	West Pasco (New Port Richey), FL	152
LANO	36	New Orleans, LA	152
NCMC	36	Morehead City, NC	152
TXVI	36	Victoria, TX	152
CASH	37	Salton Sea (north), CA	151
CASL	37	San Jacinto Lake, CA	151
LACW	37	Crowley, LA	151
SCCA	37	Charleston, SC	151
AZRC	38	Ramsey Canyon, AZ	150
CAST	38	Stockton, CA	150

Table 2b: Counts South of the United States—Mexican Border

Count Code	Rank	Count Name	Species Recorded
CRMO	1	Monteverde, Costa Rica	357
RPAC	2	Atlantic Canal Area, R.P., Panama	330
CRLS	3	La Selva, Lower Braulio Carillo, N.P., Costa Rica	326
RPPC	4	Pacific Canal Area, R.P., Panama	321
ECNM	5	Mindo – Tandayapa, Ecuador	313

RPCC	6	Central Canal Area, R.P., Panama	258
BLBC	7	Belize City, Belize	240
BLBE	8	Belmopan, Belize	221
BLGJ	9	Gallon Jug, Belize	220
TRTR	10	Trinidad, West Indies	211
CRGR	11	Grecia, Costa Rica	183
MXYS	12	Yecora, Sonora, Mexico	178
MXAL	13	Alamos, Sonora, Mexico	169
PERO	14	Rio Orosa, Loreto, Peru	163
BRIT	15	Itirapina, Sao Paulo, Brazil	161
MXSC	16	San Carlos, Sonora, Mexico	157
RPVC	17	Volcan, Chiriqui, Panama	150

Table 3. Counts with 100 or more participants on the 100th (1999-2000) Christmas Bird Count

Count Code	Count Name	# Participants
		(fw = feederwatchers)
ONNB	North Bay, ON	1011 (43 + 968 fw)
ABED	Edmonton, AB	608 (181+ 427 fw)
BCVI	Victoria, BC	346 (165+ 181 fw)
CTHA	Hartford, CT	216 (157 + 59 fw)
SCHH	Hilton Head Island, SC	194 (194 + 0 fw)
MACO	Concord, MA	181 (107 + 74 fw)
NSHD	Halifax – Dartmouth, NS	181 (100 + 81 fw)
ABCA	Calgary, AB	173 (62 + 111 fw)
CAOA	Oakland, CA	170 (160 + 10 fw)
CASB	Santa Barbara, CA	150 (144 + 6 fw)
MBWI	Winnipeg, MB	145 (70 + 75 fw)
AKAN	Anchorage, AK	144 (84 + 60 fw)
CAWS	Western Sonoma County, CA	144 (144 + 0 fw)
CAPR	Point Reyes Peninsula, CA	142 (142 + 0 fw)
NSWO	Wolfeville, NS	139 (50 + 89 fw)
DCDC	Washington, DC	135 (130 + 5 fw)
VAFB	Fort Belvoir, VA	135 (134 + 1 fw)
COBO	Boulder, CO	132 (119 + 13 fw)
OHCF	Cuyahoga Falls, OH	131 (86 + 45 fw)
ONOH	Ottawa – Hull, ON-PQ	130 (83 + 47 fw)
PAPI	Pittsburgh, PA	127 (91 + 36 fw)
BCWR	White Rock, BC	122 (100+ 22 fw)
OREU	Eugene, OR	121 (100 + 21 fw)
CASJ	San Jose, CA	118 (117 + 1 fw)
CTGS	Greenwich – Stamford, CT	118 (81 + 37 fw)
AKFA	Fairbanks, AK	114 (72 + 42 fw)
PQQU	Quebec, PQ	114 (114 + 0 fw)

SKSA	Saskatoon, SK	114 (61 + 53 fw)
ABSR	Strathcona, AB	113 (33 + 80 fw)
TXMM	Mad Island Marsh, TX	111 (103 + 8 fw)
ILFB	Fermilab – Batavia, IL	109 (103 + 6 fw)
CODE	Denver, CO	106 (68 + 38 fw)
MIPO	Pontiac, MI	106 (69 + 37 fw)
NYIT	Ithaca, NY	106 (87 + 19 fw)
TXFR	Freeport, TX	106 (94 + 12 fw)
TXBF	Buffalo Bayou, TX	100 (64 + 36 fw)

**Table 4. Regional high counts for the 100th (1999-2000)
Christmas Bird Count**

Region	# of CBC's	Highest Count (species total)
St. Pierre & Miquelon	1	St. Pierre & Miquelon (50)
Newfoundland	10	St. John's (75)
Nova Scotia	14	Halifax?Dartmouth (131)
Prince Edward Island	2	Hillsborough (58)
New Brunswick	4	Cape Tormentine (61)
Quebec	22	Quebec (81)
Ontario	92	Long Point (112)
Manitoba	21	Winnipeg (41)
Saskatchewan	6	Saskatoon (40)
Alberta	29	Calgary (62)
British Columbia	51	Ladner (138)
Northwest Territories	2	Fort Simpson (14)
Yukon Territory	5	Whitehorse (26) Yellowknife (14)
Alaska	32	Kodiak (78)
Maine	23	Greater Portland (97)
New Hampshire	15	Coastal New Hampshire (103)
Vermont	16	Ferrisburg (81)
Massachusetts	32	Cape Cod (134)
Rhode Island	3	Newport County?Westport (133)
Connecticut	16	Old Lyme?Saybrook (127)
New York	67	Montauk (135)
New Jersey	27	Cape May (162)
Pennsylvania	67	Southern Lancaster County (109)
Delaware	6	Cape Henlopen?Prime Hook (138)
Maryland	23	Ocean City (157)
District of Columbia	1	Washington (123)
Virginia	39	Cape Charles (165)
North Carolina	42	Southport, Bald Head, & Oak Islands (176)
South Carolina	16	Hilton Head Island (164)
Georgia	17	Cumberland Island (145)
Florida	60	Cocoa (161) Merritt Island N.W.R. (161)
Ohio	55	Millersburg (89)
West Virginia	16	Charles Town (86)
Kentucky	10	Land Between the Lakes (92)
Tennessee	25	Reelfoot Lake (117)
Alabama	11	Gulf Shores (143)
Mississippi	17	Southern Hancock County (158)
Michigan	53	Anchor Bay (86)

Indiana	37	Lake Monroe (98) Sullivan County (98)
Wisconsin	40	Madison (86)
Illinois	54	Cypress Creek (102)
Minnesota	43	Winona (73)
Iowa	25	Burlington (85)
Missouri	27	Horton?Four Rivers (104)
Arkansas	21	Holla Bend N.W.R. (114)
Louisiana	22	Sabine N.W.R. (186)
North Dakota	18	Garrison Dam (62)
South Dakota	14	Yankton (70)
Nebraska	8	Lake McConaughy (101)
Kansas	25	Lawrence (104)
Oklahoma	20	Oklahoma City (122)
Texas	86	Mad Island Marsh (228)
Montana	30	Bigfork (84)
Wyoming	16	Casper (64)
Colorado	35	Colorado Springs (111)
New Mexico	27	Caballo (137)
Idaho	24	Lewiston?Clarkston (84)
Utah	14	St. George (100)
Nevada	11	Truckee Meadows (110)
Arizona	29	Ramsey Canyon (150)
Washington	41	Sequim?Dungeness (141)
Oregon	40	Coos Bay (155)
California	112	Santa Barbara (213)
Hawaii	13	Honolulu, O1ahu (49)
Guam	2	Southern Guam (35)
Saipan	2	Saipan (41)
Mexico	11	Yecora, Sonora (181)
Belize	3	Belize City (241)
Costa Rica	4	Monteverde (358)
Panama	4	Atlantic Canal Area (330)
Colombia	3	Ibague, Tolima (141)
Ecuador	1	Mindo?Tandayapa (314)
Peru	1	Rio Orosa, Loreto (163)
Chile	1	Parque Nacional Puyehue (13)
Brazil	2	Itirapina, Sao Paulo (161)
Trinidad	1	Trinidad (211)
Bahamas	1	New Providence Island (105)
Dominican Republic	2	Salinas?Bani (72)
Puerto Rico	3	Cabo Rojo (100)
Virgin Islands	3	St. Croix (65)
Bermuda	1	Bermuda (87)

**Table 5. Selected species sightings, 100th (1999-2000) Christmas Bird Count
(cw = count week)**

State/Prov	# Counts	# Birds
Grasshopper Sparrow		
Massachusetts	3	3
Virginia	1	cw
North Carolina	1	1
South Carolina	1	2
Georgia	2	22

Florida	22	72
Alabama	2	4
Mississippi	3	3
Louisiana	6	10
Oklahoma	1	3
Texas	24	104
New Mexico	1	8
Arizona	6	21
California	8	15
Totals: 14	81	268
Bohemian Waxwing		
Newfoundland	6	6958
Nova Scotia	11	4792
Prince Edward Island	2	250
New Brunswick	2	128
Quebec	19	3492
Ontario	49	15,074
Manitoba	15	836
Saskatchewan	4	346
Alberta	25	14,549
British Columbia	20	15,703
Yukon Territory	1	2
Northwest Territories	1	1
Alaska	10	8605
Maine	13	2834
New Hampshire	7	210
Vermont	11	1263
Massachusetts	2	8
New York	3	118
New Jersey	1	1
Michigan	11	946
Wisconsin	7	254
Minnesota	12	1948
North Dakota	5	53
Nebraska	1	1
Montana	20	13,566
Wyoming	8	2401
Colorado	2	10
Idaho	14	941
Utah	1	2
Washington	3	328
Oregon	1	cw
Totals: 31	287	95,620
Common Redpoll		
St. Pierre & Miquelon	1	6
Newfoundland	10	948
Nova Scotia	13	7872
Prince Edward Island	2	1177
New Brunswick	4	1333
Quebec	22	7824
Ontario	87	21,497
Manitoba	17	7056
Saskatchewan	6	3495
Alberta	27	18,123
British Columbia	24	10,643
Yukon Territory	4	621
Northwest Territories	2	37
Alaska	14	1182
Maine	21	5117

New Hampshire	15	1831
Vermont	16	7344
Massachusetts	28	2869
Rhode Island	2	2
Connecticut	9	359
New York	58	10,388
New Jersey	7	19
Pennsylvania	27	902
Maryland	3	9
Virginia	2	38
Ohio	15	181
Michigan	35	2108
Indiana	2	5
Wisconsin	28	5589
Illinois	8	44
Minnesota	36	6584
Iowa	2	7
Missouri	1	3
North Dakota	16	5826
South Dakota	8	936
Nebraska	1	2
Montana	23	2714
Wyoming	2	18
Colorado	2	5
Idaho	7	213
Washington	7	60
Oregon	4	55
Totals: 42	618	135,042
Red Crossbill		
Newfoundland	4	5
Nova Scotia	9	88
Quebec	7	62
Ontario	18	102
Saskatchewan	1	47
Alberta	5	15
British Columbia	33	2397
Yukon Territory	1	3
Alaska	3	185
Maine	2	16
New Hampshire	3	5
Massachusetts	10	134
Rhode Island	2	18
Connecticut	1	1
New York	8	66
New Jersey	5	65
Pennsylvania	2	2
Delaware	1	1
Maryland	1	17
Virginia	4	7
North Carolina	3	22
Georgia	1	1
Tennessee	3	4
Michigan	3	29
Indiana	2	4
Wisconsin	2	6
Illinois	3	12
Minnesota	7	180
Arkansas	1	8
South Dakota	1	5

Nebraska	1	2
Kansas	1	1
Montana	7	156
Wyoming	4	96
Colorado	8	45
New Mexico	3	54
Idaho	6	190
Utah	1	5
Arizona	2	4
Washington	23	590
Oregon	17	562
California	8	143
Totals: 42	227	5355
Evening Grosbeak		
St. Pierre & Miquelon	1	1
Newfoundland	4	510
Nova Scotia	13	1706
Prince Edward Island	2	62
New Brunswick	2	183
Quebec	15	791
Ontario	61	7570
Manitoba	11	1659
Saskatchewan	1	75
Alberta	23	1675
British Columbia	24	1683
Northwest Territories	1	16
Maine	14	241
New Hampshire	11	361
Vermont	12	550
Massachusetts	9	287
Connecticut	2	2
New York	23	1575
Pennsylvania	24	227
Maryland	2	14
Virginia	4	26
North Carolina	7	178
South Carolina	1	4
Ohio	4	18
West Virginia	3	104
Tennessee	3	20
Alabama	1	1
Michigan	14	622
Indiana	2	15
Wisconsin	11	775
Illinois	1	4
Minnesota	13	592
North Dakota	1	10
South Dakota	2	57
Montana	6	95
Wyoming	2	80
Colorado	9	176
New Mexico	3	3
Idaho	5	67
Nevada	1	1
Arizona	1	cw
Washington	10	240
Oregon	9	823
California	11	56
Totals: 44	379	23,155

