



# Christmas Bird Count Canadian Compilers Manual

Updated: December 2005

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The Christmas Bird Count, started by Frank Chapman along with 26 other conservationists, was a way of promoting conservation by counting, rather than hunting, birds on Christmas Day of 1900. Now in its second century, it has evolved into far more than just another holiday tradition. The CBC, to quote Geoff LeBaron, the Audubon CBC Director, “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”. With the cumulative historical CBC data now on-line, there are many thousands of individual counts from December 25, 1900 to the present available for perusal and scientific research.

## THE BASICS

- *Circle:* A count must be entirely within a 24 kilometre diameter circle.
- *Center Point:* The same center point should be used each year.
- *Circle Overlap:* Circles may not overlap or abut neighboring counts.
- *Count Period:* Your count needs to be conducted within the official count period, 14 December thru 5 January, inclusive dates.
- *Count Day:* Your count must be conducted within one 24-hour calendar day.
- *Birds outside the circle* seen by an observer standing in the circle should not be included in your census data.
- *Count Hours & Observers:* Counts should have a minimum of 8 hours coverage, either by one party or cumulative by a number of parties.
- *ID by Voice:* Birds may be identified by voice, but specimens or tracks are *cw* (count week) birds (unless you can document the fact that the specimen/track wasn’t present in the area earlier than the count day).
- *Linear pelagic CBC’s* are allowed, if the boat follows the same transect or covers the same area each season.
- Bird Studies Canada requests that each CBC circle maintain one point of contact for mailing of count materials, receipt of update emails on the CBC and data entry of the count data. This “primary” circle contact needs to provide name, address, email and phone numbers to the Bird Studies Canada office upon creation of the circle. An email address is required for this “primary” contact. This one “primary” compiler may also designate other “secondary” compilers to receive emails, but only one main contact per circle can be maintained for other reasons.

## ROLE OF THE COMPILER

(Check out *The Art of the Christmas Bird Count* by Alan Contreras at <http://home.pacifier.com/~mpatters/cbc/acbc.html>)

*Organizing/recruiting participants including feeder-watchers:* Remind previous participants and start recruiting new ones in early November by placing notices in local birding or conservation newsletters, announcements in local newspapers, flyers, postcards to those you think might be interested, put up posters in gathering places.

*What new CBC volunteers need to know:* Compilers should reiterate to past participants and communicate or mail out to new participants a list of reminders such how much time they may be spending in the field, what to wear, the need to bring their own binoculars, the need for food and water/soda, sturdy footwear, rules of counting, etc. Also communicate the count fee of \$5.00 per field participant. Please review the policy on CBC count fees (page 6) for details on the count fee. Also anyone involved in the CBC can have their photos taken during a CBC considered for publication in *American Birds*. We are always looking for photos, especially electronic versions. If anyone wishes to submit a photo, rare or not, to be considered for publication, please submit an electronic version to the CBC Director with details on the photographers name, phone, email, species, date of photo and name of the CBC.

*Scheduling count:* It’s best to schedule your count during the same weekend of the count period annually. This helps observers plan their activities well in advance, and enhances the value of your data.

*Participant consistency:* It’s best to use the same people in the same areas each season. That way they can better learn their area and the birds therein. New participants that join the count can be paired with experienced birders.

*Designated census route:* Each group (party) should run a census-style route where they cover the route in-depth counting every bird encountered. No other group should cover that area—we need to ensure that no double-counting occurs.

*Counting when retracing census route:* If a group needs to retrace their path along a census route, birds *should not be recounted*. However, if other species are encountered, they should be included in the census results.

*Feeder-watchers:* Feeder watchers should look for the maximum number of each species visible (or within earshot) at any one time as their maximum count. They should not just keep adding chickadees for their entire watch period.

*Large roost counts:* For counts where large roosts are within the circle, an observer experienced with estimating large numbers of birds should census that roost in the morning or evening. With very few exceptions, no other individuals of that species counted by other observers during the day should be included in the final tally.

*Online data:* Online entry of data can be accessed by the one “primary” compiler. This compiler (or designated person of his/her choice) is responsible for entering the results of their CBC count each year, entering and maintaining the participant list, entering and maintaining the contact information about themselves and any secondary compilers, and submitted count fees either online or by mail to the Bird Studies Canada office.

## **TIMELINE AND DEADLINES FOR EACH CBC**

- all counts must be run within the “Official Count Period,” which runs from 14 December through 5 January (inclusive dates) each season.
- on-line data entry should be complete by 15 February of each year. Data entry access will be closed as of February 16 each year.
- all materials and fees payments should be returned to the Bird Studies Canada or submitted online by 15 February each year.
- Regional Editing process takes place from February 1 through March 31 each year.

## **GUIDELINES FOR SCOUTING**

**Scouting is not a required part of the preparation of any Christmas Bird Count. However, if one goal of your group is to get the highest species total each season, pre-count scouting can make or break that effort. The early winter bird season is quite variable from year to year, and a bit of time over the week or so before your official Count date will save valuable time (and potentially frustration) for your field parties on Count day.**

- *The timing on routes:* While your field parties probably always tend to follow the same route in their section of the circle each season, scouting beforehand can provide them tips about finding reclusive, crepuscular (dusk-loving), or nocturnal birds. In addition, if you learn before count day that a particular marsh or lake is completely frozen or dry (and thus not worth a visit), that could save your participants a valuable few minutes on their busy day.
  - *Road conditions:* As with the Breeding Bird Survey, it's best to make a dry run through all your Count's areas prior to your CBC to ensure that no construction areas or bridge outages will hamper your participants' access to their assigned areas
  - *Rarities:* Scouting before the Count day may turn up rare, out of range, or out of season species. These could well be your "best birds" during count day, and obviously you'll want to alert your field parties to their presence if any rarities are turned up.
  - *Tricky identifications:* Scouting may result in the location of difficult-to-identify birds that could otherwise go unlisted if they are only seen on Count day. Sorting these species out in advance (some shorebirds, gulls, flycatchers, or sparrows for example) can ensure that observers familiar with the species assist with the identification, and will help supply the details that will probably be necessary to satisfy your CBC Regional Editor.
  - *How and where to scout:* The weekend before, or during the week leading up to, your Count ideally all your routes should be pre-run. Thickets, marshes, and congregations of birds should be checked for birds of note, and any logistical difficulties uncovered, or good birds found, should be reported to your party leaders and observers. Many times some of your regular observers will be anxious to scout their areas in advance, so don't feel you have to do all the scouting on your own time.
  - *Owling:* Scouting for nocturnal species prior to your Count day can be especially helpful to your observers. The CBC period is the time when many species of owls are defining their territorial boundaries, and driving your routes at dusk or dawn may uncover specific locations where owls may be quickly seen or heard by your observers on Count day.
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# DETAILS ON RECORDING CBC INFORMATION

## WEATHER/EFFORT

### Units

Measurements can be in choice of metric or English units.

### Date & Time

**Count Date:** Date must be Dec 14 to Jan 5 inclusive.

**Start and End Times:** You must specify at least one start time and one end time. If your count times are discontinuous, you can specify additional times by using additional rows.

For example: If your nighttime and daytime hours are discontinuous, give both sets.

Start time 1 and End time 1:                   1:15 a.m. to 3:00 a.m.  
Start time 2 and End time 2:                   8:00 a.m. to 4:30 p.m.

### Weather

**Temperature:** Indicate the minimum and maximum temperatures of the day to the nearest degree.

**Wind Direction:** If there is little to no wind, select Calm for Wind Direction. In case of fluctuating wind patterns, select Variable.

**Wind Velocity:** For Wind Velocity, report representative values rather than rare extremes. You will need to use your best judgment as to what is representative. For example, if wind velocity was generally in the 5 to 15 kph range but very infrequent gusts of 30 kph occurred, report Wind Velocity, Minimum as 5 kph and Wind Velocity, Maximum as 15 kph.

**Snow Depth:** Minimum and Maximum should be reported to the nearest quarter-inch. Both should be reported as 0 if there was no snow. Report representative values rather than rare extremes. For example, if snow depth was typically between 4 and 8 cm with occasional 1-metre snow drifts in gullies and bare spots on ridge tops, report Snow Depth, Minimum as 4 cm and Snow Depth, Maximum as 8 cm. If snow depth increases with elevation, report the representative minimum depth at low elevation and the representative maximum depth at high elevation. If snow depth decreases with elevation, do the reverse.

**Still/Moving Water:** Ice Coverage, Open and Moving Water should be set by these guidelines: Open= 100% water, Partly Frozen = more water than ice, Partly Open = more ice than water, Frozen = 100% ice.

### a.m. and p.m. Conditions

**Cloud Cover:** For Cloud Cover, a.m. or p.m., select the condition that was true most of the time. Local Fog means that only portions of the count circle had fog for most of the period, while Foggy means the entire circle had fog. Clear = 0-15% clouds, Partly Cloudy = 15-33% clouds, Partly Clear = 33-66% clouds, Cloudy = 66-100% clouds.

**Rain/Snow-a.m./p.m.:** For a.m./p.m. Rain/Snow, check all conditions that were true. For example, if the morning started with drizzle that developed into heavy rain, the "Rain" boxes should have both "light" and "heavy" checked for the a.m.

### Observers

Observers in the field during daylight are counted separately from nocturnal birders and those observing at feeders. When reporting the minimum and maximum number of parties, remember these include only parties in the field during daylight hours.

**In Field-** Total Number and Minimum/Maximum Number of Parties: To determine the number of daylight parties, use the number of parties that you began the day with as your basic number. If parties further split up during the

day, the maximum number in the field at any given time of the day should be reported, and the basic number becomes the minimum.

Example: Count Frozentoos, Yukon starts the day with 3 parties. Later, two of these split into two parties each. The compiler records this as Minimum Number of Parties (daylight) = 3 and Maximum Number of Parties (daylight) = 5.

Frozentoos, YT also had a group of counters out owling from 4:45 a.m. to 6 a.m., but this party is not included in the Minimum/Maximum Number of Parties.

**At Feeder**-Total Number: Example would be of 4 people feeder-watching for several hours during the day as well, but again, this is not recorded in the daylight party number (it is recorded as observers At Feeders, Total Number).

### Party Hours and Distance

(excludes viewing at feeders and nocturnal birding)

Record a value for all hours and distance fields except for those associated with By Other Transportation. If appropriate, enter a 0 for distance. For example, an owling party may spend 1/2 hour in one spot--resulting in 1/2 hour and 0 miles owling.

Party hours and distance (Total Party, By Foot, By Car, and By Other Transportation) are reported excluding feeder hours and nocturnal birding hours and distance. Please round all hours to the nearest quarter-hour, and all distances to the nearest quarter-mile or quarter-kilometre.

**Total Party Hours and Distance:** Totals for Party Hours and Party Miles are calculated automatically on the website.

Please make every effort possible to be accurate with these numbers.

### By Other Transportation

For party hours and distance By Other Transportation, you are given a limited choice of methods of transportation. If the exact method is not listed, please select the best approximation.

NOTE: It would be unrealistic to report any more Total Party Hours than the Maximum Number of Parties (daylight) times 12, since 12 is the approximate maximum number of daylight hours in December and January.

Compilers should make sure to get the breakdown of hours and distance covered by car, foot, and other means of transportation (boat, bicycle, skis, etc.) from the party leaders.

NOTE: Take into account that for a party on foot, it is stretching reality to have traveled--and birded--much more than 1 or 1.5 miles per hour.

### Other Time and Distance

**At Feeders:** The number of hours is obtained by totaling the hours spent at feeders by feeder-watchers taking part in your count. Time spent observing feeders by parties afield should not be included here--they should be included in your field party totals. Hours should be rounded to the nearest quarter hour.

**Nocturnal Birding ("owling"):** For nocturnal birding, report the number of hours spent by all parties in the field during non-daylight hours, rounded to the nearest quarter-hour and for the distance, total up the distance (by foot, car, or other transportation) traveled by those parties, and round to the nearest quarter-mile or quarter-kilometre.

### Recording Checklist Data

For each species seen record the number observed on count day, or enter cw if the species was observed count week only. The count week runs from three days before to three days after the count day. The count week can therefore extend outside the official count period; for example if your count is run on 14 December, the first day of the period, your count week is still from three days before to three days after your count (11 through 17 December).

Please remember that, for birds coming to feeders, it is the highest number of individuals seen and heard at one time that should contribute to the total number for that species.

*Other Flags:* The US (unusual) flag is for species that are out of range or seasonal or are difficult to identify. The HC (high count) flag is if the number of birds observed is an unusually high count. The LC (Low count) flag is for unusually low numbers.

### Total Number of Species

The total number of species that will be recorded equals the number of AOU-listed ('real') species observed on count day plus any generic or *sp.* forms not represented within the list. For example, *loon sp.* counts in your total only if no other loons were identified to the species on count day. A species such as Dark-eyed Junco only counts once in your species total, even if three or four forms were identified on count day. Your total will not become official until it has been reviewed by CBC Regional Editors.

## RECORDING UNUSUAL SPECIES

### General Instructions

Paper documentation of all rare bird/unusual species must be submitted directly to the regional editor. If you have received written reports from observers documenting species that they observed on Count day, and especially if you have photographs of sketches accompanying the report, it is best to mail those "original" documentations direction to the regional editor. It is NOT wise to transcribe those reports into the on-line forms.

### When are Unusual Bird Reports Required?

Unusual Bird Reports are required under the following circumstances:

*Neotropical migrant species for which there are few accepted winter records for North America.* Any reports of these species in North America **MUST** be accompanied by impeccable substantiating details, preferably including sketches and/or photographs, or they will be deleted from counts. The only exceptions for some of these species, such as Broad-winged Hawk and Ruby-throated Hummingbird, will be for the very limited geographic area (like coastal Louisiana or south Florida) where the species is regular on Christmas Bird Counts.

*The species (or form) is out of range, season, or difficult to identify.* These species should be flagged as US (Unusual Species) when reported on the checklist. The best rule is that if it's a "good bird" or not a winter regular, it should include details. Lack of a report could result in the species being omitted or tagged with the dreaded ND (no details)! One rule of thumb is that any species seen less than once every four years *on your count* should have some details submitted. The amount of details required obviously varies with the rarity of the species and how difficult it is to identify.

All reports must include the name and phone number of the person who is the contact for the report. This could be a compiler or it could be a participant who observed the species.

## PARTICIPANT FEES POLICY

- There is a \$5.00 (Canadian) fee per field participant per count.
- Feeder watchers, all observers 18 and under and Bird Studies Canada members may count for free.
- The primary compiler (only) is exempt from paying the count fee.
- Secondary compilers must pay the count fee if they participate as FIELD OBSERVERS. If secondary compilers are helpers only they do not have to pay.
- All types of compilers get a copy of American Birds regardless of payment status.
- All participants except for non-paying feeder-watchers will receive a copy of *BirdWatch Canada with the CBC regional reports*. Participants have the opportunity to opt-out of receiving this publication.