Holiday Winter Bird Activities

METHOD

First, students will review the birds in Canada by playing a short game and listing the birds on a chart paper with the teacher. Next, they will watch a video about the Holiday Bird count and go outside to try a bird count in their schoolyard or a neighbouring park so they can teach their family how to do the count. Finally, they will make a Holiday Card and Package introducing the count to their family as a holiday activity for everyone.¹

OBJECTIVES

- -Learn about winter birds in Canada
- -Learn about the Winter Bird Count and its importance to the bird population and scientific researchers

ACTIVITY

The teacher can use the PowerPoint slideshow to introduce different sections of the lesson.

- 1) The teacher will introduce the topic for the day winter birds in different habitat in our area.
- 2) Students will play the game "Birds of Canada." Which of these are common birds in Canada? Stand up for birds. Sit down for non-birds. (The teacher could also use "Thumbs Up and Thumbs Down" to indicate the two classes).
- 3) The teacher will ask, "Do we see birds in the winter?" Then the teacher will ask the students to "Popcorn" (shout out at random) all the birds they see in the winter.
- 4) The students will "Think, Pair, Share" the names of common winter birds in Canada as they look at images of common winter birds in Canada.
- 6) The students will see "Christmas Bird Count" video²
- 5) The teacher will provide the students with the sheet of "Canadian Winter Birds". The teacher may want to modify the sheet with images of specific birds in their local area and explain that these are the birds they can expect to see. The students will discuss why they will not likely see certain birds that migrate at the end of the summer, such as warblers, herons or hummingbirds.
- 6) The students will estimate the number of the types of birds they will see in an hour of observation outside the school in the play yard or in a neighbouring open or wooded area. See the tally sheet for counting. There is a column for the students to indicate their guess for the number of birds they will see.

¹ Ties to Grade 4 curriculum: Habitat, population, community, adaptation

⁻ Use a variety of communication tools with different audiences

² Video "Christmas Bird Count"

- 7) The students will then take an excursion outside to count the birds in the area they have designated. The students will work in teams of three for the count. There will be two spotters and one student to tally the count. The students can change tasks so that everyone has an opportunity to spot birds and to tally.
- 8) When the students return from the walk, they will read "Why Count Birds?" to understand why their count will be helpful to scientists. They will answer the two questions on the activity sheet.
- 9) The students will design a holiday card and information package to explain the Holiday Season Bird count. See the "Holiday Card Planner" as a checklist for students to follow. The students will also include "Why Count the Birds?" so their family members understand the significance of the activity.
- 10) This card will serve to be a present to their family. Students will encourage their families to take a trip outdoors during the holidays and spend an hour counting the birds they see.

ASSESSMENT

- 1) Reflective thinking about the bird count activity: "How close was my count to my estimate? Why?" This is to be answered at the bottom of the "Bird Population Tally."
- 2) Holiday Card and Activity Planner. The first column is for a self-rating, and the second column is for a peer or teacher rating.

DISCUSSION

- How can we support the birds in our area that stay here all winter? How will I know what to feed each type of bird?³
- Is the bird population increasing or decreasing? How would we find out?
- Do birds live in a community, or do they live alone? What did we see during our Bird Count Excursion?
- How can we make sure our birds have enough habitat to survive?

CONTENT AREAS

o Environmental Education, Mathematics, Science, Visual Arts

MATERIALS

- This includes the following, in this order, if applicable:
 - o PowerPoint Slideshow, "Holiday Themed Activities"
 - o Research tools (e.g., internet, books, etc.)
 - o Clipboard and pencils for the bird count
 - o Large envelopes, one per student, for Holiday Package
 - Handouts "Winter Birds of Canada," "Tally for Bird Population Count," Why Count Birds,"
 "Holiday Card Planner"
 - o Art supplies

³ https://cwf-fcf.org/en/resources/DIY/outside/feed-the-birds-this-winter.html





IN ADVANCE

- 1) Review PowerPoint Slideshow
- 2) Prepare handouts
- 3) Notice or research which birds are in your specific area and adjust the handouts accordingly
- 4) Prepare the art materials
- 5) Have large envelopes for each student to collect the pertinent pages for their family to prepare for the bird count

SAFETY

- 1) If leaving the school property, distribute permission forms and try to enlist a staff member to accompany you on your bird watching trip.
- 2) Explain to the students that the quieter they are, the more likely they will see birds.
- 3) Take a list of student names to use as an attendance checklist.

EXTENSIONS

1) Have the students make games to help them remember the look and names of the birds – for example, "Birds" bingo, "Bird" concentration, "Bird" wildlife, "Guess My Bird."

VARIATIONS

- 1) Have the students participate in a Summer Bird Count to see the variation in bird types in their area. Compare the data collected with the Winter Bird Count.
- 2) Have the students compare the bird count in a variety of habitats the schoolyard, the forest, in their chosen location at home.

ACTIVITY NOTES

- 1) Select the bird count activity on a good winter weather day. Make sure the students bring appropriate clothing for an hour's walk outside.
- 2) Prepare clipboards and pencils for the tally person in each group.





GLOSSARY WORDS

Conifer: Trees that bear cones. They are usually evergreen, and most conifer trees have needle-like or scale-like leaves.

Deciduous: Trees or shrubs whose leaves fall off in autumn.

Evergreen: Trees that remains green throughout the year. A few leaves are shed at a time, but new needles develop before the old ones are shed, e.g. pine, spruce, fir and cedar.

Habitat: Natural environment with living organisms to support plants and wildlife.

Woods: Area where many trees grow close together. A forested area.

BACKGROUND

What are Winter Bird Counts?

It may be surprising to you, but everyday citizens who are enthusiastic about birds, participate in some scientific data gathering. In Canada, there are two bird counts⁴:

- A) The Christmas Bird Count (CBC)
- B) The Great Backyard Bird Count (GBBC)

A) Christmas Bird Count



The CBC started way back in 1900 by Frank Chapman, a renowned ornithologist who worked with the American Museum of Natural History. Due to the declining bird population and Frank's interest in supporting our feathered friends, he initiated the Christmas Bird Count.

The goal of the bird count activity was to replace a hunting competition called "Side Hunt" where people participated to kill the most birds and other animals through a competition. The aim was to replace this activity with a conservation-based activity.

On Christmas Day, volunteers count birds in a 24-kilometre diameter circle. The list of birds is submitted to the organizers of the count.

You can replicate this activity for your students. They need to identify the birds they see and understand how to take a count. When counting the birds, the students first need to identify the type of bird, and then keep a running record. If a large flock of birds flies overhead, then the students can do some estimating. You can review how to estimate large numbers in your mathematics class for practice. Remember that bird counting is not an exact science, but with more than 63,000 counters from the Arctic to South America, the volume of

⁴ Canadian Wildlife Federation and Support eBird





information is very helpful to identify patterns for scientific researchers. Every count is vital to the overall picture. Involving students at this age, you may be developing lifetime involvement and interest in the natural environment.



B) Great Backyard Bird Count

The Great Backyard Bird Count takes place for four days in February. The count takes place in backyards and in other locations. The count can be as short as for 15 minutes or as long as the participant's desire. The data can be submitted directly to the Great Backyard Bird Count⁵.

The Benefits

There are many benefits to involving citizens and students in this type of endeavour. First and foremost, the count has shifted interest in birding activity from hunting to a conservation-oriented activity. Citizens themselves benefit from getting out into the wild during a season where many would be cooped up inside. Birders also enjoy meeting other people who have the same interests.

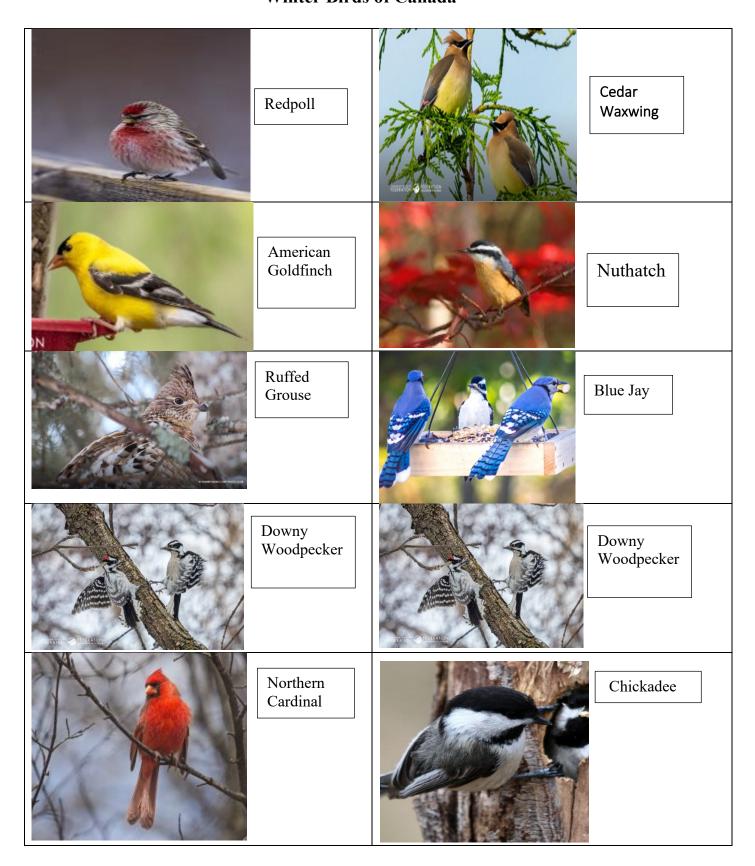
And the data they collect is used in significant ways. The data from various bird counts is merged together so that researchers can make decisions about bird populations based on facts. They are able to see the results of weather conditions, diseases, habitat loss and other influences on the health of bird populations.

However, this information makes its way to high-level reports. With the data, birds can be put on "Species At-Risk" lists. Once on the list, these birds receive conservation efforts to maintain their very existence.

By involving your students in this very important activity, they are becoming part of a larger community of conservationists who are making a difference for our planet. You are modelling the process of how small steps can achieve great ends.



Winter Birds of Canada



Tally for Bird Population Count

Bird	Estimate	Count
Northern Cardinal		
Blue Jay		
American Goldfinch		
Chickadee		
Nuthatch		
Ruffed Grouse		
Cedar Waxwing		
Redpoll		
Downy Woodpecker		

Why Count the Birds?

Instructions: Read the information and answer these 2 questions.

- 1) How does your count information support birds? Name two ways.
- 2) Using the Government of Canada's species at risk public registry⁶, list two species of birds in your area that are now on the "Species at Risk" list.

The benefits of bird counts are important. Families enjoy getting out into nature and seeing our winter birds. Also, the information they gather is used in many ways.

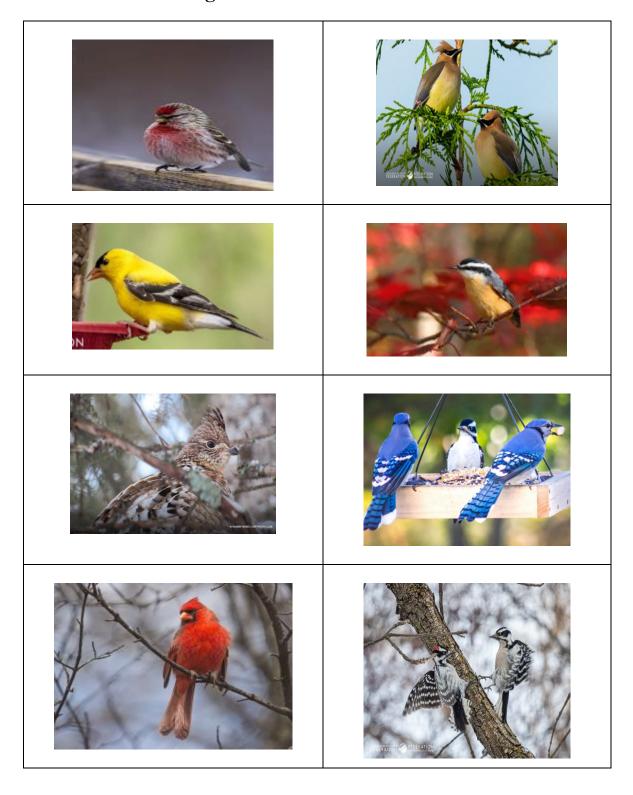
The information you and your students count are merged with other data such as the summer Breeding Bird Survey. This helps researchers monitor the status of bird populations and patterns. When scientists know how many birds there are, they can understand how weather, diseases, and other factors influence our feathered friends.

But your information goes further. It is used in many high-level reports and has helped identify threats to both birds and their habitat. This has led to adding birds to the *Species at Risk Act* lists. Birds such as the Western Screech Owl and the Red Crossbill percna subspecies have been added to these lists. Conservation efforts for many bird species are thanks to these Citizen Scientist activities. Your school and family data count can make a real difference to support these pollinators.

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Image of common winter birds for teachers use









Holiday Card & Activity Planner

Instructions:

You have made a bird counting invitation package for your family members. In it is all the information you need to go on a bird counting adventure. You will select the location and time with your family members.

Use this checklist to make sure you have included all of the sections of the card so your family members can count the birds successfully.

List of Items	My Rating	
Decorative Card with Holiday Theme	1 2 3 4	1 2 3 4
Information About "Counting Birds" o "Winter Birds of Canada" sheet o "Tally for Bird Counting" sheet to count birds o "Why Count Birds" information sheet	1 2 3 4	1 2 3 4

