

Bird Beak Buffet

Birds of the Temperature Rainforest



Field Experience Curriculum for Grade 1 Students

Curricular Workshops at the Powell Lake Outdoor Learning Center A Tool for School District 47 Teachers

*Created in Partnership with Wild BC (Habitat Conservation Trust Foundation)
and the Powell Lake Outdoor Learning Center (2014)*



Compiled by Karin Westland





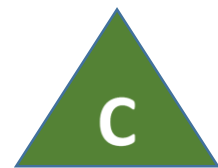
Workshop Background

During the Bird Beak Buffet Workshop, students will use their senses to learn about the special functions of bird beaks, with an in-depth focus on local bird species and how they are adapted to eat specific foods. Through play and inquiry, this workshop will introduce students to the idea that all animals have certain body features and behaviours that help them to meet their basic needs such as eating and finding food.

Kindergarten Curriculum Connections *BC's Education Plan*

The table below lists all relevant curriculum connections between Bird Beak Buffet and BC's Education Plan. As Bird Beak Buffet is designed as a series of lessons to be delivered cohesively during one outdoor field experience, All Big Ideas are addressed in the holistic delivery of this field experience curriculum and are therefore listed together below.

CORE COMPETANCIES



Communication



Thinking



Personal & Social

SCIENCE

Big Ideas

Living things have features and behaviours that help them survive in their environment.

LANGUAGE ARTS

Big Ideas

Language and stories can be a source of creativity and joy.
Stories can be told through pictures and words.

ARTS EDUCATION

Big Ideas

Creative expression develops our unique expression and voice.

MATHEMATICS

Big Ideas

Number represents and describes quantity.
We can describe, measure, and compare spatial relationships: Objects and shapes have attributes.
Analyzing data and chance help us to compare and interpret.

PHYSICAL EDUCATION

Big Ideas

Regular participation in moderate to vigorous physical activity provides benefits to all aspects of well-being.
Active play provides practice in purposeful, interactive, and skillful movement.

CAREER EDUCATION

Big Ideas

Effective collaboration relies on clear, respectful communication.

Aligned with



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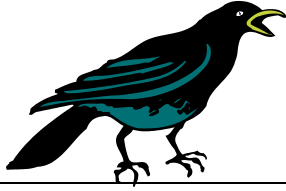
Bird Beak Buffet

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Bird Beak Buffet

Grab-and-Go Bin Checklist

<p>● Activity Bag: Owls and Crows</p> <p>Materials:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Rope <input type="checkbox"/> Two Blindfolds 	<p>● Activity Bag: Sound Mapping</p> <p>Materials:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1 Index Card Per Student <input type="checkbox"/> 1 Pencil Per Student
<p>● Activity Bag: Five Senses</p> <p>Materials:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Laminated Picture Cards of the Body Parts 	<p>● Activity Bag: Bird Watching Walk</p> <p>Site Specific Materials:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 15 Pairs Binoculars
<p>● Activity Bag: Bird Beak Buffet</p> <p>Materials:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 7 Buckets (to place food in) <input type="checkbox"/> Bag of rice (Insects) <input type="checkbox"/> 24 Marbles (Nuts/Seeds) <input type="checkbox"/> 24 Coins (Small Animals) <input type="checkbox"/> Water (Nectar) <input type="checkbox"/> 7 Large Empty Cups (Bird Stomachs) 	<p>Beaks</p> <ul style="list-style-type: none"> <input type="checkbox"/> 2 wooden spoons <input type="checkbox"/> 2 chopsticks <input type="checkbox"/> scissors <input type="checkbox"/> 1 pair of tongs <input type="checkbox"/> 1 pair of tweezers <input type="checkbox"/> 1 nut cracker or garlic press <input type="checkbox"/> 1 eye dropper or large syringe <p>Other</p> <ul style="list-style-type: none"> <input type="checkbox"/> Local Bird Picture Cards <input type="checkbox"/> Large Laminated Chart

The Rainbow Coloured Circles:

A quick visual reference representing the order of activities (Red, Orange, Yellow, Green, Blue, etc.).

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Classroom Beginnings Activity 1: What Makes a Bird a Bird?
Birding Journal & School Ground Walk About

Inside & Outside
1.5 Hours

Activity

PART 1: Class Discussion

1. Ask students to think about what comes to mind when they hear the word “bird.” The key inquiry question to pose to students is: What makes a bird a bird?
2. Give each child a Birding Journal and a writing utensil. This journal can be a specific journal (see appendix A) or an extension of their classroom journal.
3. Prepare students for their first bird walk.



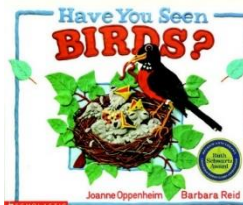
PART 2: School Ground Walk About

Remind students that the learning they are doing outside is an extension of the classroom and it is not recess. Establish a clear signal to indicate when it is time to line-up to come inside.

1. Ask students how they think they should walk, if they want to see birds: quietly and slowly.
2. Tell students you will be going on a school-ground walk about looking for birds. A Walk About means that students can amble on their own provided they do so within the established boundaries: they are to stay on the school ground, exploring the perimeter for birds.
3. When students encounter a bird, they are to stop, sit, look, and listen, paying careful attention to the special features that make a bird a bird.
4. In their journal, students can record a picture of the bird they encountered.

PART 3: Back in Class

1. Invite students to sit as a group. Discuss their observations.
2. Ask students: What did you notice about the bird you saw? What made that bird a bird? List characteristics on a “Bird Words” word wall. Make sure the following are included: flight, eggs, beaks, feet, crop, warm-blooded, gizzard, and feathers.
3. Read aloud “Have You Seen Birds” by Joanne Oppenheim.



Sing and Create Hand and Body Movements

The Bird Song

(To the tune of
“Here We Go Round the Mulberry Bush”)

*This is the way we flap our wings,
Flap our wings, flap our wings.
This is the way we flap our wings,
Just like a dove.*

*This is the way we peck at worm...
Just like a robin.*

*This is the way we use our talons...
Just like an owl.*

*This is the way we paddle our feet...
Just like a duck.*

*This is the way we drink our nectar...
Just like a hummingbird*

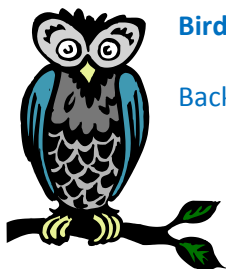
*This is the way we scoop our fish...
Just like a pelican.*

*This is the way we crack our seeds...
Just like a finch.*

*This is the way we catch our insect...
Just like a swallow.*

*This is the way we soar in the sky...
Just like a hawk.*

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Bird Beak Buffet Activity 1: Owls and Crows

Outdoor
20 Minutes

Background

This is an excellent game for assessing students' background knowledge about birds.

Flowing Learning: Awaken Enthusiasm

Materials

- Rope
- 2 Blindfolds (of different colours)

Where to Play: Open Field

Activity

Divide the group into two equal teams, the Owls and the Crows. Have the teams line up facing each other about four feet apart, place a rope between them. About 4 meters behind each team, place a bandanna which designates Home Base. The teacher makes a statement aloud about birds, and if the statement is true the Owls chase the Crows, trying to catch them before they reach their Home Base. If the statement is false, the Crows chase the Owls. Anyone caught must join the other team. Before you begin, practice by giving a few easy statements, and asking the players to just point to where they'll run.

Since the players will be continually changing sides, it's helpful to mark clearly the way to run if the statement's true or false. You can use a blue bandanna to signify the true direction - "true blue" and a red one to show false. Or you can use signs or natural features and say something like "true tree" or "false fence."

If the answer isn't obvious to the players, or they forget which way to run, you'll get some of the Owls and Crows running toward each other, and others running back to their Home Bases. During the pandemonium, the teacher should remain silent and neutral. When the action has calmed down, he can reveal the correct answer.

Here are some sample questions:

- All birds fly – false (*Crows chase Owls*)
- All birds migrate- false (*Crows chase Owls*)
- All birds lay eggs – true (*Owls chase Crows*)
- All birds have feathers – true (*Owls chase Crows*)
- Birds have teeth – false (*Crows chase Owls*)
- All birds have webbed feet – false (*Crows chase Owls*)
- All birds have hollow bones – true (*Owls chase Crows*)
- Some birds eat other birds – true (*Owls chase Crows*)

Source: Teaching Children to Love Nature, Joseph Cornell

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Bird Beak Buffet Activity 2: Sound Mapping

Outdoor
30 Minutes

Background

Sound mapping will help to focus students' attention on their surrounding environment. It promotes auditory awareness and stillness.

Flow Learning: Focus Attention

Materials

- 1 Index Card per student
- 1 pencil per student

Where to Play: A Water's Edge



Activity

1. To play, begin by showing the group an index card with an x in the center. Tell students the card is a map and that the x shows where they are sitting. When they hear a sound, they should make a mark on the card that depicts that sound. The marks location should indicate as accurately as possible the direction and distance of the sound. The marks should be interpretive, not literal. This is a listening activity more than an art activity, so students should spend more time listening than drawing.
2. Tell students to keep their eyes closed while they listen. Explain that cupping their hands behind their ears provides a reflective surface for catching sounds, like the ears of a rabbit or deer. To hear sounds behind them, they need not turn their heads but simply cup their hands in front of their ears.
3. Walk students down to the water's edge and help them to each find a special "listening place" quickly, so that some aren't walking around while others are already listening. Give students one minute to find their listening spot. Tell them to stay in the same spot until the end of the game. Make sure to let them know the sound to listen for to call them back to you, this may be a whistle or flute or even an imitated sound of an owl or crow.
4. Give students 5 minutes to listen. Remind them to keep their mouths silent while their ears listen.
5. As students assemble after calling them back together, have them share their maps casually with a partner.

Discussion Questions

After the children have drawn their maps and shared them, you can ask questions such as:

- How many different sounds did you hear?
- Which sounds did you like best? Why?
- Which sounds did you like least? Why?
- Which sounds had you never heard before? Do you know what made the sounds?
- Did anyone hear bird sounds? Do you know what birds made the sounds? What part of a bird's body does a bird call come from?

Now students are ready to talk about birds and bird beaks!

Source: Teaching Children to Love Nature, Joseph Cornell

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Bird Beak Buffet Activity 3: Bird Beak Buffet Relay

Indoor/Outdoor
40 Minutes

Summary

In this activity students will look at the shape of birds' beaks to give clues about their dietary preferences. The activity enables students to understand how birds have evolved over time to be able to live in the same geographical area.

Student outcomes

This activity will enable students to:

- explore the relationship between the shape of bird beaks and their diet
- understand why the shape of bird beaks has evolved over time
- understand why different bird species can live in the same geographical area
- identify different birds by looking at the shape of their beaks and feet.

Background

A bird's beak or bill is actually a part of its skull that is covered with a tough layer of skin. Although some birds use their beaks to defend their territories, gather nesting materials or to weave a nest, the main purpose of the beak is to obtain food in the easiest and most effective way possible. As a result, birds that have different shaped beaks will often obtain food differently. For example birds may use their beaks to tear meat, spear fish, crack hard seeds, catch insects, gather water plants, reach the nectar in flowers, probe into mud for tiny crustaceans, or filter tiny creatures from silt. These differences in the use of beaks for obtaining food are important for the survival of bird species as it enables more species to live in the same geographical area. This is because different species can feed on different food sources in different parts of the habitat without competing directly. In this activity students work in teams to perform a relay activity demonstrating how birds with different beaks gather food and what kind of food they eat.

Flow Learning: Focus Attention (Active)

Materials

• 7 small, metal bowls (bird stomachs)	• 1 laminated graphing template
Food <ul style="list-style-type: none">• 1 large plastic container with the following items inside:<ul style="list-style-type: none">• many small wooden beads - (insects)• marbles – at least one for each student in each team (nuts/seeds)• poker chips - (small animals)• water (nectar); can be poured in a separate pie plate	Beaks <ul style="list-style-type: none">• 2 wooden spoons• 2 chopsticks• scissors• 1 pair of tongs• 1 pair of tweezers• 1 nut cracker or garlic press• 1 eye dropper or large syringe

Where to Play: Open Field

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Answers: Bird Beak Buffet Relay

The table below demonstrates which birds eat which type of food. Students can be very creative and will no doubt be able to master new ways of carrying food with their 'beaks.' The table below is an indication of which foods each bird team should have the most of – discussion centering on the food that beaks are best adapted to feeding on will clear up any confusion.

Type of Beak	Cotton Buds/ Dry Rice (ex. Insects)	Coins (ex. Fish, frogs, etc.)	Marbles (Ex. Nuts, seeds, etc.)	Water (ex. Nectar)
Wooden Spoons	✓	✓		
Chopsticks	✓	✓		
Scissors		✓		
Tongs	✓	✓		
Nut Cracker or Garlic Press			✓	
Tweezers	✓			
Eye Dropper or Syringe				✓

Activity

1. Before starting the activity ask students to discuss the different types of birds they see around the school and home. Do they notice where they feed or what they eat? Can they guess?
2. Use 'Table 1: Bird Beaks' to discuss with the class the different ways in which birds feed. See if students can name a bird that has a beak that looks like or works like each of the different types of beaks (e.g. chopsticks, tongs).
3. Show students 1 bird picture card at a time. Discuss its beak and then set the card in place with a stomach container (i.e. bowl) in a large circular formation and corresponding beak/tool. Remind students that the bowl is there stomach and will be where they collect their food.
4. Split students into seven groups, each one of these groups will represent one of the seven beak types.
5. Student groups will gather in circle in the following way: Have student groups assemble behind their beak type / bird picture card in a line.
6. Place all the food from the environment in the middle of the circle.
7. Give each group their 'beaks' and demonstrate how each 'beak' should be used (i.e. The filters beak can only be used to pick up the food by using the two spoon ends to pick up food and similarly the chopsticks must both be used to pick up the food). Students must **use only their 'beak'** to pick up food one piece at a time.
8. Once the relay begins a group member will run to the other end of the area and gather food with their beak (used in the appropriate manner) from the food bucket. They will carry one piece of food at a time back to the group and place it in their group "stomach" (the empty cup). Once the food is placed in the stomach they pass the beak to the next team member. Students are only allowed to gather **one piece** of food at a time.

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8. Students have five minutes to collect as much food as they can.

Discussion Questions Bird Beak Buffet: Answer together as a Group

1. Which type of foods were the different beaks best at picking up? Why?
Discuss with students or take the lesson inside and fill in the answers on the large laminated table.



Ex.

Type of Beak	Best Foods	Why
Wooden Spoons		
Chopsticks		
Scissors		
Tongs		
Nut Crackers/Garlic Press		
Eyedropper/Syringe		

2. Was there a particular beak that suited only one type of food?
3. What did each 'food' represent?
4. Why do you think it is important that different birds have different types of beaks?
5. Why do birds have different shaped beaks?
6. What would happen if all bird beaks were shaped the same?
7. Think of some other birds mentioned in the activity and decide what type of beak they have.

Closing Activity (Inside or Outside)

Use Table 1 Bird Beaks, and accompanying Bird Picture Cards.

Show students one large bird picture card at a time. These birds can all be seen at the Outdoor Learning Center.

For each picture card:

1. Share the name of the bird.
2. Pass the bird picture card around the circle and ask students to look carefully at the beak.
3. Ask students what kind of food they think the bird on the picture card would eat?

Classroom Extensions

As a class create a number of bar graphs showing the total amount of 'food' eaten by each of the different beak groups. The different bird beaks should be on the X-axis and the amount of food collected should be on the Y-axis. Use different coloured bars for each type of food.

Source: Bird Beak Buffet, Growing Up Wild, page 42



Table 1 Bird Beaks

Example of Beak	Description of Beak	Example of Species	Materials for Beak
	A flat wide bill to sift through and filter mud to gather food	Mallard Duck	2 Wooden Spoons
	A long sharp beak to spear insects frogs or fish	Blue Heron Snowy Egret	2 Chopsticks
	A strong and hooked beak to tear flesh	Bald Eagle Barred Owl	Scissors
	A long thin beak used to probe in the mud or sand to find food	Sandpiper	Tongs
	A strong or curved beak used to break the outer shell of nuts and seeds	Varied Thrush Raven	Nutcracker/Garlic Press
	A short beak used to gather insects as they flit through the air	Winter Wren	Tweezers
	A slender curved beak and a long tongue adapted to fit into flowers to find nectar	Rufous Hummingbird	Eyedropper/Syringe

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Bird Beak Buffet Activity 4: Bird Watching Walk

Outdoor
30 Minutes

Background

Bird watching is a great way to connect with nature. Review the local bird species from Bird Beak Buffet and see if any can be seen on your walk together.

Flow Learning: Direct Experience

Materials

- Binoculars: 1 pair per buddy group

Where to Play: A forest trail or along a water's edge

Activity

1. Tell students they will now have an opportunity to see if they can find any of the bird species discussed in the Bird Beak Buffet Relay.
2. Before walking, engage students in a conversation about how to move through the forest in order to see birds: walk quietly and listen for bird songs or calls.
3. Other tips for birding include:
 - Dress in subdued colors
 - Listen; speak little and quietly
 - Walk slowly and quietly
 - Move slowly into open space
 - Take your time, wait watch and listen
 - Go West! - in the early morning head west away from the sun
 - Watch for movement
 - Stay out of other students' sight lines
 - Be specific in helping others locate birds
4. Hand-out binoculars and explain how they are used. They will be sharing 1 pair with their buddy.
5. When a bird is spotted and heard, tell students they should first find it with their bare eyes and then look for it through the binoculars.
 - Can they see what the bird is eating?
 - Look carefully at its beak – what shape is it?
 - What might this bird eat?



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Bird Beak Buffet Activity 5: Five Senses

Indoor/Outdoor

20 Minutes

Background

Students reflect on their learning experience by considering what they experienced using their five senses.

Flow Learning: Share Inspiration

Materials

- Laminated Picture Cards of the Five Senses

Where to Play: Open Field or Back In Classroom

Activity

1. Invite students to gather in a circle.
2. Ask students to relay the five senses: see, smell, touch, hear, taste.
3. Ask students to close their eyes and consider something they saw, something they heard, something they smelled, something they touched, and perhaps something they tasted during their outdoor learning experience.
4. Tell students that you will hold up one card at a time and ask them a question.

Example Questions:

1. *What did you see during your field experience today?*
2. *What did you hear during your field experience today?*
3. *What did you touch during your field experience today?*
4. *What did you smell during your field experience today?*
5. *What did you taste during your field experience today?*

5. Invite students to share their reflections with the group.

Classroom Extensions

Students can record a sensory memory in an illustrated nature journal entry.

Classroom Connections: Bird Beak Buffet and Beyond

PROJECT WILD: GROWING UP WILD

Activity: Owl Pellets

Growing Up Wild: Page 46

Activity: Hide and Squeak

Growing Up Wild: Page 47

Activity: Terrific Turkeys

Growing Up Wild: Page 44

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