# How do different animals communicate?

Animals communicate in complex and interesting ways. Students consider how humans and other animals communicate, with a focus on drama, bird calls, and bird walks.

This inquiry has two learning intentions:

- 1. How do different animals communicate?
- 2. Case study: How do wolves communicate?

# **Curricular Connections**

Refer to the "Curriculum" drop-down option under the "Learn" tab of the Great Bear Rainforest Education and Awareness website.

Curriculum Alignment: Great Bear Rainforest Education and Awareness Trust

https://greatbearrainforesttrust.org/curriculum/

### Learning intention 1

## How do different animals communicate?

What are some of the ways that different animals communicate?

# **Experiences and Observations**

### **Brainstorm**

How do we (humans) communicate?

- Non-verbal communication (body language, facial expression, gestures)
- Verbal communication (words, crying, shouting)

### **Activity Around Human Communication (Drama Connection)**

- Have students act out how to communicate the following messages:
  - ♦ I am sad
  - ◆ I am happy
  - ◆ There is danger!
  - ◆ Will you be my friend?
  - ◆ Let's go play!
- Go outside to observe other animals communicate. Have students examine sounds, body language, and body structure.
  - Examples may include birds, squirrels, and insects. What might they be communicating?

### **Bird Call Activity**

There are many different sounds that birds make to communicate! Have a call and response to practice them!

### Alarm calls

Piercing, sharp sounds to warn of threats, etc.

### Juvenile begging calls

Small peeps, whines, rasps, wheezes and chirps - to get their parents' attention

### Contact calls

Loud chirps, chips, buzzes while birds travel in flocks. This helps them let each other know they are still there!

### Flight calls

Flying songs - during migration to announce their presence and location while travelling

### Songs

Can be longer and more musical—they can attract a mate, claim their territory, discourage intruders, or for joy and play

### **Bird Walk**

Use eBird, or other mapping apps, to map out the Birds you might find in your community.

### eBird

https://ebird.org/explore

Go outside with students to listen for and look at all the different types of birds in your community. You can use the app the Merlin bird app or BirdNET app to help you identify what birds you saw.

### Merlin

https://merlin.allaboutbirds.org/

### **BirdNET Sound ID**

https://birdnet.cornell.edu/

■ It can be helpful to learn some facts about how to identify birds and their songs. Look for colour patterns, wing bars, stripes and eye lines, eye rings, spots, and beak shape (raptor, insect-eater, seed-eater, and generalist).

Here are some birds that live in B.C. Videos are a great way to prepare for your walk!

### Song Sparrow

https://www.youtube.com/watch?v=5CH0f1890Us

### **House Sparrow**

https://www.youtube.com/watch?v=BeAJsgfiO3s

### **Bushtit**

https://www.youtube.com/watch?v=yXsN2Ly59JM

### American Goldfinch

https://www.youtube.com/watch?v=kr0M\_2TiKns

### **Black-capped Chickadees**

https://www.youtube.com/watch?v=hnPVaOh9EpM

### **Downy Woodpecker**

https://www.youtube.com/watch?v=ceBustKaSuA

### Hairy Woodpecker

https://www.youtube.com/watch?v=Me6ODOT9NP4

### Dark Eyed Junco

https://www.youtube.com/watch?v=vlJUsAl4YCA

### **American Robin**

https://www.youtube.com/watch?v=Nu7fenrO9DU

### Anna's Hummingbird

https://www.youtube.com/watch?v=QpfcquwLb\_M

■ Field guides and binoculars are a perfect addition to bring with you.

# Possible Topics/Key Vocabulary

- Non-verbal Communication
- Verbal Communication

# **Reflections on Learning**

# Making Learning Visible—Learning Stories

Documenting your bird walks and sharing with families is a great way to facilitate students sharing their learning and applying it with their families!

### **Class Lists and Learning Intentions**

■ Keep a checklist to keep track of how your students are engaging with these activities. Are they showing curiosity? Are they engaged in showing the different types of communication of birds? Are they using tools, such as binoculars and field guides, to extend their learning?

### Reflections

■ Reflect on what birds live in students' neighbourhoods. Which ones did they see? What birds live in the Great Bear Rainforest? How do birds communicate?

# **Suggested Resources**

### Biodiversity > Great Bear Rainforest Trust

https://greatbearrainforesttrust.org/biodiversity/

### **BirdNET Sound ID**

https://birdnet.cornell.edu/

### eBird

https://ebird.org/explore

### Gallery > Birds: Great Bear Rainforest Trust

https://greatbearrainforesttrust.org/gallery/birds/

### **Guide to Bird Songs and Noises**

https://www.thespruce.com/what-types-of-sounds-do-birds-make-387332

### Merlin

https://merlin.allaboutbirds.org/

### **Learning Intention 2**

# Case study: How do wolves communicate?

In this lesson, students extend their understanding of animal communication to a case study on wolves. From there, students are invited to create their own animal inquiries into how other animals communicate.

# **Experiences and Observations**

### Watch

### **How Wolves Change Rivers**

https://www.youtube.com/watch?v=ysa5OBhXz-Q&t=21s

### Discussion

Why do wolves howl? What does it mean? How do wolves communicate with each other and with others? (For example, when hunting, mating, protecting, warning, or teaching their young?)

**Answer:** There are three main ways that wolves communicate. Have students fill in the blackline master at the end of this activity plan, *How do Wolves Communicate?* 

- 1. Sound
- Howls, barks, whimpers and growls
- 2. Special scents
- Scats, urine and pheromones
- 3. Body language
- Body positions, movements, and facial expressions
- Wolf postures can be a way of communicating
  - ◆ Introduce non-verbal communication
  - ◆ Have students act out different messages with just their bodies

Share images of non-verbal communication in wolves.

# Possible Topics/Key Vocabulary

- Adaptations
- Communication
- Body language
- Scent

# **Reflections on Learning**

# **Class Lists and Learning Intentions**

- Use a class list with a check list of learning intentions.
- Are students engaged in wondering, acting out, discussing, and sharing?

# **Project-based Learning**

■ Students will demonstrate knowledge and understanding through the case study of a specific animal found in the Great Bear Rainforest, and how it communicates.

# **Suggested Resources**

Communication: How Do Wolves Say Hello?

https://wolf.org/wolf-info/basic-wolf-info/biology-and-behavior/communication/

### **How Wolves Change Rivers**

https://www.youtube.com/watch?v=ysa5OBhXz-Q&t=21s

### The Language of Wolves

Living With Wolves website.

https://www.livingwithwolves.org/about-wolves/language/

### The Sea Wolves Learning Guide

PDF resource freely available on the GBREAT website (Learn > Teacher Resources)

https://greatbearrainforesttrust.org/wp-content/uploads/2018/05/Seawolves.pdf

### The Sea Wolves: Living Wild in the Great Bear Rainforest

Print resource by Ian McAllister and Nicholas Read (Orca Book Publishers). https://focusedresources.ca/en/k-12-evaluated-resource-collection/sea-wolves-living-wild-great-bear-rainforest

### **Wolf Postures**

Wolf Quest website

https://www.wolfquest.org/pdfs/Wolf Postures Lesson.pdf

### **Extension**

Students can choose an animal and inquire into different ways that animals who live in the Great Bear Rainforest communicate! Here are some ideas for topics:

- Wolves
- Crows and ravens
- Songbirds
- Eagles
- Whales
- Bears



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# How do wolves communicate?

