

# Seasonal Changes and Birds

Calgary is home to over 350 different species of birds! When we see a bird there are several things we can do to identify it. We can look at its size, shape, and colour. Information like whether it's sitting in the water or on a tree can also help us identify what kind of bird it is. Some birders are even able to tell what bird it is by only hearing the sounds that it makes. Each bird has special tools, or "adaptations", to help it survive. For example, bird beaks are uniquely adapted to each species. The size and shape of a beak is formed to get to the specific type of food that each bird eats. Similarly, each species of bird makes a nest that is well suited to the needs of that bird and its young.

## Migration and Winter Birds

During both the fall and the spring animals will move either north or south depending on their needs. In Calgary, most of our birds fly south for the winter, as they are unable to keep warm and find their food in the cold months. However, there are some birds who actually fly south to Calgary from a more northern climate, such as the Arctic Tern and the Bohemian Waxwing. That being said, not all our birds leave in the winter months. There are around 100 species of birds that stay in the winter. Birds that stay throughout the winter have several adaptations to help them survive these cold months.



## Keeping Our Birds Safe

Although birds are able to look after themselves for the most part, there are still a few things we can do to help keep our birds safe. Often the first thing that comes to mind is feeding the birds, although this is actually more harmful than helpful. When people feed birds, they are creating a dependency on human food. If they continue to be fed by people they will soon forget how to find food for themselves. Another issue is that the things we feed birds are often really bad for them. Bread, for example, is rather bad for birds and ducks, as they are unable to digest the bread and it gets stuck in their digestive tracts. Birds are able to find their own healthy, natural foods, and so they do not need to be fed.



Instead, we can help them by keeping our pets inside or on leashes outside so they are unable to stress or harm birds. Windows are another thing that unfortunately harm birds in urban areas. When flying, they can often either see through the window or can see the reflection of the outside world on them, and don't realize there is glass in the way. In Canada alone, window strikes kill 14-64 million birds every year. Some things we can do to help prevent this are putting decals or other decorations in our windows so the birds see them before they collide.





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## Activity 1: Whooo's Calling

Often you will hear birds before you are able to see them. Great birders are able to figure out what kind of birds are in the area depending on the sounds they make. Birders will listen for the length, volume, and rhythm of the call. Use your detective skills and see if you can figure out whose bird call is whose.

## Activity 2: Fill the Bill

Each type of bird has a special beak adapted to eating a certain type of food. Which beaks are best for scooping, cracking, and picking? Here you will learn which tools (or beaks) go with which types of food.

## Activity 3: Whose Nest Toss

Different birds build different nests depending on their needs. When a bird makes a nest there are a few things they need to think about. Take a close look at these nests and use your detective skills to see if you can figure out who made each of these nests.

## Activity 4: Bird Vignettes

I have some shocking news for you! A mad scientist placed one of their favourite magic potions in this kit for you. This magic spray bottle turns kids into different animals, and your lucky students are now going to find out firsthand what it's like to become one of the animals we just explored.

## Activity 5: What Makes a Bird a Bird?

Or you could rephrase the question as, "What makes a bird different from other animals?" There are 7 things (well, actually 13, but 7 is more than enough for now). In this activity we are going to compare birds to bats, some bugs, some dinosaurs, some fish, humans, and turtles, by looking at some of their unique adaptations. Adaptations are different traits or tools that animals have to help them survive. In this activity we will look at wings, feathers, bones, air sacs, eggs, bills, and teeth.

## Activity 6: Migration Game

Take a look at these birds and see how far they travel around North and South America.

## Activity 7: Adaptations Matching Game:

An adaptation is a tool that an animal uses to help it survive. In this game you will look at some things humans do to stay warm in the winter and stay cool in the summer. We will also see if animals do similar things to help them stay either warm or cold, depending on the season.

## Activity 8: Do They Stay or Do They Go?

Take a look at these birds and use your detective skills to figure out if they stay in Calgary or migrate somewhere warmer for the winter.

## Activity 9: Bird Similarities

Using the information and other activities in this kit, look at the bird cards and ask students to find some similarities between the birds. What differences are there between them?