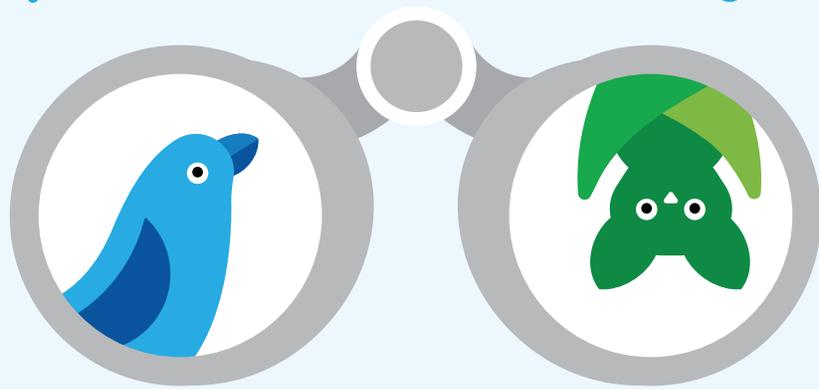


Find Your 4-H Wings



Activity  
Book





# Acknowledgements

Find Your 4-H Wings encourages 4-H'ers to learn about and protect native birds and bats. This unique program would not be possible without the commitment of TransCanada Corporation, a North American energy infrastructure company that has supported 4-H for over a decade. For more information about TransCanada, please visit [csreport.transcanada.com](https://www.transcanada.com/csreport).



Find Your 4-H Wings



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# Bird Identification 101

## How does bird watching work? It's simple. All you need to do is *stop, look, and listen.*

When searching for birds to identify, keep in mind that birds can blend into their surroundings very well. Be patient and look carefully. Start by examining the sky and then move your eye down the horizon. Look for birds on roofs and in trees and bushes. Watch for movements out of the corner of your eye. Listen closely. Tune out normal noises like the wind and cars.

Do you hear birds singing?

- Birds can blend into their surroundings very well, so be patient and look carefully.
- Start by looking at the sky, and then move down the horizon.
- Watch for movements out of the corner of your eye.
- Do you hear birds singing?

Once you've successfully spotted birds, use your *Birds of Canada* book to start identifying them. You will learn to identify birds using your eyes AND your ears. You will be able to share your knowledge with others and describe what a bird looks or sounds like.

## What you need to bring along for birdwatching:

- Binoculars
- The handy Bird Identification Questionnaire (which is coming up next in this Activity Book)





## Bird Identification Questionnaire

When identifying birds, it is often better to get an overall impression of the bird rather than trying to concentrate on one particular feature. However, the questions below can help you narrow your search!

We suggest bringing this questionnaire with you on your first few sightings to help with your bird identification process.

### What size is the bird?

- It is good to use basic size differences to separate species. Create a list of examples from common bird species that you can easily picture in your mind, starting smallest to largest. For example: hummingbird, sparrow, robin, pigeon, crow, eagle.
- This will make it easier to compare the bird's size to another bird you know. Is it bigger, smaller, or around the same size as one of the common birds you are already familiar with?

### What shape is the bird's body?

- Get your team to come up with simple words to describe the bird's shape! For example: plump, round, slender, stocky, pointy.
- Visual learners can use a birds identification book to match descriptive words with the overall look of a bird. For example, Doves and White-throated Sparrows are good examples of plump birds, while Herons and Catbirds tend to look slender.
- The size of a bird's tail is another good descriptor to use. Examples of long tail birds include Magpies and Tanagers. Short-tailed birds include Ducks and Warblers.



## What shape is the bird's bill?

- Short and narrow? (Examples: Chickadee, Warbler)
- Short and stout? (Examples: Sparrow, Finch)
- Long and sharp-pointed? (Examples: Woodpecker, Shorebird)
- Strong hook at tip? (Examples: Hawk, Owl)

## What are the markings or colours on the bird?

- Overall body colour?
- Wing bars or not?
- Eye rings or stripes?
- Crown patch, throat patch, wing patch, rump patch, or cheek patch?
- Stripes or spots on breast?
- Crest?

## What is its flight pattern? How does it fly?

Examples:

- Finches have a steep, roller-coaster flight pattern
- Woodpeckers fly in a pattern that has slow rises and falls
- Hawks soar holding their wings out to the side

## Where do you see the bird?

- Is it by the water? What kind of water? (Examples: lake, creek, ocean)
- Is it in the woods? Are they dense or open woods?
- Is it out in open fields?
- Is it in your backyard, in a hedge, or foraging on the ground?
- Is it in the city?



## What is the bird doing?

- Is it feeding, flying, or perching?
- Is it alone or in a flock?
- Is it on the ground, in the water, in a bush or tree, or clinging to the bark of a tree?
- Is it at a bird feeder? If yes, what is it eating (Examples: seeds, suet, fruit)?
- Is it eating “on the wing”? (Example: swooping at bugs in the air)

## What sounds does the bird make?

- Does it sing a pretty song repeatedly?
- Is it quiet, making no sounds at all?
- Does it only make noise when frightened?
- Does it make a high-pitched crying sound?

**TIP: There are lots of mobile applications and online resources dedicated to helping to identify bird songs and sounds. Check them out!**

## What time of day is it?

- Different bird species can be active at different times of the day. (Example: owls are nocturnal and tend to start coming out to hunt at sunset)

## What season is it?

- Since some birds migrate, you may see different types of birds at different times of the year.
- During fall or spring, there is a chance of seeing migrant birds that are just passing through on their way to summer or winter homes.

### Other Bird ID Resources:

Want additional help in identifying birds? There’s plenty of resources available out there, including:

- Mobile applications (Example: The Cornell Lab of Ornithology “Merlin Bird ID” app) [www.allaboutbirds.org](http://www.allaboutbirds.org)



# Activities

## ACTIVITY: Make A Midwinter Tree for Birds

The Black-capped Chickadee remains in Canada all winter long. This small yet hardy bird, whose name comes from its distinct call (“chick-a-dee-dee-dee”), is a master at finding food during the cold winter months.

Finding food during winter can require a lot of work for birds, and high-fat food (which is essential for staying toasty during the cold winter months) can be hard to come by. That’s where you come in! You may find that bird activity slows down in the winter and there may be fewer species to see. But, this is the time when they can use you the most! Winter is the perfect chance for you to get hands-on and help our feathered friends.

In this activity, you will use a variety of foods to make a bird’s midwinter tree. This pretty and tasty snack will bring in local birds and maybe even a few from farther afield.

Follow the recipe below, or feel free to research other foods winter birds like to snack on, and mix up the recipe for your own unique midwinter tree. Experiment throughout the winter to see what ingredients draw the most species!

### Midwinter Tree Recipe

Ingredients:

- Raisins
- 1 apple
- 1 kiwi
- 1 orange
- 1 jar of sugar-free peanut butter.
- Popcorn (air-popped only, no butter or salt; don’t use microwave popcorn)

You will also need:

- Several pinecones
- Some kind of birdseed (black oil sunflower seeds work well)
- 2 shallow cookie trays
- Heavy cotton thread
- A knife
- A needle
- Twine



## What to do:

Using the ingredients above, you can make three different kinds of edible decorations for your Midwinter Tree that the birds will love. Pick your favourite edible decoration, or try out and pile on all three!

## Fruit Garland:

- Start by cutting up the fruit into chunks.
- Once your fruit is ready, thread the needle with the cotton thread, and tie a big knot in the end.
- Next, start to string together the raisins, apple chunks, kiwi chunks, and orange slices. Try different colour combinations.
- When you're finished, set your finished fruit garland strand aside and repeat the process to make another one, or try out the next decoration.

## Peanut Butter Pinecones:

These can be a big hit with lots of different species. Peanut butter is high in fat and keeps little bird furnaces roaring throughout the winter.

- Start by pouring your birdseed into a shallow cookie tray and lay a clean cookie tray beside it.
- Now loop some twine around the top of your pinecones so that they can be hung up.
- Next, apply a thin layer of peanut butter onto the cones – just enough to help the birdseed stick. Too much peanut butter can be dangerous for some birds, not just because of the potential sugar and salt content, but because it is sticky and can hinder movement.
- Push the peanut butter deep into the cracks of the pinecone with a spoon or your fingers (the handle end of the spoon works great for smaller spaces).
- Once you're satisfied with the amount of peanut butter on your cones, roll them in the birdseed to coat all of the peanut butter with seeds.
- Now place the rolled pinecone into the clean cookie tray. Repeat the process with as many pinecones as you'd like.



## Popcorn Garland:

This one is a nice contrast to your colourful fruit garland, and it is made in much the same way.

- Start by air popping some popcorn (don't add any butter or salt).
- Thread the cotton thread through your needle, and tie a big knot at the end.
- Carefully string the popcorn with the needle and thread. It may take several tries to get the pressure right so the popcorn doesn't break. Be patient. The birds will thank you! Once you have a few strands of pretty popcorn garland, you're ready to decorate your midwinter tree!

## Final Step: Decorate Your Midwinter Tree

Take your finished creations and head outside with fellow club members, family, or friends.

Make it an event!

- Pick a tree (or multiple trees).
- Wrap your fruit and/or popcorn garland around branches.
- Hang up your peanut butter pinecones on branches.
- Keep decorating until you're happy with the way your tree looks.
- Now grab a seat near a window and watch the birds feast on your Midwinter Tree!

### Questions for Club discussion:

- What other ingredients were tried?
  - o Did new ingredients have the same effect?
  - o Did any ingredients seem to stand out as a favourite for the birds?
- What have you learned about the winter birds that live in your area?
  - o What kind of birds are they?
  - o Where do they live?
  - o What do they eat?
  - o Why don't they migrate?
- What did the birds that come to eat at your Midwinter Tree look like?
  - o Do they look thin or chubby?
  - o What did they do?
  - o How did they behave?
- What non-bird species did you see at your Midwinter Tree?
  - o Were they animals that can harmoniously co-exist with birds, or were there potential threats?



## **ACTIVITY: Explore Other Bird Habitats**

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Birds are everywhere! In fact, in almost every type of habitat on earth, you can find a thriving bird species. How cool is that?

In this activity, you will learn about different habitats and the birds that thrive there.

Here are some examples of different types of habitats:

- Woodlands and forests
- Open fields or meadows
- City parks and gardens
- Lake and ocean beaches
- Barns, urban spaces – even your back yard!

### **What you need:**

- Binoculars
- Compass

### **What to do:**

- Pick different kinds of habitats that are accessible from your home.
- Gather up the supplies listed above, and head out to a habitat!

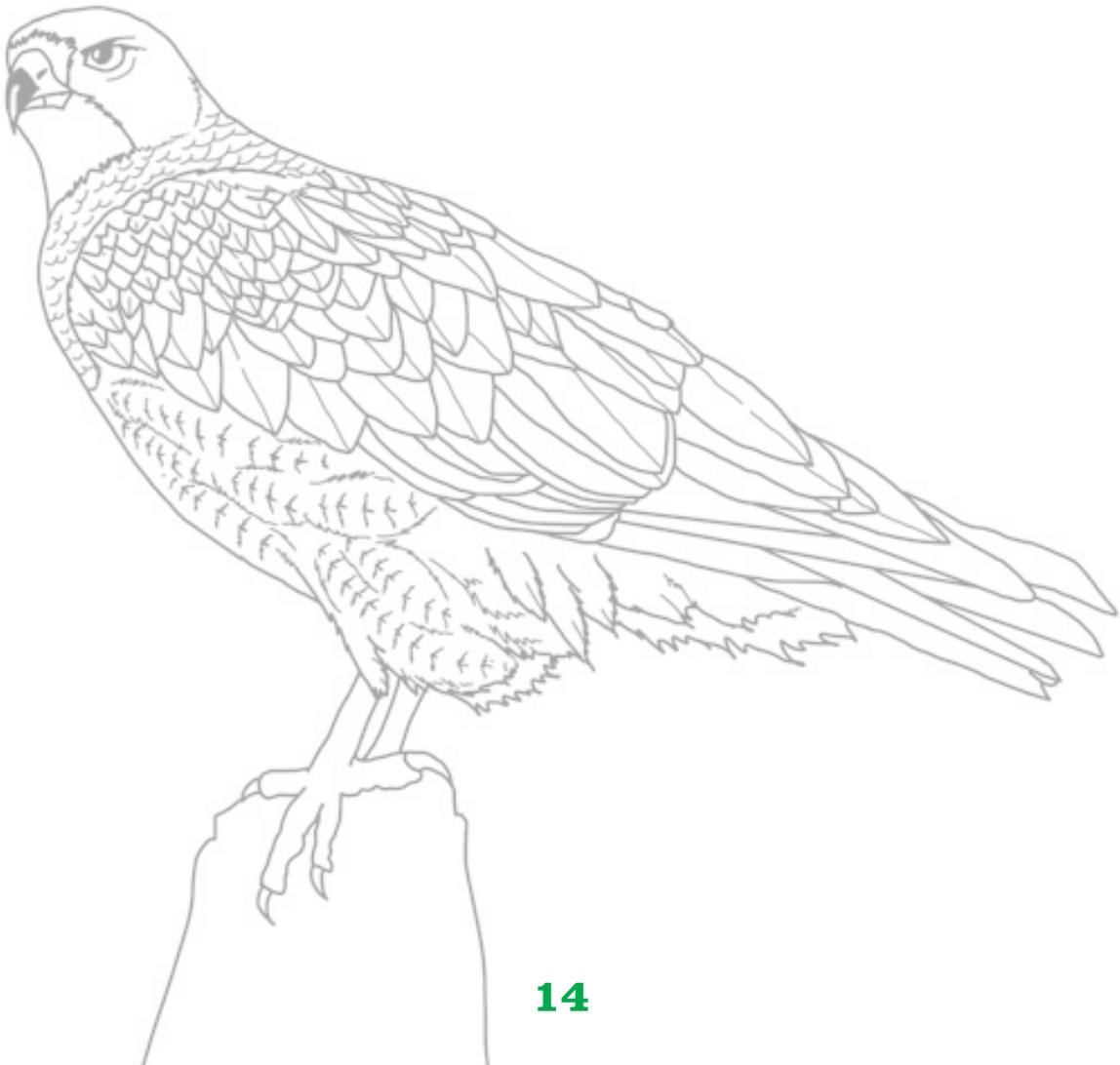
***\*We suggest visiting at least three different habitats, but you don't need to visit all of them in one day. This activity can be broken out over multiple days.***

- Take the time to really explore the habitat.
- Draw a map of the habitat, including all of the environmental features. (Examples: ponds, rocks, fence posts, trees, buildings, roads, people, etc.)
- Keep track of any birds you see. Use a bird identifying book to help identify bird species.
- Once you have visited various different habitats, spend some time discussing your discoveries about the different habitats and the birds you found there.



**Questions for Club Discussion:**

- Did you see the same species of bird in more than one type of habitat? Why do you think that is?
- Make a list of the birds that you identified in each of the habitats, from most common to least common.
- How many different species of birds did you find sharing one habitat?
  - o Did they have any traits in common?
- Can you think of any other birds in the *Birds of Canada* book that share similar traits to the birds you found in any of the three habitats?
  - o Do you think these birds could also live in the habitats you explored? If so, why would they belong there?





## **ACTIVITY: Eat Like a Bird**

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Do you know the saying, “they eat like a bird”? Chances are, you’ve probably heard it when someone has been referring to a person who doesn’t eat very much.

But, guess what? It’s not actually a very accurate statement, because birds eat a lot for their size!

When you watch a bird, you’ll notice how quickly they move, and how vigilant they are about keeping a lookout for predators. It takes a lot of energy to move around that much, not to mention fly! But birds aren’t like us; they don’t sit down to three meals a day. They spread their food out across the whole day, which can add up to many hundreds of mouthfuls!

In this activity you’ll learn what it feels like to actually “eat like a bird”!

### **What you need:**

- Allotted time to experiment with what you eat and when you eat it. This activity is probably best done over a weekend.

### **Instructions:**

If you really want to get into this project, you could try eating insects and seeds all day, but I’ll bet you’d rather not, right?

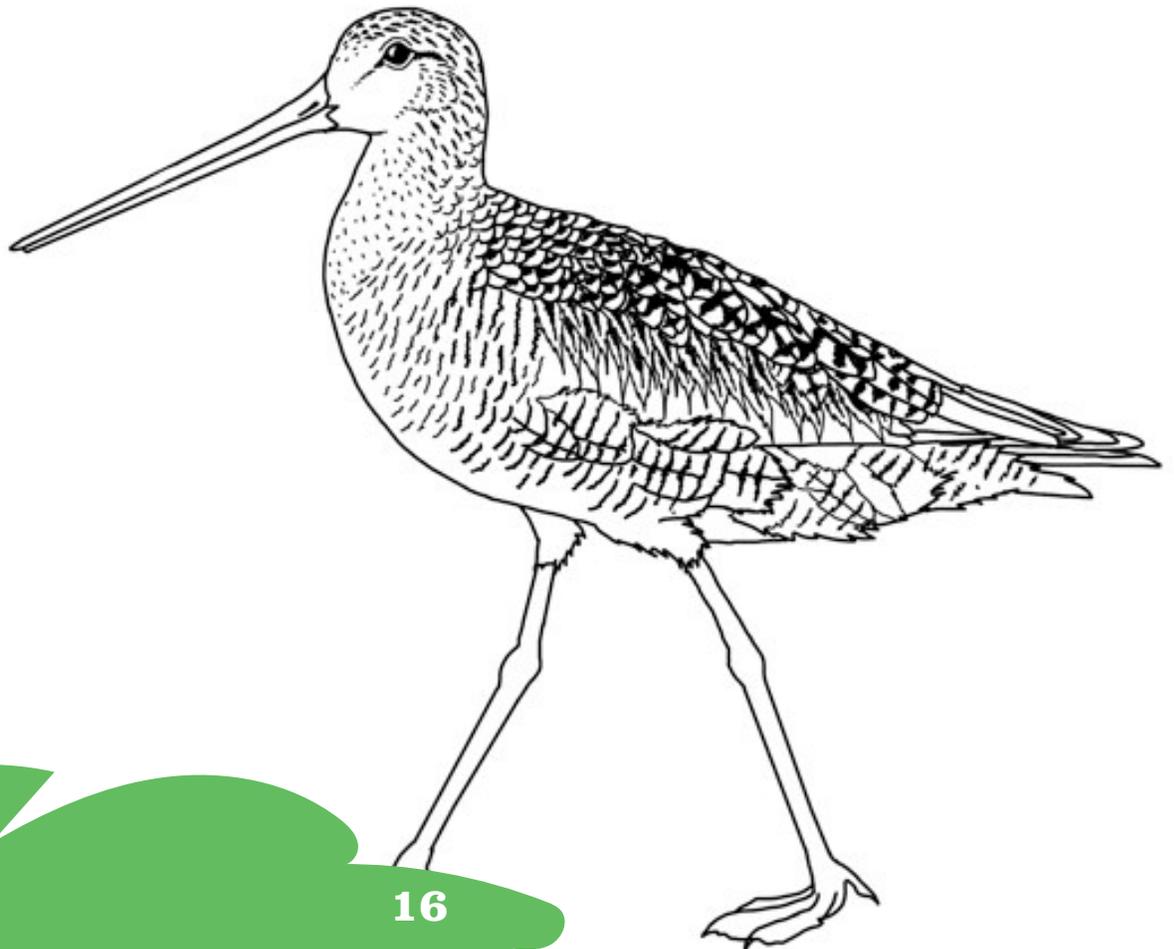
Well you can still try out the concept of eating like a bird without having to actually eat the specific foods that birds eat.

- Instead of eating your normal three meals of breakfast, lunch, and dinner - spread your meals out into several dozen little bite-sized meals.
- Try to eat just a mouthful or two about every 15 minutes. It sounds like it will be time consuming, but if you plan ahead, you can prepare your food in advance and have it ready to go. That way, even if you have to go out, you can bring your tiny snacks with you and keep to the eating schedule.
- At the end of the day, think about the experience of eating like a bird. What was it like? Did you enjoy it?



Questions for Club Discussion:

- How did you feel when you were eating like a bird?
  - o Did you like eating in small amounts, or do you prefer normal-sized portions spaced out over three meals?
- What were your energy levels like?
  - o Did you feel more sleepy than usual?
  - o Did you feel more energetic than usual?
- Were you hungry all day or did eating every 15 minutes keep your hunger at bay?
- Was it hard to plan what you would be eating all day?
- What do you think this kind of eating pattern means for a bird?
  - o Do all birds eat like this?
  - o Are there any birds that eat much more at one sitting?





## **ACTIVITY: Beak Physique**

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Beaks are one of the main tools that birds have to use. Each beak is different, and they help specific birds eat specific foods.

This is your chance to experiment with “beaks” and test out what types of food are best for different types of beaks.

### **What you need:**

#### ***Food-based Supplies:***

##### **Ingredient**

Cooked macaroni  
Goldfish crackers  
Gummy worms  
Sprinkles  
Peanuts, seeds, raisins  
Mini marshmallows  
Cereal  
Fruit juice

##### **Type of bird food the item mimics**

Small animals  
Fish  
Earth worms  
Ants  
Peanuts, seeds, raisins  
Grubs  
Insects  
Nectar

#### ***Additional Supplies:***

Each of these supplies represents a different type of bird beak:

- Clothespin
- Toothpick
- Straw
- Small plastic spoon
- Tweezers
- Small scissors



## What to do:

- Hold one type of “beak” in one hand and keep the other hand behind your back.
- Choose one of the food ingredients and try to gather as much food as possible in 15 seconds.
- Keep in mind: your survival depends on your ability to gather food! After 15 seconds is up, swap out your “beak” for a different one and try gathering your ingredient for another 15 seconds. Repeat the activity with each type of beak.

### Questions for Club Discussion:

- What ingredient did you choose?
- Which beak was most successful in gathering your ingredient?
- What are the differences between the beaks and how they can be used to gather food?
- Can you tell by the beak, what type of food that bird may eat?





## **ACTIVITY: YardMapping!**

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Once your bird house is built, you have the chance to use it to help scientists!

YardMap provides new web technology to the public and invites them to use it to construct maps of their bird habitats using real satellite images.

YardMap is a citizen science project, which means it welcomes scientific study and observations from amateur scientists. By using the YardMap program, you can upload your group's observations onto YardMap and help cultivate a better understanding of how different habitats support birds.

Visit [www.yardmap.org](http://www.yardmap.org) to sign up, and access tips on how to build your habitat and make a home for birds in the area.

## **ACTIVITY: Achievement Day!**

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Look at all you have accomplished in building a bird house! Consider holding an achievement day at your club's new bird sanctuary to promote the welfare of birds and celebrate all your hard work and dedication!

### **Questions for Club Discussion:**

- Did you learn about which kinds of plants birds prefer?
- What did you learn about your native shrubs and trees?
- Where did you choose to mount your bird house and why?
- Did you notice birds coming to check out your bird house right away, or did it take a few days/weeks?
- As you continue to observe the bird house, does it remain a safe and secure home for your birds?



## Glossary

**Aerial insectivores** - Birds who feed on flying insects that they catch in their wing, while still flying.

**Bio-diversity** - Term used to describe the variety of life. This includes ecosystems, genetic and culture diversity, and the connections between species.

**Bird** - Birds are warm-blooded, egg-laying vertebrates, distinguished by the possession of feathers, wings, and a beak. Many birds are able to fly.

**Birding** - A popular recreational activity of observing wild birds.

**Citizen science** - is scientific research conducted, in whole or in part, by amateur or nonprofessional scientists.

**Gizzard** - instead of having a mouth full of heavy teeth, birds have a 'gizzard'. The gizzard is part of their digestive tract which helps to grind up the food a bird eats.

**Habitat** - A special place where a plant or animal lives. Different animals need different habitats, but all animals need food, water, shelter, air, and a safe place to raise their young.

**Field Marks** - Field marks are the distinctive stripes, spots, patterns, colors, and highlights that birds have in such abundance and variety. Birds developed these patterns for many reasons - can you think of some?

**Mnemonics** - A trick to help with memory, mnemonics are commonly used by birders who are trying to remember distinct bird calls. Mnemonics seek to mimic the rhythm and pattern of a bird's call, and make it easier to differentiate and recall birds for identification purposes.

**Naturalist** - A student of natural history.

**Raptors** - Birds of prey.

**Waterfowl** - Birds that love to swim.

**Whole Bird Approach** - Where the field mark approach identifies individual parts of a bird's features, the whole bird approach looks at how all the features come together to identify a bird.