

Introduction to Birding

Overland Park Arboretum & Botanical Gardens

Written by:

Friends of the Arboretum Geo Activities and
Education Committee

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Funded by Friends of the Arboretum



FRIENDS OF THE
ARBORETUM

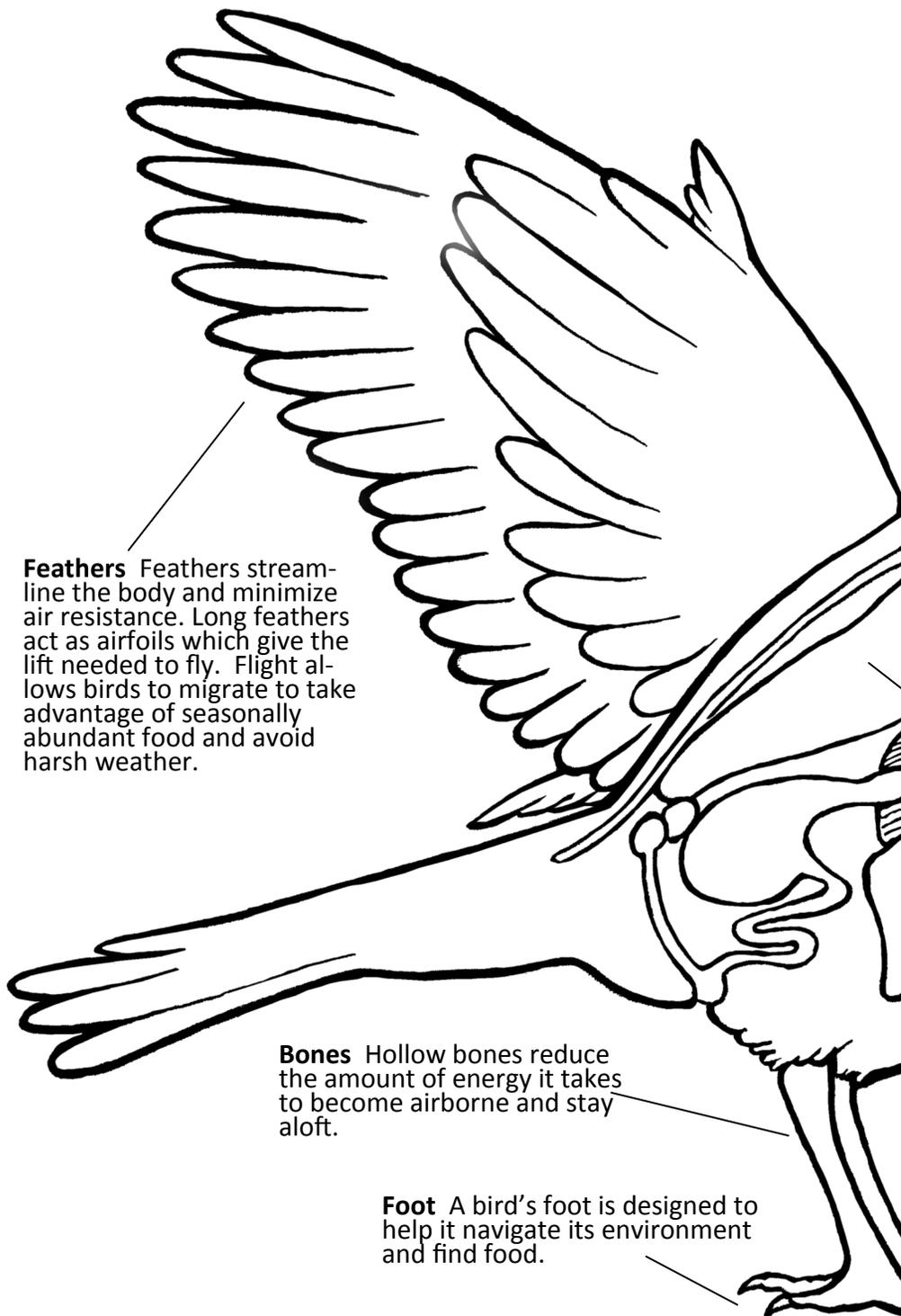
PART OF THE ARTS & RECREATION
FOUNDATION OF OVERLAND PARK



OVERLAND PARK
K A N S A S

ARBORETUM & BOTANICAL GARDENS





Feathers Feathers streamline the body and minimize air resistance. Long feathers act as airfoils which give the lift needed to fly. Flight allows birds to migrate to take advantage of seasonally abundant food and avoid harsh weather.

Bones Hollow bones reduce the amount of energy it takes to become airborne and stay aloft.

Foot A bird's foot is designed to help it navigate its environment and find food.

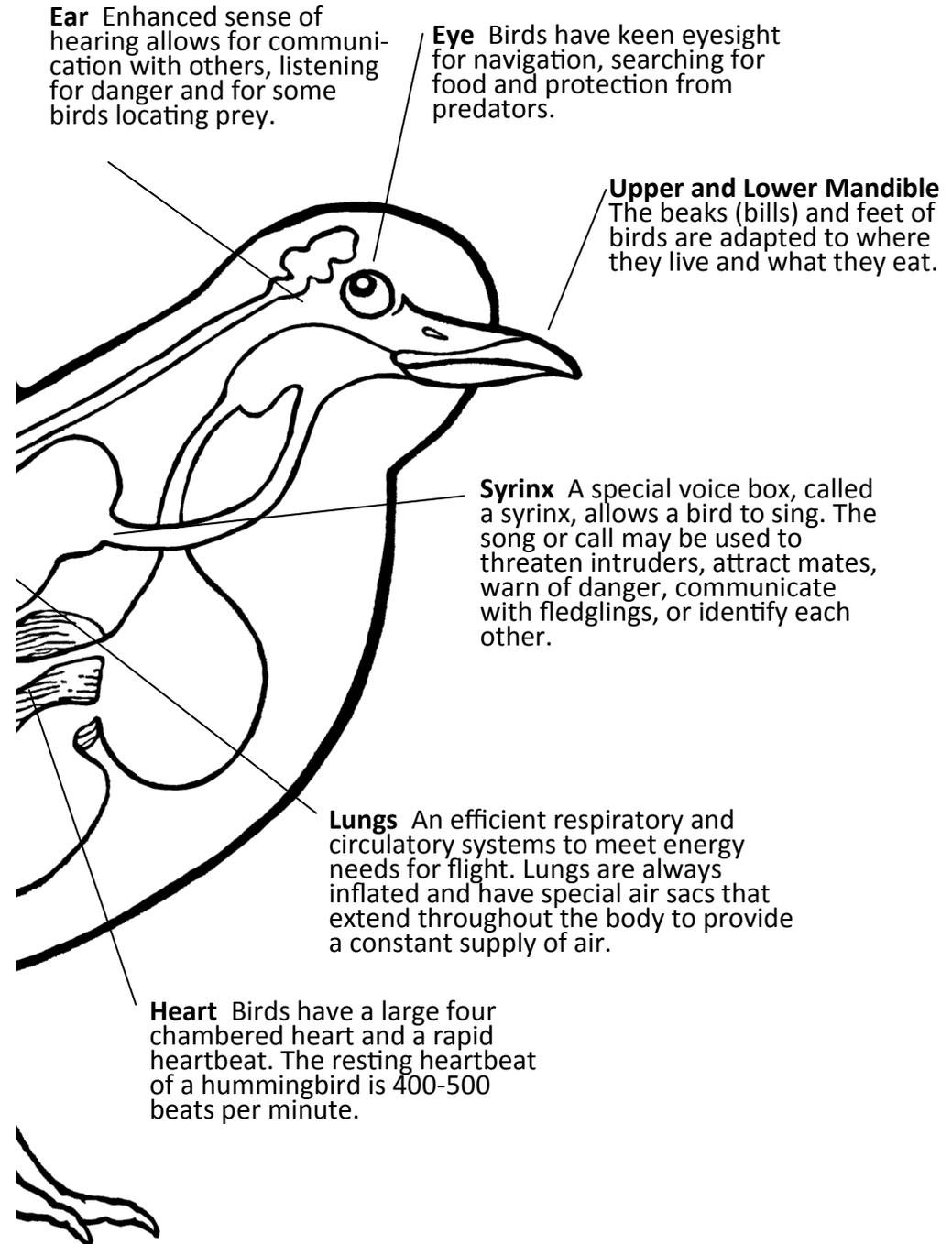
Name	Size
	Shape
	Field Marks
	Behavior(s)
	Song(s) or Call(s)
Color(s)	Habitat/Other Comments

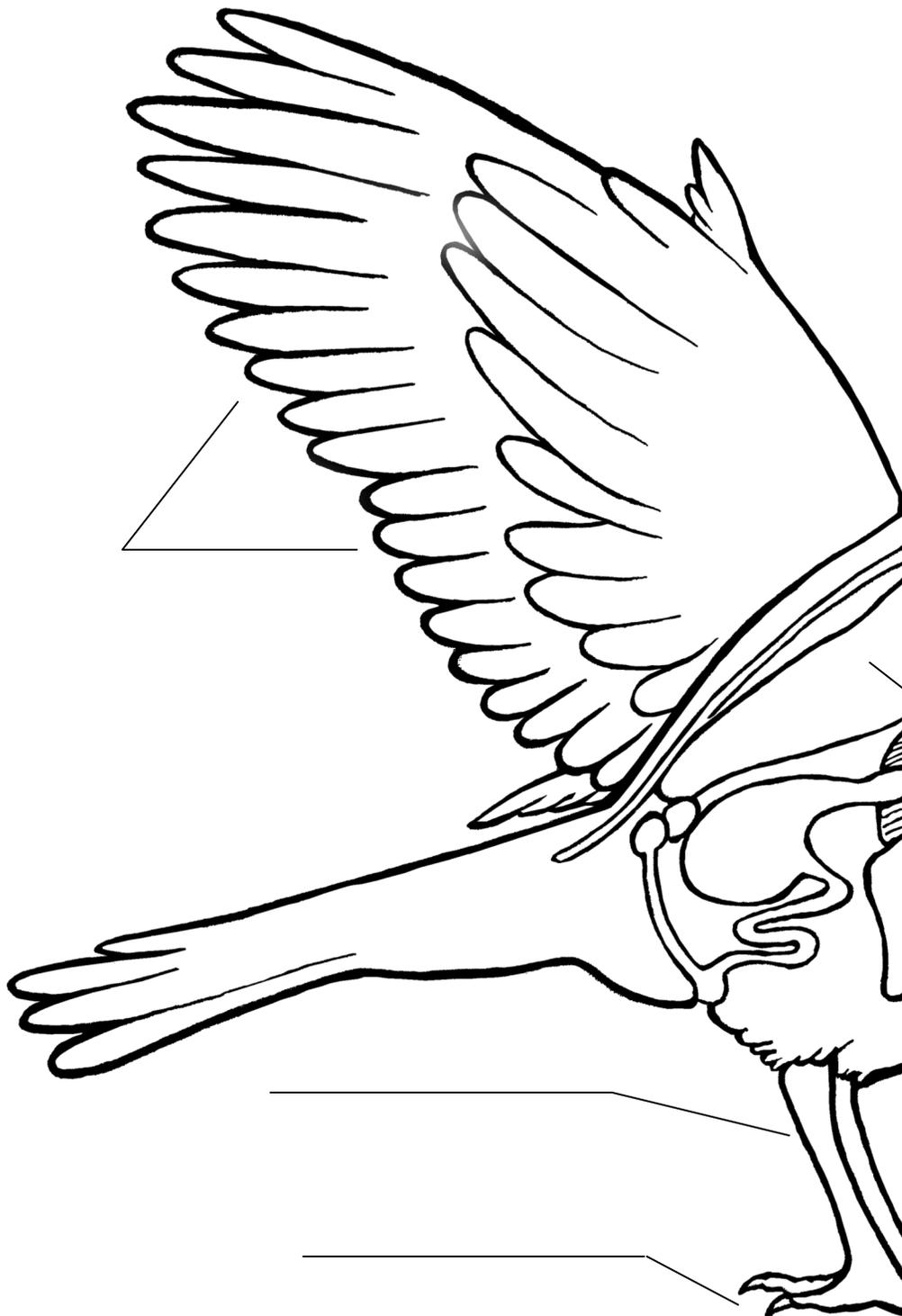
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PARTS OF A BIRD





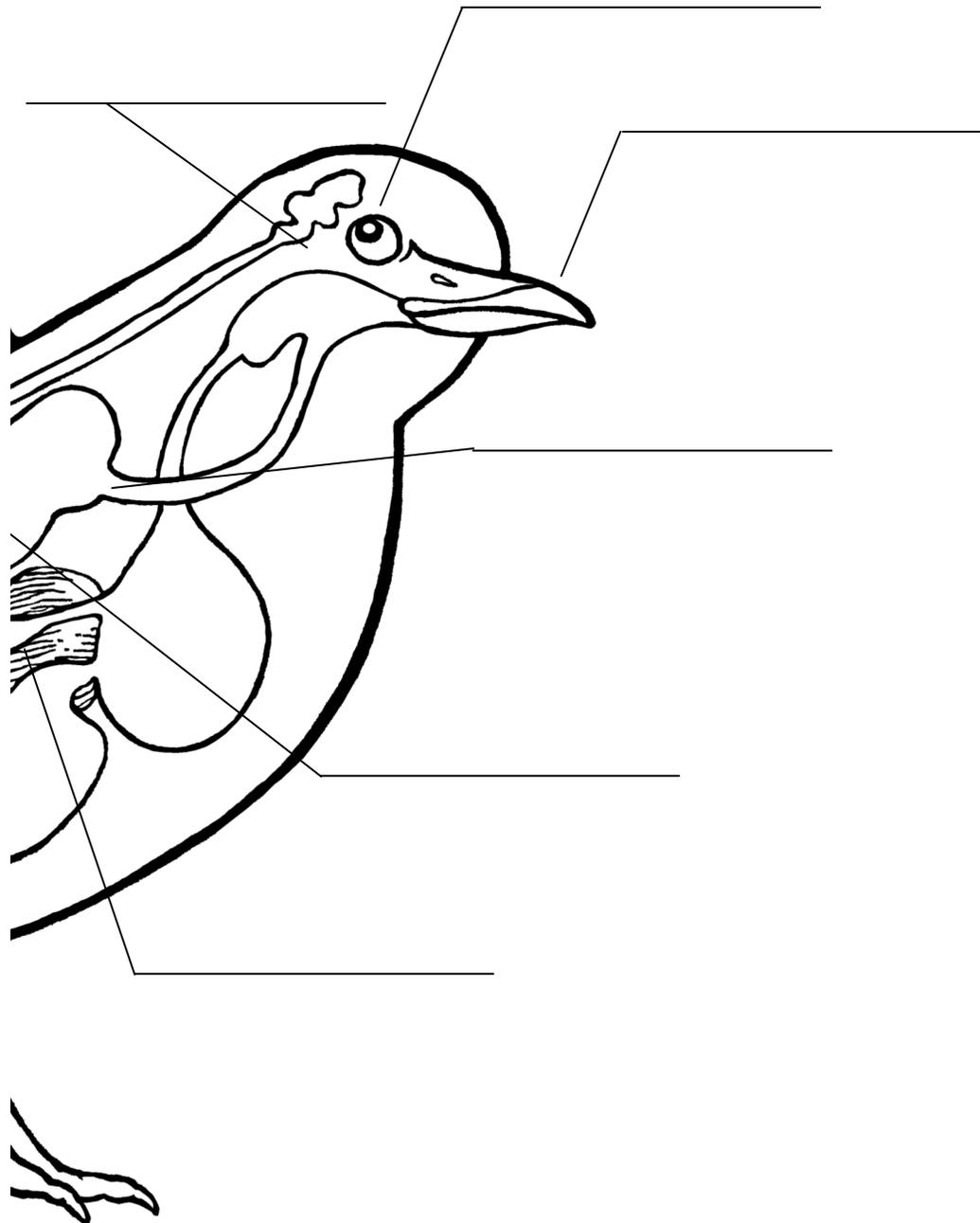
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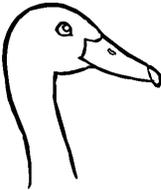
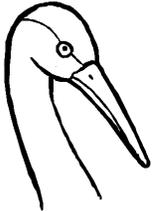
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Label the bird. Do you remember the parts of the bird?



BEAKS

By looking at a bird's beak we get clues about the bird's lifestyle, where it lives and what it eats.

	Cone-shaped beaks	Strong, short beaks that are used for cracking seeds.
	Chisel or drilling beaks	Long, tapered bill used for drilling holes in trees.
	Tubular-shaped beaks	A long bill used for sipping nectar from flowers.
	Sharp-hooked beaks	A bill used for ripping and tearing meat.
	Straining beaks	A flat-shaped bill with fringed edges to filter plants and small animals from the water.
	Probing beaks	A long, slender beak used for probing the ground.

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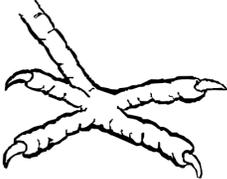
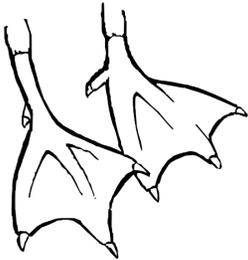
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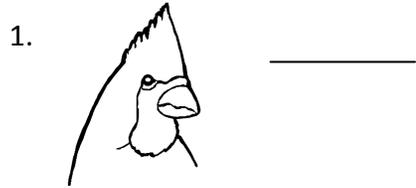
FEET

A bird's foot is designed to help it navigate its environment and find the food it needs.

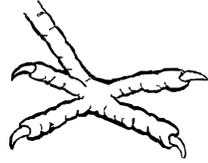
	Hawks, eagles, and owls have strong feet with long claws or talons to help them capture, grasp, and kill their prey.
	Woodpeckers have four toes, two pointed forward, and two pointed backward. This arrangement helps them grasp tree bark and climb.
	Song birds use their feet for perching and walking or hopping. Three toes pointed forward with one opposing toe helps them grasp their perch.
	Wading birds such as cranes and herons have long toes to help them walk through soft bottoms of wetlands in search of food.
	Swimming birds, such as ducks and geese, have webbing between their toes to help them paddle in water.

BEAKS AND FEET

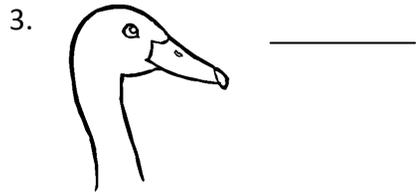
Match the bird's beak with the kind of feet it has by placing the right letter in the blank. Two of them are birds of prey. Can you name them? How do you know that?



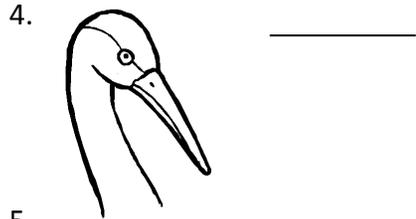
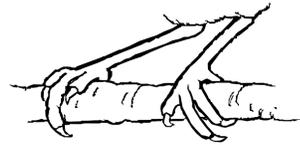
A.



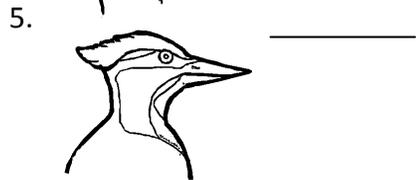
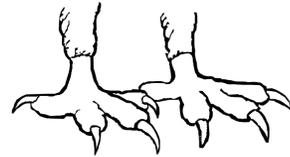
B.



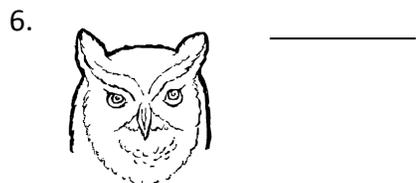
C.



D.



E.



F.



Answer Key: 1 C, 2 D, 3 B, 4 F, 5 A, 6 E. Birds of Prey-2 & 6

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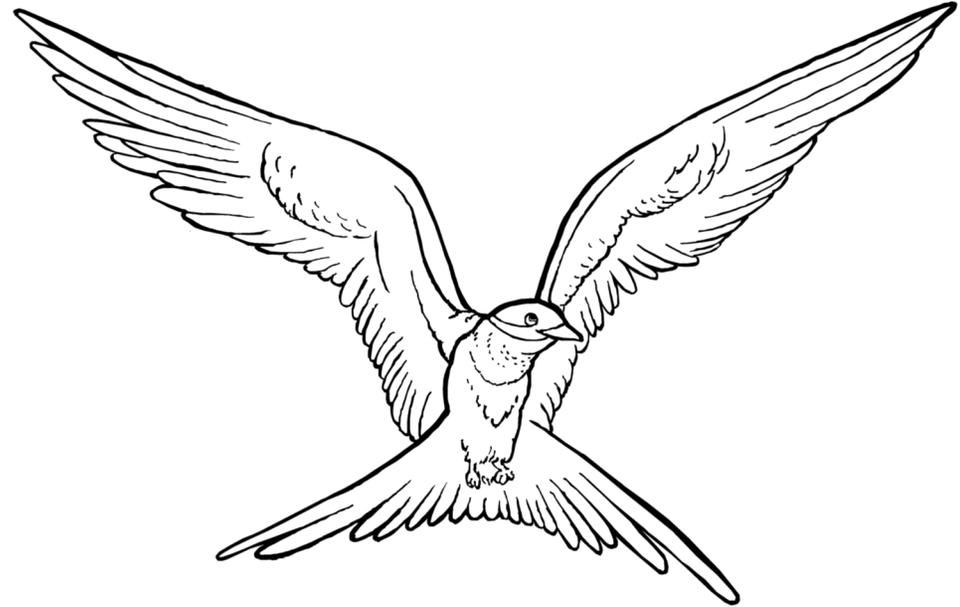
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BIRDS TAKE FLIGHT

About 200 out of 350 species of birds that migrate in Canada and the U.S. go south to Mexico, Central and South America in the fall and return in the spring to Canada and the U.S.



Every year the Arctic Tern migrates over 22,000 miles.

CHALLENGE

How many times can you flap your arms in 30 seconds? Have one person use a stop watch to tell you when to start and stop. Count your flaps. Make sure they go all the way up and down.

How many flaps did you get? _____

The master flapper award goes to the Rufous Hummingbird which is able to flap its wings 210 times in 30 seconds, that's 70 times per second!

Who was your master flapper? _____

SUPER CHALLENGE!

How long can you flap your wings before you become tired? Gather everyone in your group and start flapping at the same time. Who flapped the longest and for how long?

Longest Flapper: _____
 Longest Flapper Time: _____

A Blackpoll Warbler travels 2,000 miles, from New England to Venezuela, in three days! This degree of exertion is equivalent to a person running 4-minute miles for 80 hours in a row.



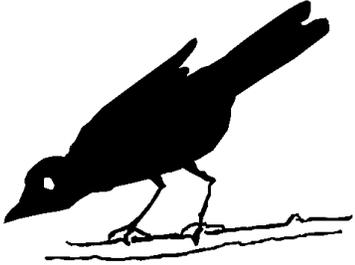
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COUNT AND ID BIRDS

While walking on trails or sitting in the Bird Watch, look for the birds that live at the Arboretum. Sketch a picture of the bird and record your results here.

Sample Chart:

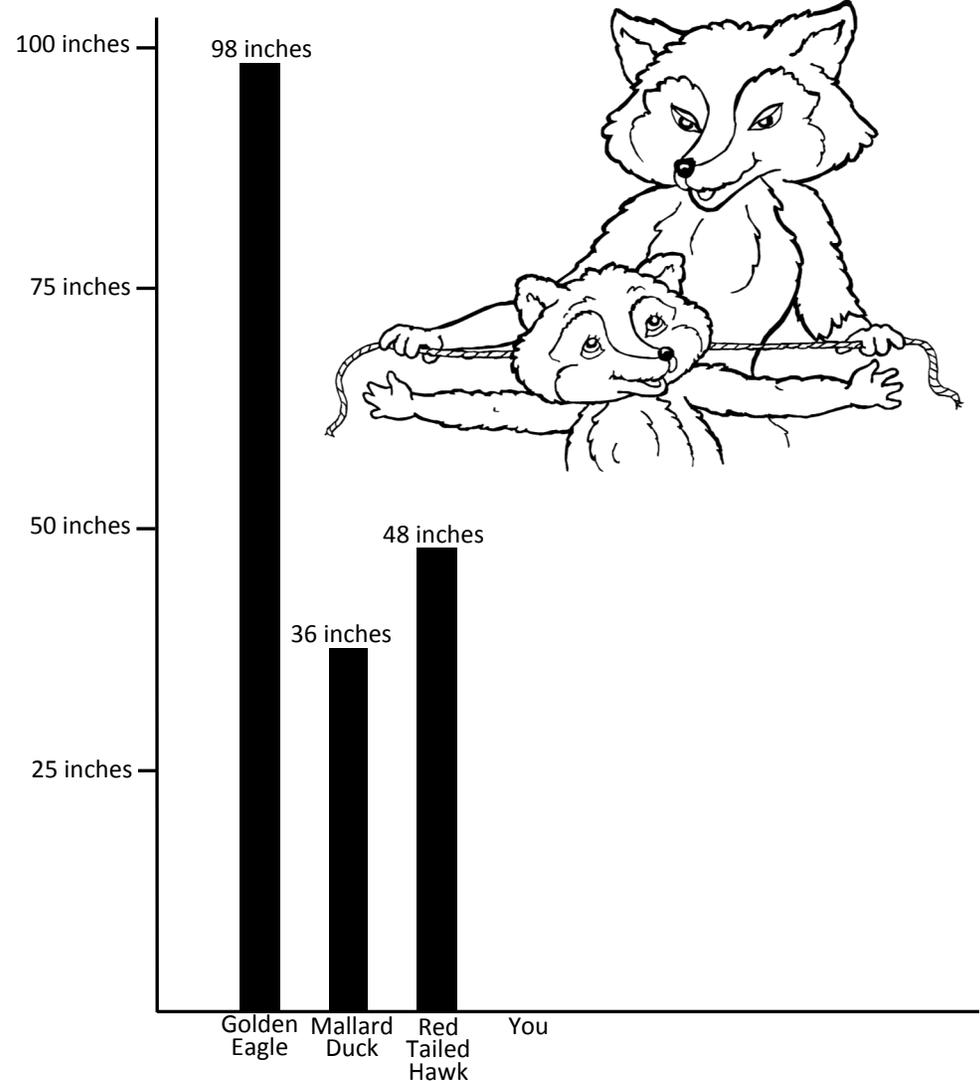
Name	Size
<i>Black-capped Chickadee</i>	<i>Smaller than a sparrow</i>
	Shape <i>It's a small bird with a long tail. Bill is small and black.</i>
	Field Marks <i>Black cap and throat, sides of face are white</i>
	Behavior(s) <i>With other birds of the same species. It held the seed between its feet and pounded the seed with its bill</i>
	Song(s) or Call(s) <i>heard a "fee-bee" and a "chick a dee dee" call</i>
Color(s) <i>black. On the head, grey back, white belly, peach flanks</i>	Habitat/Other Comments <i>Saw several flocks of these birds in different habitats</i>

Remember: Never harm or disturb an animal or plant. Also, never take an animal or plant away from its habitat. Leave the environment as you found it.

WHAT IS YOUR WINGSPAN?

Use the string and the rulers provided to measure your wing span. Record your measurements and those in your group. Spread your arms and measure from fingertip to fingertip across your back. How can wingspan help birds fly? Larger wings can help provide lift for birds, but if they are too large they can weigh the bird down.

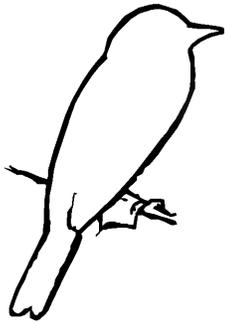
Plot your results and a few from your group below.



HOW DO YOU COMPARE?

CLUES TO ID BIRDS

Use your field guide, and these clues to identify birds

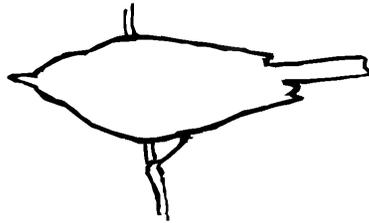


Shape: Pay attention to body shape, proportions of the head, legs, wings, tail, and the shape of the back.

Field Marks: Scientists divide bird shapes into different regions; beak, head, back, wings, tail and legs. Use these field markers to help you identify the birds. Observe distinctive colors and shapes on the birds, such as a black crown, red throat and so on.

Size: Once you have assigned a bird to its correct group, size can be a clue to its actual species. Size can be difficult to determine because it is difficult to compare birds if they both are not present.

Posture: Look at how the birds stand when perched. Are they upright or vertical, or are they bent over or horizontal?



Sound and Vocalizations: Identifying birds by their call or song is very helpful when you can't see the bird. It takes a lot of practice, and can be very difficult for new bird watchers. Sometimes, you can remember the different calls by using phrases to help. The Barred Owl's call sounds like "Who cooks for you".

Habitat: In general, each species of bird occurs only within certain types of habitat. Learn which birds to expect in each habitat. However, during spring and fall migration, birds often settle down when they get tired and hungry, regardless of habitat.

HINTS FOR BIRD ID

What **color pattern** is the bird?

What size is the bird? Is it larger/smaller than, or the same size as
A House Sparrow?
An American Robin?
An American Crow?

What **shape** is the bird?

- Is it chunky or long and slender?
- Does it have a crest?
- Is its tail long or short compared with its body?
- How long are its legs compared with its body?
- How long is its beak compared with the size of its head?
- What is the bird's posture? For example, how does it sit on its perch?
- Does it sit upright? Does it stick its tail in the air?

What are the bird's field **marks**? For example:

- Does the bird have wing bars?
- An eyebrow?
- What about stripes?
- Are there tail bands?

How does the bird **behave**? For example:

- Does it eat at the feeder?
- Does it take seed back to the cover of a tree or shrub?
- Does it eat only from the ground?
- Does it bob its tail when it perches or walks?
- Is the bird usually seen by itself, or does it hang out with a group?
- Are the nearby birds of the same species, or different species?
 - Does it chase away other feeder birds?
 - Does it share the feeder food?
 - Is its flight distinctive in any way?

