

Nature | Education

GET TO KNOW
CONNECT • CREATE • CELEBRATE

GRAB N' GO ACTIVITY:

Get To Know Birds

OVERVIEW:

This activity is designed to introduce young people to native birds, and to help them develop a personal connection with them.

Children are naturally attracted to wildlife. Of all the wildlife that live in our local natural and urban areas, birds are probably the easiest to find. As with other activities, developing an appreciation for birds takes time and effort. It is helped immensely by knowing something about them, and having chances to observe birds closely first-hand.

Observing birds directly often takes patience. Birds will often hide when large animals (like humans) enter their territories. But if the observer is still and quiet, birds will often emerge and come quite close. The longer the observer is willing to sit and watch, the more she/he will see and the closer birds will approach.

Many students have come to expect that any trip to a natural area will yield dramatic wildlife sightings at close range, similar to what they may see at a zoo or on a television wildlife documentary. In reality, nature is far more subtle. The "National Geographic moment" some people expect is a fleetingly rare experience, even for people who spend a lifetime with wildlife in their natural habitats. Your students will need to know that while they will not be seeing any dramatic wildlife footage, they might be able to get a close look at some small but spectacular animals first hand, which is an entirely different experience than seeing something on TV.

OBJECTIVES:

- Practice the use of sight, hearing, and other senses to observe birds;
- Develop an awareness of birds through signs of their presence such as nests, tracks, and other evidence;
- Develop an appreciation for birds as a part of many different natural and human-built habitats.

Ages: 6 - 13

Time: 60 minutes

PRIOR KNOWLEDGE:

What appreciation do your students have of birds, and how much do they know about the birds of your region?

One way to find out is to ask about any special experiences your students may have had that involve wild birds. In addition to this, here are some questions you can ask:

- What are some birds that live here in the summer only and migrate south in the fall?
- Can anyone name a bird that lives here all year round?
- Can you think of a bird other than a woodpecker that nests in a hole in a tree?
- What is the smallest bird in this province? All Canadian provinces are home to hummingbirds of various species.

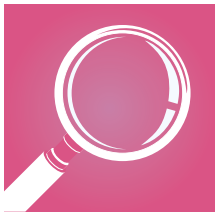
MATERIALS:

For each student group:

- Digital or film camera
- Notebook
- Pencil
- Field guide to local birds (optional)
- Binoculars (optional)

LOCATION:

Schoolyard, nearby park, or field trip site. Spring is a preferable time, but winter and fall will also work, depending on the location.



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PREPARATION:

Your school is unlikely to have a class set of binoculars, so it will likely be necessary to ask students to bring these from home if they have them. This activity will require students to work in groups in a park or natural area, so we encourage you to enlist the help of parents and other staff to supervise your students at the field trip site.

This activity will be far more effective if your students are already familiar with the use of equipment like binoculars and bird books. If time permits, have your students practice their bird identification skills by:

- Distributing binoculars bird books and explaining how to use them.
- Placing small bird pictures around the room and asking your students to identify them using their binoculars and bird books.

This activity will also benefit immensely by having your students read through the attached backgrounder (Get To Know Birds) before going out to the field trip site. Work through the backgrounder with them and reinforce the vocabulary (bold text). We strongly recommend you visit the field trip site prior to bringing your class. You should ascertain that there will be good bird observation opportunities, for either / both of the activities described below.

Be sure there is a clearly identifiable staging area where groups can reconvene prior to leaving the site, and that there are no safety risks for your students such as dangerous terrain, poisonous plants, deep water, or other hazards.

Procedure:

Part A. Birds by sight and sound. In this activity, your students will be assigned the task of going out to observe birds directly by watching and listening. If they can identify the bird they see or hear, encourage your students to do so, but be sure they understand that getting the name of the bird is far less important than seeing it and listening for its sounds. Your students will be asked to find a comfortable spot to sit and observe, for a half hour or more. Birds may not be immediately visible or audible, but if the observer is still for any period, birds will almost always make themselves seen and heard.

At the field trip site:

Step 1: Review the nature of this activity with your students, as described above.

Step 2: Assign your students to groups of two or three, depending on the availability of equipment.

Step 3: Distribute equipment to each student group. Be sure each group has a notebook or clipboard and a worksheet for capturing their direct observations.

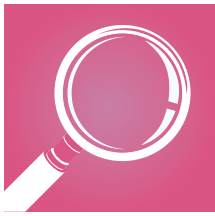
Step 4: Instruct your students to find a comfortable spot to sit with their partners for at least half an hour, where they will wait, and watch for birds in the natural habitat. Reiterate the need for maintaining silence and for keeping movement to a minimum once they are seated.

Step 5: After 45 minutes to an hour, recall your students to the staging area and debrief the observation experience with them. Have them report on any sightings they made, and to describe the highlights of the experience. Could they identify any of the birds?

Submit your work to the Get to Know Contest for a chance to win wild prizes & go to

GETTOKNOW.CA

to find more free resources and activities



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Part B. Bird signs (fall, winter, spring). In this activity, your students will be looking only for signs of bird activity in a natural area. They will simply document any signs of bird activity by recording their observations in a notebook. Have them look for:

- Bird tracks in sand, mud, snow
- Abandoned bird nests
- Holes in trees made or used by birds
- Feathers on the ground
- Any other signs they can find

Each piece of evidence they find must be documented. A student worksheet is provided that includes space to record these observations. Your students can document their observations using digital photos, drawings, or written descriptions. We discourage the collecting of nests, feathers, or other physical materials in parks or natural areas.

At the field trip site:

Step 1: Review the objectives and nature of this activity with your students, as above.

Step 2: Assign students to groups of two or three as equipment allows.

Step 3: Distribute the student worksheet (Bird Signs), and equipment as listed above.

TIPS AND ENRICHMENT:

- Invite a guest speaker from a local zoo or wildlife rescue centre who can bring a live native bird in to your classroom for a demonstration.
- As part of your field trip experience, invite a local natural history expert or bird enthusiast to help out. Have them demonstrate some of the equipment they normally use to observe birds, and tell a few stories about exciting experiences they have had with birds.
- Develop a local bird identification guide with your students. Set aside class time in the spring for your class to go outdoors in the school neighbourhood to identify local birds. Use the Internet, student drawings, student photos to compile images, then add descriptions of where these species can be found. Keep a running total from year to year, having successive classes update and improve the guide.
- Have your class participate in a Christmas bird count. Information about local Christmas bird counts across Canada is available here: <http://www.bsc-eoc.org/national/cbcmain.html>
- Bird song recordings and multimedia presentations: Many bird songs are available either as CD recordings, or as electronic files that can be downloaded from Internet sources. You can set up an excellent project with your students by having them develop Power Point presentations which incorporate photos of birds, natural history information, and recorded audio tracks of bird songs.





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BACKGROUND

Humans have always been fascinated by birds. Our early ancestors who had to walk from place to place would look up and see birds soaring effortlessly over forests, rivers, and mountains. To them, a creature that could leave the earth and rise into the sky must have seemed truly magical. No wonder so many ancient cultures thought birds were divine beings. Birds may not be divine beings, but they do have some pretty extraordinary abilities. Flying is just one of them. Any animal that flies (and not just glides) has to be extremely lightweight, must have an aerodynamically shaped body, and powerful wings. Most birds have all these features. To reduce their weight, birds' feathers, bones, and bodies have hollow spaces in them. Birds' bones are hollow and spongy in the middle, which makes them astonishingly light, but also very strong

BIRD BIOLOGY

Birds' feathers separate them from all other creatures on earth. Different kinds of feathers on the body of the bird have different jobs. The long, stiff flight feathers on their wings and tail provide the lift and control needed to fly. The short, rounded feathers on the body, called contour feathers, help give the bird its smooth, aerodynamic shape. Fluffy down feathers found all over the body next to the skin act as insulation, keeping the bird warm on cold days. Birds replace all their feathers every year, or when any are broken or lost. Many birds' plumage changes through the year, switching from brightly coloured breeding plumage in the spring and summer, to plain-coloured fall plumage from August to March.

Birds have fascinating mating habits. In the spring, many species set up territories which they defend aggressively. The songs of birds in spring are largely announcements to others of the same species that "this spot is taken!" The males (and occasionally females) may perform curious dances or display flashy colours to attract a mate. Birds' nests can be beautiful works of

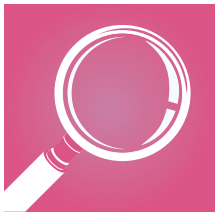
weaving skill, or for some species, a simple depression in the soil. After hatching, baby birds usually require constant care and feeding from parents. This is a time when birds are most vulnerable, and when predators, habitat destruction, or bad weather can have devastating effects on bird populations.

Many Canadian birds live here only in the spring and summer when they come here to feed, and raise their chicks. They migrate to warmer locations south of Canada for the winter. Other birds, called residents, live here year-round. Resident birds need to be well-adapted for winter, a time when food is scarce and temperatures can make life for any small animal difficult. Many resident birds switch from insects during the summer to seeds in the winter. This is typical of Chickadees and Nuthatches.

Birds are wonderfully adapted to their habitats. Not surprisingly, many kinds of plants and animals are adapted to birds, and depend on them for food, reproduction, and other things. For example, chokecherries are sought after by birds like Bohemian Waxwings, and form an essential part of their winter diet. Chokecherry pits are designed to go through the birds' intestines undigested, to be scattered across the landscape with birds' droppings.

Owls are another marvel of adaptation. They have some of the most sophisticated stealth technology in nature. Owls can catch prey in total blackness, using their extremely sensitive hearing and night vision to find it. Once they spot their prey, owls swoop in on wings silenced by soft-edged feathers.





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STUDYING BIRDS

The best way to get to know birds is to spend time with them. Birds are usually not hard to find: you can see and hear them in every Canadian city, farm, park, or natural area, usually year round. Because they are always around us, they are one of the easiest ways to stay in touch with your wild neighbours.

You don't need special equipment to watch birds, but it sometimes helps. Binoculars are practical because not only do they magnify distant things, but they let you see them with both eyes, in normal 3D. They are also far easier to carry around than telescopes.

The easiest way to identify birds is to have someone who knows birds point them out for you. Another way is to use a field guide to birds. There are many excellent field guides to Canadian birds available, any of which help you identify any bird you see. Probably the simplest way to use a field guide is after you've taken a good look at a bird, flip through the pages of the guide until you see something that looks like the bird you sighted. There may be several species that look very much alike, so you may need to check the descriptions and details closely to pick out which species you spotted. The key identifying characteristics that set one bird apart from others are called field marks, and they are usually highlighted in most good field guides.

Another way to get to know birds is to put out a bird feeder. Feeders are especially attractive to birds in winter, a time when food is often scarce. When birds come to your feeder, you can often watch them from quite close by. This is an excellent chance to take great photos, or make memorable drawings of some of your favourite wild neighbours.





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A) Birds by Sight and Sound

Your teacher has asked you to find a quiet spot at the field trip site you are visiting, and to sit for a half hour or more to observe birds. Use this worksheet to record your observations. If you have binoculars, don't hesitate to use them to observe and identify any birds that come near your location.

If you don't know exactly what species of bird you have seen, just make up your own name for it so you can remember it better.

My first location: _____

Bird name (Proper, or made-up)	What it looked like (Write a description or make a drawing)	What it sounded like (describe the sound it makes)	Behaviours (What it was doing)



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B) Bird Signs

Your teacher has asked your group to look for evidence of bird activities in the field trip site you are visiting today. If you see any birds, make a note of them and try to identify them, but your main task is to record evidence that birds have been active at this location. Look carefully for any of the following:

- Abandoned nests, egg shells, or other evidence of birds nesting and raising chicks;
- Tracks on the ground, in mud, in the snow, on trees
- Holes in trees that might have been made by or used by birds
- Feathers, bones, or other remains on the ground
- Any other evidence you can find

If you have a camera, take a photo and note the image number in your worksheet below. Record any other observations here:
