

Birds in the School Yard

Connecting to Nature

Photo: Mark A Conboy

Description of Unit

Birds are the guests who always say “YES”, all year round in all environments. Simple schoolyard observations provide opportunities for the students to discover common species, habitat and food sources. When students put themselves in a bird’s “shoes” they become empowered to lead changes to the schoolyard and their local environment to create more bird friendly spaces.

Connect with the Long Point Biosphere

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At a Glance

Grade Level: K - 2

Learning Environment: School

Prep Time: 15 minutes

Length of Lesson: 2.5 Hours

Key Vocabulary:

habitat, adaptation, shelter, compass rose, environment (the area in which something or someone exists or lives), map, label, title

Staffing: classroom staff, volunteers to assist in recording observations, if available

Materials: clipboards, writing utensils, outline of schoolyard with basic landmarks, classical or forest scape music a means of playing it, hula hoops and bean bags or suitable substitutes (minimum 1 item per student)

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Lesson Outline

Time	Lesson	Location	Materials
30 minutes	An Introduction to The Needs of Living Things	Indoor	Book or YouTube - internet/computer/smartboard
30 minutes	Observing and Mapping	Outdoor	Basic schoolyard map, "Follow that Map!" by Scot Ritchie, beak shape chart, bird identification chart for your area
1 hour	Home "Tweet" Home	Indoor and Outdoor	Clipboards, writing utensils, outline of school and schoolyard with basic landmarks
1 hour	Ready, Set, Action	Indoor and Outdoor	Device to play classical/forest scape music, hula hoops and bean bags or suitable substitutes for nests and food (minimum 1 item per student)

Curriculum Connections

Grade One:

- 1.1 Identify personal action that they themselves can take to help maintain a healthy environment for all living things, including humans
- 2.2 Investigate and compare the basic needs of humans and other living things, including the need for air, water, food, warmth, and space, using a variety of methods and resources
- 2.6 Use appropriate science and technology vocabulary, including: investigation, explore, needs, space, and food, in oral and written communication
- 2.7 Use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes
 - Bird watching tally chart, schoolyard habitat map
- 3.1 Identify environment as the area in which something or someone exists or lives
- 3.4 Describe the characteristics of a healthy environment, including clean air and water and nutritious food, and explain why it is important for all living things to have a healthy environment

Curriculum Connections

- 3.5 Describe how showing care and respect for all living things helps to maintain a healthy environment
- 3.6 Identify what living things provide for other living things
- 3.7 Describe how the things plants and animals use to meet their needs are changed by their use and are returned to the environment in different forms
 - Students are enhancing food and shelter sources for birds, birds in turn provide beauty and entertainment, consume insects, pollinate plants, transfer seeds in droppings

Science:

Grade Two:

- 1.2 Identify positive and negative impacts that distinct kinds of human activity have on animals and where they live, suggest ways in which these impacts can be minimized or enhanced
- 2.5 Investigate the ways in which a variety of animals adapt to their environment and/or to changes in their environment, using various methods
- 2.7 Use appropriate science and technology vocabulary, including life cycle, migration, adaptation, body coverings, and classify, in oral and written communication
- 2.8 Use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes
- 3.3 Identify ways in which animals are helpful to, and ways in which they meet the needs of, all living things, including humans, to explain why humans should protect animals and the places where they live

Science Extension Activities:

Grade One:

- 3.2 Identify the physical characteristics (e.g., size, shape, colour, common parts) of a variety of plants and animals

Grade Two:

- 2.6 Use scientific inquiry/research skills, and knowledge acquired from previous investigations, to investigate the basic needs, characteristics, behaviours, and adaptations of an animal of their choice
- 3.2 Describe an adaptation of a characteristic body part, shape, or behaviour that helps a plant or animal survive in its environment (e.g., some birds migrate to a warmer climate for the winter)
 - **This could also tie into Grade Two Social Studies mapping expectation about human activities in different climates

Social Studies:

Grade One: Heritage and Identity

- A2.3 Analyze and construct simple maps as part of their investigations into places that are significant to them (e.g., construct a map that includes a title, legend, and directions)
 - Using basic map elements complete a map of the school yard to show area of significance for living things and to discover areas that could benefit from naturalization

Curriculum Connections

People and Environments:

This project focuses on outdoor exploration in the schoolyard environment. It touches on all aspects of the Grade One Social Studies Strand “People and Environments: The Local Community.” Observing local birds and their environment is a wonderful way to spark the curiosity for a project that could be revisited multiple times throughout the year and introduces the basic skills needed for investigations in the wider community.

B1.3 Create a plan that outlines some specific ways in which they can responsibly interact with the existing and/or natural environment in the local community and describe how their actions might enhance the features of the local environment

- This could involve investigating the bird friendly areas around the school and making plans to enhance them and then extending this learning to their homes and the wider community using a scale appropriate to your specific setting and timelines.

Sample student talk from the curriculum document: “We are going to plant a tree in our backyard. It will grow and be a place for birds and squirrels to live. Trees help clean the air, too.” This concept could be simplified to a classroom window feeder, sprinkling seeds on window ledges, plant containers that could be moved in and out, collecting brush in the corner of the yard to create a sheltered area for winter birds etc.

B2.1 Formulate questions to guide investigations into some aspects of the interrelationship between people and the natural and man made features of their community, with a focus on some of the short and long-term effects of this interrelationship

- This project could involve discussing the benefits we experience from birds and how we could support them in return. How will making changes to our schoolyard that will support birds change things for birds and students now and in the future?

The Needs of Living Things

Lesson One

Introduction

Read the book “What do Living Things Need” By Elizabeth Austin. It is a great little book to introduce this concept in a quick and simple way. This book is also available on You Tube video.

Encourage students to frame their eyes using their hands, or you can provide them with a cardboard cut out frame or old picture frame with the glass removed. Encourage them to use their frame to observe items that living things need to survive around the classroom. You may wish to close the blinds, so they remember to focus only on their classroom environment. Allow them to explore this way for a few minutes introducing or reinforcing vocabulary such as observation, notice, detail, environment, living things, space, food, light, water, protection etc.



The Needs of Living Things...

Next, introduce a larger “frame”, the classroom window. If you do not have windows in your classroom you may need to move to a location such as the school learning commons etc. Invite students, in appropriately sized groups for your particular class dynamic, to make observations and sketches while looking out of the window, again, focusing on living things and the things that support or challenge them in their environment. Birds are fun and easy to observe so you may want to draw your focus to birds or other critters that are appropriate to your own setting.

As a follow up, keep a tally chart on a clipboard by the window and invite students to tally or graph birds they see flying, perching and feeding outside of the classroom window (Sample checklist and tally templates included)

*Emphasis is not on identifying types of birds but on noticing numbers of birds and where they are, or are not, found.

Observing and Mapping the Schoolyard Environment

Lesson Two

Learning Environment: Schoolyard

Prep Required: Pre-investigation of the school yard by the educator, creation of basic school map including buildings and landmarks using basic mapping elements as appropriate, some student pre-instruction about map reading would be helpful. This is an introduction for Grade Ones and a review for Grade Twos.

Enriching Resources:

- beak shape chart
- bird identification chart for your area
- iPad or phones to capture photos of key or hard to sketch features

Section off your schoolyard and have students with partners/groups/volunteers as appropriate for your schoolyard setting and group dynamics. Have each group add points of interest to their section of the map based on the sightings of living things and the needs of the living things they see (shelter, food sources, water etc.).

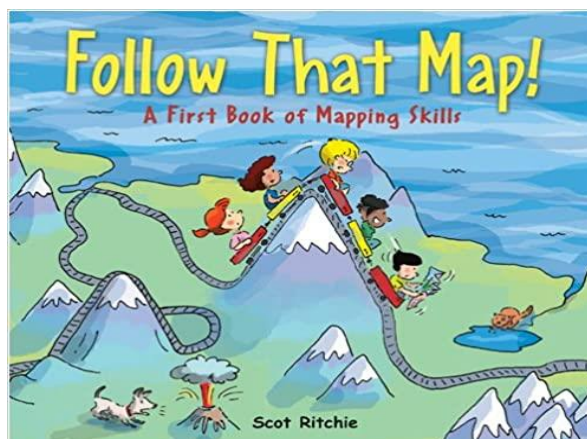
Alternatively, this could also be done as a photo walk-about with the whole class in one group followed by the creation of a cooperative class map upon returning inside, if that is more appropriate for your class dynamic.

Great Book for this activity:

“Follow that Map!” By Scot Ritchie is a great book for introducing the key elements for this lesson

It can be found on YouTube here:

<https://www.youtube.com/watch?v=PA2Si4REwws> but it is preferable, and time saving, to use the real book and focus on only the necessary and age-appropriate pages and points needed for this specific project



Home “Tweet” Home

Lesson 3

Materials:

Classical or forest scape music and a means of playing it in the gym or outdoor environment, hula hoops and bean bags or suitable substitutes for nests and food (enough for at least 1 item/student). The opportunity to revisit your schoolyard map.

Activity:

This is an active game best played in the school yard or gym. Along the lines of “Musical Chairs,” this game played with hula hoops as nests/shelters and bean bags as food. Before you begin, you really must build up the dramatic side of this game as students will be imagining and experiencing what it is like for birds who do not have enough shelter and food in their environment. Expect potential frustration during parts of the game and prepare your students accordingly. Things will improve for the student birds as the game progresses. Revisit your school yard map, discussing where in the school yard items were observed that support the needs of living things. Recall with students some of the shortcomings around the schoolyard that you discovered for birds in terms of their environment and the meeting of their basic needs. Encourage some dramatic play as birds in a beautiful forest with appropriate music and movement. Classical music or a forest soundscape work well. Ask students to explain the kind of things they see (based on what they have been learning about the needs of living things in the beautiful forest (trees, streams, plants, flowers, brush on the ground for shelter etc. Then play a few rounds of the game with music having the students start and end their movements when the music plays and stops.

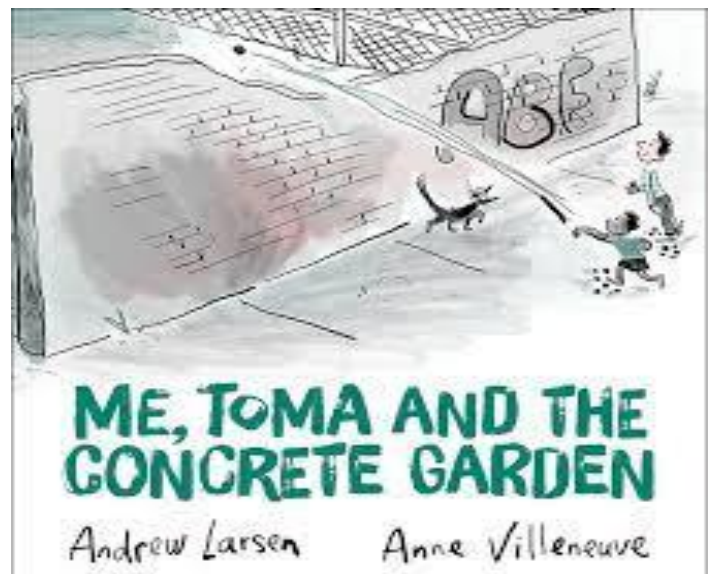
Next introduce the idea that the game is changing and this time when the music stops, they need to find a nest (hula hoop-just 2 birds per nest) or some food (a bean bag. Do a round or two with enough for everyone but then begin to change the play asking for student input about what might happen to the environment to make it less creature friendly (trees cut down for development, pollution in the river, new highway being added).

With each new change remove some of the hula hoops and bean bags from play. Ask them what they notice about finding food and shelter afterwards.

If they can’t find food or shelter, they must leave the environment and go to the sideline. You may wish to involve these students as “developers” who remove 1 item each after each round. When the game gets down to the last few players take a time out to discuss what types of things humans could do to help return food and shelter to the environment (add a bird feeder, plant trees, shrubs and food plants, pick up litter etc.) For each suggestion return the removed hula hoops and bean bags to the environment and finish with a round or two when the birds can all successfully find food/shelter.

When back in class recap the game, and discuss with the students how they could apply these findings for real birds in the schoolyard environment.

“Me, Toma and the Concrete Garden” By Andrew Larsen, illustrated by Anne Villeneuve, is a story that provides a nice jumping off point for the follow up discussion following the game and students begin to formulate ideas about what they can do to make the school yard more bird friendly.



Lesson 4

Time to make a plan!

Action:

Brainstorm ways in which to make a specific area of the schoolyard more bird friendly. Often right outside your classroom window is a great place to start, if the setup of your school can accommodate this. Find ways to make the space more bird friendly.

Some ideas are:

- Suet feeders
- Seed on the window ledge
- Stick on window feeders
- Recycled bottle bird feeders
- Nesting materials hung on tree branches or through fences
- Plants and shelters
- Bird houses

Seek out the support of local bird experts who may be willing to provide supplies or expertise for your students.

Follow Up:

Revisit the initial tallying activity at the classroom window. Has anything changed here or in other areas of the schoolyard? How can you let people know if your changes are making a difference? What can you do at home or in the broader community to make similar changes?

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