FortWhyte Alive
HUMAN. NATURE.
Naturescape for Educators
bringing biodiversity into the schoolyard

Attracting Songbirds to Your Schoolyard

Songbirds are passing through your schoolyard on migration or on a route through the neighbourhood. Why not invite them to stop, feed, and maybe build a nest? Students can help create habitat for birds, and watch as their new feathered friends find food and shelter around the schoolyard.

Creating Habitat

Natural Plantings

Urban or suburban areas with no mature trees and few shrubs do not provide birds with a variety of food sources and shelter from the elements. Adding layers of natural vegetation, including seed or berry producing trees, shrubs, wildflowers and grasses in one area, is the best way to increase bird diversity. Birds can take shelter and find food in well-established plantings.

Bird Feeders

Hang feeders near windows where your students can easily watch for visitors, and near shelter, such as a thick shrub or evergreen tree. Keeping feeders consistently filled will retain the interest of the birds. Remember to wash feeders inside and out once per month with one part bleach to nine parts hot water and a stiff brush. This helps to prevent the spread of disease within bird populations.

Bird Baths

Water sources may be scarce in your neighbourhood, so providing a stone bird bath or terracotta dishes of water is a good idea. Birds will also splash and bathe in the water, which is very entertaining to watch! Cleaning and refilling the bird bath every few weeks will prevent the spread of disease among the birds. Water is unnecessary in winter.

Preventing Window Kills

Thousands of birds are killed each year by window strikes. Birds see a reflection in the glass and perceive it to be a continuation of the outside scenery. To prevent these sad losses, have students design or simply purchase window decals to stick on the outside of the window. These will break up the reflection in the glass and keep birds alive.

An example of window decals to prevent window kills.

Creating Habitat

Tube Feeders

A tube feeder's holes make seed accessible, and a perch beneath the hole is perfect for small perching birds such as chickadees, goldfinches, redpolls and nuthatches. Keep away aggressive birds like house sparrows, by using feeders with the perch above the hole. An outer cage around the tube can help deter squirrels and larger aggressive birds like blue jays and grackles.

Hopper Feeders

Hopper feeders have a roof and walls to protect seed from wind and rain. Seed spills out the bottom into the tray as it is eaten. The larger perch invites more aggressive visitors like squirrels, blue jays and grackles.

Fruit Feeder

Fruit feeders attract catbirds, robins and even orioles. You can simply place orange halves, watermelon or grapes on a tray or use a hanging feeder with a spike for placing the fruit on, available from garden centres.

Suet Feeder

Suet feeders can be filled with fat for the birds. Suet blocks, available at hardware stores, are a winter energy source for woodpeckers, nuthatches, and blue jays. A feeder can also be built by purchasing vegetable or animal fat products (i.e. shortening, lard) or nut butters and spreading them on pinecones or wooden blocks with holes.

Hummingbird Feeder

Hummingbirds show up at feeders between May and September, and they especially appreciate a food source while on migration. Clean the feeder every couple of weeks to keep birds healthy. Red food colouring is unnecessary. The solution should be one part white sugar to four parts water.

Food for the Birds

● Summer food
● Winter food
• Year-round food
* Ground feeding bird

	what to plant						what to feed					
	Crab apple tree	Native deciduous trees	Native coniferous trees	Berry Shrubs	Native grasses + flowers	Mountain ash	Canary seed	Black sunflower	Nyger seed	Orange halves	Winter suet	Nectar (1 part sugar to 4 parts water)
American Goldfinch		●			●			●	●			
American Robin	•	•	•	●								
Black-capped Chickadee		•	•					•			●	
Blue-jay	•	•	•	•	•		•	•	•		●	
Dark-eyed Junco*		•	•		•							
Downy/Hairy Woodpeckers		•	•	•				•			●	
Finches		●	●			●		●	●			
Northern Orioles		●	●							●		●
Nuthatches		•						•			●	
Pine Siskin		●	●				●	●	●			
Redpoll		●						●	●			
Ruby-thoated Hummingbird		●			●							●
Sparrows		●	●	●			●	•				
Waxwings	●			●		●					●	

European House Sparrows

These small gray-brown birds were brought to New York in 1851 and had spread west to the Rockies by 1900. They will eat your birdfeeder clean as they travel in flocks, and they are aggressive towards our native birds. One solution is to provide a separate feeder for the sparrows filled completely with millet, a cheaper seed that they adore above all else. House sparrows need a perch to feed, so feeders with no perch such as suet cages or some tube feeders may deter them.

Birding with the Curriculum

Pre-school and Kindergarten

BIRD WATCH

Sit students a few meters away from the bird feeder. Have students look for birds and draw what they see. Match the first letter of the bird's name with the alphabet. Have students invent a name for one of the birds starting with the alphabet letter of the day.

Science: Colours; Social Studies: Active Democratic Citizenship, Managing Information and Ideas, The World Around Me; **English**: Discover and Explore, Clarify and Extend, Use Strategies and Cues, Respond to Texts, Understand Forms and Techniques, Organize, Record and Assess; **Art**: Art Language and Tools, Creative Expression in Art, Valuing Artistic Experience.

Grade 1

BIRD NEEDS

Birds are different from people. Discuss some of the differences such as feathers, food requirements, overwintering or migration and shelter. Research what different birds eat.

In winter, make woodpecker suet with the class:

1. Soften lard (either in the microwave or by leaving it out at room temperature) and place it in a bowl
2. Mix in dry fruit or seeds
3. Spread the mixture onto large pinecones and attach your feeder to a string.
4. Hang the feeders outside in the school yard.

Science: Characteristics and Needs of Living Things; **Social Studies**: Active Democratic Citizenship, Critical and Creative Thinking, Communication, Our Local Community.

Grade 2

BIRD BATH

Design a bird bath with the class. Discuss size, height and water depth. Discuss the reasons why birds might be attracted to bird baths. Discuss reasons why it is important to change the water on a regular basis. Glazed terracotta saucers make great bird baths. Simply place one on a tree stump to create your own bird bath. Students can take responsibility for changing the bath water.

Science: Air and Water in the Environment, Characteristics and Needs of Livings Things; **Social Studies**: Active Democratic Citizenship, Managing Information and Ideas, Communication, Our Local Community.

Grade 3

BUILD A BIRD FEEDER

Have students research food requirements for birds and various types of bird feeders. Discuss important structural aspects of the bird feeder such as a landing spot, container for the food, hanging structure, food access and a cover to protect the food in the rain. In groups, have students design and build a bird feeder out of easy to find supplies such as a milk carton or pop bottle. Hang the feeders by a window for best viewing. To prevent window strikes, place bird stickers on the window.

Science: Materials and Structures; **Social Studies**: Active Democratic Citizenship, Managing Information and Ideas, Critical and Creative Thinking, Communication.

Grade 4

BIRD HABITAT

Research and design an ideal bird habitat for a native bird species such as the black-capped chickadee or American robin. Students can research food, water, shelter and space requirements and then try to find a spot on the schoolyard that would best suit those needs. Have students place bird feeder in the appropriate places for the bird they are targeting.

Science: Habitats and Communities; **Social Studies**: Active Democratic Citizenship, Managing Information and Ideas, Critical and Creative Thinking, Communication, Living in Manitoba.

Grade 5

BIRD ENGINEERING

Birds are incredible working machines. For example, crossbills have a beak specifically designed to crack open pinecones and eagles have talons that work as levers to generate enough force to hold their prey. Have students research a bird and build a "bird machine" that mimics the bird's adaptations.

Science: Forces and Simple Machines; **Social Studies**: Managing Information and Ideas, Critical and Creative Thinking.

WEATHER WOES

Design an experiment with the class to determine how weather affects birdfeeder use. Students will have to perform bird watches and record the weather. Create graphs to record and analyze the data. Determine if certain bird feeders or bird feeder locations are more or less affected by the weather.

Science: Weather; **Social Studies**: Active Democratic Citizenship, Managing Information and Ideas, Critical and Creative Thinking; **Math**: Statistics and Probability.

Grade 6

WINTER BIRD COUNT

Participate in the Great Backyard Bird Count in February. Bird watchers of all ages participate in a four-day bird count and submit the results to an international online database. Have students participate and look at how results differ from one location to another. Discuss reasons for those differences. Do a spring bird count and compare the results.

Science: Diversity of Living Things; **Social Studies**: Active Democratic Citizenship, Managing Information and Ideas, Critical and Creative Thinking, Communication.

BIRD FLIGHT

Compare the flight technique of different birds. For example, hummingbirds move their wings in a figure-eight pattern to enable them to fly backwards, falcons have incredibly aerodynamic wings to maneuver quickly and hunt on the wing, and owls have "fuzzy feathers" on their wings for silent flight. Once several flight types have been identified, bring the class to the bird feeder and watch for different flight adaptations.

Science: Flight; **Social Studies**: Active Democratic Citizenship, Managing Information and Ideas Critical and Creative Thinking.