Day 5 Birds and humans





Introduction

Birds and people have been interacting throughout history. Human and bird relationships are expressed through celebrations, legends, myths, religious teachings, literary writings, symbols, ceremonies, and other activities in a wide variety of societies and cultures.

Appreciation of birds will ensure that they continue to play an important role in human culture. But in the last 50 years, we have lost nearly one-third of the bird population in North America. Some of that is from pet cats who roam outdoors, but habitat loss is the number one threat to birds and other wildlife and plants throughout the world.

Birds are important because they distribute seeds, help control insects, serve as a food source for humans, act as **pollinators**, and provide fertilizer. They are good indicators of the health of their **habitats** (forests, grasslands, mountains, polar regions, and water) — and the health of our planet. With these activities, kids will explore why we need birds, what they need to know about birds, and what they can do to treat birds better.

Questions to guide explorations and experiments

- How are birds and humans connected?
- Why are birds important to humans?
- How do birds indicate the health of a habitat?
- What can humans do to protect birds?

Books and activities

- Books: endangered birds, bird rescues, birdwatching, and looking out for birds
- Activities: help a habitat, explore a watershed, create and play a bird identification game, and take a Bird Walk

Fiction

- Bird Count by Susan Edwards Richmond (Ages 4-8)
- Bird House by Blanca Gómez (Ages 4-8)
- Birds: Just Like Us by Bridget Heos (Ages 6-9)
- The Birdwatchers by Simon James (Ages 4-8)
- The Blue Wings by Jef Aerts (Ages 9-12)
- Canary in the Coal Mine by Madelyn Rosenberg (Ages 9-12)
- Elsie's Bird by Jane Yolen (Ages 6-9)
- The Fog by Kyo Maclear (Ages 4-8)
- Free by Sam Usher (Ages 4-8)
- Helen's Birds by Sara Cassidy (Ages 6-9)
- How to Heal a Broken Wing by Bob Graham (Ages 4-8)
- Lotus & Feather by Ji-li Jiang (Ages 6-9)
- On Meadowview Street by Henry Cole (Ages 4-8)
- Mr. Lincoln's Way by Patricia Polacco (Ages 7-10)
- My America: Freedom's Wings: Corey's Underground Railroad Diary by Sharon Dennis Wyeth (Ages 7-10)
- Owl Moon written by Jane Yolen (Ages 4-8)
- Ruby's Birds by Mya Thompson and Claudia Davila (Ages 4-8)
- Sparrow Girl by Sara Pennypacker (Ages 6-9)
- Strange Birds: A Field Guide to Ruffling Feathers by Celia C. Pérez (Ages 9-12)
- Wild Wings by Gill Lewis (Ages 9-12)

Poetry

- Fly with Me: A Celebration of Birds Through Pictures, Poems, and Stories by Jane Yolen (Ages 6-9)
- On the Wing by David Elliott (Ages 4-8)



Nonfiction

- All the Birds in the World by David Opie (Ages 6-9)
- Bird's-Eye View: Keeping Wild Birds in Flight by Ann Eriksson (Ages 9-12)
- Condor Comeback by Sy Montgomery (Ages 9-12)
- Kakapo Rescue: Saving the World's Strangest Parrot by Sy Montgomery (Ages 9-12)
- Look Up! Bird-Watching in Your Own Backyard by Annette Cate (Ages 8-12)
- *Moonbird: A Year on the Wind with the Great Survivor B95* by Phillip M. Hoose (Ages 9-12)
- Olivia's Birds: Saving the Gulf by Olivia Bouler (Ages 7-10)
- Pale Male: Citizen Hawk of New York City by Janet Schulman (Ages 6-9)
- Parrots over Puerto Rico by Susan L. Roth (Ages 7-10)
- A Place for Birds by Melissa Stewart (Ages 6-9)
- The Tragic Tale of the Great Auk by Jan Thornhill (Ages 9-12)



Ecosystem

A community of living things in a shared environment

Habitat

The natural environment of an animal or plant

Marsh

A low, wet, muddy area, often thick with tall grasses





Pollinators

Animals that move or carry pollen to a plant, allowing the seeds to be fertilized

Watershed

The area of land drained by a river, river system, or lake



Introduction

Litter is unsightly, but the harm it does goes far beyond just looking like a mess. More than one million seabirds die each year from being tangled up in plastic trash or from eating it.

Ocean litter may come from anywhere because much of it is carried to the sea by rivers. Plastic waste also causes problems for birds on land. They may become entangled in it and can't fly, or they find small pieces of it and feed it to their young. Disposing of trash properly is a valuable way to help save the lives of birds and other wildlife.

Supplies

- Trash bags
- Rubber gloves

Get kids thinking ...

Ask kids to name products that they use regularly. **Ask:** How many of these products come in plastic packaging? How do they dispose of these products? Where do these products go once they have disposed of them?

Watch:

Facts on Plastic Pollution
https://youtu.be/npHUp_oQ-08

Trash that has not been properly recycled or thrown away is a problem for everyone. Discuss what ideas kids have for making litter and trash less of a problem.





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Plastics in the Ocean

© National Oceanic and Atmospheric Administration

Let's get started!

Step 1: Head out to a park or hiking trail or just take a walk with a purpose — looking for litter. Bring a trash bag and provide rubber gloves for everyone. If your area has a recycling program, you may want to have a bag specifically to carry items kids collect that can be recycled.

One person in your group (or more if it's a large group), can keep track of the number of pieces and type of trash that is picked up — plastic, paper, metal, and other kinds. Kids can rotate between being collectors and counters. When the walk is over, dispose of the trash and recyclables properly.

Step 2: After the walk, have kids tally up the pieces of trash from their notes and determine what type of material was the most commonly found. Have them list the top 10 trash items and what materials those items are made from. Compare their list to the items collected during the **Ocean Conservancy's 2019 International Coastal Cleanup** (see the next page).



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Step 3: Ask kids about the items they found: Do you use any of these products? Can you think of any substitutes that could be used?

Have kids create a list of substitutes for the plastic items they found or that were found during the International Coastal Cleanup. They can share it with others to encourage a "Reduce, Reuse, Recycle" mindset in their community.



Ocean Conservancy's 2019 International Coastal Cleanup

© Ocean Conservancy



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More litter clean-up activities

Seabird scientist Dr. Jennifer Lavers shares her poem which explores how plastic pollution is affecting seabirds and the forests they live in. Watch the video and then have kids write their own poetry that expresses their concerns about how humans are impacting birds and wildlife.

Ode to Seabirds (BLUE the Film)

https://vimeo.com/showcase/4987284/video/207595690

Go "Plirding" (picking up trash while birding)

https://www.talkinbirds.com/plirding

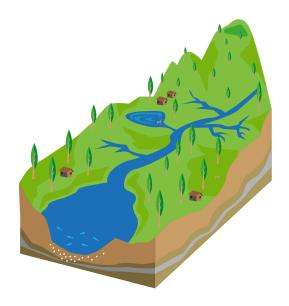




Activity 2: Build a Watershed

Introduction

Water is essential for all life, but it is particularly important as a habitat to the lives of many different kinds of birds — waterfowl, herons, rails, kingfishers, ospreys, shorebirds, and a host of perching birds that nest in or around marshes.



The land that drains precipitation into a body of water (such as a river) is its **watershed**. How the land is shaped — its hills, mountains, and valleys — determines how the water flows.

By building and experimenting with a model watershed, kids can see how polluted water may spread from a faraway source to threaten the habitat of many birds and other animals.

Supplies

- A large, shallow plastic bin or storage container and a large sheet of plastic, such as a light-colored plastic shower curtain or a large white garbage bag cut open. To do this activity outside on a larger scale, you can use two plastic tarps.
- Clean objects of different sizes from the recycling bin to create watershed topography, such as plastic containers, boxes, cans, and bottles. Natural items such as rocks and sticks can be used, too.
- Empty cans (to represent a mine and a factory)
- A spray bottle filled with water
- Confetti (made from hole-punched paper)
- Vegetable oil
- Pencil, paper, or journal for map making or recording observations



Activity 2: Build a Watershed

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Get kids thinking ...

Ask kids: How important is water to you? How many ways do you use it everyday? Where does your water come from? If something happened to your water, what would you do? Build a model watershed together to see how and where water flows.

Watch:

What Is a Watershed? https://youtu.be/QOrVotzBNto

Ask kids: How can birds help people understand more about watershed health?

Let's get started!

Step 1: Get kids to discuss what your model is going to look like. Ask: Will it have a lot of hills and valleys? Big mountains? A river or lake?

Step 2: Kids can stack and arrange the containers and other objects to form the terrain and then drape the plastic over them. Have them push the plastic down between the containers to create valleys and bodies of water. Remind them to have some terrain to add a mine and a factory.

Step 3: Once the model is ready, have kids use the spray bottle to "rain" over the hills and watch where water runs and rests. Have kids create a map and name the rivers and lakes that formed in their model. **Ask:** What kinds of birds would you think would be using the bodies of water? What people live here? Where do they work?

Step 4: Have kids add a mine and factory. At the site of these locations, show possible pollutants by adding confetti at the sites. Ask kids to predict what might happen to the pollutants if it "rains" again. Then have kids use the spray bottle to "rain" over the hills and watch where water runs, carries the pollution, and then rests.

Step 5: Discuss what happens. Ask: How will both birds and people be affected? Birds rely on healthy habitat. If it isn't healthy for birds, it isn't healthy for other wildlife or people.



Activity 2: Build a Watershed

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Step 6: Add additional confetti and small plastic caps filled with vegetable oil at the work sites. Have kids make a very heavy "rain." Discuss what happens.

Kids can learn more about the conditions of the watershed where you live. Have them start with this resource to learn more:

How's My Waterway? (Environmental Protection Agency) https://mywaterway.epa.gov/

More watershed activities

Migration Headache

https://migration.pwnet.org/pdf/Migration_Headache.pdf





Activity 3: Bird Detective

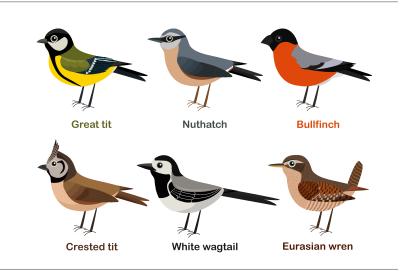
Introduction

Knowing and understanding birds and bird behavior can help us detect when something is wrong in our **ecosystems**. Kids focus on bird identification by reviewing the characteristics of the birds that are in their area while they practice their questioning and thinking skills.

Supplies

Basics

- Index cards
- Images of birds
- Scissors
- Glue
- Pen



Get kids thinking ...

Ask why it is important to be able to identify birds. What are some of the important field marks to look for when identifying a bird?

Let's get started!

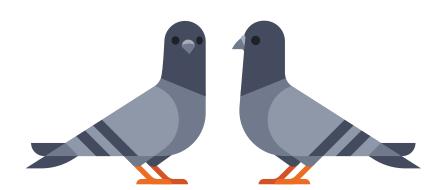
Step 1: Give each child an index card that includes a name of a bird that kids are familiar with or have seen on their Bird Walks. Every card should have a different bird. Help kids find an image of their bird that they can cut out and glue to their card. Tell kids to try not to let anyone else see which bird is on their card.

Activity 3: Bird Detective

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Step 2: Next, give kids 10–20 minutes to review and jot down facts about their bird in their Bird Journal. They should focus on:

- Size
- Color
- Markings
- Type of beak
- Type of foot
- Food
- Habitat
- Behavior



As kids research and review, get them thinking too about how to ask questions about their bird that can be answered "yes" or "no." For example in forming questions about the color of the bird, they should not ask "What color is the bird?" but "Does it have any red color?" Not, "How large is the bird?" but "Is the bird larger than a pigeon?"

Step 3: When everyone has finished their review, stack the cards image-side down. Then **gather kids into a circle to play!**

How to play:

The first player grabs a card from the top of the stack. Without looking at the front of the card, the player holds the card up on his or her forehead so that all the other players can see what bird is on the card, but the player cannot.

The player holding the card tries to figure out which bird is on the card by asking only yes/no questions to the other players. The idea is to gradually narrow down the potential options until the player with the card feels confident to name the bird. If the player can't guess the bird after asking 20 questions, others can offer clues to help make the identification.

Give everyone a chance to draw a card and ask questions!

Activity 3: Bird Detective

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More bird games

Play Jeop-Birdy

https://jeopardylabs.com/play/jeop-birdy-from-flying-wild

Bird Bingo (The Cornell Lab)

https://www.birds.cornell.edu/k12/bird-bingo

Celebrate Urban Birds (The Cornell Lab)

http://celebrateurbanbirds.org/wp-content/uploads/2016/11/CUBs-Kit-2016-Eng-1.pdf



Bird bingo card (© The Cornell Lab)



On this Bird Walk, have Bird Buddies look for favorite birds and new sightings, while also looking closely at where these birds are living.

Ask kids to examine their birding spot with these questions for their Bird Journal in mind:

- Are there native, pollinator-friendly plants that would help provide nutrition to birds?
- Are there plenty of trees and shrubs to help offer shelter and places to nest?
- Is there water nearby?
- Is there a visible human impact, such as litter?
- Are there established trails to keep humans from damaging plants?

Take time to discuss their answers while still on the Bird Walk. Ask kids to share their ideas about how to improve or increase local habitats for birds. Encourage them to come up with a plan and put it into action.

Helpful Resources:

Setting Up a Bluebird Trail (North American Bluebird Society)
http://www.nabluebirdsociety.org/PDF/NABSFactsheetGettingStarted.pdf

How to Create a Bird-Friendly Yard (Audubon) https://www.audubon.org/magazine/july-august-2013/how-create-bird-friendly-yard



Writing about Birds

Tickled about history



People used to write with feathers. Quill pens were made from birds' wing feathers (usually geese and used from the sixth century until the mid-19th century. Ask kids to imagine that they were the bird who provided the feather(s) for writing an important historical document, such as the Declaration of Independence, an invention idea from George Washington Carver or Benjamin Franklin, a letter from Frederick Douglass, or a play by Shakespeare. Have them do some research about the document and share how they feel — as the bird — about what its feathers are being used to pen.

Save the birds!

Have kids put together a colorful illustrated flier or a poster to share some ways their family and friends can help protect birds and their habitats. Share these questions with kids to provide topics for them to consider:

- What everyday objects are a hazard for birds?
- How can windows be made more bird-friendly?
- What pets are a danger to birds? How can pet owners help keep birds safe?
- What birds should not be pets?
- What pesticides are harmful to birds?
- What groups help to keep birds safe? How do you join these groups?
- What can you plant in your backyard that will help create bird habitats?
- How can you tell others about the problems birds face?

In making their flier or poster, kids should make their suggestions for saving birds simple and easy for others to do and help everyone understand how important birds are for the life of our planet.

Or make a door hanger:

http://projectbeak.org/teacher/pdf/birds_and_people_conservation_door_hangers.pdf



Writing about Birds

Where to bird

Hopefully kids have found good places to find and watch birds in your community. Ask them to help others do the same! Have them create a detailed map of one good birding spot. Remind them that someone reading their map will need to be able to find the location, so they should include street names and landmarks and give details about how to access the spot. They should also include a list and descriptions of birds likely to be seen, descriptions of habitats, and illustrations.

Flying off the page

Kids can have their words take flight when they create a concrete poem in the shape of a bird.

How to Write a Concrete Poem

https://www.poetry4kids.com/lessons/how-to-write-a-concrete-poem/

Kid-friendly Digital Media

Websites

Take Action for Planet Earth (Audubon Adventures) http://www.audubonadventures.org/TakeAction.htm

Roots and Shoots (Jane Goodall Institute)
https://www.rootsandshoots.org/for-youth/resources/

Get to Know Birds (Audubon Adventures)

http://www.audubonadventures.org/docs/Get-to-Know-Birds-Final.pdf
en español: http://www.audubonadventures.org/docs/ES_Get_to_Know_Birds.pdf

Ranger Rick: Birds (National Wildlife Federation) https://rangerrick.org/category/animals/birds/

Mapping Migraciones: Migration stories to see how people and birds intersect (Audubon) https://www.audubon.org/mapping-migraciones

Educational apps

Earth Rangers

https://www.earthrangers.com/

Nature Guides (National Wildlife Federation) https://www.nwf.org/natureguides

iNaturalist

https://www.inaturalist.org/

Nature's Notebook

https://www.usanpn.org/nn/mobile-app



Kid-friendly Digital Media

Podcasts

BirdNote: Birds and People

https://www.birdnote.org/explore/tune-kids-nature-resources-educators/shows-educa-

tors-topic

Laura Erickson's For the Birds

https://www.lauraerickson.com/radio/

Videos

Saving Birds from Windows (California Academy of Sciences) https://youtu.be/pyZDYkDUHSw

Seven Simple Actions to Help Birds (The Cornell Lab)

https://www.birds.cornell.edu/home/seven-simple-actions-to-help-birds/