Songbird Haiku

Haiku is a form of poetry that originated in Japan in the 1890s. It is usually written about nature. It does not rhyme and should be written in the present tense.

The seventeen-syllable poem has three lines. It follows this pattern:

Line 1: 5 syllables
Line 2: 7 syllables
Line 3: 5 syllables

Here is an example:

Black and white colors
Gentle creatures eating fish
Swimming with webbed feet

To get started writing a haiku about songbirds, write down some words and thoughts you have about them below.

Write your poem on the lines below.

_____

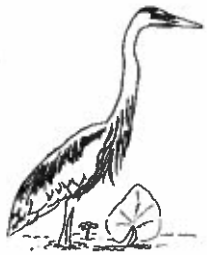
_____

_____

Check your spelling with a partner. When finished, write your poem on a piece of construction paper and draw an illustration.

Food to Fit the Bill

Subject: Science



Objectives: Students will investigate the diversity in bird beaks.

Materials:

- ☐ slotted spoon
- ☐ nutcracker
- ☐ medicine dropper
- ☐ sponge
- ☐ 4 sets of tongs
- ☐ 3 sets of tweezers
- ☐ potato peeler
- ☐ chopsticks
- ☐ straw
- ☐ strainer
- ☐ tablespoon
- ☐ scissors
- ☐ ladle
- ☐ turkey baster
- ☐ envelope
- ☐ Food to Fit the Bill Worksheet
- ☐ whole walnuts
- ☐ 5 pans or dishes
- ☐ Styrofoam cubes or peanuts
- ☐ tall, thin vase
- ☐ potting soil
- ☐ gummy worms
- ☐ food coloring for colored water
- ☐ popped corn
- ☐ loose-leaf tea or herbs
- ☐ rice grains
- ☐ bark or piece of Styrofoam
- ☐ molding clay
- ☐ stick or pencil
- ☐ bunch of grapes
- ☐ string
- ☐ illustrations of bird beaks

Procedure:

1. Prior to the lesson set up the following stations:
    - Station One: A tall, thin vase filled with colored water, medicine dropper and sponge.
    - Station Two: A dish of potting soil with gummy worms buried throughout, tongs and straw.
    - Station Three: Whole walnuts or other nuts spread throughout a pan, tweezers and nutcracker.
    - Station Four: A dish of water with one-inch Styrofoam cubes floating in shallow water, chopsticks and tongs.
    - Station Five: A dish of water with loose-leaf tea or herbs, strainer and slotted spoon.
    - Station Six: Popped popcorn, tongs and an envelope.
    - Station Seven: Rice grains tucked into the bark of a log (or Styrofoam), tweezers and tongs.
    - Station Eight: Molding clay wrapped around a stick, kids' scissors and a potato peeler.
    - Station Nine: A dish of water with one-inch Styrofoam cubes floating in shallow water, ladle and turkey baster.

- Station Ten: Bunch of grapes hanging from a string, tweezers and tablespoon.

2. Ask students to close their eyes and picture a bird. Go around the room and have students tell what bird they were visualizing. When all students have had the opportunity to share their bird, discuss diversity. There are so many types of birds, perhaps one student was thinking of a bird of prey, and another student was thinking of a hummingbird.
3. Bring adaptations into the discussion. Why are there so many different kinds of birds? What makes the birds so different?
4. Share some illustrations of different birds and discuss beaks and bills. Why are they so diverse? What purpose does the beak serve?
5. Refer to the different stations around the classroom.
6. Tell students that each station has items that represent a type of food eaten by various birds. Ask students if they can guess what each bird would have to do in order to reach their food supply. Does the shape of a bird's beak limit their food supply?

1) Nectar (colored water) needs to be sucked out. (hummingbird)
2) Worms (gummy worms) need to be dug and pulled out. (snipe & shore birds)
3) Seeds (walnuts) need to be cracked open. (sparrows & finches)
4) Fish (Styrofoam pieces) will probably need to be picked out of the water. (heron)
5) Fine bits of vegetation (tea or herbs) need to be strained out of the water. (ducks, geese and swans)
6) Flying insects (popcorn) need to be caught in wide openings. (swallows)
7) Small insects (rice) need to be picked and pried out of small crevices. (woodpeckers)
8) Meat (molding clay) needs to be pulled off of bones. (owls & hawks)
9) Fish (Styrofoam cubes) need to be scooped out of the water. (pelicans)
10) Fruit (grapes) need to be pulled off branches. (robin & cedar waxwing)

7. Pass out Food to Fit the Bill worksheet. Divide the students into ten equally numbered groups. Each group is sent to a station. Have students predict which "beak" will be the most efficient at picking up or getting at the "food" provided. Then allow a few minutes for the students to try the "beaks" and write down their answers. Have students guess a species of bird whose beak works like the demonstration. Rotate students around to each station.
8. After lab work is done, discuss with students their predictions, results and chosen bird species for each beak type.

Food to Fit the Bill

At each station, first predict which "beak" will work best to retrieve the "food" provided. Try each "beak" and write down which beak was most effective. Write the name of a bird that has that type of beak.

Station	Food	Prediction	Best "Beak"	Bird with this Type of Beak
1	Nectar (colored water in vase)			
2	Worms (gummy worms)			
3	Seeds (nuts)			
4	Fish (Styrofoam pieces)			
5	Fine bits of plants (tea or herbs)			
6	Flying insects (popcorn)			
7	Insects in wood (rice)			
8	Meat on bone (clay on stick)			
9	Fish (Styrofoam pieces)			
10	Fruit on a tree branch (bunch of grapes)			

Education Pathways

Great Possessions – An Awakening
By Seliesa Pembleton, Minnesota LEP Coordinator
Retyped by Lori Adams

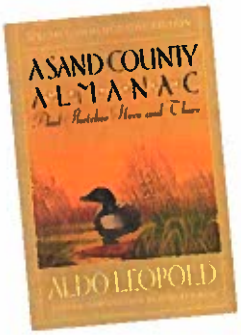
About the Activity
In his essay, Great Possessions, Aldo Leopold describes the succession of bird songs he hears at the Shack on a summer morning in Wisconsin. Participants will use mnemonic sounds to imitate bird songs as they "recreate" the dawn chorus described by Aldo Leopold.

Setting the Stage
Leopold arose early to enjoy his morning coffee and make note of the "tenants" on his farm. He recorded the time and sequence of songs as each species of bird began proclaiming its territory.

"This daily ceremony contrary to what you might suppose, begins with the utmost decorum. Who originally laid down its protocols I do not know. At 3:30 a.m., with such dignity as I can muster of a July morning, I step away from my cabin door, bearing in either hand my emblems of sovereignty, a coffee pot and a notebook. I seat myself on a bench, facing the white wake of the morning star. I set the pot beside me. I extract a cup from my shirt front, hoping none will notice its informal mode of transport. I get out my watch, pour coffee and lay notebook on knee. This is the cur for the proclamation to begin"
-Aldo Leopold from a Sand County Almanac, Great Possessions

Objectives

This activity can be used as a 10 minute workshop "energizer" to change pace and revitalize the group when energy levels drop – or it can become a lively way to introduce students to a study of birds.



Preparation
Below is a list of birds in the order that Leopold recorded. The initial time of singing and the mnemonic sound that can be used to mimic the bird call.

Record information for each bird species on a separate index card. Prepare multiples so there are enough for each participant to receive a card.

Place pictures and identification information on the backs of the cards and laminate for repeated use.

Materials
Large clock with moveable hands or digital times on cards
Bird name cards with mnemonic information and time
Binoculars (optional)
Bird Identification guide (optional)
Sand County Almanac (optional)

Procedure
Introduce the July essay, Great Possessions.

Lead a general discussion about bird song. Why do birds sing? When are birds most actively singing?

Randomly distribute the bird cards. One to each participant and ask them to find others in the group with the same bird.

Ask them to read the bird name and practice simulating the bird call using the mnemonic information printed on the card. (Mnemonics are words or phrases that help us remember. In this case, they can help us remember the rhythm of a bird call. Mnemonics are different than phonetics, which help us pronounce a word properly.)

Return to order and be seated.

Now, using your clock or digital time cards, indicate that the time is 3:30 a.m. The field sparrows should arise and begin singing. (To avoid that initial embarrassment, it's best to have at least two sparrows sing together.)

As you indicate the passage of time, additional birds join in.

All birds sing continually until full dawn chorus is achieved.

Time	Bird	Mnemonic Sound
3:35 a.m.	Field Sparrow	Tew….tew…tew, tew, tew, tew, tew
3:40 a.m.	American Robin	Cheerup, cherrily, cheerily
3:45 a.m.	Baltimore Oriole	Pidoo, tewdi tewdi yewdi tew tidew
3:50 a.m.	Indigo Bunting	Sweet sweet chew chew chew
4:00 a.m.	House Wren	churff chrff chrff chrff
4:05 a.m.	Rose breasted Grosbeak	chink chink chink
	Brown Thasher	What's Up What's Up (repeat 2 times)
	Yellow Warbler	sweet, sweet, sweet, I'm so sweet
4:10 a.m.	Eastern Bluebird	cheer, cheerful charmer
	White-eyed Vireo	chick-per-a-weeo-chick
	Red-Eyed Vireo	Look up over here, see-me-up-here
4:15 a.m.	Rufous-sided Towee	Drink your teee, drink your teee
	Northern Cardinal	What-cheer! What-cheer! What-cheer!

Results
In Leopold's words – a "bedlam" of sound – followed by laughter, smiles and increased awareness of bird songs. Who says learning can't be fun?

Conclusions
Many students – and adults – have never experienced the dawn chorus. One of the goals of the Leopold Education Project is to foster connections with the natural world. This activity may raise awareness of the songs that so often fall on deaf ears as we go about our busy lives.

Going a Step Further
Outdoor opportunities:
Leopold and his dog, Gus, made observations using many senses. Armed with sharp senses, hunt for the living things that are tenants on the schoolyard.

Establish a bird feeding station to observe and record data.

Plan a field trip to a local park, zoo or aviary to observe birds.

For information about the
Leopold Education Project
Go to: http://www.lep.org/

Evaluation
Keep nature journals. Use a bulletin board for data collection. Do observations increase over time and become more detailed? Are students more conscious of their environment and the other creatures that share it? Do they ask more questions about what they observe?

Western Bird Song Mnemonics

1. Song Sparrow	maids, maids, put on your tea kettle-lettle-lettle
2. American Robin	cheerily, cheerily, cheer, cheer-up
3. Bullock's Oriole	chuck, chuck, chuck-it-too-ee, zhew, zhew
4. Willow Flycatcher	fitz-bew, fitz-bew
5. Mourning Dove	hoooo-la-hoop, hoop, hoop
6. MacGillivray's Warbler	chiddle-chiddle-chiddle-turtle
7. Hermit Thrush	why don't you come? why don't you come? why don't you come to me?
8. Black-capped Chickadee	cheeseburger, cheeseburger
9. Spotted Towhee	che che che che zheeeeee
10. Cassin's Vireo	see me? here I am
11. Yellow Warbler	sweet, sweet, sweet, I'm so sweet
12. Western Wood Peewee	peeeer, peeeer

Teacher-Led ACTIVITY

Bird Behavior Scavenger Hunt

OVERVIEW

Following this bird-based version of a scavenger hunt, students observe various behaviors of birds.

CONTENT AREA

Science, Language Arts, Environmental Education

PEOPLE POWER

Any group size

SPACE REQUIREMENT

Outdoors

ACTIVITY TIME

One class period (can be extended), plus preparation

MATERIALS

- Observing Birds in the Wild worksheet, 1 copy per student, pair, or group
- Field guides
- Notebook
- Pencil
- Optional: Binoculars
- Optional: Tips for Successful Field Experiences (*see page 318*)

SPECIAL GUESTS

Contact a local member of the Audubon society, or the owner of a bird watching supply store to discuss methods and tips for observing birds. Have them specify reasons for specific behaviors.

TERMS TO KNOW

Behavior, flocking, roosting

Look at what that bird's doing!

Learning Objectives

Students will learn to identify different behavior patterns of birds and explain their function.

Background

Observing birds in the wild is fun but does take some patience and skill. The observer must be able to locate the bird, watch what it is doing, and try to identify it—all within a few moments. This activity concentrates on looking for different behaviors exhibited by songbirds.

Songbirds may be perching on a branch, singing to attract mates, feeding their young, searching for food on the ground, preening their feathers, or performing any number of other ***behaviors***. A bird's behavior may result from a particular adaptation that helps the bird survive. For example, ***flocking*** is a behavioral adaptation that helps birds in several ways. It can protect a bird from a predator by creating safety in numbers—most flocks can more easily drive away a predator as a group than as individuals. Also, birds located at the center of the flock are especially safe, as the surrounding birds act as a protective barrier. Also, by having more birds available to warn against predators, the majority of birds are able to spend more time feeding and less time "watching out."

Bird behaviors are as plentiful and varied as the physical adaptations found among the many different types of birds. A behavior may be specific to one species or found in many species. For example, a White-breasted Nuthatch can walk down a tree head-first—an unusual behavior for almost any type of bird. On the other hand, many bird species have developed the successful behavior of ***roosting*** communally, which involves banding together for shelter and protection from predators, primarily during sleep. Roosting enables group members to stay warm at night, which also helps conserve food

resources. In addition, some members of the flock remain alert at all times, which provides further protection against predators. Also, the roosting flock shares information about available food resources when leaving the roost each day.

Knowing the behavior patterns of birds and of different species of birds is fundamental to our understanding of songbirds and can help in their conservation. Before going out to observe birds in an area, think about where birds may be found and what time birds are most active. Songbirds tend to be very active in the morning and evening.

Getting Ready

1. In this exercise, students are looking for birds exhibiting different types of behavior, like flying, feeding, or singing. Review the Tips for Successful Field Experiences (on page 318).
2. Choose an area where you can take students out to conduct the search.

Taking Flight!

1. Take students to the site where they'll conduct their search. Students can work individually, in pairs, or in groups.
2. After spotting a behavior, students can place a check in the space provided on the worksheet. They should try to identify the species if possible.
3. Return to the classroom and summarize the information. Have students discuss why a particular behavior may be a benefit or detriment to a bird. Consider the following questions: Were any behaviors not observed? Why? Did any single species seem to be exhibiting a particularly distinctive behavior? Why?

Assessment

Ask students to discuss the following questions:

1. In pairs, act out the behavior of the bird you observed and have the class guess what you are doing and why. Explain to the class how these behaviors may benefit songbirds.
2. A bird's behavior can sometimes help in identifying the bird. List one behavior you observed that helped identify the bird and explain why.

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ZOOM IN, ZOOM OUT!

- Do this activity during different seasons and compare the findings.
- Have students choose a species of bird and record its behavior patterns at different times of day over a time period of one or more weeks.
- Conduct this activity in more than one place, such as different habitats or parts of the schoolyard, at the same time. Compare results.
- Have students write a poem or a story about what they observed.

Observing birds is fun, but takes some patience and skill.

IN STEP WITH SCIENCE STANDARDS

Standard A: Science as Inquiry

- Abilities necessary to do scientific inquiry
- Understandings about scientific inquiry

Standard C: Life Science

- Regulation and behavior
- Populations and ecosystems

Observing Birds in the Wild Worksheet

Look for the behaviors listed below. Check those you find, then list the bird's specific location and habitat. If you can, identify the species. If not, list some identifying features.

Check	Behavior Items	Specific Location and Habitat	Identification
❑	Singing or calling (Mostly males.)		
❑	Preening (Sometimes looks as if it is nibbling, tugging, or combing its feathers with its beak.)		
❑	Bathing in water		
❑	Taking a dust bath		
❑	Soaring		
❑	Flying (Its wings are beating.)		
❑	Perched on a limb or branch		
❑	Hovering in mid-air (wings beating rapidly.)		
❑	Swimming		
❑	Walking or hopping on the ground		
❑	Diving or tipping up its rump in the water		
❑	Standing on the ground		
❑	Wading in water		
❑	Feeding		
❑	Flying with a worm or insect in its mouth		
❑	Flying with or gathering twigs, grasses, leaves, string, etc.		
❑	Perched on the edge of its nest		
❑	Climbing a trunk or branch		
❑	Hanging upside down from a branch		
❑	Chiseling into the side of a tree or branch		
❑	Perching on a wire, fence post, tree snag, over an open area		
❑	A group of birds perching together on a phone/electrical wire		
❑	A flock of small birds chasing a large bird		
❑	A group of birds flocking together		
❑	Other (List behavior)		