



INTRODUCTION: WHAT MAKES A BIRD A BIRD?

Grades: K-2

Objectives: Students will know and be able to:

- Describe how birds are living things because they grow, reproduce, and need food, air, shelter, and water
- Compare a bird's life cycle to another animal's life cycle
- Name characteristics used to identify birds (color, size, beak type, song, etc.)
- Describe three physical characteristics of birds in general (they have feathers, lay eggs, most have hollow bones, etc.)
- Describe two adaptations of birds - one physical and one behavioral
- Create a field guide page for one Alaska bird

Adapted from the Massachusetts Audubon Society by



Lesson One - Introduction to Birds

Through presentations of story, images, puppet show, and prompted discussions, students will be taught to identify the main physical traits and characteristic behaviors and adaptations of birds. By manipulating feathers, students will be introduced to these unique body parts which distinguish birds from other animal groups and enable them to survive. By participating in movement and role-playing activities, students will attempt to mimic and experience some of the physiological traits and behaviors of birds. By completing a worksheet, students will learn the distinctive physical and some behavioral characteristics of one or more species of common schoolyard birds. Students will reinforce that understanding by presenting information to the class and will learn about other birds commonly seen in the schoolyard by listening to other students' presentations.

Materials and Resources:

- Various printed images of birds and other animals, from calendars, posters, or magazines
- Small life-like stuffed (toy) birds
- Bird images (see resources)
- Feathers – large clean ones from a craft store are fine, one for each student
- Magnifying lenses, optional
- A storybook to read aloud. One suggestion is "All the Birds in the World" by David Opie https://www.peterpauper.com/product_info.php?products_id=6665
- For background reference: "Guide to the Birds of Alaska" published by Audubon Alaska: <https://ak.audubon.org/birds/guide-birds-alaska-6th-edition-0>

Vocabulary

Beak

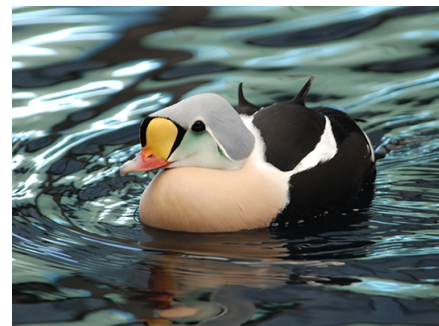
Bill

Feather

Preening

Wings

Flight



Procedures

1. Read an Introductory Story

Read a storybook aloud and have a brief discussion about what students know about birds (from the story or from their own experiences.) One suggestion is *All the Birds in the World* by David Opie.

2. Physical characteristics of birds

Show various bird images and discuss what students notice about the birds. Prompt the students to name the physiological characteristics birds share: feathers, bills/beaks, wings.

3. Feathers

Give a few different feathers to each student or small group of students. Have them spend a few minutes examining the feathers. Explain what feathers do for birds:

- insulate birds from water and cold temperatures
- may be plucked to line the nest and provide insulation to the eggs and young
- individual feathers in the wings and tail play important roles in controlling flight
- some species have a crest of feathers on their heads or other “decorations” to identify their species or attract a mate
- the color patterns of feathers serve as camouflage
- some feathers are also important for display purposes during the nesting season (bright colors, for example)

Have the students look at each feather using magnifying lenses if available. The shaft of the feather is like the trunk of a tree with the barbs of the vane coming off of it like branches. Each barb is lined with barbules that hook to other barbules. Barbules work a bit like Velcro. Students can try splitting the feather’s barbs apart, and then try to comb them back into place using a pencil as a “beak.” Birds constantly clean and repair their feathers; this is called “preening.”

Activity Set: Try Being a Bird

Materials and Resources

- Puppet show on birdsong – from Hands-on Nature
- Various printed images of birds and other animals, from calendars, posters, or magazines
- Images from Alaskan Bird Image Pack

Vocabulary

Wingspan

Flight

Bird song

Territory

Procedures

1. Physical characteristics and distinctive behaviors of birds

Show various bird images. Prompt the students to recall the physical characteristics birds share: feathers, bills/beaks, wings. Through a prompted discussion, have students try to identify the distinctive behaviors of birds – singing, flight, etc.

2. Birdsong Puppet Show (from Hands-on Nature) This great book can be purchased at shop.vinsweb.org/browse.cfm/4,18.html

3. Have students try being birds:

- Stand on one leg like a heron
- Sing like a bird – try to whistle, hoot, quack, squawk, and chirp
- Bird vision – test how well students can read a message or word taped to a classroom wall. Raptors can see up to 8 times more clearly than the sharpest human eye. A golden eagle can see a rabbit from a mile away.
- Spread your wings – measure the outstretched arms of the students to determine their wingspan and then show wingspan of an albatross (12 feet) or condor (11 feet) for comparison.
- Fly like a bird - soar like a hawk, fly like a songbird, flap their wings really fast like a hummingbird, test their endurance and see how long they can flap their wings

Bird Song Puppet Show

Characters: Rocky Raccoon
Mr. Bird - brightly colored
Ms. Bird - same shape, duller coloration

Prop: Sign saying: Next day 5:00 AM

Mr. Bird: Twee Tweedle Dee, Titter Tatter Teer
Twee Tweedle Dee, Titter Tatter Teer

Rocky Raccoon: (waking up) Uh, Mr. Bird, Mr. Bird. You have been singing that same song with those same words over and over and over again since 5:00 this morning. No offense, but it's *driving me crazy!* If you insist upon singing for so long, can't you at least change the song?

Mr. Bird: Change the song! I can't just change my song. It'd be like asking you to start barking like a dog.

Rocky: What do you mean? I hear lots of different bird songs.

Mr. Bird: Yes, but they're coming from lots of different birds. Each different kind of bird has a different special song of its own and mine is Twee Tweedle Dee, Titter Tatter Teer, Twee Tweedle Dee . . .

Rocky: Yes, yes I know what your song is. Ok, I accept the fact that you only sing one song. But *why* do you have to keep *singing* it?

Mr. Bird: Because I'm looking for a mate, a partner, a Mrs. Bird . . .

Rocky: Oh brother, I should have known, the same old story.

Mr. Bird: That's what my song means:
Twee Tweedle Dee
Come see me
Titter Tatter Teer
I'd like you here
(flies off singing)

Rocky: Twee Tweedle Dee, Come see me. I think this bird is going to drive me crazy. I think it's *driven* me crazy. I'm starting to talk to myself. Well, I think the only way I'll get that bird to stop singing is to find him a mate. Here goes: Twee Tweedle Dee, Come see me. Titter Tatter Teer, I'd like you here. Come on audience, I could use some help. Twee Tweedle Dee, Come see me. (Ms. Bird appears)

Ms. Bird: Why I could have sworn I heard a Twee Tweedle Dee, Titter Tatter Teer coming from here. But I don't see any bird like me around. (starts to leave)

Rocky: Don't leave yet, Ms. Bird. If you go right by that tree over there, I'm sure you'll find yourself a handsome mate.

Ms. Bird: Thanks for the advice, Rocky. (leaves)

Rocky: Oh, I think this is going to work. Maybe I'll be able to sleep late now. (Mr. and Ms. Bird seen flying around together) It looks good. It looks very good! Thank you so much for the help audience. No more 5:00 mornings for me. (lies down, snores a little; sign saying Next Day 5 AM appears)

Mr. Bird: Twee Tweedle Dee, Titter Tatter Teer. (repeat)

Rocky: (waking up) I don't believe it. He's still singing at 5:00 in the morning, Mr. Bird. What is going on? I found you a mate.

Mr. Bird: Yes, but my song is not only to find me a mate.

Rocky: But you told me it meant Twee Tweedle Dee. Come see me. Titter, Tatter Teer. I'd like you here. Isn't that right audience? (pause)

Mr. Bird: Yes, but it also means:
Twee Tweedle Dee
Stay away from me
Titter Tatter Teer
Don't come near

Rocky: One song means two different things?

Mr. Bird: You said it. To a Ms. Bird it means one thing and to a Mr. Bird it means something else.

Rocky: But why are you trying to keep birds away?

Mr. Bird: Because this is *my* territory, *my* home. Mrs. Bird and I are going to build a nest and raise young here. My song will keep other birds like me away.

Rocky: Have you ever considered No Trespassing signs?

Mr. Bird: I'd rather sing.

Rocky: So when spring is over and Mrs. Bird and you have built your nest, raised your young, and we're well into summer, *then* will you be quiet?

Mr. Bird: Well, not completely quiet. I won't be singing my Twee Tweedle Dee so much, but I'll still be making my short calls to warn others of danger and tell them where there's food.

Rocky: As long as there won't be *quite* so much Twee Tweedle Deeing.

Mr. Bird: Speaking of which, I better get singing. Twee Tweedle Dee, Titter, Tatter, Teer. Bye, bye everyone. Twee Tweedle Dee . . .

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Activity Set: Get to know a bird

Materials and Resources

- Images from Alaska Bird Image Pack
- Any field guide to birds that includes Alaska
- Bird worksheets – one copy for each student or each small group of students
- Info about specific bird species –
 - www.allaboutbirds.org
 - https://www.alaskasealife.org/aslc_resident_species?cat=2
 - <https://www.adfg.alaska.gov/index.cfm?adfg=animals.listbirds>
- For background reference: “Guide to the Birds of Alaska” published by Audubon Alaska: <https://ak.audubon.org/birds/guide-birds-alaska-6th-edition-0>

Vocabulary

Species
Coloration
Camouflage
Adaptation
Nest
Habitat
Migration
Nocturnal
Diurnal



Procedures

1. Focus on one bird

From the field sheet of Alaskan birds, have each student or small group of students select one bird to study. Instruct the students to start their bird worksheet, trying to accurately color the male and female birds and eggs so they match the printed images available for reference.

2. Learn about your bird

Using a field guide, websites, books, or other reference materials, have students look up information about the bird species they are studying and complete the worksheet

- What it eats
- Its habitat (in the woods, near the ocean, etc.)
- Where it lives (nests on the ground, in a tree cavity, on a building, on a branch, for example)
- If it lives in Alaska year-round or if it migrates to live elsewhere in winter.

3. Share what you have learned

Have each student present their completed worksheet and share some of the information they have learned about the bird they chose. Students can describe how the female birds and eggs are camouflaged.

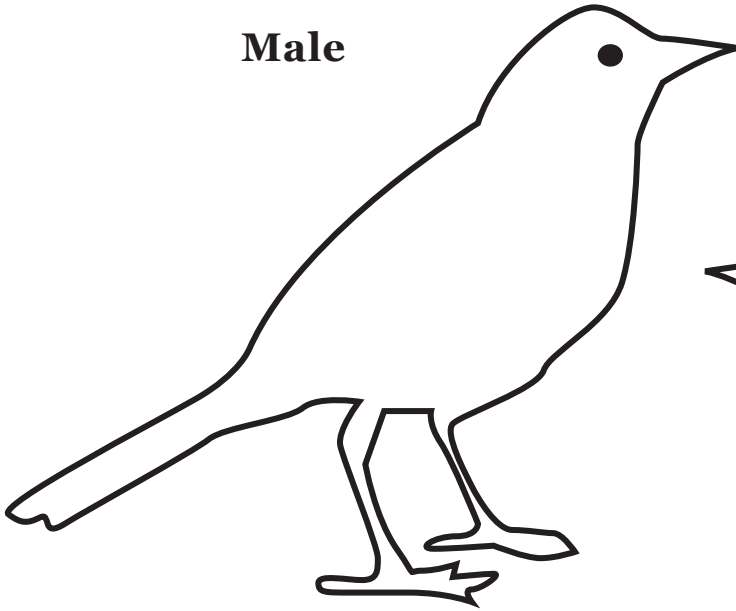


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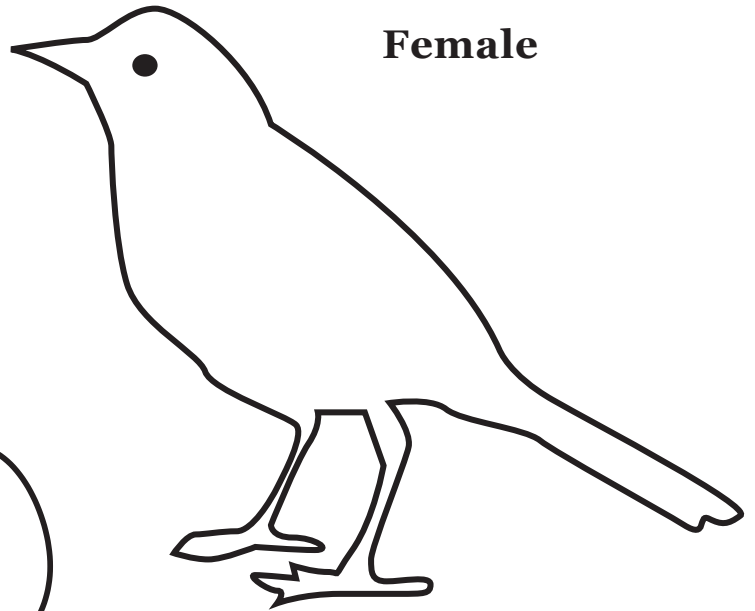
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Bird Worksheet

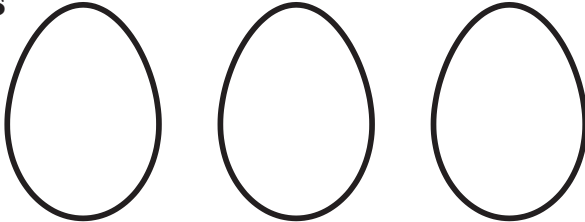
Male



Female



Eggs



Name of Bird _____

Habitat _____

What kind of nest it builds _____

Where does this bird spend the winter? _____

Food this bird eats _____

Something interesting about this bird _____

