



Bird Bites Activity

Objective:

Students will use a variety of tools and materials to learn how the size and shape of a bird's beak determines the type of food it gathers. Students will learn about some of Pennsylvania's native birds.

Materials:

- Printed bird photos (included with this activity)
- 4 Trays (to contain dry materials)
- 3 Dish pans (to contain water)
- Turkey baster
- Safety scissors
- 2 Chopsticks (paint brushes or unsharpened wooden pencils)
- Tweezers (regular)
- Over-sized tweezers
- Slotted spoon
- Packing peanuts
- Artificial leaves or foam sheets cut into ½ inch pieces
- Binder clips (different sizes)
- Small pom poms
- Rubber bands (cut to varying lengths)
- Play sand (enough to bury cut up pieces of rubber bands)
- Play dough
- Clay
- Water
- Yellow food coloring to color water (optional)





Bird Bites Activity



Procedure:

Prior to the activity:

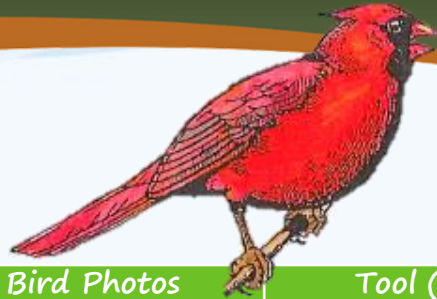
1. Print 1 copy of each bird photos included at the end of this activity. **Tip:** laminate photos to help protect them and make them last longer.
2. Set up 7 bird feeding stations using the table on slide 3 and the following instructions:
 - **Hummingbird Station:** Place a plastic vase in the middle of a dish pan and fill it halfway up with water. You can add a couple of drops of yellow food coloring to the water to make it resemble nectar. Place the hummingbird and turkey baster next to the dish pan.
 - **Raptor Station:** place clay around a craft stick-thick enough to cut chunks off and place it on a tray. Place the photo of the red-tailed hawk and safety scissors next to the tray.
 - **Wader Station:** Add 4" of water to a dish pan and add a handful of packing peanuts to the water. Place the great blue heron photo and chopsticks next to the bin.
 - **Duck Station:** Add 2" of water to a dish pan and add a handful of artificial leaves or foam sheets cut to ½" chunks and place in the water. Place the photo of the American black duck and slotted spoon next to the pan.
 - **Woodpecker Station:** Place a 4" "log" of play dough with pony bead pushed into the log on all sides and place on a tray. Place a photo of the pileated woodpecker and a pair of tweezers next to the tray.
 - **Finch Station:** Place a handful of small pop-poms on a tray. Place the photo of the American goldfinch and different size binder clips next to the tray.
 - **Shorebird Station:** Place cut up rubber bands in a dish pan and add about 2" of play sand to cover the rubber bands. Place a photo of the American Woodcock and over-size tweezers next to the bin.

After setup, begin the activity

1. Ask students "what makes a bird a bird?". Use the information on slide 4 to explain the characteristics of a bird
2. Then, use the information on slide 5 to discuss the different forms and functions of bird beaks.
3. Go to each station and show the picture of the bird, the tool that represents its beak, and the function of its beak (use the table on slide 3 for each bird beak tool and its function).
4. Tell students it's their turn to visit each station. Explain any specific safety and other rules to be followed at each station. Have students look closely at the photo, paying attention to the size and shape of the beak. Then they should use the tool to gather food to gain an understanding of the function of the beak.
5. After each student had a chance to visit each station, lead a discussion about what they learned. Some sample discussion questions include: Which beak is best for tearing meat? Would a woodcock beak be good at cracking seeds?



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Groups of Birds	Bird Photos	Tool (beak) / Material (food)	Function Of The Beak
Hummingbirds	Ruby-throated Hummingbird	Turkey baster/ water (yellow food coloring optional)	Extracting nectar
Raptors	Red-tailed hawk	Scissors/ craft stick wrapped thickly with clay	Ripping and tearing meat
Waders	Great blue Heron	Chopsticks/ packing peanuts	Spearing fish
Ducks	American black duck	Slotted spoon/artificial leaves or foam sheets cut to 1/2" chunks	Scooping & filtering aquatic plants & organisms
Woodpeckers	Pileated Woodpecker	Tweezers/ play dough shaped into a "log" with pony beads stuck in it on all sides	Excavating insects from bark
Finches	American goldfinch	Binder clips (different sizes)/small pom poms	Crushing plant seeds
Shorebirds	American Woodcock	Over-size tweezers/ cut up rubber bands buried in play sand	Probing for worms





What Makes a Bird, a Bird?

Birds

- Have feathers & wings
- Are warm-blooded
- Have a backbone
- Breathe air
- Lay eggs
- Have a beak/bill and no teeth
- Have hollow bones
- Have a four-chambered heart





Bird Beaks & Bills



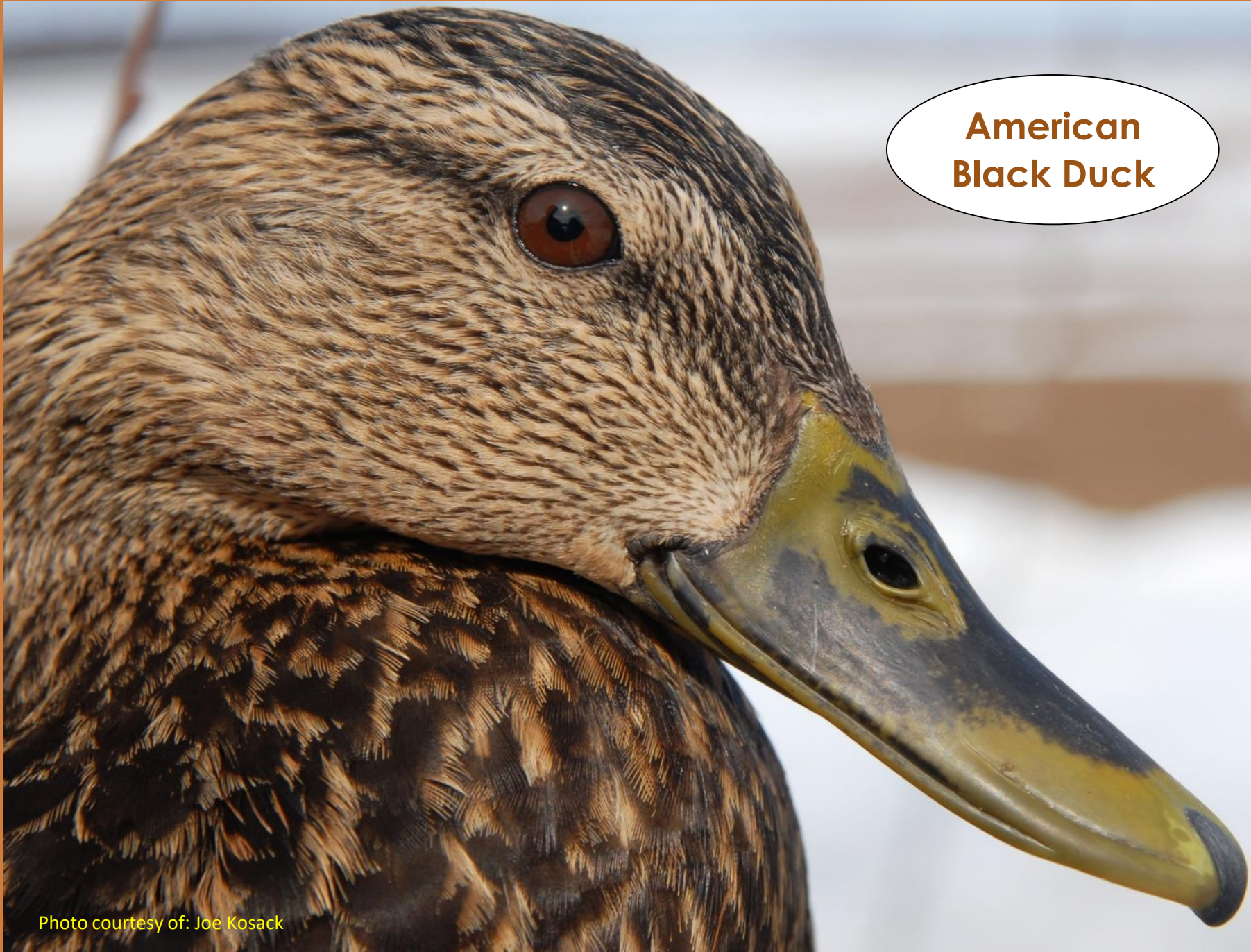
- Beak and bill mean the same thing
- A bird's beak/bill is used for things such as building a nest, feeding their young, gathering nesting materials, building nests, preening their feathers, and eating
- The shape and size of each bird's beak/bill is specific for the type of food they gather.



**American
Black Duck**

The shape and size of a bird's bill/ beak is specific for the type of food it gathers.

Photo courtesy of: Joe Kosack



Finches: Crack Seeds

**American
Goldfinch**



Photo courtesy of: Jacob Dingel

The shape and size of a bird's bill/ beak is specific for the type of food it gathers.

Shorebirds: Probe Soil and Mud for Worms

**American
Woodcock**

The shape and size of a bird's bill/ beak is specific for the type of food it gathers.

Photo courtesy of: Jacob Dingel

Waders: Spear Fish

The shape and size of a bird's bill/ beak is specific for the type of food it gathers.



**Great Blue
Heron**

Photo courtesy of: Jacob Dingel

Hummingbirds: Extract Nectar

**Ruby-throated
Hummingbird**



The shape and size of a bird's bill/ beak is specific for the type of food it gathers.

Photo courtesy of: Jacob Dingel

Woodpeckers: Peck for Insects

The shape and size of a bird's bill/ beak is specific for the type of food it gathers.

**Pileated
Woodpecker**

Photo courtesy of: Jacob Dingel



Raptors: Rip and Tear Meat

The shape and size of a bird's bill/ beak is specific for the type of food it gathers.

**Red-tailed
Hawk**

Photo courtesy of: Mandy Marconi

