



Beaks!

Beaks! by Sneed B. Collard, III

Topic: Adaptation

Description:

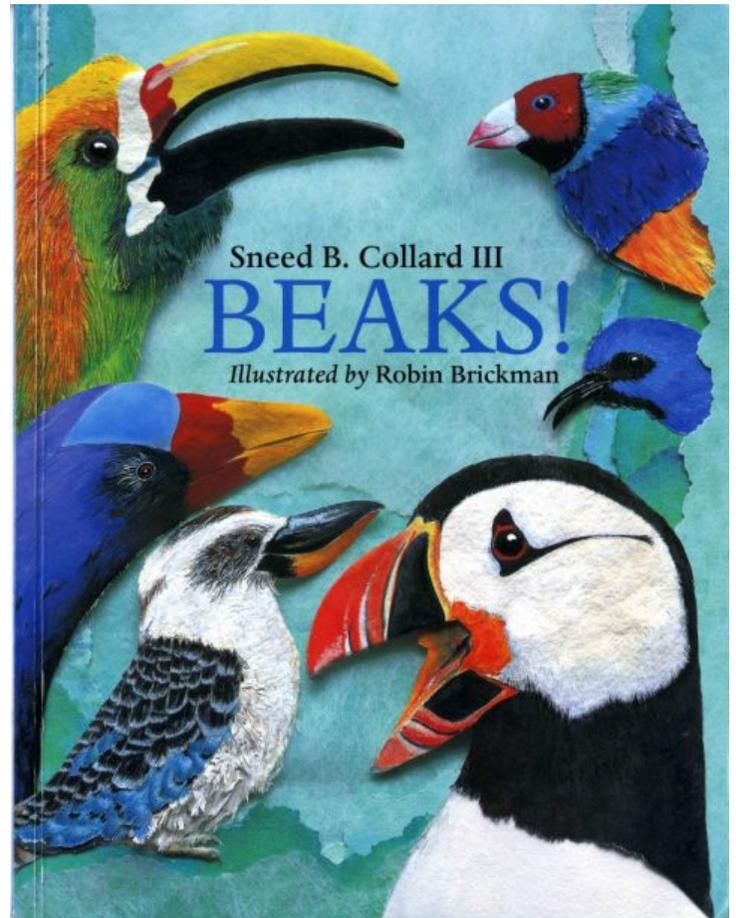
Beaks! is an excellent introduction for children to the wide variety of bird beaks and their many uses. This picture book looks at the amazing adaptations of various beaks, their different qualities, and specific uses. It includes facts about beaks, the different ways birds use their beaks, and how the shape and size of their beaks relates to what birds eat.

The author's writing style is straightforward and clear. This book is well written and students will enjoy hearing it read aloud. The level of information included also makes it a great source for student research on the topic of *Beaks!*

[Buy this book on Amazon](#)

Activity 1: Beak Adaptations **– Eat Like a Bird**

Explore how bird beaks are adapted for eating different foods with the fifth lesson in our [Feathered Friends](#) resource (available as a free download). In this lesson, students explore the concept of which beaks are best for what food. They learn that birds' beaks come in many different sizes and shapes according to their specialized function for that species of bird.



Activity 2: Look for Beaks

Go outside and observe birds. Have students pay particular attention to the beaks of any birds they see. Ask students to draw or list the characteristics of the beaks of two different birds that they see. *(Keep in mind, the time of year you take your students out to look for birds will determine the number and kinds of birds found in your area. This is due to migration or on nesting behaviors – birds on nests are harder to find.)*

When you're back inside, discuss the observations with students, asking:

- Are the beaks different? How so?
- What were the birds doing?
- How might their behavior differ because of the beaks they have?

Help students explore the beak shapes of common birds found in your area, for example woodpeckers, sparrows, finches, shorebirds, herons, raptors, ducks, warblers, and wrens. Use field guides (books or online) to look at the beak similarities within each group. For example, what are woodpeckers' beaks like? Sparrows' beaks? What else do the birds belonging to these groups have in common? (Their coloring? Wing size and shape? Habitat?) See this article, [Teaching Bird ID](#), for further information about exploring bird groups.

Activity 3: I'll Have What You're Having

Ask each child to choose a beak to draw from Collard's book. Have them label it with the species of bird, and a description of what that bird eats. Challenge students to find other bird species with a similar diet. Then, compare the beaks of all these birds. What about the beaks is the same? What is different? Next, compare the habitats of these birds. Even though they eat a similar diet, are their habitats the same? If not, how are they different. Where in the habitat does each species find its food?

Activity 4: What's on the Menu?

Find pictures to cut out (online or in magazines) of different kinds of birds. Be sure each bird's beak is easy to see and that the birds differ in what they eat. Here is a short list of the kind of birds to include and some examples of each:

- **Hummingbirds:** birds that have long, hollow beaks that protect the bird's tongue; they use their tongue to slurp up nectar – Ruby-throated and Anna's,
- **Hérons and egrets:** birds that hunt for fish in shallow water have long, sharp beaks that they use to catch or spear fish – Great Blue Heron and Snowy Egret,
- **Birds of prey (raptors):** birds that eat other animals have strong, sharp beaks to tear the meat into pieces small enough to swallow – Great Horned Owl, Bald Eagle, and Cooper's Hawk,
- **Shorebirds:** birds with very long, thin beaks that they use to probe for food in the sand or mud – Spotted Sandpiper, American Woodcock, and Wilson's Snipe,
- **Woodpeckers:** birds that drill for food under bark have strong beaks which are sturdy and taper at the tip, forming a chisel for pecking holes in trees – Downy, Hairy, and Pileated,
- **Seed eaters:** birds that have short, strong, triangular-shaped bills that can crack open seeds – Northern Cardinal, American Goldfinch, Song Sparrow, White-throated Sparrow, and Rose-breasted Grosbeak,
- **Aerial insectivores:** birds that feed while in flight, catching and eating airborne insects have beaks that are very short and flat; their mouths open very wide and act like nets to trap flying bugs – Tree and Barn Swallow, Common Nighthawk, Purple Martin, and Chimney Swift,
- **Flamingos and some ducks (only certain ducks are filter feeders.):** birds that have beaks that act like strainers; they filter their food, plants, seeds, and small animals, from the water using the comb-like edge of their beak; water enters at the tip of the beak and exits out the sides – Flamingo, Mallard, and Blue-winged Teal,
- **Warblers and thrushes:** birds with sharp, pointed beaks; used to pick insects from leaves, logs, and twigs – Yellow Warbler, Common Yellow throat, American Robin, Wood Thrush, and Ovenbird.

Glue the pictures to an index card or card stock and give them to students or groups of students.

Ask:

- What do you think this bird eats?
- What makes you think that?
- What bird do you think this is?

Then, have students use field guides and/or [All About Birds](#), the Lab's online bird guide, to determine what species their bird is and to help them make a list of how and what it eats. Have students find classmates whose birds have a similar diet. Then, compare and contrast beak design and the habitat of the birds.

Activity 5: The Right Tool for the Job

As a follow-up to "What's on the Menu?" Gather a number of common household objects: an eyedropper, chopsticks, a nutcracker or blunt-nose pliers, a small strainer, a letter-sized envelope with the flap removed (pushing the sides of the envelope together makes the opening gape wide like the mouth of an aerial insectivore – nighthawk, etc.), long tongs, a hammer and nail, tweezers or forceps, and a plastic knife and fork. Pass out the photos from the "What's on the Menu?" activity. Have students match the beak in the picture to the tool to which it most closely corresponds. Discuss with the group their reasons for making the matches they did. (*Possible matches, but accept all reasonable explanations: 1. eyedropper – hummingbird, 2. long tongs – herons and egrets, 3. plastic knife and fork – birds of prey (raptors), 4. chopsticks – shorebird, 5. hammer and nail – woodpeckers, 6. nutcracker or blunt-nose pliers – seed eaters, 7. envelope – aerial insectivore, 8. strainer – Flamingos and some ducks, and 9. tweezers or forceps – warblers and thrushes.*)

Going further:

Watch Beaks – Play these [select videos](#) from the Macaulay Library to explore the birds and the beaks that were introduced in the book. Then, consider exploring other birds and their beaks. Some resources for exploring bird species include [AllAboutBirds.org](#), [Neotropical Birds online](#), and the [Macaulay Library](#).

Project FeederWatch – Explore common birds and how they use their beaks. Put up a bird feeder where students can observe it (preferably from a classroom window). Then, join the Lab's [Project FeederWatch](#) and become citizen scientists. Access all the information about what birds eat which foods using resources available on the Project FeederWatch site. Then, look further into the size and shape of feeder birds' beaks and the type of food they eat.

Other web resources: