



Eating at Home

Introduction

A habitat is what we call home. It's where we live. Like any home, it has to provide food, water, shelter, and space. Birds also need habitats with all these elements. Bird species have adapted to live in their habitats and to obtain the things they need in order to survive.

The beaks, feet, and legs of many birds are adapted to gather specific things in their environment. Help kids explore some of the adaptations that birds have made to find food in their habitats, especially birds' beaks and how they are adapted to getting particular foods.



Supplies

- Tall vase
- A pan deep enough to hold 3 inches of mud
- Large mixing bowl
- A tray about 12 inches x 6 inches
- 6 paper drinking straws (whole) plus several more cut up into 1-inch pieces
- 3 large slotted spoons
- Tea strainers or sink strainers
- 2 sets of chopsticks
- Needle-nose pliers
- Tweezers
- 2 tongs
- Packing peanuts or small pieces of balsa wood
- Dirt to cover the tray and to make 3 inches of mud in the pan
- Bag of tiny styrofoam balls or pom poms
- Rubber bands, cut into "worms"





Start with a Book: Bird Buddies Toolkit

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Get kids thinking ...

Start by asking a couple of questions: What is a habitat? What is important to have in a habitat? What does your own habitat look like? (If you like, kids could draw a picture of their own habitat in their journal.) Talk about the difference between the essentials in their habitat and the nonessentials.



Have kids compare their habitats with those of birds, emphasizing the need for food, water, shelter, and space. Ask questions about each need — e.g., what is your source of food? What are the birds' sources of food? Help kids make comparisons between their needs and birds' needs and how these needs are met.

To have needs met and to survive, birds and other species have to be well adapted to their environment. Although all birds have beaks, these beaks vary in size, shape, and function. Many are adapted to particular habitats and the foods they eat. So in part, their beaks determine where birds will live, since they must find food nearby every day.

Let's get started!

Show kids these pictures of a **hummingbird**, **snipe**, **grosbeak**, **pelican**, and **robin** or some photos from a field guide. Get kids to focus on the beaks of each bird and guess what the beak could be used for and what the bird might eat. Explain how to rotate through 5 habitat stations to discover how the shape of a bird's beak is adapted for eating foods particular to where it lives.





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HABITAT STATION SET UP

STEP 1: Gather tools that have capabilities similar to those accomplished by birds' beaks, e.g., needle-nose pliers, tongs, straws, chopsticks, slotted spoon, and nutcrackers and set up five stations:

Woodland Edge Station: provide a tall vase full of water (nectar) with a slotted spoon, tweezers, and drinking straws

Marsh Station: provide a pan with about 3 inches of mud with cut up straws buried in the mud with a slotted spoon and chopsticks

Lawn Station: provide a dirt-filled tray with cut up rubber bands, needle-nose pliers, drinking straw, and a tea strainer

Lake Station: provide a half-full large mixing bowl of water with tiny styrofoam balls floating on it, a slotted spoon, straw, and tongs

Forest Station: provide packing peanuts or balsa wood, tongs, and chopsticks

STEP 2: Next, kids should rotate to each station and try to pick up the "food" with each of the tools provided. (Note: Straws are not for sipping! Have kids use the straws by placing them in the water then putting their finger over the opening.)

STEP 3: At each station, have them test each tool and note their results in retrieving each type of "food."

STEP 4: After they have visited every station, ask them to share their ideas about which "beak" was best to get the food in each "habitat." Then have kids identify which of the birds they saw earlier have beaks similar to the kinds of tools they used to collect "food."

IDENTIFYING BEAKS, FOOD, AND HABITATS

Woodland Edge Station: Water = nectar. Straw = hummingbird beak

Marsh Station: Cut up straws = insects and larvae. Chopsticks = snipe beak

Lawn Station: Rubber bands = worms. Needle-nose pliers = robin beak

Lake Station: Styrofoam balls = fish. Slotted spoon = pelican beak

Forest Station: Packing peanuts or small pieces of pieces of balsa wood = nuts. Tongs = grosbeak beak





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Talk about which birds have beaks that are very specific to finding food. The robin and the grosbeak could probably pick up other foods.

ASK KIDS: What else do you think they might eat? The beaks of the pelican, hummingbird, and snipe are pretty specific in their function, although the hummingbird does catch insects in flight. Discuss other birds kids have seen and what they think those birds eat based on their beak type.

TO SEE SOME BEAKS IN ACTION, WATCH:

GREAT BLUE HERON EATS A FISH

youtu.be/mCV6Yttysgw

PILEATED WOODPECKER (UP CLOSE FORAGING VIDEO)

youtu.be/XmDPIUrEJGQ

AMAZING GIANT WHITE PELICANS

youtu.be/30JeCGVGkmg (start at minute 2:34)

WILSON'S SNIPE EATING

youtu.be/Z33a59T74RU



ASK KIDS what they've noticed about other characteristics have been adapted by birds to help them find food. For example, note that the snipe's eyes are set back farther back on its head. With his bill in the mud looking for larvae, the snipe is still able to spot danger. How about the webbed feet of ducks to move them through the water?

Conclude by giving kids some time to look through field guides to check out more beaks and to discover other habitat adaptations, such as different types of feet.

More activities

EAT LIKE A BIRD (PBS FETCH! WITH RUFF RUFFMAN)

www-tc.pbskids.org/fetch/parentsteachers/activities/pdf/FETCH_EatLikeABird_AG.pdf





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RUFOUS HUMMINGBIRD



COMMON SNIPE



EVENING GROSBEAK



PELICAN





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AMERICAN ROBIN

