

## Materials

- Beak tools → Chopsticks, tongs, tweezers, strainers, scissors, lemon juicers, pipettes
- "Food" items → Yarn or strips of paper, large decorative marbles, beads, *small bottles or cups of water, large bowls of water, small leaves/grass, Play-Doh, jellybeans*\*
- Bird photos → Sandpiper, heron, woodpecker, duck, hawk, finch, hummingbird

\*Not included in kit

## Prep

Ask if anyone has observed birds eating? What were the birds eating? What kind of habitat were they in? Explain to students that birds have different shaped beaks based on what they eat, and the niche that they fill in the environment. Explain that a niche is a particular animal's function in the ecosystem. Think of it like the animal's job. All of those jobs fit together and interact, making the ecosystem function properly. Explain to students that they are going to use their imaginations and pretend to forage for food like birds using different tools.

## How to

- Pass around bird photos. Ask students to make some predictions about what each bird might eat.
- Show students the array of tools they will be using as "beaks." Can they match the tools to the photos of the birds? Don't reveal the answers just yet!
- Set up stations around the room. There is a table on the next page for guidance. Allow students to rotate through each station in small groups to "forage."
- Debrief with the whole class. Which tools were easiest to use? How about the most difficult? Ask students to share their thoughts and observations. Ask the students if they can now guess which tools matched with each bird, and what that bird would eat in real life, based on their experience using the tools. Now you can reveal the answers! Ask students what habitat each bird would require, based on their food specializations. If you're able, take a walk outside to look for birds foraging for food.

Bird	Diet	Tool	Food Items
Hawk	Small mammals, other birds, snakes	Scissors	Play-Doh → Students will cut up pieces of dough just like a hawk would tear and cut meat with its sharp, hooked beak
Hummingbird	Nectar, tiny insects	Pipette	Water → Students will "sip" nectar (water) from a small bottle just like a hummingbird would from flowers. <i>Extension:</i> Fill several bottles with water, and dye each a different color with food coloring. Have students pipette from the colored bottles into a bowl of uncolored water. Watch how the colors all muddle together in the bowl. This is just like how hummingbirds spread pollen from flower to flower as they drink the nectar!
Woodpecker	Insects in tree bark	Tweezers	Beads → Students will use the tweezers to pick up the beads just like a woodpecker would pick insects out of tree bark. <i>Extension:</i> If you have access to a log or a piece of tree bark, you can spread the beads in the grooves of the bark. You could also use grains of rice for a super challenge!
Heron	Fish, frogs, snakes, small mammals	Tongs	Large decorative marbles → Students can imagine that the marbles are shiny, slippery fish in a river or pond. They will snatch them from a large bowl of water with the tongs just like a heron would grab a fish or frog from a wetland.
Sandpiper	Small invertebrates and insects	Chopsticks	Beads hidden underneath a tangle of yarn or strips of paper → Students will probe for beads like a sandpiper would use its beak to search for insects and small critters in the wrack (washed up seaweed) and sand on the beach.
Duck	Aquatic plants/ seeds	Strainer	<b>Leaves and beads</b> → Students will strain leaves and marbles from the bowl of water like a duck would filter through wetland muck and water for plants and seeds.
Finch	Seeds	Lemon juicer	Jelly beans → Students will crush the jelly beans with the lemon juicer like a finch would crush the shells of seeds. (You may want to get an extra bag of jelly beans for students to snack on, or else the supply of "seeds" may disappear!)

## About Project WILD

Project WILD's mission is to provide wildlife-based conservation and environmental education that fosters responsible actions toward wildlife and related natural resources. All curriculum materials are backed by sound educational practices and theory, and represent the work of many professionals within the fields of education and natural resource management from across the country.





