Family Activity - Riparian Bird Beaks

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<td>Learn about riparian bird beaks through a hands-on activity.</td>
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Materials
- Set of tools (slotted spoon, tweezer, drinking straw, tongs, scissors)
- Set of food (small stuffed animal, cup of water labeled nectar, bowl of water with grasses and leaves in it, small seeds, small plastic or gummy fish)
- Paper plates

Activity Directions
1. **Organize a set of tools to represent different bird beaks.** The set should include a straw, slotted spoon, tweezers, scissors, and tongs. Up to five people can participate in the activity at one time.
2. **Prepare a plate of bird “food”**. The full set of “food” should include sunflower seeds or another kind of small seed, small plastic or gummy fish, grasses floating in a dish of water, a cup of water labeled nectar and a small stuffed animal (ideally a rodent). Increase the number of plates holding food if more than two people are participating at one time.
3. **Explain activity.** Each tool represents a different bird beak. The goal of the activity is to figure out which type of beak works best to grab and eat which type of food. Each person will choose a particular tool and try and grab as many pieces of food as possible in 30 seconds with that tool. They will place the food that they “eat” on another plate.
4. **“Eat”**. Explore the food, taking turns with the different tools. Observe which tool works best with which type of food.
5. **Discuss.**
   - Are some tools better at grabbing a particular food item than other tools?
   - Which birds may have beaks like these tools?
   - How does each beak work?
6. **Review a bird guide.** Look through a bird guide to try and identify riparian birds that have beaks that work like each tool.
7. **Optional extension:** Try and observe some of these birds at the marsh.
**Background** The wetlands, marshes, mudflats and riparian areas around the San Francisco Bay provide crucial habitat for many species of birds to rest, eat, nest, and raise their young. Aquatic habitats are especially vital to the survival of migratory birds. Seventy-five percent of all shorebirds that migrate along the Pacific Flyway stop to feed or breed around the San Francisco Bay.

A bird’s physical characteristic tells much about its life. Birds’ specialized beaks and feet provide clues to what the bird eats and the type of habitat it lives in. The narrow, tubular beak of the hummingbird is perfect for gathering nectar from flowers, while the strong thick beak of the waxwing opens seeds and cones. Songbirds have feet that allow them to perch in small branches. Hawks, owls and other predatory birds have sharp talons and point-tipped beaks that catch and pierce their prey.

Different species of birds may share physical similarities. Webbed feet are found on both waterfowl and diving birds. Diving birds, however, have long, sharp-pointed beaks to grab fish, while most waterfowl, such as ducks, have broad flat bills with toothed edges for feeding on aquatic vegetation. Long-legged and long-beaked birds, such as herons and curlews, wade in wetlands and along shorelines, picking up crustaceans or fish with their beaks.