

Bird Beak Buffet



One of the most important adaptations a bird has is its beak. Birds have specific beaks based on their diet, habitat, and behaviors. For this activity you can test different “beaks” on different types of “food” to discover which beaks are used for scooping, tearing, or cracking.

Materials

- Eyedropper or straw
- Chopsticks or two straight sticks
- Slotted spoon
- Ladle or soup spoon
- Forceps or tweezers
- Dry pasta
- Dry beans, small rocks, or beads
- Popped popcorn or small marshmallows
- Water
- Loose dirt or sand
- Tall cup
- Large tupperware or small aquarium
- Pan, tray, or shallow bucket
- Small tupperware or bowl

Things to consider

- ❖ *Have an adult present during the activity.*
- ❖ *Be careful with the sharp utensils and small items!*
- ❖ *Caution all items here are not intended for people to eat but for a game.*
- ❖ *Straw should only be used on the tall glass with water and it should be clean and safe for drinking in case ingestion occurs.*

Let's Begin:

1. Separate the items into a “**beak**” group and “**food**” group.
 - a. **Beaks** are the eyedropper or straw, chopsticks or sticks, slotted spoon, ladle or soup spoon, and forceps or tweezers.
 - b. **Foods** are dry pasta, popped popcorn or small marshmallows, dry beans, rocks or beads, and the vase or tall cup of water.
 - c. The Pan or tray and the tupperware will be used to hold some “foods.”
2. Set-up the “**Buffet**”
 - a. **Wetland Buffet** - Fill the tupperware or small aquarium with water. Then place dry pasta in the container of water to float.
 - b. **Beach Buffet** - Fill the pan, tray or shallow bucket with some dirt or sand. Then place the dry beans or rocks in the dirt or sand.
 - c. **Flower Buffet** - Add water to the cup no more than half way full.
 - d. **Aerial Buffet** - Have the popcorn popper or the small marshmallows ready to go and someone to toss them in the air.
 - e. “**Bird Belly**” - Makes sure you have your small tupperware or bowl ready to hold all the “food” you collect with your “bird beak.” Remember you don’t want to fill your “bird belly” with too much sand or water, that will not make them feel good. The goal is to get as much bird food as you can, as quickly as you can, without losing food, or filling up on water or sand from the habitat. Also, you can’t bring the cup closer to the food it has to stay on the table in front of you

and you use your “beak” to put the food in the “bird belly.”

3. Now that you are set up, try using the different “beaks” on each of the “foods”.
 - a. **Wetland Buffet** - Try using the different beaks (sticks, spoons, tweezers, eye dropper, etc) to see if you can get the “food” without getting lots of water.
 - Try timing yourself and see what tool or “beak” works best.
 - ★ There are many types of birds that live in wetlands and they have specially designed beaks to scoop, scrape, and grab at insects, fish, and other food in the water without filling up on water. What types of wetland birds live in Maine?
 - b. **Beach Buffet** - Try using the different beaks (sticks, spoons, tweezers, eye dropper, etc.) to see if you can get the “food” without getting lots of dirt or sand.
 - Try timing yourself and see what tool or “beak” works best.
 - ★ All over the world there are small shorebirds that use their beaks to grab food like insects and other invertebrates from the sand. What types of shorebirds are there in Maine?
 - c. **Flower Buffet** - Try using the different beaks (sticks, spoons, tweezers, eye dropper, straw, etc.) to see if you can get the “food” without dropping it. The food is the water this time, it is the nectar of a flower.
 - Try timing yourself and see what tool or “beak” works best.
 - ★ What bird can you think of that has a beak designed to suck up nectar from a flower?
 - d. **Aerial Buffet** - Toss the popcorn or marshmallows in the air and try catching them with different beaks. Try using the different beaks (sticks, spoons, tweezers, eye dropper, straw, etc.) to see if you can get the “food” without dropping it.
 - Try timing yourself and see what tool or “beak” works best.
 - ★ Some birds like tree swallows, chimney swifts, and eastern phoebes can catch insects to eat while flying through the air. Do any live in Maine?

Get creative and have fun!

Discuss:

1. Which beaks worked best on each food? Which beaks did not work well on each food? Why do you think you got these results?
2. Can you think of any local birds that live in these habitats, and what is in their diets? Are any of their beaks like the utensils you used?
3. What other materials are around your house that could be a bird beak? Can you make improvements to your beak design to make this easier?
4. What about other types of food could you try for this game? Are there other birds you could add to this game in other or the same habitats?