

# STEM ACTIVITY OF THE WEEK



## Bird Beak Buffet

**Theme:** Birds, Adaptation, Habitat

**Ages:** 5-8 years old

**Prep Time:** 5 minutes

**Activity Time:** 20 minutes

### Activity Summary:

Hudson River Park provides important habitat to a range of local and migrating bird species including Canada geese, red tailed hawks, song sparrows and northern flicker woodpeckers, just to name a few. In fact, there are over 100 species of birds that fly through the Park every year!

This STEM Activity of the Week teaches students how each bird species has unique adaptations to help them get the food they need to survive with an interactive game we like to call Bird Beak Buffet. Students will discover how specific beak shapes are indicators of where, how and what a bird eats. The diversity of beak shapes within the park allows for so many species to thrive right here in our backyard.

### Goals:

- To understand that there are many different bird species in Hudson River Park
- To understand different bird species have different types of beaks to match their diet
- To connect different bird species' diet to their preferred environment
- To practice fine motor skills during an activity that compares tools to bird beak function

### Lesson Materials:

- Bird Beak Buffet Lesson Plan
- Bird Beak Buffet Worksheet (printed or screenshot on a smartphone or tablet)
- Paper (optional)
- Pencil
- 2 Small bowls
- Tweezers
- Chopsticks
- Dried beans OR Cereal Or Dry Pet Food Pellets
- Timer

### Background:

Hudson River Park is home to over 100 species of birds! Birds are complex creatures that come in all different shapes, sizes and colors. Through time, particular genetic information and **adaptations** have been passed down to offspring shaping each bird species' unique form based on its environment.

**Physical traits** including **beak shape**, body shape, wing shape, foot shape, and coloring can tell us about a bird's behavior and preferred **habitat** or home. Exploring these features tells scientists a great deal about where and how a bird lives. The beak shape reveals where, how and what a bird eats. The shape of a bird's body, wings, and feet points to how fast the bird flies, glides, and swims. Shape and colors

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also reveal where a bird predominately lives. Ultimately, this variety amongst birds highlights the great biodiversity that the Hudson River Park's numerous habitats can support.



*Photo by Hudson River Park Naturalist, Keith Michael*

Hudson River Park has a vast abundance of birds in the Park during the spring, summer and fall. When the temperature begins to drop however, it is a cue for many species to travel for warmer grounds, a process called **migration**. The term migration is used to describe the movements of populations of birds. Migration patterns differ from species to species in terms of length and distances traveled. Migration can be triggered by a combination of changes in day length, lower temperatures, changes in food supply and genetic predisposition. This phenomenon is the reason why we see different bird species frequenting Hudson River Park during different times of year.

Hudson River Park serves as an especially important bird habitat in New York City with over 500 acres along the waterfront of Manhattan. The Park's Habitat Garden and 400 acres of estuarine sanctuary both contribute to valuable waterfront nesting grounds for over 100 species of birds!

## **Lesson Procedure:**

Follow the prompts on the accompanying worksheet to gather some background knowledge, and complete the hands-on activity.

Responses to questions can be written on a separate sheet of paper, or directly on the worksheet if you are able to print the document.