

### Lesson Title and Summary

#### What Can I Eat with This Beak?

The children will learn about birds and how birds adapt to their habitat. Students will use items to represent different types of bird beaks attempting to pick up a variety of foods as a bird might.

*(This lesson is adapted from the Calif. Dept. of Education and the Ridgefield Wildlife Refuge.)*

### Learning Goals/Objectives (measurable outcomes)

The children will learn:

1. Birds have different types of beaks and this affects their diet.
2. Birds have beaks that have adapted to their habitat.
3. The different diets of birds allow them to coexist in the same habitat.

### Target Grade(s)/Age(s) and Adaptation for other Grades/Ages

#### Lesson Plan, 1<sup>st</sup> to 5<sup>th</sup> grade

Younger children — Discuss beaks in simpler terms; have adult assistants for children during the game and planting.

Older children — Have children determine what kinds of foods they think each beak style is adapted to and in what habitat. Discuss birds' feet, wings, body shape and determine how those may have adapted to their habitat. Discuss in greater detail how pesticides may affect the food chain.

### Lesson Time

Approximately 45 minutes

### Preparation, Space Requirements and Supply List

**Supplies:** Beaks: spoons, scissors, tweezers, clothespins (one "beak" per child). Stomach: paper cups. Bird "food:" cut pipe cleaners (worms), macaroni (snails), and beans (beetles), sunflower seed. Snack: blueberries, sunflower seeds, peanuts in the shell.

### Lesson Plan

#### Intro/Engage the Students: (3 minutes)

Ask what they know about birds and what they eat. Why do they eat what they eat?

#### Lesson Steps and Activities: (35-40 minutes)

##### 1. **Bird beak types** (5 minutes)

Discuss what kinds of beaks have you seen (long, pointy, short, wide). Explain that bird beaks are adapted to match the type of food they eat. Explain what *adapted* means. Many birds have tweezers-like beaks so they can reach and eat animals that burrow deep. Some birds have scissor-like beaks that rip food apart into bite-sized pieces. Other birds have clothespin-shaped beaks that can crush the hard covering of seeds. Birds with spoon-like beaks can scoop up large numbers of small fish or strain plant material from mud.

The different diets of birds allow them to live in the same area at the same time (coexist). This is why many types of birds feed together in one area.

Show beak types and ask children what kinds of birds have beaks similar.

*Spoon* beak-mallard duck, Pelican, Spoonbill  
*Scissor* beak-perching birds, tern, kestrel, owl  
*Clothespin* beak-goldfinch, wren, finch, jay, chickadee  
*Tweezer* beak-egret, kingfisher, heron, hummingbird

**2. Game (10 minutes)**

Give each child a stomach (cup) and one bird beak. Explain the rules:

Children must stay put in their “nest” until allowed to feed.

Birds must pick up their food using only their beaks.

Foods may not be scooped or thrown.

Cups must be held upright.

Distribute one type of food (on the ground or a table) and allow birds (children) to leave the nest and feed. Give 1-2 minutes then have the children return to their nests.

Distribute the other foods in turn and allow feeding.

Have children count the number of each food and record their results in the data sheet.

**4. Discussion (5 minutes)**

Are some beaks better at eating a particular food?

What other parts of a bird are important to its feeding success? (Long legs-wading webbed feet-swimming, clawed feet-catch prey.)

In which habitat does each beak type forage for its food? (Tweezers-mud or field, scissors-field, spoon-slough or pond, clothespin-marsh.)

How could pesticides affect birds and their food?

**5. Garden task (10-15 minutes)**

Plant flowers that are “bird friendly” such as sunflowers that produce seeds for birds and plants that provide nectar for hummingbirds. (Plant in the ground or in pots; planting in pots will take longer and require pots and potting mix and more adult helpers,)

**6. Snack (5 minute) of bird foods: blueberries, sunflower seeds and peanuts in the shell.**

Discuss which types of beak would feed on these foods.

**Reflection/Review: (5 minutes)**

Ask the children what they now know about birds that they did not know before today. Ask the children if they were a bird what kind of bird would they like to be, what type of beak does that bird have, and what type of food does that bird eat.

habitat	
pesticides	
adapt/adaptation	
coexist	
Beak	
Various species of birds	

