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# Build-a-Bird Workshop

**Grade Level, TEKS Science Objective:**

Science, Grades K-5, TEKS: 2, 3, 4, 5, 9 & 10

**Topic:** Bird Adaptations

**Theme:** All birds are created differently, there is no right way to be and it is these differences that allow them all to survive and have their place in the ecosystem. Differences should be embraced.

**Vocabulary: Activity:** Adaptations

**Learning Objectives:** Understand what an adaptation is, understand the adaptations birds have and why they are important,

**Materials:** Build-a-Bird kits, tape, markers, bird field guides (optional)

**Introduction:** Presenters introduce themselves and the Fish and Wildlife Service/ National Wildlife Refuge system. Explain briefly what a National Wildlife Refuge is, what they can do there, and where they are. Explain how the program works such as holding the sign to talk, having a brief discussion and an activity with a take home, and how we pass the sign around the circle where everyone will give their name and the answer to the day's question.

**Introductory Question:** What is one trait you like about yourself? (i.e. kind, smart, tall, etc.)

**Transition:** These are all things that make us unique and it is our unique combinations of traits that allow us to have our own special and important place in our world.

**Content:** Similarly, birds are all different and it is their differences that allow them to have their special place in the ecosystem. Do you remember what it is called when we see different traits in different species that help them survive? It is called an **adaptation**. Some of the main traits that birds have different adaptations for are body size, wing shape, beak shape, feet/toes, and color/patterns. Each bird's unique combination of these different traits, or adaptations, allows them to fill their own important spot in their ecosystem. Some birds are small insect eaters that help keep insect populations in control while other are big predators and help keep rodent populations in control. Some birds are scavengers which help clean up dead organic material, so we aren't surrounded by decaying material constantly. Some birds are seed eaters and help spread seeds out to start new plant life.

**Transition:** Depending on what a bird eats, how it gets its food, the ecosystem it lives in, and more, it will have different features to allow it to be successful in this.

**Activity:** Build-a-Bird. Separate kids into small groups. Give each group a build-a-bird kit which will include an info sheet of the different types of each feature and the pros/cons of them as well as an example of each option. The kids will put different pieces together to build their own unique bird. When groups are done, they will explain why they chose the parts they did, what type of life their bird is adapted to, how/where it lives, what it eats, what purpose it serves in its ecosystem, etc.

**Conclusion:** These different adaptations are what allow each bird to survive and fill its own important role in an ecosystem. Differences are important, because if all birds were the same, there would be roles in ecosystems that aren't being filled. Differences should be embraced as they are what allows ecosystems and society to succeed and all niches to be filled.

**Take Home:** Kids take home their birds

**Notes/Helpful Hints:** Consider laminating kits and using dry erase markers to save paper

# Adaptations Cheat Sheet

Use this sheet to help you understand the different features of birds and their various adaptations. If you have questions, feel free to ask!

Be creative!



Slotted Wing-Strong wing that allows the bird to carry heavy things (such as prey). This wings can soar high above the ground. Allows for somewhat quick take offs.



Long Soaring Wing-Can soar in the air for a really long time by using wind instead of flapping. Bad maneuverability and slow take offs and landings.



Elliptical-Compromise between other wing types. Fast for short distances and easy to turn. Good for escaping predators.



Delta Wing- Made for speed! Very fast! Good for chasing things and diving. Has some soaring ability.



Insect Eater



Seed Eater



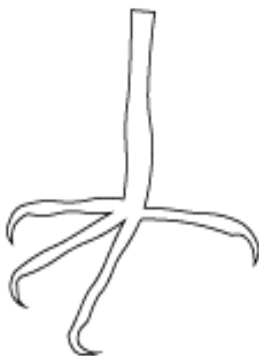
Fishing



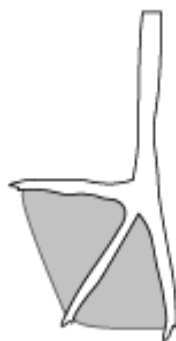
Meat Eater



Water Plant Eater



Raptor- Large curved claws for grabbing. Good for carrying things.



Waterfowl- Webbed feet, great for swimming.



Perching- great for sitting easily on branches, wires, fences, etc.



Climbing- back toes make it easy to climb up trees and hold on to the sides of trees.

