



Adapt-A-Bird

ALABAMA OUTDOOR CLASSROOM ACTIVITY

Grade Levels

3-8

Overview

Students will create a new species of bird using adaptations.

Subject Areas

Science, Art, Language Arts, Environmental Education

Duration

Activity: 60 minutes

Learning Objectives

Students will be able to create a new bird species using adaptations of birds and describe how those adaptations help the bird to survive in different habitats.

Alabama Course of Study Objective Correlations for Science:

Third: 6 & 8

Fourth: 5 & 6

Fifth: 8 & 9

Sixth: 7

Seventh: 1, 4, 5, 6, & 7

Outdoor Classroom Connection

Students observe birds' beaks and feet in your outdoor classroom site.

Materials

- Drawing Paper
- Bird Adaptation Sheet
- Paper
- Colored pencils, Markers or Crayons
- Pictures of various birds
- Binoculars (optional)
- Field guides (*listed on page 2*)

Activity created by
Birmingham Audubon
Association

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Background Info

Birds have special adaptations that enable them to live in specific habitats in the environment and to eat certain food sources. Students will observe birds in their bird habitat, sketching and writing their observations of the different birds including their feet and beaks.

Preparation

Have paper and markers ready for drawing.

Procedure

1. Discuss with the class that birds' feet and beaks are adapted to fit their environment and to assist with eating different foods. For example, hawks have large, curved, sharp claws for grasping prey to eat. Hummingbirds have long, thin, hollow beaks that they use to probe flowers for nectar, and the beak protects the tongue which slurps up the nectar.
2. Have the students observe birds in the wild bird habitat area of your outdoor classroom, making careful observations about the birds' feet and beaks. Let the students look thru binoculars if you have some available, so they can see the birds up-close and in detail. Then ask them to sketch or write about the birds they observed.
3. Lead the students in a discussion about the birds' adaptations and what clues those adaptations tells us about the birds' food sources, etc. Students can hypothesize about what each bird eats and why.
4. Show the students pictures of other birds that are not in your outdoor classroom site, and explain the differences between the birds' beaks and feet.
5. Referring to the birds observed in the outdoor classroom site and those in the pictures, help the students generate a list of bird adaptations (example on page 2).
6. Then have the students create "new species" of birds using the adaptations from the list. Students must give the new species a name and write a couple paragraphs describing the habitat and life of the bird including its food, young, nesting habits, flight, etc.

Assessment

Students should apply appropriate adaptations to their descriptions of the "new species" they created.

Extensions

- ▶ Students create a model of their new species.
- ▶ Students write up a page for a field guide for their new species.
- ▶ Have the students use their creative writing skills to write a story about their bird and its environment including what it eats, where it nests, and other interesting characteristics.



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Literature Connections

⇒ *Bird* (DK Eyewitness) by David Burnie (ISBN: 10-0756606578)

Bird Field Guides

- ⇒ *National Audubon Society Field Guide to Southeast United States* (ISBN-10: 0679446834)
- ⇒ *The Sibley Field Guide to Birds of Eastern North America* by David Allen Sibley (ISBN: 10-067945120X)
- ⇒ *Birds of Alabama Field Guide* by Stan Tekiela (ISBN: 10-1591931517) with *Birds of Alabama Audio CD* (ISBN-10: 1591931509)

Bird Magazines

- ⇒ *Birds & Blooms*
- ⇒ *Audubon Magazine*
- ⇒ *Wild Birds*
- ⇒ *Birder's Digest*

Other Related Activities

Project Learning Tree

- ⇒ *Charting Diversity*
- ⇒ *Planet Diversity*

Project WILD

- ⇒ *Which Niche*

Flying WILD

- ⇒ *Adaptation Artistry*

Discovering Alabama Video

- ⇒ *Red-cockaded Woodpecker*

BIRD ADAPTATIONS

BEAK

small, thin, like tweezers
 Pouch-like
 cone-shaped, like pliers
 hooked
 wide, flat, like a strainer

spear-like
 pointed

FEET

large, curved, sharp claws
 wide, flat feet with long toes
 webbed feet
 one long back toe and several front toes
 three front toes
 sharp claws on equal front and back toes
 long toes

LEGS

long, powerful legs
 long, slender legs
 powerful leg muscles

WINGS & TAIL

large wings

 short, broad wings

 long, pointed wings
 stiff tail feather

PLUMAGE

bright plumage

 muted plumage

 seasonal change
 white-winter, brown-summer

Notes

BIRD

warblers
 pelican
 cardinal
 hawks
 ducks

 kingfisher, herons
 woodpecker

BIRD

hawks
 chickens
 ducks
 robin

 roadrunner
 woodpecker

 egret

BIRD

ostrich
 heron, crane
 hawk, eagle

BIRD

eagle

 coopers hawk

 falcons
 woodpecker

BIRD

male birds

 female birds

 owl, ptarmigan

PURPOSE

eat insects
 scoop fish
 crack seeds
 rip, shred meat
 strains small plants and animals from water
 fishing
 breaks and probes wood

PURPOSE

grasping prey
 scratching on ground
 swimming
 grasping branches for perching
 running
 clinging to trees

 wading in water

PURPOSE

running
 wading
 lifting, carrying prey, transportation

PURPOSE

flying with prey, soaring while hunting
 maneuver through tree branches
 flying fast
 help prop body on tree

PURPOSE

attraction in courtship, mating rituals
 camouflage while nesting
 camouflage during changing seasons

The Alabama Outdoor Classroom Program is a partnership between:



Alabama Cooperative Extension System



Alabama Wildlife Federation



Alabama Nature Center



Alabama Department of Conservation & Natural Resources