

The Bio/Diversity Project
Lesson 2: Let's Talk Birds!

Grade Level: 4-12th

This lesson has been adapted from: [Lesson 3: Introducing Birds! CornellLab](#)

AZ Science Standard:	Cheat sheet for AZ science standards 6.L2U1.13 • <i>Develop and use models to demonstrate the interdependence of organisms and their environment including biotic and abiotic factors.</i>
Learning Objective:	1. Students will be able to identify key characteristics of birds and differentiate them from other animals. 2. Students will be able to describe one local bird's behavior, habitat, and unique traits. 3. Students will be able to apply observational skills to recognize birds in their local environment.
Scientist of the Week:	 • Scientist of the Week: Dr. J. Drew Lanham • <i>Professor, cultural ornithologist, and poet at Clemson University.</i> • <i>Advocates for diversity in natural resource conservation.</i> • <i>Researches songbird ecology and inspires appreciation for birds.</i>

Vocabulary	Materials
• Ornithology • Habitat • Adaptation • Biotic/Abiotic	• Projector or interactive whiteboard ◦ Slideshow • Computers or smart devices with internet access • Paper • Markers Links (provide to students) • All About Birds website • Introducing Birds videos Tucson Audubon Society live cams/resources • Tucson Audubon Society Live Cams • Tucson Audubon Meet Your Birds • Resource for what birds eat
Guiding Questions: • <i>What are some common characteristics of birds?</i> • <i>How can you tell if something is a bird vs another animal?</i> • <i>How do birds' behaviors and habitats help them survive?</i>	

Lesson 2: Let's Talk Birds!

Engage/Introduction

Time: 10-15 minutes

Objective: Capture interest and activate prior knowledge.

Activity:

- Show a short clip of local Sonoran Desert birds (e.g., Tucson Audubon Society live cams or videos).
- Ask:

- "Which of these birds have you seen before?"
 - "What do you think these birds eat, and where do they live?"
 - Share today's objective: learning about the birds that call the Sonoran Desert home.
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Explore

Time: 10-20 minutes

Objective: Investigate bird characteristics and personal connections to Sonoran Desert birds.

Activity:

- Project and discuss local bird photos or videos
 - Groups discuss the question:
 - "What Makes a Bird Unique in the Desert?"
 - Encourage students to share personal stories about seeing or hearing these birds in their neighborhoods.
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Explain

Time: 20-30 minutes

Objective: Confirm and expand bird-related knowledge through interactive games.

Activity: True or False Game

- Set up signs for "True" and "False" in the classroom or play via an online platform.
 - Focus statements on **Sonoran Desert birds**. For example:
 1. "The Cactus Wren nests inside cacti." (True)
 2. "The Vermilion Flycatcher eats mostly seeds." (False—flies and insects.)
 3. "Gila Woodpeckers make their nests in holes in saguaros." (True)
 - After each statement, discuss why it's true or false and adjust their lists of bird characteristics.
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Extend

Time: 20-30 minutes

Objective: Apply learning to local bird identification.

Activity: "Meet Your Sonoran Desert Bird" Research and Presentation

- Assign each group one bird (Cactus Wren, Gambel's Quail, Gila Woodpecker, Vermilion Flycatcher).
 - Groups use **online resources** like Tucson Audubon or *All About Birds* to research:
 - Habitat
 - Behavior
 - Adaptations for desert survival
 - Groups write their bird's information on regular paper, including:
 - Name of the bird
 - Habitat description
 - The difference between male & female birds of this species
 - A cool fact
 - A drawing or diagram of their bird
 - Groups present their findings and imitate or describe their bird's behavior or sound.
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Evaluate

Time: 10-15 minutes

Objective: Practice observation and reflect on learning.

Activity: Outdoor/Virtual Bird Walk

- Take students outside to spot Sonoran Desert birds or signs of their presence (e.g., nests, sounds).
- Groups record what they see on **regular paper**, answering:
 - "Which Sonoran Desert birds did we see or hear?"
 - "What were they doing?"
 - "How are these birds adapted to desert life?"

Conclude with a brief class discussion:

- "What surprised you about Sonoran Desert birds today?"
- Encourage students to notice birds in their neighborhoods and reflect on their role in the ecosystem.