

Photo Description



A small brown bird sits on the ground in a garden. The bird has gray and brown feathers and is near green plants and flowers. There is a big clay pot and some white flowers around the bird.

Scientific Phenomena

This image shows the Anchoring Phenomenon of animal habitat selection and foraging behavior. The mourning dove is demonstrating how birds choose specific locations that meet their basic survival needs. The bird selected this garden area because it provides food sources (seeds from plants), water (likely from garden irrigation), shelter (plants and structures for protection), and nesting materials. This behavior occurs because animals have evolved to recognize and seek out environments that increase their chances of survival and reproduction.

Core Science Concepts

1. Animal Needs: All animals need food, water, shelter, and space to survive, just like this bird found in the garden.
2. Habitat Requirements: Animals choose places to live that give them everything they need to stay alive and healthy.
3. Animal Behavior: Birds and other animals act in ways that help them find food and stay safe from danger.
4. Garden Ecosystems: Gardens create small environments where plants and animals can live together and help each other.

Pedagogical Tip:

Use the "Think-Pair-Share" strategy when discussing animal needs. Have students first think individually about what the bird might need, then discuss with a partner, and finally share with the whole class. This builds confidence and allows all learners to participate.

UDL Suggestions:

Provide multiple ways for students to express their observations by offering drawing, verbal descriptions, or simple written responses. Create a visual anchor chart with pictures showing the four basic animal needs (food, water, shelter, space) that students can reference throughout the lesson.

Zoom In / Zoom Out

1. Zoom In: The bird's digestive system breaks down seeds using a special part called a gizzard, which acts like tiny teeth to grind up hard seeds since birds don't have real teeth.
2. Zoom Out: This garden is part of a larger neighborhood ecosystem where many different animals find homes, and birds like this dove help spread plant seeds to new places when they travel and leave droppings.

Discussion Questions

1. What do you think this bird needs to survive in this garden? (Bloom's: Apply | DOK: 2)
2. How is this bird's home different from where a fish lives? (Bloom's: Analyze | DOK: 2)
3. Why do you think the bird chose to sit in this garden instead of on the sidewalk? (Bloom's: Evaluate | DOK: 3)
4. What might happen to this bird if all the plants in the garden were removed? (Bloom's: Evaluate | DOK: 3)

Potential Student Misconceptions

1. Misconception: "Birds only eat worms and bugs."

Clarification: Many birds, like this mourning dove, mainly eat seeds, fruits, and grains, while others eat insects, fish, or other foods.

2. Misconception: "Animals live anywhere they want to."

Clarification: Animals can only live in places that have everything they need to survive - the right food, water, shelter, and space.

3. Misconception: "Birds don't need water because they don't drink like dogs."

Clarification: All birds need water to drink and sometimes to bathe, just like all living things need water to survive.

NGSS Connections

Performance Expectation: 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.

Disciplinary Core Ideas:

- 2-LS4.D There are many different kinds of living things in any area, and they exist in different places on land and in water.

Crosscutting Concepts:

- Patterns Patterns in the natural world can be observed and used as evidence.

Science Vocabulary

- * Habitat: The place where an animal lives and finds everything it needs to survive.
- * Foraging: When animals search for and gather food.
- * Shelter: A safe place where animals can hide from danger and bad weather.
- * Ecosystem: A place where plants and animals live together and depend on each other.
- * Behavior: The way an animal acts to help it survive.

External Resources

Children's Books:

- A Seed Is Sleepy by Dianna Hutts Aston
- Birds, Nests and Eggs by Mel Boring
- In the Garden with Dr. Carver by Susan Grigsby

YouTube Videos:

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- "What Do Animals Need to Survive?" by Generation Genius - Educational video explaining the four basic needs of animals with engaging animations and examples (<https://www.youtube.com/watch?v=WPpg2w9cc0Q>)
 - "Backyard Birds for Kids" by Nature Watch - Kid-friendly video showing different birds that visit gardens and what they eat (<https://www.youtube.com/watch?v=jloxaJZaLQs>)