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Naturalist Explorer

MS-LS-2-2 Construct an explanation that predicts patterns of interactions among organisms in a variety of ecosystems.

Awareness Skills Practiced: Animal Senses, Sit Spot, Fox Walking, ABC's of Relational Birding, Bird Language.

Ecological Study Topics Engaged: Habitat Study, Animal Adaptations, Biological Relationships, Natural Resource Ecology.

Participants will visit two different habitats, observing the same species, or a member of the same family in each. Participants will practice the ABC's of Relational Birding in both. Participants will give attention to similarities and differences in behavior and connections.

Questions participants will answer:

This activity is meant to facilitate strands of connection between young people and wildlife through practicing the ABC's of Relational Birding. Through this, young people will learn a valuable observational skill set that will equip them to be able to notice patterns and relationships in the natural world. The observational skills acquired through this activity will empower young people to approach work related to NYS Standards for Interdependent Relationships in Ecosystems, Natural Selection and Adaptations, and Human Impacts more confidently and holistically.

The Naturalist Explorer activity can be done in any outdoor setting, since birds are literally everywhere! Ideally, this activity should be done in an open-air environment where sounds can be part of the experience as well as sight. Each participant will need this worksheet, a pencil, and a clipboard.

After completing this activity, participants may be given the opportunity to share their findings in a small group setting or to present in front of their class or another audience.

For a habitat comparison activity, have students complete this activity twice, observing the same species of bird in two different ecological settings for a habitat comparison.

Companion Video, titled "The ABC's of Relational Birding" can be found by visiting www.wnnc.net.



Naturalist Explorer



Imagine that you are a naturalist explorer, like Charles Darwin on the Galapagos Islands, cataloging previously unknown animals so the world can learn about them and their environments. Your mission is to locate and observe two individual birds in two different habitats. They should be the same species or in the same family of birds. A bird identification book will help you to know what is meant by species and family. Your task is to report on its appearance, behavior, and connections. You'll apply the ABC's of Relational Birding to guide you in your observations.

A stands for APPEARANCE. B stands for BEHAVIOR. C stands for CONNECTIONS. Using pictures or words, you'll record three things you notice about its appearance, three things you notice about its behavior, and three things you notice about its connections with its environment. After you've completed your observation, you'll be prompted to write something about the bird you've been watching that makes you wonder.

Today's date: _____

Habitat 1: _____

Name of Naturalist Explorer (your name): _____

Name of bird that you're observing (if you don't know, just write "unknown"):

Time when observation began: _____

Time when observation ended (fill this out at end): _____

A- APPEARANCE. Notice the shape and size of the bird. What do you notice about the shape and structure of its beak, feet, and other physical features? What do you notice about the pattern and colors of its feathers as well as anything else that catches your attention about its physical appearance?

Using pictures or words, record three things you notice about its appearance in the space below.

B- BEHAVIOR. Notice what it's doing and how it moves. Is it foraging, resting, preening, singing, or doing something else? Does it seem alarmed or at ease in its environment? Is it silent or if it's making noise what does it sound like?

Using pictures or words, record three things you notice about its behavior in the space below.

C- CONNECTIONS. Notice the connections that the bird has with living and non-living elements in its environment. Is it on the ground, on a rock, in a tree, on the water, in the air, or somewhere else? If its foraging, what is it eating? How is it interacting with other wildlife? Are there other birds around or different kinds of wildlife? What do you notice about how it interacts with other birds and different kinds of wildlife? As an observer, you are part of the bird's environment too. Does it seem aware of your presence? If so, how did the bird react when it first noticed you?

Using pictures or words, record three things you notice about its connections in the space below.

What patterns did you notice about the bird's behavior?

**What patterns did you notice about its interactions with its environment?
(including other birds, different animals, trees, plants, and non-living elements like water, rocks, and sky)**

Today's date: _____

Habitat 2: _____

Name of Naturalist Explorer (your name): _____

Name of bird that you're observing (same species or family as above)

Time when observation began: _____

Time when observation ended (fill this out at end): _____

A- APPEARANCE. Notice the shape and size of the bird. What do you notice about the shape and structure of its beak, feet, and other physical features? What do you notice about the pattern and colors of its feathers as well as anything else that catches your attention about its physical appearance?

Using pictures or words, record three things you notice about its appearance in the space below.

B- BEHAVIOR. Notice what it's doing and how it moves. Is it foraging, resting, preening, singing, or doing something else? Does it seem alarmed or at ease in its environment? Is it silent or if it's making noise what does it sound like?

Using pictures or words, record three things you notice about its behavior in the space below.

C- CONNECTIONS. Notice the connections that the bird has with living and non-living elements in its environment. Is it on the ground, on a rock, in a tree, on the water, in the air, or somewhere else? If its foraging, what is it eating? How is it interacting with other wildlife? Are there other birds around or different kinds of wildlife? What do you notice about how it interacts with other birds and different kinds of wildlife? As an observer, you are part of the bird's environment too. Does it seem aware of your presence? If so, how did the bird react when it first noticed you?

Using pictures or words, record three things you notice about its connections in the space below.

What patterns did you notice about the bird's behavior?

**What patterns did you notice about its interactions with its environment?
(including other birds, different animals, trees, plants, and non-living elements like water, rocks, and sky)**

Follow-up Questions

Compare and contrast how it behaved in the two different habitats.

Based on what you've learned through your observations, if you were to observe this same species or family in a third habitat, what are three things you might predict about its behavior and connections with its environment?

1.

2.

3.

It's time to wonder. When Charles Darwin explored the Galapagos Islands, he had more questions than answers. There was so much that he had to wonder about! There will always be questions that we don't yet know the answers to. That's why the world needs more naturalist explorers like you! Write down something about the bird or family you've been observing that you don't know the answer to. It should be something that makes you wonder. Your statement can have anything to do with what you noticed about the bird's appearance, behavior, or connections. Begin your statement with the words, "I wonder".