

Focus on: Bird Life Cycle

This lesson is meant to support the unit on Structures and Functions of Living Organisms. It can be done to generate background knowledge prior to teaching the unit, during the unit to reinforce lessons, or as a follow up to the butterfly unit to meet the objective of comparing a variety of animal life cycles. How you guide your students will depend on the information you have already taught and the information you want to introduce. You will need to have an occupied bluebird box near your garden in order to complete this lesson. If you do not have a bluebird box, ask your garden coordinator how you can help to get one.

Clarifying Objectives:

2.L.1.1 Summarize the life cycle of animals including:

- Birth
- Developing into an adult
- Reproducing
- Aging and death

2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

2.L.2.1 Identify ways in which many plants and animals closely resemble their parents in observed appearance and ways that they are different.

Key Vocabulary:

Definitions can be found at <http://learnersdictionary.com>

-Summarize
-Life Cycle
-Birth
-Developing
-Adult
-Reproducing
-Aging
-Death
-Compare
-Plant Parents
-Observed
-Appearance
-Variation
-Individuals
-Related
-Egg
-Hatchling
-Nestling
-Fledgling
-Juvenile
-Adult

Focus Question(s):

How is the life cycle of a bird similar or different to the life cycle of another animal?

Materials:

School Garden

Science Notebooks

Bluebird box with an active nest

Camera, iPad or other recording device

(It would be even better to have a nesting box with a hidden camera inside so you do not have to disturb the nesting birds to record findings, but you can peek inside the boxes if the camera is not possible.)

Activities:

1. Ask students what they know about the life cycles of birds. Record responses.
2. To complete this lesson you will need an active nesting bird inside one of your bluebird boxes. It does not have to be a bluebird, but you will want to have eggs in an active nest.
3. Visit the bluebird box once or twice each week - peek inside to see the eggs or baby birds. Photograph your findings.
4. Caution students to be quiet and patiently wait their turn to peek inside the box. You don't want to disturb the nest too often or have your visits take too long because the parent birds may abandon the nest.
5. Display the photograph or video for the class to get a better look once you return to the classroom. Have students record findings inside their science notebooks.
6. Typically, inside a bluebird box, you will find bluebirds or Carolina Chickadees. Following are a time lapse video and articles to support your study of either of these birds
7. Bluebird Time Lapse Video:
<https://www.youtube.com/watch?v=LdLSOtiizHk>
8. Bluebird Article: <http://www.ncbluebird.org/about/all-about-bluebirds/>
9. Carolina Chickadee Time Lapse Video:
<https://www.youtube.com/watch?v=-44K7VclKGQ>
10. Carolina Chickadee Article:
<http://animals.nationalgeographic.com/animals/birding/carolina-chickadee>
11. Discuss the article, videos and the students' findings from their science notebooks from their visit to the garden. Use the Guiding Questions.
12. FYI: Birds are considered both good and bad in a garden. More often they are considered good because they eat many bad bugs and snails from the garden which harm our plants. However, they can be considered bad because they can eat seeds that were just planted or fruits we were

Guiding Questions:

- What stages of the life cycle did we find?
- Where did you find them?
- What did they look like?
- What did you learn from the videos or article?
- In what ways are the different stages the same?
- In what ways are the different stages different?
- How does the baby bird resemble the adult?

- How is it different?
- How does this life cycle compare to other animal life cycles?
- When would be a time you would want to have birds in our garden?
- Evaluate the benefit of having birds in our garden.
- When would there be a time that you did not want to have birds in the garden?
- Which time is most important?
- Is this animal beneficial to have in our school garden? Why or why not?

hoping to eat.	
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