

Grade: 5

Title: Brown Pelicans: An Endangered Species

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Student Learning Objective(s):

- Students will learn about the Brown Pelican's endangered species status and history
- Students will learn about the effects of humans on the Pelican population
- Students will research other endangered species and recognize common patterns

LA GLE's

Grade: 5 # 49: Identify and give examples of pollutants found in water, air, and soil.

Grade: 5 # 50: Describe the consequences of several types of human activities on local ecosystems

Materials needed:

- posters
- markers
- educational books on pelicans:

Patent, Dorothy. Pelicans. New York: Clarion Books, 1992.

Cook, Joseph. Wonders of the Pelican World. New York: Dodd, Mead & Company, 1974.

Brown, Joseph. The Return of the Brown Pelican. Baton Rouge: Louisiana State University Press, 1983.

Nelson, J. Bryan. Pelicans, Cormorants and their Relatives. Oxford: University Press, 2005.

- educational books on endangered species:

Beans, Bruce E. Endangered and Threatened Wildlife of New Jersey. New Brunswick: Rutgers University Press, 2003.

Evers, David. A Guide to Michigan's Endangered Wildlife. Ann Arbor: The University of Michigan Press, 1995.

Stuart, Chris. Africa's Vanishing Wildlife. Washington, D.C: Smithsonian Institution Press, 1996.

Scott, Chris. Endangered and Threatened Animals of Florida and their Habitats. Austin: University of Texas Press, 2004.

White, Christopher P. Endangered and Threatened Wildlife of the Chesapeake Bay Region. Centreville, Maryland: Tidewater Publishers, 1992.

Detailed Procedure. Describe what the students will do in each stage. Include guiding questions you might ask to help students.

1. Engage:

- 1.) The teacher will ask the class "What does it mean when an animal is 'endangered'?"
- 2.) The students will share what they know
- 3.) The teacher will ask the class what animals they can think of that are endangered.
- 4.) The teacher will ask them "What causes animals to become endangered?"

Science Process Skills Indicate which science process skills students will develop in this part of the lesson.

Communication

2. Explore:

- 1.) The students will be divided into groups. In each group someone will be the pelican, someone will be the owner of companies that had emitted pesticides into the water, and someone will be a person petitioning for the removal of the Brown Pelican from the endangered species list, and someone will be a biologist in charge of increasing the pelican species.
- 2.) The students will use the educational books on pelicans brought by the teacher to research the cause and effect of pesticides on the pelican population.
- 3.) The students must each come up with a.) **What do I want?** –the company owner, the pelican, the petitioner, and the biologist must write what he/she wants or needs.
- 4.) They must each write b.) **The Reason**-why does he/she want or need this? Explain.
- 5.) They must each write c.) **How**—how will he/she go about acquiring what it is he/she wants?
- 6.) The students will write these down in their blue books and share them with the class.
- 7.) The students will examine the reasoning behind the decrease of the Pelican population and how to go about changing it and improving the situation.

Science Process Skills Indicate which science process skills students will develop in this part of the lesson.

Communication

3. Explain:

-The teacher will ask:

- 1.) Why did the pelican population become endangered?
- 2.) What was the reason the companies did that?
- 3.) How have people been working to improve the pelican population?
- 4.) What is the current status on the pelican population?
- 5.) How can we prevent this from happening again?

-The students will discuss what they have learned with the class and share their answers.

4. Expand:

- 1.) The students will continue to work with their groups and use the internet and educational books on endangered species to research other endangered species.
- 2.) They will use posters, markers, and pictures from the internet if they can.

3.) They must be able to share with the class. Their presentation must include:

- 1 currently endangered species
- Why is the species endangered?
- How can the population be increased?

4.) The students will present to the class and the students will be active and respectful listeners.

5.) After, the teacher will ask the class

“What was a common theme in all of these presentations?”

“What tends to harm animals the most?”

“How can we prevent this?”

“How can we turn these actions around and work to change their endangered species status?”

-The students will share what they learned and their ideas.

Science Process Skills *Indicate which science process skills students will develop in this part of the lesson.*

Communication

5. Evaluate:

1.) The students will demonstrate what they have learned from the lesson by pretending to be a biologist trying to improve the population of the Brown Pelican. They will write this down in their Blue Books.

They must write down what they need to do in order to go about this. They will demonstrate what they have learned about the Brown Pelican’s history and what is currently being done to help the Brown Pelican. They will demonstrate what they have learned from each other as well.

Brain Compatible Learning Strategies Used in This Lesson:

- Brainstorming/Discussion
- Drawing and Artwork
- Reciprocal Teaching, Cooperative Learning
- Technology (student use)
- Writing/Journals

Lesson Source: Lesson Source: Patent, Dorothy. Pelicans. New York: Clarion Books, 1992.

Name _____



Getting to Know the Brown Pelican

Circle which characteristic is correct. Use inferences from the photo and prior knowledge. Give a clue you used to choose your answer.

Brown Pelicans are living. Brown Pelicans are non-living.

Clue:

Brown Pelicans are mammals. Brown Pelicans are not mammals.

Clue:

Brown Pelicans are warm-blooded. Brown Pelicans are cold-blooded.

Clue:

Brown Pelicans are vertebrates. Brown Pelicans are invertebrates.

Clue:

Brown Pelicans have webbed feet. Brown Pelicans do not have webbed feet.

Clue:

Brown Pelicans have feathers. Brown Pelicans do not have feathers.

Clue:

Brown Pelicans can fly. Brown Pelicans cannot fly.

Clue:

Brown Pelicans eat primarily fish. Brown Pelicans eat primarily plants.

Clue:

Brown Pelicans are coastal animals. Brown Pelicans are usually found inland.

Clue:

Brown Pelicans lay eggs. Brown Pelicans do not lay eggs.

Clue: