



Lesson No. 3

Conserving Wetlands and Their Sandhill Cranes

(*Marshland Elegy*)

Target Audience: Environmental Science, Biology, Ecology, and Language Arts students.

Objectives:

This lesson introduces students to some of the issues surrounding wetland conservation and also gives them an opportunity to learn about the conservation history of the eastern sandhill crane population. It also provides students with the opportunity to learn about the restoration effort that resulted in the formation of the Goose Pond FWA in Greene County, Indiana.

Background:

Marshland Elegy is a lamentation upon the destruction of wetland ecosystems, and their associated sandhill cranes, done in the name of progress. Leopold reflects upon the nature of the actions humans often consider as representing progress. He also introduces us to the disquieting proposal that, in the end, conservation may be a self-defeating enterprise.

Actions:

1. For this lesson students will read, individually or as a group, Leopold's essay *Marshland Elegy* and then answer the associated questions given below.
2. What is an elegy? Summarize how Leopold's essay does indeed represent an elegy.
3. Leopold notes that cranes are an ancient group having been here since the Eocene. That tremendous length of deep time is difficult for us to grasp. In order to do so, construct a mathematical (a timeline represented by numbers not an actual, graphic line) timeline comparing the history of the cranes with the recorded history of humans.

The mid-Eocene Epoch occurred about 50 million years ago. Recorded human history started around five thousand years ago. Let each year be represented by one inch.

- a. How long in feet and miles would the time-line for the crane family be?
 - b. How long in feet and miles would the time-line for recorded human history be?
 - c. Explain why many people would be moved to appreciate and conserve cranes even more after comparing these two time-lines.
 - d. How does the previous question (c) touch upon the concept of ethics as an important rationale for conservation of wild things and wild places?
4. *“These haymeadow days were the Arcadian age for marsh dwellers.”*
- a. What is the meaning of the term Arcadian age?
 - b. Why was this stage of the great marsh’s utilization Arcadian?
 - c. What did the land owners do to end the marsh’s Arcadian existence?
5. Why does Leopold ponder the likelihood that, *“all conservation of wildness is self-defeating”*? Consider this article from the New York Times to help answer. (www.nytimes.com/2016/08/07/opinion/sunday/are-we-loving-our-national-parks-to-death.html)
6. At the end of the essay, Leopold speculates that, *“Some day . . . the last crane will trumpet his farewell and spiral skyward from the great marsh.”*
- a. How many sandhill cranes existed in Leopold’s home state of Wisconsin in 1937 when he wrote *Marshland Elegy*?
 - b. What is the population of sandhill cranes in the eastern United States today?
 - c. What factors have changed since Leopold’s time so that his feared loss of the sandhill crane has not come to pass?
7. Goose Pond FWA was established in 2005. It is now a major migratory stopover for sandhill cranes. Highly endangered whooping cranes also use the property.
- a. What were some of the major groups involved in purchasing the land that became GPFWA? See: www.gcdailyworld.com/story/1260574.html
 - b. Wetlands were once considered as nothing more than “useless swamps”. We now know that they have many important functions. What are some of these valuable uses?
8. How are the stories of Leopold’s “great marsh” and the Goose Pond FWA related? To answer this question, consider the history of the land that became GPFWA and compare it to what happened to the marshlands described by Leopold.

For help, read this *Nuvo Newspaper* article by Diana Ensign:

<http://www.dianaensign.com/GoosePond.pdf>

Lesson Development by:

George Sly – Friends of Goose Pond

Amanda Figolah - Bloomington South H.S.

Please visit us at www.friendsofgoosepond.org

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