U.S. Fish & Wildlife Service

Conservation in Action:

Guarding our Wildlife Resources

Lesson Plan

Purpose:

To introduce students to the work of Rachel Carson and the resource management activities of the U.S. Fish and Wildlife Service.

Grade Level

High School

Subject Areas

Science, English/Literature

National Science Education Standards

This activity addresses all or part of the following education standards:

Science in Personal and Social Perspectives: Content Standard F

History and Nature of Science: Content Standard G

Materials

Required:

- Copies of Conservation in Action Series Number 5: Guarding Our Wildlife Resources by Rachel Carson,
- Rachel Carson Fact Sheet

Recommended:

• Copies of books written by Rachel Carson (Silent Spring, Under the Sea Wind, The Sea Around Us).

Duration

Required: 1-3 class periods for reading and research Recommended: Field trip to a U.S.

Fish and Wildlife Service office, national fish hatchery or national wildlife refuge

Method

I. Discussion

Lead a discussion about the environment and wildlife conservation. Sample discussion questions include:

- How do you define environmental protection?
- How important is environmental protection to you?
- What experiences have you had in the outdoors? Hiking? Camping? Canoeing? Beachcombing?
- How would you describe the state of our environment? Is it well protected from pollution? Not protected enough? Too protected?
- Do you believe that protection of wildlife and wildlife habitat is important? Why or why not?
- Which animal and plant species need the most protection? Which ecosystems need the most protection?
- Are wild animals and plants too protected? Why or why not?

II. Rachel Carson

Students will read books by Rachel Carson, an early leader in the environmental conservation movement, research her work, and answer the following questions:

- In a short paragraph, describe who Rachel Carson was. Include where she spent her childhood, her educational background and her career.
- List some of her life achievements.
- What is Rachel Carson's most famous work? What was it about?
- Who inspired her life-long love of nature?
- Why is Rachel Carson an important figure in the conservation world?
- What has she done to set the stage for the future of conservation?
- What does the quote below mean to you? How does this quote relate to wildlife conservation?

"The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction." – Rachel Carson 1954.

III. Conservation in Action: Guarding our Wildlife Resources

- A. Students will read the pamphlet entitled *Conservation in Action*, *Guarding our Wildlife Resources*. Through review of the article and internet research, compare the work of the U.S. Fish and Wildlife Service then and now. Below are sample questions to consider:
 - 1. When was the U.S. Fish and Wildlife Service established? What is its purpose?
 - 2. What is the Migratory Bird Treaty Act? Why is it necessary?
 - 3. What is the current status of shorebirds in the Western

Hemisphere? How does that compare to what is described in the article?

- 4. According to the article, what issues threaten migratory songbirds? What are the current threats to these birds and what is their current population status?
- 5. Compare bird banding in 1948 (as described in the article) to today. How many people band birds? What is the purpose of bird banding? How is it regulated? What do you do if you find a bird band?
- 6. What does the author describe as "...one of the most important of all conservation measures...?"
- 7. Compare the status of the National Wildlife Refuge System in 1948 to today.
- 8. Through internet research, identify and describe the primary programs of the U.S. Fish and Wildlife Service.
- 9. Overall, what is the author's opinion of environmental conservation and society in 1948?

Extended research activity:

- A. Provide a brief history of the environmental conservation movement. How does environmental conservation change from the 1940's to the present? What are some of the key laws that benefit the environment? What role did the author of *Guarding our Wildlife Resources* play in the conservation movement? What role does the U.S. Fish and Wildlife Service play in conservation? In your opinion, how important is environmental conservation to the public? Be sure to support your opinion with data and references.
- B. If possible, visit a national wildlife refuge, hatchery or other Fish and Wildlife Service office in your local area. Have the students prepare interview questions to learn the mission of the U.S. Fish and Wildlife Service, and more specifically the office, hatchery or refuge they are visiting.

Supplemental Lessons from the Project Wild and Project Wild Aquatic Activity Guides:

- 1) *Enviro-Ethics* from Project Wild
- 2) What's in the Water? from Project Wild Aquatic
- 3) Can Do! from Project Wild
- 4) Living Research: Aquatic Heroes and Heroines from Project Wild Aquatic
- 5) Hazardous Links, Possible Solutions from Project Wild