Lesson Five

Environmental Issues of Sea Island

Activity 1
In this activity, students will conduct research on sea turtles that live in Georgia's coastal waters and environmental issues related to these animals.

Objective
Students will examine the impact of human behavior on the sea turtle population in the Sea Island region.

Resources
- Sea Turtle Data Sheet
- Decision-making Chart
- School media center reference materials (optional)
- Internet access for the following websites:
  http://g8usa.gov
  http://www.fhwa.dot.gov/environment/wildlifeprotection/index.cfm
  http://g8usa.gov/documents/organization/27487.pdf
  http://georgiamagazine.com/outdoors/islands/sapelo/loggerhead.htm
  http://museum.nhm.uga.edu/gawildlife/gaww.html

Introduction
What do sea turtles have to do with the G8 Summit? How will the meeting of important world leaders relate to a Georgia reptile? At Sea Island, the planners want to ensure that the activities supporting the planning and execution of the Sea Island Summit do not harm the environmental assets of Sea Island.

Task
Students will examine the environmental impact of humans on sea turtle habitat. They will then look at ways that people are working to reduce the problems created for the turtles while recognizing that their actions have consequences for some people’s jobs. Students will follow a decision-making model to discuss ways to improve the habitat for the sea turtles.

Process
In a computer lab setting, have students access the web sites listed above to learn more about the sea turtle population in Georgia. Distribute the Sea Turtle Data Sheet to guide students in their research. Use the Georgian Museum of Natural History site to locate the endangered and threatened turtles of the Georgia coast.
As students complete the research, discuss the decline in sea turtle population. Ask why they believe the population has declined. Remind students that a species is labeled “threatened” when their total number declines dramatically.

Read Brenda Guiberson’s book *Into the Sea* to the class. Discuss with students the different parts of a sea turtle’s life cycle.

Distribute poster board to groups of four students. Have the students use markers, crayons, or colored pencils, to create a poster showing the life cycle of a sea turtle on the Georgia coast. Students should use information from their data charts and the Guiberson book for assistance. They should also illustrate some of the hazards the turtles face. Allow the groups to share their posters and discuss the man-made threats to the turtles’ habitat.

Now present the students with the following problem. Lighting near beaches can disturb nighttime nesting of the sea turtles. However, the hotels, restaurants and other businesses near the beaches make money and provide jobs. They can make more money and provide jobs for more people if they can light up their properties during the evening hours. Business owners and those who are only concerned with the threatened turtle population are in a disagreement! What could be done to help solve the problem so that the turtles survive and people do not lose their jobs?

Distribute the Decision-Making Chart to each group. Have students write the problem in the first box. Each group should think of three possible solutions, then consequences for each one. Suggest that students consider short-term and long-term consequences. Have the each group come to an agreement on what they would suggest as a solution to this conflict. Discuss each group’s conclusion and allow the class to evaluate the possible consequences.
Sea Turtle Data Sheet

What species of sea turtles live on the coast of Georgia?

Circle the turtles, listed above, that are labeled “threatened” or “endangered”.

List three problems facing sea turtles that are caused by human activity.

List three ways that people are working to increase the sea turtle population.
Decision-Making Chart

Problem:

Alternative 1

Consequences

Alternative 2

Consequences

Alternative 3

Consequences

Decision

Names: ________________