

Keys Awareness Discussion

Students are introduced to the Florida Keys and human interaction with the environment throughout time via an interactive history lesson. Students will work in groups to create a story, using evidence, by looking at historical pictures from the Keys. Instructor will lead students through Native Americans to current time, discussing environmental man-made impacts along the way. In the end, students will be asked to determine what we can learn from the past to find solutions for current environmental issues the Keys are facing.

Grade Level: 5th – 12th Grade

Timing: This is a one hour long interactive discussion.

Concepts Covered:

- Connect historical environmental issues to current environmental issues
- Explain an observation using evidence
- Importance of using history as a means to finding solutions to environmental impacts
- Florida Keys history: Native Americans, arrival of Europeans, piracy, wrecking, pineapple farming, sponging, fishing, Flagler's railroad, rise of tourism, wastewater treatment



Standards Addressed:

Next Generation Sunshine State Standards

- **SC.5.N.2.1:** Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence.
- **SC.6.N.1.5**: Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.
- <u>SC.7.N.2.1</u>: Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered.
- <u>SC.7.E.6.6</u>: Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.
- **SC.912.L.17.12**: Discuss the political, social, and environmental consequences of sustainable use of land.
- <u>SC.912.L.17.16:</u> Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.
- SC.912.L.17.18: Describe how human population size and resource use relate to environmental quality
- <u>SC.912.L.17.20:</u> Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.
- **SC.912.N.4.2**: Weigh the merits of alternative strategies for solving a specific societal problem by comparing a number of different costs and benefits, such as human, economic, and environmental.

Ocean Literacy Principles

Ocean Literacy Principle #6: The ocean and humans are inextricably interconnected

- **b.** The ocean provides foods, medicines, and mineral and energy resources. It supports jobs and national economies, serves as a highway for transportation of goods and people, and plays a role in national security.
- **d**. Humans affect the ocean in a variety of ways. Laws, regulations and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, non-point source, and noise pollution), changes to ocean chemistry (ocean acidification) and physical modifications (changes to beaches, shores and rivers). In addition, humans have removed most of the large vertebrates from the ocean.

