Suggested Curriculum Areas
History
Science
Social Studies
Environmental Studies

Suggested Grade Levels
4–12

Key Concepts
Natural Heritage
Cultural Heritage
Alabama (Much more that just a name and geographic location)

Key Skills
Composition
Research
Environmental Appreciation

Synopsis
Many people—travelers, recreationists, outdoor enthusiasts, and others—consider Alabama’s coastal area as being a special “paradise.” But often such glorious praise is in reference only to the area’s beautiful beaches and beach-related accommodations for vacationing. The three-episode Discovering Alabama series, “Alabama’s Coastal Paradise,” tells the greater story of the remarkable natural diversity, cultural history, and educational resources that make Alabama’s coastal area unique in the nation. This Teacher Guide is intended for use in viewing the three Coastal Paradise episodes “Coastal Ecology,” “Coastal History,” and “Coastal Education,” developed to support state interests in promoting the economic and ecological sustainability of Alabama’s coastal area.

Discovering Alabama is a production of the Alabama Museum of Natural History in cooperation with Alabama Public Television. For a complete list of titles in the Discovering Alabama series, as well as for information about ordering videos and accompanying Teacher’s Guides, contact us at either: Discovering Alabama, Box 870340, Tuscaloosa, AL 35487–0340; phone: (205) 348–2039; fax: (205) 348–4219; or email: orders@discoveringalabama.org. Also visit our website: www.discoveringalabama.org.

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A major environmental issue today is “global climate change” (a term often used in place of its predecessor, “global warming”). Many scientists maintain that human activities, such as the burning of fossil fuels and the cutting of large areas of forest, are affecting the global climate in ways that pose dire consequences for life on earth. These scientists warn of impacts including a harmful rise in global temperature, an increase in catastrophic storms, and rising sea levels that will inundate coastal areas and devastate coastal habitats. Other scientists hold an opposing view, interpreting available climate data differently and maintaining that the planet is not on track for unprecedented harmful climate change, but is instead experiencing cycles of shifting global conditions that occur naturally, regardless of human activities.

Contrasting beliefs about this issue often clash in heated controversy, prompting neutral observers to wonder how supposed scientific experts can so adamantly disagree about supposed scientific “facts.” Why can't scientists holding disparate positions simply sit down together, jointly assess available evidence, sort facts from presumptions, and reach agreement about what is the essential truth about the issue? Are their conflicting positions strictly a consequence of differences in scientific assessment, or differences in philosophy and politics?

What degree of bias and “spin” might be associated with each of the conflicting views? What do you think about this issue? What do your friends and relatives think of this issue? Are their views based on established scientific facts, or based more on personal opinions, beliefs, and political leanings?

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<th><strong>Before Viewing</strong></th>
<th><strong>After Viewing</strong></th>
<th><strong>Philosophical Reflections</strong></th>
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<td><strong>1.</strong> As mentioned in the “Coastal Paradise” videos, the word paradise can mean different things to different people. Certainly the word is historically associated with varied concepts of the afterlife. The afterlife aside, however, people also have differing ideas of enjoyable earthly settings sometimes referred to as “paradise.” Ask students to each compose a written description (to include general location, physical attributes, and other special aspects) that conveys their personal idea of such a setting. Invite students to share their written descriptions with the class. Discuss similarities and differences among their descriptions.</td>
<td><strong>1.</strong> Place students in small groups and have each group develop a list of as many important, appealing, and interesting aspects of Alabama’s coastal area as the group can cite. Share and discuss.</td>
<td><strong>A major environmental issue today is “global climate change” (a term often used in place of its predecessor, “global warming”). Many scientists maintain that human activities, such as the burning of fossil fuels and the cutting of large areas of forest, are affecting the global climate in ways that pose dire consequences for life on earth. These scientists warn of impacts including a harmful rise in global temperature, an increase in catastrophic storms, and rising sea levels that will inundate coastal areas and devastate coastal habitats. Other scientists hold an opposing view, interpreting available climate data differently and maintaining that the planet is not on track for unprecedented harmful climate change, but is instead experiencing cycles of shifting global conditions that occur naturally, regardless of human activities.</strong></td>
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<td><strong>2.</strong> Have students each draw an outline of the state of Alabama and indicate where in our state might be a setting that offers the special enjoyment and appeal of an earthly paradise. Introduce the “Coastal Paradise” series by explaining that the videos feature a realm in Alabama with many qualities that satisfy many different ideas of paradise.</td>
<td><strong>2.</strong> Compare the similarities and differences of Alabama’s coastal paradise to students’ original description of their ideas of an earthly paradise. Discuss concerns about the future of Alabama’s coastal area, possible environmental threats to the area, and protective measures that might help maintain the many qualities of the area.</td>
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**While Viewing**

Have students count the number of interviewed experts who comment about the significant natural diversity found in Alabama.

**Video Mystery Question:** Great natural beauty and natural diversity combine to make Alabama's coastal area a unique paradise, especially enhanced by its relationship to what natural features? (Answer: Alabama’s coastal area is the environmental beneficiary of many freshwater rivers, most notably the vast inland watershed of the Mobile River Drainage Basin, itself one of the most naturally diverse aquatic systems in the world.)

**Extensions**

**1.** View other Discovering Alabama programs featuring coastal-related content. Such programs include “Alabama Natural Diversity,” “Geological History,” “Mobile River Basin,” “Alabama Wetlands,” “Alabama Rivers,” “Dauphin Island,” “Fort Morgan,” and others.

**2.** Invite a representative of any of Alabama’s numerous water conservation organizations to speak to the class about Alabama’s water resources and the relationship of healthy watersheds to healthy streams and wetlands, to include similar discussion about Alabama’s coastal area.

**Discovering Alabama**
Alabama’s coastal area has long been a popular subject for photographers, painters, and other artisans. Have students list aspects of the coastal area they feel have special aesthetic/artistic appeal. Invite them to find and bring to class an artistic work that features an aspect of coastal area appeal.

Arrange a field trip to a river or special stream in your local area. Have the class investigate where the stream originates, its length and the drop in elevation across this distance, the variety of plants and animals along its course, where it merges with a larger stream, and ultimately where these waters reach the Gulf Coast. With help from local water officials or environmental groups, investigate local conditions of water quality in the stream and survey major human activities that affect the watershed and water quality.

Bon Secour National Wildlife Refuge: http://www.fws.gov/bonsecour/


Dauphin Island Sea Lab: http://www.disl.org/.


Gulf Coast Chamber of Commerce: mygulfcoastchamber.com.

However, we are clearly jeopardizing the special natural qualities of our coastal area if we don’t ask—and answer—the obvious question that is key to coastal Alabama’s future. How do we ensure a sustainable vibrant economy for the area and also retain the area’s abundant, diverse natural qualities?

A repeated observation of Discovering Alabama is that the world is changing at an accelerating pace. Looking to the long term future, Alabama is likely to experience increasing development and urbanization similar to the sprawling growth that has consumed the natural surroundings of other regions. Thus a recurring theme of Discovering Alabama is that the state would be wise to pursue long-term planning that places an emphasis on retaining and protecting Alabama’s abundant natural heritage. Unfortunately, Alabama is still lagging in this regard.

Oh yeah, I almost forgot. Among Discovering Alabama’s almost 100 programs completed to date, several have won awards for their message about the need for long-term planning. These programs include, for example, “Alabama Countryside,” “Flint River,” “Tuscaloosa County,” “Lee County,” “Cahaba River Watershed,” “Village Creek,” and “A Walk In the Woods.”

Happy outings,
Coastal History
The Past—From Exploration to Statehood

Spanish explorers were sailing into Alabama's coastal area as early as 1500. The area was explored in more detail in 1516 by Diego de Miruelo and in 1519 by Alanso Alvarez de Pineda. In 1528, Pánfilo de Narváez traveled through what was likely the Mobile Bay area, encountering Native Americans who fled and burned their towns at the approach of the expedition. This response was a prelude to the journeys of Hernando de Soto, more than eleven years later.

Hernando de Soto explored the area and beyond in 1540, finding the area inhabited by a Muskogee Native American people. During this expedition, his forces destroyed the fortified town of Mauvila, also spelled Maubila, from which the name Mobile was later derived. The battle with Chief Tuscaloosa and his warriors took place somewhere north of coastal Alabama. The next large expedition was that of Tristan de Luna y Arrellano, in his unsuccessful attempt to establish a permanent colony for Spain, nearby at Pensacola in 1559–1561.

Mobile was founded as the capital of colonial French Louisiana in 1702 and the area remained a part of New France for over 60 years. In 1763, Britain took control following their victory in the Seven Years War. Following the American Revolutionary War, Spain gained control of the area as part of a territory captured from Great Britain in 1780.

The area first became a part of the United States in 1813, when it was captured by American forces and added to the Mississippi Territory, then re-zoned into the Alabama Territory in 1817 and, finally, on December 14, 1819, became part of the new 22nd state, Alabama, one of the earlier states of the U.S.

Coastal Ecology
The Future—Multiple Values In the Balance

Sugary white beaches, yes, but Alabama's coastal area is increasingly recognized by scientists as also being one of the most ecologically significant regions in the nation. The beautiful beaches nurture vital dune systems and blend to myriad marshes, mudflats, bays, bayous, swamps, bogs, forests, savannas, creeks, rivers, and more. The area's special combination of geology, geography, sands and soils, microorganisms, vegetation, and wildlife total a unique ecosystem that sustains life, environmentally and economically, within its boundaries and far beyond.

Science today is telling us that protecting our coastal area requires protecting the ecosystem at large. Critical environmental and biological functions, and local economies derived of these functions, are best maintained by ensuring the natural integrity of the supportive ecosystem, by saving intact expansive portions of native lands, waters, and habitats. History tells us that in protecting the natural values of Alabama's coastal area we also guard additional important values. Our native surroundings provide identity and a sense of place for who we are as a people. In other words, our natural heritage has helped to shape our cultural heritage. Alabama's abundant natural surroundings have played an important role in fostering community values, enabling a pleasant pace of life, and maintaining important traditions and freedoms. These freedoms include access to clean air, clean water, and ample open space, as well as many wild wonders representative of America the beautiful.

In protecting our coastal area we are protecting a heritage that is fundamental to a way of life and to life itself. As expanding growth and change come to Alabama, this special heritage hangs in the balance. What will the coastal landscape of Alabama be like twenty, fifty, or one hundred years from today? Will we be able to maintain the rural countryside and keep the wild lands intact? Or will the area become like so many other places, developed and artificialized to the point of losing close connection with its native natural heritage? Alabamians today are blessed to have so much remaining of our remarkable natural heritage. Thus we have the opportunity not only to experience Alabama's coastal natural wonders but also to retain them for generations to come.