

Discovering Alabama

Teacher's Guide

Alabama's Natural Diversity

Suggested Curriculum Areas

Biology
Geography
Art
History

Suggested Grade Levels

7-12

Key Concepts

Natural Diversity
Natural Heritage
Land Ethic

Key Skills

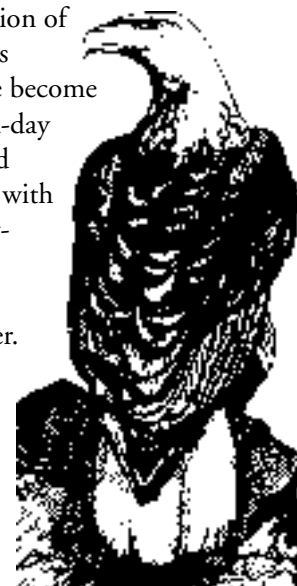
Critical Thinking
Analysis
Community Involvement

Synopsis

Alabama often has been viewed as a state that is behind, a backwoods region lacking the sophistication of more urbanized, progressive places. But today, it is apparent that many high-growth urban areas have become synonymous with a stressful life-style—24-hour-a-day noise, traffic congestion, noxious pollution, record crime rates, and all the other problems that come with sprawling development and the loss of natural surroundings. In comparison with these more urban regions, Alabama's abundant wildlands no longer cause the state to be viewed as a cultural backwater.

This video presents an overview of Alabama's natural qualities from the state's Appalachian highlands to its coastal wetlands. Alabama's great variety of terrain, its wild habitats and native plants and animals, rank among the most naturally diverse in the nation. As other parts of our country lose their native qualities, Alabama's wildlands help to make our state exceptional.

If Alabama is to retain its wildlands for the future, her citizens must learn to respect and value these increasingly rare natural characteristics.



THE UNIVERSITY OF
ALABAMA



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: 205-348-2036; fax: 205-348-4219; or email: orders@discoveringalabama.org. Also visit our website: www.discoveringalabama.org.

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Before Viewing

1. Conduct a short pre-test of student knowledge about significant natural features in Alabama. Ask each student to sketch a large outline of the state, using appropriate symbols to indicate the names and locations of: a) five Alabama natural areas or features that are nationally significant, and b) five native species (plants and/or animals) that are rare or unique in the state and which may include species that are considered threatened or endangered.
2. Place students in pairs or small groups, have them exchange and compare sketches, then work together to produce a single sketch indicating as many significant features and special species as they can identify. Introduce the video by explaining that it presents an overview of Alabama's natural diversity, a term that refers to the overall variety of natural features and resources. But alert the class that the beginning of the video, which is filmed in black and white, reveals a special secret.

While Viewing

Have students note how the terrain and natural character of Alabama change from one part of the state to the next. Have them watch for particular features and species of significance in each region of the state.

Video Mystery Question: How is Alabama helping to restore America's natural heritage? (Answer: The bald eagle, our nation's symbol—and an endangered species—is making a comeback in several wild areas of Alabama.)



Willow Oak

Southern Red Oak



Post Oak



Water Oak



After Viewing

1. Reconvene student groups to work together to add newly-learned information to their sketches of Alabama's natural features.
2. The video suggests that today Alabama is at a crossroads, that the future of the state's wildlands is dependent upon our appreciation of the state and the emphasis that is given to maintaining its natural qualities. Ask students to consider how rapid growth and development impact other regions and to imagine what Alabama might be like in a hundred years if it continues in our region. Ask them to indicate these envisioned changes on their sketches of the state.
3. Perhaps your class might recall local natural areas that have disappeared from your community in recent months or years. What environmental losses may have occurred in each place? Have students make a list of nearby locations that still have noticeable natural qualities. What values or benefits does each place provide? (For example, listed locations might provide animal homes, shade trees, a buffer from noise or buildings, a place to get off the pavement, or scenic beauty.)

Extensions

1. Develop a list of Alabama place names that are of Indian derivation (don't forget Alabama). How many refer to nature or natural features in the state? (For assistance, see **Additional References and Resources**.) An interesting research project is to investigate the tribal origins of each name and trace how the spelling and sometimes the meaning have changed over time.
2. Many of Alabama's rural schools have streams or woodlands nearby to harbor native species of plants and animals. Even an urban school setting has lots of nature—soil, rocks, grasses, shrubs, trees, insects, and birds. Develop a list of the natural diversity at or near your school. Do you have any rare species or other special features? How large is the largest tree, and how does it compare in size with the state champion tree for its species? Are there any natural features on the school grounds, perhaps among the ornamental shrubs and trees, that are not native to Alabama?
3. Invite an authority on Alabama's natural diversity to speak to your class. Three prime sources of expertise are the Alabama Natural Heritage Program, the Alabama Nongame Wildlife Program, and the Nature Conservancy. (For contact information, see **Additional References and Resources**.)

Philosophical Reflections

The term environmental quality can mean different things to different people. Some people tend to think mainly of immediate concerns for human health, of the air we breathe, and the water we drink. Others think also of the larger environmental picture, of the land, the forests, and the wild habitats needed for overall ecological health and the survival of native plants and animals.

This first perspective is sometimes

referred to as the “regulatory” perspective because it focuses primarily on regulating the discharge of pollutants. The latter has been called a “land ethic” perspective, after the philosophy promoted by the renowned conservationist, Aldo Leopold, who believed we have an ethical responsibility to be caring stewards of the land for the well-being of nature itself.

Which of the two viewpoints is most likely to ignore the loss of wildlands? Which of the two is most likely to conflict with trends toward increasing urban growth and development? Which of the two gives a greater emphasis to the welfare of other species? Which of the two is more likely to help maintain Alabama’s rural landscape and lifestyle?

Nature in Art

The video includes a brief reference to the famous naturalist, William Bartram, who traveled across much of the South in the 1700s, documenting the region’s natural wonders. Portions of his book, *Travels of William Bartram*, deal specifically with Alabama and contain early descriptions of the state that are quite impressive. Bartram was also a gifted artist, sketching many of the plants and animals he encountered. Perhaps your class would enjoy sketching features identified in your inventory of local natural diversity.

Community Connections

1. Every Alabama community has its own diversity of native natural features—hills and valleys, streams, wooded areas, plants, and animals. Develop a complete inventory of the natural diversity of your community or of your county. This is a good activity to combine the study of geography, local history, and other subjects into a single lesson. One approach is to assemble the topographic maps of your community or county and record locations of the natural features on the maps. Do any rare

or otherwise special features appear in your inventory? Are there any significant wild areas in your locale?

2. If you have a special wild area in your county, you might want to learn who owns it and what plans there are for its future. Might the owner collaborate with your school to make part of the property available as an outdoor learning lab? (For information about this concept, contact the Alabama Forest Owners Association, P.O. Box 361434, Birmingham AL 35236.)

3. Is there a special wild area in your county that will qualify for inclusion in the Alabama Forever Wild Program? (For information about this program, contact Forever Wild, Alabama Department of Conservation and Natural Resources, 64 N. Union St., Montgomery AL 36130.) If the owner is interested in pursuing this possibility, nomination of the tract for Forever Wild review is an excellent class project.

Complementary Aids and Activities

Project Learning Tree, Activity Guide, Grades 7–12, “The Influence of Forests on your Region’s History.” Available through Alabama Forestry Association, 555 Alabama St., Montgomery AL 36104.

Project WILD, Secondary Activity Guide, “Too Close for Comfort.” Available through Alabama Department of Conservation and Natural Resources, 64 N. Union St., Montgomery AL 36130.

Volunteer for the Science Program. Help scientists at the U.S. Geological Survey by gathering data in your state. Write to USGS, Dept. P, 601 National Center, Reston VA 22092, or call 703-648-7440.

George Miksch Sutton Research Center, Inc., P.O. Box 2007, Bartlesville OK 74005; 918-336-7778. Contact to learn about their program to breed bald eagles and release them in several states including Alabama.

Additional References and Resources

Indian Place Names in Alabama by William A. Read (1984).

A Sand County Almanac: With Essays on Conservation from Round River by Aldo Leopold (1949 and later editions).

William Bartram: Travels and Other Writings, edited by Thomas P. Slaughter (1996).

Alabama Nongame Wildlife Program and the Alabama Natural Heritage Program. Division of Game and Fish, Alabama Department of Conservation and Natural Resources, 64 N. Union St., Montgomery AL 36130.

Nature Conservancy of Alabama, Pepper Place, 2821C Second Ave. S, Birmingham AL 35233.

Parting Thoughts

Although this video includes a bit of Alabama history, its main concern is for Alabama’s future. Many parts of the nation have lost most of their native natural surroundings while Alabama still has an opportunity to maintain much of its wild backcountry. It will require more than a simple awareness of our natural qualities to help protect them. For example, already we see that some folks think of the state’s natural appeal only as a means of promoting such things as tourism or new growth. But if we want the state’s natural qualities protected for the long term, we will need to speak up, get involved, and take action to make sure that state leaders place a priority on maintaining our wonderful outdoor heritage.

Oh yeah, I almost forgot. The Discovering Alabama video series is an excellent way to learn about Alabama’s natural diversity. Please contact us for a listing of available shows; our address is on the front page.



Happy outings,

S. Dege



Discovering
Alabama

Activity/Information Sheet

Alabama's Natural Diversity

This interesting illustration shows some of the wonderful diversity of Alabama's wildlife. How many animals, birds, and fish can you identify in the picture? (We found 10 kinds of mammals, 13 birds, 2 fish, 1 reptile, and 2 invertebrates.)



Cover of the February 1931 issue of the *Alabama Game and Fish News*, published by the Alabama Department of Game and Fisheries.