



# Discovering Alabama

## Teacher's Guide

## Alabama Quadricentennial

### Suggested Curriculum Areas

Environmental Studies  
Social Studies  
Earth Science

### Suggested Grade Levels

4 – 12

### Key Concepts

Natural Diversity  
Rural Lands  
Conservation

### Key Skills

Critical Thinking  
Conceptual Thinking  
Research

### Synopsis

Alabama's Bicentennial year (2019) was celebrated with many gala events held across the state lauding its 200 years of progress from a frontier wilderness to a populous modern region today. Various dignitaries gave rousing speeches heralding that Alabama is now poised for a grand era of unprecedented new growth in the years ahead.

"Alabama Quadricentennial" offers Alabamians a look far ahead, over the next 200 years to the time of the state's quadricentennial, to consider how a future of continuing growth might eventually affect Alabama's lands, waters, and biodiversity. Leading environmental scientists join the program to share their concerns about the inevitable consequences of ever-expanding growth that will result in the loss of Alabama's abundant rural lands and the decline of its exceptional natural diversity.



*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 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](mailto:orders@discoveringalabama.org). Also visit our website: [www.discoveringalabama.org](http://www.discoveringalabama.org).

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## Before Viewing

**1** Have students view several of *Discovering Alabama's* earlier programs to stimulate a bit of “warm-up” thinking about environmental changes that can result from expanding growth and development. Such earlier programs include “Cahaba River Watershed,” “Weeks Bay,” “Flint River,” “Village Creek,” and “Alabama Countryside,” among others.

**2** Ask students to imagine what Alabama might be like at time of the state’s quadricentennial. Allow them to creatively image any scenarios that come to mind. Then invite open discussion of their ideas about the future and introduce “Alabama Quadricentennial” by explaining that the show discusses a future scenario for Alabama that environmental scientists say is quite possible given current trends in the world today.

## While Viewing

Have students watch for information regarding natural qualities that are special about Alabama. Ask them to note the concerns of scientists who cite detrimental consequences to these natural qualities that might result from extensive future growth and development in the state.

### Video Mystery Question

How can Alabama have a future of ever-expanding growth “in balance” with the environment? (Answer: Alabama can’t. Alabama’s special environmental abundance is inextricably dependent upon retaining Alabama’s exceptional abundance of rural natural lands. Retaining this natural abundance will not be possible in a future of ever-expanding development across rural Alabama.)

## After Viewing

**1** Review with students their reactions to “Alabama Quadricentennial,” and their subsequent thoughts about Alabama’s future.

**2** Remind the class that economic development is the basis of most of the material benefits and opportunities that society enjoys today. Conduct a brainstorm of student ideas about how Alabama might find ways to maintain a healthy economy and also retain the state’s plentiful rural lands and exceptional natural environment. (This question could also be assigned as individual or group research projects that allow students to more fully explore this difficult issue.)

## Extensions

“Alabama Quadricentennial” follows almost 100 previous *Discovering Alabama* programs, most of which give attention to particular natural areas and associated plants, animals, and other features. Have students watch several of these programs to learn more about Alabama’s natural habitats and specific aspects of Alabama’s natural diversity. Examples include “Red-Cockaded Woodpecker,” “Red Hills Salamander,” “Eastern Indigo Snake,” “Delta Revisit,” “Coastal Ecology,” “Longleaf Ecosystem,” “Geological History,” and “Alabama’s Natural Diversity.”

## Philosophical Reflections

A major concern of “Alabama Quadricentennial” is the issue of population growth. However, some people do not feel this is an issue at all and often argue that there is no problem of population pressure on the environment and no need to be

concerned. In fact, some people hold to a view, whether based in their religious beliefs or derived from their favored economic theory, that human beings should seek fervently to multiply their numbers in fulfillment of the destined advancement of human society. So it appears there are conflicting philosophical and moral perspectives about the environmental stress being wrought on the natural environment by burgeoning human population growth. One perspective maintains that we should recognize and address the human fault in contributing to this environmental stress. Another perspective maintains that the environmental harm from population pressure is necessary and justified in the pursuit of the proper purposes of humankind. Which perspective most aligns with your views and beliefs?

## Nature in Art

Photography is always an effective activity for stimulating students’ appreciation of nature. Assign group projects to photograph aspects of rural and natural landscapes that are representative of “Alabama The Beautiful.” Have the groups arrange their selected photos as an exhibit for other classes to enjoy.

## Community Connections

Have student teams conduct research to determine: 1. Alabama’s rate of population growth from decade to decade since statehood; 2. your community’s population growth since statehood (or perhaps since the town’s founding); 3. an assessment of community views about the kinds of growth and the extent of future growth that residents feel is a) desirable, and b) undesirable. Students might wish to also produce a news story presenting the results of such research.

## Additional References & Resources

- *The Creation: An Appeal to Save Life on Earth* by E.O. Wilson. W.W. Norton & Co. (2006).
- *Life on the Brink: Environmentalists Confront Overpopulation* edited by Philip Cafaro and Eileen Crist, with contributions by Albert Bartlett, Lester Brown, Roderick Nash, and Leon Kolankiewicz, among others. University of Georgia Press (2012).
- *Alabama Rivers: A Celebration and Challenge* by Bill Deutsch. MindBridge Press (2019).
- *Conservation Communities: Creating Value with Nature, Open Space, and Agriculture* by Edward T. McMahon. Urban Land Institute (2010).
- *Rural by Design: Maintaining Small Town Character* by Randall Arendt. American Planning Association (1994).
- *Discovering Alabama Wetlands* by Doug Phillips. University of Alabama Press (2002).
- *Discovering Alabama Forests* by Doug Phillips. University of Alabama Press (2006).
- *Land Development and the Natural Environment: Estimating Impacts* by Dale L. Keyes. Urban Land Institute (1976).
- *Saving America's Countryside: A Guide to Rural Conservation* by Samuel Stokes, A. Elizabeth Watson, and Shelley S. Mastran. Johns Hopkins University Press (1997).

## Parting Thoughts

Unlike previous Discovering Alabama programs, "Alabama Quadricentennial" presents a rather blunt environmental alert, likely to provoke predictable retort from some viewers. For example, there are likely to be the predictable clichés, "Well, you can't stop progress," "If you're not growing you're dying," and yes, the disguised attempt at reassurance, "we can have growth in balance with the environ-

ment" (this one, of course, is partially correct if, for instance, it is referring to using technology to control air or water emissions – but it has little to do with the matter of sprawling land conversion). I would respectfully suggest that those who offer these sorts of reactions to "Alabama Quadricentennial" are plainly missing the point of the show.

There also may be folks who assail the show as "just a bunch of warmed-over old environmental stuff," extremism they can't agree with. Needless to say, such a perception is often grounded in a particular political perspective typically unfriendly to anything "environmental." I would kindly ask these folks to watch the show again and listen more carefully this time. (DVD copies of the show are available upon request.)

Unfortunately, the odd possibility exists that "Alabama Quadricentennial" might be strangely misconstrued by advocacy groups passionate about various social or ethnic issues. Such issues are too fraught with complexity to try discussing here. Besides, they are largely irrelevant to the environmental message of "Alabama Quadricentennial," which presents considerations for Alabama's future that should be of concern to all interest groups.

And we can be sure some people will feel compelled to complain that, "the show talks about problems, but it doesn't give any solutions." Well, the first step in finding a solution for a problem is to recognize the problem. "Alabama Quadricentennial" enlists the cooperation of leading environmental scientists in recognizing potentially serious environmental problems in Alabama's future. I hope viewers will be mindful that "Alabama Quadricentennial" is only a 30-minute show. Presenting solutions for the concerns discussed will require a lengthy series of additional shows, addressing multiple needs for politically courageous leadership, thoughtful planning and policy development, relevant public

education, and innovative economic development protective of Alabama's rural lands.

Finally, I will confide, I am certainly sympathetic to a particular sentiment that some might feel in reaction to "Alabama Quadricentennial." It is quite an understandable sentiment. As the show mentions, a number of Alabama communities are losing population and suffering from a lack of growth and job opportunities. Moreover, Alabama's history of economic difficulties has instilled an enduring and widely shared eagerness for new development and economic growth. Thus, "Alabama Quadricentennial" might strike a nerve among those agencies and individuals involved with promoting growth for the state. I hope these good folks can suppress their reflexive angst and appreciate that, essentially, "Alabama Quadricentennial" is simply encouraging Alabamians to consider thoughtfully the long term environmental implications of a changing Alabama landscape. The dramatic future scenario presented in Alabama Quadricentennial is not without real plausibility. Rather, it is practically assured if many of the current directions of accelerating growth and change continue endlessly into the Southeast and into Alabama.

Oh yeah, I almost forgot. Yogi Berra is credited with several humorous observations pertaining to the future, including the famous quip "the future ain't what it used to be." Indeed, our world is changing at a pace and in a variety of ways that defy what we might once have assumed. And given the many troubles around the world today, perhaps we should be praying mightily that we will even have a future.

Dr. Doug





## Discovering Alabama

### Activity/Information Sheet

### Alabama Quadracentennial

#### Additional Parting Thoughts, Prompted by Viewer Questions

**Viewer Question:** *Why would you do a show like “Alabama Quadracentennial” now when Alabama is in such need of economic development and jobs, and needing more people for our work force and to help grow our tax base?*

**Doug Phillips:** I certainly join my business friends in wanting new economic development for Alabama today, good economic development, smart development. But smart economic development for today should include smart consideration of potential environmental consequences, for today and for tomorrow. As “Alabama Quadracentennial” clearly says, “now is not too soon” to give serious attention to planning for the long-term sustainability of Alabama’s plentiful rural lands and waters.

**Viewer Question:** *Is it even possible for Alabama to ever become so heavily populated as suggested in “Alabama Quadracentennial”?*

**Doug Phillips:** In a word, yes. Rising world and U.S. populations today are encountering water shortages, food-supply issues, energy difficulties, and other problems exacerbated by rising population pressures on the environment. Meanwhile a large portion of U.S. growth

is headed into the South. And here sits Alabama, in the heart of the South, with lots of water, great land, vast open space, nice environmental quality, plenty of freedoms, low cost of living, available energy, and abundant accessible terrain ripe for development. Thus the observation, “Alabama is a plump sitting duck for the crowding world.”

**Viewer Question:** *You say lots of growth is possible, but how could it happen? I can’t imagine that every little town in Alabama is going to just keep spreading until it becomes a big crowded city.*

**Doug Phillips:** Parts of Alabama, for example, the Huntsville area and the coastal area, and a number of other actively growing areas, are already facing significant issues of sprawling growth. And future growth, if unchecked, will eventually spread well beyond these areas. Many factors could contribute to this, but let’s briefly itemize a few that often get overlooked. Taken together, they represent a considerable cumulative stimulus for expansive growth:

- First, a seemingly minor factor that I fear is a more persistent influence than we might think: Remnants still linger of the old idea that Alabama is “behind,” that the state suffers from an image of being a “rural backwater,” and we must change this ugly image to attract growth. Unfortunately, those who harbor this conviction often associate Alabama’s rural character as an aspect of the ugliness they would like to change.

- Increasingly, Alabama is becoming a chosen location for newcomers, investors, and developers, some even from outside the U.S., who have little interest in Alabama except for monetary profit and who have little regard for Alabama’s rural natural heritage. Equally concerning, many officials welcome this new attention to our state without considering the associated potential for careless consequences to Alabama’s rural lands.

- In years ahead, we can expect there will be proposals to “open up” rural reaches of Alabama with new interstate corridors, major new state highways, farmland-taking bypass routes, and probably several new airports – all with the political promise of bringing growth

to rural Alabama. The experience of other states confirms that these kinds of development are a primary stimulus by which rural regions eventually become sprawling urban and suburban regions.

- Promoting tourism, touted as environmentally benign, may prove environmentally otherwise. The theory is, tourists will visit Alabama, spend their money, and then go home. But the truth is, many are finding Alabama a uniquely great place to live. They are buying property. They are moving in. And they are spreading the word. Actively promoting tourism (including “ecotourism”) may eventually bring the unintended permanent consequence of a “crowding world.”

- “Worshipping at the altar of growth,” as some say, can invite the phenomenon of the “perpetual sprawl cycle”: Increasing population requires more jobs; more jobs attract more people; more people require more services; more services require more tax revenues; more tax revenues require more people; more people require more jobs – and the cycle repeats until the rural countryside is swallowed by sprawl.

**Viewer Question:** *Some people won’t think you’re saying anything new or earthshaking in “Alabama Quadracentennial.” But I guess my question is, does it even matter? Do you feel this show will make any difference for Alabama’s long-term future, or ultimately, is there really just no chance of avoiding the “crowding world.”*

**Doug Phillips:** Well, we live in a democracy, of course, so if Alabamians want the state to become heavily populated and developed, then that’s their free choice. I just worry that maybe they aren’t being helped to think about the full implications and consequences of such a choice. And “Alabama Quadracentennial” is simply offering a little bit of help in that regard, now while we have time to plan ahead. But you’re right, and despite years of urging by me and many others, Alabama continues to lack political interest in seriously planning or preparing to prevent the environmental changes discussed in “Alabama Quadracentennial.” And that’s a shame.