

# DISCOVERING

# Alabama

Teacher's Guide

## Forest History

#### **Suggested Curriculum Areas**

Social Studies History Science

#### **Suggested Grade Levels**

4-12

#### **Key Concepts**

Forest History
Forest Landowner
Forest Stewardship

#### **Key Skills**

Research Map Reading Environmental Respect

## **Synopsis**

any forest education materials tend to emphasize the natural and biological aspects of forests, and often do not reflect the historical role of people as an influence on forest conditions.

Therefore, this video reviews the history of the Alabama forest in

context with the history of the southern forest region. Particular focus is given to the period from early settlement of the South to the present. The story is told from the perspective of forest landowners who feel that part of this history is often overlooked; who believe that today's highly productive southern forests are due largely to the stewardship of private indi-



viduals and families living on the land. These landowners hope that their story might supplement other educational materials while also adding a measure of historical balance. As the video suggests, in seeking a better future, we can benefit from appreciating our past.





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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Robert G. Wehle Charitable Trust



#### **Before Viewing**

- Engage students at a personal level by asking each to think of a favorite tree or wooded area near their home, school, or elsewhere in the community. Invite a few students to share where their favorite trees are located, and why the particular trees or woods are appealing.
- Remind students that, whereas our cities and suburbs are characterized by the predominance of buildings, roads, parking lots, etc., many undeveloped areas are characterized by the predominance of trees. And where these areas are large enough, they are considered to be forests. Ask each student to indicate his/her beliefs about the current condition of America's forests (for example, whether the forests are disappearing, being abused, improving, or changing in some other way) by writing a brief summary of their beliefs on a sheet of paper. Place students in pairs and have the students in each pair swap written statements and discuss how their statements are similar or different.
- Arrange students in small groups and allow 10–15 minutes of discussion in which students identify key areas of agreement and disagreement among members of their group. Using the blackboard or flip easel, list each group's primary areas of agreement and disagreement. Underscore those that are clearly related to matters of forest history, forest size, or environmental concerns. Introduce the video by explaining that it is about the history and status of Alabama's forests.

#### While Viewing

Have the class watch for information in the video that might help clarify listed areas of student disagreement.

Video Mystery Question: This video is dedicated in honor of someone. Who is this person, and what is the reason for the honorary dedication? (Answer: Video credits include a special dedication in honor of Bill Moody, whose long tenure as State Forester (i.e., head of the Alabama Forestry Commission) represents a notable period in Alabama's forest history. Now retired, Moody is known as an early leader on behalf

of forest education and as an ardent champion of landowners' rights and responsibilities, for which he pioneered many educational initiatives and landowner-assistance programs to promote forest stewardship.

#### After Viewing

- 1. Revisit the listed items of student disagreement. Beside each item, cite any new information presented in the video that may confirm or conflict with student beliefs. Discuss whether students' views and beliefs were generally similar or dissimilar to the information presented in the video.
- 2. Ask which aspects of the video were most appealing. Discuss students' reactions to the participation of forest landowners in the video. Do students feel that the landowners add an important dimension, perhaps a new perspective, in learning about the forest? Do any of your students have friends or relatives who are forest landowners?

#### Extensions

- Using a brainstorm session or assigning students to work in small groups, have the class develop a list of questions for which they would like additional information about forests. Have them pursue answers by means of additional information sources. These sources might include professional foresters, ecologists, industry groups, and environmental groups.
- 2. Invite knowledgeable guest speakers to help answer students' questions. Student curiosity can be further heightened by inviting several speakers representing different interest groups (environmentalists, industry representatives, etc.). Often this will provide the class with firsthand experience of how the positions of various interest groups differ, thereby setting

the stage for independent research, for team debates, and for other follow-up learning activities.

#### Philosophical Reflections

Modern society is becoming increasingly urbanized and increasingly removed from direct contact with the forest. Meanwhile, public attitudes about forest resources are being affected by a variety of factors, from rapidly changing life-styles to the influence of popular media. A recent survey found that public perceptions often differ dramatically, as typified by the following survey responses:

Investment Broker: "Well, I don't understand what all the environmental hug-a-tree nonsense is about. But show me a profitable new wood-products industry, and, hey, now we're talking. That's the real value of trees, the dollars—the bottom line—that's the only thing that counts for me."

Citizen Activist: "The forest? Haven't you heard? Our wonderful virgin forests that have been with us for thousands of years are being senselessly destroyed, wiped out forever by greedy profiteers. Pretty soon, there won't be any more pristine forests left, just the ugly scars from where it's all been stripped by loggers who don't give a flip about the environment."

Local Official: "Sorry, you got the wrong person. I really don't know much about forests or anything like that. I stay too busy with more important matters to think about than that kind of stuff."

Which of these responses is closest to your own viewpoint? Which represents the feelings of your students?

Discuss the possible personal backgrounds (childhood experiences, group affiliations, education, etc.) that might contribute to how people develop beliefs/attitudes about the forest.



#### Nature in Art

Across the ages, the forest has been the source for many natural materials used to artistically enrich the daily lives of people. These materials include dyes, pigments, adhesives, decorations, and much more. In early periods, the bark of the black oak, for example, was popular in yielding dyes of orange and yellow. And who among us does not still enjoy the decorative use of mistletoe, holly, pinecones, and pine-branch wreaths at appropriate holidays.

Invite your students to create their own artwork using natural materials from the forest.

#### Community Connections

Locate an appropriate site, perhaps a treeless part of the school grounds, that your class might be permitted to "reforest" by planting new trees. Your local state forestry office can offer assistance and may be able to provide seedlings, equipment, and planting guidelines. Combine the reforestation activities with related learning about the biology of tree growth, soil conservation, water, and wild-life. Consider involving other teachers and parents in a variety of interdisciplinary pursuits including career exploration and community improvement. Be sure to arrange for local media coverage featuring your students doing field activities.

Assemble a complete set of topographic maps of your community, or preferably, your county (see Additional References and Resources). Give students the assignment to locate all forested lands. Possible research items include tract ownership (public or private), dominant forest age and species, the location of major watersheds, the location of special features or natural areas (to include habitats for special plants and animals), the management history of each tract, and, if possible, annual local economic benefits generated by these forest resources. When students have completed their research, invite them to develop a forest education campaign for the community. This could involve writing articles for local publications, preparing slide presentations for civic groups, and other public awareness strategies that might emerge from the creative thoughts of your students.

# Complementary Aids and Activities

**Note**: See also the activities and resources in the complementary "Forest Issues" Teacher's Guide.

- *Project Learning Tree*: activities: grades K–3: "Long Range—Short Range"; grades 4–6: Forest Consequences"; grades 7–12: "Loose Knots and Tight Knots" and "Land Allocation." Contact: Alabama Forestry Association, 555 Alabama Street, Montgomery AL 36104; also visit: *www.plt.org*.
- *Project WILD*: activities: grades K–3: "Everybody Needs a Home"; grades 4–7: "Shrinking Habitat"; grades 5–12: "Changing Attitudes"; grades 7–12: "History of Wildlife Management." Contact: Alabama Department of Conservation and Natural Resources, 64 N. Union Street, Montgomery AL 36130; also visit their site: *www.projectwild.org*.

# Additional References and Resources

- Alabama Topographic Maps, available from the Geological Survey of Alabama, Box 869999, Tuscaloosa AL 35486–9999, or see: www.gsa.state.al.us.
- Alabama Shaded Relief Map, available from: www.ravenmaps.com.
- The Greening of the South: The Recovery of Land and Forest by Thomas D. Clark (1984).
- *Reading the Landscape of America* by May Theilgaard Watts (1975).
- Forever Green: The History and Hope of the American Forest by Chuck Leavell (2001).

Important Forestry Organizations and Websites

- Alabama Forestry Commission. There is an impressive amount of useful information and publications on their Website: www.forestry.state.al.us. Also, there are several local offices, a potential source for speakers and field trips.
- U.S.D.A. Forest Service, Alabama. Useful information and links to Alabama National Forests. Possible source of speakers and field trips: www.southernregion.fs.fed.us/alabama
- Society of American Foresters' Website has lots of resources: www.safnet.org/educate/educators
- Alabama Forestry Association. Important forestry organization, source for local speakers and resources: www.alaforestry.org
- Sustainable Forestry Initiative. The SFI seeks to promote sustainable forestry to the public, forest landowners, as well as forest, paper, and wood products industries: <a href="https://www.alaforestry.org/sfi">www.alaforestry.org/sfi</a> and <a href="https://www.pfmt.org/sfi/htm">www.pfmt.org/sfi/htm</a>

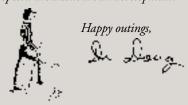
### **Parting Thoughts**

These days, a commonly-heard complaint is that Alabama is suffering because timber companies and corporations "own most of the forestlands in the state." It will surprise some folks, therefore, to learn that more than 70% of Alabama's 22 million forestland acres are owned by private citizens, approximately 215,000 such private citizens. Far from holding large tracts, the typical Alabama forestland owner oversees less than 500 acres, with average ownership being closer to 100 acres.

The role of Alabama landowners remains crucial if we want our remarkable forest heritage to continue in an abundant, productive, and environmentally-healthy condition. So, I would like to offer two thoughts that I hope are appropriate for present times.

- 1. Alabama has maintained its abundant rural and natural qualities largely because of the fact that a diversity of landowners—including average citizens—can presently afford to own forestland and to keep these lands intact as forestlands. Therefore, advocates for higher taxes on Alabama forestlands should be very careful with this issue, particularly in regard to its implications for the landowners and landscapes of our verdant state.
- 2. Alabama is facing serious funding needs in such vital areas as public education, thus political demand for higher Alabama land taxes will surely continue. Therefore, major landowners should help the state by taking proactive leadership for an acceptable tax increase. In doing so, they could help themselves by building positive public relations and by rightfully asserting their preferred limits on such tax increases.

Oh yeah, I almost forgot. The conversion of forestlands to urban/suburban development often robs local residents of important forestland benefits. These include watershed protection for streams and water supplies, accessible recreational opportunities, freedom from noise and sprawl, and a host of aesthetic values that often contribute to the community's sense of place. Unfortunately, these forestland benefits are rarely appreciated in the cost-benefit analyses for proposed urban/suburban development.





Activity/Information Sheet

#### Forest History

ready evidence of changing economic relationships over time. Sometimes such change is unfortunate, for example, the era of "cut out and get out," and sometimes change is proactive, for example, the forest restoration efforts of the Civilian Conservation Corps (CCC).

An unfortunate consequence of early international trade is the disappearance of the American chestnut, wiped out by tree diseases that entered the U.S. via imported wood products. The good news is, the American Chestnut Foundation is working to recover this native tree by developing a hybrid variety that is resistant to these diseases. The excerpted article to the right was authored by Forest Education Specialist, Tilda Mims, for Alabama's TREASURED Forests, a quarterly magazine published by the Alabama Forestry Commission.

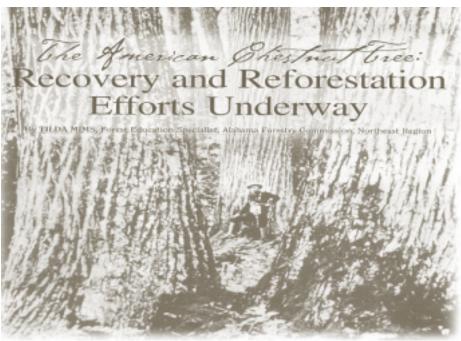
For more information, contact: Alabama Forestry Commission 513 Madison Avenue P.O. Box 302550 Montgomery AL 36130–2550 Phone: 334–240–9355

Website: www.forestry.state.al.us

THE AMERICAN CHESTNUT TREE was once an important part of the forests of eastern North America. In the heart of its range, the central Appalachians, it represented one of every four hardwoods.

The tree's consistently heavy nut crop was the single most important food for a variety of wildlife, and was a significant food for livestock and people. Chestnut wood was highly rot-resistant and used for everything from barn beams to railroad ties and fine furniture. Musical instruments used about one-half of the wood, especially pianos and pipe organs. Once abundant from southern Maine to the Florida panhandle, the American chestnut (*Castanea dentata*) was the victim of two major attacks. In the early 1800's, Ink Disease entered the U.S. on cork oaks from Portugal. Ink Disease is a root disease ease that moves through soil, and trees do not recover from Ink Disease. The disease rapidly eliminated all American chestnut trees in lowland areas along the gulf and eastern seaboard.

A second attack came around 100 years later, when trees in upland areas were destroyed almost to extinction by Chestnut Blight. Today,



A pure stand of chestnut in Connecticut around the turn of the last century.

living, old chestnut trees are very rare. The once majestic tree is now reduced to an understory shrub that dies, sprouts from the base, dies and sprouts again.

#### Chestnut Blight

The fungus *Cryphonectria* (formerly called *Endothia*) *parasitica* causes Chestnut Blight. Cankers were found on American chestnut trees lining the avenues of the Bronx Zoo in New York City in 1904. In 1907 and 1908 the fungus was found on other species of chestnut in the New York Botanical Garden. The blight moved at an alarming speed, fifty miles a year, destroying an estimated 9 million acres of trees in less than 50 years.

... The fungus does not enter the root collar at the base of the tree, so trees sprout back each year, creating a multiple-stemmed shrub.

Sprout clumps surviving today are remnants of original trees. After the blight fungus was discovered in the United States, plant explorer Frank Meyer found it in both Chinese and Japanese trees. He also noted Asian trees were often very resistant to the disease, showing few symptoms when infected. Meyer concluded that Asian trees imported into the U.S. brought the blight with them.

In 1912, the Plant Quarantine Act was passed to reduce the chances of such a catastrophe happening again....

—Tilda Mims "The American Chestnut Tree: Recovery and Reforestation Efforts Underway" *Alabama's TREASURED Forests* Vol. 20, no. 4 (Fall 2001): 18–19