





Discovering *Our* **Heritage**



*A Community
Collaborative
Approach*

Third Grade

*Model Social Studies Program Incorporating
Environmental Education to Integrate the Teaching of
History, Geography, Science, Mathematics, and Language Arts*



Sample Guidebook

Please do not remove!

*Developed by the Alabama Museum of Natural History
in cooperation with the Alabama Cooperative Extension System
and the Alabama State Department of Education*



A Program of the Alabama Wildlife Federation

Douglas J. Phillips

Third Grade

*K-6 Model Social Studies Program Incorporating
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Discovering Our Heritage

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Design: Nancy Lambert-Brown

To obtain copies of the
DISCOVERING OUR HERITAGE Guidebook for Teachers and Administrators
and the individual grade-level
DISCOVERING OUR HERITAGE Kindergarten through Fifth Grade,
please contact:

Alabama Wildlife Federation
46 Commerce Street
Montgomery AL 36104
1-800-822-WILD (9453)
www.alawild.org

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A Message from the State Superintendent of Education

Alabama can proudly boast of numerous innovative educational programs currently underway in school systems around the state. This variety is beneficial because specific pathways to learning that are appropriate in one situation might not be most appropriate for another situation. The professional judgment of local administrators and teachers is our strongest asset in making such determinations. With this in mind, I want to invite your attention to a very timely new program, DISCOVERING OUR HERITAGE, developed by Alabama educators for Alabama schools and communities.

Throughout the nation today, there is a growing recognition of the importance of environmental education, to ensure a healthy environment, to sustain a viable economy, and to augment overall student development and academic performance. DISCOVERING OUR HERITAGE is a unique program that helps address these needs for Alabama without placing added demands on our teachers. Rather, this program incorporates environmental education to support and reinforce many requirements of the Alabama Course of Study. Also, this program is sufficiently flexible to be adapted in most school systems without disrupting existing policies and practices.

I am pleased to acknowledge the organizations that sponsored production of DISCOVERING OUR HERITAGE, the Alabama teachers who helped in its development, and the Alabama schools that are using this program. I would like to join them in offering DISCOVERING OUR HERITAGE as an especially valuable pathway to educational success.

— DR. ED RICHARDSON

Foreword

the challenges facing education and strengthen local support for school policies and for the needs of teachers, students, and the classroom.

The heritage of our nation is one of freedom-loving people striving to improve opportunity for all in a land that is blessed with remarkable natural resources. As a primary vessel of this heritage, our democratic system depends increasingly upon education to inform society, sustain reason, cultivate civility, and instill both a sense of stewardship for our lands and waters and a sense of humanity for one another. In turn, to serve this role effectively, education must draw upon a central premise of democracy and ensure that communities are active participants in supporting local schooling.

DISCOVERING OUR HERITAGE provides a model for addressing these multiple aims through a coherent framework linking people to the land, learning to the real world, and the school to the community. Students and teachers are assisted in assembling otherwise fragmented subject matter into a more meaningful, conceptual understanding of our world. Science is related to society, institutions to cultures, the environment to economics, and personal responsibility to community well-being. Ultimately, DISCOVERING OUR HERITAGE is a program and a process enhancing the role of education as a purposeful means to human progress.

— DR. DOUGLAS J. PHILLIPS
Program Director, DISCOVERING OUR HERITAGE

American education today must meet a greater range of needs and serve a larger number of students than ever before. However, our schools also face an increasing array of difficulties, many of which are complex and closely intertwined with the changing conditions of society at large. Any educational program seeking long-term success must recognize this reality. Any program hoping to truly assist schools must appreciate the prevailing demands on teachers, the heavy responsibilities on administrators, and the conflicting pressures that often beset local school boards.

There may be no simple solution fitting every educational need in the nation, but Alabama educators have worked together in designing DISCOVERING OUR HERITAGE as a model for addressing many of the needs in Alabama schools. Central to this design is the philosophy that the realm of nature is an exceptional laboratory for learning, that environmental education, done correctly, provides students with meaningful connections between academic learning, applied problem-solving, civic participation, and the development of personal character and individual responsibility. DISCOVERING OUR HERITAGE is recognized by Alabama teachers for its effectiveness in demonstrating these multiple values of environmental education.

Possibly the greatest potential of this program is suggested by its subtitle, *A Community Collaborative Approach*. Through development of the DISCOVERING OUR HERITAGE Community Collaborative, schools can promote greater local understanding of

Acknowledgments

the active involvement of its officers and Board of Directors, AWF spearheaded a successful statewide initiative pulling together diverse interest groups and generating the necessary funding to complete DISCOVERING OUR HERITAGE.

Program Staff

PROGRAM DIRECTOR & PRINCIPAL AUTHOR
Dr. Douglas J. Phillips
Alabama Museum of Natural History (AMNH)

PROGRAM CONSULTANTS
Dr. John C. Hall, AMNH

Dr. Brenda Litchfield, Educational Concepts

PROGRAM COORDINATOR
Cathleen A. Baker, AMNH

TEACHER LIAISONS FOR PILOT
SCHOOL SYSTEMS

Sue Kidd, Westwood Elementary

Tuscaloosa County School System

Sherry Parrish, South Shades Crest Elementary
Hoover City School System

Renee Wolfe, Rachel Patterson Elementary
Escambia County School System

DOH OUTREACH COORDINATOR
Wayne Strickland, Alabama Wildlife Federation/
Alabama Cooperative Extension System

FUNDING DEVELOPMENT AND SUPPORT
Dr. Jeff McCollum & Tim Gothard
Alabama Wildlife Federation

DISCOVERING OUR HERITAGE is the product of the caring commitment of many Alabamians, including the program's sponsors, participating school systems, and, most significantly, Alabama teachers.

DISCOVERING OUR HERITAGE is the culmination of thoughtful input from master teachers in a variety of school systems, urban and rural, across Alabama. The program was initiated in 1996 as an experimental project at Westwood Elementary School, Tuscaloosa County School System, in collaboration with the "Challenge 21" planning initiative. In the following years, under the leadership of System Superintendent, Dr. Joyce Sellers, the program was piloted in elementary schools throughout Tuscaloosa County. It was later adopted and expanded in the Hoover City Schools and Escambia County Schools. Since 1999, these three systems have continued to provide field testing for the program. Sincere thanks and admiration are extended for their efforts.

Special thanks are extended to retired Westwood Elementary principal, Dr. Joan Lowery, and retired Tuscaloosa County Schools Superintendent, Dr. Neil Hyche, for their support in making this educational program possible. Thanks are also due to the Alabama State Department of Education (ADE), State Superintendent Dr. Ed Richardson, ADE specialists Judy Cooper and Frank Heartherly, and social studies consultant Jane Crowe, for assistance in helping ensure that DISCOVERING OUR HERITAGE is fully consistent with the Alabama Course of Study. Likewise, thanks are due to the Alabama Cooperative Extension System, Director Steve Jones, and Community Resource Coordinator, Warren McCord, for assistance in providing teacher training facilities. DISCOVERING OUR HERITAGE is made available through the leadership of the Alabama Wildlife Federation (AWF). In 1995, AWF responded to the requests of Alabama teachers for development of a model environmental education program organized sequentially to support requirements of the Alabama Course of Study throughout the school year. With

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Teacher's Welcome

the contrary, flexibility and the inclusion of your own good ideas are important to DOH design.

You will note that DOH is organized largely around social studies. This is to give you the greatest flexibility in arranging situations for applied learning. Also, the subject of social studies affords a wide variety of learning opportunities suitable for underscoring an important DOH premise: a good education should provide students with a conservation ethic; responsible citizenship should include an informed commitment to environmental stewardship (see Appendix: Resources, Part III. Additional Materials for General Consideration for a list of readings, such as *A Sand County Almanac*, which include discussion of related conservation/environmental philosophy).

General Procedure

DISCOVERING OUR HERITAGE is organized on a flexible, repeating outline. Each Unit (six weeks) has a Key Question. This question, as much as any other factor, may be seen as the guiding idea for your activities. Likewise, each Unit has a Key Experience, generally recommended to be taken at the beginning of each unit. This is usually an out-of-class experience of some kind. Not to be lightly dismissed, the Key Experience gives the class a common basis of experience to discuss and write about. Importantly, it also helps to build class spirit and cohesiveness.

The class should invite at least one Community Visitor or Community Resource per week to present a program. If necessary, Key Experiences and the complementary Visitor and Resources can be switched as appropriate.

Additionally, we suggest that other visitors come to the classroom—parents, speakers, career representatives, etc.—until the class becomes used to visitors. It is important that standard hospitality procedures are established when dealing with guests—issuing invitations, providing escorts, and

Welcome to DISCOVERING OUR HERITAGE (DOH), Alabama's first sequentially-organized, content-integrated environmental program for grades K-6 (the available sixth grade option can be found in Appendix E in the *DOH Guidebook for Teachers and Administrators*). We hope you will find DOH useful and exciting. The program is designed to be a part of a broad support network that consists of you and your students, the whole-hearted support of your school and district administrators, and real, direct connections with your community. You should never feel that you are all alone in trying to implement this new way of approaching your yearly program. An important part of DOH is the Community Collaborative process (see Appendix D in the *DOH Guidebook*), during which your school formally invites members of your local community to participate in your program. This should dramatically increase the local resources and volunteers available to you.

DOH is carefully tied to the Alabama Course of Study (ACS) in social studies, science, language arts, and math. You may be reassured that in implementing DOH, you are covering legitimate, recognized subjects and are teaching required content. At first, you might be slightly uneasy that DOH combines multiple subjects throughout each unit, but you should soon see how this integrated approach can be liberating to your program. By the same token, if you have favorite lessons that seem appropriate, a teachable moment, or an insight as to how to better teach your class, trust your instincts. DOH does not require that you slavishly follow an inflexible regimen. To

...flexibility
and the inclu-
sion of good
ideas are what
DOH is all
about.

writing thank-you notes. Each child should rotate through these various duties so that everyone becomes proficient in these important skills.

IDEALLY—

1. *Every day*, every student would have:
 - a DOH lesson/activity (this lesson, whether science or social studies, would be followed by a related language activity),
 - an additional science or social studies lesson (often a spin-off of a DOH activity),
 - a math lesson, where possible supporting the other subjects,
 - physical education,
 - individual reading and writing time, and
 - a formal period to work in the journal
 2. *Every week*, the class would have:
 - a speaker to visit the class,
 - at least one video presenting visual information,
 - an out-of-school or outdoor experience,
 - a library experience,
 - a geography lesson,
 - a computer lesson,
 - a music and art lesson, and
 - a series of small group meetings followed by a group project
 3. *Every unit*, the class would have:
 - a key experience,
 - a keynote visitor, and
 - a class project, to which each child would contribute
- However, DOH recognizes that teaching occurs in the real world of the daily school routine, with

unexpected and continuing distractions and various curriculum requirements that are difficult to integrate. This reality can pose limitations, but it should not rob us of the essential DOH idea, i.e., the intrigue of pondering our world and our place in it. Along the way and from time to time, we can expect to teach an old-fashioned math, grammar, or history lesson, and if life brings us a good teachable moment that is not “environmental,” we should take it. DOH is meant to serve as a conceptual framework that allows the teacher freedom to pursue a good opportunity or idea as it occurs.

Preliminary Preparation

DOH is the product of many years of discussion and input from concerned educators, among whom there is agreement that this model program should “aim high” in expectations for students, teachers, and the community; thus, the extensive scope and regimen of the program. However, insofar as this program is oriented to overall educational improvement, it will be successful only if adjusted for proper fit and acceptance within each school. Therefore, to facilitate program adoption, DOH staff assistance is recommended for establishing the prescribed Community Collaborative (see Appendix D in the *DOH Guidebook*) and for conducting special teacher training. To arrange assistance contact: Wayne Strickland, DOH Outreach Coordinator, Alabama Wildlife Federation, P.O. Box 1109, Montgomery AL 36102; telephone (800) 822-WILD.

Third Grade Program Overview

Once again, Unit I explores aspects of the school and community, but this year involves a deeper examination of the organizational and purposeful pursuits of various aspects of the community.

Important connections: Human societies and natural systems function according to organization and design. Human institutions draw meaning from the design and events occurring in the world.

Unit II

Key Question: What is the natural environment? A major aspect of the “design” of the world around us is referred to as the “natural environment.” Unit II examines the natural environment, beginning with an inventory of local features and expanding to consider larger natural systems. An important aim of this unit is to give students sufficient knowledge and familiarity with the natural environment so as to better appreciate the natural/geographic influence on native peoples (to be covered in Unit III).

Important connections: The natural environment is multi-faceted and includes air, water, soils, geology, geography, forests, rivers, lakes, wetlands, plants, animals, and the larger cycles and ecosystems of nature. Native species of plants and animals became established over time as part of larger interdependent natural systems adapted to local geography and climate.

Unit III

Key Question: Who were the Native Americans? Just as native plants and animals adapted to local geography and climate, Native Americans adapted to local geography, climate, plants, and animals. This, of course, is a core aspect of understanding Native American cultures. However, in this unit, perhaps the more exciting aspect is helping students—through reading, writing, and the arts—to comprehend the personal and human experiences of Native Americans. In addition to covering historical

Yearly Overview

ACS Social Studies Yearly Theme:
The Land and Its People

Third grade is geared to add to the foundational development and awareness provided in grades K-2. This year, appropriate content in such areas as history and geography is organized to follow exploratory themes that will prepare students for the intensified content of coming years. Students are taken to higher levels of conceptual understanding of governmental systems, natural systems, cultural development, interrelationships, and change. Students are introduced to new dimensions of global variation, new realms of contrasting and comparing, and greater involvement in classifying, interpreting, and communicating about the world. In a sense, this year is a final foundational year for later academic studies of Alabama history, U.S. history, and world history. For example, the learning experiences of third grade should give students sufficient contextual understanding to add greater meaningfulness to the fourth-grade focus on Alabama history. Of course, an important key to continued growth at this stage is to insure that each student enjoys sufficient personal success in both active exploration and academic/skill achievement. In this regard, the year offers a critical opportunity to concentrate special attention for students in need. Likewise, this year provides an opportunity for redoubled efforts to insure adequate parent involvement and community support.

Unit I

Key Question: Who are we? As with previous grades, students comprehend immediate relevance to learning when the year begins with local exploration.

the natural environment, now with a new emphasis given to our interdependence on nature and our responsibility for proper stewardship of nature.

Important connections: "The nature of life is practically everything we depend on for daily living is tied in some way to nature. Our rights to benefit from using nature also carry responsibilities for protecting nature, for conserving natural resources, and for sustaining environmental quality."

Unit VI

Key Question: What things are changing? The transition in America from the predominance of native cultures to the arrival of settlers to the emergence of a new nation has brought continuing changes in how people live, work, and make use of the natural environment. Unit VI introduces students to the reality of ever-occurring change in the larger context of societal change. While we want students to appreciate many aspects of life in earlier times, we also want them to comprehend the history and events of ongoing change (in economics, transportation, technology, etc.) as part of the continuous pursuit of knowledge and human progress.

Important connections: The history of human civilization is a record of continuous change through the pursuit of new knowledge and technological improvement. Sometimes the consequences of change are positive, sometime negative. The human capacity for inducing change obligates us to think and act in responsible ways.

DOH Third Grade Key Experiences

Like the Key Questions, the Key Experiences are intended to stimulate genuine curiosity and guide students in active exploration and discovery. The examples of experiences/activities listed below represent stem ideas only. In selecting preferred Key Experiences, teachers should plan for maximum learning value by organizing these experiences/activities to ensure active, hands-on student involvement in observing, investigating, and/or problem-solving.

Unit I Visit the county courthouse to see how elections are run.

Unit II Invite a geologist or archaeologist to explore land changes in the local area and lead the class on a rock/fossil hunt.

facts, an important aim is to provide students with a fundamental awareness of how native cultures viewed the world and their place in it.

Important connections: Many aspects of Native American cultures varied according to regional geographic influences. Native Americans lived in close daily contact with native natural surroundings. Native Americans shared many common beliefs derived from interpreting natural events.

Unit IV

Key Question: Who were the early settlers? As with Unit III, Unit IV covers essential factual information and also affords the opportunity to help students understand the human experiences of the settlers. For example, in addition to learning about where the settlers came from, students might gain from imagining the personal experiences of settlers and from considering the settlers' views about the world. An important aim of Unit IV is to gently introduce students to the reality that the arrival of the settlers represented more than simply a new people coming to a new land. The larger phenomenon to be understood is that this was a period of encounter between different cultures and different views of the world.

Important connections: The settlers came from a variety of lands, cultures, and backgrounds. Initially, most settlers were unacquainted with native American surroundings and native American peoples; thus, they experienced hardship in trying to adjust/adapt. Over time, the cultural ways of settlers mingled with cultural ways of Native Americans (sometimes resulting in conflicts, sometimes in cooperation).

Unit V

Key Question: How do we interact with the land? The previous unit should have added to students' comprehension of the historical connections between cultural development and regional geographical/natural surroundings. This important theme for social studies is also a basic point of understanding for science, i.e., there are often direct cause-and-effect relationships between local physical/natural surroundings and the lifeways of local peoples. Put another way, our understanding, treatment, and management of the natural environment has direct implications for the manner and quality of our lives. Unit V takes students deeper into the exploration of

- Unit III Organize a field trip to a Native American festival, reservation or powwow.
- Unit IV Take a field trip to a nearby early Alabama historic site, for example, Fort Conde (Mobile) or Fort Toulouse (Wetumpka).
- Unit V Visit a basic industry that relates to the environment, for example, farm, foundry, mine or quarry.
- Unit VI Visit a high technology industry—computer lab, telephone company, Internet service provider, television/radio station.

Understanding the Unit Plans

This Week's Topic and Focus Paragraph. Each week has a basic topic to guide the week's activities. The focus paragraph briefly explains the week's topic and suggests ways to approach it.

Correlations with Alabama Course of Study. The numbers in parentheses indicate the DOH-relevant Alabama Course of Study sections of the four subjects areas—social studies, science, language arts, and math. These are also shown in the matrices below.

Thought of the week. This is really for you, the teacher, although sometimes it may be appropriate for the children. You get only a little encouragement in this job; maybe you'll find a bit of inspiration here!

Community Visitors and Resources. These are our suggestions for appropriate visitors to the classroom. As the children become accustomed to visitors, visits will be less disruptive. Don't miss this opportunity to teach appropriate behavior and formal courtesies.

Activities and Materials. These are teacher-selected environmental activities from a variety of sources (see Appendix: Resources), presented to you as a starting point. Since many of you are as experienced as the members of the DOH team, we encourage you to search out appropriate favorite activities and materials of your own.

Unit Checkpoints. These activities are enumerated at the beginning of each unit, and it is important that the class try to accomplish them each week. Eventually, we would like every child to write in his/her journal, to write invitations and send thank-you notes, and to read quietly and aloud to others.

**Program Matrices linked
with Alabama Course of Study**
(Social Studies, Science, Language Arts, and Math)

The following matrices compare the requirements of the Alabama Department of Education's official Alabama Course of Study (ACS) with the DISCOVERING OUR HERITAGE (DOH) units. This will serve to guide and reassure teachers, parents, and administrators that the exciting activities of DOH more than meet the requirements of the ACS.

Grade 3 Social Studies Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
1	Classroom and school environment	Natural environment today	Geography and Native Americans	European settlers' movement to America	Natural resources	Events and history
2	Community producers and consumers	Natural environment in prehistoric times	Different groups of Native Americans	African peoples' movement to America	Interdependence	Careers
3	Local government	Rivers	Movements of Native Americans	Settlements and natural environment	Economics	Public safety
4	State government	Landforms	Natural environment and Native Americans	Land use by Europeans	Rights of citizens	Technology and the land
5	National government	Natural regions	Culture of Native Americans	Early forms of government	Responsibilities of citizens	Technology and the water
6	Patriotic symbols	Natural wildlife	Governments of Native Americans	Lives of Europeans and Africans	Construction locations	Technology and communication

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 3 Science Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
1	Matter 10-11	Environmental conditions and survival 30	Earth and its moon 38	Observable properties of matter 10-11	Energy 19, 23	Science, technology, and society 9
2	How species survive 30	Fossils 20, 27	Telescopes and astronomy 40, 42-43	Planet movement 38-39	Relationship of air, water, & soil to life on Earth 33-36	Science careers 9
3	Plant structure and function 24	Water cycle 33	Moon phases 38	Atmosphere 33-37	Human dependence on plants 28-30	Technology to improve products 9, 17-18, 41
4	Classification of plants 25	Rocks and minerals 32	Seasons 39	Human effect on the land 9, 30	Protecting plants 30	Science, technology, and land 9, 18
5	How plants satisfy needs 26	Natural forces 34-36	Mixtures and solutions 12-13	Human dependence on plants 28-30	Recycling 31	Science, technology, and water 9, 18
6	Plant lifestyles 29	Helpful and harmful effects of plants 28	Heat 20-22	Recycling plants 31	Gravity and motion 29, 31	Science, technology, and communication 9, 41

*The numbers in bold correspond to the current (2007) Alabama Course of Study for the respective grade and subject.

Grade 3 Language Arts Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
1	List jobs (chores)	Watch video and write about environment	Listen to literature about Native Americans	Listen to literature about European settlers	Research/write about energy sources	Read about important historical events
2	Listen to stories about plant dependence	Read about dinosaurs	Read literature about Native Americans	Read about African slaves	Create poster about interdependence	Research & write about science careers
3	Collect news stories about local government	Diagram and explain the water cycle	Write poems about Native Americans	Write about life in early settlements	List and describe plants eaten for a week	Describe how transportation has changed
4	Identify state representative districts in Alabama	Describe rocks and minerals	Create songs about Native Americans	Write about land use by settlers	Create plan to protect endangered plants/animals	Read, research, and write about land technology
5	Read about Washington D.C. & U.S. government	Write poems about Native Americans	Create skits about Native Americans	Research early forms of government	Create recycling plan	Read, research, and write about water technology
6	Class government campaigns and elections	Write about introduced plants	Perform skits about Native Americans	Read about lives of settlers	Write about local construction	Read, research, and write about communication technology

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 3 Math Yearly Plan

Week	Unit	Topic	Activities	Page Numbers
1	Unit I	Who are we?	Graph jobs students do of local community	1, 15, 53
		Who is the natural environment?	Draw a map of local community	35-37
2	Unit II	Who were the Native Americans?	Identify Native American reservations on map	35-37
		Who were the early settlers?	Draw European settlers' routes to U.S.	35-37
3	Unit III	Who are we?	Label distances to planets	38-39
		Who is the natural environment?	Create geological timeline	16, 46
4	Unit IV	Who were the early settlers?	Draw African peoples' routes to U.S.	35-37
		Who are we?	Graph ways we use air, soil, and water	53
5	Unit V	Who are we?	Graph ways we use air, soil, and water	53
		Who is the natural environment?	Graph endangered & threatened animals in Alabama	1, 15, 53
6	Unit VI	Who are we?	Graph endangered & threatened animals in Alabama	1, 15, 53
		Who is the natural environment?	Draw plants in the school yard	1, 15, 53
7	Unit VII	Who are we?	Draw plants in the school yard	1, 15, 53
		Who is the natural environment?	Draw calendar to identify length of seasons	46
8	Unit VIII	Who are we?	Use calendar to identify length of seasons	46
		Who is the natural environment?	Measure temperature over grass and asphalt	40, 53, 55
9	Unit IX	Who are we?	Measure temperature over grass and asphalt	40, 53, 55
		Who is the natural environment?	Design a garden	17, 29-30, 33
10	Unit X	Who are we?	Design a garden	17, 29-30, 33
		Who is the natural environment?	Compare crop yield now and then	15
11	Unit XI	Who are we?	Compare crop yield now and then	15
		Who is the natural environment?	Graph how much water is used at home	53
12	Unit XII	Who are we?	Graph how much water is used at home	53
		Who is the natural environment?	Start a class/school recycling program	53
13	Unit XIII	Who are we?	Start a class/school recycling program	53
		Who is the natural environment?	Estimate amount of space in local construction	4, 35-36
14	Unit XIV	Who are we?	Estimate amount of space in local construction	4, 35-36
		Who is the natural environment?	Measure how tall trees are	35-37, 39
15	Unit XV	Who are we?	Measure how tall trees are	35-37, 39
		Who is the natural environment?	Measure cost of damage caused by introduced plants	4, 21, 23
16	Unit XVI	Who are we?	Measure cost of damage caused by introduced plants	4, 21, 23
		Who is the natural environment?	Measure temperature in sun and shade	40, 53-55
17	Unit XVII	Who are we?	Measure temperature in sun and shade	40, 53-55
		Who is the natural environment?	Estimate cost of damage caused by introduced plants	4, 21, 23
18	Unit XVIII	Who are we?	Estimate cost of damage caused by introduced plants	4, 21, 23
		Who is the natural environment?	Measure temperature in sun and shade	40, 53-55
19	Unit XIX	Who are we?	Measure temperature in sun and shade	40, 53-55
		Who is the natural environment?	Estimate cost of damage caused by introduced plants	4, 21, 23
20	Unit XX	Who are we?	Estimate cost of damage caused by introduced plants	4, 21, 23
		Who is the natural environment?	Measure temperature in sun and shade	40, 53-55

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Lined writing area with 20 horizontal lines.

Teachers Notes (Use this page to write down your questions and good ideas for this Unit):

Unit 1
Who are we?

Unit 1 Week 1

Thought for the week
 Be yourself. No one can ever tell
 you you're doing wrong.

—JAMES LEO HENRIHY

Community Visitors and Resources

Local genealogist to your class to explain the importance of knowing our history

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3-5*, "Aqua Words," "Puddle Wonder," "It's All in the Air"
- *Project WET*, "Water Match"
- *Project Learning Tree*, "Air Plants"
- *Project WILD*, "What's WILD"

This Week's Topic

Classroom and school

Correlations with

Alabama Course of Study:

Social Studies:

Classroom and school

Science:

Matter (10-11)

Language Arts:

List jobs (chores) (28-29)

Math:

Graph jobs students do

(1, 15, 53)

Geography:

Map reading

Focus is on the classroom and school, and the jobs people have in these places. Students should identify, list, and graph the various jobs they see people doing within the school environment. In science, relate matter—anything that takes up space—to people, buildings, and items in a school.



Unit Checkpoints

Journal time, independent reading time and reading aloud, write invitations and send thank-you notes, nature walk.

Unit 1 Key Question
 Who are we?

Unit 1 Key Experience
 Visit the county courthouse to see how elections are run.

Unit 1 Week 2



Focus is on the community and the plants it produces for food and other uses, such as for paper or clothing. Students should be able to explain what plants need for survival and how they sometimes depend on humans. Research and graph threatened and endangered plants in Alabama.

This Week's Topic
Community producers and consumers

Correlations with
Alabama Course of Study:
Social Studies:
Community producers and consumers (22, 24)

Science:
How plants survive (30)

Language Arts:
Listen to stories about plant dependence (1, 3, 5, 12)

Math:
Graph endangered and threatened plants in Alabama (1, 15, 53)

Geography:
Map reading

Thought for the week
Never hesitate to hold out your hand; never hesitate to accept the outstretched hand of another.

—POPE JOHN XXII

Community Visitors and Resources
Local farmer or grocer to speak about the effects of supply and demand

- Activities and Materials*
- *Project Learning Tree*, "Every Tree for Itself," "Have Seeds Will Travel," "How Plants Grow"
 - *Project WILD*, "Forest in a Jar"
 - *Alabama's Environmental Legacy... Grades 3-5*, "Over and Over Again"

Unit 1 Week 3



This Week's Topic
Local government

Correlations with

Alabama Course of Study:

Social Studies:

Local government (23–25)

Science:

Plant structure & function (24)

Language Arts:

Collect news stories of local government (13, 18)

Math:

Diagram local government structure (29)

Geography:

Map reading

Focus is on the local government and its structure, and the function of the various departments. Students should read the newspaper or listen to news stories to find out what the local current events are. Introduce organizational charts by diagramming the local government structure. In science, relate government structure and function to plant part (bark, roots, leaves) performs a specific function to help the entire plant.

Thought for the week

We ought to think that we are one of the leaves of a tree, and the tree is all humanity. We cannot live without the others, without the tree.

—PABLO CASALS

Community Visitors and Resources

Local politician to speak on making and enforcing laws

Activities and Materials

- *Project Learning Tree*, “Bursting Buds,” “Looking at Leaves,” “Tree Cookies,” “The Closer You Look”
- Video: *Discovering Alabama*, “Alabama Trees”

Unit 1 Week 4



Focus is on state government and how it differs from local government. On a map of Alabama, students should identify the various senate and state representative districts. Relate how representatives are chosen based on the number of people in a district to where certain species of plants grow and how many can grow in an area.

This Week's Topic
State government

Correlations with
Alabama Course of Study:
Social Studies:
State government (23–25)

Science:
Classification of plants (25)

Language Arts:
Identify state representative districts of Alabama (13, 18)

Math:
Graph plants in the school yard (1, 15, 53)

Geography:
Map reading

Thought for the week
A man is but a product of his thoughts; what he thinks, that he becomes.

—MOHANDAS K. GANDHI

Community Visitors and Resources
Local legislative representative to discuss the importance of local government

- Activities and Materials*
- *Alabama Environmental Legacy... 3–5*, “Gardening with Natives for Natives”
 - *Project Learning Tree*, “The Shape of Things,” “Poet-tree,” “D Like to Visit a Place”
 - *Project WILD*, “Water Plant Art”
 - Video: *Discovering Alabama*, “Arboretums”

Unit 1 Week 5

Thought for the week
 America is a tune. It must be sung
 together.

—GERALD STANLEY LEE

Community Visitors and Resources

County representative to speak to
 your class about local issues

Activities and Materials

- *Project Learning Tree*, “Get in Touch with Trees,” “Adopt a Tree,” “Trees and Habitats,” “Every Tree for Itself”
- *Alabama’s Environmental Legacy...Grades 3–5*, “Habit of Habitats”
- *Project WILD*, “Everybody Needs a Home”
- Video: *Discovering Alabama*, “Guntersville State Park”

This Week’s Topic

National government

Correlations with

Alabama Course of Study:

Social Studies:

National government (23–25)

Science:

How plants satisfy needs (26)

Language Arts:

Read about Washington D.C. and U.S. government (8, 10, 13)

Math:

Add how much money is spent on lunch (21–23)

Geography:

Map reading



Focus is on national government and how it is different from local and state government in terms of structure and function. Students should locate Washington D.C. on a map and read national news stories. In science, relate how plants satisfy their various needs, such as water, sunlight, and nutrients, to how people satisfy their governmental needs by working through local state and national governments.

Unit 1 Week 6



Focus is on patriotic symbols, their origins, and what they mean. Students should draw various patriotic symbols and be able to explain their meanings. The class should participate in class campaigns and elections of officers. In science, relate plant life cycles to the cycles and elections in terms of how long people stay in various offices.

This Week's Topic
Patriotic symbols

Correlations with

Alabama Course of Study:

Social Studies:

Patriotic symbols (27)

Science:

Plant life cycles (29)

Language Arts:

Class government campaign and elections (12)

Math:

Draw patriotic symbols (32-34)

Geography:

Map reading

Thought for the week
Patriotism is not so much protecting the land of our fathers as preserving the land of our children.

—JOSE ORTHOFY CASSET

Community Visitors and

Resources

Campaign manager to discuss voting issues and strategies

Activities and Materials

- *Project Learning Tree*, "Environmental Exchange Box," "Plant a Tree," "Tree Factory," "Tree Life Cycle" Video: *Discovering Alabama*, "Long Leaf Pine"
- *Project WILD*, "Fire Ecologies"

Unit II

What is the natural environment?

Teacher's Notes (Use this page to write down your questions and good ideas for this Unit):

Unit II Week 1

Thought for the week
 When one tugs at a single thing in nature, he finds it attached to the rest of the world.

—John Muir

Community Visitors and Resources

Forester to discuss the dependence of animals on the forest

Activities and Materials

- *Project Learning Tree*, “Trees as Habitat,” “Tropical Trehouse”

- *Project WILD Aquatic Education Activity Guide*, “Wetland Metaphor,” “Deadly Skies”

- *Project WILD*, “WILD Words... A Journal-Making Activity”

- Video: *Discovering Alabama*, “Cheaha Mountain/Talladega National Forest”

This Week's Topic
 The natural environment today

Correlations with

Alabama Course of Study:

Social Studies:

Environmental conditions and survival (30)

Science:

The sun in the solar system (18, 33, 45)

Language Arts:

Watch video and write about the environment (12, 20–30)

Math:

Draw a map of local community (35–37)

Geography:

Map reading

Focus is on the natural environment today and everything it encompasses. Students should study the local environment and draw a map of the local community indicating various environmental areas on it. Environmental conditions (drought, flood, storms) and their relation to plant survival should be explained.



Journal time, independent reading time and reading aloud, write invitations and send thank-you notes, nature walk.

Unit Checkpoints

Unit II Key Question
 What is the natural environment?

Unit II Key Experience
 Invite a geologist or archaeologist to explore land changes in the local area and lead the class on a rock/fossil hunt.

Unit II Week 2



Focus is on the natural environment and how it was different in prehistoric times.
 Students should read about dinosaurs and fossils, and create a geologic timeline.
 Students should speculate why dinosaurs became extinct.

This Week's Topic
 Natural environment in prehistoric times

Correlations with
 Alabama Course of Study:

Social Studies:
 Natural environment in prehistoric times (5)

Science:
 Fossils (20, 27)

Language Arts:
 Read about dinosaurs (8, 10, 13)

Math:
 Create geologic timeline (16, 46)

Geography:
 Map reading

Thought for the week
 One touch of nature makes the whole world kin.
 —WILLIAM SHAKESPEARE

Community Visitors and Resources

Anthropologist to discuss local dig sites

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3–5, "Down Home Dinosaurs"*
- *Project WET, "Water Messages in Stone"*
- *Project WILD, "Tracks!", "Environmental Barometer"*
- *Video: Discovering Alabama, "Geological History of Alabama"*

Unit II Week 3

Thought for the week
 In rivers, the water that you touch is the last of what has passed and the first of that which comes: so with present time.

—LEONARDO DA VINCI

Community Visitors and Resources

Visit a dam; invite a hydrologist to speak on the importance of water as a natural resource

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3-5*, "To Fertilize or Not to Fertilize: That is the Question," "Do You Get My Point? Point and Nonpoint Source Pollution," "Crystallizing the Problem," "Energy from Water—Free for the Taking"
- *Project CATE*, "Rabbit's Big Splash: Hydrologic Cycle Fact"
- *Project Learning Tree*, "Water Wonders"
- *Project WET*, "Stream Sense"
- *Video: Discovering Alabama*, "Black Warrior River"

This Week's Topic

Correlations with
Alabama Course of Study:
Social Studies:
 Rivers (4, 16-17)

Science:
 Water cycle (33)

Language Arts:
 Diagram and explain the water cycle (12, 18, 27)

Math:
 Predict and record rainfall (53-55)

Geography:
 Map reading

Focus is on Alabama rivers and their relationship to the water cycle. Student should diagram and explain the water cycle. They should understand the relationship between the water cycle and rainfall. They should make predictions and record actual amounts of rainfall.



Unit II Week 4



Focus is on Alabama land forms and the rocks and minerals that make up each of these features. Student should be able to describe rocks and minerals, and draw the crystalline shapes of basic minerals.

This Week's Topic
Landforms

Correlations with
Alabama Course of Study:
Social Studies:
Landforms (4, 16, 18)

Science:
Rocks and minerals (32)

Language Arts:
Describe landforms (32–33, 35)

Math:
Draw crystal shapes (35–37)

Geography:
Map reading

Thought for the week
Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their freshness into you, and the storms their energy, while cares will drop off like falling leaves.

—JOHN MUIR

Community Visitors and Resources
Geologist to explain changes in landforms

- Activities and Materials*
- Ranger Rick Nature Scope, *Geology, The Active Earth*, "How to Grow a Crystal"
 - *Project WILD*, "Cold Cash in the Icebox"
 - *Alabama's Environmental Legacy...Grades 3–5*, "Salty Mapping," "What's the Point," "Home Sweet Home"
 - *Project CATE*, "Rabbit's Big Splash: Gulf"
 - Video: *Discovering Alabama*, "Caves of Alabama"

Unit II Week 5

Thought for the week
 The pessimist complains about the wind; the optimist expects it to change; the realist adjusts the sails.

—WILLIAM ARTHUR WARD

Community Visitors and Resources

Horticulturist to identify natural regions for certain species of plants

Activities and Materials

- *Mailbox* (Apr./May 94), "Earth Science"
- *Project Learning Tree*, "Are Vacant Lots Vacant?"
- *Project WILD*, "Stormy Weather"
- Video: *Discovering Alabama*, "Geological History of Alabama"

This Week's Topic

Natural regions

Correlations with

Alabama Course of Study:

Social Studies:

Natural regions (4, 16, 18)

Science:

Natural forces (34–36)

Language Arts:

Write poems about Native Americans (20–30)

Math:

Measure and record wind speed (53–55)

Geography:

Map reading

Focus is on natural regions such as forests, wetlands, and lakes. Students should understand how natural forces are responsible for creating these areas. They should measure and record wind speed over a period of time. In language arts, they should write poems about Native Americans and their relationship with the natural environment.



Unit II Week 6



Focus is on natural plant
wildlife. Students should be
able to identify the helpful
effects of plants (food, cloth-
ing) and the harmful ones
(poison ivy). They should be
able to define and identify
introduced species and obtain
a cost estimate of the damage
caused by introduced plants in
Alabama.

This Week's Topic
Natural wildlife

Correlations with
Alabama Course of Study:
Social Studies:
Natural wildlife (4, 16, 18)

Science:
Helpful and harmful effects of
plants (28)

Language Arts:
Write about introduced plants
(20–30)

Math:
Estimate cost of damage cause by
storms (4, 21, 23)

Geography:
Map reading

Thought for the week
You can tell all you need to about
a society from how it treats
animals and beaches.

—FRANK DEFORD

Community Visitors and
Resources
Zoologist to speak about the
natural wildlife of North America

Activities and Materials
• *Project Learning Tree*, “Pass the
Plants, Please,” “Sunlight and
Shades of Green,” “Plant a
Tree”
• *Water Sourcebook*, “Where Did
It Wear,” “Trees by the Sea”
• *Alabama’s Environmental*
Legacy...Grades 3–5, “Backyard
Composting”
• Video: *Discovering Alabama*, “A
Walk in the Woods”

Teacher's Notes (Use this page to write down your questions and good ideas for this Unit):

Who were the Native Americans?

Unit III

Unit III Week 1

Thought for the week
 Don't blow it—good planets are hard to find.

—QUOTED IN TIME MAGAZINE

Community Visitors and Resources

Native American to speak about his/her heritage

Activities and Materials

- *Project Learning Tree*, “Tepee Talk”
- *Ranger Rick’s NatureScope*, *Astronomy Adventures*, “What’s Up,” “Crazy about Craters”
- Video: *Discovering Alabama*, “Wetumpka Impact Crater”

This Week’s Topic
 Geography and Native Americans

Correlations with

Alabama Course of Study:
Social Studies:
 Geography and Native Americans (4)

Science:

Earth and its moon (38)

Language Arts:

Listen to literature about Native Americans (1, 3, 12, 14)

Math:

Identify Indian reservations on a U.S. map (35–37)

Geography:

Map reading



Focus is on geography and Native Americans. Students should be able to locate and identify Native American reservations on a United States map. They should listen to stories about Native Americans. In science, relate the movements of the moon to various traditions and practices of Native Americans.

Unit Checkpoints

Journal time, independent reading time and reading aloud, write invitations and send thank-you notes, nature walk.

Unit III Key Question
Who were the Native Americans?

Unit III Key Experience
Organize a field trip to a Native American festival, reservation, or powwow.

Unit III Week 2

Thought for the week
 Be glad of life because it gives you
 the chance to love and to work and
 to play and to look up at the stars.

—HENRY VAN DYKE

Community Visitors and Resources

Astronomer to speak about
 constellations

Activities and Materials

- *Project Learning Tree*, “Tepee Talk”
- *Ranger Rick’s NatureScope*, “Night Sky Bingo,” “Stories in the Stars,” “Famous Faces”
- *Video: Discovering Alabama*, “Horse Pens 40”

This Week’s Topic
 Different groups of Native Americans

Correlations with Alabama Course of Study: Social Studies:
 Different groups of Native Americans (6)

Science:
 Telescopes and astronomy

(40, 42–43)

Language Arts:

Read literature about Native Americans (9, 14–15)

Math:

Label distances to planets (38–39)

Geography:

Map reading

Focus is on the variety of Native American groups in the United States. Students should identify major tribes and some of their customs. In science, students should relate planet movements and the position of the Earth in relation to the sun to customs and traditions of different groups of Native Americans.



Unit III Week 3

Thought for the week
 Be bold in what you stand for and
 careful what you fall for.

—RUTH BOORSTIN

Community Visitors and Resources

Native American to speak on the
 trials his/her ancestors experi-
 enced on the “Trail of Tears”;
 meteorologist to discuss the
 influence of the moon on tides

Activities and Materials

- *Alabama’s Environmental Legacy...Grades 3–5, “A Legacy”*
- *Project Learning Tree, “Tale of the Sun,” “Tepee Talk”*
- *Project WET, “Water Messages in Stone”*
- *Project WILD, “What’s for Dinner,” “Museum Search for Wildlife,” “The Hunter”*
- *Ranger Rick’s NatureScope, Astronomy Adventures, “Moon Madness”*
- *Video: Discovering Alabama, “Moundville”*

This Week’s Topic

Movements of Native Americans

Correlations with

Alabama Course of Study:

Social Studies:

Movements of Native Americans

(7)

Science:

Moon phases (38)

Language Arts:

Write poems about Native

Americans (14, 20–24)

Math:

Draw and record moon phases

(43, 46, 53, 55)

Geography:

Map reading



*Focus is on the movements
 and migrations of Native
 Americans. Students should
 write poems about Native
 Americans and their travels.
 They should draw and record
 the phases of the moon for a
 month.*

Unit III Week 4

Thought for the week
 No winter lasts forever; no spring
 skips its turn.

—Hal Borland

Community Visitors and Resources

Forest ranger to discuss the
 changes of foliage in the autumn

Activities and Materials

- *Project Learning Tree*, "Signs of Fall," "The Native Way," "Charting Diversity"
- *Project WET*, "A House of Seasons"
- *Project WILD*, "Habitacks"
- *Ranger Rick's NatureScope, Trees Are Terrific*, "Hidden Colors"
- Video: *Discovering Alabama*, "A Walk in the Woods"

Adapt - A Bird - Seed

This Week's Topic
 Natural environment and Native Americans

Correlations with Alabama Course of Study:

Social Studies:

Natural environment and Native Americans (8, 13)

Science:

Seasons (39)

Language Arts:

Create songs about Native Americans (14-15, 17, 32)

Math:

Use calendar to identify length of seasons (46)

Geography:

Map reading

Focus is on the natural environment and how Native Americans depend upon it. Students should use a calendar to identify the length of seasons and explain what Native Americans did in each season related to clothing, farming, and food.



Unit III Week 5

Thought for the week
 Man creates culture and through
 culture creates himself.

—POPE JOHN PAUL II

Community Visitors and Resources

Guest from another country to
 discuss their culture

Correlations with
Alabama Course of Study:
Social Studies:
 Culture of Native Americans (9)

Science:

Mixtures and solutions (12–13)

Language Arts:

Create skits about Native
 Americans (17–18, 24)

Math:

List things that dissolve (53)

Geography:

Map reading

- Activities and Materials*
- *Project Learning Tree*, “Tepee Talk,” “Tale of the Sun”
 - *Project WILD*, “The Hunter”
 - *Alabama’s Environmental Legacy...Grades 3–5*, “No Salt, Please,” “Down It Goes—Where It Stops, Nobody Knows,” “Crystallizing the Problem”
 - *Water Sourcebook*, “You Must Have Been a Beautiful Bay-Bee,” “Porosity and Permeability: Down and Dirty”
 - Video: *Discovering Alabama*, “Dauphin Island”



Focus is on the culture of
 Native Americans and how
 some of this culture has blend-
 ed over into other groups.
 Student should create skits
 about Native American cul-
 ture(s). In science, relate the
 topics of mixtures (both
 substances remain the same)
 and solutions (one or more
 substances change) to how
 difficult or easy it is for differ-
 ent groups of people to adapt
 to different cultures.

Unit III Week 6

Thought for the week
 A problem is a chance for you to do your best.

—DUKE ELLINGTON

Community Visitors and Resources

Historian to compare the government of Native Americans to today's government

Activities and Materials

- *Ranger Rick's NatureScope, Astronomy Adventures, "Sundial Watches"*
- *Water Sourcebook, "N, B, and T: Pollutants Three" and T: Pollutants Three"*
- *Project Learning Tree, "Living with Fire," "It's a Gas," "Some Like It Hot," "Backyard Composting"*

This Week's Topic
 Government and Native Americans

Correlations with Alabama Course of Study: Social Studies:

Governments of Native Americans (10)

Science:

Heat (20-22)

Language Arts:

Perform skits about Native Americans (33-35)

Math:

Measure temperature in sun and shade (40, 53-55)

Geography:

Map reading

Focus is on the government of Native Americans and the rules and laws they had as a people. Student should perform their skit about Native Americans demonstrating all that was learned in this Unit's study. In science, relate the study of heat to the different areas where Native Americans lived, e.g., Gulf Coast vs. Northern Alabama.



Teacher's Notes (Use this page to write down your questions and good ideas for this Unit):

Who were the early settlers?

Unit IV

Unit IV Week 1

Thought for the week
 The history of every country
 begins in the heart of a man or a
 woman.

—WILLA CATHER

Community Visitors and Resources

Genealogist to speak about the
 student's country of origin

Activities and Materials

- *Project CATE*, "Rabbit's Big Splash: Pond"
- *Project Learning Tree*, "How Germinating Giants," "How Big is Your Tree?"
- *Project WET*, "Water March," "Cold Cash in the Icebox"

This Week's Topic
 European settlers' movement to
 America

Correlations with

Alabama Course of Study:

Social Studies:

European settlers' movement to
 America (14)

Science:

Observable properties of matter
 (10–11)

Language Arts:

Listen to literature about
 European settlers (1, 3, 12, 14)

Math:

Draw European settlers' routes to
 U.S. (35–37)

Geography:

Map reading

Focus is on European settlers and their movements into America from various countries. Student should listen to stories about early settlers and be able to draw the travel routes on a U.S. map. In science, relate the observable properties of matter to observable characteristics of various groups of settlers, e.g., light vs. dark and tall vs. short.



Unit Checkpoints

Journal time, independent reading time and reading aloud, write invitations and send thank-you notes, nature walk.

Unit IV Key Question
 Who were the Early Settlers?

Unit IV Key Experience
 Take a field trip to a nearby early Alabama historic site, for example, Fort Conde (Mobile), Fort Toulouse (Wetumpka).

Unit IV Week 2

Thought for the week
Change your thoughts and you
change your world.

—NORMAN VINCENT PEALE

Community Visitors and Resources

Historian to discuss slavery in the South

Activities and Materials

- *Ranger Rick's NatureScope*, "Whirling and Twirling," "Astro Match," "A Matter of Gravity"
- *Project WILD*, "Everybody Needs a Home"

This Week's Topic
African peoples' movement to America

Correlations with Alabama Course of Study: Social Studies:
African peoples' movement to America (14)

Science:
Planet movement (38–39)

Language Arts:
Read about African slaves (9, 14–15)

Math:
Draw African peoples' routes to US (35–37)

Geography:
Map reading

Focus is on the movement of African settlers to America. Student should read stories about African slaves and settlers and be able to draw African peoples' routes to the U.S. on a map. In science, relate the differences in planet movements (circular) to the one-way (from homeland to U.S.) movement of settlers.



Unit IV Week 3



This Week's Topic
Settlements and the natural environment

Correlations with
Alabama Course of Study:
Social Studies:
Settlements and the natural environment (11)

Science:
Atmosphere (33–37)

Language Arts:
Write about life in early settlements (20–30)

Math:
Draw and label layers of atmosphere with temperatures (39–40)

Geography:
Map reading

Focus is on how settlements were affected by the natural environment. Students should write stories about the life and hardships early settlers faced. In science, students should draw and label layers of the atmosphere and their various temperatures and how thick each one is.

Thought for the week
Flowers always make people better, happier and more helpful; they are sunshine, food and medicine to the soul.

—LUTHER BURBANK

Community Visitors and Resources

Historian to discuss conflicts that the early settlers encountered

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3–5, "It's All in the Air," "Sky Blue, Sunset Red," "Smoke Gets in More than Your Eyes," "Seeing is Believing"*
- *Project Learning Tree, "Habitat Pen Pals," "Trees as Habitats"*
- *Project WILD, "My Kingdom for a Shelter," "Adaptation Artistry"*
- *Video: Discovering Alabama, "Fort Toulouse/Jackson"*

Unit IV Week 4



Focus is on how land was used by Europeans in various areas of the country. Students should write stories about how land was used by the settlers, such as farming, towns, cattle, etc. In science, relate what effects human have on the land both positive and negative. Students should measure air temperature over grass and over asphalt, and predict the consequence of large amounts of asphalt.

This Week's Topic
Land use by Europeans

Correlations with

Alabama Course of Study:

Social Studies:

Land use by Europeans (14)

Science:

Human effects on land (9, 30)

Language Arts:

Write about land use by settlers (20-30)

Math:

Measure temperature over grass and asphalt (40, 53, 55)

Geography:

Map reading

Thought for the week

Thought for the week: If we do not permit the earth to produce beauty and joy, it will in the end not produce food either.

—JOSEPH WOOD KRUTCH

Community Visitors and Resources

Historian to identify reasons for the settlement in your area; urban planner to discuss future development

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3-5*, "We're Down in the Dumps," "Dump It," "Trash Flash Through Time"
- *Project Learning Tree*, "Pollution Search"
- *Project WILD*, "Quick Frozen Critters," "Smoky the Bear Said What?," "Shrinking Habitat"

Unit IV Week 5

Thought for the week

A true conservationist is a man who knows that the world is not given by his fathers but borrowed from his children.

—Audubon

Community Visitors and Resources

Farmer to discuss human dependence on plants for food; clothing/fabric sales representative to discuss material sources for clothing

Activities and Materials

- *Water Sourcebook*, "Wonderful, Wonderful Wetlands," "To Whom It May Concern"
- *Project WILD*, "What's for Dinner?," "Rainfall and the Forest"
- *Project Learning Tree*, "Tree Treasures," "There Ought to be a Law"
- Video: *Discovering Alabama*, "Long Leaf Ecosystem"

This Week's Topic

Early forms of government

Correlations with

Alabama Course of Study:

Social Studies:

Early forms of government (12)

Science:

Human dependence on plants

(28–29)

Language Arts:

Research early forms of govern-

ment (18, 32)

Math:

Diagram early forms of govern-

ment (29)

Geography:

Map reading

Focus is on the early forms of government developed by different groups of settlers. Students should research early forms of government and be able to diagram them. In science, relate human dependence on plants to how people depended on early forms of government for rules and laws.



Unit IV Week 6



Focus is on the lives of Europeans and Africans, and how they added to the overall population of America. Students should read about the lives of these various groups. In science, students should study about recycling plants, such as in forestry. They should measure how tall trees are in various places in their community.

This Week's Topic
Lives of Europeans and Africans

Correlations with
Alabama Course of Study:
Social Studies:
Lives of Europeans and Africans (15)

Science:
Recycling plants (31)

Language Arts:

Read about lives of settlers (9, 15)

Math:

Measure how tall trees are (35–37, 39)

Geography:

Map reading

Thought for the week
The sky is the daily bread of the eyes.

—RALPH WALDO EMERSON

Community Visitors and Resources

Historian to speak about the importance of different professions within a settlement and how the early settlers were dependent on each other

Activities and Materials

- *Project Learning Tree*, “Forest of S.T. Shrew,” “Nature’s Recyclers,” “Make Your Own Paper”
- *Alabama’s Environmental Legacy... Grades 3–5*, “Backyard Composting,” “Start Shredding the News”
- *Video: Discovering Alabama*, “Tannehill Historical State Park”

Lined writing area for notes.

Teachers Notes (Use this page to write down your questions and good ideas for this Unit):

How do we interact with the land?

Unit V

Empty rectangular box for additional notes or diagrams.

Unit V Week 1

Thought for the week
 One of the greatest sources of energy is pride in what you are doing.

—SPOKES

Community Visitors and Resources

Logger to discuss the importance of natural resources; environmentalist to discuss ways to conserve natural resources

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3-5*, "Heavy Metal," "Some Like It Hot," "The Value of Water"
- *Project Learning Tree*, "Trees for Many Reasons," "We All Need Trees"
- *Project WET*, "The Long Haul"
- *Project WILD*, "Flip the Switch for Wildlife"

This Week's Topic

Natural resources

Correlations with

Alabama Course of Study:

Social Studies:

Natural resources (16)

Science:

Energy (19, 23)

Language Arts:

Research and write about energy sources (13, 16, 18, 20-30)

Math:

Predict and record temperature

(37, 40-41)

Geography:

Map reading

Focus is on the natural resources of the community and how they affect the lives of people. Student should research and write about energy sources, and predict and record the temperature over time.



Unit V Key Question

How do interact with the land?

Journal time, independent reading time and reading aloud, write invitations and send thank-you notes, nature walk.

Unit Checkpoints

Unit V Key Experience

Visit a basic industry that relates to the environment, for example, farm, foundry, mine or quarry.

Unit V Week 2



This Week's Topic
Interdependence

Correlations with
Alabama Course of Study:

Social Studies:
Interdependence (16)

Science:
Relationship of air, water, and soil to life on Earth (33–36)

Language Arts:
Create poster of interdependence (16, 18)

Math:
Graph ways we use air, soil, water (53)

Geography:
Map reading

Focus is on interdependence and how it relates to plants, animals, and people. Students should create a poster of the various forms of interdependence that they experience. They should be able to explain the relationship of air, water, and soil to life on Earth and graph the ways we use each of these in our lives.

Thought for the week

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.

—ALDO LEOPOLD

Community Visitors and Resources

Environmentalist to share the importance of a clean environment

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3–5*, "Don't Take a 'Lichen' to Pollution" *Project Learning Tree*, "The Forest of S.T. Shrew," "The Fallen Log," "Nature's Recyclers," "Planet of Plenty" *Project WILD*, "Eco-Enrichers" • Video: *Discovering Alabama*, "Wildlife History"

Unit V Week 3

Thought for the week
 The other planets may not be able to support life, but it isn't easy on this one either.

—BANKING

Community Visitors and Resources

Doctor or nutritionist to discuss the important vitamins and minerals in foods that we need to survive

Activities and Materials

- *Project Learning Tree*, "Pass the Plants, Please"
- *Project WILD*, "Lobster in Your Lunchbox," "What's for Dinner?"

This Week's Topic

Economics

Correlations with

Alabama Course of Study: Social Studies: Economics (17)

Science:

Human dependence on plants (28-30)

Language Arts:

List and describe plants eaten for a week (28, 30)

Math:

Determine value of plants eaten for a week (21-23, 53, 55)

Geography:

Map reading

Focus is on the economic value

of the plants we use. Student should list and describe the plants they eat for the week

and determine the value of these plants. Student should research the price of edible plants in a grocery store.



Unit V Week 4



Focus is on the rights of citizens and the things that people should and should not do. Students should relate things they should not do to plants to the various things they should do to protect plants and their environment. They should design and create a small garden at school or home.

This Week's Topic
Rights of citizens

Correlations with
Alabama Course of Study:
Social Studies:
Rights of citizens (18)

Science:
Protecting plants (30)

Language Arts:
Create plan to make a garden (20-30)

Math:
Design a small zoo (17, 29-30, 33)

Geography:
Map reading

Thought for the week
It is horrifying that we have to fight our own government to save the environment.

—ANSEL ADAMS

Community Visitors and Resources

Zoologist or environmentalist to speak on laws protecting endangered species

Activities and Materials

- *Alabama's Environmental Legacy... Grades 3-5, "All Tied Up," "Color My World Natural"*
- *Mailbox* (June/July 97), "Endangered Animals"
- *Project CATE*, "Rabbit's Big Splash: All"
- *Project Learning Tree*, "Trees in Trouble," "Life on the Edge"
- *Project WILD*, "Keeping Score"

Unit V Week 5

Thought for the week
 Be careful of your thoughts; they
 may become words at any
 moment.

—TARA GASSER

Community Visitors and Resources

Police officer to explain the
 responsibilities of citizens;
 someone from the waste manage-
 ment department to encourage
 recycling

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3-5*, "A City Comes Around," "What Goes Around Rubbish," "The Great Garbage Caper"
- *Project Learning Tree*, "Make Your Own Paper," "A Look at Aluminum," "Democracy in Action," "Resource-Go-Round," "Talking Trash, Not," "Reduce, Reuse, Recycle"
- *Project WILD*, "Ethi-Thinking," "Enviro-Ethics," "Ethi-Reasoning"
- Video: *Discovering Alabama*, "Red-cockaded Woodpecker"

This Week's Topic
 Responsibilities of citizens

Correlations with

Alabama Course of Study: Social Studies: Responsibilities of citizens (18)

Science:

Recycling (31)

Language Arts:

Create recycling plan (20-30)

Math:

Start a class/school recycling program (53)

Geography:

Map reading

Focus is on the responsibilities that citizens have in their environment. Students should be able to identify items that can be recycled in their town. They should create and start a class or school recycling program or investigate an existing one.



Unit V Week 6



Focus is on locations in the

area that are undergoing

construction. Students should

collect news articles about

local construction and write

stories about things that are

being built in their community.

Students should estimate the

amount of space in their

community that is currently

under construction. In science,

relate gravity and its effect

on things dropped at a

construction site.

This Week's Topic
Construction locations

Correlations with

Alabama Course of Study:

Social Studies:

Construction locations (19)

Science:

Gravity and motion (14–16)

Language Arts:

Write about local construction

(20–30)

Math:

Estimate amount of space in local

construction (4, 35–36)

Geography:

Map reading

Thought for the week
Sticks and stones may break our
bones, but words will break our
hearts.

—ROBERT FULGHUM

Community Visitors and

Resources

Contractor to explain land prepa-

ration and the different laborers

involved in construction

Activities and Materials

• *Alabama's Environmental*

Legacy...Grades 3–5, "The

Development of Sunshine City:

Simulation Activity"

• *Project WILD, "Oh Deer!"*

• *Project Learning Tree,*

"Resource-Go-Round

Unit VI

What things are changing?

Teacher's Notes (Use this page to write down your questions and good ideas for this Unit):

Unit VI Week 1

Thought for the week
Reading is to the mind what
exercise is to the body.

—JOSEPH ADDISON

Community Visitors and Resources

Veteran to speak about wars involving America

- Activities and Materials*
- *Alabama's Environmental Legacy...Grades 3-5*, "Start Shredding the News"
 - *Project WILD*, "Improving Wildlife Habitat in the Community"
 - *Project Learning Tree*, "Tree Cookies"

This Week's Topic
Events and history

Correlations with

Alabama Course of Study: Social Studies:

Events and history (20)

Science:

Science, technology, and society

(9)

Language Arts:

Read about important historical

events (13, 20)

Math:

Mark historical events on a

calendar (46)

Geography:

Map reading



Focus is on events and history and how things have changed over time. Students should read about important historical events that have occurred and mark these events on a calendar. In science, relate changes in events and history to how technology has changed both science and society.

Unit Checkpoints

Journal time, independent reading time and reading aloud, write invitations and send thank-you notes, nature walk.

Unit VI Key Question
What things are changing?

Unit VI Key Experience

Visit a high technology industry—computer lab, telephone company, internet service, television/radio station.

Unit VI Week 2

Thought for the week
 A sense of curiosity is nature's original school of education.

—SMILEY BLANTON

Community Visitors and Resources

Parents to share about their careers; business owner to explain the variety of jobs needed to run a large business

Activities and Materials

- *Project Learning Tree*, "Every Tree for Itself," "Who Works in this Forest?"
- *Project WILD*, "Wildwork"
- *Water Sourcebook*, "What a Water Job!"
- Appendix F: Integrating Career Awareness into DOH in the *DOH Guidebook for Teachers and Administrators*

This Week's Topic

Correlations with Alabama Course of Study: Social Studies: Careers (21)

Science:

Science careers (9)

Language Arts:

Research and write about science careers (13, 16, 18, 20–30)

Math:

Graph science careers by discipline (53)

Geography:

Map reading

Focus is on careers and the

requirements it takes to

achieve them. Students should

write about the various science

careers people in their commu-

nity have and graph the num-

ber of science careers by

discipline.



Unit VI Week 3

Thought for the week
 A cold in the head causes less
 suffering than an idea.

—JULES RENARD

Community Visitors and Resources

Fireman to speak about fire safety;
 bus driver to discuss bus safety
 and different modes of trans-
 portation

Activities and Materials

- *Project Learning Tree*, “Resource-Go-Round,” “Renewable or Not?”
- *Project WET*, “Cold Cash in the Icebox”
- *Water Sourcebook*, “For Sale: Used Water,” “Posted! No Fishing, No Swimming,” “Cap a Chemical!”

This Week’s Topic

Public safety

Correlations with

Alabama Course of Study:
Social Studies:

Public safety (26)

Science:

Technology to improve products
 (9, 17–18, 41)

Language Arts:

Describe how transportation has
 changed (20–30)

Math:

Graph speeds of different modes
 of transportation (53)

Geography:

Map reading

Focus is on public safety and how technology has been used to improve products, transportation, and services. Students should be able to identify fast and slow modes of transportation, and be able to predict and graph the speeds of different modes of transportation.



Unit VI Week 4



Focus is on the land and how technology has changed things such as crop yields, highway construction, earthquake detection, etc. Students should research various types of technology that are helpful to farmers and others who work with the land.

This Week's Topic
Technology and the land

Correlations with
Alabama Course of Study:
Social Studies:
Technology and the land (28)

Science:
Science, technology, and the land (9, 18)

Language Arts:
Read, research & write about land technology (1-35)

Math:
Compare crop yield now and then (15)

Geography:
Map reading

Thought for the week
An idea can turn to dust or magic depending on the talent that rubs against it.

—WILLIAM BERNBACH

Community Visitors and Resources

Farmer to speak about the importance of fertilizers and dependence on the land; soil conservationist to discuss techniques used to prevent erosion

- Activities and Materials*
- *Alabama's Environmental Legacy...Grades 3-5, "Filtration Sensation," "Mining" Project CATE, "Ribbit's Big Splash: Wetlands; Projects" Project Learning Tree, "A Few of My Favorite Things," "Tree Treasures," "Three Cheers for Trees" Water Sourcebook, "Goin' with the Flow"*

Unit VI Week 5

Thought for the week
 What we learn with pleasure we
 never forget.

—ALFRED MERCIER

Community Visitors and Resources

Representative from the water board to speak to the class on ways to conserve water

Activities and Materials

- *Alabama's Environmental Legacy...Grades 3-5*, "Swim Suitable," "Down It Goes—Where It Stops, Nobody Knows"
- *Project CATE*, "Rabbit's Big Splash: Projects"
- *Project WET*, "A-maze-ing Water"
- *Project WILD*, "What's Wild?" "Animal Charades"
- Video: *Discovering Alabama*, "Cahaba River"

This Week's Topic
 Technology and the water

Correlations with

Alabama Course of Study:

Social Studies:

Technology and the water (28)

Science:

Science, technology, and water (9, 18)

Language Arts:

Read, research, and write about water technology (1-35)

Math:

Graph how much water is used at home (53)

Geography:

Map reading



Focus is on water and how technology has improved and monitored water in homes, schools, businesses, and industries. Students should research water technology and the improvements that have been made over time. Students should graph how much water is used at home and identify conservation measures.

Unit VI Week 6



Focus is on communications and how technology has advanced forms of communication. Students should research communication technology and identify the types they use on a regular basis. They should measure distances covered by old forms of communication—drums, pony express, ship—and compare those distances with new forms of communication—telephone and email.

This Week's Topic
Technology communication

Correlations with
Alabama Course of Study:
Social Studies:
Technology communication (28)

Science:
Science, technology, and communication (9, 41)

Language Arts:
Read, research, and write about communication technology (1–35)

Math:
Measure distances of forms of communication (39)

Geography:
Map reading

Thought for the week
Give every man thy ear but few thy voice.

—WILLIAM SHAKESPEARE

Community Visitors and Resources

Representative from a local Internet service provider (ISP) to explain the uses of the Internet; representative from the phone company to explain alternative communication devices

Activities and Materials

- *Project CATE*, “Rabbit’s Big Splash: Projects”
- *Project WET*, “A-maze-ing Water”
- *Project Learning Tree*, “Power of Print,” “Paper Civilizations”
- *Project WILD*, “Does Wildlife Sell Cigarettes?,” “The Power of a Song”

Appendix: Resources

Teacher's Guides. AMNH, 1985-.
Discovering Alabama
 Alabama Museum of Natural History
 University of Alabama
 Box 870340
 Tuscaloosa AL 35487-0340
 (205) 348-2039

Project Learning Tree: Environmental Education Pre K-8 Activity Guide. 3d edition. American Forest Foundation, 1995.
 Project Learning Tree
 Alabama Forestry Association
 555 Alabama Street
 Montgomery AL 36104

Project WET: Curriculum and Activity Guide.
 The Watercourse; Western Regional Environmental Education Council, 1995.
 Project WILD
 Alabama Department of Conservation &
 Natural Resources
 64 N. Union Street
 Montgomery AL 36130
 (334) 242-3623

Project WILD Activity Guide. 2d edition.
 Western Regional Environmental Education Council, 1992.
 Project WILD
 Alabama Department of Conservation &
 Natural Resources
 64 N. Union Street
 Montgomery AL 36130
 (334) 242-3623

Project WILD Aquatic Education Activity Guide.
 2d edition. Western Regional Environmental Education Council, 1992.
 Project WILD
 Alabama Department of Conservation &
 Natural Resources
 64 N. Union Street
 Montgomery AL 36130
 (334) 242-3623

Part I. Primary Activity Resources

Being a flexible program, DOH can accommodate a variety of activity resources. However, teachers are strongly encouraged to make sure that all primary resources are consistent with recognized standards for quality and effectiveness. If you have primary resources in mind other than those listed below, contact: Wayne Strickland c/o AWF or Dr. Doug Phillips c/o AMNH for assistance in determining their consistency with national standards.

The following resources are incorporated as primary materials for DOH because:

- these materials are widely accepted and highly rated by master teachers and environmental educators,
- these materials are consistent with nationally recommended guidelines for accuracy, balance, and effectiveness in helping teachers include environmental education as a regular component of instruction,
- these materials have been specifically correlated with academic requirements of the Alabama Course of Study, and
- parent organizations of these materials have worked closely in the development of DOH and are committed to effective environmental education in support of overall educational improvement and student success—personally, civically, and academically.

Alabama's Environmental Legacy: A Series of Classroom Activities, Guide, and Resource Directory for Grades K-2 and 3-5. Legacy, Inc., 1997.
 Legacy, Partners in Environmental Education, Inc.
 P.O. Box 3813
 Montgomery AL 36109
 (800) 240-5115

Aquatic Project WILD, see *Project WILD Aquatic Education Activity Guide*.

Discovering Alabama, a public television series hosted and produced by Dr. Doug Phillips for Alabama Public Television and the Alabama Museum of Natural History; over 40 titles with

Water Sourcebook: A Series of Classroom Activities for Grades K-2 and 3-5. Legacy, Inc., 1994.
 Legacy, Partners in Environmental Education, Inc.
 P.O. Box 3813
 Montgomery AL 36109
 (800) 240-5115

Part II. Supplemental Resources

The following is a partial listing of resources considered supplemental because they have been recommended by DOH teachers as potential sources of information and activities. Many of these materials are not environmentally-based and most have not been officially evaluated for consistency with national environmental education standards. Likewise, these materials have not been formally correlated to requirements of the Alabama Course of Study.

In keeping with DOH policy, teachers are encouraged to take care in choosing supplemental materials that are consistent with recognized standards for quality, accuracy, and balance. Of course, materials that do not meet such standards are sometimes helpful in developing critical thinking skills and students' abilities to analyze biases or inaccuracies that might apply. Here again, assistance can be obtained by contacting Wayne Strickland or Dr. Phillips.

Agriculture in the Classroom: Alabama Treasures by Jacquelyn Autrey et al. Agriculture in the Classroom Foundation, Inc., 1987
 Alabama Department of Agriculture & Industries
 P.O. Box 336
 Montgomery AL 36109-0336

Acorn Naturalists. Resources for the trail and classroom; free catalogue.
 17300 East 17th Street, #J-236
 Tustin CA 92680
 (800) 422-8886

Alabama Forest Resources Center
 660 Adams Avenue
 Montgomery AL 36130

Alabama Geographic Alliance
 Department of Geography
 Jacksonville State University
 Jacksonville AL 36265
 (800) 346-5444

Alabama Heritage Magazine
 Box 870342
 The University of Alabama
 Tuscaloosa AL 35487-0342
 (205) 348-7467

Alabama Museum of Natural History
 Box 870340
 Smith Hall
 The University of Alabama
 Tuscaloosa AL 35487-0340
 (205) 348-7550

Alabama Natural Heritage Program
 Alabama Department of Conservation and Natural Resources
 64 N. Union Street
 Montgomery AL 36130

Alabama PALS Liter Education Activity Guide
 340 North Hull
 Montgomery AL 36104
 (334) 263-7737

America's Private Land: A Geography of Hope.
 U.S.D.A., 1996
 U.S.D.A.
 Natural Resource Conservation Service
 Washington DC 20250
 (800) 245-6340

Anniston Museum of Natural History
 P.O. Box 1587
 Anniston AL 36202-1587
 (256) 237-6766

APT Classroom. A complete listing of APT programs suitable for classroom use is available.
 Alabama Public Television
 2112 11th Avenue South, Suite 400
 Birmingham AL 35205-2884
 (800) 239-5233

The Kingfisher Young Discoverers Encyclopedia of

Facts and Experiments, available from Barnes &

Noble, Borders, www.amazon.com or

www.booksense.com

Learning about Communities. Prepared by the

Educational Research Council of America.

Allyn and Bacon, 1982

Magic School Bus, series. Scholastic Inc.

The Mailbox and The Mailbox Superbook, series.

One book each for Preschool through Grade 5.

Greensboro, NC: Education Center, 1998.

www.themailbox.com

Multiple Intelligences: Teaching for Success.

The New City School, Inc., 1997.

Nature Conservancy of Alabama

Pepper Place

2821C 2nd Avenue S.

Birmingham AL 35233

Nature Link, Wildlife Education Series

Alabama Wildlife Federation

P.O. Box 1109

Montgomery AL 36102

(800) 822-WILD

Nature's Way series

Center for Environmental Research & Service

Troy State University

Troy AL 36082

Outdoor Classrooms on School Sites. U.S. Department

of Agriculture, Soil Conservation Service, 1980.

Peterson Field Guide series, Houghton Mifflin Co.

Pollution Prevention: A Common Sense Solution to a

Complex Problem—video.

Discovering Alabama

Alabama Museum of Natural History

University of Alabama

Box 870340

Tuscaloosa AL 35487-0340

(205) 348-2039

Audubon Society Field Guide series

Big Book of Everything: Social Studies,

edited by Rosemary Alexander. Educational

Instructor Publications, 1986

Creative Science Experiences for the Young Child

by Imogene Foret and Joy MacKenzie. Incentive

Publications, Inc., 1973

Environmental Education

American Forest Foundation

1111 19th Street, NW

Washington DC 20036

Ft. Toulouse/Jackson Educational Activities

Ft. Toulouse/Ft. Jackson Historic Site

2521 West Ft. Toulouse Road

Wetumpka, AL 36093

Geological Survey of Alabama

P.O. Box 869999

The University of Alabama

Tuscaloosa AL 35486-9999

(205) 349-2852

Geological Society of America

P.O. Box 9140

Boulder CO 80301-9140

(303) 447-2020; (800) 472-1988

www.geosociety.org

Global Learning and Observation to Benefit the

Environment (*The Globe*), a series of activities and

investigations about the earth and global environ-

mental systems for teachers and students.

The Globe Program

744 Jackson Place NW

Washington DC 20503

(800) 858-9947

Golden Press and Western Publishing Company

field guide series (now Golden Books)

Instant Kids Books: Martin Luther King

111 W Blanche St.

Mansfield OH 44903

www.InstantKidsBooks.com

Project CATE, Conservation Action Through Education, a series of CD-ROMs.
Project CATE
P.O. Box 123
Mobile AL 36601
(334) 694-6247

Public Broadcasting Service, Inc. Various series, e.g., *The American Experience* and the Dallas County (TX) Community College American History series, as well as other educational programs.

PBS Videos
1320 Braddock Place
Alexandria VA 22314
(800) 344-3337

Ranger Rick's NatureScope, series.
National Wildlife Federation, 1985-
National Wildlife Federation
1400 16th Street NW
Washington DC 20036-2266

School Yard Habitat Information Kit, item #79948
Alabama Wildlife Federation
P.O. Box 1109
Montgomery AL 36102
(800) 822-WILD

Simon & Schuster's Field Guide series

Teacher's Manual for Outdoor Classrooms—How to Plan, Develop, and Use Them. U.S. Department of Agriculture, Soil Conservation Service, 1979.

Teaching about the Environment: A Resource Guide for Getting Started in Environmental Education.
Alabama Wildlife Federation, 1997.

Alabama Wildlife Federation
P.O. Box 1109
Montgomery AL 36102
(800) 822-WILD

Thematic Units Collections, Carson Dellosa Publishing Company

Time-Life Videos
P.O. Box 85060
Richmond VA 23285-5060
www.time-life.com

U.S. Department of the Interior
Fish and Wildlife Service
Division of Ecological Services

P.O. Drawer 1190
Daphne AL 36526

U.S. Geological Survey
Dept. F
601 National Center
Reston VA 22092
(703) 648-7440

Waste—A Hidden Resource... Activity Guide,
published by the Tennessee Valley Association

What a Web Site! United States Department of Agriculture, Center for Nutrition Policy and Promotion. www.usda.gov/fcs/cnpp

WOW! The Wonders of Wetlands, an Educator's Guide. Environmental Concern, Inc. and The Watercourse, 1995.

Acorn Naturalists
17300 East 17th Street, #J-236
Tustin CA 92680
(800) 422-8886

Part III. Additional Materials for General Consideration

The following materials represent a sampling of suggested readings for teachers who might wish to explore various perspectives from different areas—the environment, history, science, society, educational philosophy, teaching methodology—pertinent to adopting and implementing DOH. These materials typically do not include instructional resources or activities. They are intended mainly for the teachers' personal enrichment/development.

The first book on the list, *A Sand County Almanac*, is considered the "bible" of conservation philosophy among outdoor enthusiasts. The conservation ethic espoused by author Aldo Leopold is central to the DOH aim of imbuing students with an ethic of environmental stewardship. The other materials—listed in alphabetical order—are a potpourri of suggestions from DOH staff and teachers. You are invited to add your own suggestions to this list.

of a Good [K-6th] Grade Education. Core Knowledge Series; separate book for each grade. Delta Books, 1993.

Hudson, Charles M. *Knights of Spain, Warriors of the Sun: Hernando de Soto and the South's Ancient Chiefdoms*. University of Georgia Press, 1997.

Hudson, Charles M. *The Southeastern Indians*. University of Tennessee Press, 1976.

Hyams, Edward. *Soil & Civilization*. Harper Colophon Books, 1976.

Kellert, Stephen R. *The Value of Life: Biological Diversity and Human Society*. Island Press, 1996.

McQuillan, Alan G. and Ashley L. Preston (Eds.). *Globally and Locally: Seeking a Middle Path to Sustainable Development*. University Press of America, 1998.

Owsley, Frank. *Struggle for the Gulf Borderlands: The Creek War and the Battle of New Orleans, 1812-1815*. University of Alabama Press, 2000.

Pierson, George Wilson. *Toqueville in America*. Johns Hopkins University Press, 1938; paperback edition, 1996.

Read, William A. *Indian Place Names in Alabama*. University of Alabama Press, 1984.

Rogers, William W., Richard D. Ward, Leah Rawls Atkins, and J. Wayne Flynt. *Alabama: The History of a Deep South State*. University of Alabama Press, 1994.

Schlichter, Carol L. and W. Ross Palmer (Eds.). *Thinking Smart: A Primer of the Talents Unlimited Model*. Creative Learning Press, Inc., 1993.

Tarnas, Richard. *The Passion of the Western Mind: Understanding the Ideas that have Shaped our World View*. Ballantine Books, 1991.

Taylor, Alan. *American Colonies*. Viking Penguin, 2001.

Leopold, Aldo. *A Sand County Almanac*. Oxford University Press, 1949.

Abrams Planetarium. *Sky Calendar*. Michigan State University.

Alabama Atlas & Gazetteer. Delorme Publishing, 1998.

Bartam, William. *Travels*. Francis Harper (Ed.), naturalist's edition. University of Georgia Press, 1998.

Borland, Hal. *A History of American Wildlife*. National Wildlife Federation, 1975.

Brown, Lester, Christopher Flavin, and Hilary French (Eds.). *State of the World 1999: A Worldwatch Institute Report on Progress Toward a Sustainable Society*. W.W. Norton & Co., 1999.

Duncan, Dayton and Ken Burns. *Lewis & Clark: The Journey of the Corps of Discovery, An Illustrated History*. Alfred A. Knopf, 1998.

Field, William. *Make a Movie that Tells a Story: Using a Home Camcorder...and Other Stuff You Already Own*. William Field, 2000. (P.O. Drawer 1549, Tuscaloosa AL 35403)

Glasser, William. *The Quality School: Managing Students without Coercion*. 2d ed. HarperCollins, 1992.

Goldfarb, Theodore D. *Taking Sides: Clashing Views on Controversial Environmental Issues*. 6th ed. Duskin Publishing Group, Inc., 1995.

Harker, Donald F. and Elizabeth Ungar Natter. *Where We Live: A Citizen's Guide to Conducting a Community Environmental Inventory*. Island Press, 1995.

Hawken, Paul. *The Ecology of Commerce: A Declaration of Sustainability*. Harper, 1994.

Hirsch Jr., E.D. (Ed.). *What your [Kindergarten through Sixth] Grader Needs to Know: Fundamentals*

Thayer, Robert. *Gray World, Green Heart: Technology, Nature, and the Sustainable Landscape*. Wiley, 1994.

Tocqueville, Alexis de. *Democracy in America*. Edited and abridged by Richard D. Heffner. Penguin Books, 1956.

Tortorelli, Robert and Andrew Carroll (Eds.). *In Our Own Words: Extraordinary Speeches of the American Century*. Pocket Books, 1999.

Trimble, Stephen (Ed.). *Words from the Land: Encounters with Natural History Writing*. Peregrine Smith Books, 1988.

Watts, May Theilgaard. *Reading the Landscape of America*. Revised and expanded edition. Collier Macmillan Publishers, 1975.

Whimbe, Arthur and Jack Lochead. *Problem Solving & Comprehension*. 4th ed. Lawrence Erlbaum Assoc., 1986.

Wilkinson, Loren. *Earth Keeping: Christian Stewardship of Natural Resources*. William B. Eerdmans Publ. Co., 1980.

Wilson, Edward O. *Biophilia*. Harvard University Press, 1984.

Winn, William W. *The Old Beloved Path*. Chattahoochee Indian Heritage Assoc., 1992.

