

# Everything is Connected: Arkansans and the Natural Environment

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Throughout history people have developed a relationship with the natural environment, which includes climate, geology, topography, water, soils, plants, and animals. In this lesson plan students will describe the relationship between people and the natural environment over time using the terms *depend upon*, *modify*, and *adapt to*. They will also compare and contrast people-environment interaction during the past with that of today.

**Grades:** 7-8

**Arkansas Curriculum Frameworks:**

Arkansas History 1.1.12, 2.1.11, and 4.1.11

Science LS 2.12 and LS 3.2

Social Studies PPE 1.1, PPE 1.4, PPE 1.6, PPE 2.1, PPE 2.4, and PPE 2.8

**Key Terms:**

natural environment	geology	depend	adapt	modify	uplands	lowlands
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**Key Terms Defined:**

natural environment: The external physical conditions that affect and influence the growth, development, and survival of organisms.

geology: The scientific study of the origin, history, and structure of the earth.

depend: To rely upon.

adapt: To adjust or become adjusted to new or different conditions.

modify: To change; alter.

uplands: An area of land that is mountainous or hilly.

lowlands: An area of land that is low, sometimes moist, and usually flat or gently rolling.

**Materials:**

- A copy of the Brief Description of Arkansas Uplands and Lowlands in the 1800s for each student (included below)
- A copy of the Individual Student Questions for each student (included below)
- Butcher paper for each group to record information

**Background Information:**

People are connected to the natural environment because of basic survival needs. People depend on the natural environment for food, shelter, water, clothing, and heat. People adapt to the natural environment. They settle in all areas of the natural environment by adapting to the various natural settings. People modify the natural environment to meet their needs. For example, they clear land to build homes and roads, and to plow and irrigate agricultural fields. The people of Arkansas have used the abundance of natural resources in our state—such as forests; water; the land for agriculture; the wildlife for food, shelter, tools, and clothing; and rocks and minerals—to shape their culture.

**Activities:**

1. As an introduction to the topic, ask students to describe how the environment affects people and what effects people have on the environment using the terms *depend upon*, *modify*, and *adapt to*.

2. Write the seven “Key Terms” on the board. Ask students what they think the words mean and write their ideas and comments by the terms.

3. Give some background information (above) to the class about how people and the environment are connected.

4. Tell the students they will each answer some questions and then work in groups to analyze information about how people are connected to the natural environment.

5. Give each student the Brief Description of Arkansas Uplands and Lowlands in the 1800s and the list of Individual Student Questions.

*Optional: Write the questions and descriptions on the board instead.*

6. After about ten to 15 minutes, create groups of four to five students and give each group a sheet of butcher paper to write on. Each group should choose a recorder and a presenter. Explain that recorders will write the groups’ conclusions on the butcher paper, and presenters will report this information to the class.

7. Using their answers to the individual student questions and the descriptions of the uplands and lowlands, have each group discuss the following questions and record their answers on their sheet of butcher paper:

1. *How did the early people of Arkansas depend upon, modify, and adapt to the natural environment to meet their needs?*

2. *How do these compare to how Arkansans relate to the natural environment today?*

3. *How do the decisions people make affect the environment? Give examples using soil, water, and animals.*

8. Have each group’s presenter share their groups’ written conclusions with the class.

*Optional: Display the sheets of butcher paper in the classroom.*

**Evaluation:**

Display a rubric for the group work. Points should be given for information that includes how people *depend upon*, *modify*, and *adapt to* the natural environment. Does the group show the relationship between people and the natural environment and how it changed over time in Arkansas?

**Sources:**

*The American Heritage Dictionary*. New York: Dell Publishing Co., 1985.

Foti, Thomas and Gerald Hanson. *Arkansas and the Land*. Fayetteville: University of Arkansas Press, 1992.

National Geographic Society. *Geography for Life: National Geography Standards 1994*. Washington, D.C.: 1994.

National Geographic Society. *Tool Kit for Teaching Geography*. Washington, D.C.: 1998.

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*Arkansas History lesson plans are available online at the Butler Center for Arkansas Studies website:  
[http://www.cals.lib.ar.us/butlercenter/lesson\\_plans\\*](http://www.cals.lib.ar.us/butlercenter/lesson_plans*).*

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\* To access links, copy and paste into your browser.

## Brief Description of Arkansas Uplands and Lowlands in the 1800s

### *Uplands*

- ✓ Mountains and plateaus formed millions of years ago.
- ✓ Rugged land.
- ✓ Rocks close to the surface, mostly limestone, sandstone, and shale.
- ✓ Two rocks unique to this area are novaculite and quartz.
- ✓ Shallow topsoil, except in river valleys.
- ✓ Hardwood forests mixed with pine.
- ✓ Small areas of prairie grasses.
- ✓ Deer, elk, bear, and buffalo are plentiful.
- ✓ Travel primarily on rivers; later on Indian trails and still later by roads and railroads.
- ✓ Isolated communities.
- ✓ Logging industry began to cut and clear trees in the forests.
- ✓ Sawmills increase.

### *Lowlands*

- ✓ Land is low, flat, and often wet.
- ✓ Sand and clay deposited by the Gulf of Mexico and rivers in the area.
- ✓ Rich farmland.
- ✓ Abundance of rivers that can be used for transportation.
- ✓ Flooding of rivers creates problems for farmers.
- ✓ Trees are mostly pine with hardwoods along the river bottomlands.
- ✓ Deer, beaver, fish, bear, and many birds abound.
- ✓ Oil and gas found in the southern part of the state.
- ✓ Gravel and bauxite found in the lowlands.
- ✓ Cypress and tupelo trees in swamp areas.
- ✓ Swamp areas full of mosquitoes.
- ✓ Hot and humid much of the year.
- ✓ Early travel was on rivers then military roads.
- ✓ Railroads built from 1870-1900.
- ✓ Prairies converted to farmland.
- ✓ Some plantations, where cotton was the main crop.

## Individual Student Questions

1. List some geological features (rocks and soil) of Arkansas' uplands and lowlands.
2. Describe the climate of Arkansas. Does it vary by region within the state?
3. What are the six natural divisions of Arkansas?
4. What types of bodies of water are found in Arkansas?
5. Describe the different types of vegetation (plants and trees) found in Arkansas.
6. List as many kinds of animals as possible that are native to Arkansas.
7. List ways early Arkansas settlers depended on the natural environment for their needs.
8. How is this different for people today?
9. How did the early Arkansans adapt to the natural environment?
10. Do we adapt to the environment in the same manner today?
11. How did the early people modify the environment?
12. Do we still modify the natural environment today? How?