

KENTUCKY ARCHAEOLOGY

EPISODE TWO

THE ADENA PEOPLE: MOUNDBUILDERS OF KENTUCKY A COMPANION GUIDE FOR INTERMEDIATE AND MIDDLE SCHOOL SOCIAL STUDIES TEACHERS



BY

JUDY SIZEMORE

**KENTUCKY HERITAGE COUNCIL
VIDEO EDUCATION SERIES
FRANKFORT, KENTUCKY
2001**

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The Series' Companion Guides are edited by A. Gwynn Henderson.

Kentucky Archaeology is a series of short documentaries that explore new research about the state's rich cultural heritage. Commissioned by the Kentucky Heritage Council, each episode examines a unique aspect of archaeology, with a blend of interviews, artifacts, rare archival images and video of ancient American Indian sites in Kentucky. The first three episodes of the series were premiered on KET, The Kentucky Network in early December 2000. Visit the Series' web page on the Heritage Council's website (www.kyheritage.org) to read more detailed summaries of the episodes:

Episode One: Ancient Fires at Cliff Palace Pond examines landmark research on Kentucky's first forest managers.

Episode Two: The Adena People: Moundbuilders of Kentucky, the video for which this Companion Guide was produced, examines the legacies of the Adena people whose ancient culture is renowned for massive burial mounds.

Episode Three: Saving a Kentucky Time Capsule documents efforts to preserve dozens of ancient American Indian mud glyphs (drawings) discovered deep inside a Kentucky cave.

Copies of these three episodes on one videotape are available through the Kentucky Heritage Council, 300 Washington Street, Frankfort, KY, 40601. Phone: 502/564-6661. They cost \$10.00 plus \$4.00 shipping and handling.

The lesson plans for each episode, like this one, are available for downloading from the Kentucky Heritage Council's Video website listed above. Hardcopies can be ordered by contacting the Heritage Council at the address listed above.

About the Cover: The image on the cover of this Companion Guide is of two Adena jars illustrated on the Kentucky Heritage Council's *Kentucky Before Boone* poster. The smaller one is decorated with juxtaposed concentric (or "nested") diamonds incised (or drawn with a stick) into the wet jar before it was fire-hardened. The taller vessel has a plain surface. Archaeologists discovered them on the floor of a burned structure near the partially cremated remains of an adult woman, at the base of the Morgan Stone Mound in Bath County, Kentucky in 1939.

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Teacher’s Note:

In order to successfully complete these lessons, you must have **The Adena People: Moundbuilders of Kentucky**, a short (6:00 min.) video commissioned by the Kentucky Heritage Council. It can be purchased from the Council for \$10.00 plus \$4.00 shipping and handling. Call 502/564-6661 or write the Council at 300 Washington Street, Frankfort, KY, 40601.

Activity Sheet and Handout Credits

Adena Tablets handout: Tablet drawings taken from “The Adena Engraved Tablets” by David W. Penney, published in *Midcontinental Journal of Archaeology*, volume 5, number 1, pages 3-38 (1980). Reprinted by permission of the Midcontinental Journal of Archaeology.

Handouts developed for use in Kentucky *Project Archaeology* workshops by the Kentucky Archaeological Survey included in this guide consist of the following:

Kentucky Rock Art Symbols (selected images from ***Rock Art of Kentucky***, by Fred E. Coy, Jr., Thomas C. Fuller, Larry G. Meadows, and James L. Swauger. The University Press of Kentucky, Lexington (1997).

State Laws Pertaining to Archaeological Sites

A Thumbnail Sketch of NAGPRA: Native American Graves Protection and Repatriation Act

Teachers Please Don't Touch That Trowel

About Simulated or Mock Excavations

Introduction

Throughout history, people have interacted with their environment to meet basic human needs, both physical and spiritual. Archaeologists study the material remains of past cultures to determine how people of earlier times met these needs. *The Adena People* video explores what archaeologists know -- and what they don't know -- about the Adena, a prehistoric people of the Early to Middle Woodland Period (200 B.C. – A.D. 300) who built burial mounds and earthworks that still dot the central Kentucky landscape. Despite decades of research, archaeologists still know more about how these ancient people buried their dead than they know about how they lived their daily lives.

The eight cross-curricular activities in this Companion Guide will help teachers build on the video to explore concepts of culture, geography, and historical perspective. Although the video is focused on the Adena culture (with comparisons to Mississippian and Fort Ancient cultures in Kentucky), the activities will help students develop concepts that can be applied to any culture. Because students often have the misconception that indigenous peoples no longer exist, the activity extensions emphasize comparisons to contemporary Native American cultures.

These classroom-tested activities also provide insights into the scientific process archaeologists use to learn about cultures of the past by analyzing artifacts and drawing inferences. The activities provide a springboard for a discussion about the ethics of archaeology as well. Because the Adena people were a mobile society and left little material evidence of their day-to-day life, the majority of what is known about them was learned by excavating burial mounds and analyzing grave goods.

Although the major emphasis of this Companion Guide is on social studies, the activities encompass math, technology, language arts, and arts and humanities. They could be used by a team of teachers or by a single teacher to present a cross-disciplinary unit.

A number of excellent activities related to archaeology and/or to Kentucky's prehistoric peoples can be easily downloaded from the Kentucky Archaeological Survey's website and its linked sites. KET, The Kentucky Network (KET) and the Kentucky History Center also have outstanding resources that will enhance this unit. Field trips to the History Center, the James C. Salato Wildlife Education Center, or other sites also can expand learning about the study of the past. The **Additional Resources** section provides specific information about these and other resources.

Essential Questions

What are the elements of culture?

How did the prehistoric people of Kentucky interact with their environment to meet their needs, both physical and spiritual?

How do we learn about the cultures of the past?

How has the science of archaeology changed in recent decades?

Kentucky Academic Expectations Addressed

Goal 2: 2.1-2.2, 2.16-2.17, 2.19-2.20, 2.22-2.23, 2.25, 3.36

Intermediate and Middle School Social Studies Content Addressed

Culture and Society (2.16, 2.17)

Students will

- recognize the elements of culture using different groups from Kentucky's past as examples.
- understand how social institutions in Kentucky's past respond to human needs, structure society, and influence behavior.
- examine how culture in the United States has been influenced by beliefs and behavior of people in America's past.
- investigate how social institutions addressed human needs in early United States history.

Geography (2.19)

Students will

- understand how humans have interacted with the physical environment to meet their needs in Kentucky.
- recognize how the physical environment, especially in the past, limited and promoted human settlement and activities in Kentucky.
- recognize the importance of physical environment (e.g., natural resources) in the settlement and development of early world civilizations.
- examine patterns of human movement, settlement, and interaction in early American history and investigate how these patterns influenced culture and society in the United States.
- examine how early United States history was influenced by the physical environment.

- investigate how Americans used technology, especially in early American history, to modify the environment.

Historical Perspective (2.20)

Students will

- explore different perspectives and interpretations of Kentucky history by using primary and secondary sources, artifacts, and time lines.
- understand different groups throughout Kentucky's history and their reasons for exploring and/or settling in Kentucky.
- recognize how lifestyles and conditions have changed over time in Kentucky.
- explore the interpretive nature (how perceptions of people and passing of time influence accounts of historical events) of the history of the United States using a variety of tools (e.g., primary and secondary sources, data, artifacts).
- develop a chronological understanding of early world history.
- use a variety of tools (e.g., primary and secondary sources, data, artifacts) to understand the interpretive nature (how perceptions of people and passing of time influence accounts of historical events) of world history from early civilizations prior to 1500 A.D.
- analyze the social, political, and economic changes in human societies in historical eras prior to 1500 A.D. (Early Human Communities)

Additional Kentucky Academic Expectations Addressed

Goal 1: 1.2-1.4; 1.10-1.13; 1.16

Goal 5: 5.1, 5.2

Goal 6: 6.2, 6.3

Activity: Elements of Culture: A Pre-Viewing Activity

Grade Level: 4-8
Time Required: 60 minutes
Curriculum Areas: Social Studies
Curriculum Connections

(KY Academic Expectations):

1.2-1.4, 2.16-2.17, 2.19-2.20,

5.1, 6.3 -- Students will

- make sense of things they read, observe, listen to.
- recognize the elements of culture using different groups from Kentucky's past as examples.
- understand how social institutions in Kentucky's past respond to human needs, structure society, and influence behavior.
- understand how humans have interacted with the physical environment to meet their needs in Kentucky.
- explore different perspectives and interpretations of Kentucky history by using primary and secondary sources, artifacts, and time lines.
- understand different groups throughout Kentucky's history and their reasons for exploring and/or settling in Kentucky.
- use critical thinking skills.
- make connections between existing knowledge and new knowledge.

Materials:

1. *Adena People* video.
2. "Elements of Culture" grids.

Introduction: Before viewing the video, ask students to imagine what it might have been like to live in Kentucky some two thousand years ago. In what ways would their lives have been different? Help students focus on the actual time period, so that they realize you are not discussing the age of dinosaurs nor the Ice Age, but a time when prehistoric groups of Native Americans lived in a climate quite similar to the climate of today.

Lead the class in brainstorming a list of the ways that life would have been different. Encourage them to think about how people would have met their basic needs, and guide them to think in terms of general categories. For example, if a student says, "There wouldn't be any grocery stores," you could ask, "So you think the way people would have gotten their food would have been different?" List food on the board. Encourage students to think about art and religion as well as physical needs. (See the sample "Elements of Culture Grid" for ideas on what might be included in your list.)

Procedure: Explain that different people develop diverse cultures to meet their basic needs and to express their beliefs and values. Explain that you are going to watch a video about the culture of the Adena people, who lived in the Ohio Valley from about 200 B.C. to about 300 A.D. The video will also include information about the Fort Ancient and Mississippian people, who lived during the Late Prehistoric Period (about A.D. 1000-1700).

Distribute the blank "Elements of Culture Grid" and list the elements of culture you have identified in the first column. Tell students that you want them to watch for any information in the video that will help them complete the grid.

After watching the video, allow students to work in small groups to write information in the grid. You may want to replay the video once or twice with pauses to let students decide which information pertains to the Adena people, which to the Fort Ancient/Mississippian people, and which pertains to all the groups.

Ask groups to share their results. (Save results for future activities.)

Assessment Suggestions: Assess individual participation in the group effort. Assess groups on the number and accuracy of elements that they were able to identify and categorize.

Extensions:

1. Read ***First Nations Technology*** by Karin Clark to your class (available from Oyate; see **Additional Resources**). It is a short picture book and will take only 5-10 minutes to read, but it can serve as an important reminder that in many places, there are vibrant Native American cultures that continue the traditions of the past as they adapt to the modern world. The book describes how the lifestyle of the Native American tribes on Vancouver Island in western Canada has changed as a result of modern technology, but how the tribes have retained their songs, dances, and ceremonies. Ask students to create a Venn diagram, comparing the culture of Vancouver Island's Native people in the past with the culture of contemporary Native people. Ask them to create a Venn diagram comparing what they know about the past culture of the Vancouver Island's Native people with what they know about the culture of Kentucky's Adena people.
2. Lead a discussion about the differences between the type of information archaeologists are able to deduce from artifacts and the type of information that is passed down from generation to generation within a living culture.

See **Resource Pages** 45-48 for a brief outline of Kentucky prehistory.

Elements of Culture Grid – Sample Information from the Video

<u>Element of Culture</u>	Adena Culture (Woodland Period)	Fort Ancient/Mississippian (Late Prehistoric Period)
<u>Food</u>	Hunting (deer), gathering (nuts) and gardening (sunflowers)	Hunting (deer), gathering (nuts) and farming (corn, beans, squash)
<u>Clothing</u>		Deerskin skirts and loincloths, feather capes
<u>Shelter</u>	Perhaps circular houses	Rectangular homes of woven branches plastered with mud, topped with thatched roofs
<u>Lifestyle</u>	Small groups moving from one small seasonal camp to another	Concentrated, permanent villages
<u>Art</u>	Pottery, copper jewelry, engraved tablets, mica crescents	Paintings on houses, jewelry
<u>Religion</u>	Burial of the dead in large and small earth mounds	
<u>Language</u>		
<u>Tools and weapons</u>	Scrapers, knives, spears	Scrapers, knives, mortar and pestle, bows and arrows
<u>Architecture</u>	Burial mounds and geometric earthworks	
<u>Music</u>		

Activity: Digging for Facts

Grade Level: 6-8
Time Required: 60 minutes
Curriculum Areas: Social Studies
Curriculum Connections
(KY Academic Expectations):
1.2-1.4, 1.16, 2.16-2.17, 2.19-2.20, 5.1 -- Students will

- make sense of things they read, observe, listen to.
- use technology.
- recognize the elements of culture using different groups from Kentucky's past as examples.
- understand how social institutions in Kentucky's past respond to human needs, structure society, and influence behavior.
- understand how humans have interacted with the physical environment to meet their needs in Kentucky.
- explore different perspectives and interpretations of Kentucky history by using primary and secondary sources, artifacts, and time lines.
- understand different groups throughout Kentucky's history and their reasons for exploring and/or settling in Kentucky.
- use critical thinking skills.

Materials:

1. *Adena People* video.
2. Completed "Elements of Culture" grids from previous activity.
3. Copies of "The Adena People" handout for each student.
4. Access to the Internet (optional).

Introduction: Review results from the "Elements of Culture" Activity.

Procedure: Direct students to find more information about the Adena people to enter in their grids by reading "The Adena People" handout and/or by visiting the following websites:

www.uky.edu/AS/Anthropology/Museum/wood.htm

(case sensitive)

www.ket.org/education/guides/kystory.pdf

Have students share the information they have found. Lead a discussion about what information was NOT available from any source. Ask students to consider why this would be. Ask them to explain how archaeologists obtain information. For example, the students may have identified language, stories, or dances as elements of culture, but they would not be able to get any information from any source about these elements. Point out that the information that we do have comes from artifacts, not written records. How would this affect the type of information that archaeologists have about this culture?

Why do archaeologists know more about the domestic life of Fort Ancient and Mississippian people than they know about the Adena people? Be sure students understood Dr. Clay's explanation that very few Adena settlements

have been found and studied and most of what is known about Adena culture comes from the excavation of burial mounds, which do not contain every day items.

Assessment Suggestions: Ask students to respond to one of the following prompts:

1. How did the Adena people interact with their environment to meet their basic needs?
2. What have archaeologists learned about the Adena people from the items that were buried with their owners in the burial mounds?

Extensions:

1. Download the "Archaeology of Me" activity from the William S. Webb Museum of Anthropology website www.uky.edu/AS/Anthropology/Museum/tres.htm (case sensitive), and click on "Activities" (they are in .pdf format). This will help students understand how archaeologists deduce information based on artifacts.
2. Download Activities 2 and 3 (Cultural Context) activities from the William S. Webb Museum of Anthropology website (see internet address above). This will help students understand how archaeologists make deductions from the clues given by the context in which artifacts are discovered.
3. Watch the video *The Principal People* (available from the Museum of the Cherokee; see **Additional Resources**). This will help students understand how one Native American nation has succeeded in maintaining its culture.

For more specific information about Kentucky's Adena people, read pages 91-101 and pages 122-123 in Jimmy A. Railey's chapter, "Woodland Cultivators" in ***Kentucky Archaeology***, edited by R. Barry Lewis. The University Press of Kentucky, Lexington (1996).

A map of the distribution of Adena mounds and earthworks is shown on page 49 of the **Resource Pages**.

THE ADENA PEOPLE

The Adena people lived in southern Ohio, northern and central Kentucky and western West Virginia from about 300 B.C. to about A.D. 200. Because they were a mobile society, moving from one seasonal camp to another, archaeologists have found only a few small Adena settlements. But the Adena people did leave behind a record of their culture in the burial mounds, sacred circles, and geometric earthworks they built.

The Adena people were hunters, gatherers and gardeners. They hunted deer, elk, bear, wild turkey, rabbits, squirrels, and other animals with stone-tipped spears to provide food and clothing. They hunted for birds, fished, and gathered fresh water mussels. They gathered nuts (acorns, hickory nuts, chestnuts, and walnuts), berries, fruits (like pawpaws and fox grapes), wild onions, and wild greens. They cultivated some plants like squash, gourd, sunflower, goosefoot, and maygrass in small clearings.

Although we do not know what the spiritual beliefs of the Adena people were, we can be quite certain that they believed in an afterlife because they took so much trouble to bury their dead. The largest mounds were not constructed all at once but over several generations, as each burial was covered with a layer of earth. Mixed in with the soil that covered the graves were fragments of plain-surfaced cylindrical jars with round or flat bases. They are the remains of vessels that the Adena people probably used during ritual feasts held at the mound. The ceremonies brought people together from widely scattered settlements.

The people buried in the mounds were laid out flat on their backs in shallow pits; or were cremated; or their bones were cleaned of flesh and then wrapped or bundled together and buried. Men and women seem to have been buried with equal ceremony. Some individuals, undoubtedly important clan or community members were placed in log tombs before being covered with earth. They were often buried with special possessions like jewelry, stone smoking pipes, gorgets carved from banded slate, or fragments of minerals like galena and barite. Sometimes they were buried with beautifully decorated pottery.

The Adena people took part in a long-distance trading network. We know this because many of the items found in their burial mounds were made from materials that are not found in Kentucky. For example, there are gorgets, rings, and bracelets made from copper found in the Lake Superior region; necklaces made from shell traded in from the Gulf Coast; and mica from the Appalachian Mountains of Tennessee and North Carolina cut into crescents and worn as headdress ornaments.

Rarely, the Adena people buried hand-sized, rectangular tablets of clay or soft stone in the mound layers. These tablets are carved (or rarely etched) with designs that look like raptorial birds (hawks are a kind of raptorial bird) or human figures with bird features (tails, legs, wings, heads). We do not know what the designs mean, but we can make educated guesses. Archaeologists think they probably were important Adena religious symbols. Perhaps for the Adena people, as with other traditional horticultural societies, raptorial birds symbolized death and rebirth. By eating the flesh of the dead, these birds carried the spirit to a new life. In terms of how the tablets were used, archaeologists' best guess is that they were used to print designs on some kind of material, perhaps leather.

Like the tablets, much about Adena culture is a mystery. But we can admire the beauty of the Adena peoples' tablets, pottery and ornaments, and we can appreciate their technological skill in making stone tools and building burial mounds and earthworks.

A NATIVE AMERICAN STONEHENGE OR WOODHENGE?

In the video, **The Adena People: Moundbuilders of Kentucky**, Mt. Horeb Earthworks is shown as an example of an Adena sacred circle and Dr. Berle Clay walks in the ditch of this site. He mentions that Adena sacred circles may have been Native American stonehenges or woodhenges.

Mt. Horeb Earthworks is located outside Lexington, Kentucky along the banks of South Elkhorn Creek. In 1939, limited archaeological excavations discovered that Adena people had dug a circular ditch, 7.5 feet deep and 45 feet wide, next to the creek. By piling up the soil and clay from the ditch, they made a 4 foot high embankment or mound around it. They left untouched a circular central area and a walkway or ramp leading to the central area.

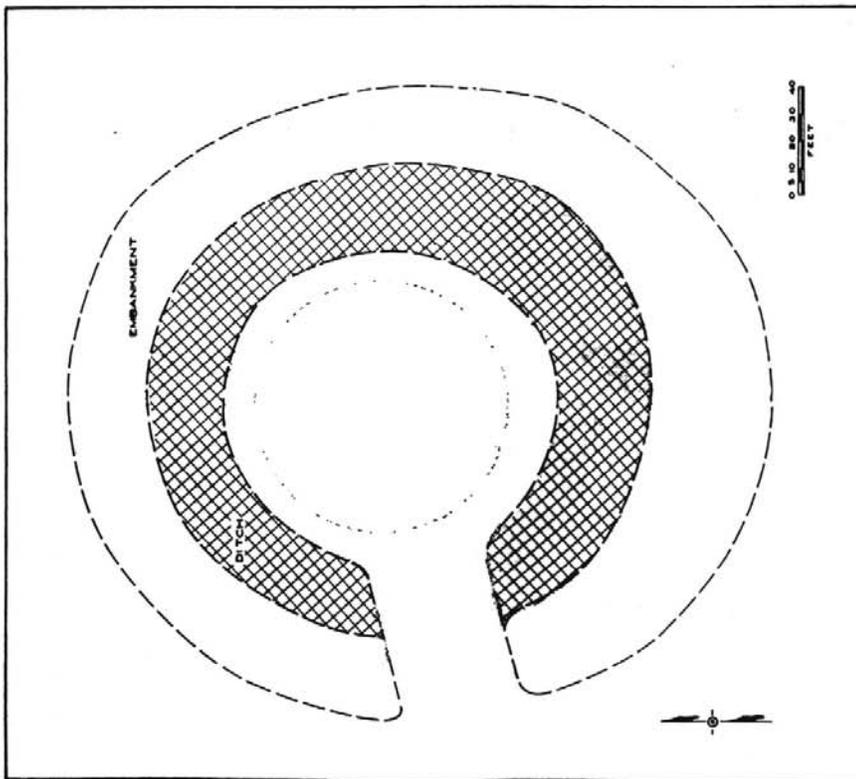
The Adena people built a circular structure of paired wooden posts in the central area. It had a radius of about 48.5 feet. The archaeologists found traces of 62 pairs of posts and eight single posts, but no evidence for an entrance to the structure and no evidence of a roof. The archaeologists found very, very few artifacts: a single fragment of prehistoric pottery; four Adena spearpoints; two arrowheads from later peoples; a spear or arrow point tip; two stone scrapers; and a small granite ball with a groove around it.

Archaeologists have suggested several ideas to explain how the Adena people may have used this structure. If the posts served as the framework for a screen of woven branches, then the structure may have been built to give privacy to people performing religious ceremonies inside it. On the other hand, the Adena people may have erected the posts simply to mark the outer boundary of a sacred space. If the posts also represented a woodhenge, then the builders would have lined-up some posts with important celestial events, like the rising sun at the summer or winter solstice.

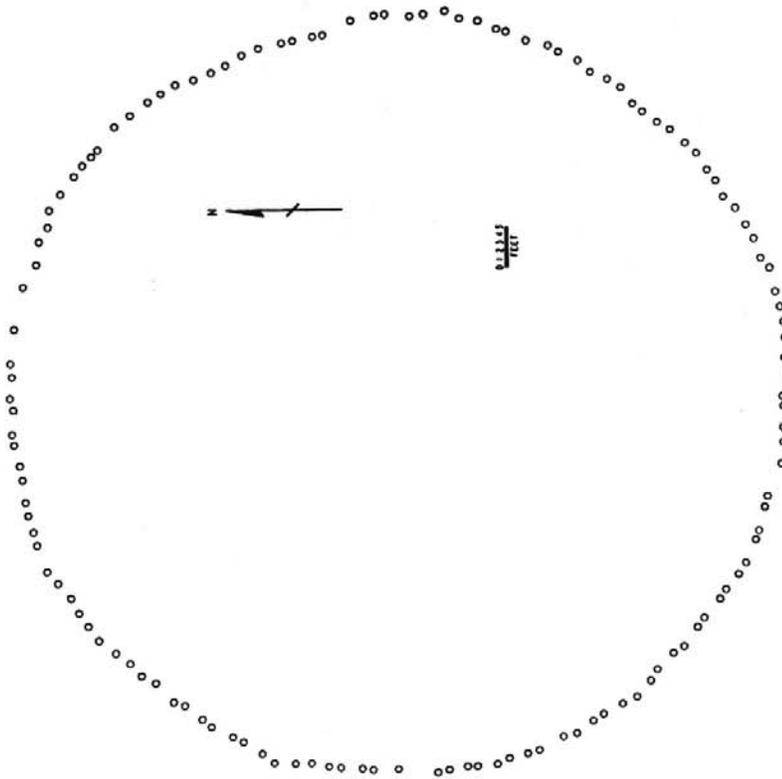
The investigators restored the site after their study by carefully refilling the units and trenches they had excavated. Today, the University of Kentucky preserves Mt. Horeb Earthworks as a park for use by UK faculty, staff, and students.

Map A shows the ditch the Adena people dug and the embankment they built around it. Map B shows the pattern of paired posts of the structure that stood in the central area.

For more information, read *Mt. Horeb Earthworks Site 1, Fayette County, Kentucky* by William S. Webb. Reports in *Anthropology and Archaeology*, Volume 5, Number 2, pages 139-169. University of Kentucky, Lexington, 1941



Map A



Map B

Activity: Pinch and Coil Pottery

Grade Level: 4-8
Time Required: 60 minutes
Curriculum Areas: Social Studies, Arts and Humanities

Curriculum Connections

(KY Academic Expectations): **1.13**
2.16-2.17, 2.19, 2.22-2.23, 5.2

-- Students will

- make sense of ideas and communicate with the visual arts.
- recognize the elements of culture using different groups from Kentucky's past as examples.
- understand how humans have interacted with the physical environment to meet their needs in Kentucky.
- create works of art using specific media (clay) and processes (hand-building).
- analyze artistic products using accepted standards.
- use creative thinking skills.

Materials:

1. *Adena People* video.
2. Clay (1/2-1 pound per student). Self-hardening clay will dry to a harder state than plain clay, but plain clay is more authentic (and much cheaper). Firing is nice but not necessary.
3. Freezer Wrap cut into pieces about 9" x 9" - one per student.
4. Sturdy zip-close plastic bags - one per student.
5. Clay modeling tools or craft sticks.
6. Kitchen sponges cut into pieces about 3" x 3" - one per every four students.
7. Bowls or margarine tubs for holding water - one per every four students.

Introduction: Observe all the ways that clay is used throughout the video (on house walls as well as pottery). Note the portions of the video where you can see someone forming a clay pot. (These were taken at the Living Archaeology Weekend listed in the **Additional Resources.**)

Procedure: Demonstrate how pots and bowls are made using the pinch and coil technique (described below) and then distribute materials.

Instruct students to keep their clay in the zip-closed bags at all times when they are not using it, or it will get too dry to use. Tell them to place their Freezer Wrap paper shiny side up and to work on that surface instead of the tabletop. This will keep your tables cleaner and will allow the students to turn their pieces as they work. It will also avoid the heartbreak of finding a piece is stuck to the table. Pieces of pottery should be allowed to air-dry on the Freezer Wrap for at least 24 hours. Then the Freezer Wrap will easily peel away.

The Pinch and Coil Method:

Begin with a ball of clay that fits comfortably into your hand (no larger than a baseball). Roll the ball until it is fairly round and smooth. Holding the ball in one hand, insert your thumb into the clay, making an opening. As you rotate the ball in one hand, pinch the clay between your thumb on the inside and your fingers on the outside. This will enlarge the opening and make the walls thinner. After a few rotations, place the clay on the Freezer Wrap and

push it gently down to give it a flat bottom. Now you can continue turning and pinching as you rotate the forming pot. You will be able to feel if the walls of the

pot are becoming uneven and apply more or less pressure accordingly. Be careful not to get your walls too thin at this point. You want your walls to be about 3/8" –1/2" thick. (A good analogy for kids is to keep walls as thick as a cookie, not a cracker.) If you get thin spots, you can take a small wad of clay and work it into the wall as a patch.

Now that your base is made, you are ready to add height by adding coils of clay. Take a piece of clay about the size of a lemon and squeeze it in one hand into a cigar shape. Place the "cigar" on the tabletop and roll it back and forth using your extended fingers. Begin at the center of the "cigar" and move your hands outward as you roll, keeping an even pressure. (Do not try to roll on the Freezer Wrap.) The coil will get longer and thinner, taking a snake shape. Again, feel for the evenness with your fingers and adjust your pressure as needed. (This takes practice!) Roll the snake out until it is slightly thicker than your pot wall. Hold it loosely around the rim of your pot and pinch off both ends to make the snake the same diameter as your pot rim. Press the two ends of the snake together, creating a clay ring. Smooth the joint so that it does not show and place the ring on top of the pot. Using your fingers, gently attach the ring to the rim. Smooth the joint inside and outside. (You can see this step on the video.)

To build-up your pot, add more coils in this same manner. If you want the sides of your pot to flare out, make each coil slightly larger than the rim. If you want the sides to taper in, make each coil slightly smaller than the rim. As you work, smooth each ring into the layer below. If you wish to leave the coils showing on the outside, you may smooth only the inside joints. Be careful throughout this process not to allow your pot's walls to become too thin. If you feel thin spots, apply a dab of clay and smooth it into place.

As the clay begins to dry, dip a sponge in the water, squeeze it out well, and use it to moisten and smooth the clay. Caution students against using too much water. This will result in a weak pot and a big mess.

When you have reached the desired shape, smooth all joints and do the final shaping with your fingers. Always make sure you are supporting both sides of the walls of the pot, one on the inside and one on the outside. You may do the smoothing with fingers, modeling tools and/or damp (not wet!) sponges.

Designs may be added with the modeling tools. Caution students against cutting their designs too deep or their pot will be weakened.

Allow the pots to air-dry for 24 hours before removing the Freezer Wrap. If students are taking the pottery home, it is best to let them take it on the Freezer Wrap and remove the wrap at home. It is also safest to have students bring in cardboard boxes to transport their masterpiece. Crumpled newspaper makes a good "nesting" material.

Unfired pots will last for years if handled carefully. But, unless you plan to fire the pots in a ceramic kiln, remind students that unfired pots will **not** hold water (or milk, or soup, or soda pop...) and are quite fragile.

Assessment Suggestions: Allow students to evaluate their own efforts. What did they learn about working with clay? Was it harder or easier than they expected? What was successful about their pottery making effort? What would they like to change next time?

Extensions:

1. Find a place to dig clay from a creek bank or invite students to find clay at home and bring it in. Try working with it. You may have to remove rocks and twigs first. You may also have to knead it with a bit of water to soften it. Discuss the various textures.
2. Read *Children of Clay* by Rina Swentzell, Bill Steen and Michael Dorris to find out how one family of Pueblo potters is continuing their pottery-making traditions (see **Additional Resources**). To read more about Rina Swentzell's family and their artwork, you also could visit **Native American Indian Resources on the Internet** for Paula Giese's book review and guided webtrip (www.kstrom.net/isk/art/claybook.html). Observe the blending of traditional techniques and contemporary themes.
3. As a class, make up a list that describes the texture of clay during the various stages of pottery making. Write poems using this word bank.

This lesson has been adapted from *Appalachian Literature/Appalachian Culture: Cross-Curricular Activities for the Primary and Intermediate Classroom* by Judy Sizemore and Ginny Eager. It is available from Forward in the Fifth (859/986-3696) (see **Additional Resources**).

Activity: Engraved Tablets

Grade Level: 4-8
Time Required: 2 sessions, 45-60 minutes each

Curriculum Areas: Social Studies, Arts and Humanities

Curriculum Connections

(KY Academic Expectations): **2.16-2.17, 2.19, 2.22-2.23, 5.2, 6.2**

-- Students will

- recognize the elements of culture using different groups from Kentucky's past as examples.
- create works of art using specific media (clay) and processes (subtractive construction).
- describe art work using appropriate terminology.
- analyze how an artist uses various media and processes to communicate meaning in a work of art.
- use creative thinking skills.
- connect knowledge from different subject areas.

Materials:

1. *Adena People* video.
2. "Adena Tablets" transparencies and "Kentucky Rock Art" transparencies.
3. Clay (1/2-1 pound per student) Self-hardening clay will dry to a harder state than plain clay, but plain clay is more authentic (and much cheaper). Firing is nice but not necessary.
4. Freezer Wrap cut into pieces about 9" x 9" - one per student.
5. Wooden rolling pins – one per 4 students.
6. White construction paper cut in 4" x 4" squares.
7. Pencils.
8. Plastic knives – one per student.
9. Sets of assorted double wire end clay tools (available from school art suppliers) – one tool per student to be shared by small groups.

Session One

Introduction: Observe the engraved Adena tablets shown at the beginning of the video and the line drawings of other Adena tablets on pages 13-14. Like the tablets shown in the video, these tablets were found in burial mounds. No one really knows what why the tablets were included in the mounds.

Designs on some of the tablets are stylized human faces or human figures with bird features (tails, legs, wings, heads). Others are stylized profiles of raptorial birds (like hawks). A few are just concentric circles. These designs were important Adena religious symbols. Perhaps for the Adena people, as with other traditional horticultural societies, raptorial birds symbolized death and rebirth: these birds consumed the flesh of the dead and carried the spirit to a new life. In terms of how the tablets were used, archaeologists' best guess is that they were used to print designs on some kind of material, perhaps leather, using the intaglio method or the conventional block printing method. Draw students' attention to the fact that the designs on all the tablets but **d.** and **g.** are the raised portion of the tablet, not the cut-away portion.

Procedure: Distribute the squares of construction paper and pencils and give students time to experiment and develop a design that they would like to create on an engraved tablet. You may assign specific criteria for the designs or allow free choice. You might want to provide time for students to research designs from

specific cultures or periods, such as prehistoric petroglyphs.

When students have completed their designs, ask them to write a brief description of the design using the following terminology: symmetrical, asymmetrical; realistic, abstract, non-objective; formal balance, informal balance; positive, negative. You may substitute or add other terms to the list.

Session Two

Introduction: Demonstrate how to make an engraved tablet (described below) and then distribute materials.

Procedure: Tell students to place their Freezer Wrap paper shiny side up and to work on that surface instead of the tabletop. This will keep your tables cleaner and will allow the students to turn their pieces as they work. It will also avoid the heartbreak of finding a piece is stuck to the table. Pieces of pottery should be allowed to air-dry on the Freezer Wrap for at least 24 hours. Then the Freezer Wrap will easily peel away.

Begin with a ball of clay that fits comfortably into your hand (no larger than a softball). Roll the ball until it is fairly round and smooth. Place the ball on the Freezer Paper and roll it out with the rolling pin.

Use the construction paper squares as a template to form a 4" x 4" square approximately 1" thick. Placing the construction paper on top of the clay, trace over the design, pressing down just enough to impress the design into the clay. Use the wire end tools to carefully cut away the negative areas of the design to a depth of approximately 1/2". Leave a border around the outside of the tablet. (This will help to minimize warping as the pieces dry.)

Place the tablets away from a heat source to dry. Cover them with clothes that have been dampened and well wrung-out to slow the drying process. (The slower the drying, the less warping will occur.)

Allow time for students to view and comment upon one another's creations. Comments should be constructive.

Assessment Suggestions:

1. Ask students to write a self-critique or a critique of a classmate's tablet and evaluate the critique in terms of appropriate terminology and accepted standards.
2. Ask students to write a how-to story on making an engraved tablet and assess it as you would any transactive writing assignment.

Extensions:

1. Fire the tablets (or use self-hardening or oven firing clay) and use them as printing tablets.
2. Use the tablets to create a 3-D mural.
3. Research contemporary Native American art on the world wide web (see

Additional Resources).



e.



f.



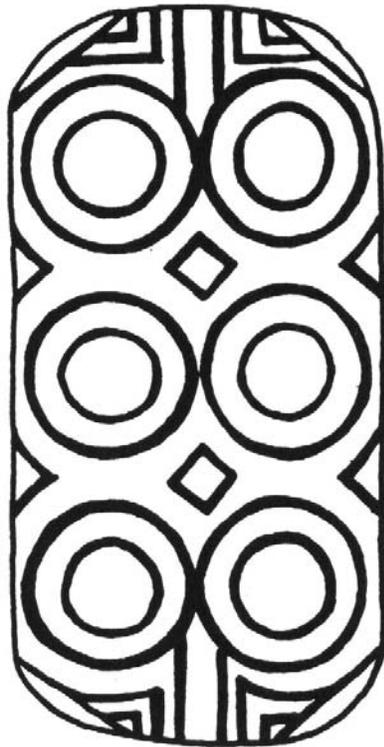
g.



e.



f.



g.

ADENA TABLETS PAGE ONE

A. Gaitskill Clay Tablet

- found late 1800s in a Kentucky mound
- carved in bas-relief mainly
- human figures with bird features (tails, legs, wings, heads); heavy, static, monumental
- possibly used in printing designs using intaglio printing method

B. Cincinnati Tablet

- found 1841 in an Ohio mound
- carved in bas-relief mainly
- human figures with bird features (tails, legs, wings, heads); undulating lines and soft curves
- possibly used in printing designs using intaglio printing method
- abraded depression on back of tablet, so may have been used for grinding pigments
- high level of surface finish and meticulous craftsmanship

C. Wilmington Tablet

- found 1881 in an Ohio mound
- carved in bas-relief mainly
- human figures with bird features (tails, legs, wings, heads); undulating lines and soft curves
- possibly used in printing designs using intaglio printing method
- when printed, left side of table and right side of tablet produce a positive/negative of the figures
- abraded depression on back of tablet, so may have been used for grinding pigments
- high level of surface finish and meticulous craftsmanship

D. Berlin Tablet

- found 1876 in an Ohio mound
- linear incised lines
- profile of a raptorial bird
- shape altered after design applied
- possibly used in printing designs
- abraded depression on back of tablet, so may have been used for grinding pigments

Information taken from "The Adena Engraved Tablets" by David W. Penney, published in *Midcontinental Journal of Archaeology*, volume 5, number 1, pages 3-38 (1980).

ADENA TABLETS PAGE TWO

E. Wright Tablet

- found 1937-1938 during archaeological excavation at a Kentucky mound
- carved in bas-relief mainly
- profile of a raptorial bird; heavy, static, monumental
- possibly used in printing designs using conventional block printing method

F. Gaitskill Stone Tablet

- found late 1800s in a Kentucky mound
- carved in bas-relief mainly
- single motif: a face; heavy, static, monumental
- possibly used in printing designs using conventional block printing method

G. Grave Creek Tablet

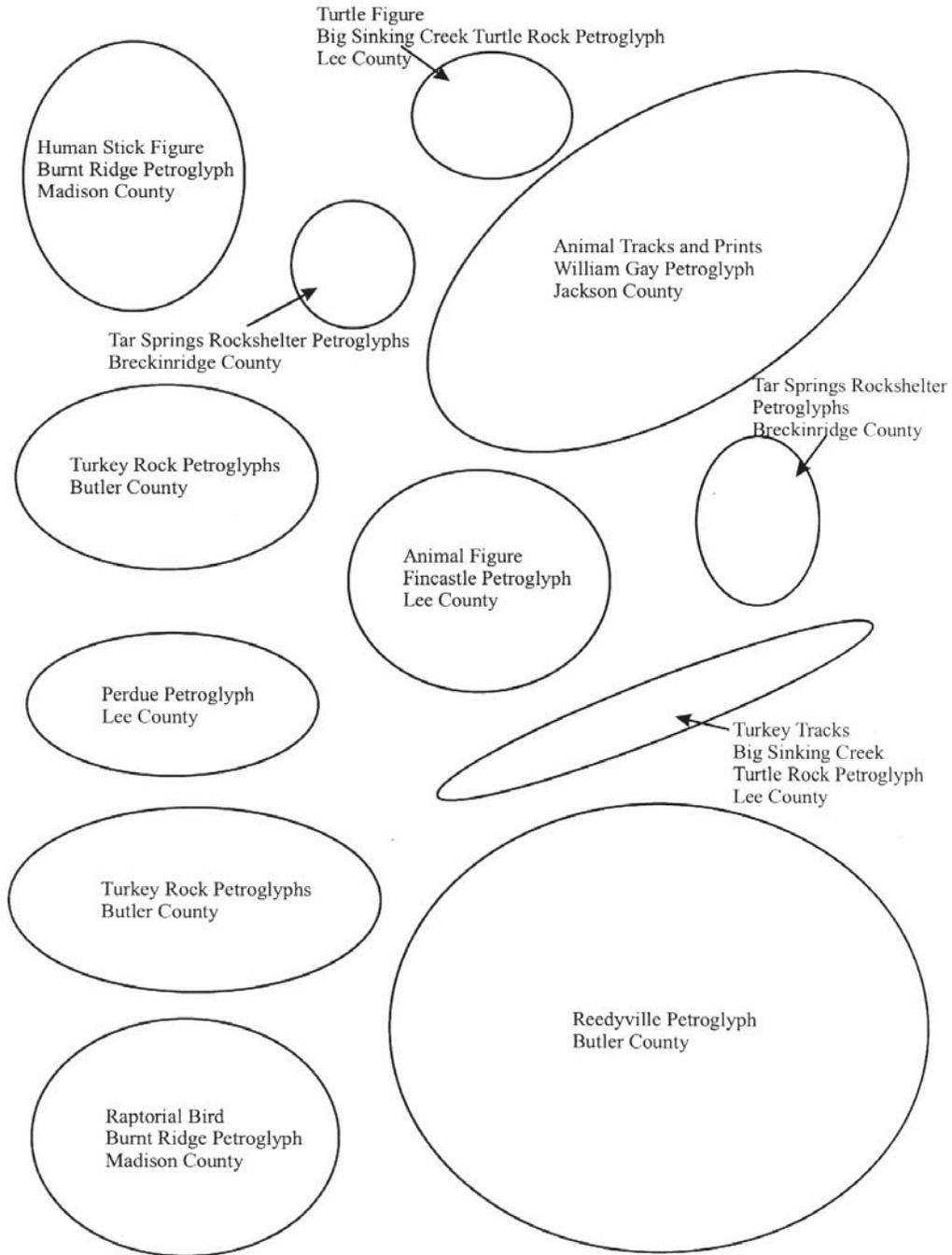
- found 1832 in a West Virginia mound
- linear incised lines; abstract lines
- curvilinear motifs/concentric circles
- possibly used in printing designs

Information taken from "The Adena Engraved Tablets" by David W. Penney, published in *Midcontinental Journal of Archaeology*, volume 5, number 1, pages 3-38 (1980).

Kentucky Rock Art Symbols



Key to Kentucky Rock Art Symbols



From: *Rock Art of Kentucky* by Fred E. Coy, Jr., Thomas C. Fuller, Larry G. Meadows, and James L. Swauger. The University Press of Kentucky, Lexington, 1997.

Activity: Purposes of Art

Note to the Teacher: This activity has been adapted from one prepared by the William S. Webb Museum of Anthropology, University of Kentucky

<http://www.uky.edu/AS/Anthropology/Museum/museum/pdfs/activity.pdf> [case sensitive]) Activity 3: More Context).

Grade: 4-8

Time Required: 45-60 minutes

Curriculum Areas: Social Studies, Arts and Humanities

Curriculum Connections

(KY Academic Expectations): **1.2-1.3, 1.10-1.12, 2.16-2.17, 2.19, 2.25, 5.1 -- Students will**

- understand what they read and observe.
- organize information through classification.
- communicate orally and in written format.
- recognize the elements of culture using different groups from Kentucky's past as examples.
- discuss works of art using appropriate terminology.
- identify various purposes for creating works of art.
- identify the role of visual arts in different cultures.
- use critical thinking skills.

Materials:

1. *Adena People* video.
2. "Ceramic Bowl" handout for each student.
3. Access to books with examples of Native American art.

Introduction: After viewing the video, discuss the works of art that were shown. Be sure that students recognize that pottery, jewelry, and headdresses are works of art. Ask if they observed works of art that seemed to be ceremonial (those in the burial mounds). Ask if they saw other works of art that seemed to be functional (the pot that is used for cooking).

Explain that we can often best understand the purposes of art and the role of visual arts in diverse cultures by observing how the art is used. When archaeologists are considering cultures of the past, the best way to determine the way that objects were used is to observe the context in which they were found. If a ceramic bowl is found that has been removed from its original context, it is difficult for archaeologists to tell much about how it was used or about the people who made it.

Procedure: Distribute the "Ceramic Bowl" handout to students and ask students to read the two scenarios and to write their thoughts about the discussion questions in the space provided. Ask students to share their ideas.

Possible answers for **Scenario One**

might include:

1. Serving food, holding water, perhaps for cooking, and possibly for use in ceremonies or rituals (for example, as a container for food to be eaten in the afterlife).

2. It would appear to have a special meaning since it was buried with the woman.
3. We really know nothing about this woman's every-day life.
4. The fact that she was buried in a burial mound might mean that she was a person of some importance in her community. She had copper bracelets and a mica headdress, which must have been obtained through trade and were probably considered items of wealth.

Possible answers for **Scenario Two** might include:

1. It might have been used for cooking and/or serving food.
2. We have no way of judging if the bowl had a special meaning.
3. We know that the people lived in a settlement and that they used a hearth for heat and cooking. We know that their diet included at least deer and beans. Deer are wild animals, so they were a hunting people. They probably raised the domesticated beans in a garden, so they were probably farmers. Archaeologists could probably also tell what materials the people used to make the house by studying fragments of charred wood. After measuring the floor size of the house, archaeologists could estimate how many people lived in the house, and thus estimate the number of people who had lived in the settlement.

As students present their thoughts, ask them to explain their answers.

Assessment:

Ask students to respond to one of the following prompts:

1. Why is it important for an archaeologist to see an artifact in the context in which it was discovered? What kinds of information might be lost if the artifact is removed from its context?
2. People create works of art for many reasons. Describe two purposes of art and give examples of each.

Extensions:

1. Read ***Songs From The Loom: A Navajo Girl Learns To Weave***, by Monty Roessel (see **Additional Resources**). This is the true story of a Navajo girl who is learning to weave in the traditional Navajo way from her grandmother. Ask students to identify some of the purposes of art discussed in this book (cultural identity, preserving family history and traditions, income). What artistic traditions are part of your community?
2. Research other Native American art or art from cultures elsewhere in the world, focusing on the purposes of the art works (see **Additional Resources**).
3. Invite an archaeologist to visit your classroom. Ask the archaeologist to discuss the kinds of information that archaeologists can deduce from the context in which artifacts are found.

CERAMIC BOWL

Imagine the following two scenarios and write your thoughts about the discussion questions in the space provided.

Scenario One: Archaeologists found a ceramic bowl in a burial mound beside a prehistoric woman. She also was buried with copper bracelets and a mica headdress. Other artifacts taken from the mound have been identified as being associated with the Adena Culture. The archaeologists have found no evidence of nearby settlements.

DISCUSSION QUESTIONS

1. What might the bowl have been used for?

2. Do you think the bowl has a special meaning?

3. What do you know about the every-day life of this woman?

4. What else can we tell about the woman who was buried with these items?

Scenario Two: Archaeologists found a ceramic bowl lying on the floor of a house at a prehistoric village. Most of the material used to build the house has rotted away with time. There are several other houses at the site. There is evidence of a fire pit (called a hearth) in the center of the house. Burned deer bone was found in the ashes of this fire pit. Archaeologists also found the remains of burned domesticated beans inside the ceramic bowl.

DISCUSSION QUESTIONS

1. What might the bowl have been used for?

2. Do you think the bowl has a special meaning?

3. What do you know about the every-day life of the people who lived in this house?

Activity: The Changing Ethics of Archaeology

Grade Level: 6-8
Time Required: 60 minutes
Curriculum Areas: Social Studies
Curriculum Connections
(KY Academic Expectations):
1.2-1.4, 2.1, 2.16-2.17, 5.1 --
Students will

- make sense of things they read, observe, listen to.
- understand roles and responsibilities in the following area: science and technology in society.
- understand similarities and differences in the ways groups and cultures within Kentucky and regions of the United States address similar needs and concerns.
- examine how culture in the United States has been influenced by language, literature, arts, beliefs, and behavior of people in America's past.
- investigate how social institutions addressed human needs in early United States history.
- use critical thinking skills.

Materials:

1. *Adena People* video.
2. "Changing Ethics in Archaeology" handout for each student.

Introduction: Ask students to recall how information about the Adena people has been gathered. As noted in the video, only a few Adena settlements have been excavated. Most of what we know about the Adena people was discovered by excavating burial mounds and studying both the artifacts and the human remains found in the mounds.

Procedure: Distribute the "Changing Ethics in Archaeology" handout. When students have had time to read it, lead a discussion based on the following discussion questions:

- What important information was obtained by archaeologists who excavated the Adena burial mounds?
- Why do some Native Americans object to the excavation of graves and burial sites?
- How have the grave goods and human remains found in Native American graves been treated by pothunters?
- By archaeologists?
- What laws have been passed to protect Native American graves and to return grave goods and human remains for reburial?
- How have the ethics of archaeology changed since the time of the 1937 Wright Excavation shown in the video?

Assessment Suggestions: Ask students to write a persuasive essay responding to one of the following prompts:

1. Should there be laws protecting Native American graves? Give at least three reasons to defend your position.
2. Should museums be allowed to display Native American human remains? Give at least three reasons to defend your position.

Assess as you would any persuasive essay.

Extensions:

1. Check out the November, 2000 issue of *National Geographic* from your school or public library and share the article "Pueblo Ancestors Return Home" with your students. About the reburial of 2,067 Pueblo ancestors, the article shows the impact of the Native American Graves Protection and Repatriation Act on Native American communities.
2. Read about the looting of Slack Farm, a prehistoric village site in Union County, Kentucky, in *Slack Farm and the Caborn-Welborn People*, by David Pollack, Cheryl Ann Munson, and A. Gwynn Henderson (see **Additional Resources**) and in the article "Who Owns the Past?" in the March, 1989 issue of *National Geographic*. Lead a discussion that explores the issues of owning the past.
3. Read the "Kentucky State Laws Pertaining to Archaeological Sites" to your students. (You will need to add some explanation of terms.) Lead a class discussion addressing the following questions:
 - Are the state laws adequate?
 - What difficulties might there be in enforcing them?
 - What amendments might you recommend?
4. Do further research on the issues of Native American graves protection and repatriation. Begin by reading "A Thumbnail Sketch of NAGPRA" and "Federal Laws Pertaining to Archaeology." A clearly written, concise, and objective article in *Anthro.Notes*, (a National Museum of Natural History Newsletter for Teachers) about the repatriation of Native American remains and sacred objects can be found in Volume 17, number 1/2, Winter/Spring 1995, pages 1-16, entitled *Repatriation: A Clash of World Views*. Further information may be found in the **Additional Resources** and on the worldwide web. The entire act can be found at www.cast.uark.edu/other/nps/nagpra/ and click on the act itself under "Legal Mandates". Lead a discussion addressing the same questions listed in Extension #2.
5. Research the laws regarding the excavation of burial sites in other countries. Compare and contrast them to U.S. laws.
6. Research the story of the "Kennewick Man." In July 1996, two river enthusiasts discovered the remains of a man believed to have lived along the Kennewick River 9,200 years ago. Since the discovery, the remains have been the subject of controversy and legal battles between various government agencies, scientists, and tribal governments. Visit www.kennewick-man.com/ for reprints of past news articles and updates on the controversy and www.saa.org/repatriation/lobby/kennewickc8.html for a statement by the professional archaeological community about Kennewick Man's cultural affiliation. Organize a debate on the issue.

CHANGING ETHICS IN ARCHAEOLOGY

How would you feel if someone were to dig up the grave of your great-great grandmother and put her bones on display in a museum? Or sell her wedding ring to a private collector? You may think that such things never happen, but this is exactly how many Native American burial sites have been treated.

In the past, there were no laws to protect Native American burial sites. Some people, often called pothunters, would dig up Native American graves because they knew that native peoples often buried special objects, like jewelry and pottery, with their dead. Pothunters would sell these *grave goods* to private collectors. They also sold the *human remains* found in the graves.

Pothunters are interested only in possessing or selling the things they find in graves. They do not study grave goods or human remains in a scientific manner to try to understand the people of the past.

Archaeologists, on the other hand, are interested in the knowledge that can be gained by careful and scientific study of artifacts and human remains. They excavated sites, like the Adena mounds, to learn about the people who lived in Kentucky before the arrival of Euro-American settlers. They learned a lot that was very important. For example, people used to believe that there had never been any permanent Native American settlements in Kentucky, only hunting camps. They believed that the mounds were built by a vanished race of people. In the 1930s, archaeological research, including the excavation of several Adena mounds, proved that Native Americans did live permanently in Kentucky and that the ancestors of today's native peoples did build the great mounds. From the study of the human remains, they learned about prehistoric diseases and cultural practices that changed the shape of a person's head.

Today, archaeologists in Kentucky continue to learn more about the past through research at many sites of prehistoric settlement. When they do discover a grave, they often consult with Native peoples. Sometimes the bones are left undisturbed. Sometimes, the bones are removed for study and then are returned to Native people for reburial. In some cases, samples of bone may be kept for later analysis. Sometimes the bones are curated at a regional university for future study. The *ethics* of archaeology have changed. Archaeologists now recognize that some Native American people consider the excavation of a burial site, no matter how ancient, as a *desecration*. These people feel that it shows disrespect for the dead to disturb their graves, even for scientific study.

In 1989 and 1990, two new federal laws, the National Museum of the American Indian Act and the Native American Graves Protection and *Repatriation* Act (NAGPRA) were enacted. It is now a felony to dig up Native American graves on federal or tribal land. It is also a felony to buy or sell Native American remains. All museums that receive federal funds are required to make a list of all the Native American human remains and sacred objects in their collections. They must decide which Native American tribe is most closely related to the

human remains in their collections and they must return these remains and the sacred objects to the proper tribe if asked to do so.

In Kentucky, state laws have been enacted that make it illegal to willfully destroy, damage, or injure any archaeological site found on state, county, or municipal land. Permits to excavate an archaeological site on state, county, or municipal lands must be obtained from the Office of State Archaeology at the University of Kentucky. State laws also protect cemeteries of any age, whether the graves are marked or not. It is a felony in Kentucky to disturb human graves.

Many Native people feel that the laws are a good start but do not go far enough. Museums or other institutions that operate without federal funds are not required to return the human remains or sacred objects that they hold in their collections. The legal and ethical debates surrounding the treatment of ancient burial sites and human remains will continue for years, but modern archaeologists believe that the rights and beliefs of Native Americans must be respected.

Vocabulary

1. *grave goods*: objects placed in a burial, often sacred or ceremonial objects associated with a belief in an afterlife.
2. *human remains*: the remains of a human being, often referring to the skeletal remains found in a grave.
3. *ethics*: a system of morals or rules of behavior
4. *desecration*: damage to something that is sacred
5. *racism*: hatred, rivalry, or bad feelings between races
6. *repatriation*: to be returned to one's own home place

KENTUCKY LAWS PERTAINING TO ARCHAEOLOGICAL SITES

Unlike some states, Kentucky does not have any laws that mirror federal laws dealing with the protection and preservation of archaeological sites. However, the *Kentucky Antiquities Act* does provide some protection for sites on public lands; statutes applying to grave robbing can be used to protect prehistoric grave sites; and the act that created the Kentucky Heritage Council goes on record for preserving archaeological sites. Here are brief summaries of the Kentucky state laws that pertain to archaeological sites. You may find the complete text of these laws at this web address: <http://www.lrc.state.ky.us/krs/titles.htm> Search first on the chapter number (the first three numbers) and then by section (the numbers after the ".").

KRS 164.705 - KRS 164.735; KRS 164.990

This is known as the *Kentucky Antiquities Act*, which was created in 1962. It makes it public policy to preserve archaeological sites and objects of antiquity and to limit archaeological work (exploration, excavation, and collection) to qualified persons and institutions. It prohibits the willful damage or destruction of archaeological sites on lands owned or leased by the state, state agencies, counties, or municipalities, and requires a permit from the University of Kentucky's Department of Anthropology to explore or excavate archaeological sites on these lands. It requires anyone who discovers a site to report it to the Department. It is a felony to violate the sections of the *Kentucky Antiquities Act* prohibiting the willful destruction of archaeological sites and requiring permits to excavate.

KRS 171.3801 - KRS 171.395

These statutes formally created the Kentucky Heritage Council, the state agency whose purpose it is to preserve and protect all meaningful vestiges of Kentucky's heritage, including archaeological sites. The Council maintains an inventory of all archaeological sites recorded in the state, and maintains lists of sites with state or national significance. The director is the State Historic Preservation Officer, a role created by the 1966 National Historic Preservation Act. Thus, the Council administrates the activities related to this act, most importantly for archaeological sites, the National Register of Historic Places and the review and oversight responsibilities that ensure compliance with federal cultural resource management laws and regulations.

KRS 433.870 - 433.885

The *Kentucky Cave Protection Act* makes it illegal, among other things, to disturb or damage cave surfaces or materials found inside caves, including archaeological remains. Archaeological investigations inside caves cannot be conducted without a permit from the State Archaeologist, and must be carried out under the supervision of the State Archaeologist and the Kentucky Heritage Council. It is a misdemeanor to violate sections of this Act.

Various KRS Statutes (e.g., **KRS 525.110; KRS 525.120; KRS 213.110; KRS 72.020**)

A variety of statutes related to grave robbing provide a measure of protection for Native American burials because they do not make a distinction on the basis of grave age or presence of a marker. Some statutes make it a felony or a misdemeanor to commit criminal mischief and theft by unlawful taking; to desecrate venerated objects (intentionally disturb human remains or the objects buried with the remains); or to abuse a corpse. If human remains are encountered, removal and transit permits must be obtained, and a coroner must be notified before the remains are removed.

THUMBNAIL SKETCH OF NAGPRA: NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

NAGPRA is a federal law enacted in 1990. It pertains to Native American human remains, grave goods, and objects of cultural patrimony. Objects of cultural patrimony are things that are/were communally owned by a tribe and are of unique importance to the tribe as a whole.

NAGPRA requires compliance from all institutions that receive federal funds and all federal agencies. Museums must provide inventories of human remains, grave goods, and objects of cultural patrimony to the federal government and to the tribes most closely affiliated with the remains and materials in their collections. When federal agencies (in Kentucky, groups like the U.S. Forest Service, the U.S. Army Corps of Engineers, the National Park Service, or the Federal Highway Administration) encounter graves, they must consult with the appropriate federally recognized Native American tribes concerning the treatment of those remains and the associated grave goods. However, the spirit of the law was not meant to stop at that point.

Basically, NAGPRA provides legal guidelines to resolve the ongoing competing philosophies/positions of Native Americans and scientists/museums with respect to how Native American human remains, grave goods, and objects of cultural patrimony are treated.

Here is a brief summary of these differing philosophies/positions:

Native Americans argue that appropriating human remains

- violates the sacredness of the dead;
- violates the civil rights of the living; and
- alienates tribal members from their cultural heritage.

Scientists/museum officials argue that human remains and material objects (artifacts)

- have scientific and educational value; and
- should therefore be preserved.

What NAGPRA has done is to open a dialogue between Native Americans and scientists/museum officials that has had many benefits and has enhanced our understanding of Native American cultures in the past and increased our awareness of the enormous cultural changes experienced by many Native groups in the wake of contact with Euroamericans.

This has forced museums to create complete inventories of their collections, to reexamine their acquisition policies, and to put in place clear de-accessioning policies. (Any claim for repatriation must be substantiated with a considerable body of proof demonstrating the direct relationship between the living Native Americans and the remains or objects under consideration). It has forced federal agencies to develop policies for the recovery and study of human remains and to make arrangements for their final disposition (either reburial or curation in an approved facility).

It has made everyone more sensitive to the recovery, care, curation, display, educational use, and research potential of Native American remains and material goods.

FEDERAL LAWS PERTAINING TO ARCHAEOLOGY

Antiquities Act of 1906. This law protected cultural materials found on public lands and was intended to stop the destruction of prehistoric sites and artifacts in the West. It also set-up a way for responsible archaeologists to excavate important sites.

Historic Sites Act of 1935. This act authorized several programs to be carried out under the National Park Service. Under this law, sites that have exceptional value for commemorating or illustrating U.S. history can be protected as National Historic Landmarks.

National Historic Preservation Act (NHPA) of 1966. At the time of this law's passage, more archaeological sites and historic buildings were being destroyed by rapid economic development than by pothunting and vandalism. This landmark piece of legislation extends the protection of the federal government to historic resources at the state and local levels. The act provides for federal grants to state and territorial historic preservation agencies, and its passage led to the establishment of the National Register of Historic Places. The National Register includes not only national historic landmarks, but also sites, objects, buildings, and districts (collections of structures) that are significant in American history, architecture, archaeology, and culture. Since the mid-1970s, all construction on federal lands or that uses federal funds requires an archaeological survey to find out if archaeological sites will be damaged by the construction, and how the information from the sites can be recorded before that happens.

Archaeological Resources Protection Act (ARPA) of 1979. This law gives more protection to archaeological resources on public and Indian lands and encourages the sharing of information gathered from these sites. It also toughens penalties for the unauthorized excavation of or damage to archaeological sites, and controls the sale of artifacts.

Native American Graves Protection and Repatriation Act (NAGPRA) of 1990. Archaeologists exploring the past sometimes come upon the bones and other remains of human beings. Prehistoric remains found in archaeological sites in the United States are the remains of Native American peoples. Contemporary Native Americans have raised concerns that the burial grounds of their tribes should not be disturbed, any more than the cemeteries of other groups. Most American Indians believe that the remains of their ancestors should not be stored or displayed in museums, but should be reburied according to the traditions and religious beliefs of their tribes. NAGPRA protects Native American grave sites on lands managed by the federal government. The law requires thousands of federally funded museums and agencies to inventory their holdings of human remains, grave goods, sacred objects, and other items important to Native American cultures. The museums and agencies must tell the tribes about the sacred and cultural items in their collections, and return the objects to the tribes that claim them.

Adapted from the Boy Scouts of America *Archaeology Merit Badge Book*, pages 26-29.

Activity: Changing Techniques in Archaeology

Grade Level: 5-8

Time Required: 60 minutes
(additional time required for preparation and assessment)

Curriculum Areas: Science, Language Arts

Curriculum Connections

(KY Academic Expectations):

1.3-1.4, 1.11, 2.1-2.2, 5.1-5.2 --

Students will

- make sense of things they read, observe, listen to.
- write for various purposes and audiences.
- review and ask questions about scientific investigations.
- examine how designing and conducting scientific investigations fosters an understanding of issues related to natural resources, helps explain changes in environments.
- describe how science helps drive technology and technology helps drive science.
- recognize how science is used to understand changes in populations, issues related to resources, and changes in environments.
- use critical thinking skills.
- use creative thinking skills.

Materials:

1. *Adena People* video.
2. "Changing Techniques in Archaeology" handout for each student.
3. Ten plastic containers like those used for Cool Whip or ice cream.
4. Sand to fill the containers (available from building suppliers).
5. Small objects like coins, bobby pins, beads, seeds, etc.
6. Ten cookies.
7. Five strainers, tablespoons, rulers, paper bags, markers.
8. Five strainers, tablespoons, rulers, paper bags, markers.

Pre-Activity Preparation: Fill the ten containers with sand mixed with the small objects and cookie crumbs (see **Materials** below). Place 10-15 objects and a small handful of cookie crumbs in each container. Place coins with older dates toward the bottom; those with more recent dates toward the top. The cookie crumbs should be placed in a layer. You could use some crumbs that are clearly a different color from the sand and some that are close in color to the sand. The other objects can be placed at different levels in the sand. Be sure to place some of the objects near the bottom of each container and others near the top.

Introduction: Tell students that you are going to explore how archaeologists learn about the past by finding and studying artifacts.

Procedure: Divide the class into five groups. Give each group several sheets of newspaper to cover a desk or tabletop. Give each group one of the containers, saving the other five for later. Tell them that each container represents an archaeological site. Each group is to examine their "site" in whatever manner they decide is appropriate, find the "artifacts," and write a brief report about what they have learned about their site.

As groups finish, ask them to share what they have found. It is likely that they will have focused on the larger objects and ignored the crumbs. Ask students to explain the process they used for exploring their "sites." It is likely that they will have explored their "site" by dumping out the contents and

will have no record of what was near the top and what was at the bottom. If

any groups have used a different process, ask them to explain it. Did the different process they used give different results? If so, discuss this.

Clean-up from the first activity and cover the desks with fresh newspaper. Distribute the second set of containers, the strainers, the tablespoons, the rulers, the paper bags, and the markers. This time give the students directions for exploring their sites. Explain that you want them to examine one layer at a time, using the rulers to measure layers about 2 inches deep. Tell them that you want them to use the spoons to carefully scrape the sand off a layer at a time and to put the sand through the strainer. Anything that is caught in the strainer should be examined and placed in a paper bag. They should mark on each paper bag the layer in which the objects were found and what the objects are. Tell them to pay careful attention to details, such as the dates on the coins. If they do not know what an object is (such as the cookie crumbs), they should label the bag "unknown." They should write a brief report about what they have learned about their site.

Ask them to compare their first site report with their second site report. Which gives them more information? Why? How might they find out even more about the artifacts they have found? (Laboratory analysis of the cookie crumbs, etc.)

Distribute the "Changing Techniques in Archaeology" handout and allow time for students to read the page. Watch the video again and pause it after the two scenes that show archaeologists at work. Ask students to discuss the difference in the techniques they see being used.

Assessment Suggestions: Ask students to respond to one of the following writing prompts:

1. Pretend that you are a modern archaeologist training some students to assist you with an excavation. Explain to them what they have to do and why.
2. Pretend that you are a modern-day archaeologist. You have traveled back in time to the 1930s. You visit an archaeological excavation and try to explain to the archaeologist in charge why he should be using different techniques. He may or may not believe you.
3. Pretend that you are an archaeologist of the future. Explain how technological advances have changed the way that you conduct your research.

Assess the stories in terms of the degree to which students include accurate information about archaeological techniques.

Extensions:

1. Students may develop the stories further as potential portfolio entries.
2. Invite an archaeologist to your classroom. If possible, arrange to visit a working excavation. (Do NOT undertake an excavation on your own! You could easily destroy irreplaceable archaeological information. Please read "Teachers Please Don't Touch That Trowel" and "About Simulated or Mock Excavations"). Read ***Archaeology: Boy Scouts of America Merit Badge Series***. This affordable, clear, and accessible book is a complete, yet

concise, source of information about archaeology (see **Additional Resources**).

3. Take students on a field trip to the Living Archaeology Weekend (see **Additional Resources**).

CHANGING TECHNIQUES IN ARCHAEOLOGY

Archaeologists are scientists who study the objects left behind by people in the past to learn about the way these people lived. These objects are called artifacts. Archaeologists also study the *context* in which artifacts are found. In other words, they pay attention to what artifacts are often found together and where particular artifacts are likely to be found. In the 1930s, archaeologists studied the artifacts that could be easily seen and identified, things like spearpoints and copper bracelets. They often discarded the rest.

Techniques in archaeology have changed a great deal over the past seven decades. Today, archaeologists are still interested in these larger artifacts, but they also study very tiny artifacts. That is because they now know that they can learn much from these tiny objects.

For example, instead of just studying spearpoints, archaeologists now also study chips and fragments (called *flakes* and *shatter*) of *chert* or flint. Ancient people made spearpoints and a variety of tools from chert. Because archaeologists have studied chert from different places and practiced making chert tools themselves, they have learned a great deal about the flakes that are chipped off a piece of chert during the tool-making process. They can tell if the toolmaker used an antler tip or a stone to shape his tools. They can tell if the flake was produced when the tool was first made or later, when it was sharpened. They can tell if the chert came from a nearby outcrop or from many miles away.

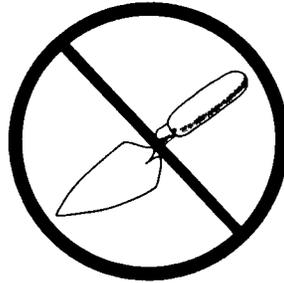
Archaeologists also are interested in pieces of charcoal and burned bits of food found in ancient fire pits. When the bits of food are studied under a microscope, scientists can identify the kind of food that was cooked in the fire pit. They can also use a laboratory technique called radiocarbon dating. This allows the scientists to tell how old the charcoal and bits of food are.

Because archaeologists know how important small artifacts can be, they work very carefully, using trowels to excavate one layer at a time. They screen the dirt from each level and place the objects they find in bags labeled with the site identification number, the level, the date, and their initials. They take the bags back to the laboratory, where they wash the artifacts.

Archaeologists work with other scientists, palynologists for example, to study even smaller artifacts. As they are working, archaeologists take samples of the dirt in each level of an excavation and seal it in a plastic bag. The dirt is sent to a laboratory where palynologists use a technique called "pollen extraction" to find tiny grains of pollen and place them on a microscope slide. By magnifying the pollen grains 400 to 1,000 times, palynologists are able to identify the pollen that was in the dirt in ancient times. This allows scientists to tell what trees and wild plants were growing in the past and to tell if people were growing crops like corn or beans.

When modern archaeologists excavate a site, they make very careful records. When their research is finished, they carefully store the artifacts that they found and their documents (notes, maps, photographs, and computer data files) in museums. In the future, there may be new technological advances that will allow scientists to learn even more from the artifacts that they have found.

TEACHERS, PLEASE DON'T TOUCH THAT TROWEL



Digging your own site can be hazardous for history!

Archaeology is a destructive science. Soil and artifacts that are removed from a site can never be replaced in the exact position where they were originally deposited. Archaeologists not only record where artifacts are found below the surface, but also where they are located relative to each other within each stratigraphic layer. Archaeologists photograph or map artifacts (ceramics, glass, structural material, shell or bone) in place before they remove them. Meticulous record keeping is necessary to reproduce the site on paper as it is being dismantled in the ground. It is extremely important that a controlled, systematic excavation be conducted by a knowledgeable, reputable professional. No two archaeological sites are alike. It takes years of specialized training to recognize a site, learn how to “read the dirt,” and then determine how an excavation should be conducted.

If you teach about archaeology, please don't include excavations as part of your class. Teaching students to dig without the supervision of a professional archaeologist will encourage site vandalism. The amount of time and preparation it takes to excavate, analyze, and interpret a site exceeds the amount of class time you can devote to this type of project. There is a possibility that you and your class could inadvertently disturb an historic or prehistoric site if you elect to do your own dig.

And teachers, be aware that it is unlawful in Kentucky to excavate on school grounds or other public lands without a permit from the Office of State Archaeology at the Department of Anthropology, University of Kentucky in Lexington. Teachers wishing to plan student participation projects involving excavation should arrange for students to attend fieldschools or volunteer in excavations under the direct supervision of a professional archaeologist.

If you or your students think you have discovered an historic or prehistoric site, please notify the Kentucky Heritage Council, 300 Washington Street, Frankfort, Kentucky, 40601; 502/564-6661.

ABOUT SIMULATED OR MOCK EXCAVATIONS

Excavation is just one step in the process of doing archaeology, the goal of which is to learn about the past through the analysis of artifacts and their contexts. And though it's the most visible and recognizable activity archaeologists do, excavation is not the activity archaeologists spend most of their time doing.

"Doing" archaeology involves many things like

- posing a research question;
- selecting the best methods to answer it;
- collecting and analyzing data;
- preparing reports;
- sharing the information with others;
- curating all documents, drawings, photographs and artifacts with a museum; and
- working to ensure that important sites are protected and preserved.

Thus "doing" archaeology entails much more than digging for artifacts and experiencing the "thrill of discovery" along the lines of Indiana Jones.

Every concept and every learning goal you want to meet and want your students to achieve from the study of archaeology can be met without doing a simulated excavation. And yet...you may still be considering carrying out a simulated excavation because you think your students would enjoy it, and because wrapped-up in doing this one activity is the potential for students to demonstrate what they have learned from all the preceding lessons.

So here are some things you need to consider before you develop a simulated excavation.

1. It is expensive to develop a simulated excavation and it involves a lot of work prior to the actual day your students begin to dig. To maximize cost-effectiveness, the excavation should be used more than once. However, upkeep and maintenance costs for repeated uses may be prohibitive.
2. It is more labor-intensive and costly than meeting your educational goals using lessons already developed that meet these same goals or by attending excavations already in progress (see **Additional Resources**). For example, *Intrigue of the Past*, the *Project Archaeology* curriculum, supports social studies, science, art, language arts, and math learning using archaeology as the focus. CD-ROMs that provide "electronic digs," such as *Excavating Occaneechi Town* or *Virtual Dig*, allow students to plan and carry-out their own electronic "excavations." The Kentucky History Center's *Digging The Past* Touch Cart simulates a unit excavated at a hotel site examined prior to the construction of the Center. Riverside, the Farnsley-Moreman Landing in Louisville, holds an actual excavation in the spring and fall every year that students can visit and participate in as part of Riverside's award-winning *Building Blocks of History* Program
3. Even with a teacher's best intentions, students involved in a simulated excavation can have a tendency to equate archaeological excavation with

treasure hunting, especially if the simulated excavation is used without sufficient pre- and post-excavation lessons and isn't conducted using standard archaeological methods and techniques.

All of these caveats aside, how does one conduct a successful simulated excavation?

- **Secure the help of a professional archaeologist.** This simple step can help immensely in planning and carrying out a successful simulated excavation. Contact the archaeologist early in the planning process. It can make all the difference in the world. Contact the Kentucky Organization of Professional Archaeologists via their website: <http://www.kyopa.org>
- Prepare lesson plans. Think about the goals you want the simulated excavation to meet. For example, is understanding chronology important (will you need to create a site with at least two layers containing two contrasting artifact groups) or is understanding context the major thrust (will you need to create a site with only one layer that contains clusters of objects)? Should your excavation focus on prehistoric or historic cultures?
- Secure funding for equipment and supplies, or seek donations of these items.
- Set-aside enough class time to conduct the excavation, as well as all pre- and post-excavation support activities. At a minimum, allow 3 weeks.
- Read the Boy Scout *Archaeology Merit Badge Book* from cover to cover (see **Additional Resources**). This complete, yet concise, booklet is a must read before attempting any simulated excavation. It will provide important background information that you will need to know so that you can successfully carry out the project.
- Volunteer on an excavation yourself for four hours to see how fieldwork is done. Before archaeologists direct excavations with a crew the size of an elementary school class, they have had at least four field seasons under their belt. Be sure you have prepared yourself for the task at hand. Ongoing projects like the one at Riverside may be able to accommodate you, and many archaeologists welcome volunteers on their projects. Contact the Kentucky Archaeological Survey (see **Additional Resources**) to find out if archaeologists are excavating at a site near you.
- Make sure you have enough adult supervision during the simulated excavation and limited numbers of students working together at each unit. A good rule of thumb is no more than 4 students at each unit supervised by one adult.

We encourage teachers to use hands-on activities in the classroom, and archaeology lends itself perfectly to this approach to teaching. Doing it the right way will ensure that your students get the most out of their archaeology experience.

Activity: Focus on Careers

Grade Level: 6-8
Time Required: 60 minutes
Curriculum Areas: Social Studies
Curriculum Connections
(KY Academic Expectations):
1.3-1.4, 2.36 - Students will

- make sense of things they read, observe, listen to.
- develop awareness of career options.
- use critical thinking skills.

Materials:

1. *Adena People* video.
2. "A. Gwynn Henderson, Archaeologist" handout for each student.

Introduction: Ask students to explain the type of work that archaeologists do. Help them to focus on the fact that archaeologists study ancient people through the artifacts, or material remains, left behind. They also study the context of these artifacts.

Procedure: Distribute "A. Gwynn Henderson, Archaeologist" handout and allow time for students to read the page.

Lead a discussion about a career in archaeology. What kind of activities might an archaeologist be involved in? What do students think would be some benefits to a career in archaeology

Why does Dr. Henderson like it? What do students think would be disadvantages about such a career? What advice does Dr. Henderson give to young people as they consider their careers?

Assessment Suggestions: Ask students to research a career in the sciences that they find interesting and to write a report on that career. Assess as you would any career exploration assignment.

Extensions:

1. Read Dr. Henderson's book, *Kentuckians Before Boone* (available from the University Press of Kentucky, Lexington, KY 40508 [reading level 4th-8th grade]; see **Additional Resources**).
2. Invite Dr. Henderson or another archaeologist to visit your class. To find a professional archaeologist in your area or one willing to travel to your school, visit the website of the Kentucky Organization of Professional Archaeologists: **<http://www.kyopa.org>**

A. GWYNN HENDERSON, ARCHAEOLOGIST

Dr. Gwynn Henderson is an archaeologist and the education coordinator at the Kentucky Archaeological Survey. She has been fascinated by archaeology since she was a young teenager and now enjoys teaching other people – especially teachers and kids – about archaeology.

Gwynn was thirteen when she realized that she wanted to be an archaeologist. She was reading a book about Pompeii, an ancient city in Italy destroyed by a volcano. Showers of wet ash and cinders engulfed the city so quickly that they preserved many of the homes and shops. Gwynn read the sidebar that explained that archaeologists are scientists who study ancient civilizations. “That was it,” she recalls. “I knew right then that I wanted to be an archaeologist, to learn about ancient people and how they lived and made their homes and tools.”

Gwynn followed her dream. She graduated from the University of Delaware with a degree in anthropology, then did field research in Mexico, Tennessee, Indiana, Illinois, West Virginia, and Kentucky. She always had a special interest in how people made pottery and she became an expert at identifying different styles of prehistoric pottery making. Later she went to the University of Kentucky to earn her Master’s Degree and Doctorate in anthropology. She wrote lots of reports about her research, but the reports were only read by other archaeologists. When she was thirty-seven, she decided she wanted to write about archaeology for people who weren’t archaeologists, to share with them her fascination with the past. She wrote *Kentuckians Before Boone*.

“Writing that book changed my life,” Gwynn explains. “I realized that to write about the people who lived in Kentucky in prehistoric times, I had to picture their lives for myself. Before I had thought about the tools and pottery they made, but now I began thinking about the people themselves, about how they lived their lives.”

Since that first book, Gwynn has worked with other archaeologists (including her husband, David Pollack) to write a series of booklets about Kentucky’s prehistory. She also coordinates the Kentucky Archaeology Education Network to help teachers find resources for teaching their students about archaeology. Her latest project is the Kentucky-Uruguay Cultural Heritage Education Project. Working with teachers and archaeologists in Kentucky and Uruguay, she is setting up an exchange program that will let students in both countries write to each other and share ideas about the archaeology of their countries. She also has been active in the production of the **Kentucky Archaeology** video series, which includes *The Adena People*.

Gwynn’s advice to young people is to follow their own interests. “I won’t get rich in my career,” Gwynn says, “but I do get to spend my days doing work that is exciting and meaningful. It’s important to find something to do that you enjoy.”

Video Vocabulary

1. Legacies
2. Distinctive
3. Mica
4. Burial mounds
5. Ceremonial structures
6. Geometric earthworks
7. Stonehenge
8. Clan
9. Excavation
10. Funerary
11. Ceremonial objects
12. Sacred
13. Concentrated villages
14. Domestic information
15. Living accommodations
16. Fertile uplands
17. Mobile life
18. Seasonal settlements
19. Resources
20. Fire pits
21. Site
22. Diversity

Resource Pages

A BRIEF OUTLINE OF KENTUCKY'S INDIGENOUS PAST

Archaeologists divide Kentucky's long indigenous past into five major periods of time. They identify these different periods based on the ways native people got their food, the kinds of tools they made, the kinds of houses they built, and the ways they buried their dead.

This outline presents just the main facts to remember about each of these periods. Other resources that can provide you with more information are listed in the following **Additional Resources** section. See especially *Kentucky Archaeology*, edited by R. Barry Lewis, which presents more detailed information and many fine illustrations.

Paleoindian Period (+12,000-8,000 B.C.)

Early: +12,000-8,500 B.C.

Late: 8,500-8,000 B.C.

- Glaciers extended into the very northern tip of Kentucky, so the region was covered in evergreen trees and had a colder and moister climate than Kentucky's climate today.
- The first people traveled across a land bridge between Siberia and Alaska, arriving in Kentucky from the west.
- Very few people lived in Kentucky during this period.
- Paleoindians lived in small groups made up of close family members who traveled together.
- They lived mainly by hunting animals like the now-extinct woolly mammoth, mastodon, and giant beaver, but they used some plants as food.
- Archaeologists identify the Paleoindians by the large, very well-made fluted spearpoints they left behind at their camps.
- Only chipped stone spearpoints and other stone tools have survived.

Archaic Period (8,000-1,000 B.C.)

Early: 8,000-6,000 B.C.

Middle: 6,000-3,000 B.C.

Late: 3,000-1,000 B.C.

- This is the longest period in Kentucky prehistory: 7,000 years long.
- Toward the end of the Early Archaic, the climate of Kentucky became more like that of today.
- Deciduous forests covered the state and animal species like those of today appeared.

- Native peoples lived in small groups made up of family members and other relatives (group size was somewhat larger than that of the Paleoindians).
- They moved with the seasons among small camps and larger base camps.
- They hunted deer, bear, and small animals; fished; collected freshwater mussels; and gathered wild plants and nuts.
- In the Late Archaic, some Archaic peoples grew squash and gourds; and traded for ceremonial objects with distant groups.
- Regional cultural differences begin.
- Archaeologists identify Archaic Indians by their many kinds of chipped stone spearpoints; their groundstone tools, such as axes, mortars, and nutting stones; and their atlatls or spearthrowers.

Woodland Period (1,000-A.D. 900/1000)

Early: 1,000-200 B.C.

Middle: 200-B.C. - A.D. 500

Late: A.D. 500-900/1,000

- Native people lived in small to medium-sized groups made up of family members and other relatives.
- They lived in small camps, larger base camps, and small villages; some villages were lived in almost year-round.
- They hunted animals; collected wild plants and nuts; fished and collected freshwater mussels; and grew plants, such as sunflowers, goosefoot, squash, and gourds, in small garden plots.
- Gardening began as a part-time activity, but as time passed, it became increasingly important as a way of life.
- In the Early Woodland, native peoples explored deep caves to mine minerals.
- During the Middle Woodland, Adena and Hopewell groups built burial mounds for important people; built geometric earthworks for religious ceremonies; and traded with distant groups for ceremonial objects made of copper, mica, obsidian, and marine shell.
- Archaeologists identify Woodland Indians by their pottery vessels, their many kinds of chipped stone spearpoints, and after around A.D. 700, by their arrowheads, which shows they began to use the bow and arrow at that time.

Late Prehistoric Period (A.D. 900/1000-1540)

Two farming cultures lived in Kentucky during this period: the Mississippians in western and southern Kentucky, and the Fort Ancient people in central, northern, and eastern Kentucky.

Mississippians

- These native peoples lived in medium-sized to large groups of related kinfolk.
- Within Mississippian society, only a member of the elite class could become a community leader. A leader's position was directly linked to his ancestors, and his sons were next in line to become leaders.
- They lived year-round in tiny hamlets of a few houses; larger villages; or palisaded towns with many houses, a plaza, and flat-topped earthen temple mounds.
- They grew corn, squash, gourds, tobacco, and sunflowers; hunted deer, turkey, smaller animals, turtles, and migrating waterfowl; fished; and collected wild plants and nuts.
- They traded with distant peoples for ceremonial items, such as marine shell ornaments, as well as day-to-day tools such as stone hoes.
- Archaeologists identify Mississippian Indians by their finely-made decorated pottery, tiny chipped stone triangular arrowheads, stone hoes, shell jewelry, and gaming stones.

Fort Ancient People

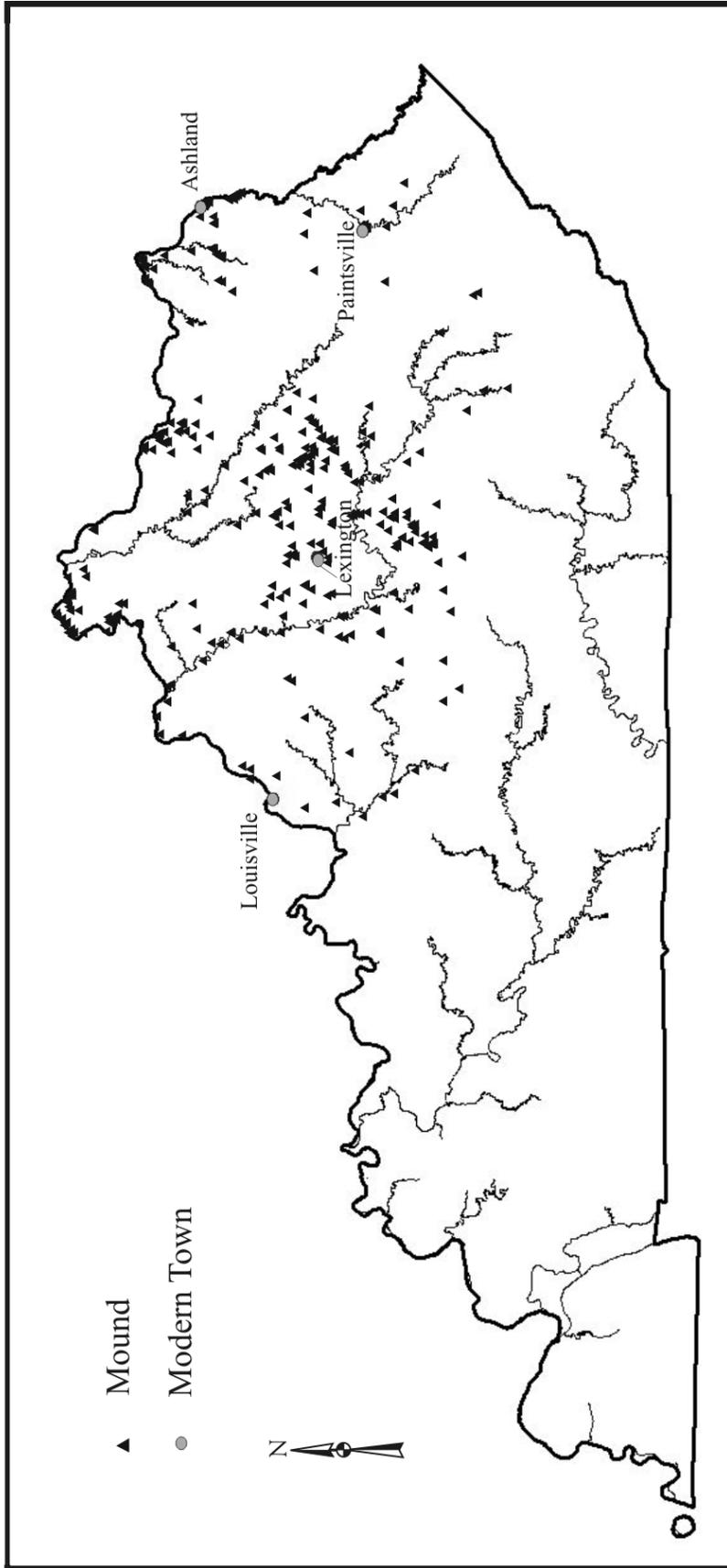
- These native peoples lived in small groups of related kinfolk early in the period, but later, group size increased.
- Within Fort Ancient society, a person became a community leader on the basis of their past accomplishments. They led by consensus and the power of their ability to persuade.
- Early in the period, Fort Ancient people lived in small villages. Later, they lived in medium-sized circular villages with central plazas and low earthen burial mounds near the village. By the end of the period, they lived in large villages in the spring, summer and early fall, and lived in smaller hunting camps in the later fall and winter.
- They grew corn, beans, squash, gourds, tobacco, and sunflowers; hunted deer, bear, elk, turkey, smaller animals, and turtles; fished and collected freshwater mussels; and collected wild plants and nuts.
- They traded with distant people for ceremonial items such as marine shell ornaments.
- Archaeologists identify Fort Ancient Indians by their decorated pottery, tiny chipped stone arrowheads, mussel shell hoes, bone tools and jewelry, and shell jewelry.

Contact Period (A.D. 1540-1795)

- The earliest Europeans passed by western Kentucky in the 1670s, but they probably didn't appear in eastern and central Kentucky until the 1690s.
- European contact with native peoples was indirect at first. It came in the form of deadly diseases like smallpox. Native peoples had no immunity to these diseases, and so a great many, especially the young and the old, died. This seriously disrupted native culture and societies.
- Face-to-face contact began with European explorers and traders, who brought metal tools and liquor. The French and the English built trading houses in or near villages in central and northeastern Kentucky.
- Groups in central and northeastern Kentucky continued to farm and tried to live the way their ancestors had lived, despite the loss of so many.
- Native people in central and northeastern Kentucky moved most of their large summer villages out of Kentucky by the late 1750s due to their fear of attack by the British during the French and Indian War. However, small communities probably continued to be occupied after that date.
- In central and northeastern Kentucky, native men continued to hunt and raid European settlements until the late 1790s.
- Archaeologists identify Contact Period Indians by their pottery and chipped stone arrowheads, but also by the European trade goods they used, such as guns and gunflints, glass beads and silver earrings, iron axes and knives, and brass kettles.

Adapted from *Culture History of Kentucky Coloring Book* by Virginia Smith. Kentucky Archaeological Survey, Lexington, KY (see **Additional Resources**).

Adena Mounds and Earthworks in Kentucky



Additional Resources

Archaeology Materials

Selected curricular materials and items of interest are available from the Education Coordinator at the **Kentucky Archaeological Survey**. You may contact the Survey at 1020-A Export Street, Lexington, KY, 40506-9854; at 859-257-5173; or you may email your request for information to the Education Coordinator at **aghend2@pop.uky.edu** They include the following:

Culture History of Kentucky Coloring Book by Virginia G. Smith contains line drawings of Indians at work and of the items they used in daily life throughout the 12,000 years of Kentucky prehistory (1993).

Columbian Kentucky by Vicky Middleswarth is a two-week lesson plan developed, in part, from actual archaeological research at prehistoric sites in Kentucky. To be used as a companion activity program with *Kentuckians Before Boone* (see **Books for Kids** section below). Subjects covered include native games, foods, clothing, burial practices, and houses. Includes resource lists (1994).

Guidelines for Evaluation of Archaeology Education Materials by the Society for American Archaeology's Public Education Committee. A very good resource. Good discussion of the purpose and benefits of archaeology; discusses major misconceptions about archaeology and archaeologists; and outlines concepts essential to understanding archaeology. Provides a three-part guidelines section for evaluating existing archaeological education materials and in developing new ones (i.e., minimal information, archaeological method and theory, and educational/curricular elements) (1995).

"The Adena Engraved Tablets" by David W. Penney, in ***Mid-continental Journal of Archaeology***, volume 5, number 1, pages 3-38 (1980). This article presents line drawings of all thirteen tablets; describes the history of their discovery, their design and composition; and suggests how they may have been used. Contact the Survey's Education Coordinator for a copy of this article if you cannot find this journal in your local university library.

Native Peoples, Continuing Lifeways Teacher Resource Packet, edited by Stephanie Darst and David Pollack, contains an array of materials about Kentucky prehistory and American Indians. It includes a Teachers' Guide to the "Kentucky Before Boone" poster described later in this section; a discussion of four widespread misconceptions about Kentucky's American Indians; an outline of the similarities and differences between the Late Prehistoric Mississippian peoples in western Kentucky and the Fort Ancient peoples in central Kentucky; a

discussion of American Indian oral traditions; and sections about native basketry traditions, music, language, and plant foods. Each packet also contains classroom applications, lists of available resource materials and persons; places to visit; and teaching/assessment strategies prepared by teachers keyed to particular outcomes specified by the Kentucky Education Reform Act (KERA) (1994).

The Native Peoples of Eastern Kentucky: An Integrated Thematic Unit Based on Local Prehistory by Judy Sizemore and A. Gwynn Henderson is divided into eight different sections that touch on archaeology, local and state-wide prehistory, prehistoric technology, site stewardship, and unlearning American Indian stereotypes. The 14 classroom-tested lessons, activity suggestions, and accompanying content materials integrate social studies, language arts, science, math, and arts & humanities subjects. In addition to the printed guide, the unit includes pictures (either as slides [n=21] or as slide images on a videotape) of people demonstrating prehistoric technology such as stone tool making, pottery making, and cooking; and of archaeologists at work in a rockshelter in Eastern Kentucky, showing field techniques (digging, troweling, screening, taking notes) (1998).

The Survey also produces a series of short booklets written for the general public on Kentucky archaeological sites and topics:

1. ***Slack Farm and the Caborn-Welborn People***, by David Pollack, Cheryl Ann Munson, and A. Gwynn Henderson, which describes the lifeways a village farming society that lived in western Kentucky from about A.D. 1400-1700 and presents information about the looting of the Slack Farm. Looting of these burials led legislators to upgrade KRS 164.990 and KRS 525.110 to be felonies (1996).
2. ***Mute Stones Speak: Archaic Lifeways of the Escarpment Region in Jackson County, Kentucky***, by William E. Sharp and A. Gwynn Henderson, which describes the lifeways of hunters and gatherers who lived in Eastern Kentucky 8,000 years ago and discusses how archaeologists learn about the past from the artifacts people left behind (1997).
3. ***Prehistoric Hunters and Gatherers: Kentucky's First Pioneers*** by Leon Lane, Eric J. Schlarb, and A. Gwynn Henderson, which presents a new explanation for how Paleoindian and Early Archaic peoples colonized and settled the mountainous portions of Cumberland and Clinton counties (1998).
4. ***Forests, Forest Fires & Their Makers: The Story of Cliff Palace Pond, Jackson County, Kentucky*** by Paul A. Delcourt, Hazel R. Delcourt, Cecil R. Ison, William E. Sharp, and A. Gwynn Henderson. This booklet tells the 10,000-year long environmental and human story of Keener Point Knob, based on

research carried out at a small ridgetop pond and nearby rockshelters by paleoecologists, archaeologists, and fire ecologists (1999).

Curricular materials and items of interest from **Other Sources** include the following:

Always A People collected by Rita Kohn and W. Lynwood Montell (1997). Forty-one individuals from seventeen different Eastern Woodland tribes tell their own personal stories about what it was like to grow up Indian. Available from Indiana University Press, 601 North Morton Street, Bloomington, IN 47404-3797. Phone 1-800/842-6796.

Anthro.Notes (a National Museum of Natural History Newsletter for Teachers) is a free newsletter that focuses on current topics in anthropology published three times a year by the Smithsonian Institution, Washington, D.C. 20560. A clearly written, concise, and objective article about the repatriation of Native American remains and sacred objects can be found in Volume 17, number 1/2, Winter/Spring 1995, pages 1-16, entitled *Repatriation: A Clash of World Views*. Write to Ann Kaupp, Public Information Office, Department of Anthropology, NHB 363 MRC Stop 112, Smithsonian Institution, Washington, D.C. 20560 to get a copy of this article to use in your classroom.

American Indian Reference Book for Children and Young Adults by Barbara J. Kuipers provides a section on where American Indian books can be incorporated into the curriculum; an evaluative checklist for resources; a section on selected American Indian biographies; and an extensive annotated bibliography of American Indian books. Published in 1991 by Libraries Unlimited, Inc. Englewood, CO.

Appalachian Literature, Appalachian Culture: Literature-based Cross-curricular Activities for the Primary and Intermediate Classrooms by Judy Sizemore and Ginny Eager (1999). One hundred classroom activities linked to particular examples of Appalachian literature (contemporary Appalachian writers and books with Appalachian themes) tried and tested by teachers and library media specialists. Two chapters deal with books about American Indians: Chapter 12 Kentuckians Before Boone by A. Gwynn Henderson and Chapter 13 Itse Selu: Cherokee Harvest Festival by Daniel Pennington (listed in the **Books for Kids** section). Published by Forward in the Fifth, 433 Chestnut St., Berea, KY, 40403. Web page <http://www.fif.org> Phone 606/986-3696. Available from Harmony House Publishers, 1002 Kent Road, Goshen, KY, 40026. Phone 1-800-809-9334

Archaeology: Boy Scouts of America Merit Badge Series (1997) is a complete, yet concise, source of information about archaeology. Chapters define

archaeology, describe the history of archaeology, discuss the step-by-step process of how archaeology is done from initial research through sharing findings with others, and discuss careers in archaeology. Available from your local Boy Scout Council Office or from Boy Scouts of America, Direct Mail Center, P.O. Box 909 Pineville, NC, 28134-0909, or call 1-800-323-0732.

Archaeology and You (1996) by George E. Stuart and Francis P. McManamon is a great introductory on-line booklet to the field of archaeology. It provides a brief discussion of archaeology in America, covering basic information about the science of archaeology, archaeological terminology and some of the more spectacular sites. It touches on archaeology as a career and how the law affects archaeological work and contains a bibliography of related readings and other materials available. It contains links and lists of other great sources of archaeological information, and suggestions for those who would like to volunteer on projects or who are thinking about a career in archaeology. The address is <http://www.saa.org/whatis/arch&you/cover.html>

Bones: A Forensic Detective's Casebook by Douglas Ubelaker and Henry Scammell (1992). This book traces the development of the collaboration of the Smithsonian and the FBI and illustrates how forensic anthropology gives voice to the dead. A fascinating look at how scientists can tell the difference between a fatal stabbing or an ancient burial practice, and how, through the study of bones, they learn about what prehistoric peoples ate and how they works, worshiped, lived, and died. Published by HarperCollins, 10 East 53rd Street, New York, NY, 10022.

Dead Men Do Tell Tales: The Strange and Fascinating Cases of a Forensic Anthropologist by William R. Maples and Michael Browning (1994). Completely engrossing journey into the world of forensic anthropology, the science of bones. It describes how scientists can tell age, gender, and ethnicity of a corpse, and how death occurred, and revisits some of the strangest and most interesting investigations conducted by forensic scientists. Published by Doubleday, 1540 Broadway, New York, NY, 10036.

Excavating Occaneechi Town CD-ROM edited by R.P. Stephen Davis Jr., Patrick Livingood, Trawick Ward, and Vincas P. Steponaitis (1998). Contains articles, maps, photographs, analysis, and short videos from the 1983-1995 excavations at the Fredricks site, an 18th century Occaneechi Indian village in North Carolina. Includes hundreds of color photographs, descriptions of houses, trash pits, burials, and artifacts, and interpretations of the materials found at this site. An archaeology primer explains the terminology and techniques used in archaeological excavation. An "electronic dig" feature allows students to plan and carry-out their own excavations at the Fredricks site. Grade: 4th and 5th with guidance; best for middle and high school. Requires Windows 3.1 or

Windows 95. Available from the University of North Carolina Press, P.O. Box 2288, Chapel Hill, NC, 27515-2288. Includes a 7 page booklet.

Intrigue of the Past: A Teacher's Activity Guide for Fourth Through Seventh Grade (1993), the curriculum guide for *Project Archaeology*, is an excellent curriculum guide that may be used in its entirety or as supplemental material. Consists of 28 classroom-tested lessons supporting social studies, science, art, language arts, and math curricula using archaeology as the focus. The Guide is divided into three parts (Fundamental Concepts, the Process of Archaeology, and Issues in Archaeology) and includes appendices and vocabulary. Available from Megg Heath, Imagination Team, BLM Heritage Education Program, Anasazi Heritage Center, P.O. Box 758, Dolores, CO, 81323. Phone: 970-882-4811. Their web address is <http://www.co.bim.gov/ahc/projectarch.htm>

Kentucky Archaeology (1996) edited by R. Barry Lewis, presents the prehistoric and historic archaeology of Kentucky for the general public with scores of drawings and photographs. Chapter 4, "Woodland Cultivators" by Jimmy A. Railey, devotes several pages (pp. 91-101 and pp. 122-123) to describing Adena culture. The University Press of Kentucky, Lexington, KY.

Kentucky Before Boone Poster by Jimmy A. Railey (1990). Detailed black and white line drawings on this poster illustrate all aspects of Kentucky prehistory from the very earliest hunter-gatherers to the most recent native farmers. It includes time-specific scenes, activity scenes, and technology scenes. An accompanying fact sheet summarizes Kentucky prehistory. Available from the Kentucky Heritage Council, 300 Washington Street, Frankfort, KY, 40601.

A Native Presence (60 min.) VHS. KET, The Kentucky Network (1995). Good program of interviews with American Indians, archaeologists, and historians concerning Kentucky's native people. Available from KET Tape Duplication, 600 Cooper Drive, Lexington, KY 40502-2296 by calling 1-800/945-9167. Fax orders to 1-859/258-7399. Cost: \$25.00 (but check cost to teachers).

Oyate Catalog. Oyate, an American Indian organization whose goal is to ensure that native people's lives and histories are portrayed accurately, produces an annual catalog of books, audio cassettes, videos, and CDs by American Indians about American Indians. Books are divided by grade levels (preschool & up; Grade 4 & up; Grade 7 & up; high school), and a section of guides and curriculum materials for teachers is included. Contact them for information or for a free catalogue at Oyate, 2702 Mathews Street, Berkeley, CA, 94702. Phone 510/848-6700; fax 510/848-4815; email Oyate@idt.net; or on the web <http://www.fdl.cc.mn.us/~oyate>

The ***Path to Becoming an Archaeologist*** (2001) is a brochure that succinctly outlines for students the diverse employment settings within which archaeologists work; the tasks they commonly carry out at these jobs; the kind of education required to become an archaeologist; how to obtain employment; and a listing of groups to contact for more information. Available free from the Society for American Archaeology, 900 Second Street, N.E. Suite #12, Washington, D.C. 20002.

Rock Art of Kentucky (1997) by Fred E. Coy, Jr., Thomas C. Fuller, Larry G. Meadows, and James L. Swauger, describes in words, line drawings, and in black and white photographs 72 of Kentucky's petroglyphs (pictures pecked into stone) and pictographs (pictures painted on stone) from rock art sites located all across Kentucky. The University Press of Kentucky, Lexington, KY.

Teaching About American Indians: Stereotypes and Contributions. A Resource Packet for Kentucky Teachers by Tressa Townes Brown (1999). Developed for use by secondary school librarians, resource specialists, and teachers. Divided into three parts. The first provides information about stereotyping and offers ideas for activities; the second presents information about American Indians' contributions to American culture, as a group and individually; and the third part is a resource guide that lists books, curriculum materials, videos, and addresses of organizations and sites on the World Wide Web. Especially useful for Kentucky educators, since information related to Kentucky's native peoples, mainly the Cherokee, Shawnee, and Chickasaw, is privileged. Available from the Kentucky Native American Heritage Commission, 300 Washington Street, Frankfort, KY 40601. Phone 502/564-6661. Grade: K-12.

Teaching About Native Americans by Karen D. Harvey, Lisa D. Harjo, and Jane K. Jackson. Lesson plans in this resource cover the following topics: environment and resources; culture and diversity; change and adaptation; conflict and discrimination; and current issues for Native Americans. The last section, Resources for Teachers and Students, includes criteria for the evaluation of educational materials and an "Indian Awareness" Inventory of 40 true or false questions. Published in 1990 by the National Council for the Social Studies as Bulletin No. 84. Washington, D.C.

Through Indian Eyes: The Native Experience in Books for Children, edited by Beverly Slapin and Doris Seale (1998). A collection of poetry, personal recollections, bibliographies and critical reviews of more than 100 children's books by and about Indians, including a guide to evaluating children's books for anti-Indian bias. American Indian Studies Center, UCLA. Available from Oyate (see entry earlier in this section).

Virtual Dig: A Simulated Archaeological Excavation of a Middle Paleolithic Site in France by Harold L. Dibble, Shannon P. McPherron and Barbara Roth (2000). This "virtual field school provides students with a very realistic experience of what it is like to carry out an excavation using real data at Combe-Capelle, a Middle Paleolithic prehistoric site in France. Organized in a series of modules that cover the various phases of preparation (research question formulation and grant proposal writing) through excavation (interactive-students actually remove virtual dirt and artifacts) and analysis (learning stone tool types, and simulating the knapping of stone tools; manipulating data), the modules can be used in sequence or completely independently of one another. Available from Mayfield Publishing Company, 1280 Villa Street, Mountain View, CA 94041. 1-800-433-1279. Workbook 128 p. plus a CD-ROM. Grade: college. Tour the program on-line at <http://www.virtualdig.com/tour.htm>

These books were specifically referenced in this Companion Guide and are available from ***Oyate*** (see ***Oyate*** entry earlier in this section):

First Nations Technology by Karin Clark. First Nations Education Division, Greater Victoria School District, 923 Topaz Avenue, Victoria, BC V8T 2M2, Canada (1996). This book gives a very simple overview of how the technology used by First Nations people has changed over time while traditions such as ceremonies have remained.

Children of Clay: A Family of Pueblo Potters (We Are Still Here: Native American Today) by Rina Swentzell, Bill Steen and Michael Dorris. Lerner Publications Co, Minneapolis, MN (1992). A photo-essay follows an older Pueblo woman named Gia Rose as she and her family seek out clay, prepare it, and then create figures and pottery from it.

Songs from the Loom: A Navajo Girl Learns to Weave (We Are Still Here: Native Americans Today) by Monty Roessel. Lerner Publications Company, Minneapolis, MN (1995). Jaclyn's grandmother teaches her the art of traditional Navajo rug-weaving. Jaclyn learns the songs, stories and perspectives that invest the weaving with meaning, as well as the proper tools and techniques.

Archaeology Websites

ArchNet: The World Wide Web Virtual Library for Archaeology is a server that provides access to archaeological resources available on the Internet categorized by region of the world (i.e., North America, Near East) and subject (botanics, ceramics, educational and instructional material, archaeological software). Also includes site tours and site descriptions. The address is <http://archnet.uconn.edu/>

The ***Kentucky Archaeological Survey's Web Page*** includes news; upcoming events; information about the four periods of Kentucky prehistory, along with pictures of artifacts and sites; information about on-going projects; a list of publications; and a Resource Guide. *Myths About Archaeology* lists common myths about archaeology and archaeologists, while *Test Your Knowledge of Kentucky Prehistory* is an interactive quiz that challenges misconceptions about Kentucky prehistory. A form on which to report archaeological sites you have found, along with instructions on filling out the form and who to send it to, also is at this web site. The address is **<http://www.kyheritage.org/kas.htm>**

You can get descriptions of the other episodes in the Kentucky Heritage Council's **Kentucky Archaeology Video Series**, view lesson plans (in .pdf), and order videos and Companion Guides at the Series' website:
<http://www.kyheritage.org/video.htm>

Kentucky Educational Television – Kentucky's Story Resource Guide

<http://www.ket.org/education/guides/kystory.pdf>

The "Early Kentucky" episode in the series is the relevant one here. Resource Guide includes information, activities, and lesson plans.

The web page for the ***Kentucky Historical Society*** includes information, activities, lesson plans and a pre-visit teacher's guide. Go to their web address, **<http://www.kyhistory.org>**, click on "Teachers and Students"; then click on "Publications", and then on "A Kentucky Journey" Teacher's Guide. It's in .pdf format.

The National Park Service has a home page on the Worldwide Web called ***Links to the Past***. Topics include history, archaeology, preservation programs, national parks, and historic places. It features specific and focused information on a variety of topics, using images, photographs, maps, and essays. The address is **<http://www.cr.nps.gov>**

A variety of resources is available from the ***Smithsonian's Anthropology Outreach Office***:

<http://www.nmnh.si.edu/anthro/> and click on "Public Information". Check it out for downloadable resource lists and activities about archaeology (recommended books, magazines and journals, guidelines to classroom resources); American Indians (languages, games/dances/crafts, religion, medicine); erasing stereotypes; guidelines for researching American Indian ancestry; and more.

The ***University of Kentucky's William S. Webb Museum of Anthropology web page*** contains information, images, and activities about Kentucky's past as

told through archaeology. In the Teacher Resources section, you can find summary descriptions about Kentucky's prehistoric and historic periods, four classroom activities, a short resource list, and text for a self-guided tour of the museum exhibits. The Activities section contains two short on-line quizzes. The Archaeology and Kentucky's Timeline section presents short, illustrated descriptions of Kentucky's prehistoric and historic periods based on archaeological research that has been conducted in the state. The address is **<http://www.uky.edu/AS/Anthropology/Museum/museum.htm>** (case sensitive).

Native American Websites

Ordering information from the ***Cherokee Museum*** for *Principal People* video and other videos and books:

www.cherokeemuseum.org

Several relevant websites to consult relative to the ***Native American Graves Protection and Repatriation Act (NAGPRA)*** and related controversies are listed below.

Websites containing information relating to the controversy around the interpretation and application of the Native American Graves Protection and Repatriation Act:

www.kennewick-man.com/

www.mnh.si.edu/arctic/html/ancient.html

An article about Kennewick Man also is presented in the Smithsonian's *Anthro.Notes* newsletter:

www.nmnh.si.edu/anthro/outreach/anthnote/fall97/ and then click on "Kennewick Man".

Websites about federal repatriation issues include:

www.cast.uark.edu/other/nps/nagpra

www.nmnh.si.edu/anthro/repatriation/

Websites Relative to Native American Topics in General

Native Web has sources for other sites about native peoples and extensive links to websites on all kinds of topics:

<http://www.nativeweb.org/>

Native American Indian Resources on the Internet is an excellent source for information and links to other websites relating to Native Americans:

<http://www.kstrom.net/isk/mainmenu.html>

Native American Navigator, a general site with hundreds of links to topics on Native Americans, is an interface for geographical, historical, topical and keyword-based student inquiry on topics related to Native American history and culture in the United States:

<http://www.ilt.columbia.edu/k12/naha/nanav.html>

Index of Native American Resources on the Internet has resources on every aspect of American Indian Life and culture. Incredible compilation on every subject imaginable:

<http://hanksville.org/NAresources>

Native American Sites is a general site with hundreds of links to topics on Native Americans. Access to home pages of individual Native Americans and Nations, and to other sites that provide solid information about American Indians:

www.nativeculture.com/lisamitten/indians.html

National Museum of the American Indian has useful links to a host of websites on many topics related to Native Americans:

www.nmai.si.edu/links/index.html

Phil Konstantin's website has links to over 200 official and unofficial tribal homepages:

www.members.tripod.com/~PHILKON/links2.html

Northern Kentucky University's Native American Program Web Page provides links to museums with Indian exhibits in the northern Kentucky region; prehistoric mound sites in Ohio, Kentucky, and Indiana; state Indian organizations; Shawnee tribal websites; many national Indian organizations; national museums and tribal museums; tribal newspapers; and directories of federally and non-federally recognized tribes.

www.nku.edu/~anthro/naslinks.html

The ***Kentucky Native American Heritage Commission's*** web address is:

<http://www.kyheritage.org/NATCOM.htm>

Books for Kids

Archaeologists Dig For Clues by Kate Duke discusses the purposes, techniques, and findings of archaeology. The story is about kids (and their pets) participating in an archaeologist-led excavation at a 6,000 year old Archaic village in the Midwest. Easy to use as a focal point of classroom activities, the reader experiences everything about what it is like to be an archaeologist. The

perfect book for introducing archaeology to children. Harper-Collins Children's Books, New York, NY. (1997).

I Can Be An Archaeologist by Robert B. Pickering introduces, in simple text, archaeological terms and concepts with lots of good color pictures. Includes a short glossary of archaeological terms. Chicago Press, Chicago, IL. (1987).

Itse Selu: Cherokee Harvest Festival by Daniel Pennington. Cherokee, archaeologists, and historians worked together to prepare this richly illustrated story of daily life of Little Wolfe and his sister, Skye. The focus is on the Cherokee's Green Corn (harvest) Festival ceremonies and stories. Eastern Band of Cherokee vocabulary words used throughout and a Cherokee syllabary are included, as well as drawings of native technology, dress, and houses that are faithful to historical and archaeological research. Charlesbridge, Watertown, MA (1994).

Growing Up Indian by Evelyn Wolfson. Told from a child's perspective and illustrated profusely by an artist who is himself a descendant of American Indians, this book sheds fresh light on a fascinating subject. Using a question-and-answer format, the book answers many myths about growing up Indian. Walker Publishing Co., New York, NY (1997).

Kentuckians Before Boone by A. Gwynn Henderson. Kentucky Humanities Council's New Books for New Readers Series. Based on archaeological, ethnohistoric, and historic information about central and eastern Kentucky's village farming peoples known as the Fort Ancient people, this book follows one Indian family's life during late summer and early fall of 1585 in central Kentucky. The University Press of Kentucky, Lexington, KY. (1990).

Field Trips

James C. Salato Wildlife Education Center (Open T-F 9-4:30; Sat 10-5; Sun 1-5.), Kentucky Department of Fish and Wildlife, Frankfort, Ky. Phone 1-800-858-1549. A mural and exhibit of prehistoric artifacts describes the Fort Ancient farming culture of central Kentucky, inspired by the book [Kentuckians Before Boone](#), by A. Gwynn Henderson (see **[Books for Kids](#)** section). Programs are available that focus on how native peoples used the environment, which include a visit to the animals kept at the Kentucky Department of Fish and Wildlife's Game Farm (eagles, elk, buffalo, deer, and wild turkey). Admission is free.

Kentucky History Center (Open TWFS 10-5; Thurs 10-8; Sun 1-5. Closed Monday) 100 W. Broadway, Frankfort, KY, 40601. Phone 502/564-1792 ext. 4461 or 1-877-4HISTORY. The Kentucky Historical Society's Center includes an extensive exhibit, filled with objects, interactive activities, and images. Free

programs also are available and tours can be scheduled. Web page <http://www.kyhistory.org> Cost: Free.

For those interested in prehistory, Area B: First Kentuckians (10,000 B.C. - A.D. 1750) in the permanent exhibit hall presents information about native people's lifeways. Among other things, visitors walk through an Indian house made of mats and view a large mural that depicts an Archaic village along the Green River. Drawers that contain artifacts pull out, and a videotape shows how stone tools are made.

The remainder of the History Center's permanent exhibit hall contains objects and exhibits, as well as audiotapes of speeches and stories, that document all facets of Kentucky history. An historical archaeology touch cart activity, *Digging the Past Touch Cart*, also is available. Filled with historic artifacts in stratigraphic sequence, these objects were recovered during the Kentucky Archaeological Survey's excavations in advance of the History Center's construction. To schedule its use or other hands-on activities, such as making prehistoric pottery, call Vicky Middleswarth at 502/564-3016.

Living Archaeology Weekend (held annually the second to the last Fri and Sat in September. 10am-5pm each day). Gladie Historic Site, Red River Gorge near Natural Bridge State Park. Sponsored by the the USDA Forest Service, Stanton Ranger District and the Red River Historical Society. Phone 606/663-2852. Visitors can watch American Indians and other craftsmen demonstrate prehistoric technology, such as stone tool making, dugout canoe making, pottery making, hide tanning, basket making, and cooking. Native storytellers also are featured and visitors can try their hand at house building and spear throwing. Cost: Free.

Riverside, the Farnsley Moreman Landing (Open all year Tues.-Sat. 10-4:30 and Sun. 1-4:30, except major holidays) 7410 Moorman Road, Louisville, KY, 40272. Phone 502/935-6809. Fax 502/935-682. Teachers can bring their classes to participate in the award-winning Building Blocks of History program, a full-day field trip experience that combines hands-on historical archaeology with a brick-making activity and a tour of a 1837 home. Building Blocks is offered Tues through Friday, 10am-1pm, from late Sept through early November and again from late March through mid-May. Call to schedule your class visit. Cost: there is a modest cost per student; call and ask about it. Visit their website: www.riverside-landing.org/default2.htm

KENTUCKY HERITAGE COUNCIL

The Heritage Council is in the Education, Arts, and Humanities Cabinet. The mandate of the Kentucky Heritage Council is to identify, preserve, and protect the cultural resources of Kentucky. The Council also maintains continually-updated inventories of historic structures and archaeological sites and nominates properties to the National Register of Historic Places. By working with other state and federal agencies, local communities, and interested citizens, the Council seeks to build a greater awareness of Kentucky's past and to encourage the long-term preservation of Kentucky's significant cultural resources. Through its various programs (e.g., Main Street, Grants, Publications, Rural Preservation, Civil War Initiative, Conferences), the Council strives to show how historic resources contribute to the heritage, economy, and quality of life of all Kentuckians. For more information, write/call the Kentucky Heritage Council, 300 Washington Street, Frankfort, Kentucky, 40601, 502/564-6661.

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