

Spiro Farming:

Corn, Squash and Beans Build a Mighty Trade Center

Objective

Students will read about farming practices among the people who populated the area around Spiro Mounds. Students will research to learn more about Spiro culture and other prehistoric farming cultures in Oklahoma. Students will identify the region in the US occupied by Mississippian culture. Students will trace the trade route along rivers and tributaries that joined the Spiro Mounds people with Mississippian ceremonial centers back east.

Materials

- sunflower seeds
- paper plates
- US map

Background

Archaeology is the study of the human past through material remains. Archaeologists study food remains — animal bones and charred seeds and nutshell — to learn what people ate long ago. They study ancient digging sticks, stone axes, arrowheads and hoe blades, pottery, grinding stones and other artifacts to learn how they captured, collected, and processed their food. To learn about people who lived before there were written records, archaeologists sometimes dig into the earth to find those remains.

One of the most important archaeological sites in the US is in Oklahoma. Spiro Mounds is a group of 12 earthen mounds on the Arkansas River in LeFlore County. From 800 AD to 1500 AD Spiro was a major trade center of a culture known to archaeologists as “Mississippian Culture.” Much of its success came from the development of crops, mostly corn, squash and beans, and from trade with many different cultures across the Americas.

The Arkansas River is one of the principal tributaries of the Mississippi River. From their location on the Arkansas, Spiro people could send valuable resources from the west to ceremonial centers in the Mississippian heartland, hundreds of miles to the east. The largest of these settlements was Cahokia, near what is now St. Louis, Missouri. In return for goods from the west, people from the eastern centers sent valuable goods back to Spiro—copper, intricately-carved shell objects, and pipes made from stone found hundreds of miles away. These were some of the objects found buried in the Spiro Mounds.

The large mounds of earth that remain at Spiro today were the foundations for special buildings. They were used by political and religious leaders or as places to bury deceased leaders.

The people of the Spiro Mounds are believed to have been Caddoan speakers. Caddoan is the name of both a language family and a culture. By the 1700s, out of Caddoan culture had come the Caddos and Hasinai of western

Oklahoma Academic Standards

HIGH SCHOOL

Speaking and Listening:
R.1,2,3; W.1,2. Reading
and Writing Process:
R.1,3. Research: R.1,2,3;
W.1,2,3,4
Oklahoma History: 1.1,2;
2.1

Vocabulary

archaeology— the science that deals with past human life as shown by fossil relics and the monuments and tools left by ancient peoples

artifact— a usually simple object (as a tool or ornament) showing human work and representing a culture or a stage in the development of a culture

bottomland— lowland along a river

civilization— an advanced stage (as in art, science, and government) of social development

cultivate— to prepare land for the raising of crops

fertility— producing vegetation or crops plentifully

hierarchy— persons or things arranged in ranks or classes

levee— a bank built along a river to prevent flooding

material— physical rather than spiritual or intellectual

Mesoamerica— a region and cultural area in the Americas, extending approximately from central Mexico to Belize, Guatemala, El Salvador, Honduras, Nicaragua, and northern Costa Rica, within which pre-Columbian societies flourished before the Spanish colonization of the Americas in the 15th and 16th centuries

mound— a small hill or heap of dirt or stones

prehistoric— of, relating to, or existing in times before written history

replenish— to make full or complete once more

terrace— a raised piece of land with the top leveled off

tributary— a stream flowing into a larger stream or a lake

Louisiana, East Texas, western Arkansas and eastern Oklahoma; the Wichitas and Kichais of Texas, Oklahoma and Kansas; the Pawnees of Nebraska; and the Arikiras on the Missouri River in South Dakota. They all spoke a Caddoan dialect, relied upon gardening and hunting, lived in grass houses, made a similar style of pottery and had similar political structures. Some or all of these tribes may be descendents of the Spiro people.

The Spiro Mounds site was the principal community center in the area, but there were related communities in Muskogee, Wagoner, Cherokee and Sequoyah counties. In his book *Looting Spiro Mounds: An American King Tut's Tomb*, David La Vere imagines what the area might have been like for people settling there at that time:

Spiro was a good place where an ambitious family might prosper. It sat atop terraces well above the river, too high for the Arkansas' spring floods to reach. But it was those same floods that covered and fertilized the lower terraces year after year. So here was plenty of well-watered land for gardening, as well as clay for pottery, cane for baskets and arrows, trees for bows, hickories, pecans and walnuts for eating, cedars and junipers for rituals, herbs for healing and a host of animals for food, clothes and tools. When the first family settled at Spiro about AD 800, they were part of the gardening culture that was spreading along the rivers of the southern prairies. (LaVere, page 17)

Migrating southern tribes brought corn from Mexico to the tribes in North America. Before that, the tribes cultivated native plants on a small scale. Squash, lamb's quarters, pigweed, amaranth, and sunflowers were some of the native plants they cultivated.

Using the slash and burn method of clearing fields, the men would scrape a ring of bark off each large tree using a stone axe. This would kill the tree in a matter of weeks. Later they burned the dead trees and underbrush, then mixed the ashes into the soil as fertilizer. Once the land was cleared, the men helped turn the soil with hoes made of stones tied to wood shafts. Sometimes they used buffalo shoulder blades.

Then the women took over. Using digging sticks and hoes, they planted the seeds. Along with corn, they planted squash, pumpkin, sunflowers and beans. Once the seeds sprouted, the women and children watered them, weeded, scared off crows and other pests and looked after the plants.

While women gardened, men hunted deer, raccoons, turkeys and water fowl and gathered freshwater mussels along the river banks.

Because the corn crops were so abundant, some of the crop could be stored for use during the winter, when food was scarce. Some was also saved as seed stock for planting the following spring.

Procedures

1. Read and discuss background and vocabulary.
2. Provide copies of the Reading Page included with this lesson for

students to read independently, in groups or as a class.

—Provide a handful of unshelled sunflower seeds for students to eat during the reading.

—Students will collect the hulls in a paper plate.

—At the end of the reading, ask students how the piles of sunflower seed hulls relates to the reading. (Seeds sprouted from discarded hulls helped ancient women see that they could plant what they had formerly gathered from the wild.) Remind students that the sunflower is native to North America and that it was one of the first foods to be cultivated by ancient farmers.

3. Lead a discussion about the background and reading based on the following questions:

- What is civilization?
- What were the advantages of having a more stable food supply?
- List the steps involved in slash and burn agriculture.
- What would be the advantage of large numbers of people staying together in villages rather than dividing into groups to look for food in winter?

4. On a map of the US, students will locate Spiro Mounds in relation to the Arkansas River. Students will trace the trade route from Spiro along the Arkansas to the Mississippi River and to St. Louis where Cahokia, the main Mississippian ceremonial center, was located.

5. Students will select one of the following topics to research and report to the class:

- One of the reasons Spiro Mounds became a great trade center was because of its proximity to the Arkansas River. Hundreds of years later the McClellan-Kerr Arkansas River Navigation System was developed to make the river a commercially navigable body of water. Find information about the system, its history and its importance to Oklahoma's economy.
- List the main cultural traits of Mississippian culture. Discuss how they are similar and/or different from the traits of our culture.
- Report on one of the other prehistoric cultures for whom archaeological evidence has been found in Oklahoma. These include Antelope Creek Culture, Washita River Culture, and Fourche Maline Culture. Identify the location where they lived in Oklahoma, agricultural practices, tools used and other information.
- Find theories about what happened to the Spiro people.
- Research to learn about other Mississippian ceremonial centers—Cahokia, Etowah, etc.

The Beginning of Agriculture



For centuries to come, Indian peoples would provide food for their families by hunting, maybe fishing, and much gathering. However, something new was on the horizon, and by the time of Christ, it had hit the peoples of the American Southeast. It began with a woman. After all, women were the gatherers of the band. She and her sisters had spent the day filling a few baskets with seeds and other wild grains. That evening, in preparing a meal for her family, she probably threw out a few handfuls of seed husks. They might have been from amaranth or sunflowers or the like, but among the husks were a few seeds. All this landed on a moist patch of ground, watered by a little runoff and sunlit much of the day. Over the weeks and months, the seeds sprouted and grew and ripened. One day she recognized the plants as those she and her sisters regularly gathered, and in that moment she made a discovery that changed the universe for Indian America. She suddenly realized that rather than going out to the woods and search for the plant, she could bring the plant and its produce to her. So began the domestication of plants, a necessary prelude to farming.

This great discovery did not bring instantaneous change to these early American Indians. In fact, it was not agriculture or farming. It was barely gardening. Women might toss out a few seeds on a bare patch of ground and the family would then set off on one of its hunting and gathering trips, leaving the seeds to fend for themselves. If all went well ripe plants awaited them on their return months later. Over the next few centuries, women studied the plants, selecting the plumpest seeds from the most bountiful or hardiest plants. Some women began actually planting the seeds, rather than just scattering them on top of the ground, even watering them if the rains did not come on time. Soon Indian women in the southern and eastern parts of America regularly scratched out small gardens of amaranth, sunflowers, little barley, bottle gourds, Jerusalem artichoke, squash, wild potato vine, goosefoot and pigweed.

Excerpt from LaVere, David, *Looting Spiro Mounds: An American King Tut's Tomb*, University of Oklahoma, 2007.

1. Identify the main idea in the reading passage.
2. Identify the supporting details.
3. Why is it important to study ancient cultures?
4. How did the discovery made by the woman in the story “change the universe for Indian America?”
5. Develop a timeline of the discovery described in the reading.