



SUPPORT MATERIALS FOR USE WITH STUDENTS

BACKGROUND ESSAY

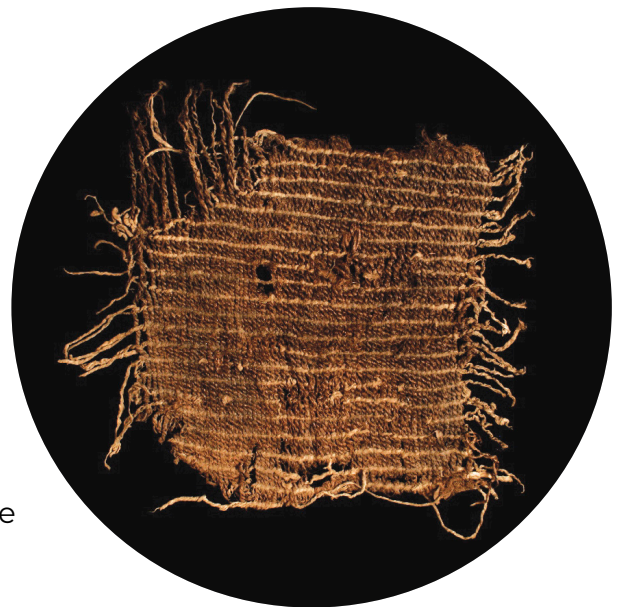
ABOUT AMERICAN INDIAN TEXTILES

One way archaeologists learn about people of the past is by studying artifacts.

Artifacts are objects made or modified by humans. Archaeologists estimate that 90% of the items people made long ago were produced from *perishable* materials. Perishables are things that decay over time. They are made from plants or wood.

Textiles are a kind of perishable artifact. They are woven objects like slippers, bags, and shawls. The materials used to make these woven objects – materials like yarn and cordage – are also perishable artifacts. Long ago, Native weavers made yarn and cordage mostly from plant fibers.

Above right: Native weavers used fibers from two different plants to create stripes in this 2,000-year-old twined textile fragment. It is from a Menifee County, KY rockshelter site. Below: An approximately 2,000-year-old bundle of bast fiber from McCreary County.



Perishables are not often preserved at archaeological sites. For this reason, textiles provide a rare window into the past. Just like non-perishable artifacts, textiles provide a direct link to the lives of long-ago people.

Textile Traditions

Archaeologists find textiles woven by past generations of Native peoples only at certain types of archaeological sites. Eastern Kentucky’s dry rockshelters are one type.

But artifacts are not the only way archaeologists learn about past technologies. They also learn from Native people today – people like Choogie Kingfisher.

Mr. Kingfisher learned the textile traditions of his people, the Keetoowah Cherokee, from his grandmother. His grandmother learned from her grandmother. He is now teaching his children and grandchildren. By passing on their traditions, Cherokee people practice and preserve their culture.

At times, keeping traditions has been difficult for Indian people. Like other Eastern Woodlands Native groups, the Indian Removal Act of 1830 forced the Cherokee to leave their homelands. They had to move west of the Mississippi River because White settlers demanded more land. Their journey was a sad and deadly time. The Cherokee call it the Trail of Tears. But as Mr. Kingfisher points out in the video, the Cherokee took their traditions with them. They have kept their traditions alive for generations.

Today, archaeologists work with Native peoples to understand how textiles were made in the past. They observe modern weavers' techniques. Then they try their hand at *replicating* textiles (making copies using the very same materials and steps) they find at archaeological sites. Through trial-and-error, archaeologists and modern weavers re-create long ago textile manufacturing techniques.

Steps in Textile Manufacture: Then and Now

Making textiles was a very important skill for ancient Native peoples. They learned the technologies used by their families and cultures.

They taught their children. In the past, children as young as three or four began by learning how to gather plants and spin fibers. An eight-year-old child would have been able to weave bags and baskets.

Today, Native peoples of all ages learn through the same steps. They continue to honor their textile traditions and employ these technologies in their unique material culture.



Above: Slippers were the perfect footwear for exploring Kentucky's caves and rockshelters. This 2,500-year-old slipper is from a site in Edmonson County, KY.

STEP 1 – Gathering and Processing Fibers

Textiles are woven from *yarn* or *cordage*. Yarn or cordage are bundles of twisted *fibers*: long, thin strands of plant material or animal fur.

Kentucky's Native craftspeople used mostly plant fibers. They gathered the plants in the late fall or early spring.

Native weavers knew which plants produced the best fibers for the textile they wished to make. Fibers came from the leaves of rattlesnake master. Fibers also came from the stems of milkweed, dogbane, and stinging nettle. Stem fibers are called *bast* fibers.



The way Native weavers processed fibers depended on the type of textile they planned to make. For hard-wearing sandals and slippers, they used plants with fibers that did not need a lot of processing.

But if they planned to make a fine, soft fabric for wearing against the skin, fiber processing took more time.

First, the weaver had to peel away the plant's tough outer layers and any hard, woody bits. Then, using a hard rock, he or she pounded the fiber strands to remove rough spots and soften the fibers. The more time a weaver spent processing the fibers, the smoother and softer the final textile would be.

Left: Spinning plant fibers against the thigh.

STEP 2 – Making Yarns

Native weavers used the processed fibers as-is, or they spun them into *cordage* (string for items like rope) or *yarn* (used for woven items). Kentucky's ancient Native peoples did not have spinning wheels. They spun their fibers by hand or against their thighs.

Native weavers did not need modern technology to make extremely high-quality yarns. In the early 1500s, Hernando de Soto and his men were impressed by the fabrics worn by Native peoples living in the Southeastern United States. The Spaniards thought some of the Native-made fabrics were as fine as anything they had seen back home.

All weavers – in the past and today – make yarn the same way. They twist fibers to the left (Z-spun) or to the right (S-spun). They can then twist the yarn together again to make *plied* yarn. Plied yarns are usually twisted in the opposite direction from how the weavers first spun the fiber. That way, if the yarns try to come apart, the opposing twist 'locks' the yarns together, making a stronger yarn.

In the past, weavers learned from their elders a tradition of twisting yarn in one direction. They taught this tradition to their children. Over time, weavers in a whole community made their yarn the same way. It often looked different from a neighboring community's yarn.

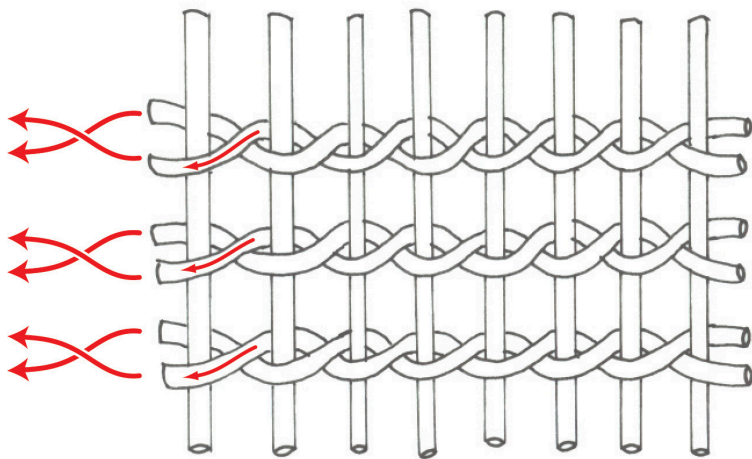
STEP 3 – Making Textiles

Kentucky's ancient Native weavers did not have looms. They wove many different textiles with only a wooden frame. These included everything from heavy-duty bags to fancy lace shawls. They wove most of their textiles, however, without any frame or support. These were baskets, cane mats, and slippers. These same techniques are taught and used today.

Native peoples used two different weaving techniques. *Twining* dates back at least 10,000 years. In twining, weavers twist two yarns together around a third perpendicular yarn. Ancient weavers twined everything from delicate shawls to durable bags and heavyweight sandals.

Weavers created complex patterns and designs in their twined textiles two different ways. They used colored yarns, dyed or painted with natural pigments like those from sumac and walnuts. They also changed how they twisted the yarns together.

In *plaiting*, the weaver passes yarns over and under each other. Weavers created *twill patterns* by changing how many times they passed a horizontal *weft* yarn over and under a vertical *warp* yarn. Plaiting and twill patterns are thousands of years old. They are one of the most common weaves today. The denim used to make jeans is an example of a twill pattern.



Above: The pattern of S-twist twining.

Busy Weavers

Using very simple technology, Native weavers long ago made many kinds of textiles. They fashioned these textiles into items they used in daily life. These included slippers, shawls, blankets, baskets, bags, nets, and mats.



Above: Teaching children an ancient weaving method – twining – at Living Archaeology Weekend.

Thick textiles kept people warm. Durable textiles helped people explore caves and rockshelters, and made moving around the landscape much easier. Very complex and highly valued textiles announced a person's social status or his/her role as a religious leader.

Taken together, textiles tell an important story about the past.

ALL IMAGES COURTESY CHRISTINA PAPPAS AND THE WILLIAM S. WEBB MUSEUM OF ANTHROPOLOGY, UNIVERSITY OF KENTUCKY.

© 2021 Living Archaeology Weekend Steering Committee. This document may be used and copied for educational purposes, free without special permission. However, re-publication or reproduction of any part of it by any other publishing service, whether in a book or any other resource, is strictly prohibited.