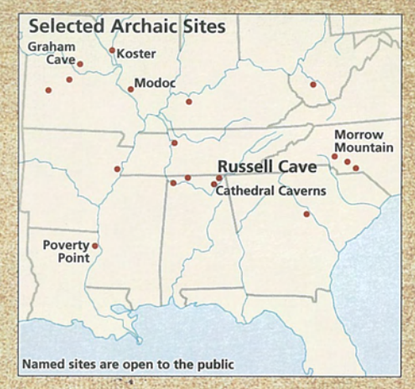
Russell Cave

To characterize the evolving stages of civilization in southeastern America before European contact, archeologists have established a general cultural sequence: Paleo, Archaic, Woodland, Mississippian. While there is a general correlation between stages and the dates shown below, these characterizations are not precise for every region in a given period. Thus some peoples continued to thrive in the Woodland stage while others not far away built great cities. For most of Russell Cave's 9,000 years of human use, its inhabitants were in the Archaic stage. The cave was one of thousands of southeastern Archaic sites, a few of which are shown on the map at right. Recent evidence indicates that the earliest users of the cave were actually at the transitional stage between Paleo and Archaic. During the Paleo period they still depended to a great extent on hunting large animals rather than exploiting a wider range of resources.

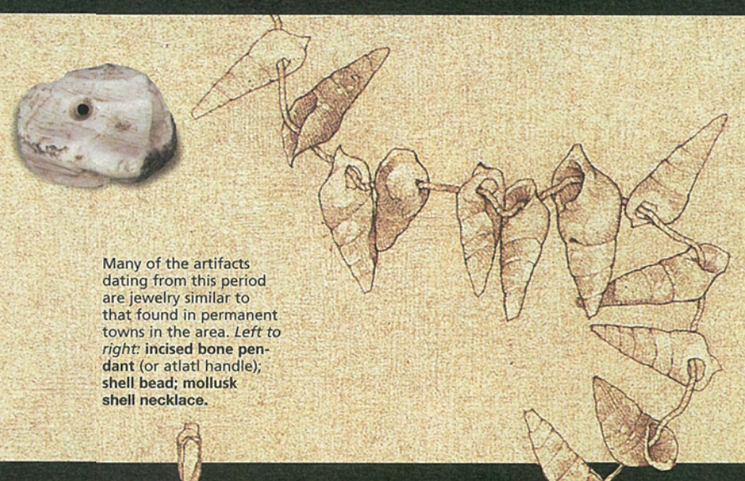


Thousands of Archaic sites have been uncovered throughout the southeastern United States, ranging from permanent cave dwellings to campfire remains. As with Russell Cave, most are located along major river valleys.

(A.D. 1000 to 1600)

Mississippian

The Woodland period civilizations that took root in the Mississippi and Tennessee River Valleys flowered in the Mississippian period. Large towns and ceremonial complexes with huge temple mounds were made possible by the refinement of corn agriculture. Because of the establishment of these permanent settlements, places like Russell Cave were used only sporadically as stopovers for hunting and trading parties. The Cherokee Indians of the historic period rarely used the cave.



Many of the artifacts dating from this period are jewelry similar to that found in permanent towns in the area. *Left to right:* **incised bone pendant** (or atlatl handle); **shell bead; mollusk shell necklace.**

Illustration of **pot** is based on fragments found at Russell Cave. The incised design is common in Mississippian pottery.

Mississippian Period:

1540	De Soto expedition explores southeastern America.
1519	Cortés begins conquest of Aztecs
1492	Columbus reaches the Americas
1455	Gutenberg produces first printed book in Europe
1453	Constantinople falls to Ottoman Turks
1300	Benin (Nigeria) empire emerges; 1325: rise of Aztecs in Mexico; 1347: Black Death (a form of bubonic plague) reaches Europe
1000	Vikings reach North America; 1066: Normans invade England; 1096: First Crusade

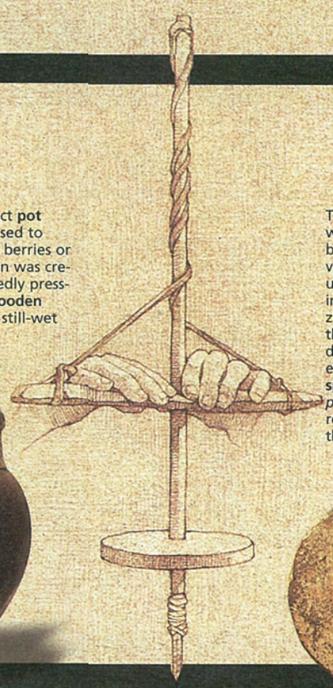
Illustrations by Greg Harlin

(500 B.C. to A.D. 1000)

Woodland

In Woodland times in the Southeast, settled village life grew more important as agriculture and trade with people to the north allowed more time for refinement of political and ceremonial life. The inhabitants of Russell Cave, while retaining many of the characteristics of Archaic life, were influenced by the region's religious and political developments. Significant material changes included the introduction of pottery and the bow and arrow. Trade contacts undoubtedly accounted for much of the change, but some archeologists believe that these technologies indicate the arrival of new people in the area. Domestic artifacts from the early Woodland, including the first evidence of gardening, suggest renewed use of the cave as at least a semi-permanent domicile. Later in the period the cave was used mostly as a winter hunting camp when river villages dispersed into more efficient smaller groups at the onset of cold weather.

This nearly intact **pot** was probably used to cook seeds and berries or stew. The design was created by repeatedly pressing a **carved wooden stamp** into the still-wet clay.

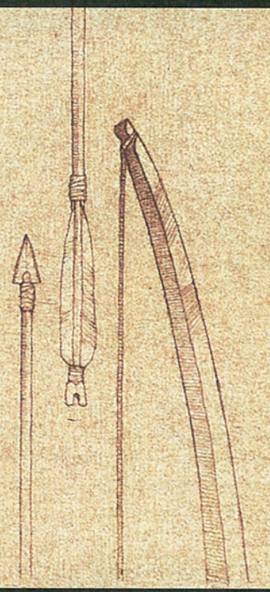


The cave's inhabitants worked the **pump drill** by first rotating the vertical shaft to wind up the cord, then pushing down on the horizontal piece to unwind the cord and rotate the drill. Momentum created by the heavy stone **spindle whorl** *(disc pictured next to drill)* rewound the cord for the next push down.

This stone gorget is thought to have been hung around the neck as a throat ornament.

Fishing expeditions to the Tennessee River, only six miles away, were common. A variety of **bone fishhooks** were used, including hinged two-piece hooks.

The **bow and arrow** improved a hunter's range and accuracy. Fletching of shafts with feathers was a crucial skill that could make the difference between a kill and returning to the cave empty-handed .



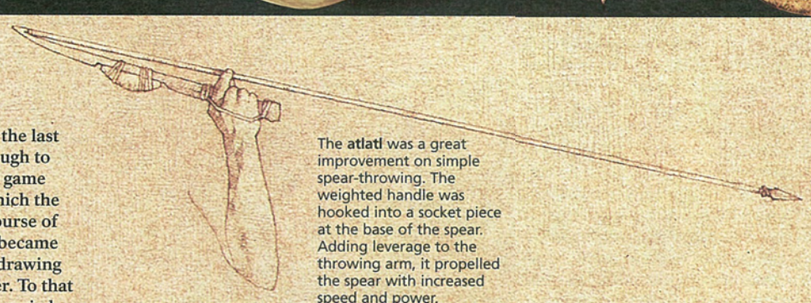
Woodland Period:

900	Rise of Mississippian mound cities
800	Charlemagne crowned first Holy Roman Emperor; 853: first printed book in China
600	Height of Mayan civilization; 632: beginning of Arab expansion and spread of Islam
A.D. 160	Height of Roman Empire
300 B.C.	Rise of Hopewell chiefdoms and cities in North America; 202: China united under Han dynasty; Great Wall underway
400 B.C.	Founding of city of Teotihuacan in Mexico; 334: Alexander begins march of conquest
500 B.C.	China develops crossbow and iron casting process; multi-tiered galleys in use; development of waterwheel; 477-429: flowering of Athenian civilization

(7000 B.C. to 500 B.C.)

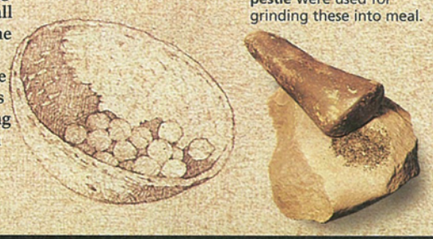
Archaic

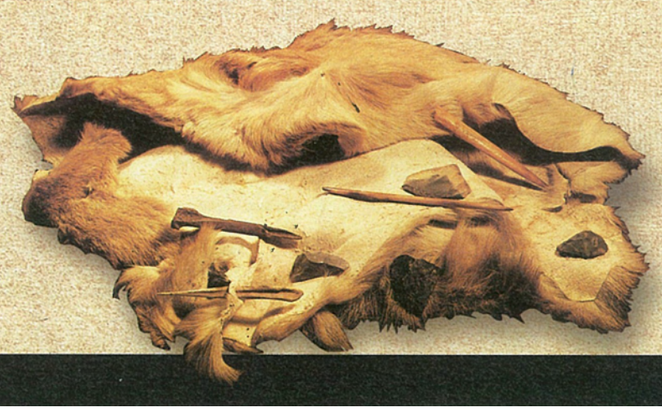
By about 8000 B.C., at the tail end of the last ice age, the weather had warmed enough to help cause the extinction of the large game (overhunting also contributed) on which the Paleo hunters had relied. Over the course of the early Archaic, American Indians became versatile, efficient hunter-gatherers, drawing on all the resources of forest and river. To that end their tools became steadily more varied and specialized. Bone and antler were shaped into an array of implements. Stone tools, long in use, were being ground and polished by the late Archaic. The mortar and pestle for milling, the fishhook, the drill, woodworking tools—all were used in the Archaic period. There is some evidence that for the last 3,000 years of this period, the use of river resources became more important in the region, and Russell Cave was probably used less as a home than as a hunting camp. In the Archaic era the basic foundation for American Indian culture was laid, persisting in some areas until European contact.



The **atlatl** was a great improvement on simple spear-throwing. The weighted handle was hooked into a socket piece at the base of the spear. Adding leverage to the throwing arm, it propelled the spear with increased speed and power.

Russell Cave inhabitants wove simple cane **baskets** used to gather nuts, seeds, etc. A stone **mortar and pestle** were used for grinding these into meal.

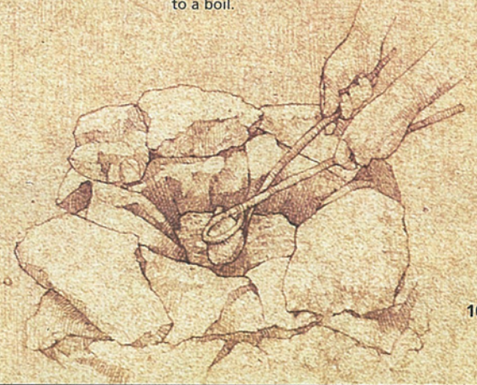




Deer hides were prepared for use as clothing and bedding by deflesh-ing them with a **scraper** and softening them with the brains. **Bone awls** were used to punch holes along the edges before the pieces were sewn together with **bone needles** and rawhide or sinew strips.

Cave inhabitants used **bone pins** to keep their hair out of the way.

Cooking by boiling was an early development. A pit lined with hide was filled with water and pieces of meat. Heated stones were then placed in the water to bring it to a boil.



Archaic Period:

900 B.C.	Foundation of Kush kingdom in Africa
2000 B.C.	Advances in astronomy and mathematics; 2000-1500: Stonehenge built; 1500: Hittites perfect iron smelting; Syrians devise early alphabet; 1150: Olmec civilization in Mexico
3000 B.C.	Alloying of copper and tin to produce bronze; pottery wheel, plow, and cart wheel; 2800: Old Kingdom founded in Egypt—first pyramids; 2500: domestication of horse in Asia
6000 B.C.	Coiled pottery and weaving in Near East; beginnings of agriculture in Europe and Mexico; 5000: smelting of copper
8000 B.C.	Agricultural revolution underway; domestication of animals and cultivation of wheat and barley; bow and arrow in general use; transition to settled villages
10,000 B.C.	Hunting and gathering cultures; atlatl in general use; the Americas settled since at least 25,000 B.C.