

Missouri Archaeology



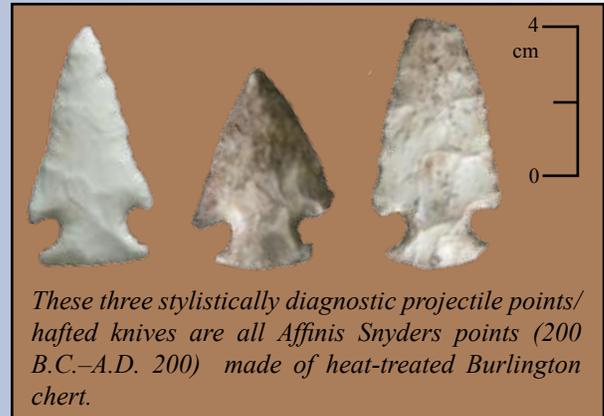
American Resources Group, Ltd., Excavating Site 23LN1379 in the Winter of 2008/2009.

During the winter of 2008/2009 a prehistoric Native American camp site, designated 23LN1379, was excavated near the Cuivre River in southern Lincoln County, Missouri. The site was identified during an archaeological survey before construction of the Keystone Pipeline (for more information about the pipeline, see back page).

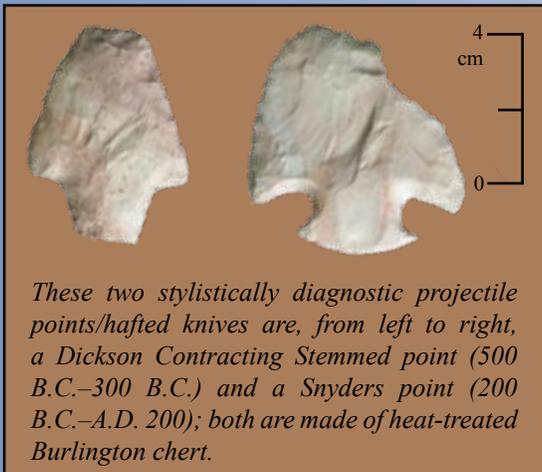
The Native American people that camped at site 23LN1379 lived during what archaeologists refer to as the Woodland Period (1000 B.C. to A.D. 1000). Prehistoric cultural groups are distinguished primarily by reference to two classes of artifacts: ceramic vessels and projectile points/hafted knives. Pottery and projectile points can be separated into types on the basis of distinctive stylistic attributes, and the recovery of these types from datable contexts allows archaeologists to assign these artifact types to specific temporal and cultural periods.



Native Americans camping at site 23LN1379 were doing so along the base of a slope adjacent to a tributary of the Cuivre River some time between 30 B.C. and A.D. 310. At site 23LN1379, a cluster of nine shallow, circular pits were identified, ranging in diameter from one to four feet. Each of these pits appears to have been used only once for cooking before being filled with refuse. Because these pits contained artifacts and food remains found in association with charcoal suitable for radiocarbon dating, they are like 'time capsules' that yielded a wealth of information on the material culture and diet of the site occupants as well as the age of the site and the season of the year the pit was used. These nine pit features and the archaeological evidence recovered from them suggest this site was a temporary field camp used by a small, nuclear or extended family during the fall season. This group collected wild plant foods native to the area with a focus on the fall nut harvest from the nearby oak, hickory, and walnut trees. The plant remains recovered at this site also suggest that these people were bringing food, particularly processed grains, to this site. This evidence suggests that the people at the site were harvesting and processing nuts that would be transported to another, more permanent site where people were engaged in gardening.



These three stylistically diagnostic projectile points/hafted knives are all Affinis Snyder's points (200 B.C.–A.D. 200) made of heat-treated Burlington chert.



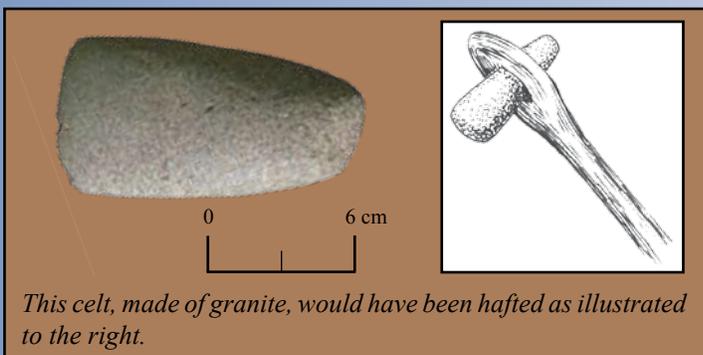
These two stylistically diagnostic projectile points/hafted knives are, from left to right, a Dickson Contracting Stemmed point (500 B.C.–300 B.C.) and a Snyder's point (200 B.C.–A.D. 200); both are made of heat-treated Burlington chert.

Because the soil conditions didn't allow for the preservation of bone, almost no identifiable animal remains were found at site 23LN1379. However, the stone tools recovered suggest that hunting and processing of animal materials took place at the site. Projectile points/hafted

knives recovered at the site would have been used for hunting, while blades and scrapers would have been used for processing meat, animal hides, or perhaps working wood for tools. A ground stone celt was also found at the site, suggesting the site occupants were cutting down trees and using wood for tools.

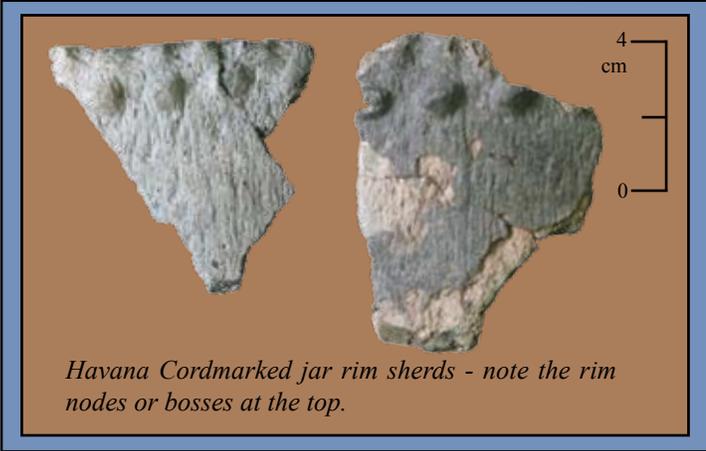
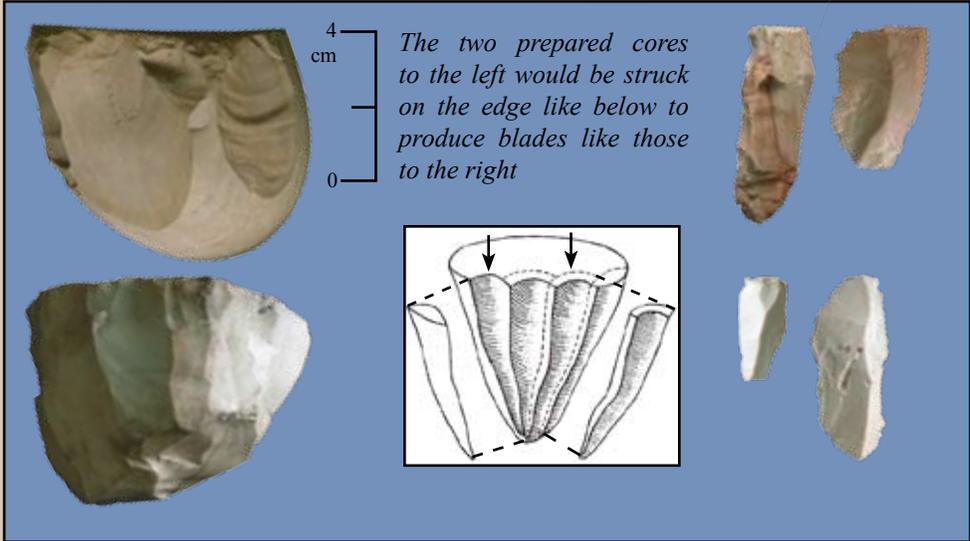


Scrapers, like the two above, could have been used in many tasks like processing meat and animal hides or to plane wood (both scrapers are of Burlington chert).



This celt, made of granite, would have been hafted as illustrated to the right.

The occupants of site 23LN1379 utilized a stone-tool technology that allowed them to produce flake tools whenever they needed them. This technique, called prepared core technology, begins with a nodule of chert, which is a type of stone that can be flaked. First, the nodule is shaped into a cone and one end is cleaved off to make a flattened surface. Then, the core is placed with the flat side up and struck on the edge of the flat surface. This results in a long, narrow, parallel-sided flake, or a blade, being detached from the core. Multiple blades can be detached from a core in a circular or spiral fashion as it is whittled down (see core and blades to the right).



The pottery recovered at site 23LN1379 has been identified by archaeologists as stylistically and technologically related to pottery found at the Havana Site in the Illinois River Valley in west-central Illinois. Havana pottery has been recovered from similar prehistoric sites in nearby counties in both Missouri and Illinois. One of the most distinctive characteristics of the Havana pottery recovered at site 23LN1379 is the presence of nodes, or bosses, that were impressed along the inner surface of vessels just below the lip (see sherds to the left). Another characteristic of Havana pottery is stick impressions that were pressed on and below the rim lips (see sherds below). From the size and shape of the sherds of pottery recovered, it appears

that the vessels at site 23LN1379 were jars and bowls that were used for cooking and serving food, as well as for storage.

The Havana pottery, the prepared core technology, and the Snyders, Affinis Snyders, and Dickson Contracting Stemmed projectile point types recovered at site 23LN1379 are evidence that this site was part of a social and economic exchange network during the Middle Woodland period called the Hopewell Interaction Sphere. The Hopewell Interaction Sphere is named after an area in south-central Ohio where, during the Middle Woodland period, large groups of village-dwelling Native Americans built various shaped mounds, geometric earthworks, and ceremonial complexes. Although the Hopewell Interaction Sphere is named for these very large sites with massive, complex features, sites of all sizes were involved in the flow of goods and ideas in this network that ranged from North Carolina to eastern Missouri and from the Great Lakes to the Gulf Coast.





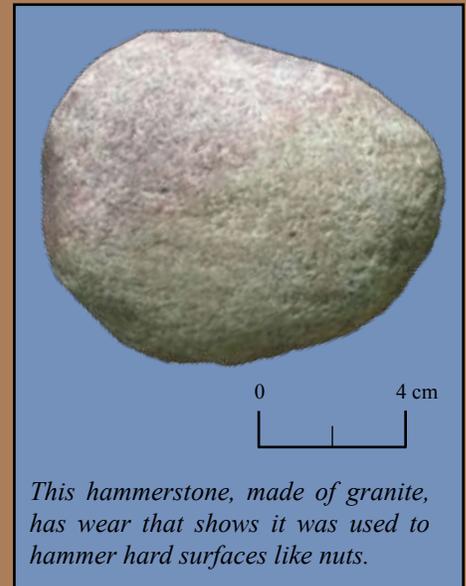
Keystone Pipeline construction in North Dakota.

The Keystone Pipeline is 2,151 miles long and transports 590,000 barrels of crude oil per day from Hardisty, Alberta, to markets in the Midwestern United States at Wood River and Patoka, Illinois, as well as to Cushing, Oklahoma (visit TransCanada's website for more information: <http://www.transcanada.com/keystone.html>). The excavation conducted at site 23LN1379 was carried out by American Resources Group, Ltd. (ARG), of Carbondale, Illinois. The excavations were conducted in order to fulfill the requirements of Section 106 of the National Historic Preservation Act of 1966, the Archaeological and Historical Preservation Act of 1974, and Title 36 of the Code of Federal Regulations, all of which exist to protect our collective cultural heritage in the United States.



This preform is a tool that was not completed because the edge collapsed in the center threatening the integrity of the tool (see arrow above).

Since TransCanada was to construct the pipeline through the land where 23LN1379 is located, the portion of the site that would have been disturbed was archaeologically excavated by ARG in the winter of 2008/2009, and all cultural materials were collected and preserved. After the materials recovered during the excavation were analyzed and catalogued by archaeologists, zoologists, and botanists, a technical report was prepared to document and preserve the history of the site.



This hammerstone, made of granite, has wear that shows it was used to hammer hard surfaces like nuts.

The archaeological excavations at site 23LN1379 have opened a window into the lives of the prehistoric people of eastern Missouri, providing information on how the inhabitants of this part of our country lived over 2,000 years ago.

This release and the preservation of our nation's cultural heritage was made possible by the cooperation of these private businesses and state agencies:



United States Department of State
Bureau of Oceans and International Environmental and Scientific Affairs



American Resources Group, Ltd.
Carbondale, Illinois