Illinois Archaeology

American Resources Group, Ltd., excavating site 11MS17 in the winter of 2008/2009.

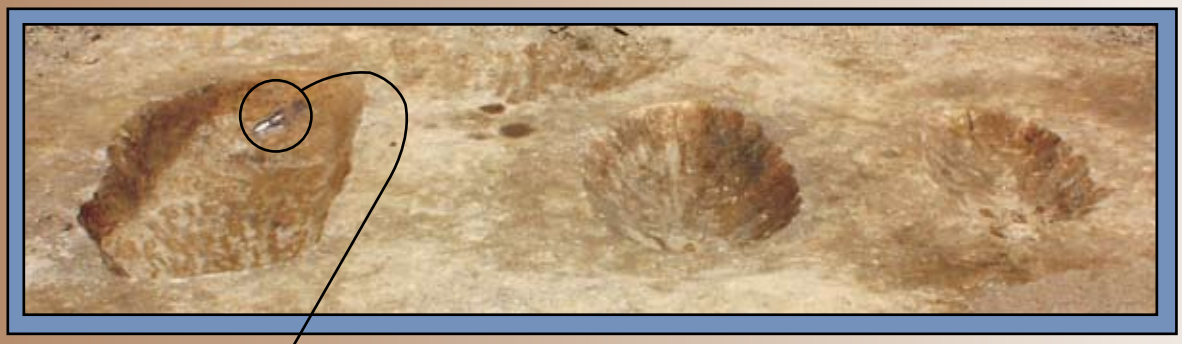
Site 11MS17 is a prehistoric archaeological site located on a terrace at the eastern edge of the Mississippi River valley in Madison County, Illinois. The portion of site 11MS17 located within the Keystone Pipeline Project corridor was excavated prior to construction in order to recover information concerning the prehistoric Native American occupation of southwestern Illinois that would have been otherwise lost (for more information about the pipeline, see back page).

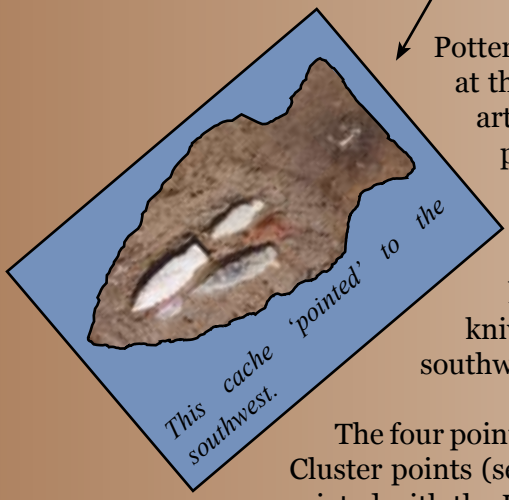
Although there is evidence that prehistoric groups occupied site 11MS17 as early as 3000 B.C., most of the cultural material recovered by archaeologists at the site indicates it was most intensively occupied from A.D. 600 to A.D. 1270, a timespan archaeologists refer to as the Late Woodland and Mississippian periods.

Over a two-week period in early 2009, a team of archaeologists from American Resources Group, Ltd., excavated approximately 29,000 square feet within the pipeline construction corridor, an area more than half the size of a football field. Despite the large size of the area that was excavated, only 534 artifacts, weighing about 35 pounds, were recovered. Nonetheless, this investigation did result in the identification and excavation of five prehistoric features.

Archaeological features are the remains of human activities that have become part of the landscape. The most common prehistoric features encountered by archaeologists are pits that were used by people for cooking, storing food, and for discarding refuse; however, prehistoric features can also be the remains of structures, organically enriched soils containing artifacts and food remains (middens), and burials. Because pit features often contain artifacts and food remains found in association with charcoal used for radiocarbon dating, these features are like 'time capsules' that can yield a wealth of information on the material cultural and diet of the site occupants; this information can also be used to determine the age of the site and even season of the year the pit was used.

Of the five features identified and excavated at site 11MS17, three are particularly interesting: these large, elliptical pits had been positioned side by side, about three feet apart, and oriented north/south (see immediately below).



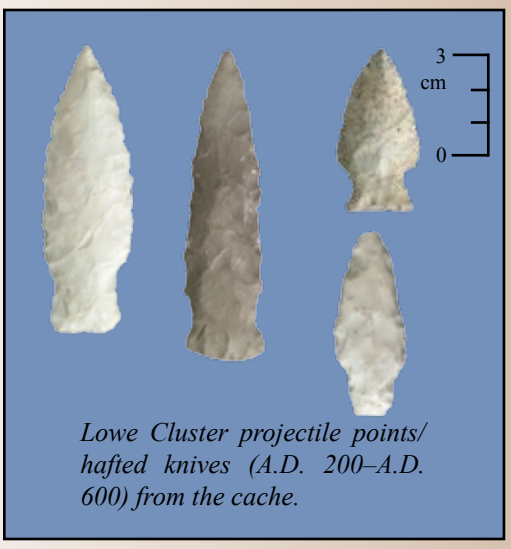


Pottery and stone tools were found in each of these three features, but at the base of the largest one (the one on the left, above), a cache of 11 artifacts was found, including four projectile points/hafted knives, a piece of galena, and a piece of ochre. Galena and ochre were personal items; galena was polished for adornment and ochre was crushed to make pigment. Three of the four projectile points/hafted knives in this cache were placed parallel to each other and appear to have never been used; moreover, all four projectile points/hafted knives had been deliberately positioned so that they pointed to the southwest (see left).

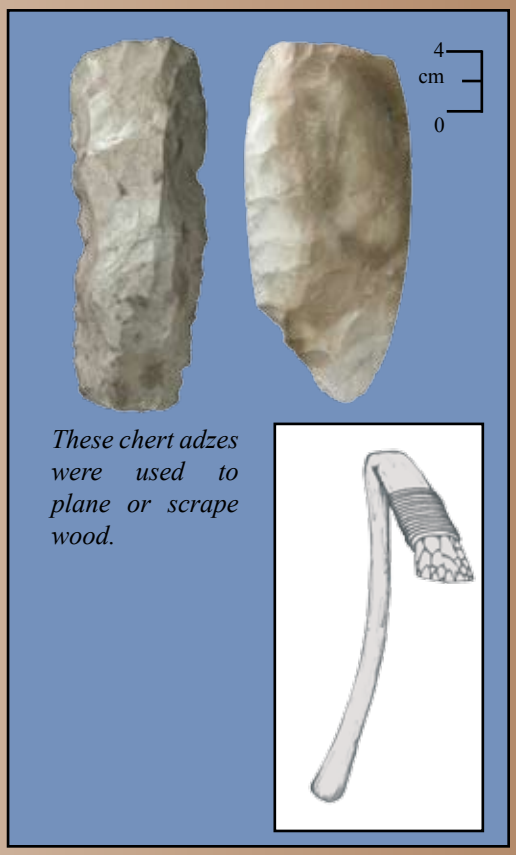
The four points are classified by archaeologists as Lowe Cluster points (see above right, facing page), a point type associated with the Late Woodland period. Charcoal was also found in these features that was radiocarbon dated to A.D. 620–690, thus confirming the features were excavated during the Late Woodland period. The spatial arrangement of these pits, together with the similarities in pit morphology and the ceramics recovered from them, suggest these three features were contemporaneous. Moreover, the unusually large size and arrangement of these pits, combined with their elliptical shape and the types of artifacts found in them—particularly the cache found in the largest—suggest these Late Woodland features may be burial pits; however, no human remains were found in any of them, so archaeologists cannot be certain about this. While human burial is a practice typically associated with longer-term occupations, there is little evidence the excavated portion of site 11MS17 was intensively occupied. It appears, instead, that the portion of the site contained within the Keystone Pipeline construction corridor lays at the periphery of a more intensively occupied portion of the site that is located outside the corridor.

Other artifacts from the cache, from left to right, top to bottom: galena, oval cobble, informal flake tool, and ochre.

Because the soil conditions at site 11MS17 did not allow for the preservation of bone, almost no identifiable animal remains were found at the site. 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 used for hunting and butchering, while flake blades and scrapers could have been used for processing meat and animal hides. Additionally, two chert adzes were recovered that could have been used for woodworking (see right).



Lowe Cluster projectile points/ hafted knives (A.D. 200–A.D. 600) from the cache.



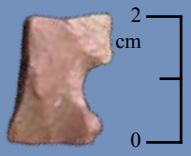
These chert adzes were used to plane or scrape wood.

The pottery recovered at site 11MS17 has been identified by archaeologists as stylistically and technologically related to pottery found at Cahokia, a large village site located approximately 11 miles south of 11MS17. Cahokia pottery has been recovered at at other prehistoric sites in the American Bottom, the regional name for the portion of the Mississippi River valley in which site 11MS17 is located (see area shaded in red on the left). The most distinguishing characteristics of the Cahokia pottery recovered at site 11MS17 are the high rims and the red slip applied to the vessel exterior that gives it a rich, earthy red color (see pottery right). From the size and shape of the potsherds recovered at site 11MS17, it appears that the vessels at the site were jars that were used for cooking and storage.

These two rim sherds are of a type known as Cahokia Red-Filmed. The clay used to make these ceramic vessels was tempered with crushed shell.

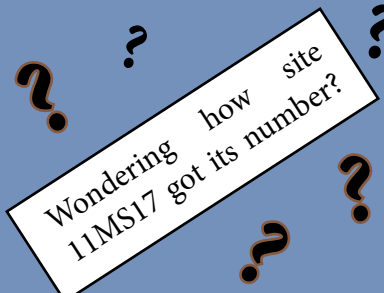
The Keystone Pipeline is 2,151 miles long and transports 590,000 barrels of crude oil per day from Hardisty, Alberta, to markets in the Midwestern United States at Wood River and Patoka, Illinois, as well as to Cushing, Oklahoma (visit TransCanada's website for more information: http://www.transcanada.com/keystone.html). The excavation conducted at site 11MS17 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. Since TransCanada was to construct the pipeline across the land where 11MS17 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.

Keystone Pipeline construction in North Dakota.



This fragment of a Raddatz Side Notched point was recovered at site 11MS17 during Phase II testing. Raddatz points date to the Middle Archaic period (6000 to 3000 B.C.).

Site 11MS17 was originally discovered in 1954 and called the Judge Gillam site, named after the owner of the land at the time. In the 1960s, this site was combined with another site to the north, and renamed the Indian Creek site. Portions of this site have been surveyed and excavated by archaeologists four times since its original discovery. In 2008, the site was tested by ARG to evaluate the eligibility of the site for listing on the National Register of Historic Places. Stone tools and over 200 potsherds were recovered, and two features were identified. This led archaeologists to the conclusion that site 11MS17 was significant, which was the reason the archaeological excavations described in this bulletin were conducted.



Site 11MS17 was the 17th site recorded in Madison County, Illinois, after the Smithsonian Trinomial Numbering System took effect in the early 20th century (the '17' at the end of 11MS17 represents this fact). Meanwhile, '11' is the number for the state of Illinois and 'MS' stands for Madison County.

The archaeological excavations conducted at site 11MS17 have opened a window into the lives of the prehistoric people of southwestern Illinois, providing information on how the inhabitants of this part of our country lived 1,400 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:

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