

EARTHWATCH INSTITUTE FIELD REPORT

Earthwatch Institute Mission: *Earthwatch engages people worldwide in scientific field research and education to promote the understanding and action necessary for a sustainable environment.*

Earthwatch Institute uses the UNESCO Definition of a Sustainable Environment: *A sustainable environment is one in which the natural environment, economic development and social life are seen as mutually dependent - and the interaction between them contributes to the sustainability and enhancement of the quality of people's lives and the natural environment.*

SECTION I: UNEP- WCMC WEBLINK INFORMATION

Project Title: Mound Builders on the Mississippi

Principal Investigator (s): John E. Kelly, William R. Iseminger

Position/Affiliations: Lecturer in Archaeology, Department of Anthropology,
Washington University, St. Louis, MO (Kelly); Assistant Site Manager, Cahokia
Mounds State Historic Site, Collinsville, IL (Iseminger)

Research Site(s):

Cahokia Mounds State Historic Site, 30 Ramey Street, Collinsville, IL 62234. The site sits in the broad floodplain of the Mississippi River known as the American Bottom and is located about 8 miles east of St. Louis, MO.

Local Management Status of the Research Site:

Cahokia Mounds State Historic Site is managed by the Illinois Historic Preservation Agency; it is also a US National Historic Landmark and a UNESCO World Heritage Site.

Key Research Objectives:

- To reopen old excavations and relocate particular structural features representing the Palisade constructions around central Cahokia
- To pursue one particular trench to see if it is one of the Palisades turning west to go behind Monks Mound and confirm that the Palisade formed a complete enclosure around the Central Ceremonial Precinct
- To examine other features that predate or are contemporary with the Palisade constructions to better understand land use patterns in that part of the site

- To examine the forest resources of the Collinsville bluffs to see what tree species are present today and the availability of those that would be suitable for Palisade construction
- To correlate information derived from this project with that from other areas of the Palisade excavations
- By defining the Palisade route(s), to better define what area of the site was enclosed as the Central Ceremonial Precinct
- To get a better understanding of Cahokia's defensive system, how it changed through time, and what it implies about their socio-politico system and the impact on the environment

Data Collection and Results

- a) Give a concise account of the data you have collected during the past field season.

We relocated several of the Palisade trenches in the previously excavated areas we opened up; followed several trench features beyond the previous excavations; and identified several features superimposed by the Palisade trenches, including rectangular and circular pits, some of which were quite deep. Artefacts and other materials recovered were kept separate according to the level, unit and, when possible, feature in which they were found. These will be analysed later to help narrow down the time frame for each feature and thus the archaeological phase to which they belong.

- b) What progress have you made towards achieving your original objectives?

Our primary objective this year was to pursue the east-west trench found in the earlier excavations and it does continue to the west in the new unit that we opened. In cross-section it exhibits the width and depth characteristic of a Palisade trench, so we believe we have confirmed that this is indeed one of the Palisade trenches that has turned to go behind Monks Mound. To fully confirm this, we will need to pursue the trench farther in future projects to the point where a bastion should be located, which will clarify which of the four Palisade constructions this represents.

- c) Please provide a summary of your results (even if they are preliminary).

As mentioned above, we believe we have confirmed a Palisade wall trench heading west. We also encountered two north-south trenches in a new unit opened to the north of and adjacent to our primary excavation units. The southeast quadrant of this two-metre square unit had been previously excavated but the other quadrants were new excavations. One trench was as wide as some Palisade wall trenches, but it seemed too shallow to classify as one. Adjacent to it was another narrower and even shallower trench. These two features may be related to some pre-Palisade constructions, perhaps a large building. In addition, there was a large ovoid pit feature abutting the smaller trench. When a cross section was made of all these features, this pit feature was extremely deep. Unfortunately, only a small portion of it was exposed in our excavation unit so we could not determine the function.

When following the east-west trench to the west, it also superimposed on a large pit feature, a portion of which was also very deep. These may be large refuse pits or possible borrow areas that were later filled with refuse and re-deposited soils. Several other features were also exposed, both rectangular and circular in form. They all appear to predate the construction of the Palisades and indicate extensive residential use of this area, supporting what was found in earlier excavations in this area of the Cahokia site.

Our survey project along the Collinsville bluffs to examine and count trees in a certain area was productive but did not necessarily produce the kind of results we had hoped for. We found that a large number of the trees growing there now were non-native introduced species and not as representative of the oak and hickory species believed to be used for most of the Palisade construction. It was later determined that much of the growth seen in that transect, next to a large conical mound, was secondary growth. The survey still provided information about plant succession in disturbed or possible clear-cut areas. In future projects we plan to examine more pristine sections of the bluff edge and slope that might be more representative of the kind of forest growth that was originally along the bluff line.

Significance/Benefits of Research

a) What is/are the significance/benefits of your research at the following levels?

- Local (in the area of the research site): This Palisade project is part of a continuing project to better identify where various segments of the walls exist around the central part of the Cahokia site and this project will help define at least where one of the walls is located. It will help us more clearly define the Central Ceremonial Precinct and thus something about the community layout and how it may have changed through time. We also hope to reveal information about how resource exploitation may have impacted the local environment, especially with the removal of the thousands of trees needed to construct each Palisade and how that may have affected the local flora, fauna regime.
- National: This project will help expand our data and knowledge base about Cahokia, and Cahokia as part of the Mississippian cultural tradition. Information provided by our study of the Palisade system can provide comparative information for those studying similar fortifications at other sites.
- International: This Earthwatch project will give Cahokia more international exposure as America's pre-eminent archaeological site. The research will also contribute to knowledge about the emergence of complex societies, ancient fortifications and warfare, urban planning, and the exploitation of resources and impact on the environment

b) How do your findings contribute to issues of sustainability?

Although we are in the early stages of this project, we hope that the information gathered will contribute to a better understanding of how Cahokia was able to maintain the large populations estimated for it and how the leadership was able to coordinate this society for the many centuries it existed. It is possible that the construction of the Palisade may have negatively affected the local ecosystem and, coupled with natural environmental and climatic changes, social and political readjustment and other factors, contributed to Cahokia's eventual demise.

Dissemination of Results

a) Have you provided details of results from your research to or within:

- Scientific papers (indicate status; e.g., peer reviewed or in progress/press)
 - Please provide full references

-A professional paper on this year's project was presented at the joint meeting of the Southeastern Archaeological Conference and the Midwest Archaeological Conference in St. Louis, Missouri, on Friday, October 22, 2004. Management plans and reports (in progress or completed).

- By who, for whom, and used by which agencies

-a formal excavation and research report will be submitted by the end of the year to the Illinois Historic Preservation Agency, as required by permit to excavate, with copies distributed to the Illinois State Museum, Cahokia Mounds State Historic Site, and other institutions as required.

- Presentations (given or planned)

- Who was the audience? How many people attended?

-a summary of the project will be given as a slide program for the Cahokia Archaeological Society, a local chapter of the Illinois Association for Advancement of Archaeology later this fall. Attendance is usually 20-30 people.

- Popular articles or films (in progress or completed)

-a summary article on the project will appear in the winter 2004-2005 issue of the *Cahokian*, the quarterly magazine of the Cahokia Mounds Museum Society.

- Books, chapters, illustrations

Will be included as part of a chapter in an edited volume on Palisade construction in the American Bottom.