

### THE OHIO ARCHAEOLOGICAL COUNCIL

## NEWSLETTER

Vol. II No. I March 1999

### PRESIDENT'S MESSAGE

### Martha Otto

On January 27, 1999, your Board of Directors met to discuss a wide range of topics, all focusing on the future of the Ohio Archaeological Council. We looked at ways to increase membership and member participation in OAC business, as well as activities that will fulfill the goals and interests of the Council. It was an exciting brainstorming session! We explored the following ideas:

- 1. Increase membership by writing to people who have dropped out, find out why they are no longer members and encourage them to join again.
- 2. Establish an OAC website that will introduce the organization, list our activities, and provide membership information, perhaps even on-line membership applications.
- Continue to encourage existing members to recruit new ones.
- 4. Enhance public education in archaeology by:
  - a) providing educational materials on the proposed OAC website.
  - b) developing teacher workshops,
  - c) organizing an annual Archaeology Week/Month with OAC-coordinated activities around the state,
  - d) strengthening relationships between the OAC and avocational archaeologists,
  - e) organizing a joint meeting of the boards of directors of the OAC and the Archaeological Society of Ohio to air differences and to identify positive ways the two organizations can work together to benefit Ohio archaeology [the OAC's response to recent editorials published in the *Ohio Archaeologist* is printed elsewhere in this newsletter].

#### 5. Preservation Advocacy:

a) Continue and strengthen the Council's efforts to preserve significant cultural resources through public education and direct involvement in the legislative process.

At the same time, the Board recognizes its continuing responsibilities to our other on-going activities such as administering the grants program, publishing the papers from our various conferences, and organizing worthwhile biennial meetings.

There are a lot of things on our plate whose success depends considerably on the interest and enthusiasm of the members. You can do your part by nominating a new member, volunteering to serve on a committee or as an officer, participating in our meetings, etc. How well we all as individual members work toward meeting these goals will determine just how strong the OAC as an organization will be at the beginning of the new millennium.

### IN THIS ISSUE

President's Message	.1
OAC Legislative Report	2
OAC Responds to Editorials	.2
OHPO Invites Nomination	3
Call For Responsible Curation	4
OAC Hosts ESAF	5
OAC Spring Meeting	5
Report of Textile Analysis	5
Geophysics at High Bank	
Calendar of Events	

### OAC LEGISLATIVE ISSUES COMMITTEE UPDATE

Page 2

Al Tonetti, Chair

### Electronic Access to the 123rd Ohio General Assembly

You can access the full text of bills, track their progress as they work their way through the General Assembly, get information on committee hearings, a schedule of floor votes, get information concerning state legislators and more by accessing the General Assembly's web site at www.legislature.state.oh.us. Links to the Governor's Office, state agencies, and other state government web sites are available.

The web site is supposed to be updated daily, so the information should be accurate and up-to-date. Unfortunately, you cannot yet obtain state legislators E-mail addresses from this web site. They are working on making this information available, and once they do you will be able to contact them via E-mail.

Bills from the 122<sup>nd</sup> General Assembly are also available at this web site. If you are interested in Substitute House Bill 429, the revision to Ohio's vandalism and desecration statutes, which was signed into law by former Governor Voinovich and which became effective September 30, 1998, you can find it at this web site.

#### **Substitute House Bill 429**

Speaking of this bill, now law, I want to re-emphasize that this bill was not and is not a "cemetery bill." I don't know how many times I have heard professional archaeologists and hobbyists alike call it "the cemetery bill." There is a lot of misinformation about what this bill did to the vandalism and desecration statutes, and this misinformation is having a negative effect on the conduct of both professional archaeology and hobbyists. Please, educate yourself about this law.

You may have read some of this misinformation spread by Ohio Archaeologist editor Bob Converse in the last two issues of Ohio Archaeologist, including egregious and false statements concerning the Ohio Archaeological Council's role in the bill's passage. The Ohio Archaeological Council did not sponsor this bill. The law simply clarifies what was meant by the term "burial place" in the vandalism and desecration statutes. The term "burial place" has been changed to "cemetery" in the revisions to these laws. This change is probably where the mistaken references to "the cemetery bill" came from, but again, this is not a cemetery bill. Ohio has a separate set of laws dealing with cemeteries, and the revisions

to the vandalism and desecration laws do not affect cemetery law.

With the enactment of Substitute House Bill 429, the vandalism and desecration laws now explicitly state that places where Native American human remains and grave goods are found are included in the list of things not to be vandalized or desecrated. These places were protected before Substitute House Bill 429 was enacted, so nothing has really changed. As long as you have the privilege (i.e., permission, to excavate cemeteries), the vandalism and desecration statutes do not apply. By definition, if you have the privilege to excavate cemeteries you are not committing vandalism or desecration.

### Electronic Access to Federal Legislation Affecting Archaeology

The Society for Archaeology's web site concerning federal legislation and regulatory issues can be accessed at www.saa.org. The most recent update to the government affairs site was November 1998. This update contains a summary of the 104th U.S. Congress with respect to archaeological matters, and information concerning NAGPRA and proposed amendments to this law.

The proposed final revised regulations implementing the National Historic Preservation Act's Section 106 process in 36CFR Part 800 were considered at the Advisory Council on Historic Preservation's (ACHP) February 12, 1999 meeting. The revised regulations were adopted by a unanimous vote; contract archaeologists should become familiar with these changes. You can contact the ACHP at their web site at www.achp.gov.

### OAC RESPONDS TO EDITORIALS

The following is the text of a letter from OAC President Martha Otto to Robert N. Converse, editor of Ohio Archaeologist. This letter was also distributed to the Board of Directors of the Archaeological Society of Ohio and the presidents of ASO chapters across the state.—Ed.

I am taking this opportunity to respond to two editorials published in the Ohio Archaeologist (vol. 48, no. 3, Summer 1998; vol. 48, no. 4, Fall 1998) that contain incorrect statements regarding the Ohio Archaeological Council's activities, especially with regard to the passage of H.B. 429 by the Ohio General Assembly. The first editorial refers to "...the Ohio Archaeological Council ... and the Ohio [Historic] Preservation Office who sponsored the bill" (emphasis added). That statement is not correct. Also incorrect is the statement

that H.B. 429 was, "...formulated and steered through the legislature by the Ohio Archaeological Council and the Ohio [Historic] Preservation Office...." (emphasis added).

On May 6, 1997, the legislation was introduced in the House of Representatives by Representative William Ogg of Portsmouth, apparently at the urging of some of his constituents. The purpose of the bill was to define the term, "cemetery", whichto my knowledge-had never been defined specifically in state law. Also, the bill required that the definition of "cemetery" be added to existing Ohio laws dealing with vandalism (ORC 2909.05) and desecration (ORC 2927.11). The text of H.B. 429 and the revised sections of the code are appended to this letter. House Bill 429 is not the same as the earlier Cemetery Bill (H.B. 432) introduced by Representative Ogg in 1996. That bill, which would definitely have had far-reaching effects on private property and on archaeology, was opposed by both the Archaeological Society of Ohio and the Ohio Archaeological Council.

In the editorial in the Fall 1998 issue of the Ohio Archaeologist is the statement that, "... the Ohio Archaeological Council knew about this law but did not inform the Archaeological Society...." That statement is incorrect. I personally sent a copy of the bill to the ASO president, Bud Tackett, on July 8, 1997. News of the bill and its hearings were published in the OAC's newsletter that is sent to all OAC members, including ex officio members; the president of the ASO is an ex officio member of the Council.

On July 23, 1997, the House Local Government and Township Committee held open hearings on H.B. 429, at which time Robert Genheimer, then-president of the OAC, presented a statement on behalf of the Council. The final paragraph of Bob's statement reads:

In conclusion, while we agree with the bill's proponents that Ohio's cemetery statutes do not afford recognition and consideration of ancient human remains, and we support the sponsor's efforts to address this situation, we do not believe that House Bill 429 effectively resolves the problem. Furthermore, we believe there may be significant and unintended adverse consequences to this bill that should be carefully considered.

Another section of that statement reads:

This bill raises a number of questions concerning the rights of property owners and others whose legitimate activities occasionally bring them into contact with

ancient human remains. For instance, does this bill impede or make it illegal for farmers to plow their fields once human remains are disturbed.... Does this bill require farmers and developers to maintain these places as cemeteries?

It would seem that these concerns, raised by the OAC president are quite similar to many of those mentioned in the Fall 1998 issue editorial.

The Ohio Archaeological Council was founded in 1975 to, among other things, "Promote the conservation and preservation of archaeological sites and records...and to develop among the general public an appreciation of these irreplaceable resources ...." This goal is nearly identical with the Archaeological Society of Ohio's purpose, "... to discover and preserve archaeological sites and material..., to seek and promote a better understanding among students and collectors of archaeological material, professional and non-The OAC's membership includes professional...." professional and amateur archaeologists and the president of the ASO is an ex officio member. Many ASO members have attended OAC conferences. My goal in writing this article is not only to correct errors, but also to establish a more formal dialog between the Ohio Archaeological Council and the Archaeological Society of Ohio. In the spirit of that dialog, the OAC's Board of Directors has extended an invitation to the ASO's Board of Directors to meet together and freely discuss our concerns. We are looking forward to that meeting.

# OHIO HISTORIC PRESERVATION OFFICE INVITES NOMINATIONS FOR OUTSTANDING ACHIEVEMENT AWARDS

Nominations are being accepted through July 1, 1999 for the Ohio Historic Preservation Office Awards, which recognize outstanding achievements in preservation, rehabilitation, and adaptive use of historic properties, as well as publications and educational programs that promote the preservation of historic places in Ohio. The awards are presented in two categories: Preservation Merit, and Public Education and Awareness.

Activities eligible for the Preservation Merit Award include longtime care of a historic property; preservation, rehabilitation, restoration, or adaptive use of an important building or site; and leadership, support, or service to historic preservation. The Public Education and Awareness Award is for advocacy, educational programs, publications, film and

video, special events, and similar efforts which have helped to increase understanding and awareness of historic preservation at the local, regional, or state level.

For a nomination form with full details, contact the Ohio Historic Preservation Office, 567 E. Hudson St., Columbus, OH 43211-2497, (614) 297-2470, Fax (614) 297-2496. The Ohio Historic Preservation Office is Ohio's official historic preservation agency. A part of the Ohio Historical Society, it identifies historic places in Ohio, nominates properties to the National Register of Historic Places, reviews federally-assisted projects for effects on Ohio's historic, architectural, and archaeological resources, consults on the conservation of older buildings and sites, and offers educational programs and publications.

### CALL FOR RESPONSIBLE CURATION

The following is the text of letter submitted to the OAC Board of Trustees by Shaune M. Skinner dated 29 September 1998.—Ed.

Recent research in the Ohio Historical Society Collections Department has revealed a startling and unfortunate situation. Archaeological surveys for Section 106 of the National Historic Preservation Act have been undertaken and archaeological collections have been recovered without being curated in a public curatorial facility. It was somewhat difficult to come to this conclusion because many of the OAI forms were not submitted or when they were submitted did not have a place of curation indicated. However, when noted, most of the forms stated that the materials were curated at OHS. A quick check with the collections facilitator at OHS (Ms. Melanie Pratt) revealed that in fact most of these materials were not at OHS nor had there been any attempt to contact OHS and secure a number for later curation. A number of these forms were completed as far back as 1993 and the accompanying reports are on file at the OHPO. Therefore, it is not likely that the reason the curation has not been completed is attributable to the fact that these artifacts are still in the process of analysis and accessioning. While I would like to believe that this is just coincidence and that OHS is the only facility that does not receive the artifacts that were reportedly curated in that facility, I suspect that this is not the case.

A review of the OHPO guidelines dated 1994 clearly states on page 40 that:

2. Following analysis, processing, and cataloging, collections should be deposited in repositories without delay.

While the terminology "without delay" is somewhat vague, I think we would all agree that five years is sufficient time to deposit collections in repositories.

I do not want to point fingers at specific individuals but a number of the forms and accompanying reports were authored by OAC members. Our own OAC ethics policy states: "The Ohio Archaeological Council must therefore ensure that its members...(c) help to conserve the archaeological record" and "The Ohio Archaeological Council Member's Responsibility to the Public...(1.1) An Ohio Archaeological Council member shall... (f) Insure adequate curatorial facilities."

It appears that the Council is not ensuring that its members conserve the archaeological record or ensuring adequate curatorial facilities. Therefore, I am requesting the Board take immediate action to rectify this situation.

It is time to quit pussy-footing around. We do not need a symposium to educate people or firms. The rules are there, and we just need to enforce them. How can we justify to the people of Ohio or our clients why we should spend their monies to allow some contractor to store these treasurers in their personal collections or basements?

Shaune Skinner's letter and the matter of responsible curation were discussed during the OAC Board meeting on 9 December 1999, and the following statement was issued: "After becoming aware of this issue, the OAC Board affirms its policies concerning the ethical guidelines related to curation." A workshop on the curation of archaeological collections in the state of Ohio is planned for the spring membership meeting of the OAC (see below). Finally, the Board approved a motion directing President Martha Otto to send a letter to Dr. Amos J. Loveday, Jr. of the Ohio Historic Preservation Office alerting him of this issue and inviting comment.; the text of that letter follows.—Ed.

### Dear Dr. Loveday:

I am writing on behalf of the Board of Directors of the Ohio Archaeological Council with regard to the curation of archaeological collections derived from investigations initiated for compliance with Section 106 of the National Historic Preservation Act. There is evidence that some collections are not being properly curated, even when a curation repository is listed on Ohio Archaeological Inventory forms. As you know, the OHPO's Archaeology Guidelines, published in 1994, devotes an entire section to curation, indicating your agency's level of concern for the proper care of these collections. I am writing to ask you to comment on this problem and to indicate the extent to which the OHPO monitors curation.

The Ohio Archaeological Council's Code of Ethics also requires members to help conserve the archaeological record

and insure adequate curation for the collections which they generate. The Board will investigate any violations of these provisions that are brought to its attention.

We plan to have a workshop on curation matters at the spring OAC meeting, likely May 21, 1999. We invite you to designate a representative to present the OHPO's views at that workshop.

Thank you for your consideration.

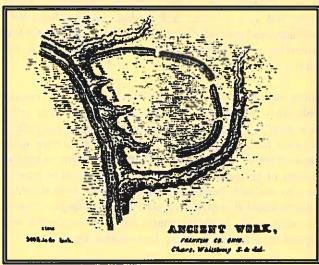
### OAC HOSTS ESAF

This year, the 66th Annual Meeting of the Eastern States Archeological Federation will be held at the Kings Island Resort and Conference Center, Kings Island, Ohio from November 17-21. The Ohio Archaeological Council will serve as the local host organization for the meetings, and, as part of the program, an OAC sponsored-symposium dealing with Ohio archaeology will be held. Plans are also underway to hold the fall business meeting of the OAC in conjunction with the meetings. A pre-meeting bus tour to the Fort Ancient Earthworks and the new Fort Ancient Museum is planned for November 17th. The featured speaker at the ESAF banquet will be Tom Dillehay, who will speak on the famous pre-Clovis site of Monte Verde in Chile. Abstracts for session papers and symposia are due June 1, 1999; all presenters must be current members of ESAF. General information on the Meetings and available the web membership оп is www.siftings.com/esaf.html; detailed information should be requested from the Program Chair: Joseph E. Granger, 8708 Eton Road, Louisville, KY 40241; phone: (502) 852-6864; Fax:(502) 852-4560; E-mail: jegran01@ulkyvm.louisville.edu. Information on local arrangements is available from Martha Otto, E-mail:motto@ohiohistory.org.

### OAC SPRING MEETING ANNOUNCED

The Spring meeting of the OAC will be held May 21, 1999 in the Nature Center at the Franklin County Highbanks Metro Park, ca. 3 miles north of Columbus on S.R. 23. The morning session will have several presentations before the business meeting. A forum on "The Curation of Archaeological Collections" is planned for the afternoon. The forum will be organized like the one last spring on "Training of Professional Archaeologists." A panel made up of representatives from museums, CRM companies, archivists, the OHPO, and state and federal agencies will present summary statements on issues such as the meaning of federal regulations, museum curation costs, longevity of collection and documentation materials, and

documentation of samples returned to property owners. If it can be arranged, the day will end with a guided tour of Squier and Davis' Orange Township works which is preserved in near pristine condition within the park's boundaries.



Orange Township Works (Squier and Davis, 1848)

### REPORT OF ANALYSIS OF SUNWATCH AND MADISONVILLE TEXTILES HELD AT THE DAYTON MUSEUM OF NATURAL HISTORY

Virginia S. Wimberley University of Alabama

A research trip to the Dayton Museum of Natural History was made to locate and preliminarily analyze the prehistoric textiles held by the Museum for inclusion within a database being developed at The Ohio State University to investigate models for the evolution of textile technology and production for prehistoric eastern North America. The database, initiated by Dr. Kathryn A. Jakes, includes fiber perishable information from the Archaic through Ft. Ancient Traditions, detailing the description and characterization of the textile artifacts, as well as the related information as to each artifact's present location, condition, estimated age and cultural affiliation.

At the Dayton Museum of Natural History, V. S. Wimberley retrieved samples from storage and viewed them under a stereo microscope for yarn and fabric construction. Slide film

photography was done to record selected samples, using a 35mm camera with macro lens mounted on a copy stand. Analysis included both the fabric and yarn structure, including yarn complexity of single versus ply, twist direction and angle, yarn diameter, and for fabrics, the type of interworking of yarns to form the fabric, consistency of the technique, thread count or number of elements per centimeter and the type of wear. Twist angle and yarn diameter had to done using a hand held protractor and grid ruler instead of the usual micrometer and protractor discs inserted within the ocular pieces of the microscope.

Some samples from Sunwatch site (33 My 57) remain embedded in soil from the features in which they were excavated. No attempt was made at the time of analysis to fully extricate them. Since the yarns on the surface were quite fragile, it was evident that these samples will require a lengthy amount of time and expert handling for removal to another storage medium. Additionally some samples were mounted between sealed glass plates or in sealed boxes with glass fronts. No attempt was made to remove the samples, since it was beyond the scope of the research to remount samples.

While the main focus was to assess the kinds and amounts of fabric evidence available for the two designated sites of Sunwatch (33 My 57) and Madisonville (33 Ha 14), it was also deemed important by the textile analyst to record the amounts and types of fabric evidence from other Ohio prehistoric sites held by the Museum for inclusion within the Collections

Holding Data Base. Some artifacts had specific provenience, such as Seip, while others were merely designated as "Mound Builder cloth". Copies of the slides and textile analyst's notes were left with the Museum archaeologist, Dr. Jay Heilman.

Table 1 summarizes the amounts and types of prehistoric textile evidence located during the research trip. Due to the condition of the samples, not all categories of desired information were able to be assessed. An artifact accessioning number that encompassed multiple pieces was modified for the table with individual fragments having the accessioning number with a suffix letter added to enable each part to be described. A total of 104 textile fragments were inspected. Basketry was not analyzed during the inspection. Seven fragments from 4507, identified as mound builder cloth by B.B. Thresher, appear to have come from different articles since some display an even balanced twill weave and others are twined. Accessioning number A-6086 fragments appear to have been part of the same article. The fabric construction being a spaced S twined interworking would lead to the judgment of a carrying bag for nuts but not small seeds. Further development of the Collection Holding Database has included examination of some of the textiles at the Ohio Historical Society in Columbus. This work will continue in the future. The support of the Ohio Archaeological Council is gratefully acknowledged for the grant that supported this research.

Table 1. Summary of Prehistoric Textile Evidence at the Dayton Museum of Natural History

Artifact Number	Size of Piece	Element Count /cm	Fabric Type	Yarn Type	Twist Initial/ply	Angle- Ply	Diameter- Ply
4507 -A		7 x 7	2/2twill	2-ply	Z/S		1 - 2mm
4507 -B		3 x 7	Alter. Pair twined	2-ply	Z/S		1 - 1.5mm
4507 -C							
4507-D,		7 x 7	2/2twill	2-ply	Z/S		1.5mm
4507-D <sub>2</sub>		3 x 6	Alter. Pair twined	2-ply	Z/S		1 - 1.5mm
4507- E		2 x 5, 3 x 8	Spaced S twined, Alter. Pair Twined	2-ply, 2-ply	Z/S Z/S		1 - 1.5mm, 1 - 1.5mm
4507 -F		3 x 8	Alter. Pair twine	2-ply	Z/S		1 - 1.5mm
A6084 - A	12.5cm x 9.5cm	6 x 19, 5 x 16	Alter, Pair S twined, 1mm space between active elements	2-ply	Z/S	55°, 40° 50°, 75°	

A6084 -	4cm x	6 x 16	Alter. Pair	2 mln	Z/S		0.05
B	3cm	0 X 10	S twined,	2-ply	2/3		0.05mm,
A6084 -		6 x 16	same space Alter, Pair	2 -1	Z/S		1mm passive
	4cm x	0 X 10	S twined,	2-ply	2/3	2	
C	3cm	5 (	same space	0 1	7.10	400	1.5
6085	8.5cm x	7 x 6	2/2	2-ply	Z/S	40° -	1.5mm
	4cm		twill			50°	
4835 -A	3cm x		Oblique interlace				100
4	1cm		COMP.				
4835 -B	3cm x	- 3	Oblique interlace	-			2
	1cm						
4835 -C	Folded						
COMMUNICATION OF THE PARTY OF T	or		100		1 1 30 1		
	selvedge		4				
4835 On	4.3cm x	1(2 elements)	Spaced S				
display	2.1cm	x 6	twined, space 8mm				
4835 -D	Folded						
	or						
Est.	selvedge			. 43	AN A WILL	AL NO	ALC: YOU
4835 -E	borrougo	1(2 elements)	Spaced S		333		
4033 -L		x 6	twined, space 8mm	1 "			
A-6086-	4.5cm x	A U	Spaced S	2-ply	Z/S		1mm
The state of the s	3cm	2.	twined,	2-pry	LIS	7,31	1111111
A 6096		_	space 8mm Spaced S	O mles	Z/S		1 - 1.5mm
A-6086-	7cm x		twined,	2-ply	ZIS		1 - 1.511111
В	3.5cm		space 8mm Spaced S	0 1	77.10	STATE OF STATE	
A-6086-	2cm x	50	twined,	2-ply	Z/S		
C	3cm		space 8mm	- 1			
A-6086-	6cm x		Spaced S twined,	2-ply	Z/S		DISCUSSION AND ADDRESS.
D	5cm		space 8mm	1100	Million to the state of		
A-6086-	5cm x		Spaced S twine,	2-ply	Z/S		1 - 1.5mm
E	2.5cm	300	space 8mm				
A-6086-	3cm x	1000	Spaced S twined,	2-ply	Z/S		7 1
F	5cm		space 8mm		100		
A-6086-	6cm x		Spaced S	2-ply	Z/S		1 - 1.5mm
G	9cm		twined, space 7 -				
- 1500 A			9mm	1200			
A-6086-	5.5cm x		Spaced S twined,	2-ply	Z/S		
H	6cm		space 8mm				
A-6086-	7cm x	Marie William	Spaced S twine,	2-ply	Z/S		1mm
I	3cm		space 9mm	1 701			
A-6086-	3cm x		Spaced S twined,	2-ply	Z/S		
J	1.5cm		space 8mm				
	1.50111						
A-6086-	1.5cm x		Spaced S	2-ply	Z/S	2001	THE LETTERS
A-6086- K		Fuelu	Spaced S twined, space 8mm	2-ply	Z/S	1937	
	1.5cm x		twined,	2-ply 2-ply	Z/S Z/S		Maria Calinery

A-6086- M	5cm x 2.5cm		Spaced S twined, space 8mm	2-ply	Z/S		
A-6086- N	Loose yarns			2-ply	Z/S		
A-6086- O	Many layers 5cm x 4.5cm		Spaced S twined, space 8mm	2-ply	Z/S		3 1/4 <sup>2</sup>
179	4.5cm x 3cm	Too fragmented	S twined, possible alter. pair	2-ply	Z/S	40°	1 - 1.5mm
Sunwatch feature8/75	Many layers	1(2 elements) x 2.5	Spaced S twined, space 9mm	2-ply	Z/S	60°	2.5mm
Sunwatch feature8/75	Soil embedded	1(2 elements) x 3	S twined	2-ply	Z/S	60°	2 - 2.5mm
Sunwatch feature8/75	Soil embedded	1(2 elements) x 3	S twined	2-ply	Z/S	50°-60°	3mm

### COMBINING GEOPHYSICS AND GROUND TRUTH AT HIGH BANK EARTHWORKS, ROSS COUNTY, OHIO

N'omi B. Greber
Cleveland Museum of Natural History

High Bank is one of a remarkable series of huge Hopewell enclosures that formed a unique planned landscape about 2000 years ago in southern Ohio (Figure 1). At sites such as High Bank, the builders and users did not leave quantities of diagnostic artifacts to date their work. They were frustratingly tidy and took tools and other portable objects away with them. In any case, objects may be physically near a wall but still not date wall construction. Even objects found within wall fill do not necessarily reflect a construction date. Knowing the architectural context of such objects within the wall itself is essential. For several years work has been conducted as time and resources mesh to document architectural details and construction time of walls at High Bank. Geophysical surveys are an integral part of the research plan, partly of course, because of their non-destructive nature. But the earthworks are so large, that even if it were permissible, we could not and would not excavate the whole site. Interpretations of geophysical maps and ground truth are intertwined; each step giving refinements for the work that follows.

The High Bank walls were built on a glacial outwash terrace about 17 meters above the active floodplain of the Scioto

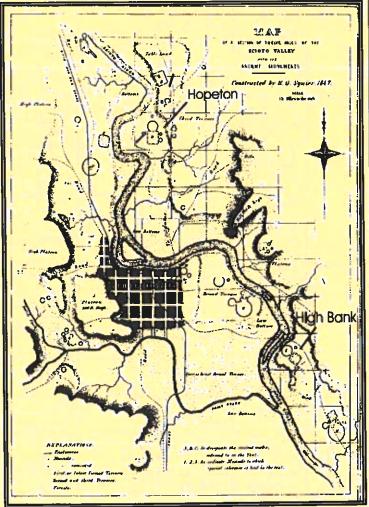


Figure 1: The numerous earthworks near Chillicothe showing locations of High Bank and Hopeton. (Base map: Plate II of Ancient Monuments of the Mississippi Valley by E.G. Squier and E.H. Davis, 1848.)

River. The original design is relatively complex and includes a rare octagonal enclosure (Figure 2). The complete design is related to that at Hopeton, a few miles to the north. Many walls are no longer visible, particularly south of the octagon. Our work has centered on the large circle and its join to the octagon. The wall of the large circle extends for more than 900 meters. The northeasterly side is heavily eroded and not clearly visible on the ground. The expansion of a nineteenth century farm lane has significantly impacted the short neck walls. I will briefly describe results to date from three areas of the wall shown in Figure 3. All are on private land. North of the lane, a farmer grows alfalfa under lease from the Archaeological Conservancy. On the south, crops are rotated among the usual corn, wheat, and beans.

In the South Circle Block (Figure 3) a conductivity survey by Berle Clay using a Geonics EM38 relocated the wall and a trench excavated across the wall by a Kent State University (KSU) field school under the direction of Orrin Shane in 1972. Orrin briefly joined us when we began work at the site. Results of the KSU work indicated that the wall design was complex and possibly included wooden posts. A stone feature was uncovered that seemed a likely target to trace geophysically. Based on my previous experience, I expected that a rock feature could give high resistance readings, provided that the instrument readings did not include the underlying glacial gravels that would mask such signals. A Geoscan RM-15 Resistance Meter from the Midwest Archaeological Center (MWAC) was used to resurvey an area away from the KSU disturbance. Geophysicist John Weymouth, a consultant to the MWAC, analyzed this and other resistivity and magnetic surveys we have conducted since. There was, and is, nothing we could convince ourselves that represented a linear rock feature in the data maps. There was the possibility that the stone line was too narrow to consistently yield anomalous signals, even at the half meter spacing endorsed by John. Limited excavations have produced ground truth showing that the remote sensing was not missing a flat rock pavement extending across the block.

In July 1997 an area was set aside within the corn field where two test trenches were cut across the South Circle block. Trench I was placed in the middle of the surveyed block, Trench II at the eastern edge closer to the 1972 excavations (Figure 3). Excavations showed that only 40 centimeters of the carefully designed wall were left; less than a third of that seen in 1846. The cleared ground surface on which the aboriginal wall was constructed was seen as a distinct line on the walls of all our archaeological units. Wall construction apparently began at the outer circle edge, here the southern end of the trenches (Figures 4 and 5). In the section cut by Trench I, four to five layers of clayey soil, apparently from the flood plain, had been placed one over the other, alternating black and yellow (Figure 4:A). Their thickness ranged from one half to

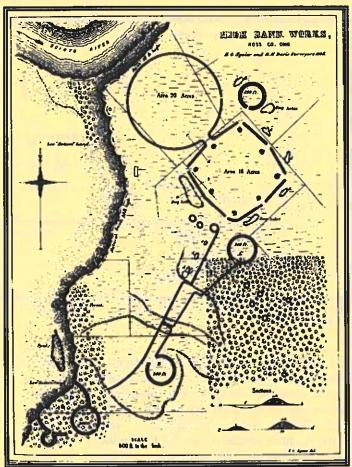


Figure 2: Map of High Bank Works drawn by E.G. Squier and E.H. Davis in 1846. (Published as Plate XVI in Ancient Monuments of the Mississippi Valley, 1848.)

two centimeters. These layers were covered with a coarse, pebbly stratum (Figure 4:B) composed of materials matching areas of the glacial outwash found in the subsoils beneath the wall. A reddish clayey soil (Figure 4:C), placed against this pebbly mantle, is the same soil found in the local B-horizon. A layer of yellow silty clay loess was placed against this red layer (Figure 4:D). Such loess soils occur in many local spots. We identified at least one and possibly two additional outer strata that covered this section of the wall (Figure 4:E). Several large and small post holes extended down from the construction surface (Figure 4:F). The posts themselves were apparently removed before actual wall construction began. The rock feature is a thin, loosely packed stone stratum that in this section of the wall, is sharply angled between the red and yellow strata found on the eastern wall of Trench I. The red and yellow strata, but no such rock feature, were seen on the western wall.

In trench II we located the remains of a fence, not seen in Trench I. A deep trench (Feature 20) held a line of posts towards the outer edge of the circle wall (Figure 5:H). A slide

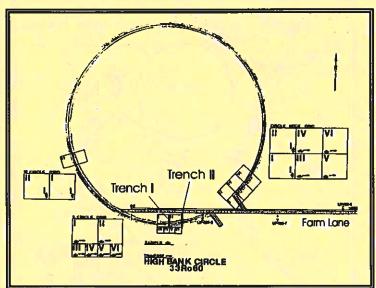


Figure 3: The three major survey areas at High Bank. (Based on map by John Weymouth.)

area (slip trench) (Figure 5:G) was used to set posts into the narrow trench that extended more than a meter below the construction surface. The posts were closely spaced. Reddish clay was used for additional support in the soft glacial outwash sands. The fence had been partially burned, and covered by a series of earthen mantles (Figure 5:E,I,J), probably while still smoldering. Most posts apparently decayed. Luckily, one post (Feature 20D) was charred to its bottom. Calibrating the weighted mean of three radiocarbon assays on pieces of charred oak from this post places the decommissioning of this fence between A.D. 70 and A.D. 340. A fourth date from pieces of weathered charred wood recovered as a unit from the upper debris (Feature 18) of the decommissioned fence is contemporaneous (Table 1).

Within the wall section cut by Trench II, the surface on which the builders stood to place the fence posts was covered with alternating layers of dark and light gravelly soils, also available in the underlying glacial outwash (Figure 5:1). The single layer of granitic, sandstone, and decaying limestone cobbles that angled, almost vertically, between the red and yellow strata 15 meters to the west, was still at their conjoin (Figure 5:K). As the rocks were uncovered, the changing angle became clear. Three small post holes were found under the rock stratum (Figure 5:F). Again, the posts were apparently removed before actual wall construction began. We followed the stones a short distance beyond Trench II as they apparently extend eastward towards the KSU trench. We found remnants of at least one silty clay loam layer over this stretch of wall and decommissioned fence

(Figure 5:E).

John Weymouth used information from the test excavations to produce a mathematically smoothed map of the original RM-15 data. The computer smoothing removed some areas of clutter apparently associated with the wide erosional wash from the wall, and thus better defined wall edges, clay wall strata, and the probable borrow area for earth used to construct the octagon. The cobbles in the single rock layer are so widely spaced that in such a map, the feature, even where it is relatively horizontal on the east, will not be easily distinguishable from the clay strata.

Several sets of resistivity and magnetic surveys have been conducted over the area where the circle and neck walls join (Circle Neck Block, Figure 3). The first set of data located a portion of the circle wall, thus enabling us to place our next set of surveys at a better angle with respect to the neck and circle walls. Resistance readings taken on transects placed at right angles to the expected feature are usually easier to interpret than on transects at other angles. The resistance data obtained on these relocated transects suggests that the neck and circle walls may be made of different materials. A magnetic survey last summer using a cesium gradiometer yielded a clear definition of the join (Figure 6). The small bright anomaly in the center of the circle wall and at the extreme right in Figure 6 are apparently due to interference from surface metal. The field has been farmed since early in then nineteenth century, thus finding a nail or other small metal object not noticed among the plants on the ground as the data are being recorded is not unexpected.

With permission from the Archaeological Conservancy, we have taken a number of one inch cores along one transect across the line of anomalies defining the outer edge of the circle wall in this area. We now know that the sands of the glacial outwash are closer to the surface here than in the South Circle

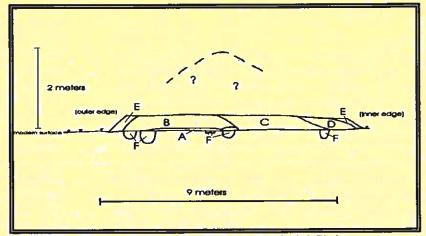


Figure 4: Schematic representation of west wall of Trench I, South Circle Block.

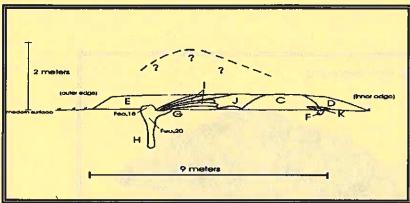


Figure 5: Schematic representation of west wall of Trench II, South Circle Block.

resources to continue our quest to describe the events and construction time associated with other sections of the wall.

#### Acknowledgments

The work to date has been supported by funds and services from private individuals, the Kirtlandia Society of the Cleveland Museum of Natural History, the Midwest Archaeological Center, Hopewell Culture National Historical Park, other NPS agencies and, of great importance, by the willing hands of avocational, student, and professional volunteers. My thanks to all, who together, have brought the project this far.

The plow zone is more Block. consistent. We did not find a fence. The strata and features at the outer edge resemble those in Trench I of the South Circle Block. A reddish clay stratum was found towards the middle of the eroded remnant. We were not able to determine the detailed origins of a series of anomalies that, in the magnetic data obtained by a survey with a sensitive proton magnetometer, follows the outer edge of the wall as a "string of pearls." John Weymouth suspects that the line is due to separate "boulders" or piles of boulders, likely not as far beneath the surface as the glacial outwash. Based on the trenches and cores, my current guess is that the line reflects a series of separate features associated with the beginning of wall construction; features covered by piles of rocks and\or gravels obtained from the glacial outwash.

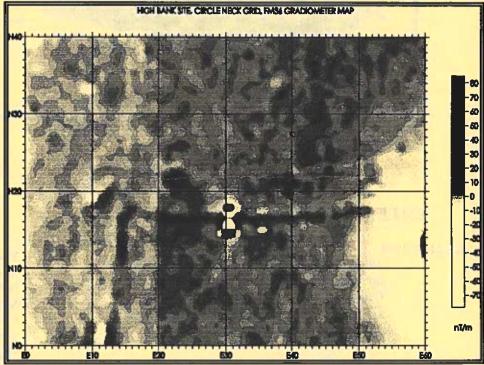


Figure 6: Gradiometer map prepared by John Weymouth based on survey in Circle Neck Block, July 1998.

Lab No.

Provenience

Fea. 18

In the area of the West Circle Block (Figure 3), one can stand on the ground and actually see the eroded wall remnant. The wall is easily traced in the trough of low resistance values seen in plots of resistivity data from this block (Figure 7). At the moment these data form a comparative set for the more eroded sections in the other two blocks we have surveyed to date.

I am quite sure that we have not yet found all the inner strata variations of this Great Circle wall. It is not surprising that pre-construction activity areas were covered with carefully placed intricate mantles; nor that the area near the join of two major parts of the design was probably defined by a fence. These architectural elements are similar to ones in other Ohio Hopewell constructions. Hopefully we will find techniques and

Table 1: Radiocarbon assays based on charred posts found in test Trench II, South Circle Block, 1997.

Years B.P. 2 sigma

Calibrated \*

(2 sigma)

AD 45 to 225

	# m	- lett		(
Fea. 20D	Beta-109207	1740	120	AD 145 to 430
Fea. 20D	Beta-109208	1960	80	BC 35 to AD 130
Fea. 20D	Beta-110640	1830	60	AD 120 to 250

1900

Beta-124044

<sup>\*</sup>Stuiver and Pearson 1993 (Radiocarbon 35:1-23)

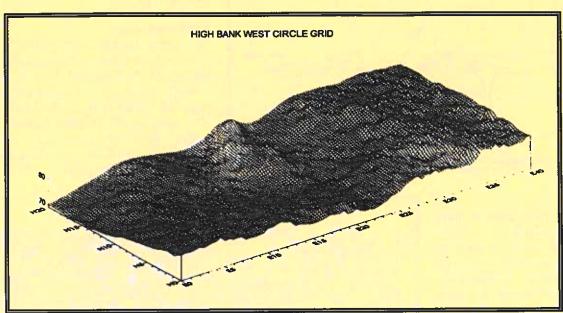


Figure 7: West Circle Block, 3D view of resistance map, analysis by John Weymouth, 1997.

### CALENDAR OF EVENTS

March 24-28,1999

The 64th Annual Meeting of the Society for American Archaeology. Sheraton Chicago Hotel and Towers, Chicago. Contact SAA headquarters, 900 Second St., NE#12, Washington, DC 20002; (202) 789-8200, web site: www.saa.org, E-mail: meetings@saa.org.

April 28-May 1, 1999

The 68th Annual Meeting for the American Association of Physical Anthropologists. Hyatt Regency Columbus, Columbus, Ohio. Contact: Mark Teaford, Dept. Of Cell Biology and Anatomy, Johns Hopkins University School of Medicine, 725 N. Wolfe St., Baltimore, MD 21205; (410) 955-7034, E-mail: mteaford@welchylink.welch.jhu.edu or Douglas Crew; phone: (614) 292-1329/4149, E-mail: crews.8@osu.edu.

October 21-24, 1999

45th Annual Midwest Archaeological Conference. Kellogg Hotel and Conference Center, Michigan State University, East Lansing, Michigan. Contact: Lynne Goldstein or William Lovis, 1999 Midwest Archaeological Conference, Dept. Of Anthropology, 354 Baker Hall, Michigan State University, East Lansing, E-mail: MI 48824-1118; barrickl@pilot.msu.edu [please note MAC on message line].

November 17-21, 1999

The 66th Annual Meeting of the Eastern States Archeological Federation. Kings Island Resort and Conference Center, Kings Island, Ohio. Contact: Joseph E. Granger, 8708 Eton Road, Louisville, KY 40241; phone: (502) 852-6864; Fax: (502) 852-4560 or E-mail: jegran01@ulkyvm.louisville.edu.

### OFFICERS OF THE OHIO ARCHAEOLOGICAL COUNCIL

President: Martha Otto (614) 297-2641

President-Elect: William Dancey (614) 292-9770

Treasurer: Scott Troy (614) 486-6194 Secretary: Eric Fettman (614) 268-2514

Trustees:, Michael Pratt, Chair, Grants Committee (419) 448-2070; David Bush, Chair, Education Committee (419) 448-2327; Jeffrey Reichwein, Chair, Native American Concerns Committee (614) 265-6641; Brad Lepper, Chair, Membership Committee (614) 297-2642; James Heilman, Chair, Nomination Committee (937) 275-7431.

Newsletter Editor: Brian Redmond (216) 231-4600, x301.

The Ohio Archaeological Council is a private, non-profit corporation registered with the State of Ohio in 1975 as a charitable scientific and educational organization promoting the advancement of archaeology in Ohio. The Ohio Archaeological Council consists of professional archaeologists, avocational archaeologists, and interested

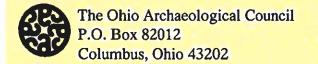
students of Ohio archaeology. Membership is open to all persons and institutions with an interest in Ohio archaeology.

PLEASE ADDRESS ALL CORRESPONDENCE TO: THE OHIO ARCHAEOLOGICAL COUNCIL P.O. BOX 82012, COLUMBUS, OHIO 43202

All submissions for the OAC Newsletter should be made directly to Brian Redmond (Dept. Of Archaeology, Cleveland Museum of Natural History, 1 Wade Oval Dr., University Circle, Cleveland, Ohio 44106-1767; (216) 231-4600 x301; E-mail: bredmond@cmnh.org).

### **Schedule For Submissions**

Deadline Issue
February 1<sup>st</sup> March
September 1<sup>st</sup> October





Ms. Martha P. Otto Ohio Historical Society 1982 Velma Ave. Columbus, OH 43211-2497