Field Notes

Newsletter of the Archaeological Research Institute



In this issue: Introduction to the Guard Site

Volume 1

Issue 2 Summer 2022



From the Director Hard Work & Lofty Goals

Well, here we are, halfway through dig season, and what a busy season it has been! Behind the scenes, we have been working hard to tackle some of our 2022 Strategic Goals--specifically, our preservation goals of expanding the archaeological site preserve, developing a sustainable land management plan, and creating a more park-like setting at the Guard Site. Among the site improvements are a designated parking area for guests, expanded trails, and protection from trespassers. Growing partnerships with the Oxbow, the USDA, Pheasants Forever, and AmeriCorps have enabled us to make significant progress in making these goals a reality.

In late April, the USDA notified us that we had been awarded the EQIP Grant. EQIP stands for Environmental Quality Incentives Program. The grant provides us with financial and technical assistance to address natural resource concerns and helps us enact a plan that delivers environmental benefits. It allows us to take the leased areas of the Guard site and the new parking and trail areas out of agriculture and return them to native plants and hay to protect the archaeological site. With the help of Matt Jarvis (USDA/Dearborn County Soil & Water), Savannah Stout (Pheasants Forever), Julie Rizzo (Oxbow Land Manager), John Klein (Oxbow board member and retired Great Parks Land Manager), and our ARI Archaeology Coordinator, Louis Herzner, we have been able to start this five-year process of taking the fields out of agriculture and creating an archaeological preserve that will be accessible to the public.

Much of the hard labor of removing invasives and surveying/installing an area for a new parking lot and entrance gate was completed by our AmeriCorps NCCC members, and by many volunteer hours from Michael Morman of CML Engineers, and our ARI volunteers. I am thrilled at the progress we have made this summer and have enjoyed the outstanding individuals we have gotten to know and love through their volunteer time with us.

The NCCCs have compiled all their notes and research and have written an Invasive Species Guide Book for Dearborn County. The information we have learned from all the experts who have patiently donated their time and expertise to us will be available to visitors, volunteers, and ARI staff as we move forward with our land stewardship program.

We have also had a tremendous archaeological educational field season so far. We have completed two field school sessions, educated many junior archaeologists through field trips and hands-on experiences, and have started to transition our new public archaeologists into their positions here at ARI. I am excited about what the future holds for ARI!



Field Notes

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Archaeological **Research Institute**

From the Editor ABOUT OUR SUMMER ISSUE



We hope you enjoyed the premier issue of Field Notes, the quarterly newsletter of the Archaeological Research Institute. We appreciate the positive response we received on the first issue and we welcome your feedback and your suggestions for how we can make future editions entertaining and informative.

To say that it's been a busy summer at ARI would be an understatement. Field work, lectures, site tours, trail construction, native cultivars gardening, junior archaeology experiences, youth camp, artifact ID days, trivia nights and many more activities have kept ARI staff and volunteers on the go. Our Field Notes newsletter is one of the ways we strive to make you aware of all that we are doing and of all the opportunities ARI offers for students and volunteers.

In this issue of Field Notes, Senior Archaeologist Marcus Schulenburg presents an introduction to the Guard site, a 700-1,000-year-old archaeological site near the confluence of the Great Miami and Ohio Rivers. Marcus shares some of the knowledge he has gained through years of archaeological work at the site, including who lived here, what life was like prior to European contact, and how this village relates to other known sites from the same time period.

In this issue you can read about work being done at the Guard site and in The Oxbow by a team of hard-working young adults from the AmeriCorps National Civilian Community Corps (NCCC).

Donna Hartman salutes two of our public archaeologists, Christina Youngpeter and Sara Polk, who are leaving ARI this summer to pursue advanced degrees in archaeology. Christina and Sara, along with Bailey Raab, who was featured in the last edition of Field Notes, have been standard bearers for ARI since the beginning and we couldn't be more proud of them or more appreciative of the great work they have done.

Also in this issue, Bailey Raab continues her article on the role of "Women in the Archaeological Record." Allison Sherman shares photos of recent happenings at ARI. Molly Cowan addresses volunteer opportunities at ARI. Samy Norris adds a calendar of upcoming events, and Sara Polk presents a fun maze for our junior readers. Rex, our official barkaeologist, could use the aid of a few bright kids to help him find his way through the maze and back to the archaeological site.

We hope you enjoy the summer issue of Field Notes.



Larry Sandman larry@exploreari.org

ARI Archaeologists on the Move Sara Polk & Christina Youngpeter

By Donna Hartman

While not much good has come of Covid 19, the happenstance of circumstances did lead to an exponential win-win for ARI and employees Sara Polk and Christina Youngpeter.

"My special interest," says Christina, "Is paleoethnobotany." A mouthful – known as "pbot."

In 2020, the summer of their senior year and final semester as anthropology/archaeology majors at University of Cincinnati (UC), roommates Sara and Christina joined ARI as interns when their collegebased field schools were cancelled because of covid. At the end of the summer,



"It's the study of plant-human interactions in the past," she explains. "I love learning about how people used plants in the past throughout different cultures, and how those uses either change or continue into today.

(L-R) ARI Archaeologists, Christina Youngpeter, Bailey Raab and Sara Polk

At the end of the summer, they became ARI employees, graduated from UC that December, and have built their skills as public archaeologists ever since.

Both Sara and Christina wanted to attend graduate school in person, not online, and they were willing to work at ARI until colleges fully reopened. During that meanwhile of almost two years, both Sara and Christina developed a special interest and pursuit in archaeology. Their special interests coincided with hands-on needs of ARI that have very much advanced the organization's research, site management and public participation in activities and education.

Sara is especially interested in spatial analysis within archaeology. "I want to use computer mapping software -ArcGIS and QGIS - to research settlement patterns during the Fort Ancient time period," says Sara. "You can look at where people are living in relation to the natural environment, as well as the other active villages at the time, Sara will attend IUPUI (Indiana University-Purdue to examine social relationships within and between groups of people. You can also look at the spatial arrangements of villages, such as house spacing and activity centers, to learn Christina is headed off to Washington University in St. about the people themselves."

Taking that technology a step further, Sara wants to "create outputs in the form of interactive technology like Story Maps to create meaningful products for the public that are based on solid archaeological research."

I hope to use pbot and other methods in my future research to come up with ways to mitigate the effects of climate change upon our environment and food procurement.

Utilizing her specialty for ARI, Sara has plotted the Guard site big picture and small. She has also worked with VR (visual reality) and AV (audio visual) doing site tours. Christina has researched, recovered and analyzed plant remains that Guard site residents likely cultivated and ate 1,000 years ago. Using that knowledge and consulting with experts, she created at the Guard site a Native cultivars garden and a land stewardship plan that is well underway.

ARI is proud but sad this autumn semester to see Sara and Christina off to graduate schools that vied to have them as students and teaching staff.

University Indianapolis) for a master's degree in anthropology and a certificate in museum studies. Louis, where she has a six-year plan and scholarship to earn a master's and PhD in anthropology/archaeology.

ARI is immensely fortunate to have been a part of Sara and Christina's futures.

A Winning Partnership Teaming Up With Oxbow, Inc & the NCCC

This summer ARI is partnering with Oxbow, Inc. and AmeriCorps on a host of projects aimed at protecting and improving the Guard archaeological site and the adjacent Oxbow property. Through an AmeriCorps program called the NCCC (National Civilian Community Corps), a team of 12 young people between the ages of 18 and 26 have come to the Lawrenceburg area to work at the Guard and Oxbow locations.



NCCC team learning the art of spear throwing using modern reproductions of Native American atlatls.

AmeriCorps is an independent agency of the federal government that engages 250,000 people annually in service projects intended "to improve lives, strengthen communities, and foster civic engagement through service and volunteering." When ARI reached out to AmeriCorps for assistance, the national organization sent the NCCC team to Indiana. NCCC team members have come from all across



Senior Archaeologist Marcus Schulenburg explaining the excavation at the Guard site to NCCC associates

the United States, from as near as Illinois and Pennsylvania and as far as California, Washington, Arizona, and Florida.

Many of the projects undertaken by the NCCC crew involve land reclamation and improvements that make the area more accessible to visitors with minimal environmental impact. Over the years, the area has been overrun by honeysuckle, garlic mustard, crown vetch and other invasive plant species. The team is working to remove the invasive plants and to replace them with native grasses, clovers and flowering plants. They are also helping to build trails to provide environmentally friendly access to the Oxbow area. Other trails will lead visitors past the ARI native cultivars garden and into the Guard archaeological site, where tours will take visitors 700-1,000 years back in time to when ancestors of the Miami, Shawnee and other native tribes lived on the site.

The NCCC is dedicated to strengthening the community and building leaders. Both of these goals mesh well with Oxbow's and ARI's educational programs. The team members, themselves, have learned about land stewardship through Oxbow, Inc., and about responsible archaeological practices through ARI. They have also contributed to ARI's public outreach program by constructing the aforementioned trails and by erecting a large tent over the Smith site, an area where kids get a hands-on experience digging in a simulated pioneer homestead.



NCCC team raising the tent above the junior archaeology dig boxes.

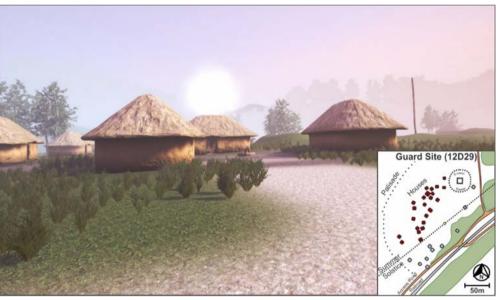
Introduction to the Guard Site (12D29) A 700-1,000 year old Fort Ancient Village

By Marcus Schulenburg

Between AD 1000 - 1300 on a terrace nestled between the Ohio and Great Miami Rivers sat a large, circular village surrounded by acres of corn fields. This village was just one of many in the Tri-State area.

organizations such as extended families, clans, or other extended family units. It is possible that the arrangement of these two neighborhoods was drawn by a shadow cast by the center post at sunrise on the summer solstice.

Today the village is designated 12D29 (the Guard Site), but the men, women, and children who lived there certainly did not call it that. Perhaps the name they used reflected the landscape surrounding the village - the large rivers, broad flood plain, the seasonal ponds, wetlands, and upland ridges that dominate the landscape.



Astronomical alignments are notoriously difficult to prove in the archaeological record.

There are so many important sun and moon rises. constellations, stars and planets that an alignment of some sort is always possible.

Figure 1. VR depiction of the Guard Village looking from the northwest to the southeast Instead of relying

Maybe they named it after themselves, or maybe the name referenced important leaders or revered ancestors. Most importantly, they called it home.

Years of research have led us to know a great deal about the village and the people who called it home. Based on survey data the village could have had more than 50 houses arranged in a circular or crescent shaped along what is now an old channel of the Great Miami River. We are relatively certain that far in the south neighborhood were burned at the end of a small wall or fence called a palisade surrounded the village. Beyond this wall would have been hundreds of acres of maize (corn) fields. The houses were arranged around a large clear area, a plaza, with one or more large posts at the center. The houses were square, made of timber frames with clay-plaster walls and grass-thatched roofs (Figure 1). It is likely 300 or more people lived in this village.

The houses were not placed randomly. We can see clusters of houses that likely represent family groups. When we have examined these clusters from a statistical standpoint it is apparent that there is at least one major division of the village into two or more groups, possibly neighborhoods. These neighborhoods may be social

just on an alignment we can look for other behaviors that differentiate the people living in the northern portion of the village from the southern portion of the village. As previously noted, the gap between the north and south neighborhoods is the largest between any sets of structures. Many, but not all, of the structures in the north neighborhood were burned after they were done being lived in. None of the structures investigated thus their use life. It's not clear why, but abandoned houses were treated differently in different parts of the village.

At the time the Guard village was occupied, there were much larger towns and cities along the Lower Ohio River Valley (Angel Mounds), the Middle Mississippi River Valley (Cahokia), and the Tennessee River Valley (Mouse Creek). These towns and cities (collectively referred to as Mississippian) were centers of culture that were connected and able to spread influence throughout the eastern portion of North America. Archaeologists debate whether this influence spread though population migrations, political influence, religious proselytizing, or a combination of these and other factors. How did these towns relate to the Guard village?

Throughout the Guard site we can see that the villagers were using similar cultural concepts as these larger towns. The use of a large post and plaza was a town organization system shared throughout this network. The specific techniques of constructing the wood framed thatch-roofed houses we see at Guard appears to have originated in the Mississippi valley and spread along the major river valleys. Specific technological advancements such as the use of crushed shell in pottery appears to have very rapidly spread throughout the continent. Underlying and fueling all of these changes was a shared reliance on maize agriculture.

But how was Guard connected to this network? From our excavations we have identified items that do not look like they were made by people who lived in the TriState area (Figure 2). These artifacts are not found across the site. As of summer 2022 they have only been found in the southern portion of the site.

It appears that the north and south neighborhoods were not accidents of ad hoc town planning. There appear to have been two neighborhoods, and it is possible that the boundary was marked by a solar alignment. People in the south neighborhood appear to have had strong, direct, connections to peoples in the large distant towns and cities of the Mississippian world. People in the north of the village had a practice of burning old houses, the people in the south did not share this practice.



Figure 2. Some of the non-local objects found at Guard. Clockwise from upperleft: sandstone pipe depicting a kneeling individual, a pot of similar design and decoration as vessels from Cahokia, a paint technique similar to that at Angel Mounds, a plain vessel similar to those found along the Mississippi and Tennessee Rivers.

It is possible that the south neighborhood was made up of local people who were culturally influenced by these distant towns and chose to emulate their cultural objects. It is also possible some of these people were migrants to the Ohio-Miami confluence. They would have brought some of the objects, techniques, and ideas with them directly. If there were migrants, they appear to have lived exclusively in the south neighborhood. Did entire families migrate here, were these individual spouses moving in with their in-laws, or are there outposts of Mississippians spread throughout the villages of the Ohio Valley for economic, religious, or political reasons? These questions, and many more, are part of what we can ask about the villagers who called the Guard Village home.

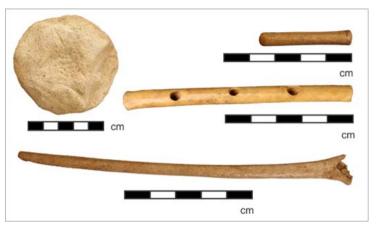


Figure 3. Non-utilitarian artifacts from the Guard Village, clockwise from upper-left: Chunkey stone, game piece, flute, clothing or hair pin.

Life Has Fun and Games

The lives of the villagers were filled with more than eating, getting food, and making tools (to more effectively get food). We know they played many games, sang, danced, and played music (Figure 3). One game involved a stone disc target similar to a game the Muscogee, Chickasaw and Choctaw played called tchung-kee (or Chunkey). The Cherokee Nation have demonstrations of how this game is played available online. One player would roll the target, with the competitors throwing a spear after it, attempting to touch the stone, or to be the closest to the final resting point.

Another game likely played at the village is often called the stick game – in which multiple small bone or wooden sticks are hidden in the hands of the players who try to guess who has which stick. They would have made music on bone flutes and whistles and wood and hide drums along with singing and dancing. They would have worn clothing adorned with pins, decorated in colors and patterns, worn jewelry, tattooed their bodies and expressed their personal and cultural notions of beauty. When we think of the people of this village, we have to remember all the fun, laughing, singing and dancing that would have filled their lives alongside the hard work of clearing and maintaining their maize fields and large villages.

Guard Site - Continued on Pg 11

More than a Pretty Figure Identifying Women in the Archaeological Record By Bailey Raab

As we learned in the last installment of the newsletter, the first attempt at identifying women in the archaeological record was simply through reexamination of past excavations. This is a great way to begin deconstructing our perception of gender and women in the past. But even modern archaeologists are biased. How do we learn about gender in the past, especially among people who are not goddesses or part of the elite, if we can't simply use our own preconceived notions of gender?

If archaeologists have any desire to better understand gender in the past in North America, we need to consult the descendants of the peoples who lived at the sites we are studying. There has been a movement, albeit a slow one, to include Native voices in archaeology. Beyond including Native voices is compensating Native peoples for their time. Native peoples do not owe archaeologists their time or knowledge, especially when, for so long, they have been explicitly excluded from contributing to the knowledge that is published about their own ancestors.

Developing archaeological practices that are based in collaboration with tribal nations is imperative, and this can only be done when respectful and engaged research practices are implemented with, by, and for indigenous communities. The future of archaeology is collaborative or it is unethical.



Figure 1. Axes found at the Guard site. These tools, once associated exclusively with men, were used by women as well

Through discussions with descendants of the Miami, one of the tribes descended from the Fort Ancient, we have learned much about the roles of women in the community. For example, we learned that axes were tools used specifically by women and bows were used by men. An example of an axe used by a woman is pictured in Figure 1. Through our Eurocentric lens we often perceive axes as gendered toward men, and only through collaboration have we determined that at the Guard site this may not have been the case.



Figure 2. Decorated pottery sherd from the Guard site.

Women handled many other tasks in Fort Ancient society. Yes, women cooked, sewed and took care of the children, as has long been assumed. But women also made the pottery used for cooking and storing foods. See figure 2. Women collected and processed fruits, nuts and seeds that helped make up a part of the community's diet. And while men were out hunting, women planted the fields and harvested the crops of corn, beans and squash which actually made up more of their diet than meat did. No doubt women also made many of the tools used in each of these pursuits.

The roles of women in Fort Ancient society were many and varied. Through collaboration with their descendant tribes, we are gaining a greater appreciation of the vital roles that women played.

Latest Happenings at ARI

By Allison Sherman

Summer is "dig season" at ARI. It's a time of discovery as we unearth artifacts and features that give us insights into the lifestyles of the people who lived in the tri-state area 700-1,000 years ago. The public is invited to join us for tours of the Guard site. This summer we're introducing a technology called "augmented reality" through which we are able to stand in the field and see on a computer what the ancient village might have looked like. Kids are invited to join us for a hands-on experience at the "Smith Site," where they can dig in a simulated pioneer homestead.



Team OG Rowdy Camp, won July's Trivia Night at the Funny Farm Coffee Company in Lawrenceburg . Join us on the first Friday of every month for Trivia!



Rain doesn't stop us from digging! But it can be a real challenge to keep water out of our units.



Public Archaeologist, Tania, & Field Student, Jazmin, setting up the total station before doing survey work at the Guard Site.



Public Archaeologist, Sara, showing kids on a school field trip how to use the Augmented Reality system to see what the site would have looked like almost 1000 years ago.



Senior Archaeologist, Marcus, leads the excavation at the Gu8ard Site. Join us on our public days for an archeological experience!

Become an ARI Member!

ARI memberships support our efforts to protect archaeological sites, to offer the public hands-on archaeological experiences, and to train future archaeologists through certifications, internships, research projects, and certified field school. It is through the generosity of individuals, corporations and foundations that we are able to do what we do. You can help by becoming a member. See the attached membership envelope for details or look us up online at https://exploreari.org/membership/.

Volunteer Opportunities at ARI

By Molly Cowan, Volunteer Coordinator

Join us in our archaeological lab Tuesday-Saturday from 9am to 5pm. We have volunteer opportunities for all ages! Read through some of the descriptions below to find out how you would like to volunteer your time.



Flotation • Flotation is our biggest need! Flotation is an analysis method which lets you get hands-on with soil samples straight from the field to discover artifacts big and small from the 2020 and 2021 seasons. This opportunity requires 3-4 hours of volunteering. You will get wet and muddy. Your work will help us gather artifacts and botanical remains from 1,000-yearold contexts.

Data Entry • One of the best ways to help our archaeologists prepare for our archaeological site report is through data entry. Tasks include scanning paperwork, entering data from rough sort sheets, entering data from fine sort sheets, etc. Volunteer work in data entry allows us to digitize all of our data we have collected in order to make it meaningful.

Rough Sort • Rough sort is an analysis method which gathers data from artifacts. It involves sorting artifacts into categories and subcategories, counting artifacts, and weighing artifacts. Volunteers who help with rough sort will work directly with Fort Ancient artifacts from our 2020 and 2021 excavations.

Fieldwork • From now until about the second week of October, we are back in the field for archaeological excavations! General volunteers can help our archaeologists with screening artifacts from the soil, general excavation tasks, and field maintenance such as weather mitigation. Certified volunteers will be able to help with feature excavation and specialized tasks.

> To become an ARI volunteer, please visit www.exploreari.org/volunteer . If you are already a volunteer and would like to sign up for an opportunity, please email volunteer@exploreari.org.

Guard Site-Continued from Pg 7

The Ohio Valley's First Farmers

The villagers were among the first maize (corn) farmers in the Ohio Valley, with 60-80% of their calories coming from maize. Maize is rich in calories, but low in the essential vitamins and minerals a well-balanced diet provides. To compensate, it is likely a portion of this maize was made into a food called hominy. Hominy preparation involves soaking the kernels in lye and steeping them over a low heat for an extended period of time. This process called nixtamalization makes maize easier for humans to digest and increases the nutritional value of maize. Nixtamalized maize has an increased amount of

available B3 vitamin niacin (reducing the risk of pellagra), an increased amount of calcium (reducing the risk of osteoporosis), and an increased availability of

iron (reducing the risk of anemia). In addition to maize, the villagers also continued to grow local crops that had been domesticated in the Midwest thousands of years prior such as Sunflower and Chenopodium (also known as Goosefoot). They also fished in the wetlands and rivers, gathered freshwater mussels, and hunted for deer and turkey.

JUNIOR ARCHAEOLOGY Archaeology Maze

HELP SENIOR BARCHAEOLOGIST REX FIND HIS WAY THROUGH THE MAZE AND GET BACK TO THE ARCHAEOLOGICAL SITE! COMPLETE ALL OF THE PUZZLES FROM EACH ISSUE OF FIELD NOTES BY THE END OF THE YEAR TO WIN A FUN PRIZE!

Start Here!

More Reading:

Cook, Robert A.

2008 SunWatch: Fort Ancient Development in the Mississippian World. University of Alabama Press, Tuscaloosa.

2017 Continuity and Change in the Native American Village: Multicultural Origins and Descendants of the Fort Ancient Culture. Cambridge University Press, Cambridge.

Lewis, R.B., and Charles Stout

1998 Mississippian Towns and Sacred Places: Searching for an Architectural Grammar. University of Alabama Press, Tuscaloosa.

Pauketat, Timothy R.

2010 *Cahokia: America's Great City on the Mississippi.* Penguin Group (USA) Incorporated, New York.

Redmond, Brian G., and Robert A. Genheimer (editors)

2015 Building the Past: Prehistoric Wooden Post Architecture in the Ohio Valley-Great Lakes. University Press of Florida, Gainesville, Florida.



NCCC-Continued from Pg 5

While working in the area, the NCCC members are "glamping" in the yard at ARI's Dover house, where they share two large tents and a renovated garage with a kitchen, shower and a recently added, very welcome air conditioner.

When asked about their favorite experiences since their arrival, several team members cited tours at the Guard site and the nearby Miami Fort earthworks at Shawnee Lookout Park. Others enjoyed getting hands-on experience in an archaeological excavation. And others found pleasure in working together, living together, and sharing many opportunities for team bonding.

With their positive attitudes, strong work ethics, appreciation for learning, and with the good humor that prevails among the group, there is good reason to believe that this NCCC team will achieve its goals of strengthening the community and preparing for roles as future leaders.



Archaeological Research Institute



ARI Calendar of Events

AUGUST

5th	Trivia Night
6th	Farmer's Market
13th	Artifact ID Day
18th	Youth Archaeology Club
20th	Youth Archaeology Club
20th	Whiskey City Summerfest

SEPTEMBER

2nd	Trivia Night
3rd	Indiana Archaeology Month-Midday Knap
3rd	Farmer's Market
10th	Indiana Archaeology Month-Atlatl Battle.
10th	Artifact ID Day
17th	Indiana Archaeology Month-Got Pots.
15th	Youth Archaeology Club (Excavation Day)
17th	Lawrenceburg Wine Walk
24th	Indiana Archaeology Month-Ft. Ancient Food Truck
24th	.Great Outdoors Weekend

OCTOBER

1st.....Farmer's Market 1st......ARI @ Peterloon (Dan Beard Scout Reservation) 7th.....Trivia Night 8th.....Artifact ID Day 11th.....Library Talk @ Cleves Branch 13th.....Youth Archaeology Club 15th.....Youth Archaeology Club 28th.....Haunted/Historic Walk