Midwest Archaeological Conference November 4-6, 2015 - Milwaukee, Wisconsin

PRESENTATION ABSTRACTS (LISTED IN ALPHABETICAL ORDER)

[6] The Susceptibility of Wyandotte Chert to High Power Use-Wear Analysis

ROBERT E. AHLRICHS (University of Wisconsin-Milwaukee) and KATHERINE STERNER-MILLER (University of Wisconsin-Milwaukee)

During the Late Archaic to Early Woodland transition, caches of blue gray chert bifaces were deposited throughout the Midwest, often in association with burials. The types of analyses that can be conducted on these bifaces are restricted by NAGPRA. Specifically, cleaning of artifacts deemed necessary to conduct high power use-wear analysis is prohibited. An experiment testing three progressive levels of washing demonstrates that Wyandotte chert is fine-grained enough to display surface polishes from use even without intensive washing. The positive results of this experiment are then applied a sample of bifaces from the Riverside site in Michigan's Upper Peninsula.

[13] The Lichliter Site Project: A Model for Revealing Hidden Archaeological Collections

SARAH M. AISENBREY and WILLIAM E. KENNEDY (Dayton Society of Natural History)

The DSNH is cataloging a large collection of archaeological artifacts from the Lichliter site, excavated in the 1960s, near Dayton, Ohio. The materials are from the Late Woodland, a poorly known time period in Ohio prehistory. Despite wide interest, no other professional had ever seen the artifacts, maps, or notes until the collection was returned in 2012. To accomplish deciphering and cataloging the site collection into a meaningful, cross-referenced database, the DSNH staff trained on QLC's ArcheoLINK software. This project will serve as the first case study in applying ArcheoLINK as a collection management solution for archaeological research collections.

[5] Burnt to a Crisp: Using Charred Food Remains on Pottery to Reconstruct the Plant Diet of Middle Woodland Populations in Michigan's Upper Peninsula - Phase II

REBECCA ALBERT (Michigan State University); CAITLIN CLARK (Michigan State University, Geography); SUSAN KOOIMAN (Michigan State University); WILLIAM A. LOVIS (Michigan State University)

Microbotanical analysis of carbonized food residue is employed to determine the plant diet of native populations occupying the ca. 2000calBP Winter Site in Michigan's Upper Peninsula. Split samples of carbonized cooking residues from sixteen ceramic sherds were independently processed by two analysts for a variety of wild and domesticated plant species; results are positive for Zea mays, potentially Zizania, various non-diagnostic starches and phytoliths, calcium oxalate, diatoms, and silicified plant tissue. The implications of these results are important for understanding Middle Woodland subsistence and the potential early introduction of maize in Upper Great Lakes diets.



[5] One Vessel, Two Vessel, Three Vessel, More!

MIRANDA J. ALEXANDER, LINDSAY J. LENTZ, MICHAEL J. NEBERMAN, TYLER J. OLSEN, ALEXANDER D. WOODS, and MEGAN N. KASTEN (Colorado State University, Center for Environmental Management of Military Lands)

In the spring of 2015, Colorado State University's Center for Environmental Management of Military Lands conducted Phase II archaeological investigations at the Silver Radio site (47MO884) at Fort McCoy in Monroe County, Wisconsin. A feature (Feature 2) was encountered during the excavation which contained multiple fragmentary Woodland vessels in association with datable charcoal.

[15] Interregional Exchange during the Mississippian Era in the Illinois Valley: Narrating the Exotic Story of Lawrenz Gun Club

M. ALLOY (University of Illinois at Chicago); MATTHEW D. PIKE (Purdue University); JEREMY J. WILSON (Indiana University-Purdue University of Indianapolis)

Research involving the sourcing of raw materials from Pre-Columbian Midwestern archaeological sites has demonstrated that vast exchange networks existed during the mid-to-late Holocene. Despite the fact that concentrations of exotics were often highest prior to the Mississippian Period, recent investigations at Lawrenz Gun Club have yielded marine shell, galena, obsidian, catlinite, fluorite, Mill Creek chert, and copper that presumably were transported hundreds of kilometers to the central Illinois River valley. The current study utilizes extant data, reports on nearby villages, network analysis, and XRF to examine how the range of exotic material made Lawrenz a regional trade center.

[4] Emerald's Empty Architecture

SUSAN M. ALT (Indiana University-Bloomington); TIMOTHY R. PAUKETAT (University of Illinois at Urbana-Champaign)

Six years of investigations at the hilltop sites of Emerald and Pfeffer in the uplands of southwestern Illinois leave little doubt that both were largely vacant "ceremonial centers." The primary reasons for this conclusion are the common occurrence of waterlaid silts in basins and the high building-to-pit and building-to-artifact ratios. Yet Emerald was the scene of massive earthmoving and extensive pole-and-thatch construction. Moreover, Emerald's pole-and-thatch architecture includes the full complement of Cahokia's public or religious buildings, many built with small poles presumably hauled to this prairie location. New evidence now points to a site-wide stratification of building types, with circular rotundas atop the "acropolis." The "shrine houses" below them may have been special temple-like facilities for different groups over decades.

[11] Continuing Investigations at the Walkup Site (11-MH-515), An Early-Mid Nineteenth Century Frontier Farmstead in Northern Illinois

DAN AMICK (Loyola University Chicago); SAMANTHA CASTILLO (Loyola University Chicago); ALANA EMBURY (Loyola University Chicago); DAVID HANLEY (Loyola University Chicago); OLIVIA GUZZARDO (Loyola University Chicago); KATIE SALEM (Loyola University Chicago)

This site was discovered during systematic subsurface survey of the 99-acre Loyola University Retreat and Ecology Campus. Currently, 39 square meters have been excavated revealing typical early-to-mid-nineteenth century farmstead debris as well as 4 pit features and 11 postholes. Archival research documents a squatter's farmstead at this location, which was likely the home of Christopher Walkup, an organizer of the Virginia Settlement party from Greenbrier County, Virginia. Although partially disturbed by late 19th and early 20th century tillage, this site represents a unique opportunity to learn about pioneer migration of an entire community from the Appalachian region to northern Illinois.

[20] Experimental Study of Lithic Artifact Movement and Damage from Tillage

DAN AMICK (Loyola University Chicago) and HANNAH HELMINIAK

Archaeological research in the Midwest commonly occurs in plowed fields. This study reports results from 3 years studying movement and damage on lithic artifact replicas in an experimental plot. Chipped-stone replicas with paint-coatings (n=140) were placed at 75-cm intervals on a 5-by-15 m plot cultivated using hugelkultur and traditional methods employing a rotary tiller. Translocation and damage found on the replicas was documented at periodic intervals. Most artifacts have moved below the surface, but excavation of 10-square meters yielded only one of these specimens. Lateral movement extends up to several meters. Breakage and edge-damage which can mimic use-wear is frequent.

[18] Looking through the fog for the traces: Recent geophysical investigations at the Ancient City of Aztalan

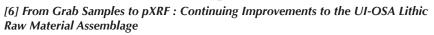
DAVID A. ANDERSON (University of Wisconsin-La Crosse)

In May 2015, a geophysical survey was conducted at Aztalan State Park as part of the University of Wisconsin-Madison's archaeological field school. This work consisted of surveys using both ground penetrating radar and fluxgate gradiometer in areas of proposed excavations. The purpose of the survey was to assist with the placement of excavation units and confirm and identify areas of earlier investigation on the property. This paper will present the methods employed and the results of those surveys.

[3] The Ongoing Quest for the Wreck of the Griffon

DEAN L. ANDERSON (Michigan State Historic Preservation Office)

In September of 1679, LaSalle's vessel the Griffon went missing with a cargo of furs after setting sail from Green Bay in western Lake Michigan. The wreck of the Griffon is perhaps the most sought-after shipwreck in the Great Lakes. Many claims of discovery have been made over the years. A recent claim has received a great deal of media attention, but archaeological evidence does not support the contention that the wreck has been found.



MARK L. ANDERSON (University of Iowa)

The University of Iowa Office of the State Archaeologist (OSA) has an expansive lithic raw material assemblage with a 30 year compilation history. The largest portion contains multiple samples of 75 in-state lithic types while the second portion contains multiple samples from the seven surrounding and 16 additional states. A revision and reorganization of the OSA collection was completed in 2006 to provide a more systematic and consistent approach to lithic identification and sourcing. This includes a web-based version affording access to our entire assemblage from anywhere. Originally a macroscopic identification system, we are now expanding the contents. We have recently posted multiple, 20x microscopic images for all in-state samples. Geologic thin sections of numerous samples are currently in production through collaborative research with anticipated application to the entire in-state assemblage. Using a portable XRF, we are building a chemical and elemental database for all in-state samples. These expanded analytical tools will afford us the opportunity to investigate several geographically and stratigraphically problematic types within the in-state assemblage. Since lithic materials so often dominate prehistoric artifact assemblages, a well-developed comparative assemblage offering more than macroscopic analysis, could afford researchers the opportunity to address a myriad of anthropological questions.

[3] Unseen Indulgences: The Hidden Implications of Commonplace Items for Life on the Wisconsin Frontier

WILLIAM M. BALCO (University of North Georgia) and ALEXANDER W. ANTHO-NY (University of Wisconsin-Milwaukee)

As nineteenth century transportation routes improved, luxury goods and other expendables became more accessible to settlers on the Wisconsin frontier. Some such items are archaeologically visible but also allude to others no longer preserved. For example, the presence of pencil leads and pen quills implies paper and ink; items rarely preserved. This paper explores the record of such expendables at the McHugh Site, an Irish immigrant homestead in north-central Wisconsin. Correlating expendable items with luxury goods such as tobacco and alcohol, as well as historical records, documents the McHugh family's long-term response to regional and national economic trends.

[8] The Shades of Cahokia's "Collapse": Research at the 13th Century Copper Site

MELISSA BALTUS (University of Toledo)

Many theories have been put forth regarding the decline and eventual abandonment of Cahokia, from environmental causes (flooding, drought) to social causes (factionalism, regional warfare, waning political power of ruling individuals). What is often missed, however, is a consideration of the historical processes that would likely have taken place in different ways at Cahokia and throughout the American Bottom during the protracted era of supposed decline (AD 1200 – 1375). Recent research at the upland mound center of Copper, presented here, is beginning to elucidate some of the details of life-as-lived within the Cahokian sphere during these later years.



[4] Refining the Map of the Emerald Site (11S1): The Search for Mound 2

REBECCA M. BARZILAI

In 2013, the Indiana University field school investigated the basal remnant of Mound 2 at the Emerald Site in Lebanon, IL, a circular flat-topped mound east of the main mound. Four test units were put into two ridges where historic descriptions placed the mound. Intact mound fill was encountered under the modern farm driveway as material was added around the remnant mound to level the ridge instead of being destroyed. The revised location and materials from mound fills are refining the picture of how we understand the importance of the site and the cultural and religious practices enacted there.

[23] Community and Communitas at Morton Village

JENNIFER BENGTSON (Southeast Missouri State University)

Turner's concept of communitas refers to the collective liminal experience of a group of people undergoing transition together. A more recent reworking focuses on the 'communitas of disaster', denoting a 'rallying spirit,' downplaying of differences, and setting aside of conventions in the midst of social disruption. I use these ideas as a theoretical frame for an emerging picture of Morton Village– a late prehistoric Mississippian/Oneota site in the Central Illinois River Valley– as a community in translocal/transcultural flux. This informs an understanding of how materially-expressed facets of social relations were transformed in the wake of migration, place-making, and violence.

[20] Summary of the 2015 NSF REU Integrating Archeology and Ecology: Temporal Trends in Human-River Dynamics in the Lower Illinois River Valley

AUTUMN M. BEYER (Michigan State University); CAROL E. COLANINNO (Arkansas Archeological Survey); KELLY B. BROWN (University of Georgia)

Students attending the 2015 National Science Foundation Research Experience for Undergraduates (REU) program, hosted by the Center for American Archeology, National Great Rivers Research and Education Center, and Illinois State Museum, learned STEM-based (science, technology, engineering, mathematics) skills and proficiency in scientific analyses, literacy, and writing. Through archeological excavations, zooarchaeological analysis, and modern fish sampling, students gained practical experience in data collection and interdisciplinary orientation. Students' analyzed these data with a focus on temporal variability in the relative frequency of fishes in archaeofaunal and ecological datasets. Here, we summarize this year's activities and results from their temporal research.

[11] Euro-American Settlement within the Big Woods: General Land Office Records, Pre-emption Claims, and Pioneer Lifeways on First Title Public Domain Land

M. CATHERINE BIRD

Fermi National Accelerator Laboratory straddles two counties and two watersheds within the Big Woods of northeastern Illinois. MARS, Inc. recently completed survey and site assessment for historic resources within the 6,800-acre campus. The author identified thirteen sites within Pre-emption land patent parcels. Land Entry



Files contain an untapped wealth of historical information that address time of settlement, family composition, crops and improvements, and in some cases lifeways. The National Archives and Records Administration has custody of land entry case files for the 30 Federal public land states. This poster will provide researchers with the procedures to acquire Land Entry Files.

[8] Plant Subsistence at Myer-Dickson During the Late Woodland and Mississippian Periods

MATTHEW E. BIWER (University of California, Santa Barbara) and AMBER M. VANDERWARKER (University of California, Santa Barbara)

We report on the identification and analysis of the Late Woodland (AD 600-800) and the Middle-Late Mississippian (AD 1200-1300) period archaeobotanical assemblages from the habitation area of the Dickson Mounds site located in the Central Illinois River Valley of west-central Illinois. The Late Woodland inhabitants of the site appear to have focused their subsistence activities around the collection of nut resources (hickory) and the cultivation of goosefoot, whereas the Mississippian occupants invested heavily in food production, specifically the cultivation of maize and beans. Despite the more than 400-year hiatus between occupations, a comparison of the plant assemblages from these occupations indicate minimal dietary change.

[5] Cervical Pathologies and Case Study from the Schroeder Mounds Site of Woodland Period Illinois

SARAH A. BONCAL (University of Wisconsin-Milwaukee); MARIA OSTENDORF SMITH (Illinois State University)

Cervical vertebrae are an effective data source. A sample of 71 pre-Columbian Native American adult individuals (N = 295 vertebrae) were analyzed from Schroeder Mounds, a Late Woodland period (circa AD 800-1100) bluff top site from Henderson County Illinois. Given the multifactorial cause of degenerative changes and pathological conditions, a wide range of mechanical injuries and morphological alterations should be considered: Baastrup's syndrome, suggesting mechanical stressing (e.g., compression, flexion); Porter's neck; and other morphological changes. Of particular interest is a potential case of teratoma indicated by enamel-like denticles present on the superior-posterior surface of vertebral centrum.

[17] Campus Archaeology as a Catalyst for Partnership between Alumni, Students, and the Administration at Wittenberg University

DARLENE L. BOOKS-HEDSTROM and CITLIN LOBL



[20] More Than Just Nightsoil: Preliminary Findings from Michigan State University's First Privy

LISA BRIGHT (Michigan State University), KATY MEYERS EMERY (Michigan State University), AMY MICHAELS (Michigan State University)

While conducting routine construction monitoring on Michigan State University's historic campus, the MSU Campus Archaeology Program discovered the foundations of a brick privy. The nightsoil layer contained one of the best preserved historic assemblages found on campus to date, including full collections of ceramics, glassware, floral and faunal remains, personal items, a figurine, and a porcelain doll head. The diagnostic artifacts provide us with a strong date range of 1850s to 1860s and it provides unique insight into the first decade of campus occupation. This is the first privy to be found on MSU's campus and detailed research is ongoing.

[17] The Only Thing Constant is Change: Maintaining Continuity in the MSU Campus Archaeology Program

LISA BRIGHT (Michigan State University), KATY MEYERS EMERY (Michigan State University), KATE FREDERICK (Michigan State University)

The Michigan State University Campus Archaeology Program (CAP) has protected archaeological resources on MSU's campus for nearly a decade, and relies heavily on both graduate and undergraduate students to run effectively. Continuity and commitment are vital to counter student turnover rates. This strategy succeeds by employing students that have a strong commitment to CAP, ensuring overlap between campus archaeologists, and maintaining a strong record of prior work through field notes and digital media. This promotes continuous institutional memory, as well as a strong sense of collaboration and teamwork among both the current students and alumnus of the program.

[12] Bringing the Past to the Public: The Ohio Hopewell Digital Initiative

KRYSTAL BRITT (University of Illinois at Chicago), CAROLYN HEITMAN (University of Nebraska- Lincoln), WILLIAM Parkinson (The Field Museum of Natural History), JAMIE KELLY (The Field Museum of Natural History), and JAMES BROWN (Northwestern University)

The Field Museum of Natural History houses one of the largest collections of Ohio Hopewell materials in the world, dating to Warren K. Moorehead's 1891-1892 excavation for the World's Columbian Exposition. In the past century this collection has been subject to trade, loss, and reorganization as well as significant efforts to improve documentation. In 2014 our team was awarded a "Humanities Without Walls" pilot grant to pick up where several projects have left off and create a publicly accessible digital Hopewell collection. In this paper we present our progress to date, describing the publically available products of our work.

[10] Settlement and Seasonal Movement of Wolf River Tradition: Oneota Populations in Wisconsin's Northern Highland

MARK E. BRUHY (Commonwealth Cultural Resources Group, Inc.)

Wisconsin's Northern Highland physiographic province differs from surrounding phytogeographic areas. Aside from its forested landscapes, its upper extent includes



a dense distribution of lakes, wetlands and southward-flowing rivers. Recent investigations provide some insight into the social landscape of the Northern Highland in late prehistory. This paper explores the possibility that Wolf River tradition Oneota presence in the upper Highland may be a function of seasonal population dispersal from the south. That is, a segment of the population moving seasonally from horticultural villages in the lower Highland, and adjoining savanna and coastal ecosystems, to logistical camps in the north.

[18] Archaeological Prospection at Aztalan: Results of the 2014 National Park Service Geophysics Workshop

JARROD BURKS (Ohio Valley Archaeology, Inc.), RINITA DALAN (Minnesota State University, Moorhead), KRIS LOCKYEAR (University College London) and STEVEN DEVORE (Midwest Archeology Center, NPS)

In 2014 the National Park Service held its annual workshop on archaeological geophysics at the Aztalan site in southern Wisconsin. Workshop participants learned the ropes for operating a range of geophysical instruments, and Aztalan was their test bed for data collection. In this presentation we examine the results of the magnetic gradient and the magnetic susceptibility surveys, which focused on an area along the east side of the site, overlooking the Crawfish River. Pit features, old excavations, and other feature types all were detected.

[12] Salvaging the North Bridge Street Mound in Chillicothe, Ohio

JARROD BURKS (Ohio Valley Archaeology, Inc.) and KELLIE LOCKE-ROGERS (Ohio Valley Archaeology, Inc.)

In the winter of 2015 an all-volunteer crew conducted salvage excavations at the North Bridge Street Mound in Chillicothe, Ohio. Originally depicted on an 1847 map, this nearly forgotten mound was bulldozed in 2008 by the landowners. The start of a shopping mall development in late 2014 was a call to action to determine what of the mound remained. In three weeks of winter excavation, the original footprint of the mound was discovered, including a paired-post circular structure, log-lined thermal basins, and human remains. Pottery and radiocarbon dates show the mound dates to the transition from Adena to Hopewell.

[6] Looking Beyond Blue: Source Identification of Midwestern Blue-Gray Chert

SHANE K. BUTLER (Illinois State Geological Survey) and MADELEINE G. EVANS (Illinois State Archaeological Survey)

Blue-gray chert from several sources was widely exchanged and transported, both in raw and artifact form, across the Eastern Woodlands during Paleoindian, Late Archaic, Middle Woodland, and early Late Woodland times. Identification of the source(s) exploited by specific populations can illuminate important cultural/behavioral patterns. In an ongoing study, ISAS and ISGS researchers attempt to establish objective, non-destructive means of source identification for Midwestern blue-gray chert, focusing on Cobden-Dongola, Wyandotte, and Kentucky Blue. Approaches include the examination of elemental composition using EDXRF and PXRF instruments, standardized color analysis with a spectrophotometer, and isotopic analysis via laser ablation and mass spectrometer.



[4] Mississippian Missionaries: a suite of traces within a religious landscape

AMANDA J. BUTLER

Labeled "outposts," "colonies," or "ceremonial centers," scholars long theorized the presence of intrusive Mississippian materials and practices within Late Woodland sites outside of Cahokia. Popular models included diffusion, emulation, or occasional intrusive emigration. Using the Collins Complex of East-Central Illinois as a case study, this paper explores how a suite of missionizing practices better explains the seemingly instantaneous, large-scale spread of a Cahokia-Mississippian religion. Identifying such practices allows a more nuanced examination of the underlying processes of widespread "Mississippianization" of Late Woodland peoples.

[20] Against Awl Odds: Applying Metal Detectors to the Archaic Shorelines of Isle Royale National Park, Michigan

CASEY CAMPETTI (AECOM)

Though a taboo subject for some archaeologists, the use of metal detectors has proven to be a useful means of finessing our understanding of the past. Much of the work advancing metal detector use has been under the auspices of historic archaeology, with work done largely in plowed contexts where vertical provenience has been compromised. In contrast, recent investigations at Isle Royale National Park in northern Michigan have applied metal detectors to work on Archaic and Woodland sites with intact soils. This poster illustrates some of the particular methods, challenges, and successes of these investigations with recommendations for future work.

[14] High and Dry: A Look at the Relict Nipissing Shoreline of Isle Royale National Park, Michigan

CASEY CAMPETTI (AECOM)

Isle Royale, located in Lake Superior, has a rich a prehistoric record obscured by its remoteness and rough terrain. The use of GIS predictive modeling has enhanced the efficacy of field efforts, though they have largely been 'intuitive' models incorporating geologic and environmental data. Refining the existing models can benefit management and expand use of GIS as a research tool. Following the most recent season of fieldwork along Isle Royale's relict Nipissing shore, this paper presents new directions in thinking about Isle Royale throughout the Archaic/Woodland transition and its larger role in Great Lakes archaeology.

[19] Oneota Ceramics from Lake Koshkonong: An Example from the Koshkonong Creek Village Site

NATALIE CARPIAUX (University of Wisconsin-Milwaukee)

The Koshkonong Creek Village site (47JE0379) is an Oneota village that was excavated by the University of Wisconsin-Milwaukee field school in the 2012 and 2014 field seasons. The site is situated farther from the Lake Koshkonong than other Oneota sites in the locality, making it a unique environmental location. The paper looks at the ceramic assemblage from the 2012 field season and a small portion of



the 2014 ceramic material. An assemblage description and stylistic comparison to the Crescent Bay Hunt Club site (47JE0904) will provide insights into whether its unique location presents any noticeable changes in the ceramic assemblage.

[16] The Archaeology of Souls: A Foundation through Systematic Survey of Historic Woodland and Plains Native American Soul Concepts

CHRISTOPHER CARR, BRIANNA RAFFIDI, and MARY KUPSCH

The potential for accurately reconstructing prehistoric Woodland and Plains Indian societies' notions of human soul-like essences using symbolically rich mortuary remains and art can be improved when analogous, comparative ethnohistorical information is collected systematically and with sensitivity to tribal and regional variations. Literature on 49 historic Woodland-Plains tribes produced 643 cases informing on nine selected subjects: number and locations of souls in an individual, number of souls that leave the body in life and death, where and when they exit, and their functions and qualities in life and death. Ideas varied considerably but pattern in their frequencies and geographic distributions.

[7] Perinates in the Poor Farm Cemetery: Establishment of Postnatal Status through Dental Development and the Neonatal Line

BRIANNE E. CHARLES (University of Wisconsin-Milwaukee) and EMILY MUELLER EPSTEIN (University of Wisconsin-Milwaukee)

Distinction between fetal remains and live births may contribute to identifications of perinatal remains that were recovered during the 2013 Milwaukee County Institution Grounds (MCIG) Poor Farm Cemetery project as biological profiles are compared to burial records. We present the results of a pilot study that connects fetal and infant aging methods through the application of Moorrees et al. (1963a,b) tooth formation stages to maxillary dentition and mandibular incisors. We also use non-destructive analysis to determine the presence or absence of a neonatal line among perinates with longitudinally broken teeth in order to confirm live birth.

[12] The Introduction and Maintenance of Havana-Hopewell in West Michigan and Northwest Indiana

JEFF CHIVIS (Michigan State University)

This research examines approximately 500 Middle Woodland (~150 B.C. – A.D. 400) pottery samples from west Michigan and northwest Indiana to identify the different types of mechanisms that were associated with the introduction and persistence of Havana-Hopewellian ideology in the study region. It achieves this by fusing stylistic analyses with compositional (i.e., ceramic petrography) analyses to define the social boundaries of different types of communities on multiple spatial scales. The results have provided insight into the complex and dynamic types of cultural interactions and mobility patterns operating within the study region, and the distinct behavioral patterns unique to each individual community.



[22] A Temporal Examination of Archaeofaunal and Modern Collections from the Lower Illinois River and Valley

CAROL E. COLANINNO (Arkansas Archeological Survey), JOHN H. CHICK (Illinois Natural History Survey), TERRANCE J. MARTIN (Illinois State Museum), AUTUMN M. BEYER (Michigan State University), KELLY B. BROWN (VCP)

For millennia, humans have been active participants in Lower Illinois River Valley riverine ecosystems. Through this temporal span, there have been shifts in climate, subsistence systems, socio-political organization, and other institutions. Using previously published data and data collected by the 2015 NSF REU Long-term Perspectives on Human-River Dynamics students, we test for dissimilarities among relative abundance of archaeofaunal and modern collections through deep-time. There are no significant similarities among archaeofaunal collections corresponding with time. All archaeofaunal collections are significantly dissimilar to modern ones. Trends observed may be related to the lack of standardization among archaeofaunal collections, rather than human-environmental dynamics.

[23] Early Village Life in Southwest Ohio: Recent Excavations at the Turpin Site AARON R. COMSTOCK (Ohio State University), ROBERT A. COOK (Ohio State

University), JARROD BURKS (Ohio Valley Archaeology, Inc.)

The Turpin site in southwest Ohio is a well-known transitional Late Woodland/Fort Ancient site. Previous investigations focused on mounds and mortuary patterning, with little emphasis on the residential structure of the site. We have recently remedied this problem with fieldwork including geophysical investigations, a bucket auger survey, and block excavations. Survey results located what appear to be two small contiguous villages comprised of several domestic structures each. Targeted excavations of two of the structures revealed in each case superimposed wall trench houses. In this presentation, we give a brief background on the site and preliminary findings.

[2] Old Main, New Insights: A Community-Engaged Excavation at Alma College ALEXANDRA CONELL (Alma College) and MARY THERESA BONHAGE-FREUND (Alma College)

Lost to a tragic fire in 1969, Old Main's tales were buried for over 40 years beneath a neatly-manicured lawn. In 2014 and 2015, excavations were conducted at the first academic building on Alma College's campus, which originally housed a chapel and library, as well as classrooms and offices until its final hours. With a project emphasis on service and engagement, students connected with global and local communities through social media and an annual Public Archaeology Day. While Archaeology Day was designed to make archaeology more accessible to the public, our team learned much from working alongside our visitors!

[20] The Johnson Collection: Using Old Collections to Find New Insights

CLARE CONNELLY (Illinois State Archaeological Survey), JENNY BENISH (Illinois State Archaeological Survey)

The Johnson Collection is an impressive, well-documented assemblage of over 1,600 lithic, ceramic, and metal artifacts collected throughout northern Illinois



and southern Wisconsin by Steve Johnson. Studying collections such as this can provide a new perspective on the archaeology of a region. This unique collection contains material collected from a region, specifically northwestern Illinois, whose prehistory has remained relatively unknown to professional archaeologists. This pilot project provides new information on the distribution of populations, chert use, and projectile types in Northwestern Illinois.

[7] Cincinnati's 19th Century Craniologists: A Taphonomic Mystery

DELLA COLLINS COOK (Indiana University-Bloomington)

Since at least 1956, a group of 14 crania with ethnic labels has resided in the collections of the Indiana University Department of Anthropology. Two number sequences, consistent in order but with differing gaps, are written directly on the crania. Roman numerals are incised on five crania. Many show erosion of the outer surface and cut marks consistent with dissection. At least five craniologists were associated with the Cincinnati Society of Natural History during the 19th century, and one or more may have collected them. There are three plausible 20th century routes through which the crania may have reached Bloomington.

[21] Experimental Archaeology and Native Copper: Metallographic Analysis of Cold Forging verses Hot Forging

SARA CROOK

Experiments and metallographic analysis of native copper have shown consistent differences in the grain structure of cold forged versus hot forged specimens. These differences can only be observed in specimens left in a worked state. Once specimens of cold or hot forging are re-annealed the grain structures become too similar to differentiate manufacturing techniques. The reference set created through these experiments may be used for comparative analysis of copper artifacts from the Old Copper Complex, in order to make inferences regarding what types of manufacturing techniques were being employed by ancient coppersmiths of the Archaic period in the Midwestern United States.

[23] Material Analysis of a Semi-Subterranean Pit Structure at the Heckleman Site (33Er14)

ZAAKIYAH CUA (Youngstown State University, Cleveland Museum of Natural History)

The Cleveland Museum of Natural History carried out archaeological excavations at the Heckleman Site in Erie County, Ohio from 2009 – 2013. This site yielded artifacts and remnants of various structures from several occupations. A semi-subterranean pit dwelling, constructed by Late Prehistoric peoples, was excavated in 2009. I conducted a stratigraphic analysis of the structure fill in July 2015 and identified floor layers associated with the structure, and midden layers associated with post-abandonment dumping activity. Analysis of artifact densities gave considerable insight into the function of the structure; a fall/winter home for a small, nuclear family over a few successive seasons.

[11] Grand Portage Village Excavation: Community Archaeology in a Western Lake Superior Anishinaabe Community

KYLELEEN CULLEN, MARA TAFT, and BILL CLAYTON (Grand Portage National Monument and Grand Portage Reservation Tribal Council)

Our poster will discuss the 2014 and 2015 excavations of a Historic-era Ojibwe Village site at Grand Portage National Monument. The site is located on a quick-ly-eroding stretch of the Lake Superior Shoreline. A multi-agency and community effort is underway to excavate the site before it is lost. We will introduce the research questions we hope to answer and share preliminary results the excavation has yielded. Such as, data about the time frame of occupation, site formation processes, and artifacts which are likely to demonstrate the evolution of land use through many phases of colonially induced change.

[23] The Goose Lake Outlet #3 Site (20MQ140), a Proto-Historic Site in the Western Great Lakes Region

SCOTT DEMEL (Northern Michigan University), MARLA BUCKMASTER (NMU Retired), TERRANCE MARTIN (Illinois State Museum), JAMES PAQUETTE, KATHRYN PARKER (KP Archaeobotany)

The discovery of early trade goods in Marquette County, Michigan has led to the subsequent investigation of a rare proto-historic locus within a larger multi-component site known as Goose Lake Outlet #3. Archaeologists and volunteers spent two summers excavating the inland site, which is located in an ecologically diverse region along a branch of the Escanaba River that is part of the Lake Michigan drainage basin. Initial review of the evidence, including numerous glass trade beads and iconographic rings suggest the locus dates to circa A.D. 1630-1640. Floral and faunal remains, including three moose, indicate a winter encampment.

[14] Beach Combing in the Middle of Lake Superior: Isle Royale's Relict Shoreline Survey Project

SETH DEPASQUAL

[17] Hubbard Park and Voxman School of Music: Campus Archaeology at the University of Iowa

JOHN F. DOERSHUK; WILLIAM E. WHITTAKER; ANGELA R. COLLINS (University of Iowa Office of the State Archaeologist); MELODY K. POPE (Indiana University-Bloomington); CYNTHIA L. PETERSON (United States Army Corps of Engineers-Rock Island)

FEMA-funded recovery from 2008 flooding in Iowa City led to significant campus archaeology at UI during 2013–14. Site 13JH1436, located at the future Voxman School of Music location and Site 13JH1440, located within the University's Hubbard Park, emerged as two focal points of activity, both sites yielding notable historic period assemblages. Archaeological study revealed information about some



of Iowa City's less-documented residents, particularly with regard to their dietary practices, settlement patterns, and economic status. These projects served to bring together staff, students, faculty, and Iowa City residents in a collaborative research effort involving campus and Iowa City archaeology.

[8] Common Field, Common Chert? A Preliminary Analysis of Lithics from the Mississippian Common Field Site (23SG100)

LESLIE E. DRANE (Indiana University-Bloomington) and MEGHAN E. BUCHANAN (Indiana University-Bloomington)

The Common Field site (23SG100) is a fortified Mississippian village located 3 kilometers south of present-day Ste. Genevieve, Missouri. The people who lived at this site likely experienced a violent attack, one that ended in their village being burned. With this poster, we explain a lithic analysis of 1,287 artifacts from Buchanan's 2010-2012 excavations at Common Field. With this initial analysis, we focused on determining object typology and classification of material, both chert and non-chert. We briefly explore the implications this analysis has for better understanding Common Field peoples' technology, trade patterns, social interactions, and experiences with violence and warfare.

[23] Sourcing Fort Ancient Redstone: Preliminary Report

PENELOPE B. DROOKER (New York State Museum)

Redstone artifacts, primarily pipes, have come from at least 18 Fort Ancient sites, plus many less-well-provenienced locations within FA territory. Determining the source(s) of their materials – local Ohio pipestone, catlinite from southwestern Minnesota, or other recognized quarries – can tell us much about Fort Ancient interaction networks over time. Through the expertise of Tom Emerson and colleagues at the University of Illinois, the current project is employing PIMA technology to source redstone Fort Ancient artifacts from major museum collections. I will report results to date for 91 artifacts curated at 5 institutions, and discuss some of the implications.

[16] Investigating the Lot of Francois Trotier in French Cahokia

PATRICK R. DURST

In the fall of 2010 the Illinois State Archaeological Survey (ISAS) completed a small-scale archaeological testing project adjacent to 1st Street in the heart of the eighteenth century French Village of Cahokia. All work was carried out prior to a proposed road improvement project for the Illinois Department of Transportation (IDOT). Investigations resulted in the discovery of an eighteenth century poteaux-sur-sole domicile situated on a lot owned by Francois Trotier ca. 1770. This paper will provide a brief historic background, results of analysis, and an overall interpretation of the site in the context of French Cahokia.



[4] Recent Sourcing and Analyses of Basaltic Materials from Mississippian Contexts in the Cahokia Region

ROBERT F. DYMEK (Washington University) and JOHN E. KELLY (Washington University)

It has been asserted that basaltic materials used in large celt manufacture were derived from basalt dikes in the Ozark's St. Francois Mountains region, southwest of Cahokia mounds. Recent geochemical and petrographic analyses of debitage and celt fragments from the Washausen, Hamell, and Cahokia sites bring into question this interpretation. Alternatively, the basaltic materials could have been derived from the volcanic rocks found in the Great Lakes region, transported south and deposited locally as cobbles and boulders in glacial till during the Pleistocene. This presentation discusses the results and their implications for sourcing basalt materials from Mississippian contexts.

[22] Dog-Human Symbiosis: Archaeological Evidence from the Great Lakes

RICHARD W. EDWARDS IV (University of Wisconsin-Milwaukee)

Isotopic analysis have been used to gain insights into aspects of cultural and provides insights into mechanisms behind changes in material culture. Midwest archaeologists have used them to track subsistence changes (e.g, introduction of maize). These destructive tests can create ethical and legal issues concerning the treatment of human remains. The Canine Surrogacy Approach (CSA) argues that domestic dog remains can usually be used as a proxy for humans because the dog values mirror the human, thereby circumventing the need to destroy human remains without sacrificing scientific research. This paper addresses the efficacy of CSA in the western Great Lakes.

[10] Lake Koshkonong Locality's Place in the Oneota Cultural Landscape of the Lake Michigan Basin

RICHARD W. EDWARDS IV (University of Wisconsin-Milwaukee) and ROBERT J. JESKE (University of Wisconsin-Milwaukee)

Oneota groups were part of a dynamic political landscape. However, archaeological interpretations of intergroup interactions have been shaped by modern political geography. Archaeologists often disproportionately focus attention on interactions among groups within the same state boundaries compared to those outside. The Koshkonong Locality represents the southernmost Oneota group in eastern Wisconsin. Considerable research has focused on the interconnectedness of Wisconsin Oneota, but the Koshkonong locality also shows evidence for interaction to the south with groups in Illinois. In this paper, we explore the extra-locality connections present in Koshkonong and its role in the larger political stage of the Lake Michigan basin.

[10] Ethnic Identity and Interaction in Late Prehistoric Northeastern Illinois

KJERSTI E. EMERSON (Illinois State Archaeological Survey); THOMAS E. EMER-SON (Illinois State Archaeology Survey)

The late prehistoric period in northeastern Illinois and northwestern Indiana, an area home to the Langford, Fisher, and Huber peoples, is one of tremendous trans-



formation involving climatic perturbations, violence, dietary shifts, migrations, and dispersals. These groups, likely representing ethnic coalitions, are distinguishable by their ceramic wares, settlement and mortuary practices, and household and village configurations. Here we review new evidence from extensive excavations, studies of museum collections, and mortuary re-analyses as they relate to the interaction of these neighboring populations, the directions of these interactions, and their social and political ramifications.

[21] Intact Early Archaic Deposits at the Vasey Site, Madison County, Illinois

MADELEINE G. EVANS (Illinois State Archaeological Survey), BRENDA E. BECK (Illinois State Archaeological Survey), and THOMAS J. LOEBEL (Illinois State Archaeological Survey)

ISAS investigations for the FAP-310 project exposed a buried Early Holocene living surface at the Vasey site in the uplands north of the American Bottom. We suggest, based on the vertical distribution of temporally diagnostic tools and on raw material compatibility, that the features and material remains associated with this surface result largely from a single Dalton or Theban component. Data from this site, including the results of microwear analysis performed on a cache of scrapers is presented. The nature of the occupation is examined in the context of other, roughly contemporary sites in the area.

[7] New Philadelphia, Illinois: From Research Project to National Historic Landmark

CHRISTOPHER C. FENNELL

New Philadelphia, Illinois, established in 1836 by Frank McWorter, was the first town planned in advance and legally founded by an African American in the United States. Members of the local and descendant communities, archaeologists, historians, and genealogists have worked together for the past decade to advance research into this remarkable crossroads of families, merchants, farmers, and artisans, and to enhance their focus in our national memory and heritage. In considering ways to present the town site and its lessons to broad audiences of visitors, divergences in design preferences can emerge among popular views by community members and professionals.

[15] War is Stress: The Biological Impacts of Warfare on Late Pre-Columbian Populations of the Central Illinois River Valley

DREANA M. FERGUSON, JEREMY J. WILSON, JENNIFER M. BAUDER

Indiana University's 2015 NSF REU program focused on warfare and demography at Lawrenz Gun Club, a Mississippian-era village in west-central Illinois. However, fieldwork alone could not assess the biological impact and cost of warfare on regional communities. To achieve this goal, the current study reanalyzes bioarchaeological data from existing databases on stress, growth and oral health in Late Pre-Columbian populations from the region. While stature remained stable over time, statistical analyses revealed a high incidence of healed skeletal lesions and poor oral health among late Mississippians when compared to preceding Late Woodland and early Mississippian groups and contemporary Oneota populations.



[17] Geophysics at Beloit College: A Tool for Sustaining Campus ArchaeologySHANNON M. FIE (Beloit College) and JARROD BURKS (Ohio Valley Archaeology, Inc.)

Excavations on the Beloit College campus have become a regular component of the archaeological methods course. While providing first-hand excavation experience, these investigations also provide opportunities for students to engage in issues of education and preservation. This paper highlights current efforts to balance these concerns through a geophysical survey of the Beloit College Mound Group. The goals of the survey are to identify prehistoric and historic deposits of possible interest for future investigations; to locate and assess the impact of previous excavations on select mounds; and to assess non-mound areas to facilitate maintenance work within the protected burial mound boundaries.

[15] Fortifying the Prairie-Plains: Understanding the Chronology of Defensive Structures at Lawrenz Gun Club

JOHN FLOOD (Department of Anthropology, Indiana University-Purdue University Indianapolis), MATTHEW D. PIKE (Department of Anthropology, Purdue University), JEREMY J. WILSON (Department of Anthropology, Indiana University-Purdue University Indianapolis)

The emergence of fortifications during the Mississippian Era sheds light on a period of geopolitical strife that cascaded across the lower Midwest and Southeast. Recent spatiotemporal analyses indicate that west-central Illinois and southern Wisconsin were the scene of early Late Pre-Columbian fortifications, rendering the investigations at Lawrenz Gun Club essential to our collective understanding of the social pressures driving strife and eventual abandonment of the region. Using chronometric data collected from palisade and bastion contexts at Lawrenz Gun Club between 2011 and 2015, this study develops a chronology and model for the evolution of defensive features at the site.

[23] Cahokia's Western Frontier: Consolidation and Collapse as viewed from the Big River Valley, Missouri

CHRISTINA M. FRIBERG and GREGORY D. WILSON

As part of Cahokia's formational Big Bang, the polity appears to have annexed portions of the Big River Valley (BRV) in southeast Missouri. However, as Cahokia's population declined and pan-regional influence diminished in the Moorehead and Sand Prairie phases, the BRV witnessed a major increase in Mississippian occupation. A detailed examination of these patterns provides insight into Cahokia's long-term developmental trajectory of consolidation, fragmentation, and collapse. This is accomplished through an archaeological investigation of the Long site mound center (23Je9), including a gradiometer survey and a detailed analysis of mound formation, architecture, and ceramics from Robert McCormick Adams' 1941 excavations.



[18] Where Were We? A Survey of Surveys and a Guide to Grids at Aztalan, Wisconsin

DONALD GAFF (University of Northern Iowa) SISSEL SCHROEDER (University of Wisconsin-Madison) JON CARROLL (Oakland University)

As Wisconsin's premier archaeological site, Aztalan (47JE1) has been the subject of archaeological investigations for more than 150 years. Over that period of time, land surveying and field methodologies have improved significantly and those changes have influenced the quality of spatial data available to archaeologists working at Aztalan today. This paper reviews the history of site surveying and mapping at Aztalan as well as considers some of the grids established by various researchers over the years. It also examines the role of increasing precision in surveying equipment and the impacts such precision has on fieldwork.

[2] Where the Land Meets the Lake: Citizen Archaeology on the Shores of Thunder Bay National Marine Sanctuary

STEPHANIE GANDULLA (Thunder Bay National Marine Sanctuary)

In November of 1870, the United States Lighthouse Board completed construction of the Sturgeon Point Lighthouse on a dangerous reef along the northwest shores of Lake Huron. In May of 2015, nearly 200 tourism industry professionals descended upon the historic site in a mission to bring it back to its days of glory. Situated on the western boundaries of Thunder Bay National Marine Sanctuary, Sturgeon Point Lighthouse is a picturesque testament to a time when schooners and steamers ruled the Great Lakes. This unique project demonstrates how a dedicated group of volunteers and a handful of archaeologists came together to keep maritime history alive for a community, and learned, with just a little digging, a few new stories to tell.

[10] Furrows Beneath the Forest: Pre-Columbian Raised Field Agriculture within the Menominee Nation Heartland of Northeast Wisconsin

WILLIAM GUSTAV GARTNER (Department of Geography, University of Wisconsin-Madison)

Many view the Menominee Nation heartland along the central Wolf River valley as marginal for maize agriculture. The growing seasons are short; the soils are acidic, infertile, and sandy; and the terrain is "inhospitable". Geoarchaeological excavations and analyses at Joe Dick Road, Sepaxticum, and Big Eddy sites document different methods for constructing raised fields, the use of fire and soil amendments in agricultural settings, and, arguably, a system of rotational fallow and agroforestry between ca 900 and 1400 AD. This suite of agricultural strategies is rare in native North America. Together, they show the sophistication of Wisconsin's original organic agriculturalists.

[17] Michigan State University's Campus Archaeology Program: What We've Done and What We've Learned

LYNNE GOLDSTEIN (Michigan State University)

Since 2005, Michigan State University (MSU) has conducted archaeological research on its campus. From 2007 to present, this work has been part of an official campus archaeology program (MSU CAP). This paper outlines how we earned line-item funding in the University budget, and what we have learned about the details of running and managing this program. Only one faculty member is directly involved (Goldstein), along with a number of graduate student fellows and undergraduate interns. Sustaining the program is not a simple task, and maintaining campus interest while making research contributions makes things more complex. Lessons learned are detailed.

[18] Aztalan: How the Questions We Ask Frame the Answers We Get

LYNNE GOLDSTEIN (Michigan State University)

The history of archaeological exploration at the Aztalan site in Jefferson County, Wisconsin, has continued for over 150 years. In addition to their own research, archaeologists have noted and marveled at the relative accuracy and completeness of earlier work by Lapham (1855) and Barrett (1933). Although data collected and recorded from every project is important, what people have looked for and what they found is determined by the questions asked and the places explored. This paper reviews Aztalan's history from the perspective of how questions and interpretations have changed over time, then comments on potential future research.

[17] Archaeology on/of the Campus

WILLIAM GREEN (Logan Museum of Anthropology, Beloit College)

Archaeologists receive much of their education on college and university campuses. Increasingly, that education includes on-campus fieldwork. Campuses are not only centers of learning and knowledge production, they are also dynamic places where construction and other forms of development are common, potentially endangering archaeological resources. The dynamism of campuses along with their educational missions and rich, complex histories provide fertile ground for archaeological work focused on: (1) teaching and learning the practice of archaeology, (2) research on important historic or prehistoric topics, and (3) service to campus and community by recording, assessing, and conserving campus resources and by engaging community members in doing and learning about archaeology.

[15] A Geophysical Investigation of Mound 14 at Lawrenz Gun Club

SETH GROOMS (University of North Carolina at Charlotte) TYLER DONALDSON (DePauw University) G. WILLIAM MONAGHAN (Indiana University-Bloomington) MATTHEW PIKE (Purdue University) MARK SCHURR (University of University of Notre Dame)

During the summer of 2015, a geoarchaeological and geophysical investigation of earthworks that front a central community plaza was carried out at Lawrenz Gun Glub, a fortified Mississippian-era village in west-central Illinois, as part of Indiana University's NSF REU program. These mounds hold a wealth of information



regarding construction episodes and chronology, clues about communal project energetics, site formation processes, paleoenvironment, and sociopolitical structure. Utilizing various methodologies such as solid earth coring, GPR, and magnetometry, as well as quaternary dating techniques, this study analyzes the interior of Mound 14 in ways that are minimally intrusive, yet highly informative.

[2] Public Archaeology at 40 Mile Point Lighthouse: Building Relationships Across Time

SK HAASE DUTHIE (Central Michigan University)

In 2014, Central Michigan University began building a relationship with the 40 Mile Point Lighthouse Society in Rogers City, Michigan. The goal of this collaboration is to research and promote preservation at the 40 Mile Point park and heritage site. This poster focuses on the relationship between Central Michigan University and the 40 Mile Point Lighthouse Society and explores the benefits and challenges experienced as the relationship has developed. Through a partnership of education and research the Society managing the park is beginning to see the structures, historical documents, and material record as an integrated resource.

[5] A Zooarchaeological Comparison of Weaver Component Housing Clusters from the Rench Site, Illinois

KELSEY E. HANSON (Illinois State University), BROOKE A. WAMSLEY (Illinois State University), PAULA L. BRYANT

The faunal assemblage from the Weaver component of the Rench site represents one of the most extensive collections of analyzed animal remains in the central Illinois River Valley. Published analyses have emphasized Weaver House Cluster #1, leaving House Cluster #2 poorly represented. To address this disparity, a faunal analysis was conducted from a selection of faunal materials found in House Cluster #2. This recently assessed material demonstrates some important deviation from House Cluster #1 in represented species and patterns of modification and disposal, suggesting a pronounced difference in activities within both clusters.

[21] Archaic and Woodland Period Rockshelter Use in the Upper Great Lakes: A Case Study on Grand Island, Michigan

KELSEY E. HANSON (Illinois State University)

Rockshelters play an integral role in archaeological inquiry as settings that feature excellent preservation and deep stratigraphic integrity. Representing one of the first formal investigations of rockshelter usage in the Upper Great Lakes region, field-work conducted in June 2015 through the Grand Island Archaeological Program identified three rockshelter sites containing both Archaic and Woodland period occupations. Informed by a theoretical approach that seeks to accommodate the great amount of variability seen in rockshelter usage, this presentation will explore the nuances of these sites' functions through a discussion of their respective artifact assemblages and geomorphic settings.



[16] St. Lawrence Iroquoians and Pan-Iroquoian Social Network Analysis

JOHN P. HART, JENNIFER BIRCH, SUSAN DERMARKAR, TERMEH SHAFIE, RON WILLIAMSON

How did Iroquoian populations in the St. Lawrence River valley interact with other populations in the valley and elsewhere in northern Iroquoia? How did these interactions change over time? Does such information allow us to make inferences about the dispersal of the St Lawrence Iroquoians outside of the valley in the 16th century? Here we use we use graphing and statistical network analysis to investigate these questions with a large data-set of similarity values for decorations on pottery collars from over 200 sites dating from ca. A.D. 1350 through 1650 and encompassing all of northern Iroquoia.

[8] Establishing a Strontium Isoscape for the American Midcontinent: Who were Cahokia's Immigrants?

KRISTIN HEDMAN (Illinois State Archaeological Survey), PHILIP SLATER (Illinois State Archaeological Survey), MATTHEW FORT (Illinois State Archaeological Survey), and THOMAS E. EMERSON (Illinois State Archaeological Survey)

Strontium isotope values (87Sr/86Sr) are used to study prehistoric human population movement worldwide. Archaeological research in the Midwest has highlighted the importance of population movement in promoting cultural and sociopolitical change. For example, our earlier strontium (87Sr/86Sr) isotope research identified one-third of Cahokia's inhabitants as immigrants. Locating the homelands of these immigrants has remained problematic due to the lack of regional strontium data. In this presentation we report on new 87Sr/86Sr data derived from fauna from Minnesota to Mississippi that creates the first regional strontium 'isoscape' map to guide the identification of potential places of origin for Cahokia's immigrants.

[2] Community Archaeology & Community Healing at the Mount Pleasant Indian Industrial Boarding School

SARAH HEGYI (Saginaw Chippewa Indian Tribe of Michigan Tribal Historic Preservation Office & Central Michigan University) and SARAH SURFACE-EVANS (Central Michigan University)

When the Saginaw Chippewa Indian Tribe of Michigan took possession of a portion of the former Mount Pleasant Indian Industrial Boarding School in 2011, they made the decision as a community to preserve the site in order to use it as a tool for healing, education, and empowerment. Archaeological investigations have had a prominent role in assisting these goals. This poster discusses the process of community-based archaeology at the boarding school and a special education event hosted by the tribe annually, the Day of Honoring, Healing and Remembering.



[15] Knapped in Stone: An Examination of Projectile Point Diversity and Blood Residue Analysis at Lawrenz Gun Club

TYLER R. E. HENEGHAN (Wright State University), EDWARD W. HERRMANN (Indiana University-Bloomington), JEREMY WILSON (Indiana University Purdue University-Indianapolis), JOHN FLOOD (Indiana University-Purdue University Indianapolis)

This research examines the impact of warfare on lithic assemblages by investigating the diversity of projectile points recovered at Lawrenz Gun Club (11Cs4). The examination analyzes the locations, forms, and raw material utilization for over 110 projectile points from village and palisade contexts. Intra-site diversity measures in form and raw material type are then compared to other sites in the region. Concurrently, several projectile points from various locations within and around the village are analyzed for blood residues. Preliminary spatial analysis indicated an increase in fingernail-size projectiles surrounding the palisades, pointing towards their use in warfare.

[15] The Best Offense Starts with a Strong Defense: Interpretations of "Defensive" Technologies and Strategies at the Lawrenz Gun Club Site

EDWARD W. HERRMANN (Indiana University-Bloomington), JOHN FLOOD (Indiana University-Purdue University Indianapolis), MATTHEW J. ROWE (University of Arizona), MICHAEL GANIS (Simsbury, CT.), SETH GROOMS (University of North Carolina at Charlotte), TYLER HENEGAN (Wright State University)

The heavily fortified Lawrenz Gun Club site was an important regional Mississippian village on the floodplains of the central Illinois River valley. The site appears to have been a major trade and commerce center well situated at the confluence of two major river systems. Analyses of multiple episodes of bastioned palisade construction, weaponry ballistics, and the lithic collection indicate that inhabitants were prepared for conflict. Although the role of bastioned palisades is typically considered defensive, the decision to occupy the local landscape might have been part of a larger Mississippian strategy aimed at controlling the central Illinois River valley.

[23] A New Incised Catlinite Tablet Style from the Red River of the Northeastern Plains

GEORGE R. HOLLEY (Minnesota State University Moorhead), MIKE SIMONSON

Since the 1960s collectors have recovered numerous incised catlinite tablets in an area ca. 20 miles in extent along and near the Red River in Minnesota and North Dakota. Several of these tablets have been recovered from sites with Sandy Lake and Northeastern Plains Village Complex affiliations. Although the principal motifs are individualistic they share design elements and most are characterized by innumerable scratched lines overlapping the principal motif. These tablets represent a new style, distinct from the well-established Oneota tablet styles, and contribute to the corpus of Native American representational art of the Late Prehistoric.

[3] Zooarchaeological Analysis of the Bland Site: Interpreting Subsistence Behavior in the West-Central Region of Illinois

ALLISON HUBER (Illinois State Archaeological Survey)

Archaeological investigations at the nineteenth-century Bland (11MS923) farmstead recovered a small but well-preserved faunal assemblage. The composition demonstrates reliance on swine, chicken, and various wild taxa reflecting the inhabitants' Upland South heritage. Similar dietary preferences have been observed at other nineteenth-century farmsteads in west-central Illinois. Comparison with Kuehn's (2007) zooarchaeological analysis of contemporaneous sites in the northeastern region reveals distinct dietary patterns across the state. Dietary choice was influenced by a variety of factors, but this study, incorporating detailed historic records research, indicates that cultural assimilation was a particularly significant aspect.

[9] Intra-site Analysis of Faunal Remains, A Case Study from the Bell site, Meskwaki Grand Village (47WN9)

JEAN HUDSON (University of Wisconsin-Milwaukee)

Zooarchaeological remains provide insights into changes associated with Great Lakes fur trade. Intra-site analysis adds details about household decision-making and special ritual events. This presentation looks at intra-site variation in faunal remains at the Bell site (47WN9), a Meskwaki village occupied between approximately AD 1680-1730. It builds on foundational work by Behm (1998) and others on the overall community plan of the site, and by Koziarksi (2004, 2012) on features in residential areas. It adds data analyzed by the author and her students, exploring contrasts within and between residential areas, gully midden, open areas, and palisade associations.

[10] Oneota of the Western Lake Michigan Basin: The Deep Periphery

ROBERT JESKE (University of Wisconsin-Milwaukee) and RICHARD W. EDWARDS (University of Wisconsin-Milwaukee)

Circa A.D. 1000, a significant shift occurs in the subsistence, settlement, and material culture patterns in the archaeological record of eastern Wisconsin and northeastern Illinois. Increased utilization of corn is accompanied by changes in the adaptive systems of Late Woodland groups, which ultimately results in a cultural phenomenon archaeologists call Oneota. However, this change appears to be only partially related to changes occurring in other areas of the Midwest, including the Mississippi trench. Distinctive historical trajectories of northern Wisconsin woodlands, southern Wisconsin woodland/oak savanna, and northeastern Illinois prairie/ savanna result in similar--but distinct—cultural entities across this upland region.



[13] Lidar and T.H. Lewis: new methodologies with 19th century archaeological notes

GEOFFREY JONES (Archaeo-Physics, LLC); SIGRID ARNOTT (Sigrid Arnott Consulting, LLC)

Theodore H. Lewis was a 19th century archaeologist whose work has left a problematic legacy. His notes are often the best – or only – record of many thousands of prehistoric earthworks in the upper Midwest. Unfortunately, his keen observation and precise measurement are combined with ambiguity and error, particularly regarding site locations. Lidar offers new insights, giving a comprehensive view of the landscape, while mounds long plowed into obscurity can be detected with specialized data processing. During recent inventories of mortuary sites in South Dakota, systematic methodologies were refined, and the accuracy and value of Lewis' work was affirmed.

[7] The application of strontium isotopic analysis as an element of a multifaceted archaeological approach to historic cemeteries: Case studies from the Milwaukee County Institution Grounds Cemetery

ALEXIS M. JORDAN (University of Wisconsin-Milwaukee); PATRICIA B. RICHARDS (University of Wisconsin-Milwaukee); SHANNON K. FREIRE (University of Wisconsin-Milwaukee); BROOKE L. DREW (University of Wisconsin-Milwaukee)

Following the 1991-1992 excavation of the MCIG Cemetery (1878-1925), up to 190 individuals were preliminarily identified using archaeological and historical analyses. These analyses also reveal that burial practices on the county grounds were more complex than the original burial records suggest, this necessitating a multifaceted approach for the secure identification of these individuals. The cemetery population is composed of geologically distinguishable groups of non-local and local native-born Americans and Western European immigrants, making the application of strontium isotope analysis a key component, among historic documentation research, material culture analysis, geospatial analysis, and skeletal analysis in generating robust individual identifications.

[11] Shovel Testing at the Leet East Camp Site on the Campus of UW-Parkside, Kenosha County, Wisconsin

SARA JOZEFOWSKI (University of Wisconsin-Parkside) and ROBERT F. SASSO (University of Wisconsin-Parkside)

The Leet East site is reported as the location of an early historic Potawatomi campsite in a wooded portion of the campus of the University of Wisconsin-Parkside, Somers Township, Kenosha County, Wisconsin. Shovel tests were completed on a ten-meter grid in the hope of finding archaeological evidence of the camp or other cultural activity. Analysis of recovered materials revealed a paucity of material that might relate to the Potawatomi. However, a significant amount of lithic material, fire-cracked rock, and more recent historic cultural remains, including container glass, were encountered. The authors illustrate the distribution of these remains across the site.



[10] Troubled Times in Late Prehistoric Central Wisconsin: Violent Skeletal Trauma Among the Winnebago Phase Oneota

JORDAN KARSTEN (University of Wisconsin-Oshkosh)

In 1991, Milner et al. published bioarchaeological research on the Oneota Cemetery at the site of Norris Farms #36 in Illinois, demonstrating violence and warfare was common in this population. They found evidence of trauma on 16.29% of skeletons examined. However, it's unknown if this level of violence was common among all Oneota populations. To partly address this issue, we examined the skeletal remains of 126 individuals from five Oneota sites in Central Wisconsin. Within the sample, 26 individuals (20.63%) showed evidence of trauma, a rate statistically indistinguishable from that found at Norris Farms.

[4] Defining Pulcher

JOHN KELLY (University of Missouri St. Louis), CASEY BARRIER (Bryn Mawr College), and TIM HORSLEY (Northern Illinois University)

The large town and mound complex known as Pulcher is critical to our understanding of the beginnings of Mississippian culture in the greater Cahokia area of the American Bottom. Recent investigations have resulted in the definition of the residential limits of this multi-component site that consist of Late Woodland, Emergent Mississippian, and Mississippian occupations. This presentation focuses on the results of the most recent work but also addresses a number of recent studies that have to varying degrees misrepresented this early town and its unique identity as part of a cultural tradition distinct and separate from Cahokia.

[8] Examining Seasonality from the Comparison of Fatty Acid Residues on Archaeological pottery in the La Crosse Region

JENNIFER KEUTE (University of Wisconsin-La Crosse)

A number of pottery sherds from two different sites in the La Crosse region (A.D. 1400) were tested for fatty acids left behind from the cooking or storing of materials. When unglazed pottery from antiquity is used, specific fats from the contents are trapped in to the walls of the vessels. Examining these can tell us about subsistence and diet, but also seasonality. Based on the faunal assemblages from the sites being compared, Swennes (47LC333) and Pammel Creek (47LC61), it has been suggested that these sites were occupied at different times of the year. Analysis using Gas Chromatography/Mass Spectrometry identified the fatty acid ratios of the pottery found at both sites and is used to evaluate this hypothesis.

[14] 4,000 Years Too Late to the Beach Party: Shoreline Surveying and Predictive Modeling at Isle Royale National Park

DANIELLE KIESOW (Indiana University of Pennsylvania)

Little information exists about the people of the Archaic tradition that occupied Isle Royale National Park from roughly 6,500 to 2,950 B.P. Time constraints and other research interests limit the availability to search the island for Archaic sites. To mit-



igate these constraints, a GIS-based model was created to predict favorable areas. The predictive model tests a series of environmental variables observed in known Archaic sites to produce a map with areas that have high and low potential for sites. This model was used to determine surveying areas for the 2015 field season and produced varying results.

[15] Site Formation Processes at Lawrenz Gun Club: A Micromorphologic Analysis of a Mississippian Structure

JONATHAN D. KING (Indiana University of Pennsylvania)); WILLIAM G. MONAGHAN (Indiana University - Bloomington); LARA HOMSEY-MESSER (Indiana University of Pennsylvania)

Micromorphology uses petrographic thin sections to document microscopic soil properties including mineralogy, microbedding, and grainsize variation that are useful when developing high-resolution chronologies of archaeological site formation processes. In the current study, micromorphology is utilized to examine the development of mollisols and the effect these pedogenic processes have on site formation at Lawrenz Gun Club. Additionally, by discerning subtle changes in grain size and orientation, a detailed infilling history of a burnt structure is discerned by recognizing both anthropogenic and natural fill events.

[11] The Identification of Faunal Remains from the Vieau Site, Racine County, Wisconsin

SARAYA KOHLOFF (University of Wisconsin-Parkside) and ROBERT F. SASSO (University of Wisconsin-Parkside)

The Vieau fur trade post was operated by brothers Jacques Vieau, Jr., and Louis Vieau at a Potawatomi village at Franksville, Wisconsin. Explorations at the early 19th Century site by the University of Wisconsin-Parkside and the Kenosha Public Museum between 2002 and 2012 yielded over 1000 faunal remains. Of these, approximately 80 individual specimens proved identifiable with the aid of the University of Wisconsin-Milwaukee Archaeology Laboratory comparative osteological collection. We identified remains from several different domesticated species and multiple wild species. Their presence relates to the varying use of this multicomponent site as a habitation, trading site, and later as a farmstead.

[18] Geomorphic and Anthropogenic Landscapes and Stratigraphy at the Aztalan Site in Southern Wisconsin

MICHAEL F. KOLB (Strata Morph Geoexploration)

Data collected from 85 cores and recent archaeological test excavations are used to map and characterize deposits at Aztalan. The subsurface data and LIDAR images are used to produce the first detailed map of the landforms at the site including the distribution and nature of the anthropogenic deposits. The analysis indicates that glacial and anthropogenic stratigraphy at the site is more complex and varied than previously thought and direct and indirect modification of the landscape by Native Americans more extensive. The results also illustrate the utility of cores for obtaining reconnaissance subsurface data on large archaeological sites.



[9] The Subsistence Status Quo: Meskwaki Foodways During the French Fur Trade Period

RALPH KOZIARSKI (AECOM)

The Meskwaki Tribe successfully incorporated fur trading culture into their existing lifeways by the end of the seventeenth century. This study explores how pelt procurement activities, along with political upheavals, disease, and the other major cultural shifts of the period changed Meskwaki subsistence. Zooarchaeological and ethnohistoric data from the Bell site near Oshkosh, Wisconsin indicate that the Meskwaki were able to balance the economic needs of the fur trade while maintaining ample access to highly nutritious and diverse vertebrate resources. This was accomplished via a system of task scheduling, communal hunting, and possibly resource caching.

[12] The Moorehead Circle: Reexamining Hopewell Pottery

JILL E. KRIEG-ACCROCCO (Dayton Society of Natural History)

The Moorehead Circle is located within the Fort Ancient Earthwork (33WA2), the largest hilltop enclosure constructed by the Hopewell people of southwestern Ohio. It consisted of a triple ring of wooden posts surrounding a large central feature filled with red soil. This paper discusses the results of a recent ceramic analysis conducted on materials recovered during field school excavations from 2006 to present. While many associate Hopewell pottery with the intricately decorated and "footed" vessels displayed in museums, this study offers a fresh perspective and showcases what may be a more typical type of ceremonial ware utilized by the Hopewell people.

[4] Around Emerald: Pedestrian Survey of the Hilly Prairie-scape of the Emerald Acropolis

JEFFERY D. KRUCHTEN (University of Illinois at Urbana-Champaign)

Concurrent with excavations, approximately 1000 hectares of the hilly prairie-scape surrounding the early Cahokian Emerald Acropolis has been covered by pedestrian survey since 2012 with funds from the John Templeton Foundation. A total of 279 new archaeological sites were recorded spanning the Early Archaic period through the late-nineteenth century, representing nearly 10,000 years of human use of the area. Notably, 73 of these have Mississippian components. Four possible additional mounds or shrine hills that situate Emerald within the surrounding landscape were also located. This paper presents results of this survey effort, emphasizing the Mississippian use of the area as it relates to the shrine complex of Emerald.

[3] Archaeological Signatures for Mechanized Threshing Operations in the Midwest and Plains

DOUGLAS KULLEN (Burns & McDonnell)

Nineteenth and twentieth century grain threshing operations left imprints on the rural landscape and social fabric of midcontinental North America. Traces of threshing activity are seldom recognized archaeologically, despite the importance



of this activity to the history of agricultural development and rural lifeways in the Midwest and Plains regions. Changes in threshing technology followed a chronological sequence with inter-regional variability. Different stages of the technology can be identified and dated through specific archaeological signatures, which are discussed here.

[8] A Preliminary Comparison of Structure Function using Faunal Data at the Crescent Bay Hunt Club Site

HANNAH LARTZ (University of Wisconsin-Milwaukee)

Among historic Great Lakes Native Americans, wigwams were often associated with winter occupation or extended family living, while longhouses were associated with summer dwelling and communal work. Both forms of house types are found at the Crescent Bay Hunt Club site, a 13-14th century Oneota village near Lake Koshkonong in southeastern Wisconsin. This research is an examination of the faunal remains within and surrounding these distinctive types of house features and determine if seasonal occupation differences are apparent. Regardless of whether or not seasonality is evident, subsistence and consumption of fauna will be further explored for the site.

[2] Public Archaeology at the Ehinger Hill Site (20SA1417), Chesaning, Michigan

PATRICK M. LAWTON (Central Michigan University)

The Ehinger Hill site was identified on private property during a public archaeology project involving student and community volunteers. I mobilized a survey of the property when it was slated for development and I realized that it had a high archaeological potential, due to its location near the Shiawassee River and the Chesaning Big Rock. Working with the landowner, we conducted geophysical and archaeological survey that identified potential hearth features. Subsequent test units confirmed the presence of four hearths, including a large earthen oven feature. This project is an example of how education of landowners can result in positive outcomes.

[5] Hunting and Gathering to Horticulture Transition in the Southern Midcontinent

LUTHER J. LEITH (Wisconsin Historical Society)

Transegalitarian societies are often associated with a shift to food production with an associated increase in sedentism and the development of territories. The Woodland period Fourche Maline peoples of eastern Oklahoma are used as a case study for this shift in lifeway. This poster examines the development of territories identified through lithic raw material preferences, mortuary practices and evidence of increased violence. The results indicate there were at least two ancestral Caddoan groups with non-overlapping territories inhabiting eastern Oklahoma during the Woodland period.



[15] Within These Walls: Ceramics and Social Reproduction at Lawrenz Gun Club

SHERRY K. LINK (Indiana University – Purdue University Indianapolis) and JERE-MY J. WILSON (Indiana University – Purdue University Indianapolis)

In this study, we examine the stylistic elements and functional diversity of the ceramic assemblage from Lawrenz Gun Club. Two in situ floor assemblages from burnt structures provide an opportunity to investigate households' working ceramic assemblage, while diversity in other areas of the site is examined against the backdrop of a prolonged occupation extending from the mid-12th through mid-14th centuries. Research questions presented here focus on how ceramics reveal information about social reproduction at the household and community levels. The implications of these findings will answer questions about household interaction and reveal insights into intra-settlement formation and reorganization.

[6] The Lithic Landscape: Using GIS to Model Chert Bearing Outcrop Potential in Illinois

TOM LOEBEL (Illinois State Archaeological Survey) and PETE GERACI (Illinois State Archaeological Survey)

The uneven distribution of knappable stone across the landscape had a profound affect on the prehistoric occupants of the region. Access to chert, a static but critical resource, impacted patterns of social and economic adaptations through prehistory. Chert identification continues to play an important role in our interpretation of archaeological sites, therefore a nuanced understanding of the distribution of this key resource at the site, local, and regional level is necessary. Here we use GIS to model the near surface potential of chert availability and present a case study of lithic provisioning and organization conditioned by a chert poor landscape.

[13] The Naturalistic Settings of Several Mound Formations

MARK L. MADSEN (Chicago Archaeological Society)

This paper will discuss the mapping and photography of 102 mound-like formations which run in linear patterns near Plum Creek in Northeastern Illinois close to the Sauk And Vincennes Trails. Some may either be Bluff and Effigy Mounds dating to the Late Middle Woodland Period while others the result of early settlers clearing their land. Microscopic analysis shows the soil used to build the mounds was taken from borrow pits right beside the mounds themselves. A Bur Oak growing out of one of the serpentine-shaped mounds near "Snake Road" has a 3.58 foot diameter and could be 180 years old. Our team photographed half a dozen surface collections of artifacts from other nearby sites, examined aerial photographs, GLOs, property records, local histories, local land use practices, and created a display for a local museum.



[7] Archaeology at the Jameson Jenkins Lot at the Lincoln Home National Historic Site, Springfield, Illinois

TERRANCE J. MARTIN (Illinois State Museum), DENNIS NAGLICH (Illinois State Museum), JOSEPH RITTER (Illinois College), and TIMOTHY TOWNSEND (Lincoln Home National Historic Site)

This summer, the Illinois State Museum concluded a third season of investigations at the Jameson Jenkins Lot in Springfield, Illinois. Jenkins worked as a drayman, and in 1850 he assisted escaped slaves that were fleeing north through Illinois. Jenkins' family shared a duplex with James Blanks and his family one block south of Abraham Lincoln's house beginning in the early 1840s. Excavations located the house site, exposed subsurface features and artifacts associated with the Jenkins-Blanks occupation, and helped to increase our understanding of Lincoln's African American neighbors.

[16] Lithics as Evidence of Social Networks and Landscape Knowledge during the Western Wendat Diaspora

MEGAN M. MCCULLEN (Alma College)

Lithics from the Wendat village at St. Ignace, Michigan (AD 1670-1701) were analyzed in an effort to understand the trade networks of the inhabitants. The Wendat had migrated from Ontario through Wisconsin and back to Michigan, so their potential for networks led in several directions. Results show that formal tools, excluding gunflints, tend to be made from cherts from the lower peninsula of Michigan, while informal tools and flakes are made of locally available beach gravels. While many fur trade items appear to be heading east-west through this village, for functional lithic items ties to north-south networks were maintained.

[11] Magnetometer Survey of Fort de Chartres and Village in French Colonial Illinois

ROBERT MCCULLOUGH (Illinois State Archaeological Survey), THOMAS LOEBEL (Illinois State Archaeological Survey), and ROBERT MAZRIM (Illinois State Archaeological Survey)

A magnetometer survey undertaken by ISAS at the location of the third Fort de Chartres, a circa 1730 wooden fortification, and its associated French settlement has revealed new insights into the built environment of the French colonial capital of the Illinois Country. Magnetometry data revealed previously unknown lines of paired posts and trench walls outside the fort's walls and new information about the fort's internal structure. At Chartres village, foundation trenches, cellars, fence or property lines, and an abandoned roadbed were evident in the data, offering data into the physical structure of a French settlement largely lost to the river.



[15] Dietary Breadth and Stress in the Mississippian Era: An Archaeobotanical Analysis of Lawrenz Gun Club

MORIAH MCKENNA (Connecticut College),, KATHRYN PARKER, and JEREMY WILSON (Indiana University-Purdue University Indianapolis)

A primary objective of the ongoing research at Lawrenz Gun Club has been the recovery and analysis of archaeobotanical remains from domestic contexts in order to examine subsistence strategies and make inferences about sociopolitical and climate stressors impacting dietary breadth and resource availability. This study presents results from the analysis of six storage and refuse pits. Nutshell, especially Hickory, and diverse wood fragments were abundant in the samples, while Maize and Chenopods were ubiquitous. Diversity and evenness indices for these pits are then compared to other Late Pre-Columbian sites in the region to understand subsistence differences over space and time.

[22] Beyond Burning: Revisiting Prairie Land Use Practices

MADELEINE MCLEESTER (University of Chicago)

Prairies likely comprised approximately 75% of the prehistoric Northern Illinois landscape. Often viewed as resource poor, discussions of their use and anthropogenesis has been almost exclusively limited to hunting with fire. While hunting fires were essential to shaping and maintaining prairies, we have overlooked other important, though subtler, uses of prairies that likely contributed to their biodiversity. Using historical records, specifically the ethnobotanical studies of Huron Smith, I present multiple land use and gathering practices conducted on prairies, relevant as possibilities for archaeological investigations into landscape cultivation and management.

[22] Life and Stress at a Langford Village Site, A Zooarchaeological Case Study at the Robinson Reserve Site (11CK2)

RACHEL C. MCTAVISH (University of Wisconsin-Milwaukee)

An examination of resource processing by Langford groups during the Late Prehistoric (ca. AD 1100-1450) of the Upper Midwest is used to investigate adaptations to dynamic stressors, such as intergroup conflict and dietary stress. The Robinson Reserve site (11CK2), located in northeastern Illinois, is used as a case study, using data from the 1983 and 1984 field seasons. The faunal analysis shows evidence of very thorough processing behaviors in order to extract maximum uselife potential, consistent with the notion that these groups are under significant social and environmental stress. These patterns are contextualized with previous research from other Langford sites.

[10] Examining the Dynamic Relationship of Langford Groups on the Landscape

RACHEL C. MCTAVISH (University of Wisconsin-Milwaukee)

This analysis of ten Langford Tradition case sites uses ArcGIS to examine the dynamic relationships of these groups to local ecological zones. This analysis provides an updated perspective on the related and divergent settlement patterns among



Langford groups in northeastern Illinois. The project builds upon previous studies of differences in settlement patterning, divergent ceramic production, and agricultural technology to explore differences in sociocultural integration in a larger Upper Mississippian tradition.

[7] The Historic Alexander Robinson Family Cemetery: Creating Methodologies for Evaluating Chronology and Landscape, Utilizing Documentary Evidence

DAN MELONE (University of Leicester)

This paper will discuss the historic, and continuing, importance of the Alexander Robinson Family Cemetery. Active from ca.1872 through 1927, the cemetery is located in the City of Chicago on land awarded to Robinson in the Treaty of Prairie du Chien. Using recently uncovered documentary evidence, this study will explore changes in cemetery boundaries and uses through time. This research is designed to: (a) create a chronological framework for understanding cultural and natural impacts to the cemetery and surrounding landscape; (b) identify the location of the graves and physical layout of the cemetery; and (c) provide methodologies for evaluating landscape, archival, and archaeological data sets as proxy for determining chronologies of lived experiences.

[12] Ohio Hopewell Bladelets: Bayesian Radiocarbon Analysis of a Middle Woodland Type Fossil

G. LOGAN MILLER (Illinois State University), BRENT EBERHARD (Ohio State Historic Preservation Office)

Bladelets made of high quality, colorful flints may be the most common diagnostic artifact of the Middle Woodland period Hopewell Interaction Sphere. As such, they are often recognized as a Middle Woodland "type fossil". However, few formal tests of their occurrence across space and time exist. Drawing on published reports, as well as a review of the unpublished gray literature, this paper presents a preliminary Bayesian analysis of radiocarbon dates from bladelet-bearing features across Ohio. Results indicate that bladelets occur earliest in the Hopewell core area of the Scioto River, subsequently spreading throughout the state.

[6] Smudge Pits and Stone Awls: The Use of Chipped Stone Tools at Burrell Orchard

G. LOGAN MILLER (Illinois State University) and BRIAN G. REDMOND (Cleveland Museum of Natural History)

Recent investigations by the Cleveland Museum of Natural History (CMNH) identified an extensive Late Archaic occupation at Burrell Orchard (33LN15), located on a promontory overlooking the Black River in northern Ohio. CMNH excavations have documented widespread midden deposits, prepared clay floors, post molds, and pit features including numerous smudge pits. High powered lithic microwear analysis was performed on 28 chipped stone tools recovered from the 2008 and 2014 CMNH field seasons. The results indicate that many "drills" were actually used on dry hide and, thus, may have held a unique place in the hide processing activities conducted at the site.

[9] Native American Mining in the Upper Mississippi Valley: Industrial Production, Conflict and Dispossession across the Lead Mining Frontier

PHILIP G. MILLHOUSE (Illinois State Archaeological Survey)

The impact of the fur trade on Native American culture has dominated frontier scholarship for over a century. Absent from many of these discussions is the critical role of Native lead mining in the Upper Midwest. Here the Meskwaki and Ho-Chunk conducted mining operations on a truly industrial scale. As a stable resource, lead provided a substantial income as fur bearing populations diminished. The mines eventually drew thousands of prospectors and resulting tensions culminated in the Winnebago and Black Hawk Wars. Subsequent treaties began the rapacious process of extinguishing Native land claims prior to forced removal and dispossession.

[21] Connections Through Time: The Cloquet River Drainage

SUSAN C. MULHOLLAND (Duluth Archaeology Center) and STEPHEN L. MUL-HOLLAND (Duluth Archaeology Center)

The Cloquet River is the core waterway is one of the oldest continuously flowing water systems in Minnesota. Archaeological the region has produced artifacts from nearly all temporal periods associated with northern Minnesota, from Early Paleoindian through historic. It also provides access, through water routes and short portages, to the three major drainage systems that encompass much of North America. Some regional and broader interactions inferred from the diagnostics and lithic material types show influences or contacts that range far afield from the region, including both eastern and western areas. Rather than being a cultural dead-end, northeastern Minnesota is proposed to play a crucial role in the interaction of cultural regions.

[5] Prehistoric Gold: Obsidian Procurement, Use, and Meaning in Hopewell and Prehistoric Aegean Cultures

CAILEY D. MULLINS (Indiana University-Bloomington)

In an attempt to better understand the Hopewell obsidian exchange, this poster will analyze the uses and possible methods of procurement of obsidian in the Hopewell culture, and, for comparative purposes, that of the Neolithic and Bronze Age Aegean. Several theoretical models of exchange are considered as well as the socio-religious implications of these trade relationships. While the Hopewell Interaction Sphere has been in the focus of Hopewellian research for quite some time, this comparative approach will broaden our understanding of how the Hopewell may have retrieved this mesmerizing stone and what importance it may have held in Hopewell ceremonialism.

[10] Phytolith Analysis In Ridged Gardens in Wisconsin

WENDY MUNSON SCULLIN (Midwest Ethnohorticulture)

Phytolith analysis is a method of minimally invasive sampling which can assist in further defining observed differences between soils in human-modified landscapes. In this case, phytolith assemblages indicate earth moving from a variety of plant communities in the construction and maintenance of ridged gardens. Cross sections



of these ridges show that various types of soils were used in their construction. Phytolith analysis of surrounding soils could indicate soil sources for the ridges for this horticultural practice which is particularly well-suited for this region of the Midwest.

[15] Identification and Chronology of Paleochannels and Their Relation to the Landform During the Mississippian Occupation at Lawrenz Gun Club

C. MURPHY (University of California Berkeley), G.W. MONAGHAN (Indiana Geological Survey)

This project examines the environmental context for the Mississippian occupation at Lawrenz Gun Club by studying the evolution of an adjacent branch of the Sangamon River through time. Field and laboratory analyses of soil cores, such as magnetic susceptibility readings and grain size analysis, were used to differentiate between old channels and flood chutes of the Sangamon River. Radiocarbon dating provided a comparison of paleochannel ages with established dates for site occupation. These results constrain the site spatially and have implications for the settlement's defensive capabilities, as well as local availability of clay material for pottery making.

[21] What to Do With All of That Fire-Cracked Rock? Contextualizing Hot Rock Technology in Hunter-Gatherer Subsistence Practices During the Late Archaic

FERNANDA NEUBAUER (University of Wisconsin-Madison)

Fire-cracked rocks (FCR) are found in great quantities at North American hunter-gatherer sites but remain an understudied analytical artifact type, and the common practice of discarding FCR in the field has led to an obscured understanding of important domestic features. In order to contextualize FCR's utilization by Late Archaic people on Grand Island, Michigan, this study combines lithic analysis with data related to hearth size and morphology, soil characteristics, and associated archaeological materials. Because organic remains are poorly preserved in the region, FCR may hold the key to investigating ancient diets, and how foods were processed and cooked by hunter-gatherers.

[5] Horizontal vs. Vertical Sequencing in Ceramic Manufacture among Scioto Valley Hopewell

KEVIN C. NOLAN (Ball State University) and ERIC C. OLSON (Ball State University)

The method of ceramic manufacture is not well studied in the Midwest. The majority of Middle Woodland types are defined as coiled. Significant variation exists in the manufacture of ceramics of other regions. Manufacturing techniques are macroscopically identifiable in sherd cores. Layering exhibits horizontal breaks, while coiling exhibits vertical/oblique breaks. We analyze >1,000 sherds from over 13 Scioto Valley Middle Woodland sites. Coiling constitutes a small minority of the sample, while layering constitutes a substantially greater proportion of the sample. These results indicate that slab manufacture of ceramics was prevalent in the Middle Woodland period in the mid-Ohio river valley.



[19] Unpacking Dishes: A Foodways Perspective on the Oneota and Mississippian Interaction in the Central Illinois River Valley

JODIE A. O'GORMAN (Michigan State University)

It has long been known that Oneota pottery in the CIRV can only be described in reference to hybridity with Mississippian traits. This paper summarizes recent efforts to consider the place of jars, plates, and bowls at the Morton Village site in the context of economic, political, and religious systems. This foodways perspective recognizes vessels are imbued with symbolic meaning and observed hybridity can be related to active negotiation of identity for socio-political purposes. The paper presents analyses of variation within the assemblage, spatial distribution, and preliminary residue analyses to explore foodways' role in negotiating Oneota and Mississippian interactions.

[14] "Surf's Up, North Side" Washington Harbor North Survey, 2014

S.J. OLSON (St. Cloud State University)

In 2012, a multi-park research initiative between Isle Royale National Park and Grand Portage National Monument was undertaken to survey possible Archaic shorelines on Isle Royale using LiDAR. The survey produced six new Archaic sites in its inaugural year, focusing mainly on the east side of Washington Harbor and the Grace Creek area. After an excavation of one of the six sites in 2013, we revisited the survey in 2014 on the north side of Washington Harbor. During that survey we found four more Archaic sites, as well as an extremely rare and definitive bifacial tool made of a local lithic material.

[15] Mississippian Settlement Histories and Occupational Longevities: A Chronological Model for Lawrenz Gun Club

ABIGAIL H. OUTTERSON (Skidmore College), MATTHEW D. PIKE (Purdue University), JEREMY J. WILSON Indiana University-Purdue University Indianapolis)

Mississippian-era villages present archaeologists with a unique challenge regarding chronology and community transformation over time. Previous research at Lawrenz Gun Club has demonstrated it was the largest fortified village in the Illinois Valley, lasting from the mid-12th to mid-14th century. In this study, a high-resolution chronological model for Lawrenz Gun Club is developed from domestic, earthwork, communal and fortification contexts with the goal of capturing the village's founding, use-life, and eventual abandonment. This chronology is subsequently compared to other Mississippian villages in the hope of understanding differences on regional and interregional scales during a period of warfare and climate change.

[10] Revisiting the Keshena Focus-Agroforestry and Late Prehistoric Populations in Northeastern Wisconsin and Michigan's Upper Peninsula

DAVID F. OVERSTREET (College of the Menominee Nation)

Barrett and Skinner (1932) and many others considered prehistoric sites on the Menominee Reservation to reflect Menominee ancestry. Raised agricultural fields, surface depressions, and groups of conical and linear mounds are associated with several substantial villages. Kinepoway's Village, occupied from 1871 to the 1920s



provides a model for prehistoric summer agricultural villages and potentially for alternative interpretations of the Mero complex. Agroforestry was a widespread late prehistoric adaptation in northeastern Wisconsin from A.D. 950-1450, but the nature and chronology of the Oneota presence is debated. Nonetheless, Menominee ancestry is likely linked to these regional late prehistoric settlements.

[20] Past Excavations, New Potential: The Rehabilitation of Archaeological Collections from the Mobridge, South Dakota Area

VICTORIA PAGEL and JACQUELINE POZZA (University of Wisconsin-Milwaukee)

The Curation Crisis is partially defined by intellectually inaccessible archaeological material and the lack of resources for proper care and management of collections. This crisis has impaired collections use and research for decades. The University of Wisconsin-Madison originally curated collections recovered from the 1956 salvage excavations near Mobridge, South Dakota and acts as a case study of these issues. Rehabilitation efforts in 2014 integrated archaeological methodology with standard museum practices to rectify the deteriorating storage materials and inconsistent documentation. This project illuminates the value of rehabilitation efforts that increase the potential for collections use in future research and public outreach.

[7] Market Access on the Mid-Nineteenth Century Illinois Frontier: the Walkup Site (11MH515) Ceramic Assemblage

HANNAH PATTEN (Loyola University of Chicago)

Archaeologists have long debated what model is the best fit for analyzing ceramic assemblages. In a rural frontier context, level of market access will have the most influence on ceramic assemblages and factors like socioeconomic status and consumer choice will be secondary. Data from the Walkup Site (11MH515) in rural northern Illinois and other comparative sites is used to determine what degrees of economic access exist in Illinois during the mid-nineteenth century. This study indicates that a simple distinction between rural and urban is not sufficient in understanding the effects of market access on ceramic assemblages.

[16] Fortifying Saint Cloud: Searching for Fort Holes, a Dakota Conflict Era "Settler's Fort"

CHARLES PELISKA (St. Cloud State University)

This presentation will detail my efforts to locate Fort Holes – a civilian fortification built in 1862 in response to the perceived threats of Native American violence. During the US-Dakota Conflict, over 50 of these "settler forts" were constructed throughout Minnesota – some in as little as 24 hours. As of 2014 none of them had been systematically examined archaeologically. In the summer of 2015 I began work on studying Fort Holes including archival research, a gradiometer survey, and a phase I survey with targeted shovel tests to ground truth the results of the gradiometer survey.



[18] One of Increase Lapham's Wonders of the Ancient World

JAKE F. PFAFFENROTH (University of Wisconsin-Madison) and SISSEL SCHROED-ER (University of Wisconsin-Madison)

Ongoing investigations by a number of scholars are yielding new evidence that Aztalan was a socially dynamic community, thereby challenging the enduring timeless portrait of this town as a place that emerged fully formed near the end of the 11th century when Mississippian peoples settled along the Crawfish River. Recent field work, often incorporating modern geophysical methods, and new collections-based studies of existing collections are oriented around modern research questions and interpretive frameworks. These studies are helping to advance our understanding of Aztalan's occupation history and the formation processes that have affected the archaeological record at the site.

[18] All Shook Up: New Findings from Material Culture at Aztalan

JAKE F. PFAFFENROTH (University of Wisconsin-Madison), JESSICA BUTTON (University of Wisconsin-Madison), and JESSICA RODRIQUEZ (University of Wisconsin-Madison)

Test excavations in the residential area of Aztalan were conducted by University of Wisconsin-Madison in 2015 to expand the sample of structures excavated at the site and re-investigate one building partially excavated in the 1960s. Several domestic contexts were investigated. Despite spatial variability of specific material types, all units yielded mixed Late Woodland and Mississippian material culture. Dense quantities of material culture including "diagnostics" were recovered from 1960s backdirt, illustrating a challenge of working with collections from that era. Preliminary findings support existing interpretations that Late Woodland and Mississippian peoples co-resided at the site while other findings fuel new research questions.

[18] Little House Before the Prairie: Possible Domestic Structures in Aztalan's Hypothesized Public Plaza

JAKE F. PFAFFENROTH (University of Wisconsin-Madison) and MARISSA LEE (University of Wisconsin-Madison)

In 2015, University of Wisconsin-Madison researchers found traces of domestic structures in an area at Aztalan conventionally interpreted as a plaza, which was separated from the village's habitation sector by a wall. Mississippian and Late Woodland artifacts in the fill of a possible house basin indicate that the structure was abandoned during the period of co-residence. Superimposed by later structures, these traces of buildings on the "wrong" side of the wall are inconsistent with longstanding interpretations of Aztalan's spatial organization. This presentation describes the possible structures and their formation histories, and discusses the implications of their existence.

[18] Floral Remains and Feature Function at Aztalan: Gathering New Data from 48 Years of Flotation Samples

JENNIFER L. PICARD (University of Wisconsin-Milwaukee)



The earliest collection of Aztalan flotation samples dates to the 1967 excavations headed by Joan Freeman of the Wisconsin Historical Society, and includes samples collected from structures below the northeast mound. While some of these samples have been processed and analyzed, others remain in storage and serve as a potential source for new floral data pertaining to the site. Previous analysis of Aztalan floral remains have focused on subsistence and horticulture, often within a diachronic framework. This paper utilizes data from 1967 samples and more recent excavations to explore feature function and activity areas during the site's Middle Mississippian occupation.

[8] A Late Fort Ancient Offering at Fox Farm, Mason County, Kentucky

DAVID POLLACK (Kentucky Archaeological Survey), BRUCE L. MANZANO (University of Kentucky), and A. GWYNN HENDERSON (Kentucky Archaeological Survey)

During excavation at Fox Farm in the Fall of 2014, a concentration of 11 deer mandibles (representing a minimum of eight deer) was found in association with a Late Fort Ancient (post-AD 1400) jar. The deer range in age of death from approximately 4 months to 12 years, with season of death ranging from May to December. The placement of the jaws along the edge of a large (8.0 x 13.5 m) Madisonville Horizon house is interpreted as an offering linked in some way to the construction or abandonment of this structure.

[23] Hinting at Ideology and Intensifying Social Hierarchies: Oneota Copper Artifacts of the Koshkonong Creek Village Site (47-JE-0379)

JACQUELINE M. POZZA (University of Wisconsin-Milwaukee)

One serpentine pendant, two rolled beads, and three fragments comprise the copper assemblage of the 2012 and 2014 University of Wisconsin-Milwaukee excavations of the Oneota occupation (AD 1000 to 1400) at Koshkonong Creek Village site (KCV). The violent social environment during the Oneota occupation of KCV resulted in restricted access to resources and tribalization of cultural groups. The scarcity of copper at KCV and the ideological power of this raw material suggests that these personal adornments had the potential to be used by individuals to display and reiterate their power within the community during an era of intensifying social stratification.

[21] Clay Floors and Deep Midden: New Evidence for Late Archaic Seasonal Sedentism in the lower Great Lakes

BRIAN G. REDMOND (Cleveland Museum of Natural History)

Evidence for multi-season occupations during the Late Archaic period in the lower Great Lakes is not common. Recent investigations at the Burrell Orchard site in northern Ohio document a Late Archaic (cal 2570-2060 B.C.) basecamp blanketed by thick sheet midden covering an area of at least 0.6 ha. Most significant are the remains of two structural/activity floors constructed of yellow clay, the largest



measuring at least 17 m2. Subsistence and feature remains point to activities during the fall-winter months focused on deer and hickory nuts. It is proposed that the site represents a locus of multi-season residence by regional macrobands.

[6] The Pope Site Revisited: Assessing the Ritual Use of Hixton Silicified Sandstone in a Late Paleoindian Context

RAY RESER (University of Wisconsin-Stevens Point)

The Pope Site 47-WP-163, discovered in 1970 in Waupaca County represents one of a handful of known locations associated with Late Paleoindian ritual practices within North America. This site and others within the Laurentia Bioregion such as Renier recorded in 1959, and Gorto in 1987, include hypertrophic Hardin/Scottsbluff-tradition projectiles and exhibit intriguing similarities such as calcined or significantly weathered large mammal bone; the preferential use of silicified sandstones and intentional ritual destruction through radial, bending and thermal fracturing of select artifact classes made on exotic lithic materials.

[3] Historic Preservation, Gentrification, and Bar Signs: Has historic preservation preserved Chicago's Pilsen neighborhood?

NICHOLAS W. RICHARDS (University of Wisconsin-Milwaukee) ITXASO RODRI-GUEZ (University of Illinois at Urbana Champaign)

Chicago's Pilsen neighborhood, certified as a National Historic District in 2005 under the National Historic Preservation Act has been the site of rapid and repeated demographic change including recent gentrification. Researchers have observed firsthand a localized iteration of a cyclical process evident across the U.S. Considering historical, linguistic and property value data, this paper examines the degree to which recent sociolinguistic research on signage language change in the district may be useful in evaluating the effects of NHPA with respect to the preservation of both the specific architectural and broader cultural fabric of this rapidly changing neighborhood.

[15] Preparing for War: The Energetics and Labor Organization Behind the Lawrenz Gun Club Palisades

CIARRA RINEHART (Indiana University-Purdue University Indianapolis), MAT-THEW D. PIKE (Purdue University), and JEREMY J. WILSON (Indiana University-Purdue University Indianapolis)

Lawrenz Gun Club is the most heavily fortified Mississippian period village known in the Illinois River Valley, suggesting inhabitants faced an impending threat of warfare and prompting construction of a three-sided palisade that abutted the Sangamon River. This study measures the energetics, labor organization, and availability of natural resources required to build and maintain a minimum of three iterations of palisades with bastions that surrounded the village. Utilizing data from ongoing remote sensing and excavations at the site, this project estimates the labor investment involved in fortification construction over various plausible time scales.



[20] Digital Techniques in Public Archaeology at Two National Parks

MARGARET ROBINSON (University of Nebraska-Lincoln); STEPHANIE STERLING (University of Nebraska-Lincoln)

Recently there has been an increase in the use of digital technology as a means to relay archaeological data to the general public. Using Hopewell Culture National Historic Park and Lincoln Home National Historic Site as our case studies, we established a process that incorporates legacy data, web applications and 3D photogrammetry to enhance the visitor experience. This project emphasizes different cultural and geographical landscapes in an attempt to demonstrate the various applications of this digital methodology. Our goal is to make the archaeology of National Parks more accessible in a way that is easily digestible and visually appealing.

[3] The Legacy Of The Minnesota Civilian Conservation Corps: Evaluating Civilian Conservation Corps Camps As Interpretive Archaeological Properties

AMANDA M ROLLER (Commonwealth Cultural Resources Group, Inc.), CARRIE A. CHRISTMAN (Commonwealth Cultural Resources Group, Inc.), and MARK BRUHY (Commonwealth Cultural Resources Group, Inc.)

In 2013, Commonwealth Cultural Resources Group, Inc. (CCRG) investigated Minnesota's Civilian Conservation Corp (CCC) camps as archaeological properties through funding from the Minnesota Historical Society and the Oversight Board of the Statewide Survey of Historical and Archaeological Sites. The project developed a database of Minnesota CCC camps and documented ten camps to test methodology for evaluation and determination of eligible under Criterion D for the National Register of Historic Places. Five camps were found eligible. As a future goal, those camps should be considered for interpretation. Two camps already had some level of interpretation. Further interpretive potentials are discussed.

[5] Exploring the Function of Lamellar Blades Through Usewear Analysis

APRIL ROTHENBACH (University of Wisconsin-La Crosse)

Blades have been classified in many ways in the archaeological literature; one type of blade is the lamellar blade found in Middle Woodland assemblages. Body modification practices, including tattooing, could be one possible function lamellar blades may have held. This hypothesis was tested using usewear analysis. Two sets of stone tools were analyzed, one used in an experimental context to mimic body modification, and one from Mound House, a Middle Woodland site. The goal of this research is to compare these two data sets to see if their usewear patterns suggest that they were used for the same activity.

[13] In the Field Away and at Home: Archaeological Investigations on Two College Campuses in Southeastern Wisconsin

ROBERT F. SASSO (University of Wisconsin-Parkside)

In recent decades, archaeologists from the University of Wisconsin-Parkside have conducted archaeological research at two separate college campuses in south-eastern Wisconsin. SHSW-sponsored fieldwork in 1997-1998 included survey and testing at Carroll College to explore long-recorded early Nineteenth Century Potawatomi cornhill contexts. More recently, we have explored several areas of our own 700-acre campus, to relocate reported Potawatomi campsites and to examine exposed surface areas disturbed by modern land use as trails and fire-maintained prairies. The nature of these projects and their findings are presented, with a discussion of challenges and benefits encountered in conducting archaeological research on college campuses.

[11] Archaeological Exploration of the Montgomery Cabin Site, Kenosha County, Wisconsin

ROBERT F. SASSO (University of Wisconsin-Parkside) and DANIEL J. JOYCE (Kenosha Public Museum)

The Montgomery Cabin site is one of several important historic sites in the Petrifying Springs-Pike Woods locality in northeastern Kenosha County. The Montgomery cabin (ca. 1834-1839) is reputed to be the first Euro-American cabin built within Kenosha County. Partly excavated by avocational archaeologists in 1976, it has been the focus of professional investigations by UW-Parkside and the Kenosha Public Museum since 2013. Our work has documented three historic structures and enhanced our understanding of site contexts, the earlier work, and the nature of early nineteenth century life along the Pike River. Research findings are presented for four discrete areas of the site.

[10] Oneota Interaction in Eastern Wisconsin AD 1050-1400

SETH A. SCHNEIDER (University of Wisconsin-Milwaukee)

Between AD 1050-1400, Oneota groups in Eastern Wisconsin were part of a dynamic and shifting political system that integrated people across a large swath of the midcontinent. The role that Middle Mississippian populations played in shaping group organization interaction in the north is still contested, but there are clear indications of north-south interactions. After Middle Mississippian sites disappeared, Eastern Wisconsin intergroup political systems appear to reorganize and become regionally focused. Ceramic analysis, though a World System's lens, shows that Oneota localities represent autonomous socio-political polities whose members used distinct decorative motifs and ceramic production techniques to mark their identities.

[18] Geochemical Characterization of Soils at Aztalan

SISSEL SCHROEDER (University of Wisconsin-Madison), GABRIELLE PETERSON (University of Wisconsin-Madison), and ALFRED HARTEMINK (University of Wisconsin-Madison)

Extensive geomagnetic surveys at Aztalan in 2014 and 2015 revealed a range of anomalies, and some of these were investigated through targeted excavations in MILWUAUKEE, WISCONSIN



2015. In total, 15 soil samples were taken from different depths in the walls of excavation units. Samples were taken from trash pits, a possible house basin, other possible features, and non-cultural deposits. The samples were airdried and analyzed in the lab using pXRF. Differences in geochemical signatures were found that could be related to site formation processes and contribute to the reconstruction of ancient activities at the site.

[8] Circular but Not Empty: The Early Fort Ancient Village at the Guard Site, Southeastern Indiana

MARCUS SCHULENBURG (University of Wisconsin-Milwaukee), ROBERT COOK (The Ohio State University), JARROD BURKS (Ohio Valley Archaeology, Inc.)

The only known pattern of Fort Ancient (AD 1000 – 1670) villages consists of circular arrangements of houses, burials, and pit features around relatively empty and large central plazas. However, recent field work at an Early Fort Ancient formal village, the Guard site (12D29), has revealed a different pattern, most notably that the plaza is filled with features. First, we first present the archaeological evidence of this unique Fort Ancient site structure. Second, we compare findings with archaeological plans from elsewhere in the Midwest to assess possible source areas for this pattern, furthering our understanding of the implications of this finding.

[17] Exploring the Foundations of University of Notre Dame 2015: The Return to Old College

MARK R. SCHURR (University of University of Notre Dame)

The Old College building, the first brick building on the University of Notre Dame campus, stands near the Log Chapel, a reproduction of the log cabin that stood on the site when the founders of University of Notre Dame du Lac arrived in 1842. Field school investigations in 1991 and 1993 found abundant archaeological remains between Old College and the Log Chapel. In 2015, a two-week field school in the Summer Scholars program conducted GPR surveys and excavations to further investigate the site. The short field season revealed a complex archaeological record and some hints into early life on campus.

[4] Chronology and Diet during the Yankeetown Phase: New Evidence from the Yankeetown Site

MARK R. SCHURR (University of University of Notre Dame) and MICHELE GRE-ENAN (University of University of Notre Dame)

The Yankeetown phase is the immediate predecessor to the Middle Mississippian Angel phase in southwestern Indiana. Unfortunately, our understanding of the relationship between the two phases is complicated by a poor understanding of Yankeetown and early Angel chronology. Multiple radiocarbon dates obtained on bone from a feature eroding into the Ohio River at the Yankeetown site (12W1) indicate that the feature dates to around AD 1000, approximately two centuries earlier than a date previously obtained from charcoal taken from what was assumed to be the same feature context. Collagen stable carbon isotope ratios indicate that maize formed a significant portion of the Yankeetown diet at that time.



[19] A Consideration of Fort Ancient Non-handle Appendages: The View from Fox Farm, Mason County, Kentucky

CLAIBORNE D. SEA (Kentucky Archaeological Survey)

Non-handle appendages (e.g., semi-circular lugs, double-vertical lugs, tabs, applied strips, and effigies) are an important component of the Fort Ancient (A.D. 1000-1750) ceramic tradition. Pre-A.D. 1400 non-handle appendages occur primarily on jars. These appendages are distinctive and interregional variation has been noted in their form and frequency of occurrence. After A.D. 1400, they occur primarily on bowls, and there is greater standardization in their execution. Temporal trends in appendage style and function are discussed in this paper and are correlated with changes in other aspects of Fort Ancient material culture, and social and political organization.

[20] A Taste of Archaeology: The Importance of Public Archaeology Programs and Digital Cultural Heritage

NIKKI SILVA (Michigan State University)

Educating the public about archaeology and creating advocates for preservation and research is of growing importance. While first-hand experiences are invaluable, digital technology offers innovative ways to reach larger audiences. This poster provides an example of each and outlines the benefits and challenges. The first example, an in-person experience, is discussed in reference to the author's involvement as a supervisor for the 'Taste of Archaeology Program' at Dickson Mounds Museum. The second example is an ongoing digital cultural heritage project from the Cultural Heritage Informatics Initiative at Michigan State University.

[4] The Role of Maize in Cahokia's Big Bang

MARY SIMON (Illinois State Archaeological Survey), KRISTIN HEDMAN (Illinois State Archaeological Survey), and THOMAS EMERSON (Illinois State Archaeological Survey)

Interpreting the role of maize agriculture in the socio-economic-religious systems of Cahokia has long been a topic of research interest. Early "prime-mover" models emphasized maize's economic importance. Through time, these models shifted to emphasize the crop's centuries long role in subsistence and ritual, positing a grad-ualist introduction, adoption, and dependence. However, the increasing number of excavated sites, associated macrobotanical data sets, and isotopic analyses by ISAS researchers have called into question the gradualist model. These lines of evidence converge to suggest that maize was a post-AD 900 introduction that facilitated, but did not cause, Cahokia's Big Bang.

[2] We Offer Tobacco Anytime We Pierce Mother Earth

STEVEN J.SMENDZUIK (Central Michigan University); JEROME G. PIGEON JR.(Central Michigan University)

This is a discussion regarding the benefits of utilizing cultural competency and non-invasive techniques in the practice of archaeological investigations, particularly in culturally sensitive or charged situations. Our team led by Dr. Sarah Surface-Evans (Central Michigan University) performed investigations at the Mount



Pleasant Indian Industrial Boarding School. The techniques used were determined by conversations between the City of Mount Pleasant and the Saginaw Chippewa Indian Tribe, and include surface survey, ground penetrating radar, magnetic susceptibility and soil core sampling. We will discuss the benefits of a collaborative and non-invasive approach when working with stakeholders that have differing goals and perspectives.

[5] Native American Effigy Burial Mounds and Plant Communities in Sauk County, Wisconsin

HARLEY SOERFASS (University of Wisconsin-Baraboo)

The goal of this research was to investigate any possible relationships between the placement of Native American effigy mound cemeteries and vegetative communities. Resources used to recreate vegetation communities and their locations included early European settlement plant data compiled by Kenneth Lange of the Wisconsin DNR. Data for Native American effigy mound locations and mound types were obtained from the recent work of Dr. Amy Rosebrough Assistant State Archaeologist at the Wisconsin Historical Society (Rosebrough 2019.0). Through the synthesis of these two resources, it was revealed that most effigy mound cemeteries were located in oak savannas, with oak forests, and marshes, sedge meadows, and wet prairies containing decreasing numbers of mounds respectively. The correlation between oak savannas and effigy burial mounds in Sauk County is greater than any other plant community at early European contact.

[23] The Kocher Site (12D491): Results of Spatial Analysis from Systematic Surface Survey

ERIN A. STEINWACHS (Ball State University) and KEVIN C. NOLAN (Ball State University)

The Applied Anthropology Laboratories collected nearly 12,000 artifacts from portion of the Kocher Site in 2013. Each find spot was GPS mapped. Attributes and classes were mapped onto find spots; intra-site fluctuations in artifact density and patterns of space usage were analyzed. Spatial and geostatistical analysis in ArcMap 10.2 revealed the community structure of Kocher village as a variant of the Late Prehistoric circular midden ring. Our analysis shows the value of surface data for intra-site analysis and adds to our knowledge about the variability in community structure during the Late Prehistoric period in the Middle Ohio River Valley.

[2] 40 Mile Point Light Station Rail System Compared with Other Lighthouses

CHAD R. STEPHENS (Central Michigan University) and TRAVIS J. COREY (Central Michigan University)

The 2015 Central Michigan University Archaeological field school at the 40 Mile point light station discovered a number of artifacts and features that seem to provide evidence that there was a rail system that brought coal from a long vanished dock to the fog signal house at the light station. The Lighthouse Society that maintains the public park was immediate intrigued by this discovery and wanted to know more to help interpret the site to the public. This poster explores whether other lighthouses have similar rail systems, if so how were they built and configured?

[10] Intraregional Variation in the Oneota Lithic Economy: A Comparison of the La Crosse and Koshkonong Localities

KATHERINE STERNER-MILLER (University of Wisconsin-Milwaukee)

In Wisconsin, "Oneota" describes a geographically widespread archaeological culture that archaeologists divide into distinct settlement clusters termed localities. We expect variation in material culture within these localities, but we might expect even greater variation across them. A correspondence analysis (CA) of the lithic raw material sources from fives sites in the La Crosse locality and four sites in the Koshkonong locality highlights differences between these two areas. Aside from differences in locally available raw materials, this analysis indicates greater diversity in resources at the La Crosse sites. These results have implications for understanding differences in intersite contact and communication.

[14] The Grace Peninsula Site (20IR239) An Archaic Copper and Lithic Manufacturing Site on Isle Royale National Park

MEGAN STROH (Sanford Museum)

The Grace Peninsula site (20IR239) is one of the few investigated Archaic sites at Isle Royale National Park. It exists on a Nipissing relict shoreline, which corresponds to a date of around 6000-4000 radiocarbon years before present. Analysis of copper and lithic artifacts suggest that the Grace Peninsula site corresponds to other major Isle Royale Archaic sites located above Nipissing relict shorelines. The comparison of lithic assemblages from the Grace Peninsula site and other Archaic sites provides an opportunity to examine the technological organization of Archaic groups utilizing Isle Royale.

[2] Creating Public Partnerships: The Benefits of Community Involvement in Archaeology

SARAH L. SURFACE-EVANS (Central Michigan University)

Community-based and public approaches to archaeology are a growing trend, but are still not yet entirely common practice. This poster considers the ethical responsibility of archaeologists to engage the public and integrate communities into their research projects. I will examine the benefits of increasing the number and variety of stakeholders involved in heritage management to the long-term sustainability of archaeology and historic preservation.

[5] Diet during the Middle to Late Woodland Transition: Stable Isotope Analysis on Ceramic Sherds from the Apple Creek Site, Greene County, IL

ADAM SUTHERLAND (University of Illinois at Urbana-Champaign)

A major transition in the Midwest was the end of the Havana-Hopewell Tradition in Illinois. This tradition, based largely on an ideology that expressed itself as a thriving ceremonial practice, centered around burial mounds and earthworks during the Middle Woodland Period (100 BCE- 400 CE). As this period came to a close this ceremonial tradition began to melt away. The Apple Creek Site, in Greene County, IL, represents a place where this transition was directly experienced. One way this transition was negotiated was through dietary practices. This study uses stable isotope analysis to look at dietary practices at the site.



[2] Like It, Then Leave It

GREG SWALLOW, TRACI SWALLOW (Central Michigan University)

One of the most frustrating situations that archaeologists face when dealing with the public involves the removal of artifacts from sites. Although exasperating, the public is generally uneducated as to what steps to take when they discover an artifact. This poster teaches the legality of keeping artifacts and the practical steps for the public to take if they find a possible artifact while visiting public heritage parks. After display at the Midwest Archaeological Conference, this poster will become part of the exhibit at the 40 Mile Point Lighthouse Park in Presque Isle County, Michigan.

[13] A Morphological Study of Lithic Material Recovered From the Buffalo Lake Locality

SETH TAFT (Grand Portage National Monument)

The Kratz Creek Mound Group (47Mq-0039) was excavated in 1917 by Samuel Barrett and Ethan Hawkes on behalf the Milwaukee Public Museum. While Barrett and Hawkes focused on mound construction and mortuary practices, artifacts were never analyzed adequately. The goal of this research was to examine the lithic assemblage recovered from the excavation using a morphological approach. Accession logs were vague on origins of materials, thus spanning into understanding the locality. The assemblage spans from the Archaic Tradition (ca. 8,000 B.C. to 500 B.C.) and into the Woodland Tradition (ca. 500 B.C. to A.D. 1200).

[2] Collaborative Documentation, Protection and Interpretation of Ezhibiigaadek Asin (the Sanilac Petroglyphs), Michigan

STACY TCHORZYNSKI (Michigan Historical Center) and SHANNON MARTIN (Ziibiwing Center of Anishinabe Culture & Lifeways)

The Sanilac Petroglyphs Historic State Park in Sanilac County, MI protects an extensive floodplain landscape associated with over 100 ancestral teachings carved into a horizontal sandstone outcrop. In recent years, the Saginaw Chippewa Indian Tribe of Michigan THPO, the Ziibiwing Center of Anishinabe Culture & Lifeways, the Michigan Historical Center, and the State Archaeologist have formed a strong collaboration to better document the site, protect it from weathering and vandalism, co-develop interpretation, increase tribal site use, and repair historic divides over site management between state, archaeological, and tribal communities.

[5] Decorative Function and Prehistoric Lifeways: A Functional Analysis of Prehistoric Ceramics from Western Iowa

MEAGAN E. THIES (Illinois State University)

In this presentation I will discuss the research design for my proposed Master's Thesis project. I hope to conduct a functional analysis of prehistoric lowa ceramics from the Sharp's site to understand the relationship between decorative elements and ceramic technology. In his 1971 work on the Sharp's site, Dr. Joseph A. Tiffany used ceramic design attributes to link ceramic typologies spatially and temporally. Prior research has rested on dates from two sites containing ceramics similar to those found at the Sharp's site. These dates were found problematic. I will first obtain C14 dates from three decorated sherds in the Sharp's site assemblage. Then I will conduct a functional analysis of the Sharp's site ceramics using the Performance-based Life History Approach. Recent work has shown ceramic analysts should first acquire a functional understanding of ceramics in order to ask more specific questions about the past. By conducting a functional analysis of the Sharp's site ceramics, I believe we can gain a better understanding of the relationship of ceramic technology to decorative elements and lifeways in prehistoric Western Iowa.

[11] Where the village smithy stood? Spatial analysis at the William Shores' property, Macktown, Illinois

CLARE TOLMIE (Midwest Archaeological Reserach Services, Inc.)

Excavations in the vicinity of the William Shores residence located a cistern, a possible wall sill, but no trace of a house cellar or other outbuildings. The artifact assemblage contained a higher than usual proportion of machine cut and L-head nails, and slag. Spatial analysis found two distinct clusters – one of nails, slag and unrefined wares, and the other of refined wares and faunal remains. Comparison with artifact assemblages from other early nineteenth workshop sites in Illinois confirms the interpretation of the distinct spatial pattern as evidence for a blacksmith or carpenters workshop and domestic activities associated with a residence.

[13] Migration and Effigy Mounds in Southeastern Wisconsin

JAY TOTH (Seneca Nation of Indians)

Despite decades of research on Effigy Mounds sites, there are many questions about the people in the Mounds. For example, were they local people occupying distinct territories or did they migrate widely? Isotope analysis could provide that answer, and the Tribal Historic Preservation Office requested that a number of individuals from the Nitschke Mounds site, excavated by McKern in the late 1920s and curated at the Milwaukee Public Museum, be tested. The ultimate goal was to return the ancient ones back to the exact mound in which they were removed.



[14] Experiments in Firesetting: Prehistoric Mining in the Keweenaw

KATHERINE TROTTER (University of Wisconsin-Milwaukee), CARL BLAIR (Michigan Technological University)

Copper mining, especially prehistoric copper mining is a significant aspect of the history of the Keweenaw Peninsula of Michigan. While experts have a theoretical understand of how the indigenous populations mined the local copper, few practical experiments have ever been conducted in the area regarding any of the possible mining methods. It is believed that one of the main methods used for mining was a technique known as firesetting. In the fall of 2014, an experiment was conducted through Michigan Technological University to test the viability of firesetting in the Keweenaw. The experiment had several repetitions and yielded favorable results.

[2] Tuskegee Airmen in Michigan

WAYNE TUSCARDI

[8] Factionalism, Migration, and Conflict in the Late Prehistoric Central Illinois River Valley: A Pilot Study Using LA-ICP-MS

ANDREW J. UPTON (Michigan State University)

The Late Prehistoric period of the central Illinois River valley (CIRV) is perhaps best known from the high levels of conflict and violence seen in burial and cemetery contexts. Yet, comparatively little is known about the social context of these violent interactions. This poster presents the results of a pilot study designed to determine whether laser ablation inductively couple plasma mass spectrometry (LA-ICP-MS) can generate data from which meaningful ceramic and clay compositional groupings can be created in the CIRV. Results suggest that LA-ICP-MS is able to create meaningful groupings, and will allow questions about regional mobility to be explored.

[22] The Role of Animals in Oneota Subsistence and Agricultural Technology: A Case Study from the Lake Koshkonong Locality

LUCIENNE VAN DE PAS (University of Wisconsin- Milwaukee), RACHEL MCTAV-ISH (University of Wisconsin- Milwaukee), and AMY KLEMMER (University of Wisconsin- Milwaukee)

Oneota sites in the Lake Koshkonong locality of Southeastern Wisconsin are demonstrably placed within or near to multiple environmental zones. The diverse suite of resources utilized by Oneota groups in the region is well documented. Three sites in the region, Crescent Bay Hunt Club (47JE904), Koshkonong Creek Village (47JE379), and Schmeling (47JE833) are investigated to see if there are differences in the way that animal resources were exploited. In particular, choices in animal bone use for tool manufacture relating to agricultural technology are contextualized with other Oneota groups.



[18] Late Woodland and Middle Mississippian Stone Tool Use at the Aztalan Site: A Comparative Lithic Analysis

ROBERT W. VANDER HEIDEN JR., (University of Wisconsin-Milwaukee), JOHN D. RICHARDS (University of Wisconsin-Milwaukee)

This paper presents a preliminary intra-site analysis of lithic assemblages from the Aztalan site in southeast Wisconsin. The site represents an initial Late Woodland settlement later transformed by influences deriving from the rise of the Cahokia site. UWM's 1984 excavation of a stratified midden produced evidence of a discrete Late Woodland component capped by mixed Late Woodland and Mississippian components. Analysis of lithic assemblages from these contexts provides an opportunity to compare shifts in stone tool use and energetic efficiency through time while collections recovered by 2011 and 2013 UWM field schools allow comparison of functionally different contexts.

[20] Public Archaeology Outreach in Floyd County, Indiana

REBECCA VAN SESSEN (University of Indianapolis), ELIZABETH STRAUB (University of Indianapolis), CHRISTOPHER MOORE (University of Indianapolis)

Ulndy was awarded one of Indiana's FSY 2015 HPF grants for survey work in Floyd County, Indiana. We selected this county since it is listed as a priority in the state for archaeological research and because one of the co-directors has personal connections there. Beginning with only a few informants, our goal of 500 acres to survey was quickly surpassed suggesting the community members share a desire to learn about the area's history. This poster will detail how participants were included in our outreach, how we continue to build rapport, and a short discussion on our initial work thus far.

[16] Lead Shot Making Among the Sac of Northwestern Illinois: PXRF and SEM Analyses of Metal Artifacts From the Crawford Farm Site (11Ri81)

MARK J. WAGNER (Southern Illinois University), DAVID BIRNBAUM (Southern Illinois University), and KAYELEIGH SHARP (Southern Illinois University)

The development of new technologies makes it possible to recover previously unknown information through re-analysis of artifacts contained in "old" collections. In this paper we present the results of portable x-ray fluorescence (pXRF) and scanning electron microscope (SEM) analysis of metal artifacts recovered from the late 1700s/ early 1800s Sac-occupied Crawford Farm site (11Ri81) between 1958-1962. Use of these techniques enabled us to identify a possible sieve used in lead shot production, the first time such an artifact has been identified in Illinois, as well as lead-encrusted copper kettle fragments that may have formed parts of additional containers for melted lead.

[9] "The Refuse of the Colonial Economy:" Repurposing Trade Items in the Upper Great Lakes c. 1630-1730

HEATHER WALDER (University of Wisconsin-Madison)

Through a materially-grounded investigation of intercultural interaction in the early historic Upper Great Lakes, I contrast progressivist models of economic development, which filter Indigenous exchange systems through the lenses of capitalism and market-driven economic motivations, with a substantivist approach developed MILWUAUKEE, WISCONSIN 83



by anthropologist Marshall Sahlins. Data obtained from compositional and attribute analyses of common "Fur Trade" artifacts, particularly blue glass beads, glass pendants, and copper-base metal adornments, are most effectively interpreted when ethnic or social identity and technological practice are considered. Historically important social motivations for exchange, such as solidifying alliances, designating fictive kinship, and compensation for loss are emphasized.

[6] PDC Group Chert Resources of the Upper Mississippi River Valley

DAN WENDT (Minnesota Historical Society)

A survey of bedrock outcrops of the PDC group dolomite in the Upper Mississippi River Valley of Wisconsin and Minnesota have shown widespread occurrence of chert with complex variation in attributes. Some systematic variation occurs within PDC group cherts by formation and member. Some variation however is unique to specific strata in specific outcrops where abundant and higher quality chert tends to occur with evidence of groundwater activity that dissolved dolomite and deposited silicates and other minerals. An occurrence of higher quality chert at Spring Coulee has extensive evidence of quarrying and workshop activities centered upon series of natural outcrops.

[7] The use of IS6110 in the identification of Mycobacterium tuberculosis in the Milwaukee County Institution Grounds Cemetery

HELEN M WERNER (University of Wisconsin-Milwaukee)

The possibility of identifying Mycobacterium tuberculosis in skeletal remains has been a debated topic for many years. This study utilizes the remains from the 1991 and 1992 excavations of the Milwaukee County Institution Grounds Cemetery, a collection of human skeletons ranging from 1882 to 1925, of various ages and sexes, to address that possibility. To test the utility of previously used methods of osteological identification of tuberculosis, the collection has been analyzed for the IS6110 repetitive element marker using molecular biological techniques, such as Polymerase Chain Reaction (PCR). Eighty-six skeletons from the collection have been analyzed, with nine of them showing evidence of skeletal tuberculosis. PCR has also been carried out with the oxyR marker to rule out Mycobacterium bovis contamination on all positive IS6110 samples. The goal of the study was to evaluate whether or not osteological identification of M. tuberculosis is possible and whether it can be confirmed using molecular biological techniques.

[16] GIS Analysis of Historic Indian Sites in Iowa

WILLIAM E. WHITTAKER (University of Iowa Office of the State Archaeologist)

A database of 634 historic Indian locations in Iowa illuminates some of the broader trends of population movement during the periods of Euroamerican exploration and American settlement. Although the quality of the data is often low, it is generally consistent with, and complementary to, traditional historic accounts of the era. Insights derived from analysis include the placement of the 1825 Neutral Line as a possible cause of the myth of Dakota as an overly-aggressive tribe and the poorly documented eastward expansion of Potawatomi into Iowa after 1840. The database can aid future investigations in to historical research, archaeology, and tribal range and affiliation.

[19] A Test of Time: Bayesian Analysis and Ceramic seriation in the Mississippian Central Illinois River Valley

GREGORY D. WILSON (University of California Santa Barbara), MALLORY A. MELTON (University of California Santa Barbara)

We employ a Bayesian statistical framework to establish a precision accelerator mass spectrometry (AMS) radiocarbon chronology for a two hundred year (A.D. 1100-A.D. 1300) portion of the Mississippian occupation of the Central Illinois River Valley (CIRV). This chronology is informed by a fine-scaled ceramic seriation consisting of the analysis of surface treatment and metric data from jar rims. The result is a revised means of assessing time/space systematics in the Mississippian CIRV and some notable changes to previously accepted understandings of the region's trajectory of historical change.

[3] Investigations of the Adlai E. Stevenson Historic Home Midden

DANIEL M. WINKLER (College of Lake County), SCOTT PALUMBO (College of Lake County), ANTONIA PITRELLO (College of Lake County), and REBECCA RIVERA (University of Wisconsin-Parkside)

The Department of Anthropology at the College of Lake County contacted the Lake County Forest Preserve in 2014 to inquire about developing a public archaeology program, with the goal of introducing college students and local volunteers to field archaeology. Upon the recommendation of the Forest Preserve staff, the Adlai E. Stevenson Historic Home property was selected for investigation in the fall of 2014. The focus of the project was a small portion of the farm landscape containing a surface concentration of historic artifacts. The results of the investigation are presented in this study.

[9] "The French Must Always Be Our Rivals in Trade": Examining the Dynamics of Trade from 1760-1820

JESSICA YANN (Michigan State University)

Several assumptions exist regarding the nature of trade in the Midwest between European traders and Native Americans from 1760-1820. Evidence suggests, however, that these assumptions may not accurately portray the diversity of economic interactions that took place. Examining these sources reveals details that demonstrate the influence Native Americans had over the economic development of the trade. This paper will examine these assumptions, and provide a discussion on both the avenues of trade and the items being traded, to demonstrate how a more nuanced approach is beneficial to discussions of this time period.