



# MIDWEST ARCHAEOLOGICAL CONFERENCE

# 58th Annual Conference

# Abstracts

October 2-4, 2014 Hilton Garden Inn Champaign, IL

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# MIDWEST ARCHAEOLOGICAL CONFERENCE

October 2-4, 2014 Champaign, Illinois

Sponsored by Illinois State Archaeological Survey Prairie Research Institute University of Illinois

Midwest Archaeological Conference, Inc.

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#### CONFERENCE SPONSORS

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# Dedication

In fond memory of our departed colleagues Dr. Mark Lynott Dr. N'omi Greber



# WELCOME! MIDWEST ARCHAEOLOGICAL CONFERENCE 2014 CHAMPAIGN, IL

Welcome to the 2014 Annual Meeting of the Midwest Archaeological Conference, Inc. in Champaign, Illinois.

It has been 58 years since John McGregor convened seven of his colleagues on a wintery day at the University of Illinois to discuss the future direction of Midwestern archaeology. Out of that 1956 meeting emerged a consensus that, because of the extensive and intensive archaeological work being done in the region, it was desirable to form "an archaeological conference of active field workers in the Midwestern areas". The participants also agreed that contributions of not more than \$1.00 would be solicited to help pay expenses.

Times have changed. The MAC now has over 500 members, supports a state-ofthe-art journal published three times per year, both in print and digitally, and has initiated a new Occasional Papers series. It annually sponsors a Conference that regularly hosts nearly 400 participants and attendees. This year the MAC has 12 symposia as well as 216 presentations and posters. We are especially pleased that a considerable percentage of these presentations are by students and younger colleagues. This bodes well for the Conference as it goes forward. Perhaps as important as the presentations, are two early evening receptions being sponsored by the Illinois professional and avocational communities and by the MAC. These casual opportunities to meet your colleagues and do a little socializing and networking are a critical aspect of what makes conventions successful. We are pleased to provide these opportunities for you.

Fortunately for all of us, the MAC no longer limits contributions to \$1.00. Over \$5600 was contributed by various organizations to help support this Annual meeting. It is their generosity that helps make these events possible and we have acknowledged their support in the program and at the sponsored events. A conference only comes together because of the work of multitudes of individuals - we have to acknowledge the tremendous efforts of ISAS's staff and University students for their enthusiasm and many volunteered hours of labor. In this era much of the nitty-gritty of conference organization takes place in the ether of the internet. This year was the first that MAC has taken control of the registration process through a new web site created and managed by John Doershuk's staff at the Iowa Office of the State Archaeologist. They deserve our thanks for a job well done.

Again, welcome to the MAC 2014.

Thomas E. Emerson Eve A. Hargrave Conference Organizers



# Midwest Archaeological Conference October 2–4, 2014 – Champaign, IL

#### REGISTRATION

Hilton Garden Inn Conference Center Entrance Thursday, October 2, 12:00 pm–5:00 pm Friday, October 3, 7:00 am–5:00 pm Saturday, October 4, 7:00 am–12:00 pm

#### **Computer Access**

Computers with Internet and free printing available in the business centers at Hilton Garden and Homewood Suites.

#### BOOK ROOM

Badgers Room Thursday October 2, 12:00 pm-5:00 pm Friday October 3, 8:00 am-5:00 pm Saturday, October 4, 8:00 am-12:00 pm

#### MEETINGS AND SPECIAL EVENTS

Midwest Ceramic Workshop Open House Conference Center- Hilton Garden Inn Room: Fighting Illini Thursday, October 2 – 3:00–4:00 pm

#### IAS Board Meeting

Homewood Suites Conference Room Thursday, October 2 – 4:30 pm

#### **IAS Business Meeting**

Conference Center-Hilton Garden Inn Room: Hoosiers/Hawkeyes Thursday, October 2 – 5:30 pm

#### Illinois Archaeology Reception

Conference Center- Hilton Garden Inn Room: Alumni Ballroom (downstairs) Thursday, October 2 – 6:30–9:00 pm Cash Bar – Free Beer and Appetizers

#### MAC Board Meeting

Homewood Suites Conference Room Friday, October 3 – 12:00–2:00 pm



#### **IAAA Board Meeting**

Homewood Suites Conference Room Friday, October 3 – 4:00–5:00 pm

#### MAC Reception

Conference Center- Hilton Garden Inn Room: Little Chief Friday, October 3 – 5:30–9:00 pm Cash Bar – Free Beer and Appetizers

#### MAC Business Meeting

Conference Center- Hilton Garden Inn Room: Little Chief Saturday, October 4 – 4:30–5:30 pm

#### **MAC Banquet**

Conference Center- Hilton Garden Inn **Room:** Fighting Illini/Spartans/Golden Gophers Saturday, October 4 – 5:30–9:00 pm Cash Bar, 5:30–6:30 pm Dinner, 6:30–7:30 pm Keynote Speaker, 7:30 pm, Dr. Martin Carver, University of York "Sutton Hoo 1600-2014. Six Campaigns- and a New One"



# Midwest Archaeological Conference October 2–4, 2014 – Champaign, IL

#### SYMPOSIA

(1) Symposium: Recent Research in Midwestern Paleoethnobotany Organizer: Mary Simon (Illinois State Archaeological Survey) Room: Hoosiers/Hawkeyes Thursday, 1:00–4:00 pm

(2) MAC Sponsored Symposium: Convergence and Divergence:

Bioarchaeological Evidence for Late Prehistoric Population Interaction in the Midwest Organizers: Mallorie A. Hatch (Arizona State University), Dawn Cobb (Illinois State Museum), Kristin M. Hedman (Illinois State Archaeological Survey-Program on Ancient Technologies and Archaeological Materials), and Eve A. Hargrave (Illinois State Archaeological Survey) Room: Little Chief Thursday, 1:00–4:00 pm

(3) Symposium: Constructing Greater Cahokia: The Archaeology of the East St. Louis Mound Complex Organizers: Thomas E. Emerson (Illinois State Archaeological Survey) and Brad Koldehoff (Illinois Department of Transportation) Room: Hoosiers/Hawkeyes Friday, 8:30-11:45 am

(4) Symposium: Hidden in Plain Sight II: Early Nineteenth Century Native American Sites and Material Culture in the Midwest

Organizers: Richard L. Fishel (Illinois State Archaeological Survey) and Robert F. Sasso (University of Wisconsin, Parkside) Room: Little Chief Friday, 8:30–11:15 am

(5) Symposium: Mark lynott, a Memorial Symposium Organizer: Timothy Schilling (NPS Midwest Archeological Center) Room: Hoosiers/Hawkeyes Friday, 1:30–4:15 pm

(6) Symposium: A Look Around the Lake: Recent Archaeological Investigations in the Lake Koshkonong Region of Southeastern Wisconsin Organizers: Richard W. Edwards IV (University of Wisconsin, Milwaukee), Katherine Sterner-Miller (University of Wisconsin, Milwaukee), and Robert J. Jeske (University of Wisconsin, Milwaukee) Room: Fighting Illini Friday, 1:30–4:00 pm



(7) Symposium: Recent Archaeological Research in the Great Lakes Region Organizer: Fernanda Neubauer (University of Wisconsin, Madison and CAPES Foundation) Room: Little Chief Saturday, 8:00 am-10:15 pm

 (8) Symposium: Science and Religion in Archaeology: The Legacy of Thomas E. Emerson
 Organizer: Timothy R. Pauketat (University of Illinois) and Brad H. Koldehoff (Illinois) Department of Transportation)
 Room: Hoosiers/Hawkeyes
 Saturday, 8:00–12:00 am

 (9) Symposium: Exploring the Complexity of Midwest Urban Life through Historical Archaeology
 Organizers: Claire P. Dappert (Illinois State Archaeological Survey), Dwayne L. Scheid (Illinois State Archaeological Survey), Mark Branstner (Illinois State Archaeological Survey)
 Room: Little Chief Saturday, 1:00–4:00 pm

(10) Symposium: Early Holocene Hunter-Gatherers of the Western Great Lakes Organizers: Thomas J. Loebel (Illinois State Archaeological Survey) and John Lambert (University of California, Davis) Room: Hoosiers/Hawkeyes Saturday, 1:00–4:30 pm

#### GENERAL SESSIONS

(1) General Session: Middle Woodland Room: Spartans/Golden Gophers Friday, 8:30–11:30 am

(2) General Session: Late Woodland Room: Fighting Illini Friday, 8:30–11:00 am

(3) General Session: Late Prehistoric (Fort Ancient, Oneota) Room: Little Chief Friday, 1:30–3:45 pm

(4) General Session: Mississippian Room: Spartans/Golden Gophers Friday, 1:30–4:15 pm

(5) General Session: Historic Room: Spartans/Golden Gophers Saturday, 8:00–9:30 am



(6) General Session: Community Outreach and Cultural Resources Management Room: Spartans/Golden Gophers Saturday, 10:00–11:45 am

(7) General Session: Paleoindian, Archaic Room: Little Chief Saturday, 10:30–11:15 am

#### MAC STUDENT WORKSHOP

#### Current Issues in Midwestern Archaeology

Organizers: Aaron Comstock and Andrew Upton Moderators: Erin Benson and Autumn Beyer MAC Board Liaison: Robert Cook Panelists: Melissa Baltus, Meghan Buchanan, John Doershuk, Shannon Fie, Timothy Pauketat, and Michael Wiant Room: Little Chief

Friday, 4:15-5:30 pm

#### POSTER SYMPOSIA

(1) Poster Symposium: Late Pre-Columbian Environmental Change, Settlement Histories, and Agricultural Impacts: Results of the 2014 Angel Mounds NSF REU Program

Organizer: Jeremy Wilson (Indiana University-Purdue University of Indianapolis) Room: Wolverines/Buckeyes Friday, 1:30–4:30 pm

(2) Poster Symposium: Learning in Action: Student Centered Research at the Applied Anthropology Laboratories 2010–2014

Organizer: Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University)

Room: Wolverines/Buckeyes Saturday, 8:00–11:00 am

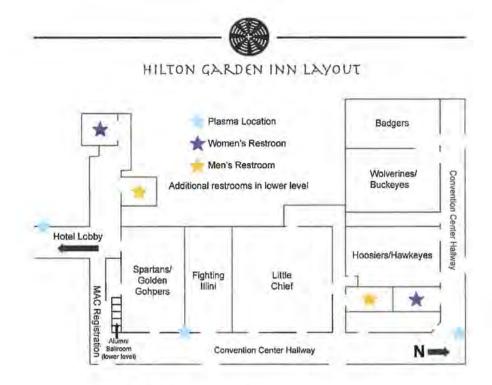
#### POSTER SESSIONS

(1) Poster Session: Mississippian, Late Prehistoric, Historic Room: Wolverines/Buckeyes Friday, 8:30–11:30 am

(2) Poster Session: Paleoindian, Archaic, Woodland Room: Wolverines/Buckeyes Friday, 1:30-4:30 pm

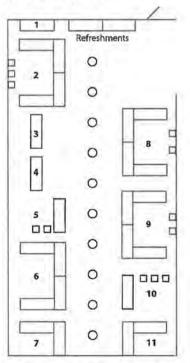
(3) Poster Session: Community Outreach Room: Wolverines/Buckeyes Saturday, 8:00–11:00 am

CHAMPAIGN, ILLINOIS



#### BADGER ROOM VENDOR LAYOUT

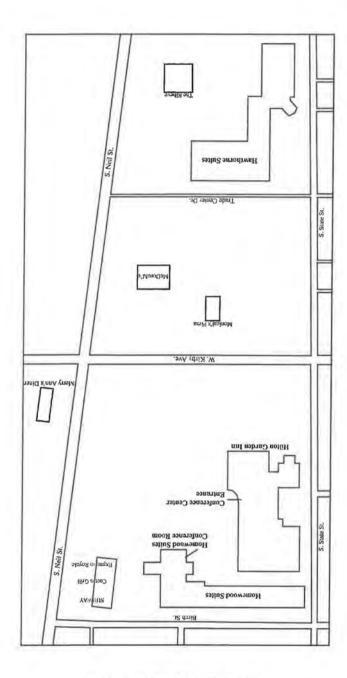
- Midwest Archaeological Conference/University of Florida Press
- 2. Illinois State Archaeological Survey
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2014 MIDWEST ARCHAEOLOGICAL CONFERENCE



# CONFERENCE COMPLEX



CHAMPAIGN, ILLINOIS



# Midwest Archaeological Conference October 2–4, 2014 – Champaign, IL

### THURSDAY AFTERNOON OCTOBER 2

## Symposium (1)

#### Recent Research in Midwestern Paleoethnobotany

Hoosiers/Hawkeyes Room - 1:00-4:00 pm

Organizer: Mary L Simon (Illinois State Archaeological Survey)

- 1:00 Connie Arzigian (University of Wisconsin-La Crosse) Food Storage and Seasonality: An Ethnographic and Archaeological Perspective
- 1:15 Rosemarie Blewitt (University of North Carolina at Chapel Hill) Ceremonial Plant Use At The Tom Jones Site (3He40), A Caddo Site In Southwest Arkansas
- 1:30 Gayle Fritz (Washington University in St. Louis) Feeding Cahokia: How Did the Agricultural System Work?
- 2:00 William Green (Logan Museum of Anthropology, Beloit College) Plains Village and Mississippian Agricultural Systems and the Question of Swidden
- 2:15 Karen Leone (Gray & Pape, Inc.) Botanical Evidence of Hopewell Feasting? A Case Study from Central Ohio
- 2:30 BREAK
- 2:45 Madeleine McLeester (University of Chicago) Pollen on the Prairie: Environmental Reconstructions, Resource Use, and Site Dynamics at Oak Forest
- 3:00 Natalie Mueller (Washington University in St. Louis) Documenting Knotweed Domestication: Preliminary Results
- 3:15 Kimberly Schaefer (Illinois State Archaeological Survey) Recent Radiocarbon Dates on Common Bean (Phaseolus vulgaris) from Illinois
- 3:30 Ronald Schirmer (Minnesota State University, Mankato) New Data on Woodland Plant Remains and Minnesota Archeology
- 3:45 Amber VanDerwarker (University of California, Santa Barbara) and Gregory Wilson (University of California, Santa Barbara) - War and Food Insecurity in the Central Illinois River Valley: Foraging, Farming, and Fishing during the Early and Middle Mississippian Periods

# Symposium (2)

MAC Sponsored Symposium: Convergence and Divergence – Bioarchaeological Evidence for Late Prehistoric Population Interaction in the Midwest

Little Chief Room - 1:00-4:00 pm

Organizers: Mallorie A. Hatch, Dawn Cobb, Eve A. Hargrave, and Kristin M. Hedman

1:00 Mallorie A. Hatch (Arizona State University), Dawn Cobb (Illinois State Museum), Kristin M. Hedman (Illinois State Archaeological Survey/Program



on Ancient Technologies and Archaeological Materials), and Eve A. Hargrave (Illinois State Archaeological Survey) - Sponsored Symposium Introduction

- 1:10 Della Collins Cook (Indiana University) Old Wine in New Wine Skins: What the Craniological Work of George Langford and Georg Neumann Predicts for the Future of Biological Distance Studies
- 1:30 Lyle W. Konigsberg (University of Illinois) and Susan R. Frankenberg (University of Illinois) The Biological Distance and Genetic Evidence for Long-Range Migration in the Prehistoric Midwest
- 1:50 Charla Marshall (Armed Forces DNA Identification Laboratory, Illinois State Archaeological Survey), Georgia G. Millward (Molecular Biology Laboratory, Army Institute of Public Health, Indiana University), John Lindo (University of Illinois), Aimee Carbaugh (Illinois State Archaeological Survey), Kristin M. Hedman (Illinois State Archaeological Survey), Thomas E. Emerson (Illinois State Archaeological Survey), Frederika Kaestle (Indiana University), Della Collins Cook (Indiana University), and Ripan S. Malhi (University of Illinois) -The Genetic Legacy of the Mississippians
- 2:10 BREAK
- 2:20 Mallorie A. Hatch (Arizona State University) The Bioarchaeology of Mississippian War: A View from the Central Illinois Valley
- 2:40 Eve A. Hargrave (Illinois State Archaeological Survey), Dawn Cobb (Illinois State Museum), Lenna Nash (Illinois State Archaeological Survey), Julie Bukowski (Illinois State Archaeological Survey), and Sarah Baires (Eastern Connecticut State University) - Ritual Sacrifice in the American Bottom: Archaeological Contexts and Interpretations
- 3:00 Stanley H. Ambrose (University of Illinois), Kristin M. Hedman (Illinois State Archaeological Survey/Program on Ancient Technologies and Archaeological Materials), Philip A. Slater (University of Illinois), and Matthew A. Fort (Illinois State Archaeological Survey) - Isotopic Evidence of Diet and Place of Origin in the Midcontinent
- 3:20 Discussant; Jane E. Buikstra (Arizona State University, School of Human Evolution)
- 3:40 Q&A

# Meetings

Midwest Ceramic Workshop Open House Fighting Illini Room — 3:00–4:00 pm

IAS Board Meeting Homewood Suites Conference Room — 4:30 pm

> IAS Business Meeting Hoosiers/Hawkeyes Room — 5:30 pm

Illinois Archaeology Reception Alumni Ballroom (downstairs) — 6:30–9:00 pm Cash Bar – Free Beer and Appetizers

CHAMPAIGN, ILLINOIS



FRIDAY MORNING OCTOBER 3

#### Symposium 3

Constructing Greater Cahokia: The Archaeology of the East St. Louis Mound Complex

Hoosiers/Hawkeyes Room - 8:30-11:45 am

Organizers: Thomas E. Emerson (Illinois State Archaeological Survey) and Brad Koldehoff (Illinois Department of Transportation)

- 8:30 Thomas E. Emerson (Illinois State Archaeological Survey) Situating the East St. Louis Mound Complex in the History of Greater Cahokia
- 8:45 Joseph M. Galloy (Illinois State Archaeological Survey) The East St. Louis Mound Complex: A Historical Overview
- 9:00 Michael F. Kolb (Strata Morph Geoexploration, Inc) The Physical and Cultural Landscape Context of Mississippian Archaeological Sites in Metro East St. Louis
- 9:15 Steven L. Boles (Illinois State Archaeological Survey) and Lenna Nash (Illinois State Archaeological Survey) - Anthropogenic Landscape Events at the East St. Louis Mound Complex
- 9:30 Tamira K, Brennan (Illinois State Archaeological Survey) and Sarah E. Baires (Eastern Connecticut State University) - Ridge-Top Mounds and the East St. Louis Mound Complex
- 9:45 Sarah Harken (Illinois State Archaeological Survey), Alleen Betzenhauser (Illinois State Archaeological Survey), Ross Brady (Illinois State Archaeological Survey), and Alexandra Freyer (Illinois State Archaeological Survey)
   Chronological Implications and External Connections within East St. Louis Ceramics
- 10:00 BREAK
- 10:15 Alleen Betzenhauser (Illinois State Archaeological Survey) and Luke Plocher (Illinois State Archaeological Survey) – Early Residents of East St. Louis: Architecture and Community Organization (AD 900–1100)
- 10:30 Brent Lansdell (Illinois State Archaeological Survey) and Victoria Rohe (Illinois State Archaeological Survey) - Stirling and Moorehead Phase (AD 1100–1250) Architecture and Community Organization at East St. Louis
- 10:45 Mary L. Simon (Illinois State Archaeological Survey) Plant Materials from Burned Structures at the East St. Louis Site
- 11:00 Daniel F. Blodgett (Illinois State Archaeological Survey) Monumental Posts at the East St. Louis Mound Complex
- 11:15 Steven L. Boles (Illinois State Archaeological Survey), Jenna Ely (Illinois State Archaeological Survey), and Justin Wallace (Illinois State Archaeological Survey) - Craft Specialization at the East St. Louis Mound Complex
- 11:30 Lenna Nash (Illinois State Archaeological Survey), Eve A. Hargrave (Illinois State Archaeological Survey), and Katharine McDonald (Illinois State Archaeological Survey) - Life and Death at the East St. Louis Mound Complex



#### Symposium (4)

Hidden in Plain Sight II: Early Nineteenth Century Native American Sites and Material Culture in the Midwest

Little Chief Room - 8:30-11:15 am

Organizer: Richard L. Fishel (Illinois State Archaeological Survey) and Robert F. Sasso (University of Wisconsin, Parkside)

- 8:30 Richard L. Fishel (Illinois State Archaeological Survey) and Robert F. Sasso (University of Wisconsin, Parkside) - Introduction to the Hidden in Plain Sight II Symposium
- 8:45 Lauren W. Ritterbush (Kansas State University) Identifying and Understanding the Early Kansa along the Kaw, 1790–1825
- 9:00 Melissa Eaton (Metropolitan Community College, Longview) Embodying Cultural Representations at Delaware Town
- 9:15 Larry Grantham (Gauss Archaeology, LLC) Osage Sites and Archaeology in the 19th Century

9:30 Philip G. Millhouse (Illinois State Archaeological Survey) - Gratiots Grove: Cultural Survival and Negotiation of Place on a Volatile Cultural Frontier

- 9:45 BREAK
- 10:00 Robert F. Sasso (University of Wisconsin, Parkside) and Daniel J. Joyce (Kenosha Public Museums) - Two Decades and Change: Challenges and Successes in Identifying the Nature of Early Nineteenth Century Potawatomi Material Culture in Southeastern Wisconsin
- 10:15 Mark R. Schurr (University of Notre Dame), Patrick H. Donohue (Civil & Environmental Engineering & Earth Sciences, University of Notre Dame), and Antonio Simonetti (Civil & Environmental Engineering & Earth Sciences, University of Notre Dame) - Multi-Element Characterization of Early Nineteenth Century Pottery Sherds from Native American and Euro-American Sites
- 10:30 Robert Mazrim (Illinois State Archaeological Survey) Some Ephemeral Early Nineteenth Century Native Signatures in Illinois
- 10:45 Mark J. Wagner (Center for Archaeological Investigations, Southern Illinois University), Rosemary Bolin (Southern Illinois University), and Lauren Austin (Southern Illinois University) - Lead Turtles and Engraved Arm Bands: Rethinking the Historic Sauk Occupation at the Crawford Farm Site
- 11:00 Richard L. Fishel (Illinois State Archaeological Survey) Investigations at a Probable 1820s Potawatomi Homestead in the Spoon River Valley of West-Central Illinois

# General Session (1)

Middle Woodland

Spartans/Golden Gophers Room - 8:30-11:30 am

8:30 Jason T. Herrmann (Center for American Archeology), Jason L. King (Center for American Archeology), Jane E. Buikstra (Arizona State University, School of Human Evolution), and Taylor H. Thornton (Center for American Archeology) - Geophysical Survey at Golden Eagle, Illinois (11C120)



- 8:45 Jason L. King (Center for American Archeology), Jason T. Herrmann (Center for American Archeology), Jane E. Buikstra (Arizona State University, School of Human Evolution), and Taylor H. Thornton (Center for American Archeology) - Ground-Penetrating Radar Survey and Excavation of the Golden Eagle (11C120) Embankment
- 9:00 Stuart Nealis (University of Kentucky) Results of the 2014 Geoarchaeological Research Investigations of the Portsmouth Earthworks
- 9:15 Jarrod Burks (Ohio Valley Archaeology, Inc.) and Jamie Davis (Ohio Valley Archaeology, Inc.) - Using Cut/Fill Terrain Models in Archaeology: Exploring Some Applications
- 9:30 G. Logan Miller (Ohio History Connection) Ohio Hopewell Craft Production: Evidence from Microwear Analysis
- 9:45 Mark L. Madsen (Chicago Archaeological Society/IAAA) Pipes, Celestial Legends, Calendars, Snakes, and Measure At the Adler and Utica Mounds
- 10:00 BREAK
- 10:15 Autumn Beyer (Illinois State University) Faunal Analysis of the Kuhne Site: Stuart Struever's 1955–56 Excavation
- 10:30 Montana Martin (University of Illinois) and Adam Sutherland (University of Illinois) A Reanalysis of Burial Artifacts from the Havana Mound Group
- 10:45 Montana Martin (University of Illinois) Re-testing the Function of a Middle Woodland Site: Ogden-Fettie
- 11:00 Sean Stretton (University of Illinois) Examining the Expansion of Middle Woodland Havana Materials into the Grand River Valley of Western Michigan
- 11:15 **Dale Tucker** (*Illinois State Archaeological Survey*) A Shell of a Journey Into the Crab Orchard Tradition

#### General Session (2)

Late Woodland

#### Fighting Illini Room - 8:30-11:00 am

- 8:30 Alexey Zelin (Illinois State Archaeological Survey) Early Terminal Late Woodland Ceramic Assemblages from the Vaughn Branch Upland Locality in the Northern American Bottom
- 8:45 James M. Pisell (Illinois State Archaeological Survey) and Lauren M. Fitts (Illinois State Archaeological Survey) - A Comparison of Terminal Late Woodland Bluff Culture Structures
- 9:00 Adam Sutherland (University of Illinois) What Can a Ceramic Type Collection Tell Us about the Snyders Site?
- 9:15 Brian Adams (Illinois State Archaeological Survey) Archaeological Investigations at the Ernat Site (11LS267), LaSalle County, Illinois
- 9:30 Megan C. Bauerle (Illinois State University) and Maria O. Smith (Illinois State University) - Patterns of Caries in the Middle and Late Woodland of the Mississippi River Valley: An Oral Health Analysis of the Albany and Kuhlman Mound Groups
- 9:45 BREAK



- 10:00 Deborah L. Neidich (Illinois State University) and Maria O. Smith (Illinois State University) - An Investigation of Teres Minor Insertional Robusticity and its Pattern in a Late Woodland Period Sample from West-Central Illinois
- 10:15 Kelsey E. Witt (School of Integrative Biology, University of Illinois), Kelsey Noack Myers (Indiana University), and Elizabeth L. Watts-Malouchos (Indiana University) - Ancient Canine DNA: Implications for Late Woodland and Mississippian (AD 600–1400) Populations and Relatedness
- 10:30 Lily Malekfar (Triton College) and Maria Ostendorf Smith (Illinois State University) The Pattern and Prevalence of Treponemal Disease in the Middle and Late Woodland of North-west Illinois
- 10:45 Brooke Wamsley (Illinois State University), Emily Blankenberger (Illinois State University), Veronica Butterfield (Illinois State University), and Maria O. Smith (Illinois State University) - Sex Differences in Mechanical Stress in Aspects of the Hip Joint in the Late Woodland Sample from Schroeder Mounds

#### Poster Session (1)

Mississippian, Late Prehistoric, Historic

Wolverines/Buckeyes Room - 8:30-11:30 am

- Danielle M. Benden (University of Wisconsin, Madison) and Robert "Ernie" Boszhardt (Independent) - The Trempealeau Archaeology Project: 2014 Investigations
- 2) Erin Benson (University of Illinois) Absorbed Residue Analysis on Ceramics from Three Moorehead Phase Sites in the American Bottom
- Adam Crane (Indiana University) and Della Collins Cook (Indiana University)

   Implementing the 'Bioarchaeology of Care' in the Illinois River Valley: A Case of Juvenile-Onset Ankylosing Spondylitis at Morton Mound 14
- Justin Wallace (Illinois State Archaeological Survey), Jenna Ely (Illinois State Archaeological Survey), and Steven L, Boles (Illinois State Archaeological Survey) - Exotic Projectile Points at ESTL: Distant Connections and Influences
- 5) Michael G. Farkas (Illinois State Archaeological Survey) Examining Monks Mound through Aerial LiDAR
- 6) Dru McGill (Glenn A. Black Laboratory of Archaeology, Indiana University) -Variability within Single Ceramic Vessels and its Implications for Archaeological Interpretations
- 7) Molly Mesner (University of Wisconsin, Madison) and Victoria Pagel (University of Wisconsin, Madison) - Comparative Analysis of the 2013-2014 Trempealeau Archaeology Project (TAP): An Examination of Two Distinct Features Within The Uhl Site
- Elizabeth L. Watts-Malouchos (Indiana University) Community and Cosmos: New Insights into Mississippian Community Organization in Southwestern Indiana from the Stephan-Steinkamp Site (12PO33)
- 9) Elizabeth L. Watts-Malouchos (Indiana University), Samuel Christian (Indiana University), Lydia Griffiths (Indiana University), Isabel Osmundsen (Indiana University), Elizabeth Roetter (Indiana University), and Chloe Strauss (Indiana University) - Creating Community Through Curation: The Reuse of



Middle Woodland Lithic Tools in Mississippian Contexts in Southwestern Indiana

- Charity F. Upson-Taboas (Indiana University) Problems Interpreting E. Y. Guernsey's Excavations of Elrod (12Cl1)
- 11) Amanda J Butler (Illinois State Archaeological Survey) and Madeleine G. Evans (Illinois State Archaeological Survey) - Walking the Orendorf Tightrope: Monumental Efforts for a Monumental Site
- 12) Adam A Tufano (Illinois State Archaeological Survey) An Examination of Unique Fisher Site Burial Lithics
- Michael D. Conner (Dickson Mounds Museum), Jodie A. O'Gorman (Michigan State University), Timothy J. Horsley (Horsley Archaeological Prospection, LLC), and Matthew D. Pike (Purdue University) – Spatial Organization of an Oneota/Mississippian Community
- Matthew J. Davidson (University of Kentucky) Pipestone Production, Exchange, and Use at the Fort Ancient Hardin Site, Greenup Co., KY
- 15) Daniel Amick (Loyola University, Chicago), Hannah Helminiak (Loyola University, Chicago), Michelle Kasper (Loyola University, Chicago), Hannah Patten (Loyola University, Chicago), Amanda Sorensen (Loyola University, Chicago), Abigail Stone (Loyola University, Chicago), John Tednes (Loyola University, Chicago), and Jamie Witherby (Loyola University, Chicago) Discovery of an Early to Mid-19th Century Frontier Farmstead (11-MH-115) in Northern Illinois
- 16) Darlene Applegate (Western Kentucky University), Derrin Whitehead (Western Kentucky University), and Kalli Beasley (Western Kentucky University) - Archaeological Evidence of Historic Mining at Temple Hill Saltpeter Cave (15Bn8), Barren County, Kentucky
- 17) Meghan E. Buchanan (Indiana University), Dawn M. Rutecki (Indiana University), and Danielle Bachant-Bell (Lord & Bach Preservation Consulting) All Cooped Up: Documenting the Chicken Coop at the Hinkle-Garton Farmstead in Bloomington, Indiana
- Brendan Pelto (Michigan Technological University) Remembering Clifton -Ceramic Analysis and Iron Conservation from a 19th Century Mining Location in Michigan's Upper Peninsula
- 19) Daniel Amick (Loyola University, Chicago) and Naveen Kanji (Loyola University, Chicago) Insights about Late 19th and Early 20th Century Households and Urban Lifeways from a Buried Refuse Deposit on the Far Northside of Chicago
- 20) Alexander Atkinson (Michigan Technological University), Brendan Pelto (Michigan Technological University), Eric Pomber (Michigan Technological University), and Timothy Scarlett (Michigan Technological University) - Experiments in Cost Effective Iron Conservation Techniques At Michigan Technological University
- 21) Miranda L. Yancey-Bailey (Illinois State Archaeological Survey), Dale Tucker (Illinois State Archaeological Survey), and Benjamin Rhode (Illinois State Archaeological Survey) - Mapping an Ancient City: Cartography of the Illinois State Archaeological Survey Investigations at 11S706



#### FRIDAY AFTERNOON OCTOBER 3

#### Meeting

MAC Board Meeting Homewood Suites Conference Room — 12:00–2:00 pm

# Symposium (5)

Mark Lynott, a Memorial Symposium

Hoosiers/Hawkeyes Room - 1:30-4:15 pm

Organizer: Timothy Schilling (NPS Midwest Archeological Center)

- 1:30 N'omi Greber Mark Lynott: Manager, Archaeologist and Friend
- 1:45 Laura Lyon (Heartlands Conservancy), John Kelly (Washington University), Suzanne Kutterer-Siburt (Mississippian Mound Prehistoric Preservation Project), and Ed Weilbacher (Heartlands Conservancy) - Advancing The Mounds - America's First Cities: A Tribute to Mark Lynott
- 2:00 John Kelly (Washington University in St. Louis) Contextualizing Mark Lynott's Contributions to Mississippian Archaeology
- 2:15 Jarrod Burks (Ohio Valley Archaeology, Inc.) Large-Area Magnetic Survey in Hopewell Culture National Historical Park, Ohio: New Enclosures, Wood Henges, and Strategically Placed Feature Complexes
- 2:30 Bret Ruby (Hopewell Culture National Historical Park) The Great Circle Project at Hopewell Mound Group
- 2:45 BREAK
- 3:00 Rinata Dalan (Minnesota State University, Moorhead) and Bruce Bevan (Geosight) - Integrating Geophysics and Archaeology: The Legacy of the Hopeton Project
- 3:15 Rolfe Mandel (Kansas Geological Survey, University of Kansas) Geoarchaeology of Hopewell Earthworks at Hopeton, South-Central Ohio
- 3:30 Jim Brown (Northwestern University) Mark Lynott's Contribution to Understanding the Constructional History of Hopewell Earthworks at Mound City

3:45 Carrie Heitman (University of Nebraska, Lincoln) - Digital Hopewell?

4:00 Timothy Schilling (NPS Midwest Archeological Center), Jay Sturdevant (NPS Midwest Archeological Center), Dawn Bringelson (NPS Midwest Archeological Center), Erin Dempsey (NPS Midwest Archeological Center), and Ann Bauermeister (NPS Midwest Archeological Center) - Past, Present, and Future: Mark Lynott's Contribution to NPS Archeology in the Midwest



#### Symposium (6)

A Look Around the Lake: Recent Archaeological Investigations in the Lake Koshkonong Region of Southeastern Wisconsin

Fighting Illini Room - 1:30-4:00 pm

- Organizers: Richard W. Edwards IV (University of Wisconsin, Milwaukee), Katherine Sterner-Miller (University of Wisconsin, Milwaukee), and Robert J. Jeske (University of Wisconsin, Milwaukee)
- 1:30 Robert A. Birmingham (University of Wisconsin, Waukesha) Seventeenth Century French Trade Goods from the Crabapple Point Site: A Possibility for a Historic Period Oneota Component on Lake Koshkonong
- 1:45 Rachel C. McTavish (University of Wisconsin, Milwaukee) and Richard W. Edwards IV (University of Wisconsin, Milwaukee) - An Analysis of Variation in Oneota Watershed Exploitation in the Lake Koshkonong Locality
- 2:00 Seth A. Schneider (University of Wisconsin, Milwaukee) Economic, Social, and Political, Interaction among Oneota Localities in Eastern Wisconsin: A Ceramic Analysis
- 2:15 Natalie Carpiaux (University of Wisconsin, Milwaukee) and Richard W. Edwards IV (University of Wisconsin, Milwaukee) - Koshkonong Creek Ceramics: A Preliminary Pottery Analysis
- 2:30 Rebecca Torgerson (University of Wisconsin, Milwaukee), Richard W. Edwards IV (University of Wisconsin, Milwaukee), and Katherine Sterner-Miller (University of Wisconsin, Milwaukee) Retracing Old Footsteps: A Recent Pedestrian Survey at the Bent Elbow Farm
- 2:45 BREAK
- 3:00 Richard W. Edwards IV (University of Wisconsin, Milwaukee) Digging Deep for Answers: 2014 Excavations at the Koshkonong Creek Village (47)E379)
- 3:15 Robert Ahlrichs (University of Wisconsin, Milwaukee) and Katherine Sterner-Miller (University of Wisconsin, Milwaukee) - A Preliminary Analysis of Lithics from the Koshkonong Creek Village Site (47JE379)
- 3:30 Katherine Sterner-Miller (University of Wisconsin, Milwaukee) Another Piece of the Puzzle: Ongoing Excavations at the Crescent Bay Hunt Club Oneota Site (47)E904)
- 3:45 Robert J. Jeske (University of Wisconsin, Milwaukee) Violence in the Wisconsin Oneota World: New Evidence from Lake Koshkonong

# General Session (3)

Late Prehistoric (Fort Ancient, Oneota)

Little Chief Room - 1:30-3:45 pm

- 1:30 Aaron Comstock (Ohio State University) and Robert Cook (Ohio State University) A Preliminary Reinvestigation of Turpin (33HA19), the Newtown Type Site
- 1:45 Matthew J. Davidson (University of Kentucky) "The Greatest [Traders] in America": Protohistoric Fort Ancient Extra-Regional Interaction at the Hardin Site, Greenup Co., KY



- 2:00 Robert A. Genheimer (Cincinnati Museum Center) Temper and the Big Pit: Evolution of Temper at the Late Woodland and Late Prehistoric Hahn Site near Cincinnati, Ohio
- 2:15 Christopher Carr (Arizona State University) and Christopher Caseldine (Arizona State University) - Archaeology of Prehistoric Woodland and Plains Native American Cosmologies of Death: An Ethnohistorical Foundation
   2:30 BREAK
- 2:30 BREAK
- 2:45 Nikki Silva (Michigan State University), Jodie O'Gorman (Michigan State University), and Michael Conner (Dickson Mounds Museum) - Implications of Recent Radiocarbon Dating at Norris Farms 36 Cemetery
- 3:00 Jasmine C. Koncur (Minnesota State University, Mankato) The McClelland Site (21GD258) and the Oneota Tradition in the Red Wing Region of Minnesota
- 3:15 Robert G. McCullough (Illinois State Archaeological Survey) Functional Changes in Late Prehistoric Enclosures in Indiana
- 3:30 Nicole Geske (Michigan State University) Digging the Archives

#### General Session (4)

#### Mississippian

Spartans/Golden Gophers Room - 1:30-4:15 pm

- 1:30 Rebecca M. Barzilai (Indiana University) Investigating the Edelhardt-Lohmann Moment: Indications from the Ceramic Assemblage From Recent Excavations at the Emerald Site (11S1) in Lebanon, IL
- 1:45 Jeff Kruchten (University of Illinois) Water Symbolism and Closing Emerald
- 2:00 B. Jacob Skousen (University of Illinois) Ground-Truthing the Emerald Avenue
- 2:15 Joel Lennen (University of Illinois) and Leslie Drane (Indiana University) -Ceramic Analysis of Lunsford-Pulcher Assemblage
- 2:30 Samuel E. Munoz (Department of Geography, University of Wisconsin, Madison), Kristine E. Gruley (Department of Geography, University of Wisconsin, Madison), Ashtin Massie (Department of Geography, University of Wisconsin, Madison), Sissel Schroeder (University of Wisconsin, Madison), and John W. Williams (Department of Geography, University of Wisconsin, Madison) - Forests, Fields, and Floods: An Environmental (Pre)history of the Cahokia Region
- 2:45 BREAK
- 3:00 Erica L. Ausel (Indiana University) Sweat the Small Stuff: How the Examination of Isolated Human Remains is Key to Interpreting Past Behaviors and Taphonomic Processes
- 3:15 Sarah Baylor (Illinois State University) Dickson Mounds and Eveland: Nodal Center on the Illinois River Valley
- 3:30 Michael D. Conner (Dickson Mounds Museum) Why Did They Build It? Archaeological Context of a Large Mississippian Structure near Dickson Mounds
- 3:45 Jake F. Pfaffenroth (University of Wisconsin, Madison) One Wall, Two Walls, Old Wall, New: Palisade Replacement and Reconfiguration at Aztalan



4:00 Rachel C McTavish (University of Wisconsin, Milwaukee) and Elissa B. Hulit (Commonwealth Cultural Resources Group, Inc.) - An Examination of the "Princess Burial" Beads collection at the Milwaukee Public Museum

#### Poster Symposium (1)

Late Pre-Columbian Environmental Change, Settlement Histories, and Agricultural Impacts: Results of the 2014 Angel Mounds NSF REU Program

Wolverines/Buckeyes Room - 1:30-4:30 pm

Organizer: Jeremy Wilson (Indiana University-Purdue University of Indianapolis)

- Matthew Pike (Purdue University) and Jeremy Wilson (Indiana University-Purdue University of Indianapolis) - Mounds from Thorn and Ivy: A Magnetometry Survey of Lawrenz Gun Club (11Cs4)
- Savanna Johnson (Emory University), Edward Herrmann (Department of Geological Sciences, Indiana University), G. William Monaghan (Indiana Geological Survey), Mark R. Schurr (University of Notre Dame), and Matthew D. Pike (Purdue University) - Mississippian High Ground: Human Transformation of the Landscape at Lawrenz Gun Club
- 3) Haley Burkhardt (University of Wisconsin, Madison), Jeremy Wilson (Indiana University-Purdue University of Indianapolis), Matthew Pike (Purdue University), Erica Ausel (Indiana University, Bloomington), and G. William Monaghan (Indiana Geological Survey) - A Palisade Construction Chronology for Lawrenz Gun Club Its Implication for Late Pre-Columbian Warfare in West-Central Illinois
- 4) Ashley Packard (Center for Mountain and Plains Archaeology), Edward Herrmann (Department of Geological Sciences, Indiana University), G. William Monaghan (Indiana Geological Survey), Aaron Stump (Indiana University-Purdue University of Indianapolis), and Matthew Pike (Purdue University) - Terraforming and the Human-modified Landscape at the Lawrenz Gun Club Site (11Cs4)
- 5) Eliza Kane (Earth Sciences, University of Maine), Kristen Twidt (North Carolina State University), Jessica Adamic (Indiana University-Purdue University of Indianapolis), and Gabriel Filippelli (Indiana University-Purdue University of Indianapolis) - The Geochemistry and Historical Ecology of a Burnt Mississippian House at the Lawrenz Gun Club Site
- 6) Aaron Stump (Indiana University-Purdue University of Indianapolis), Gloria Thomas (University of Texas-Pan American), Broxton Bird (Indiana University-Purdue University of Indianapolis), Jessica Adamic (Indiana University-Purdue University of Indianapolis), Gabriel Filippelli (Indiana University-Purdue University of Indianapolis), Owen Rudloff (Indiana University-Purdue University of Indianapolis), and Lucas Stamps (Indiana University-Purdue University of Indianapolis), and Lucas Stamps (Indiana University-Purdue University of Indianapolis) Developing a Flood History Model for the Ohio River Valley during the Late Holocene; A Comparative Analysis of Hovey and Avery Lakes
- 7) Ryan Walsh (Eastern Kentucky University), Tara Miller (Williams College), Aaron Stump (Indiana University-Purdue University of Indianapolis), Owen Rudloff (Indiana University-Purdue University of Indianapolis), Lucas Stamps



(Indiana University-Purdue University of Indianapolis), Jessica Adamic (Indiana University-Purdue University of Indianapolis), Broxton Bird (Indiana University-Purdue University of Indianapolis), and William Gilhooly (Indiana University-Purdue University of Indianapolis) - Potential Evidence of Human Activity and Agricultural Practices in Ohio River Valley Lake Sediments

#### Poster Session (2)

Paleoindian, Archaic, Woodland

Wolverines/Buckeyes Room - 1:30-4:30 pm

- Jenny Benish (Illinois State Archaeological Survey) and Amanda Douglas (Illinois State Archaeological Survey) - Preserving a Sacred Site Inside an Urban Landscape: The Gougar Site (11WI64)
- Aimee Carbaugh (Illinois State Archaeological Survey) and Brent Lansdell (Illinois State Archaeological Survey) - The Archaic Mortuary Component at the Broglio Site (11WM80), Williamson County, Illinois
- Jaremy Cobble (Wisconsin Archeological Society) The Kraemer I Site (47Sb224): A Multi-Component Habitation Site in the Sheboygan River Watershed of East-Central Wisconsin
- 11) Matthew Neff (lowa State University) Application of Geographic Information Systems to Site Structural Analysis
- 12) Chris Widga (Illinois State Museum), Stacey Lengyel (Illinois State Museum), Jeff Saunders (Illinois State Museum), Greg Hodgins (AMS Laboratory, University of Arizona), Kayla Kolis (Illinois College), Doug Walker (Department of Geology, University of Kansas), and Al Wanamaker (Department of Earth Sciences, Iowa State University) - Mammoths and Mastodons in the Great Lakes: New Data on the Chronology and Paleoecology of Extinction
- Rebecca L. Hummel (University of Kentucky) Continued Geophysical Investigations at Walker-Noe (15GD56)
- 14) Grace Ward (Center for American Archeology), Alison Shepherd (Center for American Archeology), Jennifer E. Pirtle (University of Tulsa), Katie Leslie (Center for American Archeology), Carol E. Colaninno (Center for American Archeology) - Analysis of a Middle Woodland Habitation Midden Located in the Lower Illinois River Valley
- 15) Andrew Weiland (The Ohio State University) Paleoecology of Vacant Centers: Preliminary Paleoethnobotany at the Great Circle of Hopewell Mound Group
- 16) Timothy Everhart (University of Michigan) and Robert Cook (Ohio State University) Investigating the Placement of Hopewell Earthworks: A GIS Spatial Analysis of Ross County, Ohio
- 17) Jacque Dinnes (The University of Northern Iowa) Preliminary Faunal Analysis of Cave Site in East Central Iowa
- 18) James Montney (Commonwealth Cultural Resources Group) and Sean Dunham (Chippewa National Forest) - Late Woodland Site Predictive Model for the Hiawatha National Forest
- Jaclyn Ann Skinner (Minnesota State University, Mankato) Late Woodland Pottery in Red Wing, MN



#### MAC Student Workshop

MAC Student Workshop: Current Issues in Midwestern Archaeology

Little Chief Room - 4:15-5:30 pm

Organizers: Aaron Comstock and Andrew Upton Moderators: Erin Benson and Autumn Beyer MAC Board Liaison: Robert Cook Panelists: Melissa Baltus, Meghan Buchanan, John Doershuk, Shannon Fie, Timothy Pauketat, and Michael Wiant

# IAAA Board Meeting

Homewood Suites Conference Room - 4:00-5:00 pm

# MAC Reception

Little Chief Room — 5:30-9:00 pm Cash Bar – Free Beer and Appetizers

# SATURDAY MORNING OCTOBER 4

### Symposium (7)

Recent Archaeological Research in the Great Lakes Region

Little Chief Room - 8:00-10:15 am

Organizer: Fernanda Neubauer (University of Wisconsin, Madison and CAPES Foundation)

- 8:00 Kathryn Egan-Bruhy (Commonwealth Cultural Resources Group) and Mark Bruhy (Commonwealth Cultural Resources Group) - Prehistoric Subsistence Adaptation in the Upper Great Lakes: A Perspective from Butternut-Franklin Lakes
- 8:15 Fernanda Neubauer (University of Wisconsin, Madison and CAPES Foundation) - Late Archaic Hunter-Gatherer Lithic Technology, Subsistence, and Settlement Practices on Grand Island, Michigan
- 8:30 Susan Kooiman (Michigan State University) "Winter is Coming": A Preliminary Analysis of Pottery Use and Cooking at the Middle Woodland Winter Site
- 8:45 Sean Dunham (Chippewa National Forest) Hunter-Gatherer Mobility Strategies: A Late Woodland Example from the Upper Peninsula of Michigan
- 9:00 BREAK
- 9:15 Michael J. Hambacher (Commonwealth Cultural Resources Group), James A. Robertson (Michigan Department of Transportation), and Randall J. Schaetzl (Department of Geography, Michigan State University) - Late



Prehistoric Food Choices in the Upper Great Lakes Region: Evidence from 200T283 and 200T3 in the Lower Grand River Valley of Michigan

- 9:30 Kjersti E. Emerson (Illinois State Archaeological Survey) and Thomas Emerson (Illinois State Archaeological Survey) Dismantling the Fisher-Huber Evolutionary Continuum
- 9:45 John G. Franzen (Volunteer- USDA Forest Service), Terrance J. Martin (Illinois State Museum), and Eric C. Drake (USDA Forest Service) - Faunal Remains from Three Historic Period Maple Sugar Camps in Michigan's Upper Peninsula
- 10:00 Discussant; James M. Skibo (Illinois State University)

#### Symposium (8)

Science and Religion in Archaeology: The Legacy of Thomas E. Emerson

Hoosiers/Hawkeyes Room - 8:00 am-12:00 pm

- Organizers; Timothy R. Pauketat (University of Illinois) and Brad H. Koldehoff (Illinois Department of Transportation)
- 8:00 Timothy R. Pauketat (University of Illinois) and Brad H. Koldehoff (Illinois Department of Transportation) - From BBB to the Black Drink: Thomas E. Emerson and the Archaeology of Religion
- 8:15 Brad H. Koldehoff (Illinois Department of Transportation) and Thomas J. Loebel (Illinois State Archaeological Survey) - Resource or Ritual? The Role of Lithic Caches in the Colonization and Socialization of Midwestern Landscapes
- 8:30 Mark J. Wagner (Center for Archaeological Investigations, Southern Illinois University), Go Matsumoto (Southern Illinois University), Kayeleigh Sharp (Southern Illinois University), Mary R. McCorvie (U.S. Forest Service), and Heather Carey (U.S. Forest Service) - The Power of Place: Ritual Landscapes and Rock Art within Southern Illinois
- 8:45 William F. Romain (Newark Earthworks Center, Ohio State University) Ancient Astronomers of the Eastern Woodlands: Watson Brake to Cahokia
- 9:00 John D. Richards (University of Wisconsin, Milwaukee) and Thomas J. Zych (University of Toledo) - Making a Mound, Building a Community: Late Woodland/Mississippian Ritual Syncretism at the Aztalan Site
- 9:15 Michael L. Hargrave (U.S. Army Construction Engineering Research Laboratory), R. Berle Clay (Cultural Resource Analysts, Inc.), Diana Greenlee (Poverty Point National Monument), and Rinita Dalan (Minnesota State University Moorhead) Prehistoric Post Circles in the Midwest and Southeast: Uses and Detection Biases
- 9:30 Kristin M. Hedman (Illinois State Archaeological Survey/Program on Ancient Technologies and Archaeological Materials) and Eve A. Hargrave (Illinois State Archaeological Survey/Prairie Research Institute) - Cahokia Mound 72: Reinterpreting Meaning
- 9:45 Susan Alt (Indiana University) Putting Religion Ahead of Politics: Cahokian Origins Viewed Through Emerald's Shrines
- 10:00 BREAK



- 10:15 Melissa Baltus (University of Toledo) From Caches to Offerings: Intentionally Deposited Objects in Mississippian Buildings
- 10:30 Gregory D. Wilson (University of California, Santa Barbara) and Brian Geiger (University of California, Santa Barbara) - The History of Warfare, Ritual, and Community Formation in the 13th Century Central Illinois River Valley
- 10:45 Christina Friberg (University of California, Santa Barbara) Cosmic Negotiations: Ramey Incised Pottery and the Mississippianization of Cahokia's Northern Hinterlands
- 11:00 Jessica R. Miller (University of South Florida) Carbonization Evidence in Powell Plain and Ramey Incised Vessels Supports Ritual Drink Hypothesis
- 11:15 Katie Parker (Archaeobotany) and Mary L. Simon (Illinois State Archaeological Survey) - The Central Role of Plants in Mississippian Feasting and Public Ritual
- 11:30 Steven R. Kuehn (Illinois State Archaeological Survey) Looking Beyond Diet: Faunal Remains and Ritual Behavior in the American Bottom
- 11:45 Duane Esarey (Illinois State Archaeological Survey) Investigating Routinized Production of Symbolic Paraphernalia in the Colonial Northeast

# General Session (5)

#### Historic

Spartans/Golden Gophers Room - 8:00-9:30 am

- 8:00 William Balco (Northern Illinois University) and Jennifer Picard (University of Wisconsin, Milwaukee) – Exploring the Pioneer Experience: Preliminary Report of 2014 Excavations at 47WP294 (McHugh), Waupaca County, Wisconsin
- 8:15 Jennifer L. Picard (University of Wisconsin, Milwaukee) and Brooke L. Drew (University of Wisconsin, Milwaukee) - Flat Glass and Family Treasures: A Preliminary Analysis of the Artifact Assemblage from the McHugh site (47WP294), a 19th Century Irish Farmstead in Waupaca County, Wisconsin
- 8:30 George Calfas (US Army Construction Engineering Research Laboratory), Susan Enscore (US Army Construction Engineering Research Laboratory), and Carey Baxter (US Army Construction Engineering Research Laboratory) - A Landscape Approach to Determining Significance of 19th and 20th Century Farmsteads and Rural Communities
- 8:45 Shawn Fields (University of Illinois) Navigating through Springfield's Underground Railroad: Excavations at the Jameson Jenkins Lot
- 9:00 Michael Strezewski (University of Southern Indiana) Excavations at a Kickapoo Village Adjacent to Fort Oujatenon, Tippecanoe County, Indiana
- 9:15 Heather Walder (University of Wisconsin, Madison) The (Real) Value of Scrap Metal: Identifying Regional Variation through Analysis of Historic "Kettle Scrap" and Objects Made from It



#### General Session (6)

Community Outreach and Cultural Resources Management

Spartans/Golden Gophers Room - 10:00-11:45 am

- 10:00 Paula J. Porubcan (Illinois State Archaeological Survey) Partnering with the Forest Preserve District of Cook County Archaeological Resource and Landscape Preservation In the Windy City
- 10:15 Paula Bryant (Illinois State Archaeological Survey) Partnering with the Forest Preserve District of Cook County: Modeling Archaeological Site and Landscape Sensitivity for Effective Resource Management
- 10:30 Ed Jakaitis (Illinois State Archaeological Survey) Cultural Heritage Management at the Indian Hill Manor NRHD in Northern Illinois: Results of Programing and Early Implementation
- 10:45 Peter J. Geraci (Illinois State Archaeological Survey) The Benefits of Public Outreach: Examples from the Illiana Corridor Project in Will County, IL
- 11:00 Carey L. Baxter (US Army Construction Engineering Research Laboratory) - The Use of Historic Human Remains Detection (HHRD) Dogs to Locate Unmarked Grave Sites
- 11:15 Alison Kuzj (U.S. Fish and Wildlife Service), Arianna Elm (U.S. Fish and Wildlife Service), and James Myster (U.S. Fish and Wildlife Service) - Museum Property in the U.S. Fish and Wildlife Service, Midwest Region
- 11:30 Charles Peliska, Chris Chroninger, Peer Halvorsen, and Kim Harrison -Identifying Problems and Solutions in Contemporary Cultural Resource Management

# General Session (7)

Paleoindian, Archaic

Little Chief Room - 10:30-11:15 am

- 10:30 Richard H. Kubicek (Cultural Resource Management Services, University of Wisconsin, Madison) and Zachary R. Stencil (University of Wisconsin, Madison) - Report of Investigations of Site 47JE1140 – Lee Rickerman
- 10:45 Timothy Boyd (Illinois State Archaeological Survey), Aimee N. Roberts (Illinois State Archaeological Survey), and David J. Nolan (Illinois State Archaeological Survey) Exploring Late Archaec Systematics in the LaMoine River Valley of West Central Illinois
- 11:00 Larry Kinsella Sticks-N-Stones: Experiments in Bannerstone Perforation



### Poster Symposium (2)

Learning in Action: Student Centered Research at the Applied Anthropology Laboratories 2010-2014

Wolverines/Buckeyes Room - 8:00-11:00 am

Organizer: Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) 1) Amber J. Yuellig (Applied Anthropology Laboratories, Ball State University),

- Christine K. Thompson (Ball State University), and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) - Applied Anthropology Laboratories Student Involvement Over Time
- 2) Christine K. Thompson (Ball State University), Josh Donaldson (Ball State University), and Bradley R. Painter (Ball State University) - The Battles of Fort Recovery: Continuing Education and Preservation of a Northwest Indian Wars Battlefield
- Matthew R. Swihart (Applied Anthropology Laboratories, Ball State University), Erin Steinwachs (Ball State University), and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) - Siteless Survey in Dearborn County, Indiana
- 4) Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University), Matthew R. Swihart (Applied Anthropology Laboratories, Ball State University), and Bradley R. Painter (Ball State University) - Geochemical Analysis of Possible Garden Sites in Hamilton County, Indiana
- 5) Joseph R. Miller (Cultural Resource Analysts, Inc.), Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University), Christine K. Thompson (Ball State University), and Mark A. Hill (Ball State University) - Logistical and Residential Mobility in Blackford County, Indiana
- 6) Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University), Shelbi M. Long (Ball State University), and Amber J. Yuellig (Applied Anthropology Laboratories, Ball State University) - Descriptive Model of Site Distributions near the Proposed Mounds Lake Reservoir, Madison and Delaware Counties, Indiana
- Oliver T. Firestone (Ball State University) and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) - Analysis of Ceramic Manufacturing at the Reinhardt Site (33P1880), Pickaway County, Ohio
- 8) Christine K. Thompson (Ball State University), Cailin E. Murray (Ball State University), S. Homes Hogue (Ball State University), Oliver T. Firestone (Ball State University), and Caitlin E. Nichols (Ball State University) - Tribal Collaborations in the Lower Great Lakes: NAGPRA Compliance at Ball State University
- Colin L. Macleod (Ball State University) A Compositional Covariant Method for Sourcing Indiana Chert
- 10) Christine K. Thompson (Ball State University), Mark D. Groover (Ball State University), Mark A. Hill (Ball State University), and Deborah Hollon (Ball State University) - The Battles of Fort Recovery: Identification and Future Protection of a Northwest Indian Wars Battlefield
- Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) and Matthew R. Swihart (Applied Anthropology Laboratories, Ball State Univer-



sity) - Geochemical and Geophysical Intra-site Activity Pattern Analysis in Dearborn County, Indiana

- 12) Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) and Matthew R. Swihart (Applied Anthropology Laboratories, Ball State University) - Siteless Survey in Hamilton County, Indiana
- 13) Erin A. Steinwachs (Ball State University) and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University) - Spatial Analysis of Artifact Distributions at 12D491, a Late Prehistoric Village Site in Dearborn County, Indiana
- 14) Colin Macleod (Ball State University), Emily Murray (Ball State University), and Christine K. Thompson (Ball State University) - Archaeological Surveys in a Data Deficient Region: Surface Archaeological Distributions in Montgomery County, Indiana

#### Poster Session (3)

Community Outreach

Wolverines/Buckeyes Room - 8:00-11:00 am

- 15) Matthew G. Hill (Iowa State University), Christopher C. Widga (Illinois State Museum), and Marlin F. Hawley (Independent Scholar) - A Cautionary Note on the Discovery of "Old Bones" in Walworth County, Wisconsin
- 16) April K. Sievert (Glenn A. Black Laboratory of Archaeology, Indiana University), Heather Alvey (Glenn A. Black Laboratory of Archaeology, Indiana University), Carey Beam (Glenn A. Black Laboratory of Archaeology, Indiana University), and Sharon Wise (Glenn A. Black Laboratory of Archaeology, Indiana University) Indiana University's Wylie House Museum and Archaeology in Current Social Contexts
- 17) Chad Ryan Thomas (University of Southern Indiana), Haley Tallman (Angel Mounds State Historic Park), and Heather Stone (Angel Mounds State Historic Park) - Thinking Outside the Sandbox: Teaching the Whole Process of Archaeology
- 18) Meghan E. Buchanan (Indiana University), Cailey Mullins (Indiana University), Catherine Qualls (Indiana University), Amanda Klenk (Simmons College), Megan Dunphy (Indiana University), and Emma Woodruff (Indiana University) - Rehousing the Glenn A. Black Laboratory of Archaeology Comparative Collections
- 19) Joshua Wells (Indiana University, South Bend), Andrew White (Grand Valley State University), Eric Kansa (Open Context), Sarah Kansa (Alexandria Archive Institute), Stephen J. Yerka (University of Tennessee, Knoxville), David Anderson (University of Tennessee, Knoxville), Thaddeus Bissett (University of Tennessee, Knoxville), Kelsey Noack Myers (Indiana University), and R. Carl DeMuth (Indiana University) - Changing Households and Rising Seas: Two Perspectives on the Potential of Using the Digital Index of North American Archaeology (DINAA) to Link Datasets



SATURDAY AFTERNOON OCTOBER 4

#### Symposium (9)

Exploring the Complexity of Midwest Urban Life through Historical Archaeology

Little Chief Room - 1:00-4:00 pm

- Organizers: Claire P. Dappert (Illinois State Archaeological Survey), Dwayne L. Scheid (Illinois State Archaeological Survey), Mark Branstner (Illinois State Archaeological Survey)
- 1:00 Claire P. Dappert (Illinois State Archaeological Survey) and Dwayne L. Scheid (Illinois State Archaeological Survey) - Discovering Late Victorian East St. Louis: Urban Archaeology and the New Mississippi River Bridge Project
- 1:15 Martha Mihich (Illinois State Archaeological Survey) and Claire P. Dappert (Illinois State Archaeological Survey) - Walking in Their Shoes: A Late Victorian Shoe Assemblage from the New Mississippi River Bridge Project in East St. Louis
- 1:30 Robert W. Rohe (Illinois State Archaeological Survey) For Medicinal Purposes: Health and Wellness at a Turn of the Century Boarding House
- 1:45 **Patrick R. Durst** (*Illinois State Archaeological Survey*) Understanding Rural and Urban Privy Vaults: An Overview of their Utilization and Morphological Transformation Through Time
- 2:00 Michael J. Meyer (Missouri Department of Transportation) Saint Louis on the Frontier: A Preliminary Analysis of a French Trading Center
- 2:15 Meredith Hawkins Trautt (Archaeological Research Center of St. Louis, Inc.) - Investigations into a Turn of the 20th Century Working Class Neighborhood in the City of St. Louis, Missouri
- 2:30 BREAK
- 2:45 Joe Harl (Archaeological Research Center of St. Louis, Inc.) Comparisons of Rural and Urban Sites at the Start of the 20th Century in Eastern Missouri
- 3:00 John P. McCarthy (Independent Scholar) Archaeoparasitology of Late 19th/ Early 20th Century Minneapolis
- 3:15 Misty M. Jackson (Arbre Croche Cultural Resources) Nineteenth Century Saginaw: Frontier Fur Trade Town to Midwest Logging Center
- 3:30 Kevin Cupka Head (Cultural Resource Analysts, Inc.) Uncovering the Old Prison South: Exploring Antebellum Institutional Confinement in Southern Indiana
- 3:45 Tanya A. Faberson (Cultural Resource Analysts, Inc.) and Kevin Cupka Head (Cultural Resource Analysts, Inc.) - Before the Bridges: Urban Archaeology in Jeffersonville, Indiana



#### Symposium (10)

Early Holocene Hunter-Gatherers of the Western Great Lakes

Hoosiers/Hawkeyes Room - 1:00-4:30 pm

- Organizers: Thomas J. Loebel (Illinois State Archaeological Survey) and John Lambert (University of California, Davis)
- 1:00 Daniel J. Joyce (Kenosha Public Museums) The Vikings and Columbus were Fashionably Late: Pre-Clovis, the Western Great Lakes, and the Peopling of North America
- 1:15 Dillon Carr (Grand Rapids Community College) Household Organization and Band Composition during the Great Lakes Paleoindian Period
- 1:30 Donald B. Simons (Michigan Archaeological Society) An Update on the Late Pleistocene Gainey and Butler Sites and Related Subjects
- 1:45 Ed Herrmann (Glenn A. Black Laboratory of Archaeology) Using Geoarchaeology to Model Paleoindian Presence in Floodplains
- 2:00 Ashley K. Lemke (Museum of Anthropological Archaeology, University of Michigan), John M. O'Shea (University of Michigan), and Lisa Sonnenburg (University of Michigan) - Hunters and Hunting on the Alpena-Amberley Ridge: Underwater Archaeology in Lake Huron
- 2:15 Susan Mulholland (Duluth Archaeology Center, LLC) and Stephen Mulholland (Duluth Archaeology Center, LLC) - A Good Beginning: Early Paleoindian Occupation in Northeastern Minnesota
- 2:30 BREAK
- 2:45 Stephen Mulholland (Duluth Archaeology Center, LLC) and Susan Mulholland (Duluth Archaeology Center, LLC) - The Late Paleoindian Occupation in Northeastern Minnesota
- 3:00 Ryan J. Howell (CEMML-CSU-Fort McCoy, WI) New Findings on Late Paleo-Indian Lithic Technology and Lithic Resource Utilization in Western Wisconsin
- 3:15 Robert Legg (Northern Michigan University) An Environmentally-Based Site Location Model of Paleoindian Settlement in the Upper Peninsula of Michigan
- 3:30 John M. Lambert (University of California, Davis) A New Perspective on the North Lakes: Early Holocene Hunter-Gatherer Mobility in Northern Wisconsin
- 3:45 Thomas J. Loebel (Illinois State Archaeological Survey) Stilwell II: A Buried Early Archaic Site in Pike County, Illinois
- 4:00 Christopher C. Widga (Illinois State Museum), Dennis Lawler (Illinois State Museum), and Michael Wiant (Dickson Mounds Museum) The Earliest Domesticated Dogs in the Midcontinent: Chronology, Morphology, and Paleopathology of Dogs from the Koster and Stilwell Sites, Calhoun County, IL
- 4:15 Discussant; Matthew G. Hill (lowa State University)

# Meeting

#### MAC Business Meeting Little Chief Room — 4:30–5:30 pm

CHAMPAIGN, ILLINOIS



SATURDAY EVENING OCTOBER 4

#### **MAC Banquet**

October 4, Saturday, 5:30-9:00 pm

Fighting Illini/Spartans/Golden Gophers Room

Cash Bar, 5:30 pm Dinner, 6:30 pm

Keynote Speaker, 7:30 pm





2014 Midwest Archaeological Conference Champaign, Illinois

Keynote Speaker - Martin Carver, University of York

#### SUITTON HOO 1600- 2014. SIX CAMPAIGNS - and A NEW ONE

As everyone working in Moundbuilder territory knows, monumental mounds act as powerful magnets to lotters, snoopers and archaeologists of every kind. Martin Carver lells the story of the Sutton Hoo burial mounds in south-east England, which have been pitted, pillaged, ploughed, trenched and used as a military training area – as well as revealing an famous Anglo-Saxon cemetery with cremations, horses and ships and a long prehistoric sequence beneath it.

The six archaeological campaigns known so far stretch over six centuries, and show the very different types of attractions that these mounds held for their various explorers. There is about to be a seventh. Sutton Hoo's new owners, the National Trust for England and Wales, plan a different kind of investigation: total, non-invasive and community sensitive. The speaker sees this as a chance to get some feed back on this proposal in a global perspective.



Martin Carver has carried out field projects in England, Scotland, France, Italy and Algeria, and has directed field research at Sutton Hoo since 1983. He is currently emeritus professor at the University of York in Yorkshire, England.







2014 MIDWEST ARCHAEOLOGICAL CONFERENCE



# Midwest Archaeological Conference October 2–4, 2014 – Champaign, IL

# STUDENT WORKSHOP ABSTRACT

(NO REGISTRATION REQUIRED)

#### Current Issues in Midwestern Archaeology

Organizers: Aaron Comstock and Andrew Upton; Moderators: Erín Benson and Autumn Beyer MAC Board Liaison: Robert Cook Panelists: Melissa Baltus, Meghan Buchanan, John Doershuk, Shannon Fie, Timothy Pauketat, and Michael Wiant

This year's workshop focuses on the variety of issues facing all undergraduate and graduate students in archaeology today. Topics will include everything from how to find funding in an increasingly difficult funding climate to how to effectively engage with the public and others throughout the course of your research and your future career. We will hear from a panel of archaeologists from different professional backgrounds who can provide valuable advice and insight regarding these issues and more. This workshop is designed to answer your questions about being a Midwestern archaeologist today and is open to everyone, so please join in the discussion!

(Friday, 4:15-5:30 pm, Little Chief Room)

#### SYMPOSIUM ABSTRACTS

#### Exploring the Complexity of Midwest Urban Life through Historical Archaeology

#### Organizers: Claire P. Dappert, Dwayne L. Scheid, and Mark Branstner

The nineteenth century Midwest is often considered a largely rural and agricultural landscape, serviced primarily by small mercantile hamlets. By the late nineteenth and early twentieth centuries, however, some of these communities had become urban ones, with industrialized economies that followed improved shipping networks and the technological developments of the Gilded Age. These communities offered employment opportunities to both recent immigrants and those displaced by an increasingly mechanized agrarian economy. New urban environments had a profound effect on social interaction and spatial organization, and paralleled modernizations in material culture, consumer choice, and refuse disposal. An often neglected research topic in the Midwest, recent urban historical archeology has demonstrated significant potential regarding the plurality and complexity of life in emerging urban environments.

#### A Look Around the Lake: Recent Archaeological Investigations in the Lake Koshkonong Region of Southeastern Wisconsin

Organizers: Richard W. Edwards IV, Katherine Sterner-Miller, Robert J. Jeske

Southeastern Wisconsin has long been of interest to archaeologists, and provides a wealth of information essential to understanding the history of the northern edge

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of the Prairie Peninsula. This symposium presents a portion of the current research being conducted in the region, focusing primarily on the Oneota and historic occupations along the northwestern shore of Lake Koshkonong. Analyses of material culture from excavations at three sites located on the northern side of the lake include examinations of Oneota lithics, ceramics, fauna and French trade goods. Pedestrian survey of three additional sites recovered lithics and ceramics dating from the Paleoindian through historic periods.

#### Constructing Greater Cahokia: The Archaeology of the East St. Louis Mound Complex

#### Organizers: Thomas E. Emerson and Brad H. Koldehoff

During a five-year period between 2008 and 2012 the Illinois State Archaeological Survey carried out excavations at the Mississippian period East St. Louis Mound Complex that lies buried under historic and modern fill in the modern city of East St. Louis. The excavations were funded by the Illinois Department of Transportation as part of the mitigation for the new Stan Musial Veterans Memorial Bridge. One of the largest excavations ever carried out in the U.S., the Survey ultimately excavated nearly 1,500 structures, 4,000 pit features, the intact base of a leveled ridge-top mound, multiple large marker posts, borrow pits, and plaza areas packed within a 34 acre excavated area that represents less than ten percent of the total site area. The papers in this session provide our initial interpretations of this vast dataset and its implications for understanding the history of North America's first native city.

#### Hidden in Plain Sight II: Early Nineteenth Century Native American Sites and Material Culture in the Midwest

#### Organizers: Richard L. Fishel and Robert F. Sasso

The waning fur trade and Native American removal from the Eastern United States during the early 1800s resulted in great cultural change for Native Americans and Euro-Americans alike. Native material culture of this time period in the Midwest is especially poorly understood from an archaeological perspective. Historic records indicate the presence of numerous early nineteenth century Native American sites and Euro-American trading sites, yet their identification and excavation continue to pose significant challenges for Midwestern archaeologists. Recent research should contribute toward a better definition of material culture to allow archaeologists to more easily identify sites from this period.

#### MAC Sponsored Symposium: Convergence and Divergence: Bioarchaeological Evidence for Late Prehistoric Population Interaction in the Midwest

#### Organizers: Mallorie A. Hatch, Dawn Cobb, Kristin Hedman, and Eve Hargrave

Questions regarding population mobility and its influence on cultural interactions have formed foundational issues within anthropology and archaeology alike. Evaluating whether or not individual and population movements shaped societies is critical to understanding lifeways in both the past and present. While insights into the nature of cultural interactions are key to understanding both cultural maintenance and change, prehistoric population movements have proven difficult



to detect and interpret archaeologically. Bioarchaeological data, however, have provided promising results for identifying past population movements and interactions through the integration of archaeological and biological lines of evidence. Midwestern bioarchaeology, in particular, has been at the forefront for addressing larger anthropological questions of population movements and interactions. The papers in this symposium will use biological distance, stable isotopes, aDNA, mortuary, and paleopathological data to explore evidence for population interactions and movement during the Late Prehistoric period of the U.S. Midwest.

# Science and Religion in Archaeology: The Legacy of Thomas E. Emerson

#### Organizers: Timothy R. Pauketat and Brad H. Koldehoff

Two seemingly divergent trends in contemporary archaeology—a focus on archaeological science on the one hand and the humanistic study of ritual and religion on the other--converge in the career of Thomas E. Emerson. Midwestern archaeologists have made great strides through remote sensing, bioarchaeological provenance and other archaeometric studies. Many of these scientific studies are being mobilized to address the fundamental problems of the humanities: How were religions, rituals, and ontologies related to human history? Why do people hold beliefs that may or may not be in their own self interest? What forms did power and agency take in the past? Papers in this session address these and other questions and tack between the two trends, thereby promoting the role of Midwestern archaeology in addressing the most important questions of our day, which is the true legacy of Thomas Emerson.

# Early Holocene Hunter-Gatherers of the Western Great Lakes

#### Organizers: Thomas J. Loebel and John Lambert

The last several decades have seen a great increase in our understanding of the human colonization and occupation of recently deglaciated landscapes. The Great Lakes area serves as an excellent region in which the adaptive responses of hunter-gatherers to rapidly changing climates can be studied. Papers in this symposium provide updates of current and on-going research, as well as regional overviews of the early Holocene archaeological, paleontological, and geoarchaeological record of the western Great Lakes.

# Recent Archaeological Research in the Great Lakes Region

#### Organizer: Fernanda Neubauer

A number of archaeological investigations in the Great Lakes region combine traditional and innovative methodologies in order to shed new light on the lives of ancient hunter-gatherer and historical period peoples. This symposium brings together scholars studying Great Lakes archaeology to present their current and recent research, and highlights the important contributions emerging from the region. The papers focus on investigating small-scale daily practices through the study of a diverse range of topics, including: technological organization and innovation, craft production, subsistence and cuisine, cultural interactions, and human-landscape interactions.



# Mark Lynott, a Memorial Symposium

# Organizer: Timothy Schilling

Mark Lynott was a pivotal figure in Midwestern Archaeology for over 30 years. His work spanned the breadth of our region and investigated diverse topics from Hopewell earthworks to Great Lakes logging archaeology. His impacts went beyond area interests to include the promotion of innovative methods, the development of archaeological ethics, and the advancement of archaeology as a profession. This collection of papers pays tribute to Mark and celebrates his contribution to Midwestern Archaeology. Authors both reflect on his past work and show how they are continuing using the same or similar themes, methods, or sites. He was a colleague, friend, and mentor to many of us and he will be missed.

#### Recent Research in Midwestern Paleoethnobotany

# Organizer: Mary S. Simon

Papers in this symposium focus on ongoing and recent research in the field of paleoethnobotany. Topics covered include traditional areas of research, such as subsistence, seasonality, and environmental modeling, and extend to less traditional areas such as cultivation practices under diverse conditions; the role of plants in ritual and feasting; refining and explaining plant use histories; and using plants to better understand settlement systems. In all cases, this diverse group of papers moves well beyond the descriptive, highlighting the importance of plant remains for answering important archaeological questions.

# Late Pre-Columbian Environmental Change, Settlement Histories, and Agricultural Impacts: Results of the 2014 Angel Mounds NSF REU Program

#### Organizer: Jeremy Wilson

The 2014 National Science Foundation Research Experience for Undergraduates examined the interaction between climate change, human settlement histories, and agricultural impacts to landscapes over the past 2,000 years across the lower Midwest. This program brought together students and staff from a diverse array of backgrounds and institutions, immersing them in a multidisciplinary research environment. This student-driven symposium provides preliminary results, including the timing and potential relationships between population, settlement and landscape changes related both to climatic factors (i.e., Medieval Climate Anomaly, Little Ice Age) and human-related land-use and agricultural practices. The thematic questions included: 1) how did climate and landscape status affect human populations, and 2) in turn, how did humans affect landscapes, regional ecologies and biodiversity? These questions were addressed by combining lake sediment core records of climate, soil geochemistry and landscape nutrient status with archeological records from Mississippian-era settlements in the Illinois and Ohio River valleys.



# Learning in Action: Student Centered Research at the Applied Anthropology Laboratories 2010-2014

Organizer: Kevin C. Nolan

The Applied Anthropology Laboratories in the Department of Anthropology at Ball State University operates under a model of student-centered, experiential and immersive learning to provide students with hands-on training in archaeology. We log thousands of student hours on both research and compliance projects, meeting deadlines and standards for diverse clients and funding agencies. We present a sample of the research that has been conducted by and with our students over the last four years. Our projects cover a diverse array of the archaeology of the region including battlefield archaeology, siteless survey, landuse patterns, archaeo-geochemistry, archaeo-geophysics, lithic analysis, ceramic analysis, spatial analysis, use-wear, and more. The posters focus predominantly on research projects, but our activities include a variety of CRM compliance surveys and literature reviews. Our students gain invaluable practical experience with the nuts-and-bolts of the predominant venues of archaeological practice, producing top-level research in the process.



# Midwest Archaeological Conference October 2–4, 2014 – Champaign, IL

# PRESENTATION ABSTRACTS (LISTED IN ALPHABETICAL ORDER)

# Adams, Brian (Illinois State Archaeological Survey)

#### ARCHAEOLOGICAL INVESTIGATIONS AT THE ERNAT SITE (11LS267), LASALLE COUNTY, ILLINOIS

In the spring of 1987, archaeological excavations were conducted at the Ernat Site (11LS267), a multicomponent occupation located in the Illinois River floodplain immediately east of Starved Rock State Park along State Route 71. Excavations yielded several pit and rock concentration features, including two possible basin structures, and rich lithic, ceramic, faunal and botanical assemblages. Although diagnostic materials indicate Early Archaic through Upper Mississippian occupations at the site, the majority of remains pertain to the Middle and Late Woodland periods. Of these, materials classified as Late Woodland Swanson and Starved Rock Collared predominate. This paper summarizes the results of archaeological investigations at this site.

(General Session (2), Friday, 9:15 am, Fighting Illini Room)

# Ahlrichs, Rob (University of Wisconsin, Milwaukee) and Katherine Sterner-Miller (University of Wisconsin, Milwaukee)

#### A PRELIMINARY ANALYSIS OF LITHICS FROM THE KOSHKONONG CREEK VILLAGE SITE (47]E379)

The Koshkonong Creek Village site is an upland Oneota site located in Jefferson County, Wisconsin. Excavations in 2012 and pedestrian survey in 2014 recovered a variety of lithic materials, including triangular projectile points, scrapers, cores, a range of edge-only informal tools, and debitage. A multifaceted analysis of this assemblage provides valuable insight into the material culture of Koshkonong Locality Oneota. A comparison of the material recovered from pedestrian survey versus material from excavated contexts elucidates site formation and taphonomic processes as well as potential sampling bias of traditional archaeological field methods. Examining these materials in relation to the lithic assemblage from the nearby Crescent Bay Hunt Club site (47Je904) highlights the similarities and differences between the two sites.

(Symposium (6), Friday, 3:15 pm, Fighting Illini Room)

#### Alt, Susan M. (Indiana University)

# PUTTING RELIGION AHEAD OF POLITICS: CAHOKIAN ORIGINS VIEWED THROUGH EMERALD'S SHRINES

We have identified religious shrines at the Emerald and Pfeffer sites, both mound centers and both long misunderstood by Cahokian scholars. Emerald in particular has proven to be a spectacular place of dense architecture and rebuilt landscapes with more than 10 percent of its buildings classified as shrines. The shrines (or as Emerson might call them, temples) demonstrate that religion built Cahokia by attracting distant converts, some who stayed and were critical in creating Missis-



sippian culture as well as the Cahokian polity. Here, I provide the details of shrine construction and use that underwrote Mississippian religion and Cahokian power. (Symposium (8), Saturday, 9:45 am, Hoosiers/Hawkeyes Room)

Ambrose, Stanley H. (University of Illinois), Kristin M. Hedman (Illinois State Archaeological Survey/Program on Ancient Technologies and Archaeological Materials), Philip A. Slater (University of Illinois), and Matthew A. Fort (Illinois State Archaeological Survey)

#### ISOTOPIC EVIDENCE OF DIET AND PLACE OF ORIGIN IN THE MIDCONTINENT

The midcontinent (Illinois) has figured prominently in foundational isotopic studies of diet and place of origin in the midcontinent. Larger datasets and new techniques have contributed significantly to our understanding of prehistoric diet and interactions. Recent stable isotope and strontium (87St/86Sr) isotope analyses of human bones and teeth from individuals buried within Cahokia's Mound 72 provide direct evidence for diet and place of origin for this ritually and politically important site. These data provide new insight into the dietary and residential heterogeneity of Cahokia, and direct evidence of non-local individuals within the Cahokia mortuary sample. Evidence for variation in diet and place of origin with age, sex, and social status is suggested by recent data. The correlation of isotope results with available biological and mortuary data allows us to examine the role of migration in the rise (and fall) of this Mississippian polity.

(Symposium (2), Thursday, 3:00 pm, Little Chief Room)

Amick, Daniel (Loyola University, Chicago), Hannah Helminiak (Loyola University, Chicago), Michelle Kasper (Loyola University, Chicago), Hannah Patten (Loyola University, Chicago), Amanda Sorensen (Loyola University, Chicago), Abigail Stone (Loyola University, Chicago), John Tednes (Loyola University, Chicago), and Jamie Witherby (Loyola University, Chicago)

### DISCOVERY OF AN EARLY TO MID-19TH CENTURY FRONTIER FARMSTEAD (11-MH-115) IN NORTHERN ILLINOIS

Subsurface surveys and test excavations on the 99-acre Loyola University Retreat and Ecology Campus have produced remains of an early to mid-19th century farmstead. Twenty-nine square meters have been excavated from this deposit which was partially disturbed by late 19th and early 20th century tillage before it was buried under 10-15 cm of topsoil and construction debris around 1960. The 1835 GLO survey documents a squatter's farmstead at this location, which archival research suggests may be the homestead of Christopher Walkup, one of the organizers of the Virginia Settlement party from Greenbrier County, Virginia (now West Virginia). Artifact analyses and historic documents support this interpretation. A variety of domestic and architectural debris has been recovered and several truncated features were located. This site represents a unique opportunity to learn from the pioneer phase migration of an entire community from the Appalachian region of West Virginia who settled in northern Illinois.

(Poster Session (1), Poster #15, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)



Amick, Daniel (Loyola University, Chicago) and Naveen Kanji (Loyola University, Chicago)

INSIGHTS ABOUT LATE 19TH AND EARLY 20TH CENTURY HOUSEHOLDS AND URBAN LIFEWAYS FROM A BURIED REFUSE DEPOSIT ON THE FAR NORTHSIDE OF CHICAGO

Long-term salvage archaeology work from nearly two decades of construction activities on the Loyola University Lakeshore Campus has documented a late 19th to early 20th century refuse dump underlying the campus which was built on unimproved beach dunes in 1908. An opportunistic artifact sample of 55 kg has been recovered from this deposit which appears to cover approximately 3 hectares. The assemblage is characterized by 1885-1910 period domestic refuse probably which seems to be coming from upper middle class homes on Chicago's far north side. Glass containers and ceramic tableware dominate this garbage assemblage, partly altered by incineration. This informal dump is undocumented in the historic record and offers insights into households, waste disposal, and urban lifeways in Chicago during this key transformative era of modernization, consumerism, and electrification. This analysis focuses on the dietary aspects of the assemblage reflected by faunal remains and containers for foods, beverages, and medicines. (Poster Session (1), Poster #19, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room).

# Applegate, Darlene (Western Kentucky University), Derrin Whitehead (Western Kentucky University), and Kalli Beasley (Western Kentucky University)

### ARCHAEOLOGICAL EVIDENCE OF HISTORIC MINING AT TEMPLE HILL SALTPETER CAVE (15BNB), BARREN COUNTY, KENTUCKY

Temple Hill Saltpeter Cave (a.k.a., Payne Cave, Skaggs Cave) is located on Skaggs Creek in Barren County, Kentucky. It is one of many caves in the region from which saltpeter was mined historically, though it is only the third small-scale mining site investigated by archaeologists. Artifacts and cultural features associated with historic saltpeter mining include working bays, tally marks, and tool marks. Saltpeter sediment was processed on-site in leaching vats of undetermined form. The saltpeter mining occurred throughout all passages of the cave, especially the trunk passage. The mining activity began in the late eighteenth century and expanded substantially in the early nineteenth century in association with the War of 1812 under the direction of Brig. Gen. Alexander Spotswood, a Barren county pioneer. (Poster Session (1), Poster #16, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

#### Arzigian, Constance (University of Wisconsin-La Crosse)

# FOOD STORAGE AND SEASONALITY: AN ETHNOGRAPHIC AND ARCHAEOLOGICAL PERSPECTIVE

In addition to food crops, what other plants were typically stored, and what archaeological indicators might exist? How does the period of use for plants, particularly fruits and berries, differ from that of the harvest season? How do stored resources contribute to adequate nutrition during the winter? Ethnographic data compiled from traditional ethnobotanies and archaeological data drawn from summer and winter Oneota sites in the La Crosse, Wisconsin, locality explore how subsistence and seasonality interpretations need to account for the use of stored resources. (Symposium (1), Thursday, 1:00pm, Hoosiers/Hawkeyes Room)



# Atkinson, Alexander (Michigan Technological University), Brendan Pelto (Michigan Technological University), Eric Pomber (Michigan Technological University), and Timothy Scarlett (Michigan Technological University)

EXPERIMENTS IN COST EFFECTIVE IRON CONSERVATION TECHNIQUES AT MICHIGAN TECHNOLOGI-CAL UNIVERSITY

Experiments have been conducted comparing traditional iron conservation techniques such as electrolysis and tannic acid bath treatment to a super-critical moisture displacement and polymer impregnation process originally developed for the conservation of waterlogged wooden artifacts. The goal of our work with the super-critical process is to develop a low cost, expedient batch treatment process for the large quantities of iron artifacts inherent in Historical Archaeology in general and Industrial Archaeology in particular.

(Poster Session (1), Poster #20, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

#### Ausel, Erica L. (Indiana University)

SWEAT THE SMALL STUFF: HOW THE EXAMINATION OF ISOLATED HUMAN REMAINS IS KEY TO INTERPRETING PAST BEHAVIORS AND TAPHONOMIC PROCESSES

Bioarchaeological analyses reside at the intersection between human biology and the surrounding environments. This research has greatly enhanced our understanding of prehistoric and historic peoples; however, the analysis of human remains has more to offer in our understanding of past behaviors, mortuary practices, and the processes that create the archaeological sites we see and interpret today. This presentation will first discuss the value of examining osteological collections in their entirety in order to understand past behaviors, taphonomic processes, and decades-old excavation techniques otherwise invisible to modern archaeological interpretation. The isolated human remains at the prehistoric site of Angle Mounds will serve as a case study. Additionally, the results of the author's paleopathological analysis of Angel Mounds will be presented and contextualized within the recent flurry of chronological and archaeological research surrounding this important regional town.

(General Session (4), Friday, 3:00 pm, Spartans/Golden Gophers Room)

#### Balco, William (Northern Illinois University) and Jennifer Picard (University of Wisconsin-Milwaukee)

# EXPLORING THE PIONEER EXPERIENCE: PRELIMINARY REPORT OF 2014 EXCAVATIONS AT 47WP294 (MCHUGH), WAUPACA COUNTY, WISCONSIN

Exploration of 47WP294 (McHugh), a pioneer homestead founded by Irish immigrants in 1850 have begun to contextualize the lived experience of the occupants of 19th century central Wisconsin. Archival evidence suggests that the site was established in 1850 by Michael McHugh. Following his death in 1853, the farmstead was managed by his widow, Mary, while raising 11 children, four of whom served in the Civil War. Data recovery excavations were conducted in 2014 by UWM-Cultural Resource Management (UWM-CRM). This paper presents the site's excavation strategy and preliminary results of the fieldwork, contextualizing the site from its establishment in 1850 to its abandonment in the early 1900s. Results contribute to knowledge of the history of Waupaca County, the lives of women and children on

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the Wisconsin frontier, and the experience of Irish immigrants in the Upper Great Lakes region.

(General Session (5), Saturday, 8:00 am, Spartans/Golden Gophers Room)

# Baltus, Melissa (University of Toledo)

# FROM CACHES TO OFFERINGS - INTENTIONALLY DEPOSITED OBJECTS IN MISSISSIPPIAN BUILDINGS

The large-scale excavation of numerous Mississippian sites in the American Bottom region, mainly through transportation-related archaeological projects, has revealed a pattern of intentionally deposited objects on house floors and in refuse pits. While these artifact caches are not identical, they often incorporate a similar suite of commonplace lithic tools (celts, hoes, adzes, knives) gathered together in pairs or small groups. In opposition to functional interpretations of these caches as tools stashed for later use, this pattern of object deposition is explored in this paper as a household religious practice, in which particular objects are gathered together as votive offerings.

(Symposium (8), Saturday, 10:15 am, Hoosiers/Hawkeyes Room)

### Barzilai, Rebecca M. (Indiana University)

# INVESTIGATING THE EDELHARDT-LOHMANN MOMENT: INDICATIONS FROM THE CERAMIC ASSEM-BLAGE FROM RECENT EXCAVATIONS AT THE EMERALD SITE (11S1) IN LEBANON, IL

Located near the Silver Creek in the Illinois uplands, the Emerald Site (1151) in Lebanon, IL is a constructed Mississippian mound center where everyday practices were entangled with the performance of Mississippian religion, evident in the site structure, architecture, and material culture. Specifically, recent excavations have unearthed a high density of non-domestic structures dating to the Edelhardt and Lohmann Phases c. 1000 AD and ceramic types indicative of diverse peoples from throughout the Midwest. This paper will report on data from the ongoing ceramic analyses of materials excavated in the past seasons at the Emerald Site and emphasize the chronological and spatial markers of this assemblage. As such, this paper will discuss the importance of the Edelhardt-Lohmann moment that is impacting how we understand the importance of the site and religious practices in the fluorescence of Cahokia.

(General Session (4), Friday, 1:30 pm, Spartans/Golden Gophers Room)

# Bauerle, Megan C. (Illinois State University) and Maria O. Smith (Illinois State University)

# PATTERNS OF CARIES IN THE MIDDLE AND LATE WOODLAND OF THE MISSISSIPPI RIVER VALLEY: AN ORAL HEALTH ANALYSIS OF THE ALBANY AND KUHLMAN MOUND GROUPS

Caries pattern and prevalence were compared between two osteological samples from the Mississippi River Valley of west-central Illinois: Albany Mounds (Middle Woodland, approximately 200 BC – AD 400) and Kuhlman Mounds (Late Woodland, approximately AD 500-800). Given the presumptive shift in subsistence strategy between the two temporal periods, a marked difference in caries prevalence and crown location (i.e., occlusal versus cervical) was expected between the samples. However, the preliminary results indicate that few individuals display crown caries,



there is little difference in the prevalence of caries between the Albany and Kuhlman samples and, surprisingly, variations in oral health occur between the individual mounds at the Albany site. The observed inter-site similarity could be because neither sample dated to the adoption of flint corn in the area (circa 900 AD), which resulted in a greater dietary reliance on maize.

(General Session (2), Friday, 9:30 am, Fighting Illini Room)

#### Baxter, Carey L. (US Army Construction Engineering Research Laboratory)

#### THE USE OF HISTORIC HUMAN REMAINS DETECTION (HHRD) DOCS TO LOCATE UNMARKED GRAVE SITES

In recent years, numerous Native American Nations have requested that archaeologists on US Army Facilities utilize Historic Human Remains Detection (HHRD) dog teams to locate unmarked cemeteries. However, the scientific literature on the accuracy of these surveys is extremely limited and ground truthing of HHRD dog alerts is not permissible under current regulations, resulting in difficulties interpreting the data along side of traditional geophysical survey methods. To provide guidance on the interpretation of HHRD dog team results, a study was conducted combining laboratory and real world conditions to test the dog's ability to locate unmarked historic graves and to differentiate between human and animal skeletal remains. These results demonstrate that HHRD dog teams may prove a cost effective complement to traditional geophysical survey techniques in identifying unmarked historic human burial locations.

(General Session (6), Saturday, 11:00 am, Spartans/Golden Gophers Room)

#### Baylor, Sarah (Illinois State University)

#### DICKSON MOUNDS AND EVELAND: NODAL CENTER ON THE ILLINOIS RIVER VALLEY

This presentation explores what makes the cemetery and village of Dickson Mounds atypical for a Middle Mississippian site. Habitation, estimated population, and location are central to understanding the purpose of this site as more than just a place to dispose of the dead. Cahokia, a center of Mississippian culture, is examined to determine differences between the use and placement of mounds at these two sites. These conclusions help explain the differences at Dickson Mounds and also why this spot was chosen for a cemetery and a nodal center for Mississippian activity.

(General Session (4), Friday, 3:15 pm, Spartans/Golden Gophers Room)

### Benden, Danielle M. (University of Wisconsin, Madison) and Robert "Ernie" Boszhardt (Independent)

#### THE TREMPEALEAU ARCHAEOLOGY PROJECT: 2014 INVESTIGATIONS

In 2014, investigations of an early Middle Mississippian colony continued in the Village of Trempealeau, Wisconsin. The excavations focused on the Third Street Mound, an isolated platform with a confusing history, located within the Uhl site (47Tr-0159). Having never been formally excavated, the goals of the 2014 investigations were to determine mound construction processes, assess what portions remained intact, and if sub-mound features existed. Excavations included a series of



test units into the remnant mound surface and modern slopes. These revealed that the mound was constructed of short-grass prairie sod and documented the presence of a "clean" pre-mound Mississippian structure at the base. Units placed on the slope clarified historic modifications to the mound size and shape. Immediately east of the mound, in the Schaffner locale, a block excavation produced very few Mississippian artifacts or features, which suggests the area was utilized as a plaza. In addition, a large curved wall trench at Schaffner yielded only Oneota materials. (Poster Session (1), Poster #1, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

# Benish, Jenny (Illinois State Archaeological Survey) and Amanda Douglas (Illinois State Archaeological Survey)

#### PRESERVING A SACRED SITE INSIDE AN URBAN LANDSCAPE: THE GOUGAR SITE (11WI64)

In 2013, the Northern Illinois Field Station completed a Phase I survey for High Speed Rail from Chicago to Joliet. The survey corridor provided ISAS with the opportunity to view the distribution of cultural resources across a wide range of terrain and assess the accelerated loss of such resources within a significant urban area. As a result of the survey, the Gougar Site (11WI64) was revisited. The Gougar Site represents a complex Archaic, Contact Period Native American, and Euro-American archaeological site. The Hickory Creek landscape was intensely used for habitation and mortuary activities during prehistoric periods until Euro-American contact marked by numerous previously recorded sites along the drainage. Despite the destruction of many of these sites, 11WI64 remains a partially intact multi-component habitation and mortuary site amid a highly urbanized landscape, principally due to the protection of the Gougar family from the Pioneer Period until the present. (Poster Session (2), Poster #8, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

#### Benson, Erin (University of Illinois)

# Absorbed Residue Analysis on Ceramics from Three Moorehead Phase Sites in the Amer-Ican Bottom

Recent stable isotope analysis has provided insight into Mississippian foodways at the beginning of the Moorehead Phase in the American Bottom. As Cahokia's influence began to decline in the American Bottom and across the Mississippian world, changes affecting everything from small-scale daily practices to larger scale social, political, and religious practices swept across the region. Included in these changes was a shift in ceramic vessel types, frequencies, and technology, and thus in food storage and preparation practices. Absorbed residue analysis on Moorehead phase ceramic vessels from three sites; Schoolhouse Branch, Old Edwardsville Road, and Olszewski, has investigated the culinary practices of late Mississippians and how these practices were occurring in the greater context of Cahokia's decline. This analysis provides a detailed look into food procurement, preparation, and serving practices, which gives additional insight into how late Mississippian identities may have been transforming through time.

(Poster Session (1), Poster #2, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)



# Betzenhauser, Alleen (Illinois State Archaeological Survey) and Luke Plocher (Illinois State Archaeological Survey)

# EARLY RESIDENTS OF EAST ST. LOUIS: ARCHITECTURE AND COMMUNITY ORGANIZATION (AD 900–1000)

East St. Louis was occupied continuously from approximately AD 900 (Terminal Late Woodland period) through AD 1250 (early Moorehead phase). We will focus on the early occupations dated to the Terminal Late Woodland through Lohmann phase (AD 900 – 1100). This time frame is of particular interest because it corresponds to the Mississippian transition. We will delineate differences in architectural style, arrangement of domestic architecture, and the identification of supra-house-hold storage features and buildings. We also briefly address evidence for landscape modification and changes in material practices associated with the transformation of East St. Louis from a large village to an urban mound center with close ties to Cahokia.

(Symposium (3), Friday, 10:15 am, Hoosiers/Hawkeyes Room)

# Beyer, Autumn (Illinois State University)

### FAUNAL ANALYSIS OF THE KUHNE SITE: STUART STRUEVER'S 1955-56 EXCAVATION

Stuart Struever's excavation of the Kuhne site, located in the Upper Illinois River Valley occurred during the start of archaeological interest in the region. The faunal remains recovered during this excavation offer a unique opportunity to understand subsistence strategies in the area during the Middle Woodland. Using standard zooarchaeological methods, these remains will be analyzed to better understand which fauna were targeted by Middle Woodland people in this region, the seasonality of the site, and how bones were modified for utilitarian and other purposes. These findings will then be compared to faunal assemblages from Middle Woodland sites in the Central and Lower Illinois River Valley to see how the Kuhne site's subsistence strategy relates to other sites, as well as to build a more comprehensive knowledge of the subsistence strategy for the entire Illinois River Valley. (General Session (1), Friday, 10:15 am, Spartans/Golden Gophers Room)

# Blewitt, Rosemarie (University of North Carolina at Chapel Hill)

### CEREMONIAL PLANT USE AT THE TOM JONES SITE (3HE40), A CADDO SITE IN SOUTHWEST ARKANSAS

This paper describes the paleoethnobotanical assemblage from a Protohistoric Caddo mound center in southwest Arkansas, the Tom Jones site (3HE40). The presence of members of the Eastern Agricultural Complex as well as likely domesticated amaranth at this site is unexpected in this region and time period. The spatial distribution of the botanical remains suggests that Eastern Agricultural Complex crops had ceremonial importance at the Tom Jones site. This site also presents an opportunity to define a plant assemblage from a Caddo cookhouse, a structure type that is not well understood.

(Symposium (1), Thursday, 1:15 pm, Hoosiers/Hawkeyes Room)



# Birmingham, Robert A. (University of Wisconsin, Waukesha)

# SEVENTEENTH CENTURY FRENCH TRADE GOODS FROM THE CRABAPPLE POINT SITE: A POSSIBILITY FOR A HISTORIC PERIOD ONEOTA COMPONENT ON LAKE KOSHKONONG

The Crabapple Point site (47 le-93), located on the west shore of Lake Koshkonong in southern Wisconsin, has major prehistoric and historic period components. Over several decades, lames Bussey, former landowner of part of the site, collected the site recovering over 5000 ceramic sherds that indicate a substantial Oneota occupation dating from the 1200s through the late prehistoric or protohistoric period. The pottery types are similar with those found at the adjacent Crescent Bay Hunt Club currently being investigated by the University of Wisconsin -Milwaukee. In the 1970s, Janet Spector identified a 19th century historic period occupation that is probably Ho-Chunk (Winnebago) at the Crabapple Point site. However, Bussey's collections also include a substantial amount of British and French fur trade artifacts. The French artifacts, including iconographic (lesuit) brass rings and gun parts, date from about the mid 1600s to the mid 1700s leading to the possibility that the Oneota occupation persisted into historic times. This paper describes the French era artifacts and discusses the implications of a historic period Oneota occupation on Lake Koskonong, if trade good associations can be established by future archaeological investigations.

(Symposium (6), Friday, 1:30 pm, Fighting Illini Room)

### Blodgett, Daniel F. (Illinois State Archaeological Survey)

#### MONUMENTAL POSTS AT THE EAST ST. LOUIS MOUND COMPLEX

Recent excavations conducted by the Illinois State Archaeological Survey at the East St. Louis Mound Complex uncovered numerous large post pits, many of which held massive wooden posts. Using the ethnohistoric record and previous archaeological excavations, I discuss both the metrics and spatial distribution of these monumental posts as well as their role in the community at East St. Louis and elsewhere during Mississippian times. I will also review new evidence for the method of insertion/ extraction of these great posts that has come to light based on these recent excavations.

(Symposium (3), Friday, 11:00 am, Hoosiers/Hawkeyes Room)

# Boles, Steven L. (Illinois State Archaeological Survey), Jenna Ely (Illinois State Archaeological Survey), and Justin Wallace (Illinois State Archaeological Survey)

#### CRAFT SPECIALIZATION AT THE EAST ST. LOUIS MOUND COMPLEX

Recent excavations at the East Saint Louis Mound Complex yielded over 750,000 lithic items. Within this vast assemblage is evidence of numerous lithic crafting activities. While some crafting activities were widespread across the site, others were more restricted and specialized. Both utilitarian and status items were produced and cached at the site. The overall lithic assemblage will also be discussed briefly. (Symposium (3), Friday, 11:15 am, Hoosiers/Hawkeyes Room)



# Boles, Steven L. (Illinois State Archaeological Survey) and Lenna Nash (Illinois State Archaeological Survey)

#### ANTHROPOGENIC LANDSCAPE EVENTS AT THE EAST ST. LOUIS MOUND COMPLEX

A number of borrow pits likely associated with a nearby ridge-top mound were excavated during the 2011 field season at the East Saint Louis Mound Complex. These borrows were refilled and the area capped to create a plaza south of the mound. This reclamation event appears to have been ritually orchestrated with the probable intent to create a purified sacred space. A comparison to Cahokia borrows demonstrates both similarities and differences which will be discussed briefly. (Symposium (3), Friday, 9:15 am, Hoosiers/Hawkeyes Room)

# Boyd, Timothy (Illinois State Archaeological Survey), Aimee N. Roberts (Illinois State Archaeological Survey), and David J. Nolan (Illinois State Archaeological Survey)

#### EXPLORING LATE ARCHAIC SYSTEMATICS IN THE LAMOINE RIVER VALLEY OF WEST CENTRAL ILLINOIS

Recent excavations in the upper portion of the LaMoine River Valley of Illinois have produced assemblages of small-sized dart points that have recently been radiocarbon dated between the Late Archaic and Early Woodland periods. Analysis suggests that these cultural remains have characteristics similar to the Labras Lake/Floyd phases of the American Bottom and the Riverton horizon of the Wabash Valley. However, these assemblages seem to represent one or more heretofore-unidentified regional cultural phases or traditions. Currently, only a single Late Archaic cultural phase has been identified in the LaMoine River drainage. This paper presents data from these site assemblages and discusses the implications that this new information holds for regional Late Archaic-Early Woodland chronologies and culture history.

(General Session (7), Saturday, 10:45 am, Little Chief Room)

#### Brennan, Tamira K. (Illinois State Archaeological Survey) and Sarah E. Baires (Eastern Connecticut State University)

#### RIDGE-TOP MOUNDS AND THE EAST ST. LOUIS MOUND COMPLEX

The discovery of a previously unknown ridge-top mound during the Illinois State Archaeological Survey's recent excavations at the East St. Louis Mound Complex reveals that landscape modification, interment of human remains, and carefully engineered layers of soil were integral not only to the mound-building process, but to the making of East St. Louis' community. Each mound-making act, at East St. Louis and throughout the Mississippian world, represented action imbued with meaning that was intended to make and maintain community at these centers. This paper overviews the events surrounding the construction of Main Street Mound and discusses them in the context of the ridge-top monuments and their use in the Greater Cahokia region.

(Symposium (3), Friday, 9:30 am, Hoosiers/Hawkeyes Room)



# Brown, James A. (Northwestern University)

#### MARK LYNOTT'S CONTRIBUTION TO UNDERSTANDING THE CONSTRUCTIONAL HISTORY OF HOPEWELL EARTHWORKS AT MOUND CITY

In 2009 Mark Lynott began an important research initiative at Mound City that the authors who assisted him are impelled to report although that project was far from complete. Only a few seasons work produced results that reveal a distinctly different site constructional history than conventionally thought. The embankment and so called 'borrow pits' were architectural features constructed very late in its history (ca. AD 400) and that the surface on which the group stands was stripped down into the B zone in at least two separate patches. This stripping appears to have largely removed a substantial pre-Hopewellian component. (Symposium (5), Friday, 3:30 pm, Hoosiers/Hawkeyes Room)

### Bryant, Paula (Illinois State Archaeological Survey)

# PARTNERING WITH THE FOREST PRESERVE DISTRICT OF COOK COUNTY: MODELING ARCHAEOLOGI-CAL SITE AND LANDSCAPE SENSITIVITY FOR EFFECTIVE RESOURCE MANAGEMENT

Despite being one of the most urbanized landscapes in the United States Cook County, Illinois has preserved nearly 70,000 acres of undeveloped land. Beginning shortly after the Civil War the movement to preserve the natural watersheds and landscapes of Chicago came to fruition near the end of the 19th century under the inspired leadership of prominent Chicago architect, Jens Jensen. Managed by the Forest Preserve District of Cook County (FPDCC) these lands contain nearly onehalf of the known sites in the county. The Prairie Research Institute and its scientific surveys are working with the FPDCC to help the agency to better understand and manage their archaeological resources. Less than 20% of Forest Preserve lands have undergone systematic professional survey; less than 250 of the recorded sites have been professionally evaluated. Preliminary results of modeling site and landscape sensitivity, along with management recommendations, are discussed. (General Session (6), Saturday, 10:15 am, Spartans/Golden Gophers Room)

# Buchanan, Meghan E. (Indiana University), Cailey Mullins (Indiana University), Catherine Qualls (Indiana University), Amanda Klenk (Simmons College), Megan Dunphy (Indiana University), and Emma Woodruff (Indiana University)

### REHOUSING THE GLENN A. BLACK LABORATORY OF ARCHAEOLOGY COMPARATIVE COLLECTIONS

In 2013, Glenn Black Lab staff and interns began a project to rehouse, reorganize, and document the various comparative and type collections maintained by the lab. Type collections at the lab include a botanical comparative collection, a projectile point and lithic tool type collection, a ceramic type collection, and a collection of representative objects from individual accessions. While this rehabilitation project is ongoing, in this poster we present some of our methods and results, as well as discuss some of the challenges that have emerged.

(Poster Session (3), Poster #18, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)



# Buchanan, Meghan E. (Indiana University), Dawn M. Rutecki (Indiana University), and Danielle Bachant-Bell (Lord & Bach Preservation Consulting)

ALL COOPED UP: DOCUMENTING THE CHICKEN COOP AT THE HINKLE-GARTON FARMSTEAD IN BLOOMINGTON, INDIANA

The Hinkle-Garton Farmstead, occupied by members of the Hinkle family from 1882-2003, was a highly productive and well-known farm in the Bloomington, Indiana region. The property was given to Bloomington Restorations, Inc. and subsequently listed on the National Register in 2007. In 2013, we conducted a survey to document and evaluate a post-1900 chicken coop on the property that was most recently used as a dump or scrap pile. In this poster we discuss our documentation and analysis of the coop and associated artifacts as well as the inclusion of these materials in the Hinkle-Garton teaching collection.

(Poster Session (1), Poster #17, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

Burkhardt, Haley (University of Wisconsin, Madison), Jeremy Wilson (Indiana University-Purdue University of Indianapolis), Matthew Pike (Purdue University), Erica Ausel (Indiana University Bloomington), and G. William Monaghan (Indiana Geological Survey)

# A PALISADE CONSTRUCTION CHRONOLOGY FOR LAWRENZ GUN CLUB ITS IMPLICATION FOR LATE PRE-COLUMBIAN WARFARE IN WEST-CENTRAL ILLINOIS

Palisade construction during the Mississippian era provides insight into the socio-political climate, nature of warfare, and distribution of Native peoples in the lower Midwest shortly before AD 1500, Between 2011 and 2014, a magnetometer survey at Lawrenz Gun Club (11Cs4) revealed a series of palisades with bastions that extend around the north, west and south sides of the site. Small-scale excavations within a palisade and bastion on the northern margin of the site in 2014 provided evidence for construction and rebuilding episodes of this fortification. In addition, organic materials provided radiometric ages from which a high-resolution chronological model of one version of the site's palisade was developed. The amount of labor involved in construction was also estimated. Through these models, the regional significance of this site can be contextualized and compared with the trajectory of other palisaded Mississippian villages in the Illinois Valley and across the lower Midwest. (Poster Symposium (1), Poster #3, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

# Burks, Jarrod (Ohio Valley Archaeology, Inc.)

# LARGE-AREA MAGNETIC SURVEY IN HOPEWELL CULTURE NATIONAL HISTORICAL PARK, OHIO: NEW ENCLOSURES, WOOD HENGES, AND STRATEGICALLY PLACED FEATURE COMPLEXES

Geophysical survey has long been an important tool in the Midwest, thanks in large part to the support and innovation of the Midwest Archeological Center (MWAC). Recently, MWAC funded a large-area (ca. 200 acres) magnetic survey at three earthwork sites in southern Ohio: Hopewell Mound Group, High Bank Works, and Hopeton Works. This presentation explores some of the results from the survey, including new earthen enclosures, wood henges, and distinct feature complexes at key locations. Though extensively mapped and excavated, the magnetic survey results show that there is much left to be discovered at these large earthwork sites. (Symposium (5), Friday, 2:15 pm, Hoosiers/Hawkeyes Room)

CHAMPAIGN, ILLINOIS



# Burks, Jarrod (Ohio Valley Archaeology, Inc.) and Jamie Davis (Ohio Valley Archaeology, Inc.)

# USING CUT/FILL TERRAIN MODELS IN ARCHAEOLOGY: EXPLORING SOME APPLICATIONS

As electronic data sources become increasingly accessible, more archaeologists are turning to digital terrain models (e.g., those based on LiDAR data) to visualize the landscape. In this presentation we explore a variety of digital data sources useful for creating terrain models and show how these can be used to examine the way landscapes vary depending on the data source. Terrain models from different times/years can be used to create cut/fill models showing where soil has been removed or the old surface has been buried. This can be a particularly useful tool when attempting to locate intact archaeological deposits.

(General Session (1), Friday, 9:15 am, Spartans/Golden Gophers Room)

# Butler, Amanda J. (Illinois State Archaeological Survey) and Madeleine G. Evans (Illinois State Archaeological Survey)

# WALKING THE ORENDORF TIGHTROPE: MONUMENTAL EFFORTS FOR A MONUMENTAL SITE

Over 40 years ago the threat of imminent destruction of the Mississippian temple town at the Orendorf site kick started an historic large scale salvage effort by the Upper Mississippi Valley Archaeological Research Foundation (UMVARF). Through the efforts of a dedicated team of excavators, the story of Orendorf unfolded. In the heart of the Central Illinois River valley, the Orendorf Site includes four settlements spanning CE 1100-1250. The latest, a fortified town designated Settlement D, catastrophically burned and was abandoned, leaving archaeologists an entire town site frozen in time. Thirty-five years after the final field season the Illinois State Archaeology Survey is partnering with UMVARF to bring this monumental settlement out of the shadows with a comprehensive site report. Our digital dive into the past showcases the archaeology of the Orendorf site and the archaeologists that saved it. (Poster Session (1), Poster #11, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

# Calfas, George (US Army Construction Engineering Research Laboratory), Susan Enscore (US Army Construction Engineering Research Laboratory), and Carey Baxter (US Army Construction Engineering Research Laboratory)

# A LANDSCAPE APPROACH TO DETERMINING SIGNIFICANCE OF 19TH AND 20TH CENTURY FARM-STEADS AND RURAL COMMUNITIES

The Army must manage the cultural resources on its lands. For installations containing large numbers of historic farmstead sites, meeting these requirements through traditional archeological approaches entails large investments. In 2005, Fort Leonard Wood and ERDC-CERL developed a methodology for efficiently identifying the best examples of Ozark historic farmstead sites, and also those sites least likely to be eligible for the National Register. In 2013, the methodology was tested for applicability in a different region with a different temporal depth – the Southeast. A historic context and determination of the "typical" farmsteads of the Southeast were developed. The existing Eligibility Prescreening Form was modified to reflect the archeological patterns of the Southeast and then applied to test sites at Fort Bragg. The results show this approach is applicable to the Southeastern region, and can be



used to quickly identify basic information about historic farmstead sites, expediting, determinations of eligibility.

(General Session (5), Saturday, 8:30 am, Spartans/Golden Gophers Room)

# Carbaugh, Aimee (Illinois State Archaeological Survey) and Brent Lansdell (Illinois State Archaeological Survey)

# THE ARCHAIC MORTUARY COMPONENT AT THE BROGLIO SITE (11WM80), WILLIAMSON COUN-TY, ILLINOIS

This poster presents the results of recent archaeological and osteological investigations at the Broglio Site (11W/M80), a Late Middle Archaic to Late Archaic mortuary site superimposed by an Early to Middle Woodland occupation in south-central Illinois. The Archaic component of the site is comprised mainly of a cluster of individual burials. The interments are consistent with other Archaic mortuary sites in the region, with individuals placed in shallow graves in a flexed or semi-flexed position. Some of the grave offerings recovered include shell beads and projectile points. Twenty-one individuals were identified and range in age from 38 fetal weeks to old adult, with nearly an equal number of males and females represented. General indicators of stress were observed on a number of individuals. A lack of internal organization to the graves and the small number of burials suggests use of the site over time by a single group of people.

(Poster Session (2), Poster #9, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

### Carpiaux, Natalie (University of Wisconsin, Milwaukee) and Richard W. Edwards IV (University of Wisconsin, Milwaukee)

#### KOSHKONONG CREEK CERAMICS: A PRELIMINARY POTTERY ANALYSIS

Located in Jefferson County, Wisconsin, the Koshkonong Creek Village (47JE379) is an upland Oneota habitation site. During recent excavations, large amounts of material culture, including ceramics, were recovered. We present a preliminary analysis of the pottery recovered during the 2012 excavations. Lip treatment, decoration, and other stylistic elements are used to contextualize the site's assemblage within the Koshkonong Locality.

(Symposium (6), Friday, 2:15 pm, Fighting Illini Room)

# Carr, Christopher (Arizona State University) and Christopher Caseldine (Arizona State University)

## ARCHAEOLOGY OF PREHISTORIC WOODLAND AND PLAINS NATIVE AMERICAN COSMOLOGIES OF DEATH: AN ETHNOHISTORICAL FOUNDATION

Symbolically rich mortuary remains from prehistoric Woodlands and Plains societies in North America offer ripe opportunities for inferring past eschatologies when integrated with analogous native ethnohistorical information. This research program has been weakened, however, by the lack of systematic characterization and mapping of historic Woodland-Plains eschatological knowledge. A survey of 204 narratives about the journey to an afterlife, drawn from 42 Woodland-Plains tribes, documents a huge suite of motifs (527), their commonness, geographic distributions, and co-occurrences. Twelve distinct narratives or narrative segments, areally



bounded, are revealed. A few individual motifs were widespread over the region but no narrative was. (General Session (3), Friday, 2:15 pm, Little Chief Room)

# Carr, Dillon (Grand Rapids Community College)

# HOUSEHOLD ORGANIZATION AND BAND COMPOSITION DURING THE GREAT LAKES PALEOINDIAN PERIOD

Research presented here draws upon existing archaeological data to reconstruct aspects of past social structures maintained by Terminal Pleistocene / Early Holocene hunter-gatherers in the Lower Great Lakes region. Because these social structures influence the organization and use of space across individual sites, data presented here will focus on understanding the social landscape at the site level. The organization of individual households and the interrelationship between multiple households are interpreted as reflecting the regular movement of the entire domestic group, which would suggest a strong emphasis on residential mobility. Likewise, the numbers of individual households at excavated sites also suggest the maintenance of very low population densities similar to ethnographically known hunter-gatherers from high-latitude parts of North America. (Symposium (10), Saturday, 1:15 pm, Hoosiers/Hawkeyes Room)

### Cobble, Jaremy (Wisconsin Archeological Society)

#### THE KRAEMER I SITE (47Sb224): A MULTI-COMPONENT HABITATION SITE IN THE SHEBOYGAN RIVER WATERSHED OF EAST-CENTRAL WISCONSIN

Over the past seventeen years, surface collection at the Kraemer I site (47Sb224) has yielded an assemblage of diagnostic artifacts that are representative of Late Paleoindian through Late Woodland cultural stages. This poster provides an overview of the site, highlights the artifact assemblage and provides insights into the cultures represented at the site.

(Poster Session (2), Poster #10, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

# Comstock, Aaron (Ohio State University), and Robert Cook (Ohio State University)

#### A PRELIMINARY REINVESTIGATION OF TURPIN (33HA19), THE NEWTOWN TYPE SITE

Historically excavated type sites often represent the foundation of our understanding of prehistoric sequences. However, it is uncommon that these important sites are rigorously reexamined. This study uses archival data and museum collections to reevaluate the Turpin site (33HA19), which is considered the type site for the Newtown Focus along the Middle Ohio River. Although original interpretations of a Late Woodland village followed by a Fort Ancient village occupied until European contact have become entrenched in the literature, our findings suggest that these assumptions must be reconsidered. Two issues are evident. First, it is unclear whether Late Woodland structural remains, interpreted as a village, were domestically or ritually oriented. Second, the Fort Ancient occupation at Turpin appears to extend from the beginning of the Fort Ancient sequence (c. AD 1050) until approximately



AD 1300. Overall, we suggest it is imperative that long-standing assumptions from type sites are verified.

(General Session (3), Friday, 1:30 pm, Little Chief Room)

#### Conner, Michael D. (Dickson Mounds Museum)

# WHY DID THEY BUILD IT? ARCHAEOLOGICAL CONTEXT OF A LARGE MISSISSIPPIAN STRUCTURE NEAR DICKSON MOUNDS

The Myer-Dickson habitation area is adjacent to the Dickson Mounds site in Fulton County, Illinois. Dickson Mounds is the largest known Mississippian mortuary site in the region with potentially 3,000 burials. The Myer-Dickson area adjacent to the mounds contains abundant evidence of Mississippian domestic use as well as a plaza flanked by at least five buildings, including the largest documented Mississippian structure in Illinois outside of Cahokia. While viewed in the past as a nucleated village with a central plaza, detailed analysis of the site suggests a more complicated spatial organization and occupational history.

(General Session (4), Friday, 3:30 pm, Spartans/Golden Gophers Room)

# Conner, Michael D. (Dickson Mounds Museum), Jodie A. O'Gorman (Michigan State University), Timothy J. Horsley (Horsley Archaeological Prospection, LLC), and Matthew D. Pike (Purdue University)

# SPATIAL ORGANIZATION OF AN ONEOTA/MISSISSIPPIAN COMMUNITY

The Morton Village site (11F2) in Fulton County, Illinois was occupied by Oneota and Mississippian people during the A.D. 1300s and is adjacent to the Norris Farms #36 cemetery. Magnetometer surveys covering 7.3 ha have provided excellent information on the distribution of structures and features. No palisade has been found, and there is evidence the most densely occupied area of the site was established amidst a dispersed late Mississippian occupation. Excavations have provided valuable ground-truthing data and preliminary evidence of spatial patterning within the main village.

(Poster Session (1), Poster #13, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

#### Cook, Della Collins (Indiana University)

### OLD WINE IN NEW WINE SKINS: WHAT THE CRANIOLOGICAL WORK OF GEORGE LANGFORD AND GEORG NEUMANN PREDICTS FOR THE FUTURE OF BIOLOGICAL DISTANCE STUDIES

The typological paradigm was replaced by biological distance studies in the last half of the twentieth century. George Langford at Fisher Mounds and Georg Neumann at Morton and Havana contributed to a consensus: late prehistoric peoples of Illinois were distinct from their predecessors. Their published data have been used uncritically in later biological distance studies. A close look at their curation and data collection practices shows that their data should be approached with caution. Langford had little formal training, and his curation practices do not meet even the limited standards of his contemporaries. His reconstructions clearly erred in favor of his hypothesis: that round-headed peoples replaced long-headed ones at Fisher Mounds. Neumann's used quite stringent and eccentric standards for excluding



crania from his types. In a post-repatriation world, careful accommodation to the limitations of older data, including the data we are now collecting, will be needed. (Symposium (2), Thursday, 1:10 pm, Little Chief Room)

#### Crane, Adam (Indiana University) and Della Collins Cook (Indiana University)

### IMPLEMENTING THE 'BIOARCHAEOLOGY OF CARE' IN THE ILLINOIS RIVER VALLEY: A CASE OF JUVE-NILE-ONSET ANKYLOSING SPONDYLITIS AT MORTON MOUND 14

At the PPA meeting in 2014 we presented F14-46, an old adult male from Morton Mound 14, as a case of juvenile-onset ankylosing spondylitis. He exhibits bilateral sacroiliac fusion, lumbar fusion, bilateral hip dysplasia associated with underdeveloped femora and tibiae, and fusion of the tali and calcanei. The lesions likely caused substantial disability, including difficulty breathing, chronic pain, and limited mobility. By interpreting F14-46 through a 'bioarchaeology of care' analytical framework that assesses "the probable impact of a serious pathology upon an individual's ability to operate within their immediate physical and social environments" (Tilley and Oxenham 2011), we demonstrate that the individual's survival from disease onset through old age without signs of poor health would have necessitated continuous, long-term intervention by the community to provide at least basic subsistence and shelter, thereby reflecting the social and economic position of the disabled in the Mississippian community that constructed Morton Mound 14. (Poster Session (1), Poster #3, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

#### Dalan, Rinita A. (Minnesota State University, Moorhead) and Bruce Bevan (Geosight)

#### INTEGRATING GEOPHYSICS AND ARCHAEOLOGY: THE LEGACY OF THE HOPETON PROJECT

Mark Lynott's vision in promoting geophysics in his research at the Hopeton site has been pivotal in the development of geophysics in archaeology. John Weymouth's large-area magnetic map of the earthworks was the guide for both excavations and additional geophysical applications. In particular, geophysical tests on the faces of excavated trenches and units were used to characterize archaeological features, soil horizons, and strata; this allowed correlation with surface geophysical maps and the geoarchaeological studies of Rolfe Mandel. These within-excavation tests had a high spatial resolution; they provided detailed information on anomaly sources, feature formation and post-depositional processes. They even identified soil contrasts that were otherwise invisible. Geophysical tests were also performed on samples extracted from excavations. This was the first large project in the U.S. where geophysics was encouraged and developed to this degree; the Hopeton research is a model for integrating geophysics and archaeology.

(Symposium (5), Friday, 3:00 pm, Hoosiers/Hawkeyes Room)

### Dappert, Claire P. (Illinois State Archaeological Survey) and Dwayne L. Scheid (Illinois State Archaeological Survey)

### DISCOVERING LATE VICTORIAN EAST ST. LOUIS: URBAN ARCHAEOLOGY AND THE NEW MISSISSIPPI RIVER BRIDGE PROJECT

Between 2009 and 2012, teams of archaeologists from the Illinois State Archaeological Survey (ISAS) conducted large-scale excavations in East St. Louis for the Illinois



Department of Transportation as part of the New Mississippi River Bridge Project. The excavations focused on the alignment of relocated I-70, which crosses the newly opened Stan Musial-Veteran's Memorial Bridge. The new alignment transects former residential neighborhoods and remnants of the St. Louis National Stockyards. Hundreds of features, dating from the late-nineteenth century to the early-twentieth century and spanning 76 lots across 4 city blocks, were investigated. Thousands of artifacts were recovered from dozens of privies, cisterns, wells, and cellars. The recovered artifacts and information, combined with archival research, are yielding new insights into the history of East St. Louis, particularly about the daily lives working-class individuals and families when the city was a booming transportation and manufacturing hub. In this paper, the excavation of late 1800s and early 1900s features are summarized and specific examples of the material culture associated with this Late Victorian East St. Louis working class neighborhood are examined in some detail.

(Symposium (9), Saturday, 1:00 pm, Little Chief Room)

#### Davidson, Matthew J. (University of Kentucky)

# "THE GREATEST [TRADERS] IN AMERICA": PROTOHISTORIC FORT ANCIENT EXTRA-REGIONAL INTER-ACTION AT THE HARDIN SITE, GREENUP CO., KY

Fort Ancient societies of the middle Ohio Valley have not attracted the same level of scholarly or public attention as their Mississippian contemporaries. Yet, by the 15th century many Mississippian groups had largely abandoned their unsustainable mound centers while Fort Ancient communities continued to prosper. This paper proposes that, in general, Fort Ancient societies weathered the social upheavals that occurred during the little ice age, and perhaps did so better than their Mississispian neighbors, many of whom dispersed and reorganized into less complex social arrangements. The broad regional contacts and central geographic location of protohistoric Fort Ancient groups enabled them to maintain and enhance the network of extra-regional relationships they had been developing since the 13th century. Multiple lines of evidence suggest that these well-established relationships enabled the protohistoric inhabitants of the Hardin Site in northeastern Kentucky to take advantage of rapidly changing geopolitical and economic circumstances. (General Session (3), Friday, 1:45 pm, Little Chief Room)

#### Davidson, Matthew J. (University of Kentucky)

### PIPESTONE PRODUCTION, EXCHANGE, AND USE AT THE FORT ANCIENT HARDIN SITE, GREENUP Co., KY

Pipestones such as catlinite and flint clay are fine-grained sedimentary and metamorphic rocks that were used by Native Americans for the production of smoking pipes and pipe bowls. During the protohistoric and contact periods (ca. A.D. 1500-1800) this raw material was mined, exchanged and shaped into pipes by Fort Ancient people in the middle Ohio Valley. Recent excavations at the Fort Ancient Hardin Site in northeastern Kentucky have produced a large assemblage of pipestone debitage, worked fragments, and a portion of disc pipe bowl. This poster uses evidence from previous and recent studies of pipestone in the Hardin assemblage to illustrate a preliminary model of production, exchange, and use of pipestone at this locality. (Poster Session (1), Poster #14, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)



### Dinnes, Jacque (The University of Northern Iowa)

#### PRELIMINARY FAUNAL ANALYSIS OF CAVE SITE IN EAST CENTRAL IOWA

During the summer of 2013, the University of Iowa Office of the State Archaeologist (OSA) in conjunction with the Jones County Conservation Board, Americorps volunteers, and additional avocational archaeologists and volunteers, conducted an archaeological excavation of Bruggeman Cave (13JN12). This excavation was associated with a cave restoration project that was supported by a Historic Resources Development Program grant from the State Historical Society of Iowa. The Bruggeman Cave site contains multiple Late Woodland occupations. Artifact collection was conducted through a limited site excavation and screening of looter backfill piles. These artifacts were used to perform a preliminary faunal analysis for select areas of the site.

(Poster Session (2), Poster #17, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

### Dunham, Sean (Chippewa National Forest)

### HUNTER-GATHERER MOBILITY STRATEGIES: A LATE WOODLAND EXAMPLE FROM THE UPPER PENIN-SULA OF MICHIGAN

The Late Woodland (LW) period in the upper Great Lakes region has been has been linked to the development of the Inland Shores Fishery and especially to the advent of deep water fall fishing. A recent study of LW settlement and subsistence patterns in the eastern Upper Peninsula of Michigan has revealed a shift in the mobility strategies used by LW peoples of that region. Using site locational data and an assemblage diversity index trends were identified that directly inform on LW settlement and mobility patterns that have spatial, temporal, and environmental components. In brief, Early LW people were more residentially mobile and that Late LW people were more logistically mobile. Likewise, Late LW people were making greater use of the interior. This paper will explore the transition in LW mobility patterns and discuss this trend in the context of our understanding of LW dynamics in the region.

(Symposium (7), Saturday, 8:45 am, Little Chief Room)

#### Durst, Patrick R. (Illinois State Archaeological Survey)

### UNDERSTANDING RURAL AND URBAN PRIVY VAULTS: AN OVERVIEW OF THEIR UTILIZATION AND MORPHOLOGICAL TRANSFORMATION THROUGH TIME

Until the advent and widespread adoption of modern plumbing, the privy vault played nearly as important a role to permanent occupation as would a sustainable water source. This paper will peruse the various construction methods employed while investigating the rational behind changes in morphology. Special focus will be given to privies within the urban setting of turn of the century East St. Louis. Comparisons will be made between privy vaults found in various Southern Illinois archaeological contexts.

(Symposium (9), Saturday, 1:45 pm, Little Chief Room)



### Eaton, Melissa (Metropolitan Community College, Longview)

#### EMBODYING CULTURAL REPRESENTATIONS AT DELAWARE TOWN

The archaeological site called Delaware Town was occupied for seven years during the 1820s by immigrant Delaware (Lenape) peoples. The archaeological materials recovered from this site mark it as a historic-era Native American site. Yet, known Delaware sites ranging from western Pennsylvania to eastern Missouri betray no indications of ethnic affiliation. What happened in the short time at Delaware Town is important, distinctive, and unique. A close examination of the archival records and archaeological materials permits archaeologists to understand the complex social, political, and economic motives that led to a new embodiment of "Delaware-ness" during the short tenure in southwestern Missouri. (Symposium (4), Friday, 9:00 am, Little Chief Room)

## Edwards IV, Richard W. (University of Wisconsin, Milwaukee)

# DIGGING DEEP FOR ANSWERS: 2014 EXCAVATIONS AT THE KOSHKONONG CREEK VILLAGE (47]E379)

The Koshkonong Creek Village (47JE379) is a large Oneota habitation site approximately three kilometers from Lake Koshkonong. The site has been investigated as part of the UW-Milwaukee biennial field school since 2008, and excavations have been ongoing since 2012. The field school returned to the site in the summer of 2014 and excavated a total of 45 square meters. Over 80 features including post molds, and numerous pits were uncovered. A wide array of lithics, ceramics, and faunal materials were recovered within and above the features. Initial results of the excavations are discussed.

(Symposium (6), Friday, 3:00 pm, Fighting Illini Room)

### Egan-Bruhy, Katie (Commonwealth Cultural Resources Group) and Mark Bruhy (Commonwealth Cultural Resources Group)

#### PREHISTORIC SUBSISTENCE ADAPTATION IN THE UPPER GREAT LAKES: A PERSPECTIVE FROM BUT-TERNUT-FRANKUN LAKES

The Butternut-Franklin Lakes Archaeological District is located immediately south of the confluence of the Upper Wisconsin, Menominee, Brule River watersheds, in an area dominated by several thousand lakes. The preponderance of streams, swamps, and marshes make this a vast and extraordinary aquatic ecosystem. Archaeological research in this region, extending back into the 1960s, provides a solid baseline for reconstruction of the dynamic settlement/subsistence adaptation of prehistoric populations in this region from the Archaic through the Oneota tradition.

(Symposium (7), Saturday, 8:00 am, Little Chief Room)

# Emerson, Kjersti E. (Illinois State Archaeological Survey) and Thomas Emerson (Illinois State Archaeological Survey)

#### DISMANTLING THE FISHER-HUBER EVOLUTIONARY CONTINUUM

The evaluation of the taxonomic, chronological, and cultural historical relationships of the Upper Mississippian Huber and Fisher groups in the Chicago region has been

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ongoing since their identification in the early 1930s. With Charles Faulkner's 1972 research, it became widely accepted, based almost entirely on ceramic evidence, that the two phases represent an evolutionary continuum with Fisher transitioning to Huber in the 15th century. For the last four decades, archaeologists have had little cause to question this assessment. However, recent large-scale investigations at the multi-component Hoxie Farm site and the reanalysis of a number of older Fisher and Huber phase collections have provided new insights into the Fisher-Huber relationship. Based on these analyses we suggest that the Fisher and Huber phase peoples clearly having ties to the east, while Huber may represent northwestern Oneota expansions into the area.

(Symposium (7), Saturday, 9:30 am, Little Chief Room)

#### Emerson, Thomas E. (Illinois State Archaeological Survey)

#### SITUATING THE EAST ST. LOUIS MOUND COMPLEX IN THE HISTORY OF GREATER CAHOKIA

During a five-year period between 2008 and 2012 the Illinois State Archaeological Survey carried out excavations at the Mississippian period East St. Louis Mound Complex that lies buried under historic and modern fill in the modern city of East St. Louis. The excavations were funded by the Illinois Department of Transportation as part of the mitigation for the new Stan Musial Veterans Memorial Bridge. One of the largest excavations every carried out in the U.S. the Survey ultimately excavated nearly 1500 structures, 4000 pit features, the intact base of a leveled ridge-top mound, multiple large marker posts, borrow pits, and plaza areas packed within a 34 acre excavated area that represents less than ten percent of the total site area. The papers in this session provide our initial interpretations of this vast dataset and its implications for understanding the history of North American first native city. (Symposium (3), Friday, 8:30 am, Hoosiers/Hawkeyes Room)

#### Esarey, Duane (Illinois State Archaeological Survey)

# Investigating Routinized Production of Symbolic Paraphernalia in the Colonial Northeast

Consideration of symbolic artifacts is one of many ways in which we attempt to understand the belief systems of a society. Although all deployment and reception of cultural symbols is open to negotiation, raw material and social context of production and distribution are frequent aspects of inscribed meaning. In Colonial period Native sites in northeastern North America new technologies and settings of production and exchange of symbolic paraphernalia reflect vigorous economic, technological, artistic, and political fluorescence. As a whole new artifact forms and decorations express attributes of innovation, hybridization, and in some cases apparent centralized production characterized by standardization. I describe several classes of very common, yet nearly uninvestigated, symbolic paraphernalia throughout the 17th century Northeast. Detailing my attempt to systematically investigate the most basic questions for one of these classes (the Standardized Marine Shell industry), I suggest appropriate scientific methods for approaching these artifact complexes as a whole.

(Symposium (8), Saturday, 11:45 am, Hoosiers/Hawkeyes Room)



# Everhart, Timothy (University of Michigan) and Robert Cook (Ohio State University)

# INVESTIGATING THE PLACEMENT OF HOPEWELL EARTHWORKS: A GIS SPATIAL ANALYSIS OF ROSS COUNTY, OHIO

This study uses a GIS to analyze the placement of Ohio Hopewell earthworks along the Scioto River and its tributaries in Ross County. Least-cost spatial analysis illustrates that these earthworks are not placed within the closest proximity to the easiest routes of travel. Analysis of spatiality, using both Euclidian and Manhattan distances, reveal that earthworks were not optimally placed with regard to space. Analysis of environmental factors demonstrate that, while glacial and pre-glacial parent materials and aspect were not chosen for, areas with elevations between 639 to 708 feet above sea level, slopes of less than 6 percent, and Eldean loam soils were specifically targeted for the construction of earthworks. While the logic of selecting sites at specific elevations and minimal slope are expected, the selection of Eldean Loam supports a possible explanation that Ohio Hopewell people chose sites that would resist both erosion and the growth of smaller plant life. (Poster Session (2), Poster #16, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

# Faberson, Tanya A. (Cultural Resource Analysts, Inc.) and Kevin Cupka Head (Cultural Resource Analysts, Inc.)

#### BEFORE THE BRIDGES: URBAN ARCHAEOLOGY IN JEFFERSONVILLE, INDIANA

Recent investigations by Cultural Resource Analysts, Inc., conducted on behalf of the Indiana Department of Transportation for the Louisville-South Indiana Ohio River Bridges project, have resulted in the discovery of intact features and stratified deposits buried beneath the surface in several interstate green spaces in downtown Jeffersonville, Indiana. The documented sites included late nineteenth- through mid-twentieth-century residential and commercial lots, an early-to-mid-nineteenth century state penitentiary, and a late nineteenth through mid-twentieth century community dump. The data recovered from these sites provided new insights into the daily lives of Jeffersonville's residents, as well as the historic development of the city. Research topics addressed by this project broadly included consumerism, settlement patterns, foodways, municipal services, ethnicity/status, and institutional confinement. The project also exposed various adversities particular to the urban environment and reinforced the need for flexibility when excavating in urban settings.

(Symposium (9), Saturday, 3:45 pm, Little Chief Room)

#### Farkas, Michael G. (Illinois State Archaeological Survey)

#### EXAMINING MONKS MOUND THROUGH AERIAL LIDAR

Monks Mound, located within the prehistoric city of Cahokia, is North America's largest earthen pyramid. Over the years, there have been many attempts to map the mound. Using the techniques of each era, topographic maps were produced from methods such as traditional land surveying and photogrammetry. The increasing availability of aerial LiDAR has allowed for some of the most accurate measures of the mound ever undertaken. Based on LiDAR data collected between January 2011 and September 2013, this poster provides a new view of the mound and presents a method to quantify areas of both change and stability within the mound's surface

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morphology. The data are derived from a preliminary joint study of the mound by the Illinois State Archaeological Survey, the Illinois State Geological Survey and the Illinois Historic Preservation Agency.

(Poster Session (1), Poster #5, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

# Fields, Shawn (University of Illinois)

# NAVIGATING THROUGH SPRINGHELD'S UNDERGROUND RAILROAD: EXCAVATIONS AT THE JAMESON JENKINS LOT

The Jenkins lot is located only five lots south from Abraham Lincoln's home at the Lincoln Home National Historic Site in Springfield, IL. The lots namesake, Jameson Jenkins, was an African-American man who was Abraham Lincoln's neighbor during most of the time Lincoln lived in Springfield. While Abraham Lincoln began his political ascent to become president elect at his Springfield address, Jenkins acted as a conductor on the Underground Railroad where he helped escaping slaves gain their freedom. 2014 marks the second year of excavations at the site. I will be discussing the preliminary findings from this year's field season. I also plan to discuss ways in which Jenkins' own involvement in the Underground Railroad can help us understand how other Freed African-Americans participated in Abolitionist movements and activities.

(General Session (5), Saturday, 8:45 am, Spartans/Golden Gophers Room)

## Firestone, Oliver (Ball State University) and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University)

### ANALYSIS OF CERAMIC MANUFACTURING AT THE REINHARDT SITE (33PIBBO), PICKAWAY COUN-TY, OHIO

Examination is made of the pottery manufacturing methods employed by potters at the Reinhardt Site (33PI880), a Late Prehistoric settlement in Pickaway County, Ohio. Vessel construction method was examined using x-radiography for a random sample of the entire collection. Firing environment was interpreted by grouping each sherd according to interior, exterior, and core color. The color pattern for each group was interpreted to determine the firing environment that produced it, and the frequency of these groups used to determine the firing techniques used to produce the collection as a whole.

(Poster Symposium (2), Poster #7, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Fishel, Richard L. (Illinois State Archaeological Survey)

### INVESTIGATIONS AT A PROBABLE 1820S POTAWATOMI HOMESTEAD IN THE SPOON RIVER VALLEY OF WEST-CENTRAL ILLINOIS

During 2013, the Illinois State Archaeological Survey conducted survey and limited test excavations at Buckman Flats (11KX271), an Historic Indian site along the Spoon River of western Illinois. A substantial metal assemblage was recovered, including gun parts, ammunition, projectile points, jewelry, clothing ornaments, and scrap pieces, as well as a smaller number of stone and glass artifacts. Relying primarily on archival information, we suggest the site is likely affiliated with the Potawatomi and dates to the 1820s.

(Symposium (4), Friday, 11:00 am, Little Chief Room)



# Fishel, Richard L. (Illinois State Archaeological Survey) and Robert F. Sasso (University of Wisconsin, Parkside)

#### INTRODUCTION TO THE HIDDEN IN PLAIN SIGHT II SYMPOSIUM

The early 1800s represent an interesting and dynamic time period for archaeologists and historians in the history of the Midwest. Historic records indicate the presence of numerous early nineteenth century Native American sites and Euro-American trading sites, yet their identification and excavation continue to pose significant challenges for Midwestern archaeologists. The intent of this symposium is to not only present the results of recent research, but to also discuss problems encountered in the definition of early 1800s Native-related sites. This symposium is a continuation of the symposium organized by Fishel and Sasso at the 2003 Midwest Archaeological Conference.

(Symposium (4), Friday, 8:30 am, Little Chief Room)

# Franzen, John G. (Volunteer- USDA Forest Service), Terrance J. Martin (Illinois State Museum), and Eric C. Drake (USDA Forest Service)

#### FAUNAL REMAINS FROM THREE HISTORIC PERIOD MAPLE SUGAR CAMPS IN MICHIGAN'S UPPER PENINSULA

Ethnohistoric descriptions of maple sugaring in the Upper Great Lakes can give the impression that faunal resources were a relatively unimportant part of subsistence at sugar camps. For example, Alexander Henry's account of sugaring in 1763 mentions that sugar was the "principal food" consumed during the month of April. However, archaeological test excavation near the Straits of Mackinac conducted by the USDA Forest Service recovered a significant amount of fish remains from sugar camp sites occupied during the late 18th or early 19th centuries. Birds and small mammals are also represented, but the only evidence of wild or domestic large mammals consisted of a single horse tooth fragment. Seasonal and geographic variability of food resources is discussed, as well as the possible influence of interaction between French-Canadians, Native Americans, and Anglo-Americans. (Symposium (7), Saturday, 9:45 am, Little Chief Room)

#### Friberg, Christina (University of California, Santa Barbara)

# COSMIC NEGOTIATIONS: RAMEY INCISED POTTERY AND THE MISSISSIPPIANIZATION OF CAHOKIA'S NORTHERN HINTERLANDS

Cahokia's cultural influence altered patterns of social organization throughout the Midwest, and this complex historical process warrants further interregional research. Ramey Incised jars were cosmograms through which Cahokians attempted to frame relationships among different social groups and the broader cosmos. The exchange, and subsequent emulation, of these ritually charged vessels provided opportunities for hinterland groups to do the same. But did hinterland Mississippian peoples adopt a Cahokian understanding of the cosmos wholesale or reinterpret it based on local understandings and histories? To address this question, this paper examines variation in Ramey Incised iconographic motifs and design fields from the Lower Illinois River Valley, Central Illinois River Valley, Apple River Valley, and the Aztalan site. The data are then statistically compared with Emerson's typology from the American Bottom to explore the ways in which Mississippianized populations

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in the Midwest incorporated their understandings of Cahokian religion within local contexts.

(Symposium (8), Saturday, 10:45 am, Hoosiers/Hawkeyes Room)

# Fritz, Gayle (Washington University in St. Louis)

#### FEEDING CAHOKIA: HOW DID THE AGRICULTURAL SYSTEM WORK?

A major challenge for researchers studying ancient Cahokia before, during, and after its rapid population growth is explaining how farmers fed so many people. Past scenarios have focused on maize and high-status individuals who controlled what was planted, how elites were provisioned, and where farmers lived. Some explanations of Cahokia's collapse implicate maize as being relied upon too heavily, with additional factors such as drought seen as playing important roles. I assess the degree to which paleoethnobotanical data fit with models in which agriculture figures prominently and explicitly in the rise or fall of central Cahokia and the greater American Bottom region.

(Symposium (1), Thursday, 1:30 pm, Hoosiers/Hawkeyes Room)

#### Galloy , Joseph M. (Illinois State Archaeological Survey)

#### THE EAST ST. LOUIS MOUND COMPLEX: A HISTORICAL OVERVIEW

The East St. Louis Mound Complex (ESTLMC) is an archaeological oddity. Although commonplace in many parts of the world, the ESTLMC is the only instance in American cultural history in which a modern city overprinted, but did not completely destroy, an ancient one. Furthermore, the ESTLMC is currently the most intensively studied Mississippian mound center, with an enormous database of features and artifacts largely generated by IDOT's MRB Project (2008–2012), yet the whole of the site remains poorly understood due to its burial under historic fill and urban development. This paper provides a broad overview of the ESTMC's discovery, its partial destruction and burial in the nineteenth century, its subsequent rediscovery in the twentieth century, and a history of IDOT's I-55/70 and MRB investigations. It concludes with a review of some major puzzles that remain to be solved.

(Symposium (3), Friday, 8:45 am, Hoosiers/Hawkeyes Room)

# Genheimer, Robert A. (Cincinnati Museum Center)

### TEMPER AND THE BIG PIT: EVOLUTION OF TEMPER AT THE LATE WOODLAND AND LATE PREHISTOR-IC HAHN SITE NEAR CINCINNATI, OHIO

The Hahn Site exhibits robust middle Fort Ancient (ca. AD 1200-1400) and late Fort Ancient (Madisonville) (ca. AD 1400-1625) village occupations, as well as a significant earlier, but poorly understood Late Woodland (ca. AD 400-1000) occupation. In 2011, a large magnetic anomaly (ca. 10 m by 6 m) was partially investigated through unit excavations. Included within dense deposits of cultural debris were over 12,800 ceramic sherds. The lower levels of the depression contained rock-tempered sherds (pre-Fort Ancient) only. Above these lower levels, shell temper was noted, but the vast majority included additives such as grit or limestone. Shell temper without additives becomes increasingly more common in levels closer to the



top of the depression indicating a gradual reliance on shell as a standalone temper. Radiocarbon dates suggest a protracted filling of the depression beginning as early as the 8th century AD and culminating in the 15th century AD. (General Session (3), Friday, 2:00 pm, Little Chief Room)

#### Geraci, Peter J. (Illinois State Archaeological Survey)

# THE BENEFITS OF PUBLIC OUTREACH: EXAMPLES FROM THE ILLIANA CORRIDOR PROJECT IN WILL COUNTY, IL

Although the trowel is considered to be the quintessential tool of archaeology, an underappreciated and equally important tool every archaeologist should keep in their toolbox is public outreach and discourse. Public outreach can take many forms e.g. newspaper articles, lectures, museum displays; however these efforts can be one-sided with information primarily flowing from the archaeologist to the public. In this paper I argue that public outreach can benefit the archaeologist as well as the public. Throughout Phase I investigations of the Illiana Corridor I incorporated traditional outreach techniques including articles and presentations with in depth landowner and local collector interviews. The results of these efforts were wide ranging and led to a better informed community with a renewed sense of place in their local history as wells as a better informed archaeologist rich with new data, friends, and purpose.

(General Session (6), Saturday, 10:45 am, Spartans/Golden Gophers Room)

#### Geske, Nicole (Michigan State University)

#### **DIGGING THE ARCHIVES**

As a result of burial protection and repatriation laws, there is no question that research involving human remains has changed dramatically in recent years. Burials are avoided when possible, and thus the only modern addition to skeletal and mortuary data comes from mitigation projects in which burials cannot be avoided. Many of the large scale projects have resulted in more historic cemetery data, but few pre-contact burial sites have been excavated. Given this context, it is now necessary to shift our research focus to the remaining collections in various repositories, or previously analyzed human remains. For this paper, I tried to locate and evaluate the available Oneota skeletal data across the Midwest in order to develop future research avenues in mortuary archaeology and bioarchaeology. A wide range of variation in types of data and collection methods were noticed, leading to potential problems if data sets are to be combined. In summarizing extant data, I stress the need to further standardize the types and ways that skeletal and contextual mortuary data are collected, in order to ensure future research and analysis. (General Session (3), Friday, 3:30 pm, Little Chief Room)

# Grantham, Larry (Gauss Archaeology, LLC)

#### **OSAGE SITES AND ARCHAEOLOGY IN THE 19TH CENTURY**

From the time of first contact until the late 18th century, the Osage had totally transformed themselves from the objects of slave taking to the premier raiders on the eastern Plains. There are fifteen sites associated with the Osage and Euro-Amer-



ican interactions with them. There were only six sites associated with the Osage in the first century after contact. Until 1792, all trading with the Osage had been conducted in the Osage villages. That year marks the watershed for the Osage. Their participation in the fur trade was extreme and in that year, they accounted for 55% of the entire fur trade on the Missouri River. After 1792 and the construction of Fort Carondolet, the relationship between the Osage and the Euro-Americans began to shift. After that there were a number of sites including trading posts, forts, missions, mills, and factories constructed in the vicinity of the Osage villages. The 18th century was a complex period for the Osage with most events that affected them coming from sources beyond their control. There are two major sites that define this late period—Carrington and Hayes. We will examine these sites in light of the other Osage sites and the changes that are (and are not) apparent in the archaeological assemblages from these sites.

(Symposium (4), Friday, 9:15 am, Little Chief Room)

### Greber, N'omi

#### MARK LYNOTT: MANAGER, ARCHAEOLOGIST AND FRIEND

Mark Lynott was a knowledgeable and even handed administrator. He supported innovative geophysical field methods that have become almost required parts of archaeological field work. He believed in acquiring and sharing field data, particularly from the great Hopewell Era enclosures. As we often discussed, many theories have been presented about "Hopewell" but until recently, there was little archeological data to check against. We also discussed the great lack of chronological data at the scale of human generation; he began collecting and sharing dates. He was an archaeologist, mentor and friend. He is sorely missed. (Symposium (5), Friday, 1:30 pm, Hoosiers/Hawkeyes Room)

#### Green, William (Logan Museum of Anthropology, Beloit College)

#### PLAINS VILLAGE AND MISSISSIPPIAN AGRICULTURAL SYSTEMS AND THE QUESTION OF SWIDDEN

Late prehistoric agricultural systems throughout the Prairie Peninsula were diverse and productive. Between ca. A.D. 1100 and 1300, people in the Missouri, Mississippi, and Illinois River valleys relied to a high degree on maize and various native crops. Comparisons between coeval western Iowa (Plains Village) and western Illinois (Mississippian) plant use practices reveal similarities and differences in the organization of food production and consumption. This paper summarizes recent Plains Village archaeobotanical findings and interpretations from western Iowa and discusses their relevance in regard to Mississippian plant use patterns of the same period. Particular attention focuses on hypothesized swidden farming. (Symposium (1), Thursday, 2:00 pm, Hoosiers/Hawkeyes Room)



# Hambacher, Michael J. (Commonwealth Cultural Resources Group), James A. Robertson (Michigan Department of Transportation), and Randall J. Schaetzl (Department of Geography, Michigan State University)

# LATE PREHISTORIC FOOD CHOICES IN THE UPPER GREAT LAKES REGION: EVIDENCE FROM 200T283 AND 200T3 IN THE LOWER GRAND RIVER VALLEY OF MICHIGAN

Research into Late Prehistoric subsistence strategies used by residentially mobile hunter-foragers in the Upper Midwest indicate that there is a complex interplay in the choices made between the exploitation of natural resources and the incorporation of maize and other domesticated plants into those economies. Recent excavations of food processing and storage features at two Late Prehistoric sites have provided new insights into the nature of these adaptations. Paleobotanical, phytolith, and organic residue analysis coupled with soils/geomorphological analysis indicate that wild rice, aquatic tubers, and sturgeon are key components of the traditionally assumed dominance of deer and nuts as key subsistence resources during this period.

(Symposium (7), Saturday, 9:15 am, Little Chief Room)

#### Hargrave, Eve A. (Illinois State Archaeological Survey), Dawn Cobb (Illinois State Museum), Lenna Nash (Illinois State Archaeological Survey), Julie Bukowski (Illinois State Archaeological Survey), and Sarah Baires (Eastern Connecticut State University)

#### RITUAL SACRIFICE IN THE AMERICAN BOTTOM: ARCHAEOLOGICAL CONTEXTS AND INTERPRETATIONS

Primary burials and isolated human crania have been found in association with large post pits at several early Mississippian sites in the American Bottom region of Illinois. Their physical location, positioning, and demographic characteristics suggest that the intentional deposition of human remains as sacrifice or offering was part of broader community based ritual events. The association of these deposits with the early Mississippian Lohmann and Stirling phases (A.D. 1050-1200) correlates with an influx of people and political and ideological innovations occurring at Cahokia. This paper explores the role of human sacrifice and the delineation of sacred space during the early Mississippian period at Cahokia and surrounding mound centers as it relates to the development and sustainability of the Cahokia phenomenon. Regional comparisons are made within the Midwestern and South-eastern regions to determine whether similar burial events occur elsewhere during this period or whether they are unique to the American Bottom. (Symposium (2),Thursday, 2:40 pm, Little Chief Room)

## Hargrave, Michael L. (U.S. Army Construction Engineering Research Laboratory), R. Berle Clay (Cultural Resource Analysts, Inc.), Diana Greenlee (Poverty Point National Monument), and Rinita Dalan (Minnesota State University, Moorhead)

#### PREHISTORIC POST CIRCLES IN THE MIDWEST AND SOUTHEAST: USES AND DETECTION BIASES

Post circles (also known as post circle monuments and "woodhenges") and massive isolated and aligned posts have played roles in the ritual and social life of prehistoric groups widely separated in time and space. Poverty Point, certain Adena and Hopewell sites in Ohio, and Cahokia are prominent examples of sites with

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large-scale non-domiciliary post facilities. Uses ascribed to these facilities include the prediction and ritualization of earthly seasonal and celestial phenomena and geospatial and cadastral mapping. We consider how site formation processes and detection biases could render many massive posts and post facilities nearly unrecognizable in geophysical surveys and large-area excavations. We reflect on the implications of these factors for understanding variability in the nature and use of prehistoric post facilities.

(Symposium (8), Saturday, 9:15 am, Hoosiers/Hawkeyes Room)

# Harken, Sarah (Illinois State Archaeological Survey), Alleen Betzenhauser (Illinois State Archaeological Survey), Ross Brady (Illinois State Archaeological Survey), and Alexandra Freyer (Illinois State Archaeological Survey)

# CHRONOLOGICAL IMPLICATIONS AND EXTERNAL CONNECTIONS WITHIN EAST ST. LOUIS CERAMICS

The recent excavations at East St. Louis conducted by ISAS resulted in the recovery of nearly 500,000 ceramic items weighing over 3 tons. The majority of the material is consistent with local pottery dating to the Terminal Late Woodland through early Mississippian period (AD 900-1300). However, several vessels appear to be non-local items or manufactured in non-local styles on local pastes. We give a brief overview of the ceramic assemblage, highlighting those vessels that may contribute to the refinement of the regional chronology as well as more unusual items such as effigies and engraved sherds.

(Symposium (3), Friday, 9:45 am, Hoosiers/Hawkeyes Room)

# Harl, Joe (Archaeological Research Center of St. Louis, Inc.)

#### COMPARISONS OF RURAL AND URBAN SITES AT THE START OF THE 20TH CENTURY IN EASTERN MISSOURI

The start of the 20th century is a unique time as society was changing from ideas of the Victorian Age to the developing Consumer/Industrial Age. A wide number of consumer goods became available at cheaper prices, which could be used to express financial and social success. Archaeological investigations at sites within St. Louis City and those in rural areas of eastern Missouri suggest that people utilized these growing number of goods in different ways. (Symposium (9), Saturday, 2:45 pm, Little Chief Room)

# Hatch, Mallorie A. (Arizona State University)

### THE BIOARCHAEOLOGY OF MISSISSIPPIAN WAR: A VIEW FROM THE CENTRAL ILLINOIS VALLEY

War has figured prominently in reconstructions of prehistoric life during the Mississippian period (ca. AD 1000-1400) of the U.S. Midcontinent and Southeast. Archaeological evidence, including palisades, settlement nucleation, defensible site locations, and SECC warrior themes indicate an increasing concern with war after AD 1200. Bioarchaeological data also document an increase in war during this time, although more population-level analyses are necessary to fill knowledge gaps. Regional and local syntheses of warfare-related skeletal trauma are also infrequently published, inhibiting studies of diachronic changes in Mississippian war. This paper examines the evidence for Mississippian warfare in the Central Illinois Valley,



contributing data from bioarchaeological analyses of 777 individuals from five sites (Dickson Mounds, Crable, Berry, Emmons, and Larson). Warfare-related skeletal trauma is infrequent from AD 1000-1200 in the Central Illinois Valley, while low intensity warfare was endemic from AD 1200 through the end of the Mississippian period.

(Symposium (2), Thursday, 2:20 pm, Little Chief Room)

#### Head, Kevin Cupka (Cultural Resource Analysts, Inc.)

#### UNCOVERING THE OLD PRISON SOUTH: EXPLORING ANTEBELLUM INSTITUTIONAL CONFINEMENT IN SOUTHERN INDIANA

In response to a shift in public attitudes towards crime and punishment, Indiana established a state penitentiary in Jeffersonville. The penitentiary was Indiana's first, and operated from 1822 until 1846. During recent investigations conducted on behalf of the Indiana Department of Transportation, Cultural Resource Analysts, Inc. identified intact early-to-mid-nineteenth century deposits associated with the prison. Excavations uncovered structural remnants and other features at this site. A large sample of faunal material and a variety of other artifacts were recovered. The features and material have provided data on the architectural landscape of the prison and about the daily lives of its predominantly working-class European-American inhabitants.

(Symposium (9), Saturday, 3:30 pm, Little Chief Room)

# Hedman, Kristin M. (Illinois State Archaeological Survey/Program on Ancient Technologies and Archaeological Materials) and Eve A. Hargrave (Illinois State Archaeological Survey)

#### CAHOKIA MOUND 72: REINTERPRETING MEANING

For three decades, the mortuary features associated with Cahokia's Mound 72 have been fundamental to archaeological interpretations of Mississippian social structure, political hierarchy, religious practices, and cosmology within the American Bottom and throughout southeastern North America. Recent osteological and isotope studies of the skeletal remains associated with Mound 72 allow us to re-examine long held interpretations of this elaborate mortuary complex. Revised demographic information, isotopic evidence for heterogeneity in diet and place of origin among individuals buried in Mound 72, raise new questions regarding the role and significance of Mound 72.

(Symposium (8), Saturday, 9:30 am, Hoosiers/Hawkeyes Room)

#### Heitman, Carrie C. (University of Nebraska-Lincoln)

#### DIGITAL HOPEWELL?

When Dr. Mark Lynott passed away, he and I were busy embarking upon a series of initiatives focused on the digitization and online dissemination of various forms of Hopewell Culture archaeological data. In this paper I outline those projects and the goals we had hoped to accomplish. Through current and emergent partnerships, I describe one of the many ways Mark's legacy can continue to shape Hopewell



archaeology into the future, and invite members of the archaeological community to contribute to these efforts. (Symposium (5), Friday, 3:45 pm, Hoosiers/Hawkeyes Room)

### Herrmann, Ed (Glenn A. Black Laboratory of Archaeology)

#### USING GEOARCHAEOLOGY TO MODEL PALEOINDIAN PRESENCE IN FLOODPLAINS

Paleoindian sites in Indiana are frequently found on outwash terraces of rivers that carried glacial meltwaters. However, river meandering since the late Pleistocene has created landscapes where floodplain sites are rare. Many sites in floodplain settings have either been buried by alluvium or eroded from the archaeological record. Geoarchaeological research in the White River Valley has identified clusters of Paleoindian sites in the modern floodplain in river segments dominated by bedrock control. Because surficial and subsurface bedrock inhibits river meandering in these river segments, the lowland landforms may reflect late Pleistocene landscapes and better preserve Paleoindian sites. This paper discusses Paleoindian predictive modeling and compares the number of Paleoindian sites found in bedrock-controlled floodplain settings where Paleoindian-aged sediments have been preserved, to meandering river segments where Paleoindian sites are rare. Resulting estimates suggest that a significant portion of the Paleoindian sites in similar settings in the midcontinent may be missing.

(Symposium (10), Saturday, 1:45 pm, Hoosiers/Hawkeyes Room)

# Herrmann, Jason T. (Center for American Archeology), Jason L. King (Center for American Archeology), Jane E. Buikstra (Arizona State University, School of Human Evolution), and Taylor H. Thornton (Center for American Archeology)

# GEOPHYSICAL SURVEY AT GOLDEN EAGLE, ILLINOIS (11C120)

In 2013, the Center for American Archeology (CAA) initiated a multi-sensor geophysical survey at Golden Eagle, a mound group near the confluence of the Mississippi and Illinois Rivers unique in its oval earthen embankment that is roughly 500m x 350m. Survey with a magnetic gradiometer mapped the horizontal distribution of archaeological features over approximately half the site. Magnetic survey results show the footprints of some mounds and confirm the presence of a ditch outside the earthen embankment. Ground-penetrating radar (GPR) and electrical resistance tomography mapped the vertical distribution of sediments on two of the site's 4 hypothesized mounds. Results show tomb and ramp structures that are consistent with patterns observed within other Middle and Late Woodland period mounds in the Lower Illinois River Valley. GPR was also used to map stratigraphy of the surrounding embankment and ditch. Our results form the basis for ongoing investigations. (General Session (1), Friday, 8:30 am, Spartans/Golden Gophers Room)

# Hill, Matthew G. (Iowa State University), Christopher C. Widga (Illinois State Museum), Marlin F. Hawley (Independent Scholar)

#### A CAUTIONARY NOTE ON THE DISCOVERY OF "OLD BONES" IN WALWORTH COUNTY, WISCONSIN

Circumstances surrounding the discovery, recovery, and preservation of a small collection of large, "old bones" from Walworth County, Wisconsin, are reviewed. Ini-



tially identified as possibly extinct bison and horse, the remains are modern/historic horse. The find illustrates the value of prompt scientific attention, as such discoveries have the potential to illuminate late Pleistocene and Holocene faunas, some of which were also potential prey for the initial human occupants of the region. (Poster Session (3), Poster #15, Saturday, 8:00–11:00 am, Wolverines/Buckeyes Room)

#### Howell, Ryan J. (CEMML-CSU-Fort McCoy, WI)

#### New Findings on Late Paleo-Indian Lithic Technology and Lithic Resource Utilization in Western Wisconsin

Recent expansive CRM-driven test excavations in Monroe County in west-central Wisconsin have recovered evidence of a previously unknown Late Paleo-indian blade-core technological complex, as well as a series of related quarry and work-shop sites. The sites show a focused procurement strategy on what has to now been supposed to be a "secondary-quality" lithic material, Cataract Silicified Sandstone (CSS). The manufacturing and quarry sites demonstrate the consistent use of a single-platform, blade-core technology to produce large macro-blades as rough stock for the production of large lanceolate points. It seems likely, based on archaeolog-ical finds from the sites in question, that the end goal of the production sequence was the removal of large numbers of finished points and near-finished preforms for transport on an expansive, and likely northward focused, seasonal round based on finds of Agate Basin-type caches made of similar lithic material within the same region.

(Symposium (10), Saturday, 3:00 pm, Hoosiers/Hawkeyes Room)

#### Hummel, Rebecca L. (University of Kentucky)

#### CONTINUED GEOPHYSICAL INVESTIGATIONS AT WALKER-NOE (15GD56)

Initial site visits to 15GD56 have shown an area with high artifact density with several diagnostic Early Woodland artifacts being recovered. With the high artifact density over such a large area it would be difficult to narrow down suitable locations for further investigation. Under these circumstances it was decided that a gradiometer survey should be conducted over a portion of the site in order to detect subsurface features. The promising results of one survey were previously presented at the 2013 Midwestern Archaeological Conference. It was then decided to expand off the first survey to trace promising anomalies. The results of this expansion are presented in this poster.

(Poster Session (2), Poster #13, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

# Jackson, Misty M. (Arbre Croche Cultural Resources)

#### NINETEENTH CENTURY SAGINAW: FRONTIER FUR TRADE TOWN TO MIDWEST LOGGING CENTER

As Saginaw Michigan began to grow around Fort Saginaw, which was constructed in 1822, it soon fell victim to the Depression of 1837, and population plummeted. It slowly regained citizens with immigrants arriving in the 1840s but remained a frontier town in 1850. By the 1880s the logging boom was at its height, and now an urban center it had much more successfully weathered the Depression of 1873. Archaeological monitoring of a water main replacement project on N. Michigan



Avenue in 2012 and 2013 revealed remains of 19th century Saginaw that document its transition from frontier extractive center to urban extractive center, shedding light on developments in transportation, city improvements, environmental control and on the preservation of early Saginaw sites in the front yards of the old city. (Symposium (9), Saturday, 3:15 pm, Little Chief Room)

# Jakaitis, Ed (Illinois State Archaeological Survey)

# Cultural Heritage Management at the Indian Hill Manor NRHD in Northern Illinois: Results of Programing and Early Implementation

Archaeology is finding new avenues of support in northern Illinois. Located south of Rockford, at the confluence of the Kishwaukee and Rock Rivers, nearly 900 acres of bluff top woodland and agricultural property is being designed as an outdoor laboratory for regional resource conservation and heritage studies. At the center of this landscape is the Indian Hill Manor, an early 20th century rural estate that is now a National Register Historic District. The founders of this growing institution, the Smeja Foundation, recently approved a CRM program proposed by ISAS that is designed to identify and assess cultural resources through field studies and augmented by comprehensive archival research, potentially leading to future archaeological research. The program design has been the most recent development of ongoing work that has resulted in the protection of an endangered effigy mound group and the relocation of a failed historic village, occupied around 1840. (General Session (6), Saturday, 10:30 am, Spartans/Golden Gophers Room)

# Jeske, Robert J. (University of Wisconsin, Milwaukee)

# VIOLENCE IN THE WISCONSIN ONEOTA WORLD: NEW EVIDENCE FROM LAKE KOSHKONONG

Since John Jeske's investigations into an Oneota mound site in the 1920s, the evidence for understanding the amount and nature of violence among Oneota groups in Wisconsin has been ambiguous. Archaeologists have examined the possible evidence for violence between Oneota groups, between Oneota and Mississippian groups, and between Oneota and Late Woodland groups with mixed results and interpretations. Recently recovered technological and biological data from the Crescent Bay Hunt Club and other sites around the shore of Lake Koshkonong provide multiple lines of evidence that broaden our interpretations of Oneota interpersonal interactions in Eastern Wisconsin.

(Symposium (6), Friday, 3:45 pm, Fighting Illini Room)

# Johnson, Savanna (Emory University), Edward Herrmann (Indiana University Department of Geological Sciences), G. William Monaghan (Indiana Geological Survey), Mark R. Schurr (University of Notre Dame), Matthew D. Pike (Purdue University)

### MISSISSIPPIAN HIGH GROUND: HUMAN TRANSFORMATION OF THE LANDSCAPE AT LAWRENZ GUN CLUB

Over the past two decades, archaeological investigations across the Mid-continent and Southeast have documented the spatial and temporal extent of landscape modification by Pre-Columbian Native Americans related to spiritual, economic,



defensive and subsistence practices. At Lawrenz Gun Club (11Cs4), a late Mississippian-era village in west-central Illinois, the ridge and swale topography of this floodplain settlement was anthropogenically altered by mound construction and settlement features, such as the central plaza. Construction methods and stages can be deduced through the analysis of magnetometry and GPR data, as well as solid-earth cores collected from the large centrally located mound and plaza. GeoTek imaging and magnetic susceptibility were used to analyze the extent to which the anthropogenic addition of sediments changed natural ridge elevation. When paired with recently obtained AMS dates, geochemical analyses, particularly phosphate content, provide additional insight into the history of mound construction at the site.

(Poster Symposium (1), Poster #2, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

#### Joyce, Daniel J. (Kenosha Public Museums)

THE VIKINGS AND COLUMBUS WERE FASHIONABLY LATE: PRE-CLOVIS, THE WESTERN GREAT LAKES, AND THE PEOPLING OF NORTH AMERICA

Pre-Clovis mammoth and mastodon exploitation sites in Southeast Wisconsin (Schaefer (47Kn252), Hebior (47Kn265), Mud Lake (47Kn246) mammoths and the Fenske (47Kn 240) mastodon) span 13,450–11,200 14C yr B.P. ending just as the classic Clovis culture is beginning. Evidence from these pre-Clovis sites makes a case for an even earlier and perhaps precursory subsistence strategy involving megafauna.

Comparison to Clovis mammoth site geomorphic settings is also made. Is the Great Lakes Proboscidean exploitation pattern different from the later Clovis culture? The timing of entry of pre-Clovis peoples into the Western Great Lakes is reviewed and compared in light of new evidence of pre-Clovis sites from across the Americas. A proposed relationship between these pre-Clovis butchered megafauna sites and the subsequent Clovis culture is put forth.

(Symposium (10), Saturday, 1:00 pm, Hoosiers/Hawkeyes Room)

Kane, Eliza (University of Maine, Earth Sciences), Kristen Twidt (North Carolina State University), Jessica Adamic (Indiana University-Purdue University of Indianapolis), and Gabriel Filippelli (Indiana University-Purdue University of Indianapolis)

THE GEOCHEMISTRY AND HISTORICAL ECOLOGY OF A BURNT MISSISSIPPIAN HOUSE AT THE LAW-RENZ GUN CLUB SITE

This research examines the effects of human habitation on soil geochemistry at Lawrenz Gun Club (11Cs4) - a fortified, Mississippian period village in the central Illinois River valley. Continuous geochemical samples were obtained from the profile walls of an excavation block placed atop the corner of a burnt structure stratigraphically superimposed by a natural mollisol. Elemental (Fe, Ti, Ca) and organic (P,N,C) compositions are compared to investigate the differences in percent enrichment of these elements between the interior and the exterior of the structure. Samples were burned at 550 degrees Celsius to determine loss on ignition for organic enrichment estimation and then digested in strong (2M HCl) acid for ICP-OES analysis. This work aims to determine the relationship between mollisol formation,



which appears to have occurred shortly after site abandonment, and habitation of the site through comparison of samples from both inside and outside of the burnt house structure itself.

(Poster Symposium (1), Poster #5, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

### Kelly, John (Washington University in St. Louis)

#### CONTEXTUALIZING MARK LYNOTT'S CONTRIBUTIONS TO MISSISSIPPIAN ARCHAEOLOGY

Most MAC members are most familiar to his contributions to Hopewell Archaeology. However his career at the National Park Service's Midwest Archaeological Center covered various topics that encompassed the region that extended from the Rocky Mountains to the Appalachians and from the Great Lakes to the Ohio river. His early work included the eastern Ozark's and with Jim Price, the testing of a number of sites with Developmental Mississippian and early Mississippian components. This presentation focuses on the importance of his work on Mississippian sites not only in the Ozarks but also the Mississippi embayment to the south. (Symposium (5), Friday, 2:00 pm, Hoosiers/Hawkeyes Room)

### King, Jason L. (Center for American Archeology), Jason T. Herrmann (Center for American Archeology), Jane E. Buikstra (Arizona State University, School of Human Evolution), and Taylor H. Thornton (Center for American Archeology)

### GROUND-PENETRATING RADAR SURVEY AND EXCAVATION OF THE GOLDEN EAGLE (11C120) EMBANKMENT

The Golden Eagle site (11C120), located near the confluence of the Mississippi and Illinois Rivers, in Calhoun County, Illinois, is the only known Lower Illinois Valley mound site that includes an earthen enclosure. The site is frequently discussed in regional interpretations of moundbuilding traditions, though little is directly known about the site, particularly the embankment. Archaeological investigations have been limited to topographic mapping, pedestrian surveys, and limited inspection of an erosional cross-section on the eastern side of the embankment. In 2013, the Center for American Archeology (CAA) began geophysical prospection of the site, followed by excavations conducted by the CAA and the Arizona State University Field School in 2014. In this paper, we report results from ground-penetrating radar (GPR) survey and groundtruthing in the northwestern portion of the embankment. GPR and excavation results are used to characterize the structure of the embankment. GPR and evaluate evidence from the eastern erosional profile. (General Session (1), Friday, 8:45 am, Spartans/Golden Gophers Room)

#### Kinsella, Larry

#### STICKS-N-STONES: EXPERIMENTS IN BANNERSTONE PERFORATION

Since the publication of "Bannerstones of the North American Indian" by Byron W. Knoblock, in 1939, estimates of the amount of time it takes to perforate bannerstones, has gone mostly uncontested. In this paper, the author will demonstrate the importance of proper material selection and technique to perforate bannerstones. Using materials, easily accessible to Archaic craftspeople, the author will show how bannerstone perforation can be accomplished with much less time than previously



thought. These experiments have much merit, when assigning function, to bannerstones. If bannerstone function is skewed by estimates of their labor intensity, experimental archaeology should lead us to a more robust understanding of those enigmatic objects.

(General Session (7), Saturday, 11:00 am, Little Chief Room)

#### Kolb, Michael (Strata Morph Geoexploration, Inc)

#### THE PHYSICAL AND CULTURAL LANDSCAPE CONTEXT OF MISSISSIPPIAN ARCHAEOLOGICAL SITES IN METRO EAST ST. LOUIS

The physical and cultural landscapes in the East St Louis area are examined from a geomorphological perspective as a context for archaeological investigations. Data generated from subsurface investigations (cores, trenches and archaeological excavation units) over the last 15 years are being compiled and analyzed resulting in detailed mapping of landforms and delineation of stratigraphy around and within two major Mississippian sites (Metro East St Louis and Janey B Goode). This paper presents some preliminary results of this compilation.

(Symposium (3), Friday, 9:00 am, Hoosiers/Hawkeyes Room)

#### Koldehoff, Brad H. (Illinois Department of Transportation) and Thomas J. Loebel (Illinois State Archaeological Survey)

#### RESOURCE OF RITUAL? THE ROLE OF LITHIC CACHES IN THE COLONIZATION AND SOCIALIZATION OF MIDWESTERN LANDSCAPES

Clovis lithic caches (points, bifaces and blades/flakes) have been documented across the heartland, especially west of the Mississippian River. With few exceptions, researchers have interpreted Clovis caches as utilitarian deposits used by pioneering populations of mobile hunters to provision vast unexplored and lithic-poor landscapes. Non-utilitarian or ritual interpretations of these and other early caches have not been fully explored. In this paper, we explore ritual interpretations of early caches from a landscape perspective. We compare and contrast Clovis caches with Dalton caches and other early Holocene caches from the Mississippi Valley. By analyzing the content, condition, and context of caches, we develop lines of evidence that support the notion that many early caches were ritual offerings used to create cultural (socialized) landscapes.

(Symposium (8), Saturday, 8:15 am, Hoosiers/Hawkeyes Room)

### Koncur, Jasmine C. (Minnesota State University, Mankato)

#### THE MCCLELLAND SITE (21GD258) AND THE ONEOTA TRADITION IN THE RED WING REGION OF MINNESOTA

There is a long history of Oneota studies in the Red Wing, Minnesota, region, but most have been closely intertwined with the Silvernale phase, either because of site location or actual cultural linking. This has created a literature rife with speculation about the relationship between Silvernale and Oneota. While there are some Oneota sites known to exist near sites with Silvernale phase materials, there are many others away from Silvernale sites that have not yet received detailed analysis. The McClelland site (21GD258) is one of many single component Oneota sites in tribu-



tary valleys outside the Mississippi trench. The McClelland assemblage can be used to help construct the framework for a better understanding of the Oneota tradition within the Red Wing region separate from the Silvernale phase. This analysis will help develop a more comprehensive understanding of the unique characteristics of Oneota tradition in the Red Wing Region.

(General Session (3), Friday, 3:00 pm, Little Chief Room)

## Konigsberg, Lyle W. (University of Illinois) and Susan R. Frankenberg (University of Illinois)

#### THE BIOLOGICAL DISTANCE AND GENETIC EVIDENCE FOR LONG-RANGE MIGRATION IN THE PRE-HISTORIC MIDWEST

Decades of biological distance research generally has not supported the argument for long-range migration in the prehistoric Midwest, although a few recent studies of ancient DNA (aDNA) provide evidence for long-range migration. We argue that, as was the case until the early 1990s in biological distance studies, the aDNA studies are not well integrated within population genetic and statistical theory. For example, computer simulation has been used with aDNA data in attempts to test the hypothesis of in-situ development versus replacement for archaeologically-defined lineages. A more logical approach from the population genetics literature would be to use approximate Bayesian computation to estimate effective population size and migration rate from aDNA data. We apply such an approach using aDNA data from West central Illinois. We show that current sample sizes are inadequate to make definitive statements about past demographics, and suggest some next steps in terms of data and analytical requirements.

(Symposium (2), Thursday, 1:30 pm, Little Chief Room)

#### Kooiman, Susan M. (Michigan State University)

#### "WINTER IS COMING": A PRELIMINARY ANALYSIS OF POTTERY USE AND COOKING AT THE MIDDLE WOODLAND WINTER SITE

The relationship between subsistence and food-processing technology is a burgeoning topic in archaeology and has the potential to yield new perspectives on food acquisition and cuisine in the Upper Great Lakes. This paper presents the results of exploratory functional pottery analysis from a well-dated Middle Woodland habitation site located in the western Upper Peninsula of Michigan. The analytic data discussed includes those physical properties affecting vessel performance, as well as use-alteration traces, particularly those indicative of cooking and food processing techniques. The results of the preliminary analysis of the Winter site assemblage is then compared to similar data from the Naomikong Point site, another northern Michigan Middle Woodland site. Together these assemblages could serve as the foundation for a more refined understanding of prehistoric vessel function and diet in this region.

(Symposium (7), Saturday, 8:30 am, Little Chief Room)



## Kruchten, Jeff (University of Illinois)

#### WATER SYMBOLISM AND CLOSING EMERALD

A series of special-use buildings were constructed atop an isolated spur of the main ridge at Emerald, northeast of the site's Great Mound. These buildings, including large council houses, temples, and a sweat lodge, are adjacent to an ancient spring that would have been a powerful presence at the site. The closing of this portion of Emerald sometime during the late Lohmann or early Stirling phase is rife with water symbolism, including structured water-lain deposits and possible arrow offerings that have ethnohistoric associations with Thunderbirds and violent thunderstorms. (General Session (4), Friday, 1:45 pm, Spartans/Golden Gophers Room)

## Kubicek, Richard H. (University of Wisconsin-CRM) and Zachary R. Stencil (University of Wisconsin-CRM)

#### REPORT OF INVESTIGATIONS OF SITE 47 JE1140 - LEE RICKERMAN

Site 47JE1140 – Lee Rickerman is an approximate 2,200 square meter open air campsite and resource extraction site harboring a Middle to Late Archaic and a Late Woodland component. The site is situated on a high bank of the Rock River, approximately two miles south of Watertown, in Jefferson County, Wisconsin. It was subject to data mitigation in 2008 for the STH 26 reconstruction, with hand excavation of 404.25 square meters. This paper will present an overview of the excavation data, and highlight a case study in selective lithic raw material utilization within the Archaic component.

(General Session (7), Saturday, 10:30 am, Little Chief Room)

#### Kuehn, Steven R. (Illinois State Archaeological Survey)

#### LOOKING BEYOND DIET: FAUNAL REMAINS AND RITUAL BEHAVIOR IN THE AMERICAN BOTTOM

The examination of prehistoric faunal assemblages has traditionally focused on dietary patterns, resource availability, ecology, and other aspects of faunal exploitation. In recent years, greater emphasis has been accorded to understanding the role of animals and their products in ritual and ceremonial activities. Typically infrequent in the archaeological record, zooarchaeological remains reflecting Late Woodland Patrick phase ritual behavior were recently identified at the Fish Lake site. The faunal data from Fish Lake and other Late Prehistoric sites provide increased insight on animal remains and ritual behavior in the American Bottom. (Symposium (8), Saturday, 11:30 am, Hoosiers/Hawkeyes Room)

## Kuzj, Alison (U.S. Fish and Wildlife Service), Arianna Elm (U.S. Fish and Wildlife Service), and James Myster (U.S. Fish and Wildlife Service)

#### MUSEUM PROPERTY IN THE U.S. FISH AND WILDLIFE SERVICE, MIDWEST REGION

The U.S. Fish and Wildlife Service (USFWS), an agency of the federal government, manages hundreds of thousands of artifacts and other historically, artistically or scientifically significant objects (collectively called "museum property") in perpetuity for the benefit of the American people. An ongoing project, in partnership with Hamline University, is inventorying, cataloging and tracking the USFWS' museum property in the Midwest Region. This paper will outline the background to USFWS

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policies and procedures, the types of museum property within the USFWS, and how the ongoing project is working with USFWS field stations and non-federal repositories to fulfill the agency's preservation mission. (General Session (6), Saturday, 11:15 am, Spartans/Golden Gophers Room)

### Lambert, John M. (University of California, Davis)

### A New Perspective on the North Lakes: Early Holocene Hunter-Gatherer Mobility in Northern Wisconsin

Northern Wisconsin was first colonized by Late Paleoindian groups during the Early Holocene after the final retreat of the Laurentide ice sheet from the region. As a result, Paleoindian sites in the area are ideal for testing ideas about the nature of hunter-gatherer adaptive responses to early postglacial environments. This project presents data from reanalysis of the lithic assemblages from two of these sites: Robinson (47-ON-27) and Squirrel Dam (47-ON-21). The first hunter-gatherer groups to occupy the region would have encountered a rapidly changing boreal forest environment with no clear modern analog. Long-distance transport of high quality raw materials and the composition of lithic toolkits both indicate that high residential mobility, investment in key organic technology (i.e., watercraft and tailored leather clothing), and seasonal use of emerging wetland environments were important strategies used to cope with the unique ecological challenges presented by this recently deglaciated landscape. (Symposium (10), Saturday, 3:30 pm, Hoosiers/Hawkeyes Room)

## Lansdell, Brent (Illinois State Archaeological Survey) and Victoria Rohe (Illinois State Archaeological Survey)

### STIRLING AND MOOREHEAD PHASE (AD 1100–1250) ARCHITECTURE AND COMMUNITY ORGA-NIZATION AT EAST ST. LOUIS

East St. Louis was occupied continuously from approximately AD 900 (Terminal Late Woodland period) through AD 1250 (early Moorehead phase). This paper will focus on the late occupation of the site through the Stirling and early Moorehead phases. The Stirling phase saw the rapid expansion of East St. Louis as an urban center with the expansion of both elite and domestic activities. This includes evidence of the re-organization of formally domestic areas as public or sacred spaces as well as the expansion of new domestic neighborhoods into areas not previously occupied. We will delineate differences in architectural style, arrangement of domestic architecture, and the identification of supra-household storage features and buildings. We will also address the apparent abandonment of the mound center at the beginning of the Moorehead phase and how that relates to the eventual collapse of Cahokia and its environs.

(Symposium (3), Friday, 10:30 am, Hoosiers/Hawkeyes Room)

## Legg, Robert (Northern Michigan University)

### AN ENVIRONMENTALLY-BASED SITE LOCATION MODEL OF PALEOINDIAN SETTLEMENT IN THE UPPER PENINSULA OF MICHIGAN

This research presents a redeveloped site location model developed using known Paleo-Indian site data in the Northern Great Lakes. Here the model is an adaption



of a modeling process that was highly successful for settlements associated with the Archaic Period in Lake Superior lake basin. This research applies a site prediction modeling process using locations of previously known Paleo-Indian sites, located on a DEM corrected for glacial processes that date to the near the beginning of the Holocene.

(Symposium (10), Saturday, 3:15 pm, Hoosiers/Hawkeyes Room)

Lemke, Ashley K. (Museum of Anthropological Archaeology, University of Michigan), John M. O'Shea (University of Michigan), and Lisa Sonnenburg (University of Michigan)

#### HUNTERS AND HUNTING ON THE ALPENA-AMBERLEY RIDGE: UNDERWATER ARCHAEOLOGY IN LAKE HURON

It has long been argued that early hunter-gatherers in the Great Lakes region were caribou hunters. While caribou bones are scarce, other lines of evidence such as site locations, distributions of lithic raw material, and technological variation have been used to argue for caribou exploitation. In addition to this terrestrial evidence, hunting structures discovered beneath Lake Huron provide further support for the caribou hunting hypothesis. The underwater environment of the Alpena-Amberley Ridge (AAR), a land bridge across the Lake Huron basin which was dry and habitable 9,000 C14 years ago, provides an intact ancient hunting landscape. Research to date demonstrates sophisticated hunting strategies were used by Great Lakes hunter-gatherers in the early Holocene, characterized by specific seasonal movement, use of stone hunting structures, and group aggregation and dispersal to target caribou herds during their bi-annual migrations. This paper will present archaeological research on the AAR and propose a detailed view of early foraging lifeways in the Great Lakes by taking advantage of a unique underwater landscape. (Symposium (10), Saturday, 2:00 pm, Hoosiers/Hawkeyes Room)

#### Lennen, Joel (University of Illinois) and Leslie Drane (Indiana University)

#### CERAMIC ANALYSIS OF LUNSFORD-PULCHER ASSEMBLAGE

The Lunsford-Pulcher site (11-S-40) is a Mississippian mound center located in the American Bottom region, near modern day Dupo, Illinois. To date, limited excavation and analysis has been conducted at this ceremonial village site. A surface collection by Timothy R. Pauketat on discrete portions of the site resulted in a large assemblage, of which 181 rim sherds were analyzed for this study. The data collected was compared to other Mississippian sites, with a focus on the differences in temper usage. We aim to provide insight pertaining to the experiences of those inhabiting and visiting Lunsford-Pulcher, how the influx of diverse communities interacted with and affected ceramics, and whether some people were less inclined to participate in particular Mississippian technological and aesthetic changes. This paper explores stylistic and morphological differences in the assemblage, and encourages the idea that Lunsford-Pulcher had a diverse and dynamic population with fluid social and political ideologies.

(General Session (4), Friday, 2:15 pm, Spartans/Golden Gophers Room)



#### Leone, Karen L. (Gray & Pape, Inc.)

## BOTANICAL EVIDENCE OF HOPEWELL FEASTING? A CASE STUDY FROM CENTRAL OHIO

Is it possible to identify a botanical pattern for feasting? Ongoing excavations at the North 40 Site, located just north of the Mound City Group Hopewell mound and earthwork complex in Chillicothe, Ohio have provided a small sample of botanical data from a handful of features. The deposition pattern of the botanical assemblage from one feature, in particular, will be examined as a possible indicator of feasting. (Symposium (1), Thursday, 2:15 pm, Hoosiers/Hawkeyes Room)

#### Loebel, Thomas J. (Illinois State Archaeological Survey)

#### STILWELL II: A BURIED EARLY ARCHAIC SITE IN PIKE COUNTY, ILLINOIS

In 1961 a road cut through an alluvial fan along the Illinois River bluff base in southern Pike County exposed over 12 feet of stratified deposits containing a deeply buried Early Archaic deposit. Salvage investigations conducted by Greg Perino in 1961–62 recovered a modest assemblage of chipped stone debris and tools, and a well-preserved assemblage of faunal remains, a unique bone tool, a partial human internment and a dog burial. Distinctive projectile points from the site include a variant of the Early Archaic Kirk Corner notch cluster, named "Stilwell" points by Perino. Analysis of the recently "rediscovered" chipped stone and faunal assemblage, as well as the dog burial has provided much needed radiocarbon and subsistence data for the Early Archaic period in the region, and indicates adaptations geared towards wide spectrum foraging exploiting local upland and riverine resources.

(Symposium (10), Saturday, 3:45 pm, Hoosiers/Hawkeyes Room)

#### Lyon, Laura (Heartlands Conservancy), John Kelly (Washington University in St. Louis), Suzanne Kutterer-Siburt (Mississippian Mound Prehistoric Preservation Project), and Ed Weilbacher (Heartlands Conservancy)

#### ADVANCING THE MOUNDS - AMERICA'S FIRST CITIES: A TRIBUTE TO MARK LYNOTT

This presentation provides an update on The Mounds Project highlighting our collaborators, such as Dr. Mark Lynott and the archaeological community. The Mounds Team is thankful for these longstanding contributions, resources and guidance throughout the project. Building upon the significance of Cahokia Mounds and select thematically-connected satellite complexes in the region, our initiative recommends their elevation to a nominal unit of the National Park Service. Furthermore, following the over 30 years of Mark Lynott's efforts as a public servant we continue to promote a collaborative partnership to preserve, interpret, and educate the public about the ancient societies we as archaeologists call Mississippian Culture. This will ensure that our country's early urban center's is protected through a collaborative management model at the local, state, and national levels. These efforts will honor Mark Lynott's involvement and elevate the status of the region to that of a national and global treasure celebrated by all. (Symposium (5), Friday, 1:45 pm, Hoosiers/Hawkeyes Room)



## Macleod, Colin L. (Ball State University)

## A COMPOSITIONAL COVARIANT METHOD FOR SOURCING INDIANA CHERT

Natural resource allocation and transport are among the most pressing questions for archaeologists interested in prehistoric trade and interaction, and replicably sourcing these materials remains the largest obstacle to overcome. Chert, as one of the most widely used and effectively preserved of all natural materials throughout human prehistory, is of paramount importance for this. Better defined, objective means of sourcing chert are needed. Archaeologists currently use subjective criteria to sort chert into ill-defined source categories. I propose a new chert sourcing method based on elemental composition covariance. Using Portable X-ray Fluorescence Spectrometry and Principle Components Analysis I will identify clusters of covariation in presourced material allowing for the retroactive creation of source areas. Source areas will be objectively based on the composition of the material, expectantly reflecting formational and diagenetic processes. This allows for more objective chert sourcing analyses in the future.

(Poster Symposium (2), Poster #9, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

### Macleod, Colin L. (Ball State University), Emily Murray (Ball State University), Christine K. Thompson (Ball State University)

#### ARCHAEOLOGICAL SURVEYS IN A DATA DEFICIENT REGION: SURFACE ARCHAEOLOGICAL DISTRIBU-TIONS IN MONTGOMERY COUNTY, INDIANA

In 2010-11 and 2013-14, archaeologists from Ball State University's Applied Anthropology Laboratories conducted two 900 acre Phase Ia pedestrian surveys focusing on the northern (2010-11) and southern (2013-14) half of Montgomery County, Indiana. Montgomery County was considered data deficient, displaying low amounts of recorded sites and a relatively weak cultural chronology. These surveys, funded by Historic Preservation Fund Grants from the National Park Service and administered by the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology, were intended to address this data deficiency issue. Together these two projects formed a county wide survey of agricultural land focusing primarily on local ecotones, poorly documented areas of historic and prehistoric significance and upland areas in close proximity to water. The result of these two projects was a total of 1815 acres of agricultural land surveyed and an addition of 466 archaeological sites to the DHPA state archaeological site database. (Poster Symposium (2), Poster #14, Saturday, 8:00–11:00 am, Wolverines/Buckeyes Room)

### Madsen, Mark L. (Chicago Archaeological Society/IAAA)

#### PIPES, CELESTIAL LEGENDS, CALENDARS, SNAKES, AND MEASURE AT THE ADLER AND UTICA MOUNDS

William Romain noted Summer Solstice angles on Adena Tablets. Sacred angles may have been included in other artifacts also. A Hopewell Owl-Snake Effigy Pipe contains the latitude angle of Adler Mound 5 and the Adler and Utica Mounds are among the few with snake burials. A latitude could've been determined two thousand years ago by tying the pipe to a Hédewachi Sacred Pole and pointing it towards Kochab, Gausar, and Polaris. Are the Adler and Utica Mounds celestial calendars? On the Summer Solstice, Alpha Antares in Scorpio set along Adler Mounds'



242° azimuth alignment followed by the Sun one Sidereal Month before and after the Winter Solstice. The Utica Mounds resemble the Autumn Equinox layout of Corona Borealis, Bootes, and Great Bear of the Micmac "Legend of the Celestial Bear Hunt Feast." The Lynx Constellation rises over the snake effigy stone wall in Mound 1 while the Millky Way arches overhead from east to west.

(General Session (1), Friday, 9:45 am, Spartans/Golden Gophers Room)

#### Malekfar, Lily (Triton College) and Maria Ostendorf Smith (Illinois State University)

## THE PATTERN AND PREVALENCE OF TREPONEMAL DISEASE IN THE MIDDLE AND LATE WOODLAND OF NORTH-WEST ILLINOIS

The pre-Columbian prevalence of treponemal disease has consistently indicated a marked difference between hunter/foragers (1-2%) and sedentary horticulturalists/ agriculturalists (10+%). The osteological samples from Albany Mounds (11WT1, Middle Woodland [500 BC-AD 350]) and Kuhlman Mounds (11A163, early Late Woodland (AD 600-900)) were examined for periosteal reactive change. Both samples exhibited an equivalent prevalence of periostosis (~20%). Neither site exhibited a pathognomonic case of treponemal disease. However, several individuals displayed with treponematosis-indicative saber shins (1?/53, 1.9% Albany, 4-5/56, 7-8.9% Kuhlman). These results contrast with the later Late Woodland Schroeder Mounds (AD 850-1150) sample (13%) which included several pathognomonic cases. The Albany Mounds indicative level of treponemal disease prevalence is significantly different from Schroeder Mounds (p=0.0314); the Kuhlman sample is not (p=0.3516). If treponemal disease is ultimately a reliable indicator of sedentism, the presence/prevalence data suggest a temporal change from forager/farmers (Albany Mounds) to less transient food producing economies (Kuhlman Mounds, Schroeder Mounds).

(General Session (2), Friday, 10:30 am, Fighting Illini Room)

#### Mandel, Rolfe D. (Kansas Geological Survey, University of Kansas)

#### MARK J. LYNOTT : GEOARCHAEOLOGY OF HOPEWELL EARTHWORKS AT HOPETON, SOUTH-CEN-TRAL OHIO

The Hopewell earthworks at Hopeton consist of subtle remnants of three circular enclosures, a rectangular enclosure, and two long parallel walls. This paper summarizes the results of 13 years of geoarchaeological research aimed at learning when and how the earthworks were constructed. Geophysical methods were used to map basal remnants of the earthen walls, and the maps served to guide coring and the excavation of nine trenches across remnant earthen walls. We estimate that nearly 30,000 m3 of soil were required to build the embankment walls of the two larger enclosures, and coring revealed that nearly all of it was quarried from inside the enclosures. Most walls were built with two to three different soil types forming the core of the wall, and the soils were carefully placed so that mixing did not occur. Radiocarbon ages indicate that earthwork construction occurred primarily between A.D. 100 and A.D. 250.

(Symposium (5), Friday, 3:15 pm, Hoosiers/Hawkeyes Room)



Marshall, Charla (Armed Forces DNA Identification Laboratory, Illinois State Archaeological Survey), Georgia G. Millward (Molecular Biology Laboratory, Army Institute of Public Health, Indiana University), John Lindo (University of Illinois), Aimee Carbaugh (Illinois State Archaeological Survey), Kristin M. Hedman (Illinois State Archaeological Survey), Thomas E. Emerson (Illinois State Archaeological Survey), Frederika Kaestle (Indiana University), Della Collins Cook (Indiana University), and Ripan S. Malhi (University of Illinois)

#### THE GENETIC LEGACY OF THE MISSISSIPPIANS

In this study, we examine the maternal relationships between Mississippian peoples and potential living Native American descendants in Eastern North America. First, we present new ancient DNA results from American Bottom and Illinois River valley Mississippians buried at the East St. Louis, Janey B. Goode, and Yokem sites in Illinois. Our results increase the sample size of Mississippian mitochondrial DNA to facilitate population comparisons with ancient and extant groups. Our results show that Mississippians were genetically diverse, with all five major Native American haplogroups represented (A, B, C, D and X). We show that within-haplogroup diversity was maintained across an 800-year time span except in the case of haplogroup D, in which ancient lineages were more diverse. Finally, we show that Native American genetic diversity appears to have been structured geographically, as Midwestern groups from all time periods are more similar to one another than those from outlying regions.

(Symposium (2), Thursday, 1:50 pm, Little Chief Room)

#### Martin, Montana (University of Illinois)

#### **RE-TESTING THE FUNCTION OF A MIDDLE WOODLAND SITE: OGDEN-FETTIE**

Ogden-Fettie, located on the Illinois River Floodplain near Dickson Mounds Museum, is a unique Middle Woodland mound group. According to Struever and Houart (1972) Ogden-Fettie was used as a Regional Transaction Center, which should have many long distance trade goods. However, the lithic and ceramic material from the midden area (Fv196) at Ogden-Fettie does not support this function. The ceramic analysis showed a large percentage of Havana sherds, traditionally thought to be associated with habitation activities. However, a large percentage of the sherds were decorated pointing to a non-habitation function. The decorations were also highly variable suggesting Ogden-Fettie may have been a point of aggregation for early Havana people.

(General Session (1), Friday, 10:45 am, Spartans/Golden Gophers Room)

## Martin, Montana (University of Illinois) and Adam Sutherland (University of Illinois)

#### A REANALYSIS OF BURIAL ARTIFACTS FROM THE HAVANA MOUND GROUP

The Havana Mound Group is located overlooking the Illinois River in present day Havana, Illinois. The mound group dates to the early Middle Woodland period, although the site at which it is located dates from the Archaic period to the Late Woodland period. The focus of our reanalysis will be on artifacts from Mound 6 with some additional work done on the remaining mounds. The analysis will determine if the artifacts were used in a secular manner prior to their use as a



ceremonial object; non-secular use suggests a division between burial tradition and non-ritual practice that is found east of the Rocky Mountains during this period. We believe that Havana burial practices pre-date the Hopewell tradition and hope that this analysis can aid in the advancement of Havana-Hopewell studies. We will be analyzing materials collected by Taylor in 1927 and the Illinois State Museum in 1945.

(General Session (1), Friday, 10:30 am, Spartans/Golden Gophers Room)

#### Mazrim, Robert (Illinois State Archaeological Survey)

#### SOME EPHEMERAL EARLY NINETEENTH CENTURY NATIVE SIGNATURES IN ILLINOIS

We understand that a number of native groups were present in Illinois during the nineteenth century. While the historical and archaeological evidence of large, well-established summer villages postdating 1800 is limited to several well-known sites, the population of the native communities of the era, the pattern of seasonal land use, and the numerous references to "Indian villages" in late nineteenth century country histories, all suggest that there should be more sites or signatures than we are encountering in our archaeological surveys. Expectations tend to color how we define such sites, however. The bulk of these sites (particularly those postdating 1800) are probably much more ephemeral than we might expect, defined as they were by small numbers of people briefly occupying seasonal, resource-procurement locales. The result may be very small, low-visibility samples that appear in apparent isolation, or perhaps more likely, on multicomponent sites with stronger prehistoric or early Euro-American visibility. (Symposium (4), Friday, 10:30 am, Little Chief Room)

## McCarthy, John P. (Independent Scholar)

#### ARCHAEOPARASITOLOGY OF LATE 19TH/EARLY 20TH CENTURY MINNEAPOLIS

The archaeological study of parasitism has implications for understanding sanitary and health care practices in the past as well as the physical well-being of site inhabitants. Analysis of sediments from the Bridgehead Site in Minneapolis was undertaken to evaluate the parasitological state of the late 19th/early 20th century inhabitants of that city. Privy-fill soil samples were processed and examined for parasite eggs. While roundworm parasitism was common in this period, surprisingly, very little evidence of this parasite was found. However, tapeworm finds, unique in historic North America, were made. This paper describes the context of these finds, the specifics of the finds, and their implications for understanding working class life in the Upper Midwest near the turn of the 20th Century. (Symposium (9), Saturday, 3:00 pm, Little Chief Room)

### McCullough, Robert G. (Illinois State Archaeological Survey)

#### FUNCTIONAL CHANGES IN LATE PREHISTORIC ENCLOSURES IN INDIANA

During the Late Prehistoric period, earthen enclosures were constructed in northern, central, and southern Indiana. In northern Indiana, as in southeastern Michigan, the earlier enclosure sites appear to have served a "special purpose" function related to the integration of dispersed populations. Later in this period, nucleated



villages, with a variety of domestic structures, were located within the earthworks, which were palisaded. These palisaded enclosures suggest a defensive purpose and have been identified in northeastern Indiana, as well as central and southern Indiana. This paper examines the archaeological evidence for changing functions over time from five of these enclosure sites.

(General Session (3), Friday, 3:15 pm, Little Chief Room)

#### McGill, Dru (Glenn A. Black Laboratory of Archaeology, Indiana University)

#### VARIABILITY WITHIN SINGLE CERAMIC VESSELS AND ITS IMPLICATIONS FOR ARCHAEOLOGICAL INTERPRETATIONS

Midwest archaeologists frequently document and quantitatively report morphological characteristics of ceramics, such as rim angles or rim lengths. The characteristics of ceramic assemblages from different locations or time periods are then often compared in attempts to determine any spatial or temporal significance. For example, archaeologists have argued that Mississippian jar rim heights in the central Illinois River Valley lengthen over time, making rim sherds useful chronological markers. But, in order to effectively compare manufacturing variability across ceramic vessels, we must recognize the standardization of vessel segments within single units here, single vessels. In this report, I discuss the results of a recent study examining the variability of rim angles, lengths, and thicknesses within several whole vessels from the late pre-Columbian Mississippian site Angel Mounds (12-Vg-1). I also make suggestions for how archaeologists can account for single-vessel variability in statistical testing, including the use of confidence intervals.

(Poster Session (1), Poster #6, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

#### McLeester, Madeleine (University of Chicago)

#### POLLEN ON THE PRAIRIE: ENVIRONMENTAL RECONSTRUCTIONS, RESOURCE USE, AND SITE DYNAM-ICS AT OAK FOREST

The Oak Forest site is a Huber Phase agricultural village located in Cook County, Illinois. In this presentation, I reconstruct surrounding vegetation through recent pollen analysis of sediment samples from the 1979 excavation. I compare these data with existing environmental reconstructions and macrobotanical remains from the site, raising new questions about Upper Mississippian resource use and procurement as well as our environmental reconstructions. In addition to these questions, these data confirm a springtime occupation of Oak Forest. While not excluding its occupation during other seasons, the analysis sheds light on the timing of semi-sedentary site dynamics. The results supplement current understandings of Upper Mississippian landscapes and lifeways, relevant especially now with a growing interest in both the archaeology of the Chicago Region and environmental reconstructions more generally.

(Symposium (1), Thursday, 2:45 pm, Hoosiers/Hawkeyes Room)



## McTavish, Rachel C. (University of Wisconsin, Milwaukee) and Elissa B. Hulit (Commonwealth Cultural Resources Group, Inc.)

## AN Examination of the "Princess Burial" Beads collection at the Milwaukee Public Museum

The "Princess Burial", excavated by Samuel Barrett, is a unique aspect of the Aztalan site (47]E001). Despite being the most decorated burial excavated at the site, the shell beads wrapped around the individual have not been the focus of intensive study. This paper is a preliminary analysis of the shell beads themselves, focusing on the 1,505 discoidal beads appropriate for measurement. An updated assessment of the collection, the preliminary results of metric data, contextualization of the beads as grave goods, and their utility in craft production studies are presented. (General Session (4), Friday, 4:00 pm, Spartans/Golden Gophers Room)

#### McTavish, Rachel C. (University of Wisconsin, Milwaukee) and Richard W. Edwards IV (University of Wisconsin, Milwaukee)

#### AN ANALYSIS OF VARIATION IN ONEOTA WATERSHED EXPLOITATION IN THE LAKE KOSHKONONG LOCALITY

The role of microenvironmental variation, particularly watersheds, as an influence in subsistence choices for Oneota populations is explored. Aquatic resource patches were a substantial source of protein in the Oneota diet in the Lake Koshkonong locality in southeast Wisconsin. Sites within the locality are placed with uneven access to different types of aquatic patches, including rivers, creeks, several different wetland types, and open lake. A comparative approach is used to examine the role microenvironments played in fish species variation among three sites: Crescent Bay Hunt Club (47JE904), Schmeling (47JE833) and Koshkonong Creek Village (47JE379). Ecological setting, dietary emphasis, fishing strategy, technology, and seasonality are considered.

(Symposium (6), Friday, 1:45 pm, Fighting Illini Room)

# Mesner, Molly (University of Wisconsin-Madison) and Victoria Pagel (University of Wisconsin-Madison)

### COMPARATIVE ANALYSIS OF THE 2013-2014 TREMPEALEAU ARCHAEOLOGY PROJECT (TAP): AN EXAMINATION OF TWO DISTINCT FEATURES WITHIN THE UHL SITE

In 2013-2014 the Trempealeau Archaeology Project (TAP) uncovered two ditch features at the Knepper and Schaffner localities of the Uhl site (47-Tr-0159). A comparison of these features provides insight into the community plan of one of two early Mississippian settlement areas in Trempealeau, Wisconsin at A.D. 1050. Feature 10 at Knepper is a substantial east-west oriented basin with a refuse midden at its base that included rims of more than 20 early Mississippian vessels that are contemporaneous with the Lohmann phase. Feature 1 at Schaffner is a circular double-post wall that appears to be a later Oneota construction within a Mississippian plaza immediately east of the 3rd Street Platform Mound. A wall-trench structure beneath the Third Street Mound contained very few artifacts suggesting that it was intentionally cleaned. Presumably, refuse from Mississippian activities at the Schaffner Plaza and Third Street Mound was dumped into Feature 10 at Knepper. (Poster Session (1), Poster #7, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)



## Meyer, Michael J. (Missouri Department of Transportation)

## SAINT LOUIS ON THE FRONTIER: A PRELIMINARY ANALYSIS OF A FRENCH TRADING CENTER

In 2013, the Missouri Department of Transportation began conducting archaeological investigations at the western end of the Poplar Street Bridge in downtown Saint Louis. The project, located immediately south of the Jefferson National Expansion Memorial and the Gateway Arch, is situated within the confines of what was historically the old French village of Saint Louis. Excavation not only has identified features associated with the early-nineteenth century occupation of the area, but also remnants of multiple French residences and outbuildings constructed during the second half of the eighteenth century. To date, archaeological investigations have focused on three properties originally conveyed between 1769 and 1789. Even as fieldwork continues, comparative analysis of these properties with contemporaneous rural sites in Missouri and Illinois is being conducted in an effort to provide greater insight into the early development of the town. (Symposium (9), Saturday, 2:00 pm, Little Chief Room)

## Mihich, Martha (Illinois State Archaeological Survey) and Claire P. Dappert (Illinois State Archaeological Survey)

#### WALKING IN THEIR SHOES: A LATE VICTORIAN SHOE ASSEMBLAGE FROM THE NEW MISSISSIPPI RIVER BRIDGE PROJECT IN EAST ST. LOUIS

A significant number of shoes and shoe parts were recovered during the Illinois State Archaeological Survey's (ISAS) excavations in East St. Louis for the Illinois Department of Transportation as part of the New Mississippi River Bridge Project. A total of 261 shoes dating to the late nineteenth and early twentieth century were excavated from over forty features, most of which were privies. While there has been some archaeological research of shoes, the MRB project differs from these other studies in the breadth and range of shoe styles and construction. Shoes and shoe parts can be indicative about the wearer's identity, gender, and occupation. These areas are illuminated by examining construction methods (soles), style (vamp) and shoe size. Most of the MRB shoe assemblage consists of laborer work boots, but some men's and ladies' dress shoes, as well as children's shoes, are present. Many of the shoes exhibit evidence for repairs and/or are extensively worn. This paper explores some of these different types of styles and constructions present in the MRB shoe assemblage, as well as discuss a few unique examples within a household context. (Symposium (9), Saturday, 1:15 pm, Little Chief Room)

## Miller, G. Logan (Ohio History Connection)

### OHIO HOPEWELL CRAFT PRODUCTION: EVIDENCE FROM MICROWEAR ANALYSIS

Countless elaborately crafted artifacts, created from both exotic and local materials, have been recovered from Hopewell earthworks. Scholars have devoted considerable effort to determining the geographic source of the raw materials for these crafts as well as to understanding the symbolic dimensions of their final forms. However the organization of production of these artifacts remains poorly understood. In order to gain a better understanding of the content and extent of Hopewell craft production, this paper presents the functional analysis Hopewell bladelets from the Fort Ancient and Stubbs earthworks. High powered microwear analysis reveals that

CHAMPAIGN, ILLINOIS



bladelets were used to produce numerous craft products made of stone, plant fiber, leather, and bone/antler in addition to their use in feasting and maintenance tasks. These results, along with insights from the theory of ritual economy, indicate that Hopewell ceremonialism and craft production were intricately linked to important tribal social processes.

(General Session (1), Friday, 9:30 am, Spartans/Golden Gophers Room)

## Miller, Jessica R. (University of South Florida)

### CARBONIZATION EVIDENCE IN POWELL PLAIN AND RAMEY INCISED VESSELS SUPPORTS RITUAL DRINK HYPOTHESIS

A recent use-alteration investigation of Powell Plain and Ramey Incised vessels from Cahokia and Dickson Mounds has uncovered evidence in support of previous assertions that these jars were used to prepare ritual teas or medicines. A carbonization pattern consistent with decoction, or the process of boiling down vegetal matter to extract active ingredients, has been identified in both vessel types. This cooking process has been described in ethnohistoric accounts of the preparation of Black Drink, a ritual tea used during prehistoric and historic times throughout the Southeast. The use-alteration evidence in combination with the archaeological contexts of the samples in this study, most coming from mounds within ceremonial complexes, further supports the ritual drink hypothesis.

(Symposium (8), Saturday, 11:00 am, Hoosiers/Hawkeyes Room)

### Miller, Joseph R. (Cultural Resource Analysts, Inc.), Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University), Christine K. Thompson (Ball State University), and Mark A. Hill (Ball State University)

### LOGISTICAL AND RESIDENTIAL MOBILITY IN BLACKFORD COUNTY, INDIANA

As part of Fiscal Years 2011 and 2012 Historic Preservation Fund grants, the AAL conducted ~1,800 acres (728 hectares) of pedestrian surface reconnaissance in Blackford County, Indiana in an attempt to improve understanding of this region. Prior to the surveys there were 105 documented archaeological sites. Using a distributional approach, AAL discovered 466 new sites in a range of environmental zones across two watersheds. The two watersheds exhibit distinct distributional and assemblage composition patterns. The southern drainage yielded sites with rich and diverse assemblages representing the full range of domestic activities. The northern drainage contained fewer sites, with smaller, less-diverse assemblages. When matched with temporal data, there is a trend of a shift from residential mobility during the Archaic in both drainages, to logistical use of the northern drainage throughout the Woodland periods.

(Poster Symposium (2), Poster #5, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

### Millhouse, Phillip G.

#### GRATIOTS GROVE: CULTURAL SURVIVAL AND NEGOTIATION OF PLACE ON A VOLATILE CULTURAL FRONTIER

In the 1820's, the Ho-Chunk allowed the French-American Gratiot family to settle on a high plateau near the divide of the Mississippi and Rock River drainage



systems. The area was soon a sprawling community of mines, smelters, trading warehouses, homesteads, fortifications and Native American camps that was known as Gratiot's Grove. The community was multi-cultural, fluid, and critical to the movement of people, capital, goods and varied cultural influences through the lead region. Even after removal, Ho-Chunk people continued to return and visit the area until the late 19th century. Although important, there is very little knowledge of the settlement's actual place on the landscape. This presentation will concentrate on what we currently know as well as the potential Gratiot's Grove offers for understanding frontier interactions during the lead rush. (Symposium (4), Friday, 9:30 am, Little Chief Room)

#### Montney, James (Commonwealth Cultural Resources Group) and Sean Dunham (Chippewa National Forest)

#### LATE WOODLAND SITE PREDICTIVE MODEL FOR THE HIAWATHA NATIONAL FOREST

Commonwealth Cultural Resources Group (CCRG) developed a predictive model for Late Woodland (LW) site locations on the West Unit of the Hiawatha National Forest (HNF). CCRG generated an inductive model based on currently available environmental data derived from LW archaeological site locations. This information was used to develop predictions about other, currently unknown, LW site locations. The model divided the HNF into 1 hectare quadrats. Archaeological sensitivity was classified as high, medium, and low. The predictive model found that over half of the LW sites in the HNF have been found in mixed pine habitats within 120 m of a major source of water (high sensitivity areas). The high sensitivity areas account for only about 3.5 percent of the HNF. The use of the predictive model may help identify additional LW sites as survey continues on the HNF. (Poster Session (2), Poster #18, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

#### Mueller, Natalie G. (Washington University in St. Louis)

#### DOCUMENTING KNOTWEED DOMESTICATION: PRELIMINARY RESULTS

For over two millennia, native farmers in the Midwest cultivated knotweed (*Polygonum* sp.), but it is currently unknown whether or not this plant was domesticated. Paleoethnobotanists widely acknowledge the morphological diversity of archaeological assemblages of knotweed. Erect knotweed (*Polygonum erectum*) was evidently the species of choice for ancient farmers, but morphologically ambiguous assemblages suggest that related species may also have been harvested. Moreover, some researchers have noticed assemblages that differ from all modern plants and may represent a domesticated sub-species. I will present an update on my ongoing morphometric analysis of knotweed assemblages, including new metrics for differentiating between species, results from carbonization experiments, comparisons between modern and archaeological fruit assemblages, and harvests from wild plants. Preliminary results indicate 1) at least two species were cultivated and; 2) some Mississippian assemblages differ morphologically from all modern plants, probably as a result of selective pressures exerted by human farmers. (Symposium (1), Thursday, 3:00 pm, Hoosiers/Hawkeye Room)



## Mulholland, Stephen L. (Duluth Archaeology Center, LLC) and Susan Mulholland (Duluth Archaeology Center, LLC)

#### THE LATE PALEOINDIAN OCCUPATION IN NORTHEASTERN MINNESOTA

The onset of the early Holocene witnessed a dramatic rise in the number of Late Paleoindian sites across Northeastern Minnesota when compared to that of the Early Paleoindian. Sites are documented by the recovery of Agate Basin, Hell Gap, Scottsbluff, Eden, and Cody Knife types to name the most common diagnostic artifacts. Activities associated with the sites include dugout canoe manufacture, hunting, fishing, tool-stone acquisition, and general habitation camps. Unlike the Early Paleoindian period where sites are concentrated within a narrow ice-free zone, Late Paleoindian site distribution is spread across the entire region. The environmental focus is that of extensive use of the region's numerous waterways, a course that continued to be the focus throughout all subsequent periods of occupation. (Symposium (10), Saturday, 2:45 pm, Hoosiers/Hawkeyes Room)

#### Mulholland, Susan C. (Duluth Archaeology Center, LLC) and Stephen Mulholland (Duluth Archaeology Center, LLC)

#### A GOOD BEGINNING: EARLY PALEOINDIAN OCCUPATION IN NORTHEASTERN MINNESOTA

Several fluted points recently documented in northeastern Minnesota support an Early Paleoindian occupation within the region, first suggested by a single fluted point from the Cloquet River valley. Known sites cluster in this drainage and immediately up-glacier toward the international border, between the Superior Lobe (east) and St. Louis Sublobe (west) while south of the retreating Rainy Lobe. Concentration between ice lobes suggests occupation concurrent with the ice at the end of the Pleistocene. Most of the points are attributed to the Gainey type, which suggests an origin from the east rather than the west. A single Folsom point outside the corridor indicates western influence somewhat later, probably after the final ice retreat. Late Paleoindian points are much more abundant and widespread, with several Plains Plano types represented across northeastern Minnesota. (Symposium (10), Saturday, 2:15 pm, Hoosiers/Hawkeyes Room)

Munoz, Samuel E. (Department of Geography, University of Wisconsin-Madison), Kristine E. Gruley (Department of Geography, University of Wisconsin-Madison), Ashtin Massie (Department of Geography, University of Wisconsin-Madison), Sissel Schroeder (University of Wisconsin-Madison), and John W. Williams (Department of Geography, University of Wisconsin-Madison)

#### FORESTS, FIELDS, AND FLOODS: AN ENVIRONMENTAL (PRE)HISTORY OF THE CAHOKIA REGION

The decline and abandonment of Cahokia, a major Mississippian population center located in the central Mississippi River valley, has previously been attributed to environmental changes, namely resource depletion, flooding, and/or drought, but few paleoenvironmental records previously existed from this region to test these hypotheses. Here, we present multi-proxy paleoenvironmental records from two oxbow lakes in the central Mississippi River valley that provide an ecological and hydro-climatic history of the Cahokia region. Based on fossil pollen assemblages, the widespread removal of trees and the expansion of croplands began at the onset of the Late Woodland period, and continued through the Mississippian period.



Particle-size analysis reveals the presence of several large Mississippi River flood events, with the Late Woodland and Mississippian occupations occurring during a relatively warm and dry period when large floods were infrequent, while Cahokia's decline and abandonment coincides with a period when high-magnitude floods occurred with greater frequency.

(General Session (4), Friday, 2:30 pm, Spartans/Golden Gophers Room)

Nash, Lenna M. (Illinois State Archaeological Survey), Eve Hargrave (Illinois State Archaeological Survey), and Katharine McDonald (Illinois State Archaeological Survey)

#### LIFE AND DEATH AT THE EAST ST. LOUIS MOUND COMPLEX

Analysis of the burials and isolated human remains identified at the East St. Louis Mound Complex provide a unique perspective on mortuary practices practiced by the inhabitants of this large mound center from the Terminal Late Woodland through the Early Mississippian periods. Using a combination of archaeological contextual information and skeletal analysis, we discuss the significance of isolated human elements and burials in domestic contexts as well as the deliberate placement of select elements or burials in ritual contexts such as post pits, prehistoric borrow pits, a previously unidentified mound, and discrete burial clusters. The mortuary practices represented are consistent with other contemporaneous examples from the American Bottom, and reflect a wide diversity in the treatment of dead. (Symposium (3), Friday, 11:30 am, Hoosiers/Hawkeyes Room)

#### Nealis, Stuart (University of Kentucky)

### RESULTS OF THE 2014 GEOARCHAEOLOGICAL RESEARCH INVESTIGATIONS OF THE PORTSMOUTH EARTHWORKS

I will present the results of recent geoarchaeological fieldwork on several aspects of the Portsmouth Earthwork complex. This work was based on a primary goal of total coverage gradiometric survey of extant earthwork elements, followed by more targeted secondary geophysical techniques. Additionally, core samples collected across several transects throughout each group of the complex were analyzed for sedimentary and stratigraphic data regarding embankment construction. Preliminary radiocarbon dates will be used to inform interpretations of the sequence and timing of construction, as well as the relation of Portsmouth to other major earthwork centers.

(General Session (1), Friday, 9:00 am, Spartans/Golden Gophers Room)

### Neff, Matthew (Iowa State University)

### APPLICATION OF GEOGRAPHIC INFORMATION SYSTEMS TO SITE STRUCTURAL ANALYSIS

GIS is a powerful analytical tool in revealing continental-, regional-, and site-level patterning in spatial data. Application of ArcGIS and GeoDa are applied to elucidate the formation of a diffuse late Holocene site in western Iowa. There are no statistically significant patterns in the vertical and horizontal distribution of piece-plotted artifactual, geofactual, and ecofactual items. Aggregating this material into standard archaeological analytical units (i.e., excavation units and levels)



produces statistically significant (and misleading) impressions of the organization of human activities at the site.

(Poster Session (2), Poster #11, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

## Neidich, Deborah L. (Illinois State University) and Maria O. Smith (Illinois State University)

#### AN INVESTIGATION OF TERES MINOR INSERTIONAL ROBUSTICITY AND ITS PATTERN IN A LATE WOODLAND PERIOD SAMPLE FROM WEST-CENTRAL ILLINOIS

Teres minor insertions are traditionally examined in the muscle suite identified as the rotator cuff. Humeri rarely display osteological change at the teres minor insertion due to the sheltered position of the teres minor within the rotator cuff. However, several atypically rugose insertion sites (entheses) were observed in the adult component of a Late Woodland (CE 900-1150) period osteological sample (N= 43) from west-central Illinois (Schroeder Mounds, 11HE177). A co-association between body size/skeletal robusticity and teres minor insertional expression was suspected. A humeral robusticity index [((MDM × mDM))/ML× 100] was calculated and was found to positively correlate. Intra-sample patterns of teres minor insertional robusticity by age and sex also suggest behavioral changes in activities across the life course or health status (frailty).

(General Session (2), Friday, 10:00 am, Fighting Illini Room)

### Neubauer, Fernanda (University of Wisconsin, Madison and CAPES Foundation)

#### LATE ARCHAIC HUNTER-GATHERER LITHIC TECHNOLOGY, SUBSISTENCE, AND SETTLEMENT PRACTIC-ES ON GRAND ISLAND, MICHIGAN

This paper presents the preliminary results of a study of foodways, chipped stone and hot rock technologies, settlement variability, residential mobility, and landscape interactions of the Late Archaic (c. 5,000-2,000 BP) people on Grand Island, in Michigan's Upper Peninsula. Recent excavations by the Grand Island Archaeological Program have yielded a sizable body of evidence for Late Archaic occupations on Grand Island, which is the largest island of Lake Superior's southern shore. To study diachronic changes, direct evidence is drawn from six archaeological sites excavated by GIAP that span the entire Late Archaic period and allow for a study of socioeconomic changes through time. This is an effort to develop a synthetic overview of the Late Archaic on Grand Island, and to contribute to and expand our knowledge of hunter-gatherer diversity and daily practices in the Great Lakes region.

(Symposium (7), Saturday, 8:15 am, Little Chief Room)

### Nolan, Kevin C. (Applied Anthropology Laboratories, Ball State University), Matthew R. Swihart (Applied Anthropology Laboratories, Ball State University)

#### GEOCHEMICAL AND GEOPHYSICAL INTRA-SITE ACTIVITY PATTERN ANALYSIS IN DEARBORN COUNTY, INDIANA

As part of a Fiscal Year 2013 Historic Preservation Fund grant the AAL conducted geoscience investigations of three tracts of land in Dearborn County, Indiana. We investigated the intra-site patterning of two possible Late Prehistoric habitation sites



of previously unknown function and one site reported by Glenn A. Black in the 1930s of unknown function and period of occupation. We discovered organized and intense activity at all three tracts with persistent plowzone and subsoil signatures for an array of activity types, including a subsoil geochemical signature for a surface site with only three artifacts.

(Poster Symposium (2), Poster #11, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Nolan, Kevin C. (Applied Anthropology Laboratories, Ball State University), Matthew R. Swihart (Applied Anthropology Laboratories, Ball State University)

#### SITELESS SURVEY IN HAMILTON COUNTY, INDIANA

As part of a Fiscal Year 2012 Historic Preservation Fund grant the AAL conducted ~565 acres (228.6 ha) of pedestrian surface reconnaissance in nine tracts in Hamilton County, Indiana. We recovered 1154 prehistoric artifacts and 471 historic artifacts and defined 230 clusters as "sites". Overall, the survey encountered 2.9 artifacts/acre, and "sites" occurred with a frequency of one every 2.46 acres. We explore patterns of density and diversity in the archaeological record of Hamilton County, Indiana.

(Poster Symposium (2), Poster #12, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Nolan, Kevin C. (Applied Anthropology Laboratories, Ball State University), Matthew R. Swihart (Applied Anthropology Laboratories, Ball State University), Brad R. Painter (Ball State University)

#### GEOCHEMICAL ANALYSIS OF POSSIBLE GARDEN SITES IN HAMILTON COUNTY, INDIANA

In 2012–2013 the AAL conducted a soil chemical survey of three tracts in Hamilton County, Indiana as part of a Historic Preservation Fund grant-funded survey with supplemental funding from Ball State University. We measured Mehlich 2 extractable phosphorus (P) colorimetrically, and Mehlich 3 extractable aluminum (Al), calcium (Ca), copper (Cu), iron (Fe), potassium (K), magnesium (Mg), manganese (Mn), sodium (Na), nickel (Ni), and zinc (Zn) via ICP-OES. We identified several anomalous depletions of soil nutrients correlated with artifact distributions. We propose that these chemical anomalies represent prehistoric landuse practices, particularly gardens and fields.

(Poster Symposium (2), Poster #4, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Nolan, Kevin C. (Applied Anthropology Laboratories, Ball State University), Shelbi M. Long (Ball State University), Amber J. Yuellig (Applied Anthropology Laboratories, Ball State University)

#### DESCRIPTIVE MODEL OF SITE DISTRIBUTIONS NEAR THE PROPOSED MOUNDS LAKE RESERVOIR, MADISON AND DELAWARE COUNTIES, INDIANA

AAL was hired to conduct a Pre-NEPA background assessment of the cultural resources that will potentially be affected by the proposed Mounds Lake Reservoir starting just east of Anderson in Madison County and extending to just west of Daleville in Delaware County, Indiana. The proposed pool encompasses 2,456.7 acres. There are 80 previously documented sites within the pool and 215 within one mile (inclusive). We present the analysis of the distribution and type of



previously reported archaeological resources in the vicinity of the proposed pool. We forecast various models for the quantity and distribution of sites by setting. Estimates for sites to be effected by the proposed reservoir range from 214 to 1,479 with up to 40 percent requiring additional investigation.

(Poster Symposium (2), Poster #6, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

Packard, Ashley (Center for Mountain and Plains Archaeology), Edward Herrmann (Indiana University Department of Geological Sciences), G. William Monaghan (Indiana Geological Survey), Aaron Stump (Indiana University-Purdue University of Indianapolis), Matthew Pike (Purdue University)

TERRAFORMING AND THE HUMAN-MODIFIED LANDSCAPE AT THE LAWRENZ GUN CLUB SITE (11Cs4)

The Lawrenz Gun Club site (11Cs4) is a palisaded Mississippian-era village located in the Central Illinois River Valley. Eleven solid-earth sediment cores were collected with a GeoProbe to investigate natural and human-modified landscape formation processes. Two positive magnetic anomalies detected with a magnetometer along the northern third of the village were bisected by a transect of sediment cores and analyzed to understand the relationship between the positive magnetic anomalies and surrounding landscape. It is hypothesized that the positive magnetic anomalies were swales in-filled with anthropogenic soils during site occupation. Core analyses included sedimentological properties, organic matter content, depositional chronologies, magnetic susceptibility, and geochemistry. Excavation data were combined with these sedimentological analyses to identify the natural and cultural processes that transformed the landscape within and around Lawrenz Gun Club. It was determined that people were in fact modifying their landscape at the site. (Poster Symposium (1), Poster #4, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

#### Parker, Katie (Archaeobotany) and Mary L. Simon (Illinois State Archaeological Survey)

#### THE CENTRAL ROLE OF PLANTS IN MISSISSIPPIAN FEASTING AND PUBLIC RITUAL

The Cahokia mound complex, North America's only prehistoric metropolis, has long been acknowledged as the focal point of Mississippian social, political, and religious power, and of ritual power displays in the American Bottom. Research at a number of outlying Lohmann / Stirling phase sites (AD 1050-1150, has shown evidence for politico-religious rituals using a set of specialty materials within distinctive non-domestic buildings. The buildings and the materials are visible "artifacts of power" (Emerson 1997), and archaeological evidence for Cahokia-centered internal organization. Certain sacred or symbolic plants associated with purification, renewal, healing, social mediation/integration, and contact with the supernatural, were active elements in ritual practices, and therefore are counted among "artifacts of power". Carbonized macrobotanical remains from unique Mississippian structures and associated pit features include a set of specialty items, some with psychoactive or purifying medicinal properties.

(Symposium (8), Saturday, 11:15 am, Hoosiers/Hawkeyes Room)



## Pauketat, Timothy R. (University of Illinois) and Brad H. Koldehoff (Illinois Department of Transportation)

#### FROM BBB TO THE BLACK DRINK: THOMAS E. EMERSON AND THE ARCHAEOLOGY OF RELIGION

The archaeology of ritual and religion has been a constant in the career of Thomas Emerson. But what are the appropriate boundaries of the subject matter today? Did ancient people have it? Or is everything that ancient people did, in some sense, religion? This opening review locates the contributions of Thomas Emerson in the middle of the questions and the answers.

(Symposium (8), Saturday, 8:00 am, Hoosiers/Hawkeyes Room)

#### Peliska ,Charles, Chris Chroninger, Peer Halvorsen, and Kim Harrison

#### IDENTIFYING PROBLEMS AND SOLUTIONS IN CONTEMPORARY CULTURAL RESOURCE MANAGEMENT

This presentation will be focusing on different aspects of solutions to problems in modern Cultural Resource Management from the viewpoint of experienced Archaeological Field Technicians. It is an attempt to bring these problems and suggested solutions to the foreground and start a proactive discussion with the hope to change conditions in the field with improvements for Cultural Resource Management Companies, Archaeological Field Technicians, and the resource itself. Topics will include an introduction from a field tech's point of view, as well as aspects on training, experience, methodologies and efficient practices, compensation and solutions to various other problems that arise in giving our time, sweat, tears, blood and joints in an effort to discover and conserve North America's archaeological and cultural heritage.

(General Session (6), Saturday, 11:30 am, Spartans/Golden Gophers Room)

#### Pelto, Brendan (Michigan Technological University)

#### REMEMBERING CLIFTON - CERAMIC ANALYSIS AND IRON CONSERVATION FROM A 19TH CENTURY MINING LOCATION IN MICHIGAN'S UPPER PENINSULA

In the mid 19th century, Clifton was a thriving mining location in Michigan's Keweenaw Peninsula. From 1847-1872, Clifton was the primary residence of workers of the Cliff Mine, Michigan's first profitable copper mine. Over the last year, a ceramic analysis has been conducted on assemblages recovered in past field seasons, and iron conservation techniques such as electrolysis, and super critical polymer impregnation, have been used to preserve and study the artifacts that made up the material culture of Michigan's frontier.

(Poster Session (1), Poster #18, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

#### Pfaffenroth, Jake F. (University of Wisconsin, Madison)

### ONE WALL, TWO WALLS, OLD WALL, NEW: PALISADE REPLACEMENT AND RECONFIGURATION AT AZTALAN

Field maps produced during excavations at Aztalan in the late 1940s through 1960s document several cases in which exterior and interior palisade walls at the site were replaced or reconfigured. In this paper, I tease apart the construction sequences of the superimposed walls and propose novel hypotheses to explain their histories. For example, the presence of superimposed exterior walls suggests that



the main palisade was dismantled and replaced in situ by sturdier walls with more uniform bastions and new baffled entrances. In another case, a sequence of superimposed internal walls could be the result of a history of spatial reconfiguration in the community's residential area and the use of different construction techniques through time. These cases illustrate Aztalan's archaeological complexity and the value of revisiting decades-old excavation documents.

(General Session (4), Friday, 3:45 pm, Spartans/Golden Gophers Room)

Picard, Jennifer L. (University of Wisconsin-Milwaukee), Brooke L. Drew (University of Wisconsin-Milwaukee)

FLAT GLASS AND FAMILY TREASURES: A PRELIMINARY ANALYSIS OF THE ARTIFACT ASSEMBLAGE FROM THE MCHUGH SITE (47WP294), A 19TH CENTURY IRISH FARMSTEAD IN WAUPACA COUNTY, WISCONSIN

The McHugh site (47WP294), located in Waupaca County, Wisconsin, represents the remains of a farmstead structure constructed by Irish immigrants in 1850. Mary McHugh headed a household of eleven children following the death of Michael McHugh in 1856. Data recovery excavations at 47WP294 produced a large artifact assemblage, including construction materials, household items, religious objects, toys and personal items. The results of preliminary artifact analysis, based on a functional classification of material culture, are utilized to contextualize the occupancy and abandonment of the McHugh site structure. The rich material culture assemblage provides insight into the lives of early settlers in central Wisconsin, in particular members of the Irish diaspora. Material culture from 47WP294 reflects adaptation to life in a new environment as well as connections to tradition. Items recovered during excavation may also reveal information about the lives of pioneer women and children in central Wisconsin.

(General Session (5), Saturday, 8:15 am, Spartans/Golden Gophers Room)

#### Pike, Matthew D. (Purdue University) and Jeremy Wilson (Indiana University-Purdue University of Indianapolis)

#### MOUNDS FROM THORN AND IVY: A MAGNETOMETRY SURVEY OF LAWRENZ GUN CLUB (11Cs4)

Lawrenz Gun Club, located on a channel of the Sangamon River in west-central Illinois, is proving to be one of the largest and most complex Mississippian village sites in the region. Geophysical investigations employing magnetic gradiometry have preliminarily defined the site as encompassing 10 ha, largely within the palisade, though features extend beyond the survey's boundaries. Visible in the magnetic imagery are multiple iterations of a bastioned palisade, six earthworks, a plaza, dozens of structures, and evidence of the geomorphic formation of the landform. Magnetic imagery was used to guide targeted excavations that revealed cross-cutting and overlapping episodes of palisade reconstruction, a solid-earth coring survey of anthropogenic and geomorphic features, and excavation of a burnt structure. Magnetic survey of the earthworks shows evidence of construction and anomalies consistent with mound-top structures. Combined with other remote sensing and targeted excavation, the survey provides a foundation for future research at the site.

(Poster Symposium (1), Poster #1, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)



## Pisell, James M. (Illinois State Archaeological Survey) and Lauren M. Fitts (Illinois State Archaeological Survey)

#### A COMPARISON OF TERMINAL LATE WOODLAND BLUFF CULTURE STRUCTURES

Relatively little is known about the archaeology of the upland area situated between the Lower Illinois River Valley and Northern American Bottom of western Illinois. However, several recent IDOT-sponsored projects have afforded the opportunity to gather baseline information about local Late Woodland cultures. As part of one modest-scale road-widening project, a portion of the Wedding site was excavated, producing over 70 pit facilities. This paper focuses on a preliminary analysis of the two structures excavated at the site, which appear to differ somewhat from roughly contemporaneous residential buildings in the American Bottom. Our research suggests that the character of the Wedding site structures, as well as variation in the point and pottery styles, denote the presence of a distinctive social group within the greater terminal Late Woodland Bluff tradition from the Illinois/ Mississippi/Missouri River confluence area.

(General Session (2), Friday, 8:45 am, Fighting Illini Room)

#### Porubcan, Paula J. (Illinois State Archaeological Survey)

#### PARTNERING WITH THE FOREST PRESERVE DISTRICT OF COOK COUNTY ARCHAEOLOGICAL RE-SOURCE AND LANDSCAPE PRESERVATION IN THE WINDY CITY

Cook County, Illinois, containing over 5 million inhabitants, comprises a total population larger than that of 29 individual U.S. states. Within this urban landscape lies 70,000 acres of publically held Forest Preserve of Cook County (FPDCC) lands containing nearly half of the recorded sites in the county. Preserved here is the rich prehistory and history of northeastern Illinois, from Paleoindian through WWII. The Illinois State Archaeological Survey, together with the Illinois Natural History Survey and the Illinois State Water Survey, has partnered with the FPDCC to develop a Natural and Cultural Resources Management Plan. This pioneering approach, inaugurated as a key part of FPDCC's centenary plan, integrates information on recreational pressure, species protection, habitat restoration, archaeological site and landscape sensitivity, public engagement, and scientific research—giving each due consideration in the early stages of management decisions. (General Session (6), Saturday, 10:00 am, Spartans/Golden Gophers Room)

Richards, John D. (University of Wisconsin, Milwaukee) and Thomas J. Zych (University of Toledo)

#### MAKING A MOUND, BUILDING A COMMUNITY: LATE WOODLAND/MISSISSIPPIAN RITUAL SYNCRE-TISM AT THE AZTALAN SITE

The Aztalan site in southeast Wisconsin is notable for an archaeological record that represents a mingling of Late Woodland and Middle Mississippian material culture. Social processes capable of producing this result range from forcible imposition of one cultural lifeway on another to wholesale acceptance of a new tradition. In between these polar extremes are a variety of scenarios based on mutual accommodation. A review of 1960s-era Wisconsin Historical Society excavations of Aztalan's northeast platform mound, along with recent archaeological work at the site, suggest that the latter alternative most closely fits the Aztalan case. The Aztalan

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data suggests that the development of the Aztalan site involved, at least in part, syncretic rituals combining aspects of Middle Mississippian and Late Woodland ritual behavior.

(Symposium (8), Saturday, 9:00 am, Hoosiers/Hawkeyes Room)

#### Ritterbush, Lauren W. (Kansas State University)

#### IDENTIFYING AND UNDERSTANDING THE EARLY KANSA ALONG THE KAW, 1790-1825

After initial adaptation to the fur trade while living along the Missouri River, the Kanza (Kaw) Indians underwent further adjustments as they relocated to the river that bears their name late in the eighteenth century. What cultural changes developed out of this transition and how can we uncover and understand them? Review of existing knowledge about the historic Kanza alongside on-going ethnohistoric research pertaining to early occupation along the Kansas (or Kaw) River, uncovers issues related to the archaeological study of Kanza sites of the first quarter of the nineteenth century. Obstacles faced include identifying Kanza site locations and the archaeological evidence of early nineteenth century occupation, in addition to site destruction.

(Symposium (4), Friday, 8:45 am, Little Chief Room)

#### Rohe, Robert (Illinois State Archaeological Survey)

#### FOR MEDICINAL PURPOSES: HEALTH AND WELLNESS AT A TURN OF THE CENTURY BOARDING HOUSE

Exponential industrial growth at the end of the 19th century made way for the rapid expansion of the industrial complex in urban America. Despite creating a wealth of jobs and some measure of prosperity, this boom brought about an abundance of pollution, residential overcrowding, and excessive workdays, all of which contributed to an ideal environment for illness and disease. East St. Louis was no exception. A thriving livestock market and manufacturing district provided a bounty of both employment and health hazards. In living situations like multi-occupant housing, this phenomenon could be exacerbated due to the number of inhabitants or the diversity of the occupant's lifestyles. From 2009 to 2012 ISAS conducted excavations for the New Mississippi River Bridge Project in East St. Louis. This paper will examine the medicinal evidence, excavated from 5 privies on a lot associated with a boarding house, in order to better understand maladies afflicting the occupants and potentially the city at large.

(Symposium (9), Saturday, 1:30 pm, Little Chief Room)

#### Romain, William F. (Newark Earthworks Center, Ohio State University)

#### ANCIENT ASTRONOMERS OF THE EASTERN WOODLANDS: WATSON BRAKE TO CAHOKIA

In this presentation, prehistoric Native American skywatching in the Eastern Woodlands is considered using archaeastronomic analyses and LiDAR imagery. Among the sites considered are: Watson Brake, Poverty Point, Grave Creek, Marksville, Newark, Toltec, Iowa Effigy Mounds, Winterville, Angel, and Cahokia. Significant trends are identified. Also identified are design principles held in common from



Archaic to Mississippian times. These design principles suggest certain continuities in cosmological thinking and ritual practice over the course of 5,000 years. (Symposium (B), Saturday, 8:45 am, Hoosiers/Hawkeyes Room)

#### Ruby, Bret J. (Hopewell Culture National Historical Park)

#### THE GREAT CIRCLE PROJECT AT HOPEWELL MOUND GROUP

Mark Lynott led the way and encouraged us to investigate and understand Ohio Hopewell mounds and earthworks as elements that create and respond to larger and constantly changing landscapes. The Hopewell Mound Group is one of the largest and most complex of these landscapes of history. Often overlooked there is the "Great Circle." First mapped nearly 200 years ago, plowing had entirely obliterated it when Warren King Moorehead arrived in 1891. Our project followed Mark's lead and used large-scale multi-sensor geophysical surveys, targeted excavations, and geoarchaeological studies to resurrect the Great Circle as a major feature of the built landscape at Hopewell Mound Group. The Great Circle Project alters our view of this landscape to include a monumental embankment and ditch more than 100 meters in diameter, flanked on the interior by a row of wooden posts, each nearly one meter across and perhaps five meters tall.

(Symposium (5), Friday, 2:30 pm, Hoosiers/Hawkeyes Room)

#### Sasso, Robert F. (University of Wisconsin, Parkside) and Daniel J. Joyce (Kenosha Public Museums)

#### Two Decades and Change: Challenges and Successes in Identifying the Nature of Early Nineteenth Century Potawatomi Material Culture in Southeastern Wisconsin

More than two decades of archaeological and ethnohistoric research have focused on the identification of 19th Century Potawatomi sites and material culture in the southeastern Wisconsin region. This portion of the Upper Midwest represents an area of intensive Potawatomi settlement and land use, and hundreds of sites of several types have been recorded here in the historic and archaeological literatures. Compiling what we have learned from earlier archaeological research, historical descriptions, examination of extant collections, and our own field research has taught us much. Identification and examination of Potawatomi sites continues to present many distinct challenges for archaeologists, yet significant progress has been made toward identifying the true material culture of 19th Century Potawatomi life here. In this paper, we present a synopsis of these challenges and successes. (Symposium (4), Friday, 10:00 am, Little Chief Room)

#### Schaefer, Kimberly (Illinois State Archaeological Survey)

#### RECENT RADIOCARBON DATES ON COMMON BEAN (PHASEOLUS VULGARIS) FROM ILLINOIS

Domesticated crops introduced to eastern North America from Mesoamerica, like maize, beans, and squash, each had their own patterns of dissemination and adoption. The adoption and use of beans in Illinois has been poorly understood due to limited available dates. This paper presents recent unpublished radiocarbon dates for beans from several sites in Illinois and summarizes previous dates. This informa-



tion is then used to discuss how prehistoric people of Illinois incorporated beans into their subsistence strategies. (Symposium (1), Thursday, 3:15 pm, Hoosiers/Hawkeyes Room)

## Schilling, Timothy (NPS Midwest Archeological Center), Jay Sturdevant (NPS Midwest Archeological Center), Dawn Bringelson (NPS Midwest Archeological Center), Erin Dempsey (NPS Midwest Archeological Center), and Ann Bauermeister (NPS Midwest Archeological Center)

#### PAST, PRESENT, AND FUTURE: MARK LYNOTT'S CONTRIBUTION TO NPS ARCHEOLOGY IN THE MIDWEST

In over 30 years as an NPS archeologist, Mark Lynott's work spanned the geographic and temporal breadth of the Midwest. His commitment to both scientific archeological investigations and historic preservation impacted research trajectories most significantly in three parks: Indiana Dunes National Lakeshore, Ozark National Scenic Riverways, and Hopewell Culture National Historical Park. At INDU, Mark was instrumental in recognizing the breadth of the archeological resources along the south shore of Lake Michigan. MWAC is currently expanding on his initial insights with multiple field projects in the dune contexts. Mark's work at OZAR demonstrated that archeological resources on the Ozark Plateau are significant but complex. He advocated for using multidisciplinary studies to understand environmental and behavioral change on the Plateau and influenced many researchers who continue his work in the region. Mark's involvement at HOCU was fundamental for organizing and implementing a scientific approach to the archaeological record. Moreover, under his leadership at MWAC, Hopewell Culture grew to incorporate and preserve some of the most significant sites in the Nation. (Symposium (5), Friday, 4:00 pm, Hoosiers/Hawkeyes Room)

### Schirmer, Ronald C. (Minnesota State University, Mankato)

## NEW DATA ON WOODLAND PLANT REMAINS AND MINNESOTA ARCHEOLOGY

Even though flotation processing and analysis of archeobotanical materials was initiated in the late 1960s in Minnesota, such data are still uncommon across the state. This is clearly unfortunate because it impoverishes our understanding of past human culture and human-plant interaction patterns, especially as they relate to Minnesota's complex natural and cultural environments. Recent work on a number of Woodland tradition sites is showing that people practiced plant cultivation earlier and wider than previously believed in Minnesota, and these patterns hold significance for understanding the emergence of horticultural lifeways and interregional interaction.

(Symposium (1), Thursday, 3:30 pm, Hoosiers/Hawkeyes Room)

### Schneider, Seth A. (University of Wisconsin, Milwaukee)

ECONOMIC, SOCIAL, AND POLITICAL, INTERACTION AMONG ONEOTA LOCALITIES IN EASTERN WISCONSIN: A CERAMIC ANALYSIS

Inter-regional interaction among Oneota and other Late Prehistoric groups living in the Western Great Lakes and Mississippi Valley during late prehistory is well-doc-



umented, and many have looked at the question of origins and disappearance of these groups. Limited inquiry has been made into how intra-regional localities, especially in Eastern Wisconsin, interacted with one another. In this paper a synchronic approach is taken analyzing pottery assemblages from three Oneota localities in Eastern Wisconsin dating between A. D. 1200-1400: Lake Koshkonong, Grand River, and Waupaca/Tomorrow River. Research questions focus on economic, social, and political interactions to see how autonomous these localities were from one another. Data from ceramic attribute and composition analyses are presented in this paper to address how variation in material culture may reflect relationships such as marriage, trade and economic/political organization. (Symposium (6), Friday, 2:00 pm, Fighting Illini Room)

#### Schurr, Mark R. (University of Notre Dame), Patrick H. Donohue (Civil & Environmental Engineering & Earth Sciences, University of Notre Dame), and Antonio Simonetti (Civil & Environmental Engineering & Earth Sciences, University of Notre Dame)

#### MULTI-ELEMENT CHARACTERIZATION OF EARLY NINETEENTH CENTURY POTTERY SHERDS FROM NATIVE AMERICAN AND EURO-AMERICAN SITES

Fine earthenwares imported from England are distinctive artifact types frequently found on early nineteenth century Native American and Euro-American sites. Relatively rapid changes in decorative motifs and technologies provide information about site chronology and economic status. However, visual analyses of sherds usually can provide only general information because of the fragmentary nature of most assemblages. We present data about the chemical composition of sherds from two Midwestern sites occupied during the first half of the nineteenth century: Pokagon Village, a Native American site; and Collier Lodge, a Euro-American site. Multi-element compositions determined using multiple methods show that sherds of the same type from the two sites have different chemical compositions, indicating that different manufactures produced the pottery, and that manufacturing compositions changed over time. Multi-element characterization has the potential to produce new information about manufacturing sources, technology, and dating from very small sherds.

(Symposium (4), Friday, 10:15 am, Little Chief Room)

#### Sievert, April K. (Glenn A. Black Laboratory of Archaeology, Indiana University), Heather Alvey (Glenn A. Black Laboratory of Archaeology, Indiana University), Carey Beam (Glenn A. Black Laboratory of Archaeology, Indiana University), and Sharon Wise (Glenn A. Black Laboratory of Archaeology, Indiana University)

#### INDIANA UNIVERSITY'S WYLIE HOUSE MUSEUM AND ARCHAEOLOGY IN CURRENT SOCIAL CONTEXTS

Indiana University in Bloomington acquired the home that housed its first president, Andrew Wylie, in 1947 and started a restoration process in 1961 intended to return it to its original 1836 configuration. The house, now listed on the National Register of Historic Places, provides a centerpiece to what remains of a large 19th century farm. We present a site biography focusing on the last fifteen years, a critical time in recognizing the potential of this property as an archaeological site that can further the university's mission for research and education. We present a

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narrative by weaving together threads relating to legal compliance, student involvement, university administration, cultural resource management, heritage studies, and material culture analysis.

(Poster Session (3), Poster #16, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Silva, Nikki (Michigan State University), Jodie O'Gorman (Michigan State University), and Michael Conner (Dickson Mounds Museum)

#### IMPLICATIONS OF RECENT RADIOCARBON DATING AT NORRIS FARMS 36 CEMETERY

The Bold Counselor Phase Oneota cemetery Norris Farms 36 has been the subject of extensive analysis since its complete excavation in the 1980s, and the remarkable rates of trauma have been used to analyze the relationship between Oneota and Mississippian populations in the Central Illinois River Valley. Recent excavations at the associated Morton Village site and associated analyses have further examined the nature of these interactions. In 2013, new radiocarbon dates were obtained on the bone collagen of 6 individual burials from the cemetery. This paper will address the implications of these dates for analyzing this relatively short time period and how the information provided by these dates influences previous and future research on the interactions between the Oneota and Mississippians in this area. (General Session (3), Friday, 2:45 pm, Little Chief Room)

#### Simon, Mary L. (Illinois State Archaeological Survey)

#### PLANT MATERIALS FROM BURNED STRUCTURES AT THE EAST ST, LOUIS SITE

A number of burned structures dating to the Stirling Phase of occupation were identified during excavations in Tract 5 of the East St Louis Site (11S506/5). Included is Structure 181, which, based on its large size and the presence of exotic and ritual artifacts, is interpreted to have functioned as a temple and been the locus of Mississippian ritual activities. In contrast are fourteen smaller burned structures that likely served as domestic residences. Analysis of burned timbers and flotation samples from both the temple and domestic structures has been initiated to discern if they evidence differences in construction material selection or plant use practices coincident with their presumed functions. Additionally, Structure 181 yielded the remnants of plaited cane matting, an artifact type that has not yet been described from American Bottom contexts. In this paper, I present the preliminary results of those ongoing analyses and their implications for understanding the nature of this unique occupation.

(Symposium (3), Friday, 10:45 am, Hoosiers/Hawkeyes Room)

### Simons, Donald B. (Michigan Archaeological Society)

#### AN UPDATE ON THE LATE PLEISTOCENE GAINEY AND BUTLER SITES AND RELATED SUBJECTS

After twenty-one seasons, excavations at the above sites ended in July 1999. Since then additional projects and discoveries have been made at loci in Southern Michigan which provide additional data and insights on the environment, prey species, tool function, patterns of human colonizing and cultural continuity in the Lower Great Lakes Region.

(Symposium (10), Saturday, 1:30 pm, Hoosiers/Hawkeyes Room)



## Skinner, Jaclyn Ann (Minnesota State University, Mankato)

## LATE WOODLAND POTTERY IN RED WING, MN

Pottery types are generally considered to be the most important artifact class for identifying population segments and tracing both culture change and culture blending. It has been proposed that evidence of cultural blending and relationships can be seen in Late Woodland pottery styles in the Red Wing, Minnesota area and a Terminal Woodland period may be present in observable changes in those Late Woodland pottery styles. This poster will present a preliminary examination and analysis of the pottery sequences present in four key Late Woodland sites: the Bartron site (21GD02), the Pickerel Slough site (21GD181), the Silvernale West Terrace site (21GD254), and the Mosquito Terrace site (21GD260). The analysis will be used to better understand how these complex sites fit into regional systems and will start to roughly define a Late Woodland archeological sequence for the Red Wing area. (Poster Session (2), Poster #19, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

### Skousen, B. Jacob (University of Illinois)

#### GROUND-TRUTHING THE EMERALD AVENUE

Historical documents, maps, and recent archaeological excavations show that a number of major roadways crossed southern Illinois in the early 19th century. Many of these routes were likely established during pre-Columbian times, meaning that studying these features could show how and why ancient peoples moved through the landscape. This paper describes my own research on one of these roads, dubbed the Emerald Avenue, which purportedly linked Cahokia to the Emerald site 20 km to the east. Both magnetic survey and targeted excavations performed this summer revealed that some of the anomalies previously identified as remnants of the pre-Columbian road actually correspond to a historic road. Although no direct physical evidence of a pre-Columbian road was found in this area, it is possible that this historic road followed a more ancient route. While indirect, this evidence sheds light on Emerald's importance in the greater Cahokia region. (General Session (4), Friday, 2:00 pm, Spartans/Golden Gophers Room)

### Steinwachs, Erin A. (Ball State University) and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University)

## Spatial Analysis of Artifact Distributions at 12D491, a Late Prehistoric Village Site in Dearborn County, Indiana

In 2013, 12D491 was pedestrian surveyed by the Applied Anthropology Laboratories at Ball State University as part of a Fiscal Year 2013 Historic Preservation Fund grant. We recovered nearly 12,000 artifacts from the site. A spatial analysis consisting of density mapping, interpolation (krieging), and cluster analysis revealed a highly concentrated area on the east section of the survey area and a distinct "C" shaped pattern within all artifact classes, especially within the distribution of Late Prehistoric diagnostics such as shell-temper pottery and triangular points. Based on these diagnostic artifacts and arcing, circular pattern, we believe 12D491 is a Late Prehistoric village, similar to other Fort Ancient village sites in the Middle Ohio River Valley.

(Poster Symposium (2), Poster #13, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

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### Sterner-Miller, I Katherine M. (University of Wisconsin, Milwaukee)

#### ANOTHER PIECE OF THE PUZZLE: ONGOING EXCAVATIONS AT THE CRESCENT BAY HUNT CLUB ONEOTA SITE (47]E904)

Since 1998, archaeologists from UW-Milwaukee have conducted a long-term, systematic survey and excavation strategy to understand the prehistory of the Lake Koshkonong region of south-central Wisconsin. Under the direction of Robert Jeske, excavations at two Oneota sites--the Koshkonong Creek Village site (47Je379) and the Crescent Bay Hunt Club site (47Je904)-- continued in the 2014 field season. This year's excavations at Crescent Bay Hunt Club revealed the presence of numerous well-preserved cultural features including a special function structure and numerous pit features containing a wealth of cultural material including ceramics, lithics, and fauna. The preliminary results from the 2014 excavations provide new insights into site spatial organization and function. (Symposium (6), Friday, 3:30 pm, Fighting Illini Room)

#### Stretton, Sean (University of Illinois)

#### EXAMINING THE EXPANSION OF MIDDLE WOODLAND HAVANA MATERIALS INTO THE GRAND RIVER VALLEY OF WESTERN MICHIGAN

Understanding the processes involved in the movement of people and/or material culture is important to understanding the interactions within and between cultural groups. At the core of these types of explanations, however, is the timing of the appearance and the spatial distribution of culturally sensitive material remains. This presentation reports on the compilation and analysis of previously collected radiocarbon dates from Havana and Havana related sites in the Illinois River Valley, Kankakee River Valley, Northwest Indiana, and Southwest Michigan. The collected data help to clarify the depth of time necessary and the specific timing for Havana characteristics to arrive and move to these different regions.

(General Session (1), Friday, 11:00 am, Spartans/Golden Gophers Room)

#### Strezewski, Michael (University of Southern Indiana)

## EXCAVATIONS AT A KICKAPOO VILLAGE ADJACENT TO FORT OUIATENON, TIPPECANOE COUNTY, INDIANA

Fort Ouiatenon was a French fur-trading outpost constructed in 1717 on the Wabash River. Wea, Kickapoo, and Mascouten villages were located in the surrounding floodplain. The area remained a focal point of Native American habitation and fur trade through 1791. In past years, extensive excavations have been conducted within the fort proper, resulting in a fair amount of knowledge of the non-indigenous inhabitants of the area. Little attention, however, has been paid to the Native American residents of the Ouiatenon vicinity. The current project consisted of extensive magnetometry across site 12-T-9, coupled with targeted excavations of a structure of probable Kickapoo construction. The 6.2 meter diameter structure was circular, built by digging a shallow trench, into which saplings were placed. It was covered with bark. The structure was also burned, likely intentionally. These excavations add considerable information to our knowledge of eighteenth century Kickapoo lifeways and subsistence.

(General Session (5), Saturday, 9:00 am, Spartans/Golden Gophers Room)



Stump, Aaron (Indiana University-Purdue University of Indianapolis), Gloria Thomas (University of Texas-Pan American), Broxton Bird (Indiana University-Purdue University of Indianapolis), Jessica Adamic (Indiana University-Purdue University of Indianapolis), Gabriel Filippelli (Indiana University-Purdue University of Indianapolis), Owen Rudloff (Indiana University-Purdue University of Indianapolis), and Lucas Stamps (Indiana University-Purdue University of Indianapolis)

#### DEVELOPING A FLOOD HISTORY MODEL FOR THE OHIO RIVER VALLEY DURING THE LATE HOLO-CENE; A COMPARATIVE ANALYSIS OF HOVEY AND AVERY LAKE

Fluvial depositional environments can preserve continuous histories of sedimentological processes and flood events spanning hundreds to thousands of years, permitting researchers to examine how humans interacted with their environment in a dynamic system. A multi-proxy analytical approach is applied to sediment cores recovered from Ohio River floodplain lakes Avery (Illinois) and Hovey (Indiana) in an effort to reconstruct environmental conditions during the Mississippian and modern periods. Flood frequency and severity in inferred from magnetic susceptibility variation in the lake sediments, which are constrained by radiocarbon dates from wood and charcoal samples. Elemental geochemistry measured by ICP-OES and XRF is also used to reconstruct flood events, the occurrence of which has been shown to influence sedimentary elemental ratios. Our efforts are intended to compliment regional archaeological studies on the interactions between human populations and climatic forces.

(Poster Symposium (1), Poster #6, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

#### Sutherland, Adam (University of Illinois)

#### WHAT CAN A CERAMIC TYPE COLLECTION TELL US ABOUT THE SNYDERS SITE?

Can we determine anything about an archaeological site using only a ceramic type collection? This paper will attempt to answer this question. A type collection, consisting of mostly rim sherds, from the Snyders site will be analyzed and compared to previous excavations to determine if the collection can tell us anything of importance about the site. This analysis will be extended to determine if a ceramic type collection can be useful in understanding other sites as well; this may be especially important when no other artifacts from a given site are readily available. The Snyders site dates from the Early Archaic to the Late Woodland period and is located in present day Calhoun County, Illinois atop Mississippi River bluffs. (General Session (2), Friday, 9:00 am, Fighting Illini Room)

### Swihart, Matthew R. (Applied Anthropology Laboratories, Ball State University), Erin Steinwachs (Ball State University), and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University)

#### SITELESS SURVEY IN DEARBORN COUNTY, INDIANA

The Applied Anthropology Laboratories conducted approximately 345.67 acres (139.89 ha) of pedestrian surface reconnaissance as part of a Fiscal Year 2013 Historic Preservation Fund grant in Dearborn County, Indiana. In ten tracts of land, we recovered 12,297 prehistoric artifacts and 66 historic artifacts representing 50 archaeological sites. Of these 50 sites, 5 were reinvestigations of previously

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recorded sites and 45 were newly recorded sites. Nine sites were recommended as potentially eligible for Indiana Register of Historic Sites and Structures (IRHSS) and the National Register of Historic Places (NRHP). In summation, our survey revealed an average artifact density of one artifact per 0.03 acres (34.42 artifacts/acre) with archaeological sites being encountered with a frequency of one archaeological site per 7.18 acres (0.14 sites/ha). This data was used to analyze patterns of distribution of the archaeological record in Dearborn County, focusing primarily on the Late Prehistoric Fort Ancient cultural phenomenon.

(Poster Symposium (2), Poster #3, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Thomas, Chad Ryan (University of Southern Indiana), Haley Tallman (Angel Mounds State Historic Park), and Heather Stone (Angel Mounds State Historic Park)

#### THINKING OUTSIDE THE SANDBOX: TEACHING THE WHOLE PROCESS OF ARCHAEOLOGY

The sandbox excavation, where participants "excavate" a simulated archaeological site under controlled conditions, is a time-honored method of teaching archaeological methods to students. However, it reinforces the widespread misconception that all that archaeologists do is dig to recover artifacts. This year, at Angel Mounds State Historic Site's "Archaeology CSI" field trip day, students received a much more holistic view of archaeological research through a sequence of six activities. These included simulations of survey, surface collection, site layout, excavation, lab processing, and interpretation. This poster will present both the structure of our program, as well as some of the pedagogical lessons learned. (Poster Session (3), Poster #17, Saturday, 8:00–11:00 am, Wolverines/Buckeyes Room)

Thompson, Christine K. (Ball State University), Cailin E. Murray (Ball State University), S. Homes Hogue (Ball State University), Oliver T. Firestone (Ball State University), and Caitlin E. Nichols (Ball State University)

#### TRIBAL COLLABORATIONS IN THE LOWER GREAT LAKES: NAGPRA COMPLIANCE AT BALL STATE UNIVERSITY

Beginning in fall 2010 the Department of Anthropology began a systematic inventory of the human remains held in the curation facility at Ball State University. Faculty and staff within the department received NAGPRA Consultation and Documentation grants in 2012 and 2013 from the National Park Service to inventory funerary goods and consult with Native American tribes for repatriation. A 2014 NAGPRA Repatriation grant has also been awarded. Ball State is the first university in Indiana to receive federal funds for NAGPRA consultation and repatriation. Additional funding from Ball State University's Office of Research and the College of Sciences and Humanities has also supported this four-year endeavor. This project has been instrumental in providing graduate students and undergraduates an opportunity to meet with tribal representatives and learn from them the importance of the NAG-PRA process. Students also enhanced their skills in, curation procedures, skeletal analysis, documentation, and communication.

(Poster Symposium (2), Poster #8, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)



## Thompson, Christine K. (Ball State University), Josh Donaldson (Ball State University), and Bradley R. Painter (Ball State University)

THE BATTLES OF FORT RECOVERY: CONTINUING EDUCATION AND PRESERVATION OF A NORTHWEST INDIAN WARS BATTLEFIELD

In 2012 and 2013, the Department of Anthropology, Ball State University (BSU) was awarded three National Park Service American Battlefield Protection Program (ABPP) grants and two internal BSU grants to continue the research at the battlefield of two significant Northwest Indian War battles, the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794) in Fort Recovery, Ohio. The overall focus of this research was to continue to document and identify the extent of the battlefield, work with the community to preserve and protect the battlefield location, and to involve BSU students in all aspects of these projects. Deliverables and outcomes include a National Register nomination, Preservation Planning document for the community of Fort Recovery, additional archaeology survey, increased understanding of the Native American strategies used in these battles, and increased awareness of the significance and extent of the battlefields through community meetings and presentations.

(Poster Symposium (2), Poster #2, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

### Thompson, Christine K. (Ball State University), Mark D. Groover (Ball State University), Mark A. Hill (Ball State University), Deborah Hollon (Ball State University)

#### THE BATTLES OF FORT RECOVERY: IDENTIFICATION AND FUTURE PROTECTION OF A NORTHWEST INDIAN WARS BATTLEFIELD

In 2010, the Department of Anthropology, Ball State University (BSU) was awarded a National Park Service American Battlefield Protection Program grant to identify and document the extent of two significant Northwest Indian War battles, the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794) in Fort Recovery, Ohio. Research methodology included extensive metal detecting, gradiometer, resistivity, and ground penetrating radar surveys across the 97 acre core battlefield area and a targeted anomaly excavation that uncovered a likely 17 foot section of the original palisade wall of the 1794 fort. This project included over 20 students and 6 faculty/ staff members that were involved in all aspects of project execution, including extensive GIS data modeling. The results of this research led to a student-focused BSU Immersive Learning grant which produced a 26 minute DVD and public volume outlining the history, archaeology, and Native American perspective of these battles. (Poster Symposium (2), Poster #10, Saturday, 8:00–11:00 am, Wolverines/Buckeyes Room)

### Torgerson, Rebecca Rae (University of Wisconsin, Milwaukee), Richard W. Edwards IV (University of Wisconsin, Milwaukee), and Katherine Sterner-Miller (University of Wisconsin, Milwaukee)

#### RETRACING OLD FOOTSTEPS: A RECENT PEDESTRIAN SURVEY AT THE BENT ELBOW FARM

In the summer of 2014, the Bent Elbow Farm was surveyed as part of the University of Wisconsin-Milwaukee archaeology field school. The property is adjacent to Koshkonong Creek and the northwest shore of Lake Koshkonong. Several known sites were relocated and a new site was identified. Abundant material culture was

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recovered from surface collection including lithics, faunal remains, shell tempered pottery, grit tempered pottery, and a variety of historic artifacts. This paper will contextualize the results of this summer's survey with previous reports of the sites and discuss the implications of the data for diachronic land use studies. (Symposium (6), Friday, 2:30 pm, Fighting Illini Room)

#### Trautt, Meredith Hawkins (Archaeological Research Center of St. Louis, Inc.)

#### INVESTIGATIONS INTO A TURN OF THE 20TH CENTURY WORKING CLASS NEIGHBORHOOD IN THE CITY OF ST. LOUIS, MISSOURI

At the turn of the 20th century, societal attitudes pertaining to dining activities, personal hygiene, healthcare, and aesthetic and social values changed. This change is reflected in the cheaper consumer goods that became available during the Consumer/Industrial Age. Archaeological investigations into a working class neighborhood in the City of St. Louis yields new insights into how the predominately ethnically German residents chose to express themselves during the social and cultural developments of this period.

(Symposium (9), Saturday, 2:15 pm, Little Chief Room)

#### Tucker, Dale (Illinois State Archaeological Survey)

#### A SHELL OF A JOURNEY INTO THE CRAB ORCHARD TRADITION

My research goal is to test the feasibility of shell being used to create surface impressions during Crab Orchard Tradition. Following a hunch based on field observations, I hypothesized that Crab Orchard Fabric Impressed surface treatments could be replicated with shell and therefore may better be described as shell impressed. My subsequent experiments with shell impressing have resulted in similar surface treatments to Crab Orchard Fabric Impressed and Crab Orchard Plain sherds. Unlike the cordage lost to time, shell artifacts are present at these sites in large quantities. Both riverine and marine shells played important roles in both daily and ritual life of people in the region, as early as the Middle Archaic and well beyond the end of the Crab Orchard Tradition in the Middle Woodland. My research provides an innovative, fresh look at some of the earliest ceramics in the Midwest by employing experimental archaeology with shell.

(General Session (1), Friday, 11:15 am, Spartans/Golden Gophers Room)

#### Tufano, Adam A. (Illinois State Archaeological Survey)

#### AN EXAMINATION OF UNIQUE FISHER SITE BURIAL LITHICS

The Fisher Site (11WI5), is a well-known, but poorly reported Late Prehistoric village and mound site located on the Des Plaines River near the confluence with the Kankakee River, approximately 22 km Southwest of Joliet, Illinois. In 1898 George Langford visited the Fisher Site and in 1906, began to excavate the Mounds and portions of the village, work that continued throughout the 1920s. The University of Chicago was invited to participate in excavations and did so from 1927 and 1929. In 1940 the Works Progress Administration (WPA) joined in the excavations. These excavations uncovered and documented many unusual burials. The purpose of this poster is to showcase the unique aspects of several of the burials, including a



pebble mosaic "pillow" and several groundstone "tablets" and antler cylinders. The analysis of this material raises questions regarding the visibility and recognition of such artifacts in the archaeological record.

(Poster Session (1), Poster #12, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

#### Upson-Taboas , Charity F. (Indiana University)

#### PROBLEMS INTERPRETING E. Y. GUERNSEY'S EXCAVATIONS OF ELROD (12CL1)

In the 1930's, Eli Lilly recruited Elam Young Guernsey to excavate three sites in Clark County for the Indiana Historical Society – Elrod (12Cl1), Newcomb (12Cl2), and Clark's Point (12Cl3). Excavations occurred from early 1933 until late 1935, with some material recovered in 1937 as well. However, Guernsey was not a professional archaeologist, and did not record his excavations as protocol today would require. When studying the Elrod site, excavation information was reconstructed based on correspondences between Guernsey and Lilly, inventory accession cards, and hand-written notes on storage boxes. The skeletal material was 75% co-mingled and, after considering the reconstructed excavation information, it was determined that three "blocks" had been excavated, resulting in a minimum number of individuals of 52 and a multitude of artifacts with no specific context. In the end, the history at Elrod is still incomplete and reveals only a small window. (Poster Session (1), Poster #10, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

#### VanDerwarker, Amber M. (niversity of California, Santa Barbara) and Gregory Wilson (niversity of California, Santa Barbara)

#### WAR AND FOOD INSECURITY IN THE CENTRAL ILLINOIS RIVER VALLEY: FORAGING, FARMING, AND FISHING DURING THE EARLY AND MIDDLE MISSISSIPPIAN PERIODS

We argue that the intensification of regional violence had ramifications for subsistence strategies that reduced the amount of time villagers spent outside their palisaded villages. Drawing from four sites dating to the Early and Middle Mississippian periods (A.D. 1100-1300), we present macrobotanical and fish data that bracket the escalation of regional violence. Results indicate that dietary diversity shrank, marked by a decrease in most wild foods and fish species; but there is no corresponding increase in cultigens (maize), suggesting that villagers were unable to make trade-offs and likely suffered from periodic food shortages. (Symposium (1), Thursday, 3:45 pm, Hoosiers/Hawkeyes Room)

# Wagner, Mark J. (Center for Archaeological Investigations, Southern Illinois University), Go Matsumoto (Southern Illinois University), Kayeleigh Sharp (Southern Illinois University), Mary R. McCorvie (U.S. Forest Service), and Heather Carey (U.S. Forest Service)

#### THE POWER OF PLACE: RITUAL LANDSCAPES AND ROCK ART WITHIN SOUTHERN ILLINOIS

Native Americans within Illinois are known to have recognized unique natural features as comprising parts of ritual landscapes imbued with power. A clustering of rock art, mortuary, and habitation sites near Fountain Bluff in Jackson County, Illinois, suggests that this three mile isolated bluff segment, which once extended out of a mosaic of swamps and lakes, represents one such landscape. In this paper we use GIS and



LIDAR data to reconstruct the ancient physical landscape that once surrounded the bluff and the relation of prehistoric mortuary and rock art sites within this region both to each other and the natural landscape in which they were once contained. (Symposium (8), Saturday, 8:30 am, Hoosiers/Hawkeyes Room)

#### Wagner, Mark J. (Center for Archaeological Investigations, Southern Illinois University), Rosemary Bolin (Southern Illinois University), and Lauren Austin (Southern Illinois University)

#### LEAD TURTLES AND ENGRAVED ARM BANDS: RETHINKING THE HISTORIC SAUK OCCUPATION AT THE CRAWFORD FARM SITE

The CAI is currently completing a report of investigations for a major Sauk village in northwestern Illinois (Crawford Farm) excavated by the University of Illinois in the 1960s. The artifact collection, although rich, represents only a fraction of what once existed at the site. The recent (2014) donation of a 1950s surface collection from Crawford Farm to the Illinois State Museum contains materials not represented in the U of I collection and expands of our knowledge of late eighteenth/early nineteenth century Sauk material culture. In this paper we describe these new items within the context of the site as a whole and the information that they provide regarding late historic Native American life ways within the lower Great Lakes. (Symposium (4), Friday, 10:45 am, Little Chief Room)

#### Walder, Heather (University of Wisconsin-Madison)

#### THE (REAL) VALUE OF SCRAP METAL: IDENTIFYING REGIONAL VARIATION THROUGH ANALYSIS OF HISTORIC "KETTLE SCRAP" AND OBJECTS MADE FROM IT

Attribute analysis of more than 3,000 copper and brass objects and waste materials from 17th and 18th century Upper Great Lakes archaeological contexts has yielded evidence for heterogeneity in the methods of production used to manufacture "hybrid" material culture forms that are recognized as hallmarks of colonial interaction. Several thousand years of copper-working experience provided a technological foundation for later Indigenous peoples, who manipulated European-made trade kettles and other metal items to produce familiar and useful forms of adornments and tools, such as tinkling cones and metal projectile points. Interrelated factors that likely affect documented artifact attributes include contexts of use and deposition, ethnically determined trading partnerships causing differential availability of raw material, and aesthetic preferences of craftworkers or their communities. This case-study highlights the usefulness of comparing technological practices evident in diverse material assemblages to investigate regional-scale interaction, a method applicable to many eras and locales of study.

(General Session (5), Saturday, 9:15 am, Spartans/Golden Gophers Room)

#### Wallace, Justin (Illinois State Archaeological Survey), Jenna Ely (Illinois State Archaeological Survey), and Steven L. Boles (Illinois State Archaeological Survey)

#### EXOTIC PROJECTILE POINTS AT ESTL: DISTANT CONNECTIONS AND INFLUENCES

A significant percentage of the projectile point assemblage from ESTL shows influence and/or exchange with several non-local groups. These connections are ex-



plored and the projectile point assemblage is briefly compared with other regional point assemblages to gauge the significance of these connections at ESTL. (Poster Session (1), Poster #4, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

Walsh, Ryan (Eastern Kentucky University), Tara Miller (Williams College), Aaron Stump (Indiana University-Purdue University of Indianapolis), Owen Rudloff (Indiana University-Purdue University of Indianapolis), Lucas Stamps (Indiana University-Purdue University of Indianapolis), Jessica Adamic (Indiana University-Purdue University of Indianapolis), Broxton Bird (Indiana University-Purdue University of Indianapolis), and William Gilhooly (Indiana University-Purdue University of Indianapolis)

#### POTENTIAL EVIDENCE OF HUMAN ACTIVITY AND AGRICULTURAL PRACTICES IN OHIO RIVER VALLEY LAKE SEDIMENTS

As part of the Angel Mounds NSF REU program, one focus was the examination of anthropogenic impacts related to Mississippian lifeways and agriculture in the Ohio River Valley. Isotopic and geochemical analyses were performed on samples from lake sediment cores at Hovey and Avery Lakes to better understand human activity and, in particular, possible shifts in agricultural practices and their eventual decline during the late Mississippian period. Human maize agriculture can leave distinct chemical signatures in the form of higher levels of carbon-13, while the presence of humans on a landscape can be identified through higher ratios of carbon to nitrogen and elevated concentrations of phosphorus in nearby lake sediments. These results will help form a picture of human activity and its impact to the landscape in the lower Ohio River Valle during the late Pre-Columbian and historic periods. (Poster Symposium (1), Poster #7, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)

#### Wamsley, Brooke (Illinois State University), Emily Blankenberger (Illinois State University), Veronica Butterfield (Illinois State University), and Maria O. Smith (Illinois State University)

#### SEX DIFFERENCES IN MECHANICAL STRESS IN ASPECTS OF THE HIP JOINT IN THE LATE WOODLAND SAMPLE FROM SCHROEDER MOUNDS

The proximal end of the femur and the acetabulum in adult individuals recovered from the later Late Woodland (AD 900-11000) Schroeder Mounds site (11HE177) from west-central Illinois were examined for the presence of Allen's fossa, Poiriers facet, periostosis, exostoses in the trochanteric fossa, third trochanter, osteoarthritis in the femoral head, acetabular rim, and auricular surface, and the irregularity and depth of the fovia. The sample consisted of forty-seven adults (94 femurs and acetabulae). No sex differences were detected, suggesting mechanically equivalent physical activities

(General Session (2), Friday, 10:45 am, Fighting Illini Room)



Ward, Grace (Center for American Archeology), Alison Shepherd (Center for American Archeology), Jennifer E. Pirtle (University of Tulsa), Katie Leslie (Center for American Archeology), Carol E. Colaninno (Center for American Archeology)

Analysis of a Middle Woodland Habitation Midden Located in the Lower Illinois River Valley

The Buried Gardens of Kampsville (TBGOK, 11C373), located along the base of a bluff in present-day Kampsville, IL, is a Middle Woodland (50 BCE–250 CE) habitation site with an underlying Archaic component. Excavations conducted in the 1970s encountered features and debris indicative of this Middle Woodland occupation. Recently the Center for American Archeology's Education Program returned to the site to conduct excavations of a large, dense midden located in the northwestern portion of the site boundaries. Stratigraphic profiles, artifact distributions, and soil descriptions of midden deposits suggest variability in depositional processes across our excavation boundaries. Specifically, the southern extent of the midden has a greater artifact density compared to the northern extent. Additional soil analyses and radiocarbon dating may elucidate formation processes and spatial variation across the midden and TBGOK.

(Poster Session (2), Poster #14, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

#### Watts-Malouchos, Elizabeth L. (Indiana University)

#### COMMUNITY AND COSMOS: New INSIGHTS INTO MISSISSIPPIAN COMMUNITY ORGANIZATION IN SOUTHWESTERN INDIANA FROM THE STEPHAN-STEINKAMP SITE (12PO33)

During the late 1980's, Cheryl Munson and the Glenn A. Black Laboratory of Archaeology at Indiana University undertook survey and excavations at the Stephan-Steinkamp site, a large Mississippian village in Posey County Indiana. This research exposed several storage and refuse pit features, structure basins, and a possible stockade. A recent magnetometry survey at Stephan-Steinkamp revealed a more extensive presence of a likely palisade along the northern limit of the site as well as a large number of superimposed structures composing a densely occupied village. This poster explores the parallels between palisade and structure construction at Stephan-Steinkamp and key Mississippian settlements nearby at Angel Mounds and the Southwind site. Preliminary results indicate interesting similarities in regional communal constructions, orientations, and alignments that reference far-flung interactions with Cahokia and engagements with the Cahokian cosmos and the wider Mississippian world.

(Poster Session (1), Poster #8, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

Watts-Malouchos, Elizabeth L. (Indiana University), Samuel Christian (Indiana University), Lydia Griffiths (Indiana University), Isabel Osmundsen (Indiana University), Elizabeth Roetter (Indiana University), and Chloe Strauss (Indiana University)

CREATING COMMUNITY THROUGH CURATION: THE REUSE OF MIDDLE WOODLAND LITHIC TOOLS IN MISSISSIPPIAN CONTEXTS IN SOUTHWESTERN INDIANA

Lithic tools from the Middle Woodland period (200 BC- AD 500) have been recovered in Mississippian contexts (AD 1100-1400) at both Angel Mounds and the



Southwind site in southwestern Indiana: Middle Woodland and other pre-Mississippian projectile points were recovered in domestic and mound contexts at Angel and Middle Woodland lamellar blades and projectile points at Southwind. Preliminary results from recent excavations at the Stephan-Steinkamp site (12PO33), a large Mississippian village located along the Ohio River between Southwind and Angel, reveal a similar pattern of reuse of Middle Woodland tools. The materialization of communal identities and the regional consolidation of Mississippian communities in southwestern Indiana has been unclear, however, new insights from the Stephan-Steinkamp site indicate that in addition to recognized Mississippian practices (i.e. shell tempering, wall trench architecture, and palisade construction) common and important practices in regional Mississippian communities involved the collection, reuse, and curation of Middle Woodland stone tools. (Poster Session (1), Poster #9, Friday, 8:30–11:30 am, Wolverines/Buckeyes Room)

#### Weiland, Andrew (The Ohio State University)

#### PALEOECOLOGY OF VACANT CENTERS: PRELIMINARY PALEOETHNOBOTANY AT THE GREAT CIRCLE OF HOPEWELL MOUND GROUP

In this facet of the Great Circle Project at Hopewell Mound Group (33RO27), we have the rare opportunity to analyze archaeobotanical remains from intact features associated directly with a Hopewell earthwork. This assemblage is distinctly divided by feature type and formation processes. Two samples are drawn from a series of very large postholes that make up a "woodhenge" on the interior of the 120 m diameter earthwork. The posthole samples represent secondary deposits rapidly backfilled using nearby surface soils. Samples from the ditch surrounding the circular embankment represent primary deposits, perhaps from feasting or firebased land management. This preliminary paleoethnobotanical interpretation of the Great Circle offers not the usual economic information available from middens and thermal features, but unique paleoecological information on a micro-scale, along with support for hypotheses about site formation processes.

(Poster Session (2), Poster #15, Friday, 1:30-4:30 pm, Wolverines/Buckeyes Room)

Wells, Joshua (Indiana University, South Bend), Andrew White (Grand Valley State University), Eric Kansa (Open Context), Sarah Kansa (Alexandria Archive Institute), Stephen J. Yerka (University of Tennessee, Knoxville), David Anderson (University of Tennessee, Knoxville), Thaddeus Bissett (University of Tennessee, Knoxville), Kelsey Noack Myers (Indiana University), and R. Carl DeMuth (Indiana University)

#### CHANGING HOUSEHOLDS AND RISING SEAS: TWO PERSPECTIVES ON THE POTENTIAL OF USING THE DIGITAL INDEX OF NORTH AMERICAN ARCHAEOLOGY (DINAA) TO LINK DATASETS

The Digital Index of North American Archaeology (DINAA) currently contains primary data from over 340,000 archaeological sites in 15 states in eastern North America. Two cases are used to explore the new research and management opportunities that are created by using DINAA in combination with other sources of data. First, the potential power of using DINAA as a "bridge" between specialized, independent datasets is considered using information compiled by the Eastern Woodlands Household Archaeology Data Project. Second, DINAA site data are combined with environmental data to model the effects of anticipated changes in sea



level due to global climate change on cultural resources near the Atlantic and Gulf coasts. DINAA data were compiled in cooperation with State Historic Preservation Offices in our partner states to demonstrate the feasibility and research value of interoperating state-maintained site databases into a single, large-scale, freely-available archaeological dataset that protects sensitive site location information. (Poster Session (3), Poster #19, Saturday, 8:00–11:00 am, Wolverines/Buckeyes Room)

#### Widga, Chris (Illinois State Museum), Dennis Lawler (Illinois State Museum), and Michael Wiant (Dickson Mounds Museum)

#### THE EARLIEST DOMESTICATED DOGS IN THE MIDCONTINENT: CHRONOLOGY, MORPHOLOGY, AND PALEOPATHOLOGY OF DOGS FROM THE KOSTER AND STILWELL SITES, CALHOUN COUNTY, IL

The Midwest has the earliest and possibly richest record of dog burials in North America. New direct AMS 14C dates on Archaic-period canids from the region confirms this pattern (Koster Horizon XI, 10,130-9680 cal BP; Stilwell II, 10,200-9630 cal BP; Rodgers Shelter, 9000-8600 cal BP; Rodgers Shelter 8560-8210 cal BP). Additional morphological studies indicate a high level of regional variability in the shape and size of these early dogs, consistent with back-breeding to wild canids. The pre-mature development of joint-related osteoarthritis and the low incidence of healed trauma in these populations further suggests use as pack animals and occasional hunting companions. Although perhaps these results are not surprising, it is difficult to rectify these data with extant scenarios of dog domestication at a global scale.

(Symposium (10), Saturday, 4:00 pm, Hoosiers/Hawkeyes Room)

Widga, Chris (Illinois State Museum), Stacey Lengyel (Illinois State Museum), Jeff Saunders (Illinois State Museum), Greg Hodgins (AMS Laboratory, University of Arizona), Kayla Kolis (Illinois College), Doug Walker (Department of Geology, University of Kansas), and Al Wanamaker (Department of Earth Sciences, Iowa State University)

#### MAMMOTHS AND MASTODONS IN THE GREAT LAKES: NEW DATA ON THE CHRONOLOGY AND PALEOECOLOGY OF EXTINCTION

Distinguishing between different megafaunal extinction scenarios requires careful consideration of archaeological, chronological and paleoecological datasets. We report 77 new direct-dates on midwestern proboscideans in order to improve the regional chronology of extinction. We also review the zooarchaeology and taphonomy of 576 localities comprising >1600 proboscidean elements. Although single-animal localities are by far the most common, multi-animal and multi-taxic assemblages are also present. All taxa survive until the Bølling-Allerød, when Mammuthus were extirpated ~13,470 cal BP (~11,630 14C BP). Two mastodons from Schimelphenig Bog, WI (~12,700 cal BP; ~10,800 14C BP) are the only proboscideans from the region to survive into the Younger Dryas. Most multi-animal death assemblages occur within 500 years of the terminal extinction date. Against this regional background, demonstrated human or carnivore impacts on proboscideans are extremely rare, despite the ubiquity of natural death assemblages. (Poster Session (2), Poster #12, Friday, 1:30–4:30 pm, Wolverines/Buckeyes Room)



#### Wilson, Gregory D. (University of California, Santa Barbara) and Brian Geiger (University of California, Santa Barbara)

THE HISTORY OF WARFARE, RITUAL, AND COMMUNITY FORMATION IN THE 13TH CENTURY CEN-TRAL ILLINOIS RIVER VALLEY.

This paper considers the historical relationship between warfare, ritual, and community in the context of the Orendorf site, a 13th century, fortified town in the Central Illinois River Valley. A deep history of interaction with Cahokia provided the regional inhabitants of the CIRV with an assortment of social strategies by which to negotiate the challenges of rapid nucleation and coalescence during an era of intensifying hostilities. But while history literally and figuratively provided the social structures used to build community at Orendorf, the site's residents drew on their traditions selectively and in novel ways to address the changing regional situation. (Symposium (8), Saturday, 10:30 am, Hoosiers/Hawkeyes Room)

#### Witt, Kelsey E. (University of Illinois School of Integrative Biology), Kelsey Noack Myers (Indiana University), Elizabeth L. Watts-Malouchos (Indiana University)

#### ANCIENT CANINE DNA: IMPLICATIONS FOR LATE WOODLAND AND MISSISSIPPIAN (AD 600– 1400) POPULATIONS AND RELATEDNESS

Analysis of ancient DNA from prehistoric dog remains can examine population histories and migration patterns in both dogs and their human owners. This paper focuses on aDNA analyses of canine remains from three sites: the Late Woodland component of the Janey B. Goode site (11S1232) in the American Bottom region, the Early Mississippian component of the Stephan-Steinkamp site (12PO33) in Posey County, Indiana, and the Mississippian component of the Angel site (12Vg1) in Vanderburgh County, Indiana. A portion of the mitochondrial genome was sequenced for all the individuals to assess relatedness between populations. Preliminary results indicate genetic similarities between dogs from the three sites and other dog populations in the Americas, suggesting the possibility of far-flung trade interactions. Similarity of the DNA sequences across time also suggests some continuity between the Late Woodland and Mississippian populations in the region. (General Session (2), Friday, 10:15 am, Fighting Illini Room)

#### Yancey-Bailey, Miranda L. (Illinois State Archaeological Survey), Dale Tucker (Illinois State Archaeological Survey), and Benjamin Rhode (Illinois State Archaeological Survey)

#### MAPPING AN ANCIENT CITY: CARTOGRAPHY OF THE ISAS INVESTIGATIONS AT 115706

From 2008 through 2012 the Illinois State Archaeological Survey (ISAS) excavated over eleven hectares (or approximately 5%) of the East St. Louis Mounds Center (115706). The excavations were undertaken in preparation for IDOT's construction of the new Interstate 70 Connector, a key part of Illinois and Missouri's joint Mississippi River Bridge (MRB) Project. Approximately 6,000 prehistoric features dating to the Terminal Late Woodland and Mississippian periods were uncovered and excavated during the course of the investigation. Beginning in 2013 eight ISAS staff members at the Central Illinois Field Office and American Bottom Field Station scanned and digitized over 2,000 feature plan maps creating the base data for one of the largest site geographic information systems in the history of Midwestern



archaeology. This poster presents the preliminary site temporal component maps for 115706, a review of our cartographic methodology, and proposes future directions for spatial analysis utilizing this unique dataset.

(Poster Session (1), Poster #21, Friday, 8:30-11:30 am, Wolverines/Buckeyes Room)

#### Yuellig, Amber (Applied Anthropology Laboratories, Ball State University), Christine K. Thompson (Ball State University), and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University)

#### APPLIED ANTHROPOLOGY LABORATORIES STUDENT INVOLVEMENT OVER TIME

The Applied Anthropology Laboratories (AAL) in the Department of Anthropology at Ball State University focuses on providing student-centered hands-on training in archaeology and CRM. As we move toward becoming an increasingly student-focused operation supported by grant and CRM funding sources, we have been able to provide students diverse opportunities to engage outside of the classroom through both experiential and immersive learning. This operational shift of focusing on student learning has resulted in a substantial increase in paid work opportunities for more students, internships, assistantships, and volunteer opportunities. These opportunities result in students graduating with job experiences in research, archaeological survey, report writing, and other transferable skills valuable in an increasingly competitive job market.

(Poster Symposium (2), Poster #1, Saturday, 8:00-11:00 am, Wolverines/Buckeyes Room)

#### Zelin, Alexey (Illinois State Archaeological Survey)

#### EARLY TERMINAL LATE WOODLAND CERAMIC ASSEMBLAGES FROM THE VAUGHN BRANCH UPLAND LOCALITY IN THE NORTHERN AMERICAN BOTTOM

Three early Terminal Late Woodland occupations were discovered in the dissected uplands of the northern American Bottom during ISAS excavations as a part of the IDOT proposed FAP-310 project. Two sites, Grove and Bay Pony, are situated on upland ridges adjacent to Vaughn Branch, an intermittent stream draining into the Mississippi River floodplain. An additional Terminal Late Woodland occupation was uncovered at the Vasey site situated south of Vaughn Branch on the bluff edge overlooking the Mississippi River floodplain. A unique ceramic assemblage dated to the transitional Late Woodland/Terminal Late Woodland or early stages of the Terminal Late Woodland period was recovered from the Grove site. This assemblage is characterized by undecorated cordmarked to the lip vessels that are frequently tempered with chert. The Bay Pony ceramic assemblage is characterized by the presence of Late Bluff jars, the majority of which are made of Madison County Shale paste, and are believed to represent a Loyd phase affiliation. The early Terminal Late Woodland ceramic assemblage at the Vasey site represents a hybrid of cordmarked to the lip vessels intermixed with the Late Bluff jars, and possibly associated with the Collinsville phase. The discovery of these assemblages adds new data for understanding Early Terminal Late Woodland taxonomy in the Northern American Bottom.

(General Session (2), Friday, 8:30 am, Fighting Illini Room)











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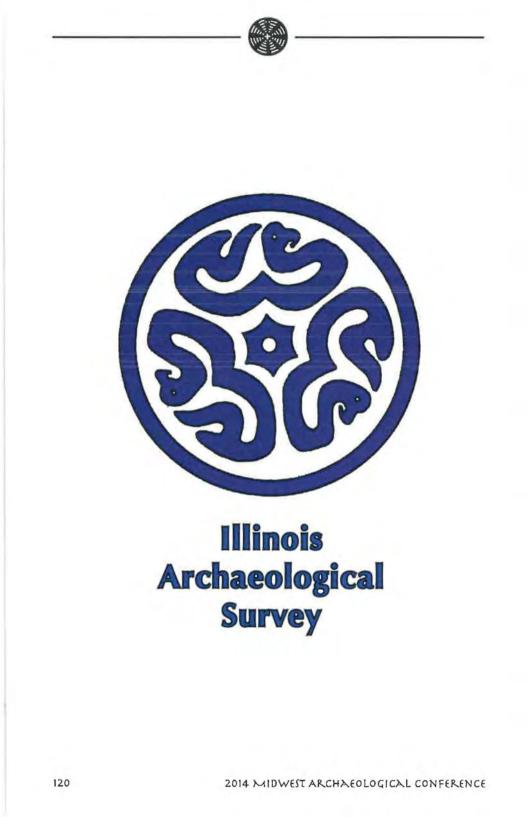
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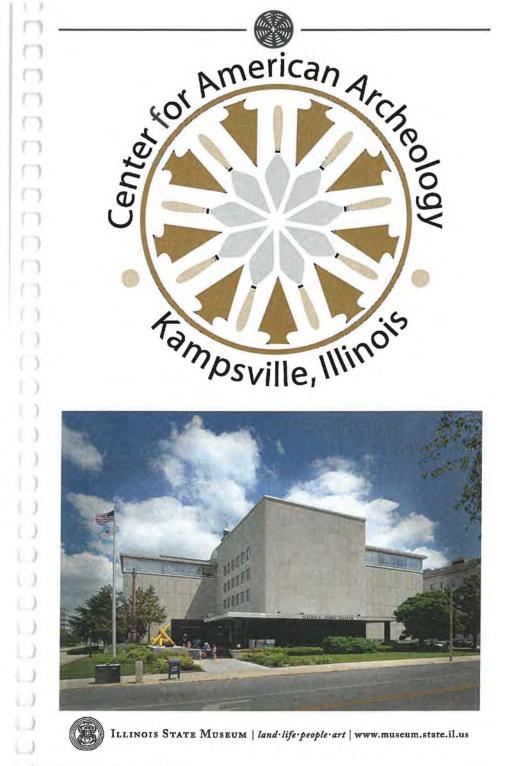
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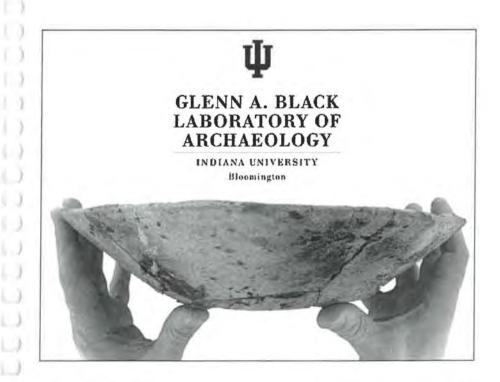


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# North American Archaeology

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