
57TH ANNUAL
**MIDWEST
ARCHAEOLOGICAL
CONFERENCE**

LA CROSSE, WISCONSIN
OCTOBER 13–15, 2011



MAC EXECUTIVE COMMITTEE:

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Kathryn Parker (Independent)

MCJA Editor: Mark R. Schurr (University of Notre Dame)

CONFERENCE ARRANGEMENTS:

Hosted by: Mississippi Valley Archaeology Center (MVAC)

University of Wisconsin–La Crosse

UW-L Archaeological Studies Program

Conference Chair: Constance M. Arzigian

Program Chair: Joseph A. Tiffany

2011 Conference Organizing Committee:

Constance M. Arzigian

Michael Bednarchuk

Jean Dowiasch

Bonnie Jancik

Wendy Holtz-Leith

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Katherine Stevenson

Michael Straskowski

James L. Theler

Joseph A. Tiffany

Vicki Twinde-Javner

WELCOME TO LA CROSSE
AND THE 2011
MIDWEST ARCHAEOLOGICAL
CONFERENCE



On behalf of the Mississippi Valley Archaeology Center, we would like to welcome you to the 57th Annual Midwest Archaeological Conference. Our co-hosts are the Archaeological Studies Program of the Department of Sociology and Anthropology and the University of Wisconsin–La Crosse. The conference has also received generous support from several sponsors representing archaeological research and professional organizations and businesses who have advertisements in the program. We thank all these sponsors for helping to make this conference a success. Additional thanks go to Continuing Education and Extension, and the many volunteers.

La Crosse has hosted the Midwest Archaeological Conference twice before, once in 1991 and again in 2001. With its proximity to the Mississippi River and its beautiful scenery, La Crosse always seems to be a great draw for the conference, and this year is no exception. At this writing we have over 300 people registered, 179 papers and presentations, and 6 workshops. As you'll see, this year's conference features interesting symposia, workshops, field trips, social events, and contributed papers and posters on a wide range of topics. We hope you enjoy the conference and your stay in La Crosse!

Constance M. Arzigian, Conference Chair
Joseph A Tiffany, Program Chair

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Cover Design and Conference Artwork: The program cover and 2011 meeting logo, designed by Mike Bednarchuk, combine a photograph of a small sandstone face effigy excavated in 2009 from the Lower Sand Lake Site (47Lc45) in La Crosse County, Wisconsin, with portions of a map of the Swatek Ridge Mound Group (47Cr19) in Crawford County, Wisconsin. The latter was originally published in I. A. Lapham's seminal 1855 work *The Antiquities of Wisconsin* (Plate LI.), reissued by The University of Wisconsin Press. Session dividers were derived from both Oneota vessel motifs recovered within the La Crosse locality (original illustrations by Bonnie Jancik) and effigy mound outlines from Swatek Ridge.

GENERAL CONFERENCE INFORMATION



REGISTRATION AND FACILITIES

Registration

La Crosse Center, lower level

- Thursday, 7:00 AM–5:30 PM
- Friday, 7:00 AM–5:00 PM
- Saturday 7:00 AM–NOON

Lost and Found

Lost and Found will be housed at the Conference Registration Tables. To inquire about lost items after the conference, contact midwestconference2011@gmail.com.

Pay Phones

Pay phones are located in the La Crosse Center lobbies.

Smoking Policy

The La Crosse Center is a smoke-free facility. The UW-L campus prohibits smoking inside of all buildings and within 20 feet of all buildings.

Parking at the La Crosse Center

A free, public parking ramp is located at 2nd and Jay Street, with a Skywalk connection to the La Crosse Center. (Use upper levels of ramp.)

Parking at UW-La Crosse/Mississippi Valley Archaeology Center (MVAC)

Limited two-hour street parking is available around the UW-L campus, and short-term (20-minute) and handicapped parking is available outside the MVAC building. Conference organizers strongly encourage use of the shuttle bus for the Friday evening reception at MVAC.

Computer Internet Access

There is free wireless internet throughout the La Crosse Center. The password is “lacrossecenter” without the quotation marks.

EXHIBITION AND VENDOR ROOM

The Exhibition and Vendor Room is located across from Room B and will be open at these times:

- Thursday: 1:00–5:00 PM
- Friday: 8:00 AM–5:00 PM
- Saturday: 8:00 AM–5:00 PM

Exhibitors:

Ancient Society Books
ArchaeoTerra
Center for Archaeological Investigations – Southern Illinois University Carbondale
Continental Mapping Consultants
Gustav’s Library
Jim Theler
John Doershuk – Iowa OSA
Mississippi Valley Archaeology Center
Rock Art in Watercolors, LLC
University of Wisconsin Press–Arctic Anthropology
Wind Turbine Orchard
Wisconsin Archeological Society

SOCIAL EVENTS

La Crosse Queen River Cruise with pizza and beverages

Thursday, 5:30–7:00 PM. Leaves from Riverside Park.

Reception, Open House, and Cash Bar

Archaeology Center and Laboratories at the University of Wisconsin–La Crosse.
Friday, 6:00–9:00 PM

Shuttle bus will run continuously between the La Crosse Center and the lab during the reception.

Saturday Reception and Banquet

5:00–6:30 PM – Reception and Cash Bar, Zielke Suite

6:30–9:00 PM – Banquet Hall: Banquet and Plenary Speaker: Mark Seeman (Kent State University) – *Hopewell Time and Materiality*

BUSINESS MEETINGS

MAC Executive Board Meeting

Friday, 11:30 AM–1:00 PM, Zielke Suite

Midwest Archaeological Conference Annual Meeting

Saturday, 4:30–5:30 PM, Room B

Wisconsin Archeological Survey Fall Meeting

Saturday, 4:00–4:30 PM, Room A

WORKSHOPS

WisDOT Workshop: Changes in the Wisconsin Department of Transportation Facilities Development Manual

Thursday, 8:00–10:00 AM and 1:00–3:00 PM, Room C

Lithics Exchange

Thursday, 9:00 AM–NOON, Room D

NAGPRA Workshop: Native American Graves Protection and Repatriation Act from a Tribal Perspective

Thursday, 10:00 AM–NOON and 3:00–5:00 PM, Room C

Public Outreach Interest Group

Thursday, 10:30–11:30 AM, Room A

Paleoethnobotany Workshop

Thursday, 10:00 AM–NOON, Archaeology Center and Laboratories, University of Wisconsin–La Crosse

STUDENT INFORMATION

Students' Workshop: Building your Career in Archaeology

Saturday, 10:30 AM–NOON, Room D; lunch to follow for registered participants

Student Paper Competition: Evaluation Committee

Robert "Ernie" Boszhardt
Jodie O'Gorman
Kathryn Parker
Sissel Schroeder

SYMPOSIA

The Cultural Landscape of the Western Frontier, 1800–1825, organized by Richard L. Fishel (Illinois State Archaeological Survey), Mark C. Branstner (Illinois State Archaeological Survey), and David J. Nolan (Illinois State Archaeological Survey)

Symposium 1: Thursday, 1:00–4:00 PM, Room B

Archaeology in Northeastern Minnesota: From Paleo to Historic, organized by Susan C. Mulholland (Duluth Archaeology Center, LLC), Mark P. Muñiz (St. Cloud State University), and Stephen L. Mulholland (Duluth Archaeology Center, LLC)

Symposium 2: Friday, 8:00–11:30 AM, Room B

Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, organized by Matthew G. Hill (Iowa State University) and Joseph A. Tiffany (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse)

Symposium 3: Friday, 1:00–4:45 PM, Room B

The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley, organized by Paul J. Pacheco (SUNY Geneseo), Jarrod Burks (Ohio Valley Archaeology, Inc.), and Dee Anne Wymer (Bloomsburg University of Pennsylvania)

Symposium 4: Saturday, 9:45–11:30 AM, Room C

New Research in the Lake Koshkonong Region in Southeastern Wisconsin, organized by Seth A. Schneider (University of Wisconsin–Milwaukee) and Robert J. Jeske (University of Wisconsin–Milwaukee)

Symposium 5: Saturday, 1:00–4:00 PM, Room A

Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, organized by Kathleen L. Ehrhardt (Illinois State Museum) and James W. Bradley (ArchLink)

Symposium 6: Saturday, 12:45–4:00 PM, Room B

FIELD TRIPS

Historic Downtown La Crosse Walking Tour

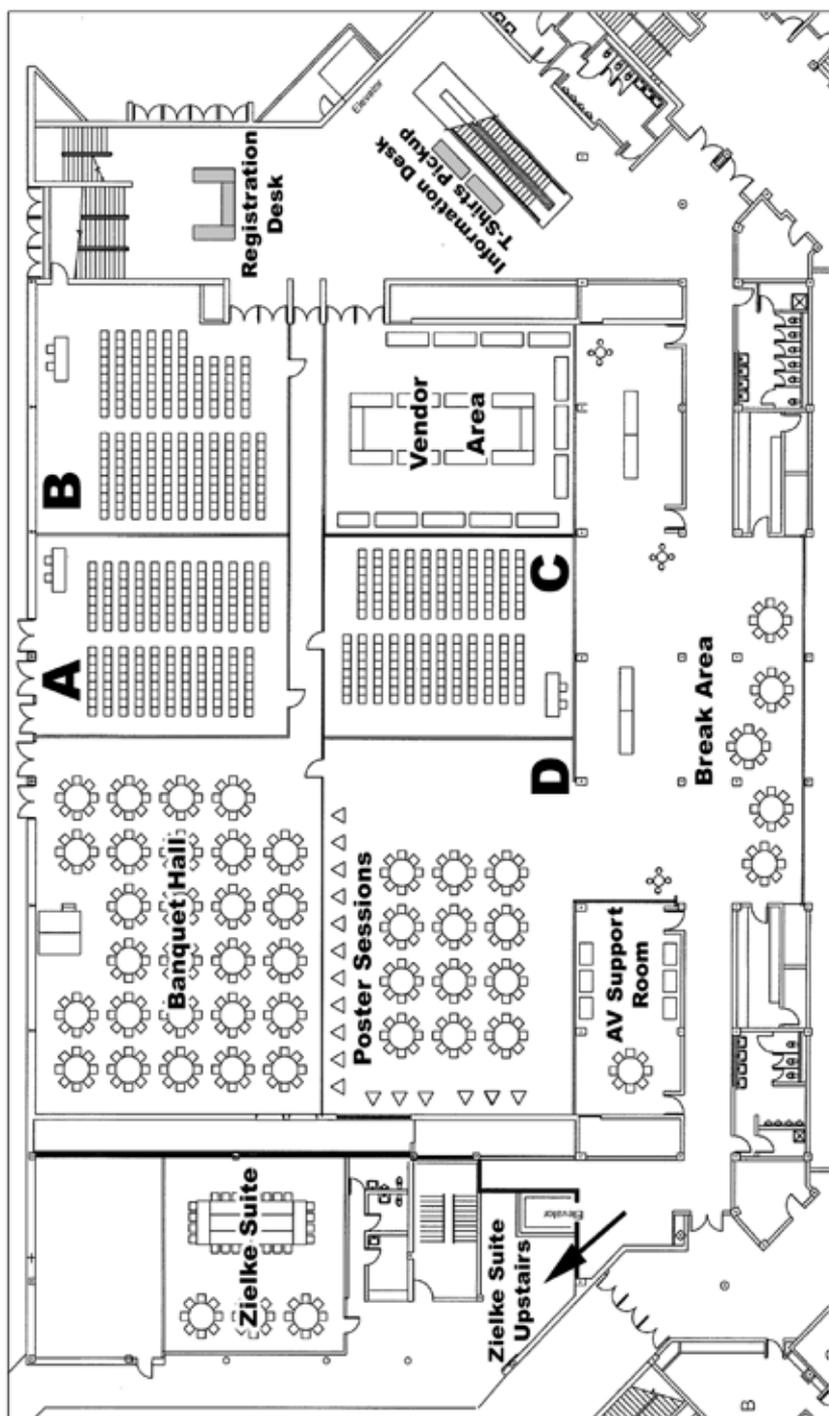
\$5.00 (includes information packet), Saturday, 11:00 AM–NOON

The Mississippian Presence in Trempealeau, WI

\$10 (includes bus transportation and tour packet), Sunday. Bus will leave the conference center at 9:00 AM and return at 12:30 PM.

Prairie du Chien area and Effigy Mounds National Monument

No fee, Sunday, self-guided trip



Thursday October 13

Room A	Room B	Room C	Room D	Other
10:30-11:30 AM Public Outreach Interest Group		8-10 AM Workshop 1: WisDOT workshop 10-NOON Workshop 2: NAGPRA	9 AM-NOON Lithics exchange 10-NOON Paleoethnobotany Workshop-held at UWL Archaeology Lab	
Lunch				
1-3 PM Gen. Session 1: Woodland and Oneota 3-4:45 PM Gen. Session 2: Hopewell	1-4 PM Symposium 1: Cultural Landscape of Western Frontier 1800-1825	1-3 PM Workshop 1: WisDOT workshop 3-5 PM Workshop 2: NAGPRA	2-4 PM Poster 1: Floral and Faunal Studies; Poster 2: Field Reports	

5:30 - 7 PM Boat Cruise; leaves from dock at the north end of Riverside Park

Friday October 14

Room A	Room B	Room C	Room D	Other
8:15-11:15 AM Gen. Session 3: American Bottom	8-11:30 AM Symposium 2: Archaeology in NE MN: From Paleo to Historic		9-11 AM Poster 3: Lithics and Specialized Studies	
Lunch				
1-3 PM Gen. Session 4: Regional Studies 3:15-4:30 PM Gen. Session 5: New Approaches	1-4:45 PM Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler	1-4:30 PM Gen. Session 6: Historic Archaeology		11:30 AM-1 PM MAC Executive Board Mtg

6-9 PM Reception and Open House at Archaeology Center and Laboratories,
University of Wisconsin-La Crosse
Shuttle bus runs continuously from LAX Center to lab

MIDWEST ARCHAEOLOGICAL CONFERENCE

LA CROSSE, WISCONSIN ■ OCTOBER 13–15, 2011

THURSDAY MORNING
OCTOBER 13
WORKSHOPS

*All events at the La Crosse Center
unless otherwise noted.*



**WisDOT Workshop: Changes in the Wisconsin Department of
Transportation Facilities Development Manual**

Room C, 8:00–10:00 AM (continued 1:00–3:00 PM)

Organizers: Cynthia Stiles (Cynthia M. Stiles, RPA Consulting) and Melinda J. Young (Lac du Flambeau Tribal Historic Preservation Office)

Moderator: Kelly S. Jackson (Statewide Tribal Liaison, Wisconsin Department of Transportation)

Panelists: Larry Balber (Tribal Historic Preservation Officer, Red Cliff Band of Lake Superior Chippewa Indians), David Grignon (Tribal Historic Preservation Officer, Menominee Indian Tribe of Wisconsin), Edith Leoso (Tribal Historic Preservation Officer, Bad River Band of Lake Superior Chippewa Indians), William Quackenbush (Tribal Historic Preservation Officer, The Ho-Chunk Nation), and Melinda Young (Tribal Historic Preservation Officer, Lac du Flambeau Band of Lake Superior Chippewa Indians)

Lithics Exchange

Room D, 9:00 AM–NOON

Organizer: Michael Straskowski (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse)

**NAGPRA Workshop: Native American Graves Protection and
Repatriation Act from a Tribal Perspective**

Room C, 10:00 AM–NOON (continued 3:00–5:00 PM)

Organizers: Cynthia Stiles (Cynthia M. Stiles, RPA Consulting) and Melinda J. Young (Lac du Flambeau Tribal Historic Preservation Office)

Moderator: Kelly S. Jackson (Statewide Tribal Liaison, Wisconsin Department of Transportation)

Panelists: Larry Balber (Tribal Historic Preservation Officer, Red Cliff Band of Lake Superior Chippewa Indians), David Grignon (Tribal Historic Preservation Officer, Menominee Indian Tribe of Wisconsin), Edith Leoso (Tribal Historic Preservation Officer, Bad River Band of Lake Superior Chippewa Indians), William Quackenbush (Tribal Historic Preservation Officer, The Ho-Chunk Nation), and Melinda Young (Tribal Historic Preservation Officer, Lac du Flambeau Band of Lake Superior Chippewa Indians)

Public Outreach Interest Group

Room A, 10:30–11:30 AM

Organizers: Bonnie Jancik (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) and Jean Dowiasch (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse)

Paleoethnobotany Workshop

Archaeology Center and Laboratories, University of Wisconsin–La Crosse,
10:00 AM–NOON

Organizer: Constance Arzigian (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse)

THURSDAY AFTERNOON
OCTOBER 13



Symposium 1: The Cultural Landscape of the Western Frontier, 1800–1825

Room B, 1:00–4:00 PM

Organizers: Richard L. Fishel (Illinois State Archaeological Survey), Mark C. Branstner (Illinois State Archaeological Survey), and David J. Nolan (Illinois State Archaeological Survey)

- 1:00 William E. Whittaker (Office of the State Archaeologist, The University of Iowa) – *Overview: When the American Frontier Stalled along the Upper Mississippi, 1804–1832*
- 1:15 Cynthia L. Peterson (Office of the State Archaeologist, The University of Iowa), Anton Till (Office of the State Archaeologist, The University of Iowa), and Steven L. DeVore (Midwest Archaeological Center, National Park Service) – *Archaeology at Iowaville, the 1765–1820 Báxoje (Ioway) Village on the Des Moines River*
- 1:30 Saul Schwartz (Princeton University) and William Green (Logan Museum of Anthropology, Beloit College) – *Grounding Metaphors, Materially: Perspectives from Iowaville on Culture and Power in Colonial Interaction*
- 1:45 Ferrel Anderson (Quad Cities Archaeological Society) – *Saukenuk: Locating and Platting the Last Principal Village of the Sauk Nation before the Black Hawk War of 1831–1832*
- 2:00 William E. Whittaker (Office of the State Archaeologist, The University of Iowa) – *Searching for Quashquame’s Village*

- 2:15 John F. Doershuk (Office of the State Archaeologist, The University of Iowa), Joe Alan Artz (Office of the State Archaeologist, The University of Iowa), William E. Whittaker (Office of the State Archaeologist, The University of Iowa), and Cynthia L. Peterson (Office of the State Archaeologist, The University of Iowa) – *The Archaeological Context of the Original Fort Madison Battlefield and Black Hawk's Ravine (13LE10)*
- 2:30 Break
- 2:45 David J. Nolan (Illinois State Archaeological Survey) and Claire P. Dappert (Illinois State Archaeological Survey) – *Fort Johnson/Cantonment Davis: War of 1812–Era Military Installations at the Des Moines Rapids*
- 3:00 Mark C. Branstner (Illinois State Archaeological Survey) and Robert N. Hickson (Illinois State Archaeological Survey) – *Fort Johnson and Cantonment Davis: Excavation Notes and Material Recoveries*
- 3:15 Richard L. Fishel (Illinois State Archaeological Survey) – *Analysis of War of 1812 Buttons from Fort Johnson and Cantonment Davis, Hancock County, Illinois*
- 3:30 Steven R. Kuehn (Illinois State Archaeological Survey) – *A Preliminary Analysis of the Fort Johnson/Cantonment Davis Faunal Assemblage, Hancock County, Illinois*
- 3:45 Regena Schantz (Colonel Davenport Historical Foundation) – *More than a Company of Soldiers: Fort Armstrong in the 1820s*



General Session 1: Woodland and Oneota

Room A, 1:00–3:00 PM

- 1:00 Michael Michlovic (Minnesota State University Moorhead), George Holley (Minnesota State University Moorhead), and Rinita Dalan (Minnesota State University Moorhead) – *A Survey Perspective on Settlement and Culture History on the Southwest Minnesota Prairie*
- 1:15 Jared Langseth (Minnesota State University, Mankato) – *Preliminary Results of Lithic Analysis from the Langseth Site (21NO11), Nobles County, Minnesota*
- 1:30 G. Patrick Bonnie (Normandale Community College) and Susan H. Krook (Normandale Community College) – *A Middle Woodland Period Habitation Site in Murray County, Minnesota*
- 1:45 George Holley (Minnesota State University Moorhead) – *Oneota in the Northwest: The Minnesota River Oneota Region*

- 2:00 Susan M. T. Myster (Hamline University), Lindsey Jo Helms (Illinois State University), and Maria O. Smith (Illinois State University) – *Post-Mortem Human Bone Modification: Demographic Analysis of Mortuary Tapping in Northern Minnesota*
- 2:15 Susan Kooiman (Illinois State University) – *Old Pots, New Approaches: A Functional Analysis of Woodland Pottery and Decoration along the South Shore of Lake Superior*
- 2:30 Terrance Martin (Illinois State Museum) and Angela Perri (Durham University) – *Animal Remains from the Getewaaking Site (20MK457), A Multi-Component Late Woodland Site on Mackinac Island, Michigan*
- 2:45 Michael J. Hambacher (Commonwealth Cultural Resources Group, Inc.) – *Turkeys, Toads, Points, and Pits: Initial Impressions from Excavations at 20OT283, Ottawa County, Michigan*



WisDOT Workshop continuation (see Thursday morning)

Room C, 1:00–3:00 PM



General Session 2: Hopewell

Room A, 3:00–4:45 PM

- 3:00 David M. Stothers (University of Toledo, Firelands Archaeological Research Center) – *Five New Middle Woodland Hopewellian Phases in Northern Ohio*
- 3:15 Glenwood Boatman (WLEARP, University of Toledo) and David M. Stothers (WLEARP, University of Toledo) – *The Middle Woodland (100 B.C.–500 A.D.): Hopewellian Esch Phase North Central Ohio Heckleman Site Linear Ditches*
- 3:30 Douglas Charles (Wesleyan University) – *The Use of Color in Hopewellian Ritual*
- 3:45 Ashley Evans Busch (Arizona State University) and Jeremiah Stager (University of Alabama) – *A Brave New, Old World: Utilizing Computer Modeling to Reconstruct and Research Hopewell Earthworks in Ohio*

- 4:00 Mark Lynott (National Park Service), Rolfe Mandel (Kansas Geological Survey), James A. Brown (Northwestern University), and Bret Ruby (National Park Service) – *New Evidence Relating to the Construction of Mound #7, Mound City Group, Chillicothe, Ohio*
- 4:15 Christopher Carr (Arizona State University) and Robert McCord (Arizona Museum of Natural History) – *Ohio Hopewell Composite Creatures and a Journey to an Afterlife: Biological Identification and Contextual Interpretation*
- 4:30 N’omi Greber (Cleveland Museum of Natural History) and Robert Horn (Earlham College) – *Cross Cultural Geometry*



Poster Session 1: Floral and Faunal Studies

Room D, 2:00–4:00 PM

- Amanda Bailey (University of Wisconsin–La Crosse) – *Floral Analysis of an Oneota Feature and Its Implications*
- Megan Leigl (University of Wisconsin–La Crosse) – *A Faunal Analysis of the Northern Engraving Site (47Lc164) and Comparison to the Pammel Creek (47Lc61) and Jim Braun (47Lc59) Sites*
- Wendy Munson Scullin (Midwest Ethnohorticulture) and Michael Scullin (Midwest Ethnohorticulture) – *Phytolith Profiles: Maize Typologies as Identified through Phytolith Analysis*
- Stuart Nealis (University of Kentucky) – *The Effect of Freshwater Mussel Consumption on Dental Wear during the Late Archaic Period*
- Melody K. Pope (Office of the State Archaeologist, The University of Iowa) and Anson Kritsch (Office of the State Archaeologist, The University of Iowa) – *Hidden in Stone: Plant Processing with Chert Implements*



Poster Session 2: Field Reports

Room D, 2:00–4:00 PM

- Robert “Ernie” Boszhardt (University of Wisconsin Baraboo–Sauk County), Timothy R. Pauketat (University of Illinois at Urbana-Champaign), and Danielle M. Benden (University of Wisconsin–Madison) – *Assessing the Little Bluff Platform Mounds at Trempealeau, Wisconsin*

- Danielle M. Benden (University of Wisconsin–Madison), Timothy R. Pauketat, (University of Illinois at Urbana-Champaign), and Robert “Ernie” Boszhardt (University of Wisconsin–Baraboo/Sauk County) – *Early Mississippian Houses at the Uhl Site in Trempealeau, Wisconsin*
- Michael Conner (Illinois State Museum, Dickson Mounds) and Jodie O’Gorman (Michigan State University) – *A Unique Oneota Public Structure in the Central Illinois River Valley*
- John D. Richards (University of Wisconsin–Milwaukee) and Thomas J. Zych (University of Wisconsin–Milwaukee) – *Recent Archaeological Investigations at the Aztalan Site (47JE0001)*
- Andrew J. Upton (Michigan State University), Frank J. Raslich (Michigan State University), Jodie A. O’Gorman (Michigan State University), Michael D. Conner (Illinois State Museum, Dickson Mounds), and Timothy J. Horsley (Museum of Anthropology, University of Michigan) – *An Assessment of Magnetometry at Morton Village*



NAGPRA Workshop continuation (see Thursday morning)

Room C, 3:00–5:00 PM

THURSDAY EVENING
OCTOBER 13
RIVER CRUISE



La Crosse Queen River Cruise

With pizza and beverages.

5:30–7:00 PM. Leaves from Riverside Park.

FRIDAY MORNING
OCTOBER 14



Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic

Room B, 8:00–11:30 AM

Organizers: Susan C. Mulholland (Duluth Archaeology Center, LLC), Mark P. Muñiz (St. Cloud State University), and Stephen L. Mulholland (Duluth Archaeology Center, LLC)

- 8:00 Susan C. Mulholland (Duluth Archaeology Center, LLC), Mark P. Muñiz (St. Cloud State University), and Stephen L. Mulholland (Duluth Archaeology Center, LLC) – *The Status of Archaeology in Northeastern Minnesota: A Retrospective*
- 8:15 Peter Englebert (Provincial Archaeologist, retired), and William Fox (Canadian Museum of Civilization) – *A Knife Lake Survey—36 Years Ago*
- 8:30 Jon Nelson (Confederation College, retired) – *KLS Quarries—Searching the Canadian Side of Knife Lake*
- 8:45 Mark P. Muñiz (St. Cloud State University) – *Preliminary Results of Recent Research at the Knife Lake Paleoindian “Daughter District”*
- 9:00 Susan C. Mulholland (Duluth Archaeology Center, LLC) – *Knife Lake Siltstone off Knife Lake: The Amoeber 1 Quarry Site*
- 9:15 Dan Wendt (Minnesota Historical Society, Volunteer Program) – *Evaluation of Hydration and Heat Treatment to Improve Knife Lake Siltstone*
- 9:30 Jennifer Rovanpera (Saint Cloud State University) – *Insights from the Debitage Analysis at the Lillian Joyce Site*
- 9:45 Gregory Schwab (Saint Cloud State University) and Philip Bauschard (Saint Cloud State University) – *Cultural Palimpsest Deposition at the Lillian Joyce Site, BWCAW*
- 10:00 Break
- 10:15 Susan C. Mulholland (Duluth Archaeology Center, LLC) and Stephen L. Mulholland (Duluth Archaeology Center, LLC) – *Early Paleoindian Occupations in Southeastern Pine County: Implications for Northern Minnesota*
- 10:30 Stephen L. Mulholland (Duluth Archaeology Center, LLC) and Susan C. Mulholland (Duluth Archaeology Center, LLC) – *The Cloquet River: A Paleoindian Highway in Northeastern Minnesota*

- 10:45 Jennifer Hamilton (Duluth Archaeology Center, LLC) – *Unusual Ceramics in Private Collections of Northeastern Minnesota*
- 11:00 David Mather (Minnesota Historical Society) – *The Zooarchaeology of Voyageurs National Park: A View from the Rainy Lake City Saloon*
- 11:15 Susan C. Mulholland (Duluth Archaeology Center, LLC), Stephen L. Mulholland (Duluth Archaeology Center, LLC), and Jennifer Hamilton (Duluth Archaeology Center, LLC) – *Points and Pits: Survey Results on the Lake Superior Shore (SHPO Region 9)*



General Session 3: American Bottom

Room A, 8:15–11:15 AM

- 8:15 Thomas E. Emerson (Illinois State Archaeological Survey) and Michael G. Farkas (Illinois State Archaeological Survey) – *Re-envisioning the Cahokia Landscape*
- 8:30 William Iseminger (Cahokia Mounds State Historic Site), John Kelly (Washington University), and Susanna Bailey (Powell Archaeological Research Center) – *Pursuing Cahokia's Enigmatic North Palisade*
- 8:45 John E. Kelly (Washington University) and James A. Brown (Northwestern University) – *Assessing the Impact of the Ramey Plaza and Its Creation on the Cahokian Landscape*
- 9:00 Thomas E. Emerson (Illinois State Archaeological Survey), Joseph M. Galloy (Illinois State Archaeological Survey), Patrick R. Durst (Illinois State Archaeological Survey), and Douglas K. Jackson (Illinois State Archaeological Survey) – *Excavations in Greater Cahokia: Exploring the Heart of the East St. Louis Mound Center*
- 9:15 Douglas Jackson (Illinois State Archaeological Survey) and Patrick Durst (Illinois State Archaeological Survey) – *Linear Paired Feature Patterns from the East St. Louis Site: A Proposed Swale Area Agricultural Field System*
- 9:30 Andrew Fortier (Illinois State Archaeological Survey), Kathryn E. Parker (Great Lakes Ecosystems), and Mary Simon (Prairie Research Institute, Illinois State Archaeological Survey) – *A Reevaluation of the Sponeemann Phase and Its Implication for Understanding Maize Use in the Midwest*
- 9:45 Alexey Zelin (Prairie Research Institute, Illinois State Archaeological Survey) – *The Sponeemann Ceramic Component of the Vaughn Branch Upland Locality, Northern American Bottom*
- 10:00 Break

- 10:15 B. Jacob Skousen (University of Illinois) – *The Emerald Site: The 1960s Excavations*
- 10:30 Maura Elizabeth Hogan (Indiana University Bloomington) – *Pottery and Social Process at an Upland Mississippian Mound Center: The Pfeffer Site in Lebanon, IL*
- 10:45 Amanda Butler (University of Illinois at Urbana-Champaign) – *Playing Detective with Mississippian Period Axe-Heads: Detailing the Results of a Provenance Study Using Portable X-Ray Fluorescence*
- 11:00 Daniel R. Smith (Illinois State Archaeological Survey) – *Late Woodland Discoidals from the Clinton Silt Site, Jersey County, Illinois*



Poster Session 3: Lithics and Specialized Studies

Room D, 9:00–11:00 AM

- Allison J. Foley (Indiana University South Bend) – *Four New Radiocarbon Dates from the Morton Mound Group in the Central Illinois River Valley*
- Peter J. Geraci (Illinois State Archaeological Survey/University of Wisconsin–Milwaukee) – *The Lamellar Blade Assemblage from the Buried Gardens of Kampsville, a Havana Hopewell Village in the Lower Illinois River Valley*
- Wendy J. Church (The Ohio State University) and Robert A. Cook (The Ohio State University) – *Shifts in Lithic Technology at the Clark Site (33Wa124): A Late Woodland Site in Southwest Ohio*
- Justin Cramb (Central Michigan University) – *The Darrah Creek Site (20MC78): An Archaeological Investigation and Collection Analysis*
- Kurtis Kettler (Office of the State Archaeologist, The University of Iowa) and Kevin Verhulst (Office of the State Archaeologist, The University of Iowa) – *Projectile Points from the Palace Site (13PK966): An Iowa Raddatz Type-Site*
- Mark A. McConaughy (Pennsylvania Bureau for Historic Preservation), Gretchen E. Anderson (Carnegie Museum of Natural History), and Deborah G. Harding (Carnegie Museum of Natural History) – *A Close-up Look at Two Early Woodland Copper Objects from West Virginia and Pennsylvania*
- Kristin Hedman (Illinois State Archaeological Survey), Julie Bukowski (Illinois State Archaeological Survey), and Dawn Cobb (Illinois State Museum/Illinois Historic Preservation Agency) – *Culturally Modified Teeth from Illinois: Cahokia and Beyond*

- Christopher Pulliam (U.S. Army Corps of Engineers, St. Louis District), Andrea Adams (U.S. Army Corps of Engineers, St. Louis District), and Catherine McMahon (U.S. Army Corps of Engineers, St. Louis District) – *Our Nation's Veterans and Indiana's Archaeological Heritage: Curation of Archaeological Collections at the St. Louis Veterans Curation Program Facility*
- Rebecca M. Barzilai (Indiana University Bloomington) – *The Spatial and Contextual Setting of the Painted Daub at the Angel Site (12Vg1)*
- Roland L. Rodell (University of Wisconsin–Rock County) and Norman C. Sullivan (Marquette University) – *Notched Teeth and Trophy Taking in the Northern Mississippi Valley*
- Shannon Freire (University of Wisconsin–Milwaukee) and Ashley Dunford (University of Wisconsin–Milwaukee) – *Wormian Bones: A Reliability Study of Methods for Scoring a Non-metric Human Osteological Trait*



MAC Executive Board Meeting

Zielke Suite, 11:30 AM–1:00 PM

FRIDAY AFTERNOON
OCTOBER 14



Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler

Room B, 1:00–4:45 PM

Organizers: Matthew G. Hill (Iowa State University) and Joseph A. Tiffany (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse)

- 1:00 Matthew G. Hill (Iowa State University) – *Introduction to “Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler”*
- 1:15 Robert “Ernie” Boszhardt (University of Wisconsin–Baraboo/Sauk County) – *Deer Jim, Found a Bone. Will You ID?*

- 1:30 Katherine P. Stevenson (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) – *Understanding Oneota Adaptations to the La Crosse Locality: The Contributions of James L. Theler*
- 1:45 Constance Arzigian (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse), William Gresens (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse), and Beth Hall (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) – *The Seasonal Round and Oneota Subsistence: A View from the Swennes Site*
- 2:00 Robert F. Sasso (University of Wisconsin–Parkside) – *Le Boeuf Sauvage: Cultural Manifestations and Importance of Bison in Oneota and Historic Cultures of the Upper Midwest*
- 2:15 Janet Speth (University of Wisconsin–Green Bay) – *The Birds of Brogley Rockshelter*
- 2:30 Joseph A. Tiffany (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) and Stephen C. Lensink (Office of the State Archaeologist, The University of Iowa) – *Correlating Climate and Culture Change with Plains Village Sites on the Prairie-Plains Border, A.D. 900–1675*
- 2:45 Break
- 3:00 William Green (Logan Museum of Anthropology, Beloit College) – *Transition, Reorganization, Replacement? Political and Economic Change in Southeast Iowa, ca. A.D. 200–400*
- 3:15 Luther J. Leith (University of Oklahoma) – *Food or Friend: Analysis of Woodland Period Dog Remains in Eastern Oklahoma*
- 3:30 Mark Seeman (Kent State University) – *Modeling Fluted Point and White-Tail Deer Densities in Eastern North America*
- 3:45 Jonathan D. Baker (University of Wisconsin–La Crosse) – *The History and Future of Research on Archaeologically-Derived Freshwater Mussels from the Upper Midwest*
- 4:00 Don G. Wyckoff (University of Oklahoma) – *No Past, Little Future: A Brief, Select History of Southern Plains Paleoenvironmental Studies*
- 4:15 Matthew G. Hill (Iowa State University), Marlin F. Hawley (Wisconsin Historical Society), Christopher C. Widga (Illinois State Museum), Michael F. Kolb (SMG, Inc.), and Alan D. Wanamaker (Iowa State University) – *Archaeology, Zooarchaeology, and Paleoecology of the Interstate Park Bison Site*
- 4:30 Discussant: James B. Stoltman (University of Wisconsin–Madison)



General Session 4: Regional Studies

Room A, 1:00–3:00 PM

- 1:00 Brian M. Butler (Center for Archaeological Investigations, Southern Illinois University Carbondale) and Wesley A. Jackson (Center for Archaeological Investigations, Southern Illinois University Carbondale) – *Strange Doings in the Lower Ohio Borderlands—The Cypress Citadel Ceramics*
- 1:15 Edward Jakaitis (Illinois State Archaeological Survey) – *Preliminary Research of the Otter Creek Drainage in the Pecatonica–Sugar River Watershed*
- 1:30 Michael Gornick (Prairie Research Institute, Illinois State Archaeological Survey) and Madeleine Evans (Prairie Research Institute, Illinois State Archaeological Survey) – *Exploring the Use of Upland Depressions in the East Central Illinois Prairie*
- 1:45 Cynthia Stiles (Cynthia M. Stiles, RPA Consulting), William Kurtz (Bureau of Indian Affairs), and Jerry Smith (Lac Courte Oreilles Tribal Historic Preservation Office) – *Archaeological Investigation and Site Conservation on the Chippewa Flowage, Lac Courte Oreilles Reservation, Wisconsin*
- 2:00 Kevin Nolan (Ball State University) – *Changes in Prehistoric Landscape Exploitation Strategies in Central Ohio: A GIS Analysis*
- 2:15 Kira Kaufmann (Commonwealth Cultural Resources Group) and Kevin Mueller (Commonwealth Cultural Resources Group) – *Predictive Model of Archaeological Sensitivity for Prehistoric Occupation along US 12, Southwest Michigan*
- 2:30 Douglas Kullen (Cultural Resource Analysts, Inc.) and Andrew Martin (Cultural Resource Analysts, Inc.) – *Floodplain Landforms and the Age of Prehistoric Sites in the “Big Bend” of the Ohio River, Vanderburgh County, Indiana*
- 2:45 Allison Lange Mueller (University of Wisconsin–Milwaukee, Commonwealth Cultural Resources Group, Inc.) – *A Regional Analysis of Prehistoric Rock Art Sites in Iowa and Juneau Counties, Wisconsin*
- 3:00 Break



General Session 5: New Approaches

Room A, 3:15–4:30 PM

- 3:15 Zack Gaydos (Prairie Research Institute, Illinois State Archaeological Survey) and Madeleine Evans (Illinois State Archaeological Survey) – *Unidentified Flintknappers in East Central Illinois Prehistory: Examining a Fledgling Chronology*
- 3:30 Meghan E. Buchanan (Indiana University Bloomington) – *The Mighty Mississippi and Magnetometry; Assessing Flood Impacts at the Common Field Site*
- 3:45 Burton Smith (University of Minnesota) – *The Little Pottery Collection That Could: Exploring the Research Potential of a 130-Year-Old Historically Collected and Unprovenanced Mississippian Ceramic Vessel Assemblage*
- 4:00 Carol Richards (Illinois State University) – *A Behavioral Analysis of Cordage: Looking Beyond Final Twist Direction of Cordage Impressions*
- 4:15 Shannon Davis-Foust (University of Wisconsin–Milwaukee) and Richard Mason (University of Wisconsin–Oshkosh) – *Using Sclerochronology to Date the Occupancy of an Archaeological Site*



General Session 6: Historic Archaeology

Room C, 1:00–4:30 PM

- 1:00 John Franzen (USDA Forest Service), Eric Drake (USDA Forest Service), Terrance Martin (Illinois State Museum), and Kathryn Parker (Great Lakes Ecosystems) – *Archaeological Evaluation of an Early 19th Century Maple Sugar Camp in Northern Michigan*
- 1:15 Heather Walder (University of Wisconsin–Madison) – *Glass Trade Beads as Temporal Markers for the Contact Era of Wisconsin: Compositional Analysis Results*
- 1:30 Jay T. Sturdevant (Midwest Archeological Center, National Park Service) – *Recent Archeological Investigations at Fort Charlotte, Grand Portage National Monument, Minnesota*
- 1:45 Andrew E. LaBounty (National Park Service, Midwest Archeological Center) – *Awaiting the Call: Historic Sites Monitoring and Preservation at Fort Charlotte (21CK7), Grand Portage National Monument, Minnesota*
- 2:00 Rochelle Lurie (Midwest Archaeological Research Services, Inc.), Clare Tolmie (The University of Iowa), and Jay Martinez (Midwest Archaeological Research Services, Inc.) – *Nesswe Neppe, The Meeting of the Three Waters: Material Remnants of Oral History*

- 2:15 Elizabeth Spott (University of Wisconsin–Milwaukee) – *A Gendered Use of Space: Description and Spatial Analysis of Material Culture Recovered from the Chief Richardville House (12AL1887)*
- 2:30 Philip G. Millhouse (Illinois State Archaeological Survey) and Scott Wolfe (Galena African American Foundation) – *Dominant Narratives and Forgotten Communities: The Archaeological Potential for Illuminating the 19th Century African American Community in Jo Daviess County, Illinois*
- 2:45 Break
- 3:00 Stephen Jankiewicz (Illinois State Archaeological Survey) and Mark Branstner (Illinois State Archaeological Survey) – *GET A GRIP ON IT: Coffin and Casket Handles from the 19th Century*
- 3:15 Scott J. Demel (Northern Michigan University) – *Artifact Density, Distribution, and Displacement in the Dunal Environment of the ca. 1848–1860s Cable’s Bay Fishing Village, Beaver Island, Lake Michigan*
- 3:30 Amy Rosebrough (Wisconsin Historical Society) – *The East Branch Site (47-LG-0123): An Unusual Late Post-Contact Textile Assemblage*
- 3:45 Donald Gaff (University of Northern Iowa) – *The Lou Henry Hoover House, Waterloo, Iowa*
- 4:00 David Kujawa (Commonwealth Cultural Resources Group, Inc./Indiana University Northwest) – *Archaeological Survey of the Material Service: Documenting 23 Years of History*
- 4:15 Geoffrey Jones (Archaeo-Physics, LLC) – *Subsurface Radar Imaging of an Historic “Receiving Tomb”*

FRIDAY EVENING
OCTOBER 14
RECEPTION AND
OPEN HOUSE



Reception, Open House, and Cash Bar

Archaeology Center and Laboratories at the University of Wisconsin–La Crosse

6:00–9:00 PM

Shuttle bus will run continuously between the La Crosse Center and the lab during the reception.

SATURDAY MORNING
OCTOBER 15



General Session 7: Middle and Late Woodland

Room A, 8:15–11:30 AM

- 8:15 Anya C. Frashuer (Arizona State University), Christopher Carr (Arizona State University), and Michael D. Glascock (University of Missouri Research Reactor Center) – *Clay Selection in Hopewell Vessel Production: A Look at Pottery from a Multi-Component Scioto Hopewell Site*
- 8:30 Mark R. Schurr (University of Notre Dame) and Della C. Cook (Indiana University Bloomington) – *The Temporal and Cultural Contexts of the Enigmatic Cremation Burials from the Yokem Site, Illinois*
- 8:45 Jason L. King (Center for American Archeology), Taylor H. Thornton (University of Illinois at Urbana-Champaign), Ang DeMarco (Utah Valley University), and Jane E. Buikstra (Arizona State University) – *Middle and Late Woodland Habitation Occupations at the Mound House Site (11GE7), Greene County, Illinois*
- 9:00 Nicole A. Raslich (Michigan State University) – *By the Community, for the Community: Engaging Archaeology in Contemporary Urban Contexts*
- 9:15 Marcus Schulenburg (University of Wisconsin–Milwaukee) and Richard W. Edwards (University of Wisconsin–Milwaukee) – *Washington Island Archaeology: Preliminary Ceramics Analysis of the Gibson Site (Door County, WI)*
- 9:30 Elissa Hult (University of Wisconsin–Milwaukee) – *X-Ray Fluorescence of Havana-Type Ceramic Sherds and Implications for the Waukesha Focus*
- 9:45 David W. Benn (Bear Creek Archeology, Inc.) – *The Rise of Weaver Social Formations in the Upper Mississippi and Illinois River Basins*
- 10:00 Break
- 10:15 Joe Harl (Archaeological Research Center of St. Louis) – *Insights into the Terminal Late Woodland Period at Site 23FR1553, Washington, Missouri*
- 10:30 Elizabeth L. Watts (Indiana University Bloomington) and Susan M. Alt (Indiana University Bloomington) – *Building Community at The Dead Man's Curve Site*
- 10:45 Levi Smith (University of Northern Iowa) – *Ceramics from the Black Medicine Site: A Woodland Camp in Black Hawk County, Iowa*

- 11:00 Sarah Caldwell (University of Northern Iowa) – *John C. Hartman and the Archaeology of Black Hawk County, Iowa*
- 11:15 Jody Clauter (University of Wisconsin–Milwaukee) – *Spatial Differences between Decorative and Technical Attribute Clusters in Wisconsin Late Woodland Ceramics*



General Session 8: Mississippian

Room B, 8:00–11:45 AM

- 8:00 George R. Milner (Penn State) – *Warfare in the Late Prehistoric Midwest: New Information from Norris Farms in Illinois*
- 8:15 Jessica Haglund (Illinois State University) – *Preliminary Analysis of Animal Remains from the Myer-Dickson Site, Fulton County, Illinois*
- 8:30 Kjersti Emerson (Illinois State Archaeological Survey) – *The Huber Phase Component at the Hoxie Farm Site: Broadening Our Understanding of Huber Phase Ceramics*
- 8:45 Katy Mollerud (University of Wisconsin–Milwaukee) – *Compositional Analysis of Cambria Phase Pottery Using X-Ray Fluorescence*
- 9:00 C. Martin Raymer (Kentucky Archaeological Survey) and Christopher R. Moore (University of Indianapolis) – *A Consideration of the Social and Historical Context of Site 12D123, a Middle Fort Ancient Circular Village in Dearborn County, Indiana*
- 9:15 G. William Monaghan (Glenn A. Black Laboratory of Archaeology/Mathers Museum, Indiana University Bloomington), Timothy Schilling (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Anthony Krus (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), and Timothy Baumann (Glenn A. Black Laboratory of Archaeology/Mathers Museum, Indiana University Bloomington) – *Refining Time: A Bayesian Approach to Chronology at the Angel Site*
- 9:30 Timothy Schilling (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington) – *Mound Explorations at Angel, Retrospective Thoughts and Prospective Opportunities*
- 9:45 Break

- 10:00 Erica Ausel (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Anthony M. Krus (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Jeremy Wilson (Indiana University–Purdue University Indianapolis), and G. William Monaghan (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington) – *From a New Perspective: 2011 Excavations at Angel Mounds*
- 10:15 Dru McGill (Indiana University Bloomington) – *Investigating Technological Style and Assemblage Diversity in Mississippi Plain Pottery and Pottery Trowels from Angel Mounds (12Vg1)*
- 10:30 Robert Cook (The Ohio State University) and Jarrod Burks (The Ohio State University, Ohio Valley Archaeological Consultants) – *As Good as It Has Gotten: Magnetic Mapping of Two Fort Ancient Village Structures*
- 10:45 Douglas Shaver (University of Missouri Kansas City) – *Steed-Kisker Archaeology: Cooperative Research on the Smith's Fork Site, Clay County, Missouri*
- 11:00 Rebecca M. Barzilai (Indiana University Bloomington), Maura E. Hogan (Indiana University Bloomington), and Meghan E. Buchanan (Indiana University Bloomington) – *Investigating Craft Production and Resource Utilization at a Mississippian Mound Center: A Mineralogical Analysis of Clays and Ceramics from the Common Field Site (23SG100)*
- 11:15 Erin Benson (Illinois State Archaeological Survey) and Joseph Galloy (Illinois State Archaeological Survey) – *Owl Medicine: Three Ceramic Owl Effigies from the East St. Louis Mound Center*
- 11:30 Gregory Wilson (University of California, Santa Barbara) and Steven Kuehn (Illinois State Archaeological Survey) – *Getting to the Point of Diversity in Mississippian Projectile Frequencies*



General Session 9: Paleo and Archaic

Room C, 8:15–9:30 AM

- 8:15 Dillon H. Carr (Grand Rapids Community College) and William A. Lovis (Michigan State University) – *The Round Lake Cache: A Gaihey Phase Biface Cache from Central Michigan*
- 8:30 Michael Perry (Office of the State Archaeologist, The University of Iowa) – *An Early Archaic Component in Southeastern Iowa*
- 8:45 Fernanda Neubauer (University of Wisconsin–Madison, CAPES Foundation) and Michael J. Schaefer (University of Wisconsin–Madison) – *Patterns of Settlement, Subsistence, Seasonal Mobility and Cultural Interaction of the Late Archaic Hunter Gatherer Groups of Michigan's Upper Peninsula (4,500–2,000 B.P.)*

- 9:00 James M. Pisell (Illinois State Archaeological Survey), Lauren M. Fitts (Illinois State Archaeological Survey), and Robert W. Monroe (Illinois State Archaeological Survey) – *Investigations at the Trinity Hill Site (11JY582): Late Woodland and Archaic Occupation of the Piasa Creek Valley, Jersey County, Illinois*
- 9:15 Rhiannon Jones (Great Lakes Archaeological Research Center, Inc.) – *On the Border: A Pre-Contact Butchering Site in the Prairie-Forest Ecotone in Northwestern Minnesota*
- 9:30 Break



Symposium 4: The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley

Room C, 9:45–11:30 AM

Organizers: Paul J. Pacheco (SUNY Geneseo), Jarrod Burks (Ohio Valley Archaeology, Inc.), and Dee Anne Wymer (Bloomsburg University of Pennsylvania)

- 9:45 Paul J. Pacheco (SUNY Geneseo) – *Investigating Ohio Hopewell Settlement and Subsistence Patterns in the Central Scioto Valley: An Overview of the Brown's Bottom Project*
- 10:00 Jarrod Burks (Ohio Valley Archaeology, Inc.) – *Using Geophysical Survey as the Foundation of Our Research Design: Brown's Bottom, Ohio*
- 10:15 Noah Kanter (SUNY Geneseo) – *A Structural Engineering Analysis of Three Ohio Hopewell Structures Excavated during the Brown's Bottom Project*
- 10:30 Sandra Bender (SUNY Geneseo) – *Buried Secondary Refuse Deposits at the Lady's Run Site (33Ro1105): Implications for Ohio Hopewell Sedentism*
- 10:45 Aaron Kather (SUNY Geneseo) – *The Ohio Hopewell Ceramic Assemblage from Lady's Run (33Ro1105)*
- 11:00 DeeAnne Wymer (Bloomsburg University of Pennsylvania) – *The Paleoethnobotanical Assemblage from the Brown's Bottom Project: Hopewell Kith, Kin, and Hearth*
- 11:15 Discussant: William S. Dancy (The Ohio State University) – *Multistage Research Design in the Service of Middle Woodland Settlement Pattern Research in Southern Ohio*



Students' Workshop: Building Your Career in Archaeology

Room D, 10:30 AM–NOON; lunch to follow for registered participants

Organizers: Heather Walder (University of Wisconsin–Madison) and Richard Edwards (University of Wisconsin–Milwaukee)

Speakers: John Doershuk, Sean Dunham, Lynn Goldstein, William Green, Terrence Martin, Robert Sasso



Historic Downtown La Crosse Walking Tour

11:00 AM–NOON; leaves from registration desk, La Crosse Center

Tour Leader: Barbara Kooiman (University of Wisconsin–La Crosse)

SATURDAY AFTERNOON
OCTOBER 15



Symposium 5: New Research in the Lake Koshkonong Region in Southeastern Wisconsin

Room A, 1:00–4:00 PM

Organizers: Seth A. Schneider (University of Wisconsin–Milwaukee) and Robert J. Jeske (University of Wisconsin–Milwaukee)

- 1:00 Daniel M. Winkler (Carroll University) – *The Early Paleoindian Occupation of the Lake Koshkonong Region*
- 1:15 Sara Ramond (University of Wisconsin–Milwaukee), Kate Foley Winkler (University of Wisconsin–Milwaukee), Robert Jeske (University of Wisconsin–Milwaukee), Kristin Hedman (Illinois State Archaeological Survey), Phil Slater (University of Illinois at Urbana-Champaign), and Matthew Fort (University of Illinois at Urbana-Champaign) – *Late Archaic Lifeways in Southeastern Wisconsin: Evidence from the Jaco Site (47JE1192)*

- 1:30 Richard H. Kubicek (Great Lakes Archaeological Research Center), Nicholas J. Weber (Great Lakes Archaeological Research Center), and Jennifer Haas (Great Lakes Archaeological Research Center) – *A Preliminary Report on Recent Excavations at the Finch Site (47JE0902) in Jefferson County, Wisconsin*
- 1:45 Kira Kaufmann (Commonwealth Cultural Resources Group), William F. Kean (University of Wisconsin–Milwaukee), and Michael Baierlipp (University of Wisconsin–Milwaukee) – *Interpretation of Effigy Mound Construction in the Lake Koshkonong Region Using Applications of Geoelectrical Techniques*
- 2:00 Eric J. Schuetz (University of Wisconsin–Milwaukee), Robert E. Ahlrichs (University of Wisconsin–Milwaukee), and Seth A. Schneider (University of Wisconsin–Milwaukee) – *Paste Compositional Analysis of Oneota Pottery Vessels in the Lake Koshkonong Region*
- 2:15 Break
- 2:30 Richard W. Edwards IV (University of Wisconsin–Milwaukee) and Kimberly Pater (University of Wisconsin–Milwaukee) – *What's on the Menu: An Updated Analysis of Oneota Subsistence at the Crescent Bay Hunt Club (47JE904)*
- 2:45 Katherine Sterner (University of Wisconsin–Milwaukee) – *Oneota Lithics: A Functional Analysis of the Crescent Bay Hunt Club Assemblage*
- 3:00 Robert E. Ahlrichs (University of Wisconsin–Milwaukee) and Seth A. Schneider (University of Wisconsin–Milwaukee) – *Paste Compositional Analysis of Exotic Pottery Vessels from the Crescent Bay Hunt Club*
- 3:15 Kathleen M. Foley Winkler (Marquette University) – *Oneota and Langford Mortuary Practices from Eastern Wisconsin and Northeast Illinois.*
- 3:30 Mark Hill (Ball State University/University of Wisconsin–Milwaukee) and Robert Jeske (University of Wisconsin–Milwaukee) – *Laser Sourcing of Copper from Late Archaic and Late Prehistoric Sites near Lake Koshkonong, Southeastern Wisconsin*
- 3:45 Robert A. Birmingham (University of Wisconsin–Waukesha) – *Oneota Ceramics from the Crabapple Point Site on Lake Koshkonong: The James Bussey Collection*



Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750

Room B, 12:45–4:00 PM

Organizers: Kathleen L. Ehrhardt (Illinois State Museum) and James W. Bradley (ArchLink)

- 12:45 James W. Bradley (ArchLink) – *From the Edge to the Middle, the Onondaga Iroquois in 1550 and 1675*
- 1:00 Andrea Carnevale (Archaeological Services, Inc.), Ronald F. Williamson (Archaeological Services, Inc.), Martin S. Cooper (Archaeological Services, Inc.), and Jennifer Birch (University of Georgia) – *Hidden from View: The Story of an Early Sixteenth Century Iron Tool in Eastern North America*
- 1:15 Duane Esarey (University of North Carolina–Chapel Hill) – *The 17th Century Northeastern Standardized Marine Shell Ornament Industry*
- 1:30 Lisa Marie Anselmi (SUNY Buffalo State) – *Northern Iroquoian Use of Copper-Base Metal in the Early and Middle Contact Periods*
- 1:45 Kurt A. Jordan (Cornell University), Charlotte L. Pearson (Cornell University), and Darren S. Dale (Cornell University) – *The Characterization, Use and Provenance of Red Stone at Seneca Iroquois Sites, circa 1688–1754*
- 2:00 William A. Fox (Parks Canada) – *Red, White and Black: Ornamental Stone Selection for Lower Great Lakes Area Pipes and Beads*
- 2:15 Timothy J. Abel (Jefferson Community College) and David M. Stothers (University of Toledo) – *Middle Men or Big Men?: The Context of Late Prehistoric and Protohistoric Trade Interaction in Northwestern Ohio*
- 2:30 Penelope B. Drooker (New York State Museum) – *Redstone, Shell, and Copper/Brass in Late Prehistoric and Protohistoric Fort Ancient Contexts*
- 2:45 Break
- 3:00 Cheryl Ann Munson (Indiana University Bloomington) and David Pollack (Kentucky Archaeological Survey/ University of Kentucky) – *Far and Wide: Late Mississippian/Protohistoric Extraregional Interactions at the Mouth of the Wabash*
- 3:15 Kathleen L. Ehrhardt (Illinois State Museum) – *Metals in Motion? Native Copper and European Copper-Base Metal Forms and Distribution in the 17th Century Protohistoric North American Interior*
- 3:30 Jeffery A. Behm (University of Wisconsin–Oshkosh) – *Middle Historic Use of Marine Shell, Pipestone, and European Metal from the Perspective of the Bell Site*
- 3:45 Dale R. Henning (Illinois State Museum/United States National Museum, Smithsonian Institution) – *Red Stone (Catlinite?) Distribution Patterns in the Upper Mississippi Valley: A Few Tentative Suggestions*



Poster Session 4: Settlement Studies

Room D, 2:00–4:00 PM

- Jeremy Doyle (University of Wisconsin–Milwaukee) – *The Bezella Cedarburg Bog Collection: Application of GIS to a Regional Archaeological Collection*
- Edward Herrmann (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Robert Mahaney (Glenn A. Black Laboratory of Archaeology, Stone Age Institute, Indiana University Bloomington), Timothy Baumann (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), and Loren Clark (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington) – *Midwest Lithic Raw Material Repository at the Glenn A. Black Laboratory of Archaeology*
- Jason T. Herrmann (University of Arkansas), Duncan P. McKinnon (University of Arkansas), Jason L. King (Center for American Archeology), and Jane E. Buikstra (Arizona State University) – *Summary of Three Seasons of Remote Sensing at Mound House (11GE7), Greene County, Illinois*
- Brad Logan (Kansas State University) – *Taxonomic Revision of Kansas City Hopewell: The Quarry Creek Case*
- Marco Valeri (University of Bologna), Immacolata Valese (University of Bologna), Davide Domenici (University of Bologna), Maurizio Cattani (University of Bologna), Florencia Debandi (University of Bologna), John Kelly (Washington University), and Maurizio Tosi (University of Bologna) – *Mapping Cahokia: New Perspectives and Approaches to Cahokia's West Plaza*
- Robert J. Watson (Commonwealth Cultural Resources Group), Kira E. Kaufmann (Commonwealth Cultural Resources Group), and Kevin J. Mueller (Commonwealth Cultural Resources Group) – *Reinterpreting and Revising Mound Boundaries through Interdisciplinary Means: The Inlet Mound Group*
- Joshua Wells (Indiana University Bloomington, South Bend) – *Digital Dimensions of Mississippian Settlement: Strengths and Weaknesses of Scalar Efforts with Curated Data for GIS Analysis and Modeling*



Wisconsin Archeological Survey Fall Meeting

Room A, 4:00–4:30 PM

**Midwest Archaeological Conference Annual Meeting**

Room B, 4:30–5:30 PM

SATURDAY EVENING
OCTOBER 15

RECEPTION AND
BANQUET

**Reception and Cash Bar**

5:00–6:30 PM, Zielke Suite

Banquet and Plenary Speaker

6:30–9:00 PM, Banquet Hall

Speaker: Mark Seeman (Kent State University) – *Hopewell Time and Materiality*

SUNDAY,
OCTOBER 16



Mississippian, Woodland, and Historic Sites in the Trempealeau, Wisconsin Locality

Bus will leave the La Crosse Center at 9:00 AM and return at 12:30 PM.

Tour Leaders: Robert “Ernie” Boszhardt (University of Wisconsin Baraboo–Sauk County), William Green (Logan Museum of Anthropology, Beloit College), Roland Rodell (University of Wisconsin–Rock County), Danielle Benden (University of Wisconsin–Madison) Tim Pauketat (University of Illinois at Urbana-Champaign)



Prairie du Chien Area and Effigy Mounds National Monument: Self-Guided Tour

Information available at information desk.

MIDWEST ARCHAEOLOGICAL CONFERENCE

LA CROSSE, WISCONSIN ■ OCTOBER 13–15, 2011

SYMPOSIUM ABSTRACTS

*Symposium abstracts are
listed in order of appearance.*



Fishel, Richard L. (Illinois State Archaeological Survey), Mark C. Branstner (Illinois State Archaeological Survey), and David J. Nolan (Illinois State Archaeological Survey) – *The Cultural Landscape of the Western Frontier, 1800–1825*

The first quarter of the nineteenth century is marked by significant changes in the cultural landscape of what was then the western frontier of the United States. This time period is noteworthy for the American military's occupation and expansion up the Mississippi Valley that not only saw the abandonment of this area by British troops after the conclusion of the War of 1812, but also resulted in the forced removal or assimilation of Native groups. These circumstances eventually opened the territory for American colonialism and permanent settlement. This session presents the results of recent archaeological investigations and research into selected Native villages and American military sites within the Mississippi Valley region of the western frontier, focusing specifically on the area between Quincy, Illinois and Clinton, Iowa.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 1:00–4:00 PM, Room B

Mulholland, Susan C. (Duluth Archaeology Center, LLC), Mark P. Muñiz (St. Cloud State University), and Stephen L. Mulholland (Duluth Archaeology Center, LLC) – *Archaeology in Northeastern Minnesota: From Paleo to Historic*

Northeastern Minnesota has seen a steady increase in archaeological investigations and a corresponding change in the perception of the research potential over the last 40 years. This symposium presents a wide variety of the type of research currently being conducted. A series of presentations focuses on the Knife Lake quarries, which is the most recent example of the depth of archaeological potential in the region. Other research projects include collections documentation at the Reservoir Lakes in the Cloquet River valley, faunal analysis at Voyageur's National Park, on-going research on the impact of the Fires of 1918, and survey along the North Shore of Lake Superior.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 8:00–11:30 AM, Room B

Hill, Matthew G. (Iowa State University), and Joseph A. Tiffany (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) – *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*

Over the course of a four decade career, James L. Theler made numerous original contributions to Midwest and Plains prehistory and paleo-environment studies that exemplify the best of contemporary archaeology. As a passionate educator and steward of archaeology, Theler trained a generation of archaeologists, encouraging them to think scientifically and to represent the discipline professionally. Colleagues and former students honor Theler's legacy in a series of papers that highlight the breadth and impact of his contributions and interests.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 1:00–4:45 PM, Room B

Pacheco, Paul J. (SUNY Geneseo), Jarrod Burks (Ohio Valley Archaeology, Inc.), and Dee Anne Wymer (Bloomsburg University of Pennsylvania) – *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*

Between 2005–2011 SUNY Geneseo, OVAI, and Bloomsburg University have collaborated on the Brown's Bottom project. The research area is located on a low lying floodplain of the Scioto River, 10 km south of Chillicothe, Ohio on a portion of the archaeologically famous Harness Farm. A multi-stage research design that included surface survey, geophysical prospecting, and a variety of excavation sampling techniques produced evidence of three complete Ohio Hopewell structures, areas of buried secondary refuse, and numerous earth ovens, basins, and hearths from two distinct Middle Woodland clusters located about 100 meters apart. This symposium summarizes the results of our research through the most recent field season, which represents the last active field season of the project.

Symposium 4: *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 9:45–11:30 AM, Room C

Schneider, Seth A. (University of Wisconsin–Milwaukee), and Robert J. Jeske (University of Wisconsin–Milwaukee) – *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*

Lake Koshkonong is one of Wisconsin's largest lakes, with a drainage basin that covers over 2500 square miles. The area contains some of the state's most well known sites, including Carcajou Point, Crabapple Point, and Highsmith. Papers in the symposium present updates on recent research in the region. Time periods include Paleoindian, Archaic, Middle Woodland, Late Woodland, Late Prehistoric and Early Historic. Topics and approaches include mobility, mortuary programs, chemical sourcing of copper artifacts, remote sensing of Effigy Mound sites, chemical and mineralogical sourcing of ceramic artifacts, settlement and subsistence strategies, and regional trade and exchange.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 1:00–4:00 PM, Room A

Ehrhardt, Kathleen L. (Illinois State Museum), and James W. Bradley (ArchLink) – *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*

Over the late prehistoric and early contact periods, important raw materials such as red stone, marine shell, and native copper/copper-base metal, and the forms produced from them, circulated widely through and among Native communities in the northeast and midcontinent. Their appearance and distribution prompts archaeologists to think about their points of origin and manufacture, the variety of forms they took, and how and why they moved within and across regions. Contributors investigate these processes either from the perspective of their own regions, or survey the movement of particular objects across larger-scale networks. Their common goal is to link materials, forms, time, space, and social relations into wider patterns of distribution and movement, thereby creating new opportunities to trace activity at a broader scale. All participants consider how the introduction of European materials affected the circulation and dissemination of these resources, or prompted the creation of new forms and new networks.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*, Saturday, 12:45–4:00 PM, Room B

PAPER AND POSTER ABSTRACTS

*Paper and poster abstracts are
listed in alphabetical order.*



Abel, Timothy J. (Jefferson Community College), and David M. Stothers (University of Toledo) – *Middle Men or Big Men?: The Context of Late Prehistoric and Protohistoric Trade Interaction in Northwestern Ohio*

Beginning in the 16th century, regional political, social and economic interaction appears to have spawned a re-emergence of prestige economies and far-reaching regional trade and exchange networks across the Midwest. In the western Lake Erie basin, participation in these networks is manifested in the appearance of metal goods fashioned of native copper on several sites of the Late Woodland Sandusky Tradition. By the beginning of the 17th century, however, these goods had been almost completely eclipsed by goods fashioned from a much more abundant source of copper: Europeans. This paper outlines the evidence for this transition and speculates on the meaning of evidence for 17th century Sandusky Tradition interaction with populations throughout southern Ohio and the Midwest.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*, Saturday, 2:15 PM, Room B

Adams, Andrea – *see Pulliam, Christopher*

Ahlrichs, Robert E. (University of Wisconsin–Milwaukee), and Seth A. Schneider (University of Wisconsin–Milwaukee) – *Paste Compositional Analysis of Exotic Pottery Vessels from the Crescent Bay Hunt Club*

Vessel attributes suggest the existence of nonlocal pottery vessels at the Crescent Bay Hunt Club (47JE904) site in Southeastern Wisconsin. Vessels associated with Western Wisconsin and Iowa, including Allamakee Trilled and Perot Punctate, have been identified at Oneota sites around Lake Koshkonong. Fisher pottery types from Northern Illinois may also be present. Ceramic petrography and energy dispersive X-ray fluorescence (ED-XRF) analyses are used to examine variations in paste composition among these vessels and presumed local pottery types such as Carcajou and Grand River. The paste compositional analyses of vessels from Crescent Bay Hunt Club elucidate the regional interactions among people during the 13th and 14th centuries A.D. in southern Wisconsin.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 3:00 PM, Room A

Ahlrichs, Robert E. – *see Schuetz, Eric J.*

Alt, Susan M. – *see Watts, Elizabeth L.*

Anderson, Ferrel (Quad Cities Archaeological Society) – *Saukenuk: Locating and Platting the Last Principal Village of the Sauk Nation before the Black Hawk War of 1831–1832*

The general location of Saukenuk, the generic name for the “place of the Sauk” or principal village of the Sauk Nation, has been known since the end of the Black Hawk war of 1831–2, which centered on this site and gave it national attention. It is located in the city of Rock Island, IL on the bank of the Rock River two miles from its mouth on the Mississippi River, and has been impacted by residential and light commercial development. The casual search for the exact location and plan of this village by the presenter was recently accelerated by a rumored plan (true) of Walmart Corporation to build a box store in the area suspected of hosting this village. After an intensive literature search, neighborhood interviews, review of accidental and directed archaeology conducted at the site location and the results of the University of Illinois excavations in 1959–60 of another “Saukenuk” named the Crawford Farm site (11RI81) located three miles further up the Rock River, a good understanding of the location and plan for the village was determined. This information resulted in the donation of funds to build a model of the village, which is on display at The Black Hawk State Historic Site in Rock Island, IL.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 1:45 PM, Room B

Anderson, Gretchen E. – *see McConaughy, Mark A.*

Anselmi, Lisa Marie (SUNY Buffalo State) – *Northern Iroquoian Use of Copper-Base Metal in the Early and Middle Contact Periods*

During the Early and Middle Contact Periods (ca. A.D. 1480/1500 to 1614, and A.D. 1615 to 1690, respectively), Native peoples throughout Northeastern North America used European-introduced metal trade goods as sources of raw material for the production of forms such as projectile points and pendants. A set of manufacturing techniques used on these materials has been identified and is discussed here along with an analysis of some of the crafted forms in an effort to delineate possible patterns of trade and/or interaction occurring in the Northeast with special emphasis on hollow tubing, “corrugated” metal and expedient forms. Illustrative examples are drawn from sites attributed to three Northern Iroquoian peoples: the Wendat, Seneca and Susquehannock.

Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 1:30 PM, Room B

Artz, Joe Alan – *see Doershuk, John F.*

Arzigian, Constance (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse), William Gresens (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse), and Beth Hall (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) – *The Seasonal Round and Oneota Subsistence: A View from the Swennes Site*

Seasonal rounds of hunting-gathering and agricultural peoples have been a major focus of research through examination of how extractive strategies deal with seasonal variation in resource availability. Oneota villages in the La Crosse, Wisconsin, locality tend to reflect predominantly summer occupations along the major river terraces. Smaller campsites in more protected interior valleys might represent winter and spring occupations for at least a portion of the population. The Swennes site (47LC333) in La Crosse County has produced evidence of fall, winter, and spring activities, including bone grease production and spring fishing episodes, as well as earth ovens, ceramic manufacture, and perhaps a winter house. Such evidence complements the extensive information available about the larger summer agricultural villages on the main Mississippi River terraces.

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 1:45 PM, Room B

Ausel, Erica (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Anthony M. Krus (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Jeremy Wilson (Indiana University–Purdue University Indianapolis), and G. William Monaghan (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington) – *From a New Perspective: 2011 Excavations at Angel Mounds*

Excavations at the Mississippian site of Angel Mounds in Evansville, Indiana have occurred throughout the last 80 years with the vast majority occurring during the

Works Project Administration (WPA) era under the direction of Glenn A. Black. New excavations during the 2011 summer field school through Indiana University's Glenn A. Black Laboratory of Archaeology examined a heavily occupied area where the WPA ceased excavation in the site's East Village. Based on Black's field notes, we anticipated encountering a palisade wall and wall-trench structure. In addition to these features, several other structures and rebuilding episodes that were not recorded on the original plans from the WPA excavations were uncovered and excavated. These findings raise questions regarding the accuracy and extent of the WPA excavations, and provide an opportunity to enhance Angel's chronology. Additionally, participating students were provided the unique opportunity to examine the results of past excavations while conducting their own.

General Session 8: Mississippian, Saturday, 10:00 AM, Room B

Bailey, Amanda (University of Wisconsin–La Crosse) – *Floral Analysis of an Oneota Feature and Its Implications*

The Pammel Creek site (47Lc61) is located at the south end of the city of La Crosse adjacent to Pammel Creek and a backwater slough of the Mississippi River. Pammel Creek is a 15th century Oneota culture site. The site itself has gone through recent developments including expansion of a city park into a large artificial sedimentation basin channelizing the creek. Excavations began in 1983 and again in 1988–89. Feature 167 is a hearth excavated in 1989. Floral analyses completed on the different zones within this hearth are compared in this presentation. This type of research shows the different usage of the hearth and the seasonality of this particular feature.

Poster Session 1: *Floral and Faunal Studies*, Thursday, 2:00–4:00 PM, Room D

Bailey, Susanna – see Iseminger, William

Baierlipp, Michael – see Kaufmann, Kira E.

Baker, Jonathan D. (University of Wisconsin–La Crosse) – *The History and Future of Research on Archaeologically-Derived Freshwater Mussels from the Upper Midwest*

Over the past century, a handful of researchers have analyzed freshwater mussels from archaeological contexts in the upper Midwest. This paper explores the history of freshwater mussel research in this region. It begins with an examination of the early work conducted by biologically trained researchers and moves through to the more culturally oriented studies of the past several decades. Both how this research has contributed to our understanding of the region's ancient human economies and how it has allowed for the reconstruction of past aquatic environments is explored. As Dr. James Theler has been one of the most prolific mussel researchers from the area, particular emphasis is placed upon his contributions to this knowledge. The paper concludes with an examination of the future of freshwater mussel research in the region, stressing how archaeological remains may play a role in modern conservation efforts.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 3:45 PM, Room B

Barzilai, Rebecca M. (Indiana University Bloomington) – *The Spatial and Contextual Setting of the Painted Daub at the Angel Site (12Vg1)*

In his publication of the Angel Site (12Vg1), Black (1967) mentions the presence of painted daub found during excavation, but does not expand on its significance or associated features. Very little attention has been given to these painted pieces of house structures that have clear curvilinear designs and patterns. This poster will portray the context of these painted walls and trace them to certain structures in the East Village of the Angel Site. The implications of daub with painted designs will be examined in the physical and temporal landscape of the Angel Site.

Poster Session 3: Lithics and Specialized Studies, Friday, 9:00–11:00 AM, Room D

Barzilai, Rebecca M. (Indiana University Bloomington), Maura E. Hogan (Indiana University Bloomington), and Meghan E. Buchanan (Indiana University Bloomington) – *Investigating Craft Production and Resource Utilization at a Mississippian Mound Center: A Mineralogical Analysis of Clays and Ceramics from the Common Field Site (23SG100)*

The Common Field Site (23SG100) near Ste. Genevieve, MO is a Mississippian mound center located near the ample resources of the Saline Creek. This paper presents data on XRD analysis of ceramics, daub, and salt pan as well as local and regional clay sources. This analysis will help to situate the site history in the regional perspective in terms of resource procurement and craft activities. This paper will critically examine and expand upon the productive activities that go into salt production, including the hypothesis that salt pan manufacture took place on site at the Saline Creek.

General Session 8: Mississippian, Saturday, 11:00 AM, Room B

Baumann, Timothy – *see Herrmann, Edward; see also Monaghan, G. William*

Bauschard, Philip – *see Schwab, Gregory*

Behm, Jeffery A. (University of Wisconsin–Oshkosh) – *Middle Historic Use of Marine Shell, Pipestone, and European Metal from the Perspective of the Bell Site*

The Bell Site (47Wn9), located in east-central Wisconsin, is the location of the Grand Village of the Meskwaki (Fox Indians) from approximately 1680 until their expulsion in 1730. During that approximately 50 year residence the Meskwaki were important participants in the continental trade of Native- and European-manufactured trade goods. Many examples of marine shell, pipestone and European metal artifacts have been recovered from the Bell site. Stylistic and sourcing information on these artifacts have the potential for significantly improving our understanding of the inter-tribal trade networks and the mechanisms for the dissemination of these items.

Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 3:30 PM, Room B

Benden, Danielle M. (University of Wisconsin–Madison), Timothy R. Pauketat (University of Illinois at Urbana-Champaign), and Robert “Ernie” Boszhardt (University of Wisconsin–Baraboo/Sauk County) – *Early Mississippian Houses at the Uhl Site in Trempealeau, Wisconsin*

The Uhl site (47Tr-159; formerly known as the Stull site) is located adjacent to the Third Street Platform Mound on the edge of a Pleistocene outwash terrace 300 meters east of Little Bluff. Excavation of a 1 x 4 meter test trench by the Mississippian Initiative in 2010 suggested the presence of two wall-trench building basins. Expanded excavations in 2011 exposed most of the remainder of these overlapping basins and a third building immediately to the south. The rectangular basin fills contained early Mississippian diagnostics such as Burlington chert lithics (including a series of fragile tri-notched projectile points) and red-slipped ceramics. In addition, sherds of the Lower Mississippi Valley ceramic type French Fork Incised were recovered. One of the three buildings had charred posts preserved on its floor.

Poster Session 2: *Field Reports*, Thursday, 2:00–4:00 PM, Room D

Benden, Danielle – *see Boszhardt, Robert “Ernie”*

Bender, Sandra (SUNY Geneseo) – *Buried Secondary Refuse Deposits at the Lady’s Run Site (33Ro1105): Implications for Ohio Hopewell Sedentism*

Investigations at the Lady’s Run site (33Ro1105) uncovered a second Ohio Hopewell domestic settlement on Brown’s Bottom. Excavations in 2007 produced the evidence that secondary refuse deposits were preserved at the site. A large area of these deposits located within a paleochannel was explored and documented in 2007–2008. This past field season, excavation results suggested that secondary refuse deposits extend further along the paleochannel for a distance of at least 85 meters. This paper describes the excavation process and basic results associated with the secondary refuse deposits at the site. Because, cross-culturally, sedentary populations are shown to maintain living spaces separately from refuse deposits, these data are also used to support the argument that the settlement contained a sedentary residential population.

Symposium 4: *The Brown’s Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 10:30 AM, Room C

Benn, David W. (Bear Creek Archeology, Inc.) – *The Rise of Weaver Social Formations in the Upper Mississippi and Illinois River Basins*

The decline of the Havana Hopewell cultural system and the rise of Weaver culture in the Upper Mississippi and Illinois rivers basin are analyzed using the theory of labor-value to explain how ranked Middle Woodland Havana societies changed into more egalitarian Weaver societies.

General Session 7: *Middle and Late Woodland*, Saturday, 9:45 AM, Room A

Benson, Erin (Illinois State Archaeological Survey), and Joseph Galloy (Illinois State Archaeological Survey) – *Owl Medicine: Three Ceramic Owl Effigies from the East St. Louis Mound Center*

Owls were among the most popular subjects of Mississippian animal effigies. Owl representations have been found in a wide variety of contexts, such as refuse pits,

burials, and mound surfaces. Ethnohistorical accounts spanning North America reveal that owls were beings of great spiritual power, associated with themes such as death, rebirth, and agricultural fertility. During recent excavations at the East St. Louis Mound Center (11S706) for the Mississippi River Bridge project, two clay owl effigies and one pottery owl-human effigy were recovered from pits within a single Stirling phase structure. A high frequency of minerals, most notably quartz, recovered from these features, as well as others in the vicinity, suggests that this part of the site was a locus of specialized activities during the Stirling phase. In this paper, we describe the attributes of these distinctly different effigies, and offer interpretations for their use and final disposition within the structure.

General Session 8: Mississippian, Saturday, 11:15 AM, Room B

Birch, Jennifer – *see Carnevale, Andrea*

Birmingham, Robert A. (University of Wisconsin–Waukesha) – *Oneota Ceramics from the Crabapple Point Site on Lake Koshkonong: The James Bussey Collection*

The multicomponent Crabapple Point site (47JE93) sits on the west shore of Lake Koshkonong. Excavations conducted by Janet Spector in the 1970s focused on a Late Historic Winnebago (Ho-Chunk) component. James Bussey, a former landowner at Crabapple Point, collected extensively from cultivated fields at the locality. More than 5,000 sherds from the Bussey collection represent circa 100 vessels. Oneota vessels dominate the collection but Woodland vessels are also present, as are French period trade goods dateable to the late 1600s and early 1700s. The Oneota ceramics are comparable to those recovered from the nearby Carcajou Point and Crescent Bay Hunt Club sites. Early French trade goods collected from the site suggest the possibility that an Oneota population persisted into the Historic Period at Lake Koshkonong, but excavated data are needed to test this hypothesis.

Symposium 5: New Research in the Lake Koshkonong Region in Southeastern Wisconsin, Saturday, 3:45 PM, Room A

Boatman, Glenwood (WLEARP, University of Toledo), and David M. Stothers (WLEARP, University of Toledo) – *The Middle Woodland (100 B.C.–500 A.D.): Hopewellian Esch Phase North Central Ohio Heckleman Site Linear Ditches*

Excavations were carried out by the Western Lake Erie Archaeological Research Program (WLEARP) at the University of Toledo and the Firelands Archaeological Research Center in Amherst, Ohio in 2008–11. This research has demonstrated the inner liner ditch at the Heckleman site to be filled with Hopewellian Esch phase midden artifacts with radiocarbon dates of A.D. 160–170. This is contrary to earlier research that suggested this ditch to be Early Woodland. The evidence suggests that the previously unknown outer ditch is a Late Woodland ditch that parallels the inner ditch. Evidence indicates the “Hopewellian Interaction Sphere” extended across Lake Erie into Southern Ontario. These dynamics suggest that the Heckleman-Weilnau site was a staging complex for this trade.

General Session 2: Hopewell, Thursday, 3:15 PM, Room A

Bonnie, G. Patrick (Normandale Community College), and Susan H. Krook (Normandale Community College) – *A Middle Woodland Period Habitation Site in Murray County, Minnesota*

Faculty-led and student-supported teams from Normandale Community College have been investigating historic and prehistoric sites in the Lake Shetek region of Murray County, Minnesota since 2006. This area, representing a nexus of the Great Dakota War of 1862, has great historic archaeological potential, but more significantly, it is an area that has demonstrated evidence of prehistoric habitation for at least 9000 years. From 2009 through 2011, archaeological excavation has focused on a site bordering Lake Fremont (part of the Shetek watershed) designated as 21-MU-0003. Thirty one-meter test pits have been dug and hundreds of potsherds and lithics have been recovered. In July of 2011, an intact hearth constructed of more than forty stones was uncovered at a depth of approximately 50 cm. Radiocarbon dating of charcoal recovered at the same depth in an adjacent pit has indicated 1370 +/- 40 years BP, approximately A.D. 580 (Beta Analytic).

General Session 1: *Woodland and Oneota*, Thursday, 1:30 PM, Room A

Boszhardt, Robert “Ernie” (University of Wisconsin–Baraboo/Sauk County) – *Deer Jim, Found a Bone. Will You ID?*

Jim Theler focused much of his career in the Driftless Area of the Upper Mississippi Valley. After arriving at UW–La Crosse in 1984, he became a prominent faunal specialist, was instrumental in developing an undergraduate archaeology major, and taught in the field and classroom with distinction. When not distracted by hunting land snails, Jim published many articles in addition to the co-authored synthesis book *Twelve Millennia: The Archaeology of the Upper Mississippi River Valley*. In a 2006 *American Antiquity* article, Jim proposed that the bow and arrow equipped Late Woodland Effigy Mound people with the ability to overhunt white-tailed deer, which was a major factor in contributing to the transition to the Oneota Culture. Testing this model is a call for continued research in his retirement.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 1:15 PM, Room B

Boszhardt, Robert “Ernie” (University of Wisconsin Baraboo–Sauk County), Timothy R. Pauketat (University of Illinois at Urbana-Champaign), and Danielle M. Benden (University of Wisconsin–Madison) – *Assessing the Little Bluff Platform Mounds at Trempealeau, Wisconsin*

In 2011, the Mississippian Initiative conducted excavations into two of three platform mounds on Little Bluff (47-Tr-32) overlooking the village of Trempealeau. The Little Bluff platform mounds and associated borrow pits were mapped and photographed between 1884 and 1928. Unfortunately, a water tower had been constructed on Mound 1 in 1938 (which was demolished in 1991), and a pole-mounted warning siren was placed in Mound 3. The 2011 trench excavations were authorized to assess the impacts of these and other historic activities, but also provided an opportunity to examine mound stratigraphy and composition. A single stage construction composed of three colored and basket-loaded fill zones was documented on Mound 1, surmounted

by a Lohmann-phase wall-trench building and two formal hearths. A large post feature was located on Mound 3.

Poster Session 2: *Field Reports*, Thursday, 2:00–4:00 PM, Room D

Boszhardt, Robert “Ernie” – see *Benden, Danielle M.*

Bradley, James W. (ArchLink) – *From the Edge to the Middle, the Onondaga Iroquois in 1550 and 1675*

This paper has two purposes. The first is to introduce the overall session and two of its main themes: cross-cultural exchange and regional interactions over time, and the relationship between traditional high value materials (marine shell, copper, and red stone) and the forms they take. The second is to examine these themes in more detail by comparing two Onondaga Iroquois sites, one mid 16th century, the other occupied between 1663 and 1682. I argue that the changes in the frequency and distribution of these materials, and the forms in which they occur, provide a useful framework for reconstructing the complex social interactions that took place across the Northeast after European Contact.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*, Saturday, 12:45 PM, Room B

Branstner, Mark C. (Illinois State Archaeological Survey), and Robert N. Hickson (Illinois State Archaeological Survey) – *Fort Johnson and Cantonment Davis: Excavation Notes and Material Recoveries*

While the rediscovery of the War of 1812 Fort Johnson/Cantonment Davis site near Warsaw, Illinois was an important event in its own right, it also represented the culmination of a long-term venture that included avocational historians, professional archaeologists, and the tolerance of an interested property owner. This cooperation continued into the fieldwork phase of the project, with several seasons of limited testing revealing architectural features, military-related artifacts, and a broad range of contemporary domestic debris from this largely undisturbed site. While the surprisingly large military button assemblage will be addressed in more detail in the following paper, this paper will provide a preliminary overview and description of the remainder of the recovered assemblage.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 3:00 PM, Room B

Branstner, Mark C. – see *Jankiewicz, Stephen*

Brown, James A. – see *Kelly, John E.*; also see *Lynott, Mark*

Buchanan, Meghan E. (Indiana University Bloomington) – *The Mighty Mississippi and Magnetometry; Assessing Flood Impacts at the Common Field Site*

The Mississippian Common Field site has been heavily impacted by Mississippi River flooding events throughout the centuries. In 1979, a flood levee near the site

was breached, forcing river water over the site, stripping the plow zone, and exposing archaeological features. Remote sensing technologies may be useful for providing insights about the impacts of these events on the preservation of features. In this paper, I compare aerial photographs taken after the 1979 flood, recent magnetometry data, and excavation data in order to assess the impacts of flooding events and agriculture production at Common Field.

General Session 5: *New Approaches*, Friday, 3:30 PM, Room A

Buchanan, Meghan E. – *see Barzilai, Rebecca M.*

Buikstra, Jane E. – *see Herrmann, Jason T. ; also, King, Jason L.*

Bukowski, Julie – *see Hedman, Kristin*

Burks, Jarrod (Ohio Valley Archaeology, Inc.) – *Using Geophysical Survey as the Foundation of Our Research Design: Brown's Bottom, Ohio*

Believe it or not, Hopewell habitation sites can be quite hard to find in Ohio. Many dozens have been investigated but few have yielded the kind of data needed to thoroughly examine settlement structure. I went into the Brown's Bottom project hoping to remedy this using geophysical survey—we were not disappointed by the results. In this presentation I show how we used magnetic gradiometry to map out the locations of pit features and develop a sampling strategy for testing a representative sample of the many hundreds of pits detected. Through a ranking scheme based on peak magnetic amplitude, we were able to stratify the excavation sample into cooking pits and other pit-type features. We also tried out several other kinds of geophysical survey instruments, including magnetic susceptibility, ground-penetrating radar, and electrical resistance. Though none of these detected as many features as the magnetic gradiometry, each had something to offer in examining site structure.

Symposium 4: *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 10:00 AM, Room C

Burks, Jarrod – *see Cook, Robert*

Busch, Ashley Evans (Arizona State University), and Jeremiah Stager (University of Alabama) – *A Brave New, Old World: Utilizing Computer Modeling to Reconstruct and Research Hopewell Earthworks in Ohio*

The monumental earthworks built by the Hopewell culture in Ohio nearly two thousand years ago are in a state of decay that is in many cases irreversible. We are developing (or have developed) three-dimensional models that rebuild these earthworks in a virtual world. While other models have been built in the past as illustrative media, our models will be more useful as research tools. By utilizing the data available from previous excavations, satellite/aerial orthoimagery, and measurements taken on site, we have attempted to reconstruct this monumental architecture as it may have looked nearly two millennia ago. There are significant advantages of three dimensional models over traditional mapping. Height (or Z value) is not able to be represented in top-down maps except in using cross sectioning, which is very limited. In addition,

these models will be readily accessible to researchers to utilize and evaluate through the use of freeware programs.

General Session 2: Hopewell, Thursday, 3:45 PM, Room A

Butler, Amanda (University of Illinois at Urbana-Champaign) – *Playing Detective with Mississippian Period Axe-Heads: Detailing the Results of a Provenance Study Using Portable X-Ray Fluorescence*

This paper discusses the preliminary results of sourcing Mississippian period axe-heads (celts) to the Saint Francois Mountain (SFM) region of southeastern Missouri. Previous studies have visually identified several celt caches from the American Bottom to raw material samples from the SFM region ~100 km from Cahokia. A number of intrusive mafic dikes and sills present throughout the SFM region are considered the most likely source of the materials exploited for Mississippian celt production. This project utilized portable X-Ray Fluorescence (pXRF) to conduct major and trace elemental analysis of more than 300 celts and celt production debitage. Definitively answering whether or not the Mississippian peoples of the American Bottom were utilizing SFM mafic material for the production of their celts should generate important questions regarding materiality and social identity in regards to the celt itself and its manufacture, in addition to understanding the diverse relationships between people, places and objects.

General Session 3: American Bottom, Friday, 10:45 AM, Room A

Butler, Brian M. (Center for Archaeological Investigations, Southern Illinois University Carbondale), and Wesley A. Jackson (Center for Archaeological Investigations, Southern Illinois University Carbondale) – *Strange Doings in the Lower Ohio Borderlands—The Cypress Citadel Ceramics*

Cypress Citadel is a large and very unusual Late Woodland complex in the Cache River drainage of southern Illinois. The site belongs to the Lewis phase and its large ceramic sample is the first major analysis of Lewis ceramics since that construct was first described in 1944. As the analysis has progressed, the unusual nature of this ceramic assemblage has emerged, marking it as unique in the region. Although it is typical Late Woodland pottery in many respects, this ceramic assemblage is most unusual in its very high frequencies of rim modification and complex incised decoration, whose origins are unknown. The ceramics suggest that this site played a central role in Late Woodland society in the lower Ohio borderlands in southern Illinois.

General Session 4: Regional Studies, Friday, 1:00 PM, Room A

Caldwell, Sarah (University of Northern Iowa) – *John C. Hartman and the Archaeology of Black Hawk County, Iowa*

During the course of background research for a long-term archaeological project at Hartman Reserve Nature Center, it was discovered that the property's namesake, John C. Hartman, was an avocational archaeologist who left several documents about his research into the prehistory of Black Hawk County, Iowa. A review of these documents revealed the story of the recovery of a pot and human remains from a burial mound. These finds are discussed in the context of recent excavations in the area.

General Session 7: Middle and Late Woodland, Saturday, 11:00 AM, Room A

Carnevale, Andrea (Archaeological Services, Inc.), Ronald F. Williamson (Archaeological Services, Inc.), Martin S. Cooper (Archaeological Services, Inc.), and Jennifer Birch (University of Georgia) – *Hidden from View: The Story of an Early Sixteenth Century Iron Tool in Eastern North America*

An iron tool was recovered from an excellent sealed context at the early sixteenth century ancestral Huron-Wendat Mantle site near Toronto. It is one of the earliest European artifacts to have been found in the Great Lakes region. Radiographic analyses (x-ray and neutron radiography) of the piece have provided information on the nature and function of the object. This paper discusses the implications of this tool in terms of both pre-existing exchange networks in shell, catlinite, and native copper as well as early European-Indigenous trade and interaction from local, regional and super-regional perspectives.

Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 1:00 PM, Room B

Carr, Christopher (Arizona State University), and Robert McCord (Arizona Museum of Natural History) – *Ohio Hopewell Composite Creatures and a Journey to an Afterlife: Biological Identification and Contextual Interpretation*

Hopewellian peoples in southwestern, south-central, and northeastern Ohio sculpted, engraved, and cut out seven naturalistic depictions of unusual creatures that combine the bodily elements of ordinary animals. Zoological identifications of the component animals are made. For four of the depictions, from the Turner site, contextual analysis of their placement within mounds, mound stratigraphy, and historic Woodland Native American narratives shed light on the nature of the creatures and specifically their roles in journeys of the deceased through lower-world realm(s) to a land of the dead. Implications for some recent interpretive trends in Woodland archaeology are explored.

General Session 2: Hopewell, Thursday, 4:15 PM, Room A

Carr, Christopher – *see Frashuer, Anya C.*

Carr, Dillon H. (Grand Rapids Community College), and William A. Lovis (Michigan State University) – *The Round Lake Cache: A Gainey Phase Biface Cache from Central Michigan*

Biface caches may be one of the most distinctive and enigmatic aspects of Paleoindian behavior. We present current research concerning one such cache, consisting of 24 mid-stage bifaces and a single large flake blank, documented in 1981 from the Round Lake locality (20CL227), Clinton County, Michigan. Analysis of metric and non-metric attributes support an interpretation that the cached bifaces represent the same intentional point in the chaine operatoire of fluted biface manufacture; probably related to the Gainey fluted point phase. Moreover, the cache is distinguished by a remarkable degree of standardization suggesting production by a single individual. As a necessary complement to our technological analysis of the cache, we situate our interpretation of the Round Lake Cache within the broader regional context of Great Lakes Paleoindian caching behavior.

General Session 9: Paleo and Archaic, Saturday, 8:15 AM, Room C

Cattani, Maurizio – see Valeri, Marco

Charles, Douglas (Wesleyan University) – *The Use of Color in Hopewellian Ritual*

Explorations of color in archaeology are usually semiotic in nature, the primary goal being to ascertain the meaning(s) of the colors. The colors of the Hopewell phenomenon of eastern North America—white conch shells from the south, black obsidian from the west, red copper from the north, “blue” or reflective mica from the east—may be subject to such readings. However, the construction of earthworks, the placement of “ritual” caches, and the burial of the dead involved only the fleeting juxtapositions of different colors or alternations of light and dark materials as these features were created and then hidden from sight. Temporal sequences may be as important as spatial patterns. This paper will explore the temporal construction of meaning through the serial or simultaneous emplacement of color as part of the processes of monument building and funerary ritual associated with the Middle Woodland period Hopewell phenomenon.

General Session 2: Hopewell, Thursday, 3:30 PM, Room A

Church, Wendy J. (The Ohio State University), and Robert A. Cook (The Ohio State University) – *Shifts in Lithic Technology at the Clark Site (33Wa124): A Late Woodland Site in Southwest Ohio*

Lithic technology during the later portion of the Late Woodland (ca. A.D. 700–1000) in the Middle Ohio Valley has been characterized as one that met the needs of a mobile settlement strategy. There is often a co-occurrence of diagnostic projectile point types in these assemblages that are quite distinct in form, but little is understood about their contemporaneity and whether there were associated differences in manufacture. To address this issue, the Clark Site in Franklin, Ohio was examined as it dates exclusively to this time period and appears to represent one or few short occupations. Methodology for the study included identification of production stage and chert source for cores, preforms and finished points provenienced within two areas of high overall activity within the site. Results support a shift from usage of exotic preforms in the manufacture of Jack's Reef and Raccoon Notched points to local cores to produce triangular points.

Poster Session 3: Lithics and Specialized Studies, Friday, 9:00–11:00 AM, Room D

Clark, Loren – see Herrmann, Edward

Clauter, Jody (University of Wisconsin–Milwaukee) – *Spatial Differences between Decorative and Technical Attribute Clusters in Wisconsin Late Woodland Ceramics*

Investigations into geographic clustering differences between Late Woodland ceramic attributes relating to decoration and elemental analyses found across southern Wisconsin from A.D. 700–1200 indicate that decorative attribute data exhibit geographic clustering, but also indicates overlap. A concurrent analysis using elemental data obtained by energy dispersion X-ray fluorescence (ED XRF) analysis also suggests geographically bound groups during this period. However, the spatial ranges of the ED XRF groups were widespread and overlapped considerably. These results are compared and discussed in relation to possible social organization and territoriality of Late Woodland

groups. Several models that potentially explain the relationship between vessel attributes and geographic and temporal Late Woodland ceramic variation are compared.

General Session 7: Middle and Late Woodland, Saturday, 11:15 AM, Room A

Cobb, Dawn – see *Hedman, Kristin*

Conner, Michael (Illinois State Museum, Dickson Mounds), and Jodie O’Gorman (Michigan State University) – *A Unique Oneota Public Structure in the Central Illinois River Valley*

Four seasons of field school excavations at the Morton Village site (11F2) in Fulton County, Illinois, have revealed a dense concentration of Mississippian and Oneota domestic structures and pit features. However, Structure 16 appears to be a public rather than domestic building, and it has a unique two-level basin. Two of three corners excavated are constructed within pit features, and puddled clay was used to bolster the wall of the lower basin within the pit fill. What appear to be deliberately broken Oneota vessels have been found in several locations. The structure also has a hearth lined with puddled clay and an unusual clay tube constructed after the hearth was no longer in use.

Poster Session 2: Field Reports, Thursday, 2:00–4:00 PM, Room D

Cook, Della C. – see *Schurr, Mark R.*

Cook, Robert (The Ohio State University), and Jarrod Burks (The Ohio State University, Ohio Valley Archaeological Consultants) – *As Good as It Has Gotten: Magnetic Mapping of Two Fort Ancient Village Structures*

Over the past few years, we have examined the site structure of several Fort Ancient villages using magnetic susceptibility and gradiometry. In this paper, we focus on two sites that produced very different results: Taylor and Guard. At the Taylor site, magnetic susceptibility revealed a clear plaza and magnetic gradiometry revealed numerous pit features, several of which have been confirmed through test excavations. At the Guard site, magnetic susceptibility was less clear, likely due to its floodplain setting. Magnetic gradiometry produced unusually clear definition of household architecture—individual houses were clearly detected. Fieldwork is currently being planned for Guard, but the clarity of the pattern is likely due to house burning and/or sealed deposits.

General Session 8: Mississippian, Saturday, 10:30 AM, Room B

Cook, Robert A. – see *Church, Wendy J.*

Cooper, Martin S. – see *Camevale, Andrea*

Conner, Michael D. – see *Upton, Andrew J.*

Cramb, Justin (Central Michigan University) – *The Darrah Creek Site (20MC78): An Archaeological Investigation and Collection Analysis*

This research is an archaeological investigation into a collection of two hundred thirty-five lithic artifacts and the land believed to be associated with it. The Darrah

Creek Site is composed of seventy-nine acres of former farmland in Mecosta County, Michigan. Through typological analysis, field survey, sampling, and limited excavation this research explored the cultural prehistory of the collection and the site itself. Results from this investigation suggest a continued human presence on the property for a period of roughly ten thousand years. It does not, however, suggest any form of human settlement or intensive land use.

Poster Session 3: Lithics and Specialized Studies, Friday, 9:00–11:00 AM, Room D

Dalan, Rinita – *see Michlovic, Michael*

Dale, Darren S. – *see Jordan, Kurt A.*

Dancey, William S. (The Ohio State University) – *Multistage Research Design in the Service of Middle Woodland Settlement Pattern Research in Southern Ohio*

The Brown's Bottom Project demonstrates the power of multistage research design for the detection and documentation of the archaeological record of Middle Woodland settlement patterns in southern Ohio. This paper puts the Brown's Bottom research in historical perspective and comments on its implications for the future of Hopewellian studies in the Middle Ohio Valley.

Symposium 4: The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley, Saturday, 11:15 AM, Room C

Dappert, Claire P. – *see Nolan, David J.*

Davis-Foust, Shannon (University of Wisconsin–Milwaukee), and Richard Mason (University of Wisconsin–Oshkosh) – *Using Sclerochronology to Date the Occupancy of an Archaeological Site*

Sclerochronology is the study of variations in the accretionary hard part remains from organisms such as fish or clams. Environmental factors such as precipitation or temperature influence growth rates, so the accretionary patterns vary by year. The patterns can be cross-matched between organisms that lived at the same time to create a chronology. A chronology can be correlated to climatic records to determine the years the organisms lived. Freshwater drum otoliths were used to evaluate the estimated dates of occupancy of Doty Island in Neenah, WI. Otoliths were cross-dated and the range of occupancy of the site was estimated to be 34 years, which was close to the original estimation of 32 years of occupancy. The otolith chronology was then correlated to proxy sea surface temperature records, which corresponded to the estimated dates of occupancy.

General Session 5: New Approaches, Friday, 4:15 PM, Room A

Debandi, Florencia – *see Valeri, Marco*

DeMarco, Ang – *see King, Jason L.*

Demel, Scott J. (Northern Michigan University) – *Artifact Density, Distribution, and Displacement in the Dunal Environment of the ca. 1848–1860s Cable’s Bay Fishing Village, Beaver Island, Lake Michigan*

This paper discusses the distribution, density, and displacement of historic artifacts from the Cable’s Bay Site, a mid-nineteenth century fishing village situated in a coastal dune setting on the southeast shore of Beaver Island, Lake Michigan. The most abundant and similar artifact categories (ceramic sherds and glass shards) are used in this study to determine the effects of slope, gravity, erosion, and deflation on the artifact assemblage. Test units and shovel probes randomly placed across the site (upslope to downslope) sampled the shallow artifact scatter indicating that the mid-slope assemblage is the oldest, and that artifact curvature and surface configuration have an effect on downslope movement. The study covered a twenty five meter long incline with an average slope of twelve percent.

General Session 6: Historic Archaeology, Friday, 3:15 PM, Room C

DeVore, Steven L. – *see Peterson, Cynthia L.*

Doershuk, John F. (Office of the State Archaeologist, The University of Iowa), Joe Alan Artz (Office of the State Archaeologist, The University of Iowa), William E. Whittaker (Office of the State Archaeologist, The University of Iowa), and Cynthia L. Peterson (Office of the State Archaeologist, The University of Iowa) – *The Archaeological Context of the Original Fort Madison Battlefield and Black Hawk’s Ravine (13LE10)*

The Fort Madison site (13LE10) is without doubt the premiere Iowa preservation locus for materials related to the War of 1812. Recent investigations were undertaken directly west of the fort deposit. Within this area, portions of the original ground surface associated with the fort were found to be intact, capped by historical fills. The archaeological deposits exposed in excavated trenches represent the fort era (1808–1813), including War of 1812 battlefield activities. Also exposed were portions of a specific landscape feature of this battlefield described in historical documents as “Black Hawk’s ravine,” having been used by Native American forces as a strategic area of cover from which to conduct military actions against the fort. This investigation has greatly expanded knowledge of this early and significant battlefield area and provides the basis for refining the 13LE10 site boundaries to more accurately encompass the battlefield as well as the associated fort.

Symposium 1: The Cultural Landscape of the Western Frontier, 1800–1825, Thursday, 2:15 PM, Room B

Domenici, Davide – *see Valeri, Marco*

Drooker, Penelope B. (New York State Museum) – *Redstone, Shell, and Copper/Brass in Late Prehistoric and Protohistoric Fort Ancient Contexts*

Artifacts made of red stone are not particularly common at Late Fort Ancient (ca. A.D. 1400–1650) sites, although a source of red pipestone is locally available. This

paper summarizes data on types and contexts of redstone artifacts, discusses potential sources and distribution patterns, and compares this information with previously reported distribution patterns of European-derived and marine-shell artifacts from the same sites.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*, Saturday, 2:30 PM, Room B

Doyle, Jeremy (University of Wisconsin–Milwaukee) – *The Bezella Cedarburg Bog Collection: Application of GIS to a Regional Archaeological Collection*

Geographic Information Systems (GIS) software was utilized to determine site boundaries and environmental settings of a set of sites located around the Cedarburg Bog of Ozaukee County, Wisconsin. Avocational archaeologist Donald Bezella collected and recorded around the bog for several decades. Original field notes and Bezella's one published article were used to generate a database to ascertain site boundaries around the Cedarburg Bog using GIS. Sites were then compared based on their proximity to water, soil characteristic and type, presettlement vegetation, and elevation. Site locations based on GIS analysis indicate that people chose areas of higher elevation, gentle slope, and well-drained soils. Although Bezella's sites cannot at this time be assumed to be representative of the entire region, this project lays the foundation for a larger, more systematic assessment of prehistoric landscape use and environmental variation throughout prehistory in the region.

Poster Session 4: *Settlement Studies*, Saturday, 2:00–4:00 pm, Room D

Drake, Eric – see Franzen, John

Dunford, Ashley – see Freire, Shannon

Durst, Patrick R. – see Emerson, Thomas E.; also see Jackson, Douglas

Edwards IV, Richard W. (University of Wisconsin–Milwaukee), and Kimberly Pater (University of Wisconsin–Milwaukee) – *What's on the Menu: An Updated Analysis of Oneota Subsistence at the Crescent Bay Hunt Club (47JE904)*

Floral and faunal data collected over the course of eight field seasons at the Crescent Bay Hunt Club, an Oneota habitation site on the northwest shore of Lake Koshkonong in Jefferson County, Wisconsin, provide information pertaining to subsistence practices, site usage, duration of occupation, and ritual activity at the site. Features from across the site have yielded a variety of fauna and flora including *Chenopodium*, maize, and wild rice, dog, bison, deer, and a variety of fish and small mammals. These materials were recovered from a variety of contexts across the site, including features interpreted as hearths, basin, threshing pits and dog burials. The floral data provide evidence for a winter occupation and further evidence of a strong wetland emphasis on wetland plants. The faunal data provide new information about the importance of large mammals as well as the ritual importance of canids.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 2:30 PM, Room A

Edwards, Richard W., IV – *see* Schulenburg, Marcus ; also *see* Walder, Heather

Ehrhardt, Kathleen L. (Illinois State Museum) – *Metals in Motion? Native Copper and European Copper-Base Metal Forms and Distribution in the 17th Century Protohistoric North American Interior*

In the Native North American interior, European-derived copper base metals first appear primarily in ornamental form. However, little is known about when and where many of these forms actually originated, their temporal trajectories, or how broadly they were distributed over the landscape. In this research, industries comprised of native copper and European copper-base metal from late prehistoric and protohistoric sites in Illinois (Hoxie Farm, New Lenox, and Palos), Missouri (Iliniwék Village), and Ohio (Indian Hills) are evaluated formally and stylistically to identify the range of forms and raw materials present. Industries are then compared to determine whether plotting the distribution of particular forms provides useful insights into their emergence, frequency, and potential movement in and through the Midwest.

Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 3:15 PM, Room B

Emerson, Kjersti (Illinois State Archaeological Survey) – *The Huber Phase Component at the Hoxie Farm Site: Broadening Our Understanding of Huber Phase Ceramics*

Based on ISAS investigations at the Hoxie Farm site in the Chicago area, it has become possible to expand and clarify our definition of Huber phase ceramics. To date, Huber ceramics have been broadly identified in the region as shell-tempered globular jars, with smoothed surfaces and fine-line incising on the shoulder. In analyzing the Hoxie Farm Huber component, a variety of shoulder decorations become apparent. A preponderance of medium- to wide-trailed decorative motifs, along with radiocarbon dates, lead us to believe Hoxie Farms may be an example of an “early” Huber assemblage. Also significant, the rim forms when compared to the extensive Hoxie Farm Fisher phase ceramic assemblage, are visibly and statistically different. Although much overlapping is present, there is an obvious uniformity to Huber rim forms that holds true across the known Huber phase ceramic assemblages.

General Session 8: Mississippian, Saturday, 8:30 AM, Room B

Emerson, Thomas E. (Illinois State Archaeological Survey), and Michael G. Farkas (Illinois State Archaeological Survey) – *Re-envisioning the Cahokia Landscape*

For nearly two centuries Euro-Americans have been attempting to capture the magnificence of Cahokia through drawings, photography and cartography. Beginning in the 1870s the first of a series of comprehensive maps of the site were created, culminating in the 1966 University of Wisconsin–Milwaukee photogrammetric map. Today greater cartographic accuracy is possible. In January, 2011 ISAS conducted airborne LiDAR surveys of three major American Bottom Mississippian mound groups including Emerald, Pulcher and Cahokia. In all 29 sq. miles were examined with 10 gigabytes of data collected. Nineteen square miles of the Cahokia site was recorded at a vertical topographic relief of about 2–3 cm with a horizontal point spacing of 25 cm or less. All data is GPS referenced. In this paper we briefly explore the potential of this data to

change our perspectives on such Cahokian landscape features as Monks Mound, causeways, potential undetected mounds, and numerous historical impacts.

General Session 3: American Bottom, Friday, 8:15 AM, Room A

Emerson, Thomas E. (Illinois State Archaeological Survey), Joseph M. Galloy (Illinois State Archaeological Survey), Patrick R. Durst (Illinois State Archaeological Survey), and Douglas K. Jackson (Illinois State Archaeological Survey) – *Excavations in Greater Cahokia: Exploring the Heart of the East St. Louis Mound Center*

Archaeological research has shown that in the eleventh century A.D. the core of the Cahokian polity consisted of a 14.5 km² expanse of 200 mounds, pole monuments, plazas, elite complexes, burial sites, and residential compounds. Three elite-religious precincts dominated this core—the Cahokia, East St. Louis and St. Louis “mound centers”. Taken separately they represent the first, second and fourth largest mound centers in North America. Beginning in 2008 as part of the new Mississippi River Bridge crossing ISAS has had teams of up to 100 crew members excavating a 35 acre linear swath through the heart of the East St. Louis precinct. Work to date has exposed over 500 structures, 1600 pits, forty marker posts, a complex modified landscape, and has yielded extensive insights into Mississippian lifestyles. These excavations, combined with two earlier explorations of the central mound area, are changing the way we understand Cahokia.

General Session 3: American Bottom, Friday, 9:00 AM, Room A

Englebert, Peter (Provincial Archaeologist, retired), and William Fox (Canadian Museum of Civilization) – *A Knife Lake Survey—36 Years Ago*

An anecdotal review is presented concerning the genesis and results of a brief survey of the Knife Lake north shore in October of 1975. The results not only informed researchers concerning late PaleoIndian siltstone procurement activities, but also spoke to later acquisition of the entire range of local turbidite materials for a broader range of tools.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 8:15 AM, Room B

Esarey, Duane (University of North Carolina—Chapel Hill) – *The 17th century Northeastern Standardized Marine Shell Ornament Industry*

Interactions between colonial and native technologies affected many forms of material culture production in Northeastern North America. Metal tool cutting, drilling, and abrading technologies were easily adapted to existing shell ornament production. For example, the evolution of wampum production from its roots, to a hybrid product, to a European-dominated industry has been explored. Less well-documented is the emergence of a suite of post-1640 marine shell ornament forms including varied and evocative effigy and geometric forms with few antecedents—apparently designed as a component part industry. With notable exceptions these forms were restricted to the native polities with central roles in the Dutch, and subsequent Northeastern English, fur trade network. For the rest of the century a sequence of these shell ornaments were distributed among these groups. Based on a comprehensive literature and collections

sample, this paper presents preliminary observations on this industry and its most notable attributes.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*, Saturday, 1:15 PM, Room B

Evans, Madeleine – see *Gaydos, Zack*; also see *Gornick, Michael*

Farkas, Michael G. – see *Emerson, Thomas E.*

Fishel, Richard L. (Illinois State Archaeological Survey) – *Analysis of War of 1812 Buttons from Fort Johnson and Cantonment Davis, Hancock County, Illinois*

Fort Johnson and Cantonment Davis are two short-term War of 1812-era American military posts located within what was then the western frontier of the United States above the east bank of the Mississippi River in Hancock County, Illinois. Recent archaeological investigations there uncovered a diverse artifact assemblage that includes a wide array of button types. Of the hundreds of recovered buttons, approximately 70 percent exhibit military insignias, including those attributed to the infantry, army general service, riflemen, artillery, and the dragoons. In addition to describing the assemblage, what these buttons can and cannot tell us regarding the occupations of the two military posts is also discussed.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 3:15 PM, Room B

Fitts, Lauren M. – see *Pisell, James M.*

Foley, Allison J. (Indiana University South Bend) – *Four New Radiocarbon Dates from the Morton Mound Group in the Central Illinois River Valley.*

This poster will present four new radiocarbon dates from Morton Mound 14, the largest mound within the Morton Mound Group. Mound 14 contains burials from multiple cultural horizons including Red Ochre, Late Woodland, and Mississippian. Following field notes and established mortuary assumptions, four burials were chosen for radiocarbon analysis. It was expected that these burials would be representative of, and concordant with, the range of cultural horizons associated with this mound. However, the resultant dates of 2610 ± 40 yBP, 2540 ± 40 yBP, 2490 ± 40 yBP and 790 ± 30 yBP presented an unexpected distribution. This distribution suggests not only that this mound was the site of multiple concurrent mortuary traditions in the Late Archaic/Early Woodland period, but also that diagnostic mortuary assumptions regarding the Late Woodland should be used with caution.

Poster Session 3: *Lithics and Specialized Studies*, Friday, 9:00–11:00 AM, Room D

Foley Winkler, Kathleen M. (Marquette University) – *Oneota and Langford Mortuary Practices from Eastern Wisconsin and Northeast Illinois*

Data from several sites on Lake Koshkonong form the basis for a broader examination of mortuary programs for eastern Wisconsin Oneota and northern Illinois Langford archaeological cultures. Culture contact, boundary maintenance and violence across

the northern edge of the Prairie Peninsula are examined using mortuary and related data among 13 sites. It was expected that: (1) Mortuary programs for Oneota were different from those of Langford; (2) Wisconsin Oneota sites were occupied in a more stable political and social milieu compared to the noted conflict and violence associated with Langford sites; and (3) Oneota sites reflect a more egalitarian society than do Langford sites. The results demonstrate that Oneota and Langford mortuary programs do vary, however variation is greater among all sites than between the two archaeological cultures. Distinctions reflect cultural variation correlated with regional environmental adaptations rather than differences in social or political institutions.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin, Saturday, 3:15 PM, Room A*

Foley Winkler, Kathleen M. – *see Ramond, Sara*

Fort, Matthew – *see Ramond, Sara*

Fortier, Andrew (Illinois State Archaeological Survey), Kathryn E. Parker (Great Lakes Ecosystems), and Mary Simon (Prairie Research Institute, Illinois State Archaeological Survey) – *A Reevaluation of the Sponemann Phase and Its Implication for Understanding Maize Use in the Midwest*

This paper offers a multi-scalar reevaluation of the Sponemann phase in the American Bottom. In 1991, Sponemann assemblages were only known from the type-site, Sponemann. Corn macroremains were identified from about 30 percent of the Sponemann phase features at that site, which was interpreted as indicative of a tradition of corn cultivation. This supposition, along with the identification of non-Patrick ceramic traits, suggested that the Sponemann phase represented the beginnings of the Terminal Late Woodland period. Since then, 12 more Sponemann phase sites have been excavated and analyzed. None have yielded corn. Further, recent AMS dates on four corn fragments from excavated Sponemann features indicate that all are Mississippian contaminants. We conclude that Sponemann ceramic traits were derived from northern-based, Mississippi River trench, maize-less, Late Woodland migrants (Fall Creek phase) who became assimilated into northern American Bottom Patrick populations. The resultant Patrick/Fall Creek hybridized materiality is what we recognize as Sponemann.

General Session 3: *American Bottom, Friday, 9:30 AM, Room A*

Fox, William A. (Parks Canada) – *Red, White and Black: Ornamental Stone Selection for Lower Great Lakes Area Pipes and Beads*

Sixteenth through seventeenth century stone bead and pipe assemblages from southern Ontario are described and new XRF evidence is presented with regard to identification of raw material sources. The distribution of specific classes of artifacts is considered in relation to Native distribution networks and the turbulent political events of the late seventeenth century.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 2:00 PM, Room B*

Fox, William – see *Englebert, Peter*

Franzen, John (USDA Forest Service), Eric Drake (USDA Forest Service), Terrence Martin (Illinois State Museum), and Kathryn Parker (Great Lakes Ecosystems) – *Archaeological Evaluation of an Early 19th Century Maple Sugar Camp in Northern Michigan*

Test excavation at a small site near the Straits of Mackinac in the Hiawatha National Forest has yielded historic period artifacts dating c. 1790–1830. Located about 750 meters from the nearest water feature, General Land Office surveyors described the surrounding timber in 1845 as sugar maple, beech, birch, and hemlock. Faunal remains recovered include fish, small game, and bird species. Charcoal is also abundant and preliminary analysis has identified maple, white ash, hemlock, and red oak. The assemblage is compared to George Quimby's description of the archaeological remains one would expect to find at a sugar camp, which he based on Alexander Henry's account of Ojibwe sugaring in the 1760s. In particular, the animal species identified are similar to those predicted by Quimby, and also agree with several written accounts of subsistence at mid 19th century sugar camps in the Upper Great Lakes.

General Session 6: Historic Archaeology, Friday, 1:00 PM, Room C

Frashuer, Anya C. (Arizona State University), Christopher Carr (Arizona State University), and Michael D. Glascock (University of Missouri Research Reactor Center) – *Clay Selection in Hopewell Vessel Production: A Look at Pottery from a Multi-Component Scioto Hopewell Site*

As a part of a larger study to document the rates of local exchange of utilitarian ceramic vessels and changes in rates over time in the Scioto Valley, Ohio, a diachronic analysis was made of vessel clay composition at a single site with multiple components as an important first step. The Harness-28 site, with both Middle and Early Late Woodland components ranging from 50 B.C. to A.D. 540, was selected for this purpose. The clay matrix and aplastic inclusions of pottery vessels were analyzed for their absolute concentrations of major, minor, and trace elements with instrumental neutron activation analysis and electron microprobe. Possible clay source distinctions in the samples from each component were identified through an analysis of the chemical compositional data using principle component analysis and Ward's hierarchical cluster analysis. Results indicate a distinct shift in clay source selection between Middle and Early Late Woodland occupations.

General Session 7: Middle and Late Woodland, Saturday, 8:15 AM, Room A

Freire, Shannon (University of Wisconsin–Milwaukee), and Ashley Dunford (University of Wisconsin–Milwaukee) – *Wormian Bones: A Reliability Study of Methods for Scoring a Non-metric Human Osteological Trait*

To gain meaningful insight from non-metric trait analysis within the field of human osteological study, issues of reliability and context need to be addressed, especially for the analysis of discrete cranial traits. A preliminary study tested the reliability of different methods of quantifying wormian bones, with the purpose of establishing a consistent method that would enable further applicability for this and other non-metric traits within mortuary analysis. The determination of reliability for both studies is made

through the computation of Olsson and Janson's (2001) iota statistic, and bivariate correlation. This study examines the reliability of scoring methods on an interobserver scale, an imperative step for the applicability of these techniques for the wider archaeological community, as the majority of current data collection is a collaborative effort. The results of this study support the initial application in a case study involving an analysis of the Milwaukee County Institutional Grounds collection.

Poster Session 3: Lithics and Specialized Studies, Friday, 9:00–11:00 AM, Room D

Gaff, Donald (University of Northern Iowa) – *The Lou Henry Hoover House, Waterloo, Iowa.*

Lou Henry Hoover, First Lady of the United States, was born in Waterloo Iowa in March 1874. Currently maintained as a park strip for highway right-of-way, her birthplace is marked with a sign, though the precise location of the house remains unknown. Documentary evidence suggests the possibility of intact subsurface features and an archaeological project based on the relocation of the house began in September 2011. After a brief biography of the first lady, this paper reviews the property's history and summarizes archaeological activities at the site.

General Session 6: Historic Archaeology, Friday, 3:45 PM, Room C

Galloy, Joseph – *see Benson, Erin*

Galloy, Joseph M. – *see Emerson, Thomas E.*

Gaydos, Zack (Prairie Research Institute, Illinois State Archaeological Survey), and Madeleine Evans (Illinois State Archaeological Survey) – *Unidentified Flintknappers in East Central Illinois Prehistory: Examining a Fledgling Chronology*

Documenting private collections for the East Central Illinois Archaeological Project has resulted in a sample of roughly 6,000 temporally diagnostic projectile points and hundreds of groundstone tools. These collections, coming from a nine-county area centered on Champaign, Illinois, offer great insights into the prehistory of an area that has seen relatively little professional archaeological work. This paper examines relative population intensity through temporally standardized projectile point frequency to set a baseline from which a local chronology might be developed. Chert use patterns are also examined and compared with those reported in neighboring areas.

General Session 5: New Approaches, Friday, 3:15 PM, Room A

Geraci, Peter J. (Illinois State Archaeological Survey/University of Wisconsin–Milwaukee) – *The Lamellar Blade Assemblage from the Buried Gardens of Kampsville, a Havana Hopewell Village in the Lower Illinois River Valley*

Attribute analysis of the lamellar blade assemblage recovered from the Buried Gardens of Kampsville (TBGOK) has provided information regarding manufacture, use, and discard patterns practiced by Havana Hopewell people living in the Lower Illinois River Valley. Microwear studies provide valuable data regarding the function of Hopewell blades. However those studies are very time-consuming and require unique skillsets and expensive equipment. The attribute approach taken here provides basic information about the size, shape, and condition of the lamellar blades as well as the raw

material chosen for tool production. The results of this approach suggest that blades were not necessarily the end product of blade production. People appear to have broken whole blades into smaller work units, and modified them through retouch for specialized tasks. It also appears that they chose several specific types of Burlington chert and used varying degrees of heat treatment in the production of blades.

Poster Session 3: Lithics and Specialized Studies, Friday, 9:00–11:00 AM, Room D

Glascock, Michael D. – *see Frashuer, Anya C.*

Gornick, Michael (Prairie Research Institute, Illinois State Archaeological Survey), and Madeleine Evans (Prairie Research Institute, Illinois State Archaeological Survey) – *Exploring the Use of Upland Depressions in the East Central Illinois Prairie*

In 2007, ISAS and the East Central Illinois Archaeological survey initiated a project aimed at identifying, documenting, and stewarding the archaeological resources of a nine-county area centered on our home offices in Champaign, Illinois. The importance of upland marsh and glacial kettle landscape features is becoming very clear as a result of these efforts. This paper examines the use of upland wetlands and the evidence for intensive prehistoric use, site stability, and possible resident populations along their margins.

General Session 4: Regional Studies, Friday, 1:30 pm, Room A

Greber, N'omi (Cleveland Museum of Natural History), and Robert Horn (Earlham College) – *Cross Cultural Geometry*

The ancient human made landscape in Mid-Ohio Valley is unique. Hundreds of earthen and stone walls exhibit varying ground plans. In many instances, the builders could not see the whole plan. We are working towards a preliminary typology of ground plans of large simply shaped earthworks that enclose 50 or more acres. In proposing interpretations of our preliminary categories in terms of cultural intentions and engineering abilities of the builders, we acknowledge that mathematics, including geometry, is culturally defined. That is, we seek to consider viewpoints outside conventional western mathematics in considering geometric shapes and varying cultural ideals that determine accuracy in physical construction.

General Session 2: Hopewell, Thursday, 4:30 PM, Room A

Green, William (Logan Museum of Anthropology, Beloit College) – *Transition, Reorganization, Replacement? Political and Economic Change in Southeast Iowa, ca. A.D. 200–400*

Apparently profound differences between sequential archaeological assemblages in the same locality can be interpreted in different ways. Integrating multiple lines of evidence helps to identify processes of cultural construction through a variety of practices, promoting a more comprehensive understanding of such apparent discontinuities. Applying a historical-processual approach, we can examine how change occurred and attempt to develop a clearer understanding of discontinuities in the archaeological record. The interface between the Middle and Late Woodland in the upper Mississippi Valley supplies such a discontinuity. Intensive analysis of Havana and Weaver communities in

eastern Iowa serves as a case study of the historical-processual approach to the changes commonly associated with the “end of Hopewell.”

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 3:00 PM, Room B

Green, William – see *Schwartz, Saul*

Gresens, William – see *Arzigian, Constance*

Haglund, Jessica (Illinois State University) – *Preliminary Analysis of Animal Remains from the Myer-Dickson Site, Fulton County, Illinois*

A substantial faunal assemblage was recovered from 1960's and early 1970's excavations at the Myer-Dickson site, a settlement associated with the Dickson Mounds in Fulton County, Illinois. Preliminary analysis of the animal remains recovered from Late Woodland (Myer-Dickson phase A.D. 600–800) and Mississippian (Larson phase, ca. A.D. 1125–1250) pit features reveals the presence of local species of mammals, fish, birds and freshwater mussels. The collection also includes examples of specimens that were modified into artifacts.

General Session 8: Mississippian, Saturday, 8:15 AM, Room B

Hall, Beth – see *Arzigian, Constance*

Hambacher, Michael J. (Commonwealth Cultural Resources Group, Inc.) – *Turkeys, Toads, Points, and Pits: Initial Impressions from Excavations at 20OT283, Ottawa County, Michigan*

Site 20OT283 is an expansive Late Woodland occupation extending across two Holocene terraces associated with the lower Grand River valley in western Michigan. Extensive Phase II and Phase III data recovery excavations conducted in 2011 for the Michigan Department of Transportation indicates that the occupation primarily dates to the post–A.D. 1000/1100 period, although minor earlier Archaic and Woodland components are also represented. Differential use of space at the site was also documented. The site contains a series of short-term hunting and other resource acquisition and processing occupations along with a large number of deep cache pit features. The excavations provide an insight into a poorly documented period in the region and an important previously unexplored aspect of the regional settlement system.

General Session 1: Woodland and Oneota, Thursday, 2:45 PM, Room A

Hamilton, Jennifer (Duluth Archaeology Center, LLC) – *Unusual Ceramics in Private Collections of Northeastern Minnesota*

Two unusual rim types have been recently identified during a photo documentation project of private collections in northeastern Minnesota. Ceramics in two private collections from the Boulder Lake Reservoir near Duluth Minnesota include mostly Laurel, Blackduck, and Sandy Lake Ware; exactly what would be expected in this area. Two large rims that fit together appear at first glance to be Laurel Dentate; however they have a notched lip, a characteristic generally found only in Sandy Lake ceramics in this region. In addition, three different rim fragments appear to be Sandy Lake Corded,

complete with lip notching; however these rims also have a dentate stamp decoration, a Laurel characteristic. These ceramics are new in this region and show the importance of working with private collectors to identify both usual and unusual finds.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 10:45 AM, Room B

Hamilton, Jennifer – see *Mulholland, Susan C., and Stephen L. Mulholland*

Harding, Deborah G. – see *McConaughy, Mark A.*

Harl, Joe (Archaeological Research Center of St. Louis) – *Insights into the Terminal Late Woodland Period at Site 23FR1553, Washington, Missouri*

Site 23FR1553 represents a terminal Late Woodland (A.D. 850–900) site located on the Missouri River bluff top just west of Washington, Missouri. Previous work suggested that the residents of Missouri were conservative and maintained a Late Woodland type of existence from A.D. 300 until the coming of European settlers. However, recent archaeological investigations, including site 23FR1553, suggests that changes did take place around A.D. 900 and during the following Mississippian Period.

General Session 7: *Middle and Late Woodland*, Saturday, 10:15 AM, Room A

Haas, Jennifer – see *Kubicek, Richard H.*

Hawley, Marlin E. – see *Hill, Matthew G.*

Hedman, Kristin (Illinois State Archaeological Survey), Julie Bukowski (Illinois State Archaeological Survey), and Dawn Cobb (Illinois State Museum/Illinois Historic Preservation Agency) – *Culturally Modified Teeth from Illinois: Cahokia and Beyond*

Culturally modified teeth have been known from Mississippian (A.D. 900–1400) mortuary sites in the Midwestern United States for over a century, primarily found within or near the Mississippian mound center of Cahokia in the American Bottom. Recently, the authors identified several new examples of dental modification during archaeological investigations and studies of curated museum collections. These finds provide critical contextual information for exploring the temporal and geographic distribution of dental modification and the associated cultural implications. In this poster, we describe the known modified teeth from Illinois and consider the cultural implications of patterns in overall occurrence and styles of modification between regions and sexes. The role of Cahokia, the preeminent Mississippian cultural center in eastern North America, is considered in light of these recent discoveries, specifically the possible impact its development had on the temporal, geographic, and gender patterns observed.

Poster Session 3: *Lithics and Specialized Studies*, Friday, 9:00–11:00 AM, Room D

Hedman, Kristin – see *Ramond, Sara*

Helms, Lindsey Jo – see *Myster, Susan M. T.*

Henning, Dale R. (Illinois State Museum/United States National Museum, Smithsonian Institution) – *Red Stone (Catlinite?) Distribution Patterns in the Upper Mississippi Valley: A Few Tentative Suggestions*

While red stone objects (some proven, others assumed, to be catlinite) circulated in the Upper Mississippi valley much earlier, intensive quarrying and distribution of red stone artifacts appear to have begun ca. A.D. 1450 and persisted into the historic period. This presentation is focused on the period A.D. 1450 to 1700, with attention to the presence or absence of red stone objects on sites of this period and the quality and quantities of those objects found. Applying this information, some conclusions regarding the shifting patterns of distribution are offered.

Symposium 6: *Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750*, Saturday, 3:45 PM, Room B

Herrmann, Edward (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Robert Mahaney (Glenn A. Black Laboratory of Archaeology, Stone Age Institute, Indiana University Bloomington), Timothy Baumann (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), and Loren Clark (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington) – *Midwest Lithic Raw Material Repository at the Glenn A. Black Laboratory of Archaeology*

The Midwest Lithic Raw Material Repository at the Glenn A. Black Laboratory of Archaeology has been developed over the past 40 years to facilitate a better understanding of prehistoric acquisition and utilization of lithic resources in the mid-continent. This repository curates over 500 samples with 110 lithic types from across North America, but its focus is on the Ohio Valley and Great Lakes region. Its primary function has been to assist scholars in the proper identification of resource types and secondly to determine the range of resource extraction and/or trade networks. In 2010, a rehabilitation project was initiated to recurate this collection and to increase its accessibility via the internet. This has included the reanalysis of every sample, a new database with digital images, and spatial data for GIS analysis. Future goals are to solicit additional lithic samples and to encourage data sharing and collaboration between scholars

Poster Session 4: *Settlement Studies*, Saturday, 2:00–4:00 PM, Room D

Herrmann, Jason T. (University of Arkansas), Duncan P. McKinnon (University of Arkansas), Jason L. King (Center for American Archeology), and Jane E. Buikstra (Arizona State University) – *Summary of Three Seasons of Remote Sensing at Mound House (11GE7), Greene County, Illinois*

Geophysical survey at Mound House (11GE7) has played a prominent role in reconstructing the original configuration of cultural features at this floodplain mound complex in the Lower Illinois Valley and in tracking the transformative effects of natural and anthropogenic forces. The results reported here are the sum of three seasons of multi-sensor investigations that included ground-penetrating radar (GPR), electromagnetic induction, electrical resistance and geomagnetic surveys. Geomagnetic and resistance surveys in the areas surrounding the mounds show off-mound activity

areas, while electrical resistance tomography of Mound One reveals internal structural elements whose composition and arrangement held symbolic significance to Middle Woodland people. The effects of historic occupation and land management at Mound House are also evident in the results of these remote sensing surveys. These surveys were conducted by undergraduate students enrolled in the Geomatics track of Arizona State University's Field Program at the Center for American Archeology at Kampsville, Illinois.

Poster Session 4: *Settlement Studies*, Saturday, 2:00–4:00 PM, Room D

Hickson, Robert N. – see Branstner, Mark C.

Hill, Mark (Ball State University/University of Wisconsin–Milwaukee), and Robert Jeske (University of Wisconsin–Milwaukee) – *Laser Sourcing of Copper from Late Archaic and Late Prehistoric Sites near Lake Koshkonong, Southeastern Wisconsin*

Copper artifacts from two Late Archaic sites (Kelly North Tract at Carcajou Point and the Jaco Site) and near-contemporary sites (Aztalan and Crescent Bay Hunt Club) are compared using laser ablation techniques. All four sites are located near Lake Koshkonong and the Rock River, in southeastern Wisconsin. Variation within time periods as well as between time periods is discussed within the broader context of sourcing copper from Great Lakes sites.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 3:30 PM, Room A

Hill, Matthew G. (Iowa State University) – *Introduction to “Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler”*

Over the course of a four decade career, James L. Theler made numerous original contributions to Midwest and Plains prehistory and paleo-environment studies that exemplify the best of contemporary archaeology. As a passionate educator and steward of archaeology, Theler trained a generation of archaeologists, encouraging them to think scientifically and to represent the discipline professionally. Colleagues and former students honor Theler's legacy in a series of papers that highlight the breadth and impact of his contributions and interests.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 1:00 PM, Room B

Hill, Matthew G. (Iowa State University), Marlin E. Hawley (Wisconsin Historical Society), Christopher C. Widga (Illinois State Museum), Michael F. Kolb (SMG, Inc.), and Alan D. Wanamaker (Iowa State University) – *Archaeology, Zooarchaeology, and Paleoecology of the Interstate Park Bison Site*

Recent research on the Interstate Park Bison site exemplifies the strong interdisciplinary approach that transcends Jim Theler's career. Excavated in 1936–37 by CCC workers, two side-notched points and a bi-pointed copper tool were recovered in association with the remains of 44 bison (*B. occidentalis*), 10 elk, and 1 deer. This contribution summarizes the site's history of investigations and archaeology, with an eye towards the taphonomic history of the faunal assemblage and results of stable isotope analyses ($\delta^{13}\text{C}$, $\delta^{18}\text{O}$) of bison remains. The average $\delta^{13}\text{C}$ of bone collagen -15.3% , consistent

with a diet dominated by C₄ grasses. Further dissection of seasonal trends through analyses of serial tooth enamel samples ($\delta^{13}\text{C}$, $\delta^{18}\text{O}$) illustrates variability within and between age groups. Five bison show a consistent pattern of increased C₃ use during cool seasons; however, the remaining teeth are out-of-phase due to subtle variability in the age-at-death or fluid land-use patterns. The combined evidence compels us to rethink aspects of Wisconsin's prehistory.

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 4:15 PM, Room B

Hogan, Maura Elizabeth (Indiana University Bloomington) – *Pottery and Social Process at an Upland Mississippian Mound Center: The Pfeffer Site in Lebanon, IL*

Excavations at Pfeffer, a Lohmann- and early Stirling- phase (1050–1180 CE) mound center located in the Richland Complex east of Cahokia, identified numerous non-residential, clay-lined structures, temples and pits. My analysis of the ceramics recovered from a selected sample of these features, in combination with an analysis of the GPR survey I have recently conducted on the site, explores spatial differences in activities performed at the site, and investigates the possibility of special uses associated with each of these contexts. In this paper, I consider how specific modifications to the physical landscape and site's location may have played a role in the construction of greater Cahokia.

General Session 3: American Bottom, Friday, 10:30 AM, Room A

Hogan, Maura E. – *see Barzilai, Rebecca M.*

Holley, George (Minnesota State University Moorhead) – *Oneota in the Northwest: The Minnesota River Oneota Region*

The Oneota presence in southwestern Minnesota has never been vetted, although the unpublished ceramic collections excavated from Fort Ridgely have been proposed as representing the last bona-fide Oneota site on the Minnesota River. Utilizing this collection along with other data I explore what little is known for the Minnesota River region for Oneota. This region is characterized by diverse settlements, burial mounds, and presumably some time depth. Large areas of the region have yielded either no Oneota or only a trace, and thus it serves as a candidate for studying the northwestern border of the Oneota phenomenon.

General Session 1: Woodland and Oneota, Thursday, 1:45 PM, Room A

Holley, George – *see Michlovic, Michael*

Horn, Robert – *see Greber, N'omi*

Horsley, Timothy J. – *see Upton, Andrew J.*

Hulit, Elissa (University of Wisconsin–Milwaukee) – *X-Ray Fluorescence of Havana-type Ceramic Sherds and Implications for the Waukesha Focus*

Hopewell Interaction Sphere trade goods indicate the presence of a social network with two main centers, Hopewell in Ohio, and Havana in Central Illinois, as well as

many local variants. Many of these variants display artifact styles that would suggest regional continuity with earlier cultures and in situ development of the Middle Woodland cultures that took part in this interaction. The Waukesha focus of Southeastern Wisconsin is one such variant initially described by Robert Salzer. Waukesha focus pottery is a mix of exotic vessels derived from the Northern Illinois River Valley and local imitations. This presentation describes a preliminary attempt to use x-ray fluorescence to compare elemental components of ceramic sherds from central and northern Illinois and southern Wisconsin in order to test Salzer's hypothesis. Despite small sample sizes, initial results suggest some difference between the Illinois and Wisconsin samples and suggest directions for future study.

General Session 7: Middle and Late Woodland, Saturday, 9:30 AM, Room A

Iseminger, William (Cahokia Mounds State Historic Site), John Kelly (Washington University), and Susanna Bailey (Powell Archaeological Research Center) – Pursuing Cahokia's Enigmatic North Palisade

For several decades, various projects have revealed segments of Cahokia's palisade system. The focus for the past several seasons has been to better understand the route and nature of the palisades along the northeast and north sides of the site, just east of Monks Mound. One of the four constructions of the wall turns at right angles and heads west toward the rear of Monks Mound while several others continue north into the Cahokia Creek bottom. A unique possible entryway has been identified as well as new evidence for landform modification in this area of the site. This project is attempting to identify which of the palisades are going in what direction and to clarify the extent of the Central Ceremonial Precinct enclosed by the palisade system and how it changed through time.

General Session 3: American Bottom, Friday, 8:30 AM, Room A

Jackson, Douglas (Illinois State Archaeological Survey), and Patrick R. Durst (Illinois State Archaeological Survey) – Linear Paired Feature Patterns from the East St. Louis Site: A Proposed Swale Area Agricultural Field System

Illinois State Archaeological Survey personnel have been conducting extensive excavations over the past few years at the East St. Louis Mound Center site, excavating hundreds of structures and thousands of pits from Terminal Late Woodland and Lohmann and Stirling phase Mississippian occupations. Amidst the wealth of primarily residential community data collected thus far from these excavations are numerous examples of consistently spaced, linear, paired row patterns of small features. Only with the current year excavations have we been able to convincingly prove their prehistoric association. These features occur only in low-lying areas of the site that contain clayey soils. We propose that these excavations represent a method to farm the swale areas, benefitting from the moisture and topsoil fertility characteristics of such areas.

General Session 3: American Bottom, Friday, 9:15 AM, Room A

Jackson, Douglas K. – see Emerson, Thomas E.

Jackson, Kelly S. – see Stiles, Cynthia

Jackson, Wesley A. – *see* Butler, Brian M.

Jakaitis, Edward (Illinois State Archaeological Survey) – *Preliminary Research of the Otter Creek Drainage in the Pecatonica–Sugar River Watershed*

The Otter Creek is a seven mile drainage that runs approximately 2 miles upstream of the confluence of the Pecatonica and Sugar Rivers in northwest Illinois. Despite over a hundred and fifty years of nearly continuous agriculture in the area, the marshy bottomlands of the Otter Creek have avoided severe disturbance. Limited archaeological research has been conducted in the region, with the last systematic survey of the area being conducted in the 1970s by Salzer as part of the Historic Sites Survey. Archaeologically, a fresh look is being taken of this area with the help of collections gathered at localities over the last half of the 20th century. With these collections and newly surveyed areas being recorded, a resource-rich drainage is beginning to offer new information about the region.

General Session 4: Regional Studies, Friday, 1:15 PM, Room A

Jankiewicz, Stephen (Illinois State Archaeological Survey), and Mark C. Branster (Illinois State Archaeological Survey) – *GET A GRIP ON IT: Coffin and Casket Handles from the 19th Century*

A small but slowly growing number of studies exist concerned with the significance of coffin and casket hardware. The abundance of historic funerary hardware within the archaeological record can complement dating procedures and greatly increase their accuracy. The mid-19th century in particular experienced a unique movement in funerary practices where great amounts of attention were placed on presentation of the deceased. Transportation and technological advances allowed people of all backgrounds to participate in this movement. Coffin and casket handles are especially important to focus on due to their extensive use by all demographics and classes of American society, and the ability of their functional and stylistic attributes to be organized along chronological and temporal shifts regardless of provenience. Despite restrictions during the recovery effort, Illinois City Cemetery gave archaeologists a small but unique perspective into a large multi-ethnic urban cemetery, which are often abandoned and quickly forgotten during massive urban sprawl.

General Session 6: Historic Archaeology, Friday, 3:00 PM, Room C

Jeske, Robert – *see* Hill, Mark; also *see* Ramond, Sara

Jones, Geoffrey (Archaeo-Physics, LLC) – *Subsurface Radar Imaging of an Historic 'Receiving Tomb'*

At the Calvary Cemetery in Saint Paul Minnesota, a subsurface 'receiving tomb' or winter storage vault was rumored to exist beneath the site of a chapel that had been demolished in the early 20th century. A ground penetrating radar survey over the site of the former chapel detected not only the foundation of the chapel, but a below-ground structure much larger than the chapel itself. Three-dimensional imaging of the radar data shows a circular domed structure approximately 45 feet in diameter and interesting details of its construction.

General Session 6: Historic Archaeology, Friday, 4:15 PM, Room C

Jones, Rhiannon (Great Lakes Archaeological Research Center, Inc.) – *On the Border: A Pre-Contact Butchering Site in the Prairie-Forest Ecotone in Northwestern Minnesota*

While small, Site 21-RO-39 in far northwestern Minnesota represents one of the very few documented pre-contact archaeological sites in the area. It is only the 39th recorded archaeological site in the county, despite having been first identified as recently as 2006. The site harbored a series of two or more short-term, pre-contact occupations spanning a period of up to 10,000 years from the Late Paleoindian tradition—possibly beginning as early as the final retreat of Glacial Lake Agassiz in the area—to the Terminal Woodland Blackduck Complex. Site 21-RO-39 is interpreted as a series of minor butchering locales involving the hunting of large and medium mammals, including *Bison bison* and other Artiodactyla, likely deer. The bison assemblage is suggestive of a butchering site, where limbs removed from a carcass somewhere nearby—perhaps the adjacent river—were brought for processing.

General Session 9: Paleo and Archaic, Saturday, 9:15 AM, Room C

Jordan, Kurt A. (Cornell University), Charlotte L. Pearson (Cornell University), and Darren S. Dale (Cornell University) – *The Characterization, Use and Provenance of Red Stone at Seneca Iroquois Sites, circa 1688–1754*

During the late 17th and early 18th centuries, Seneca Iroquois peoples used two categories of red-colored lithic raw materials: fine-grained red pipestone and coarser red slate. These came from several distinct geographical sources (often presumed to be Minnesota and Wisconsin and the New York–Vermont border region, respectively), and likely entered Iroquois sites in New York’s Finger Lakes region along different trade routes involving separate sets of trade partners. This paper reviews historical trends in the Seneca use and manufacture of red stone items, showing that increased consumption of imported pipestone items diminished use of locally-manufactured red slate adornment items after 1715. It also provides an elemental characterization of red slate and pipestone artifacts from two Seneca sites using Scanning X-Ray Fluorescence Microscopy (SXFEM) and presents preliminary results of multivariate analysis to establish possible provenance of these materials.

Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 1:45 PM, Room B

Kanter, Noah (SUNY Geneseo) – *A Structural Engineering Analysis of Three Ohio Hopewell Structures Excavated During the Brown’s Bottom Project*

Ohio Hopewell domestic structures are poorly understood, partially because of limited samples and partially because recent analyses have been inadequate and incomplete. The 2005–2011 excavations discovered three Ohio Hopewell structures; all are interpreted to be houses. Archaeological evidence suggests these houses were large (all over 10 x 10m, timber framed, square structures. This presentation is an engineering analysis of these approximately 1700 year old structures. Structural engineering principles were used to perform a complete analysis, attempting to answer the following questions: Could the hypothetical support posts have withstood the horizontal and vertical force from the weight of the roof? Would the soil dynamics have affected the integrity of the structure? How would the houses have reacted to wind and snow

loads? Upon answering these questions it appears that our earlier reconstruction of these structures was in error, and my analysis has resulted in a revised view of how these structures were engineered.

Symposium 4: *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 10:15 AM, Room C

Kather, Aaron (SUNY Geneseo) – *The Ohio Hopewell Ceramic Assemblage from Lady's Run (33Ro1105)*

Ceramics are one of the most common and therefore useful classes of artifacts found at archaeological sites. Using ceramic artifacts recovered from the Lady's Run site (33Ro1105) between 2007 and 2010, this presentation will report the results of my analysis of the collection. My analysis produced an estimated minimum number of vessels, identification of the ceramic types present, hand drawn rim profiles, a distributional analysis of the rims based on context, and a comparison with the results from the Brown's Bottom #1 site (33Ro1104). Implications of the research, such as how pottery was used at the site, to what extent it was traded, and the possible existence of activity areas within the site, will be discussed.

Symposium 4: *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 10:45 AM, Room C

Kaufmann, Kira E. (Commonwealth Cultural Resources Group), William F. Kean (University of Wisconsin–Milwaukee), and Michael Baierlipp (University of Wisconsin–Milwaukee) – *Interpretation of Effigy Mound Construction in the Lake Koshkonong Region Using Applications of Geoelectrical Techniques*

Three different electrical geophysical techniques were employed over two specific effigy mounds in Indian Mounds County Park on Lake Koshkonong in Jefferson County, Wisconsin to better define the subsurface under and around these mound structures. The entire site was first surveyed using conductivity. Electrical profiles (ERT) were conducted longitudinally and transversely on two of the mounds (61, a lizard-shape, and 58, a bird shape) using an Aries electrical profiling system. Finally, Ground Penetrating Radar using two different frequencies was applied along the same lines as the ERT. Lateral variations in resistivity data are most likely from pre-mound construction activity and/or looters' pits. Resistivity variations and differences in the GPR data suggest greater preparation for some mounds compared to others. The three techniques give an internally consistent non-invasive view that adds to the archeological interpretation of the site.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 1:45 PM, Room A

Kaufmann, Kira E. (Commonwealth Cultural Resources Group), and Kevin Mueller (Commonwealth Cultural Resources Group) – *Predictive Model of Archaeological Sensitivity for Prehistoric Occupation along US 12, Southwest Michigan*

As part of a pilot research study, funded by FHWA and MDOT, to test the feasibility and effectiveness of GIS-based predictive modeling in Michigan, a predictive model of prehistoric archaeological sensitivity for Highway US-12 was developed through

a three phase approach. Phase I and II produced models of prehistoric site locations which were tested with field survey. The third phase refined variables, attributes, evaluated, and analyzed the strength of the model. The final model selection was based on meeting established goals to correctly predict 85 percent of sites in the high/medium probability classes while having the high/medium classes occupy only 30 percent of the landscape, producing a high Kvamme's Gain statistic, and predicting sites classes that actually occurred in those areas. The final model identified trends and was effective to provide MDOT with the ability to predict the locations of sites over an area much larger than the study corridor.

General Session 4: *Regional Studies*, Friday, 2:15 PM, Room A

Kaufmann, Kira E. – *see Watson, Robert J.*

Kean, William F. – *see Kaufmann, Kira E.*

Kelly, John E. (Washington University), and James A. Brown (Northwestern University) – *Assessing the Impact of the Ramey Plaza and Its Creation on the Cahokian Landscape*

This presentation focuses our attention on the creation and construction of the Ramey Plaza complex and the way it altered the existing cultural and natural landscape of Cahokia. While certain cosmological principles underlie the design of this plaza complex, we want to examine the manner in which the plaza as a sunken layer was created, along with the removal of earth from a large residential area to the north and west of the plaza. Both activities had a major impact on the landscape in that a substantial area is no longer part of the intact archaeological record. It is important to remember that this took place shortly after Cahokia's climax in the 13th century, a period often characterized as one of decline.

General Session 3: *American Bottom*, Friday, 8:45 AM, Room A

Kelly, John E. – *see Iseminger, William; see also Valeri, Marco*

Kettler, Kurtis (Office of the State Archaeologist, The University of Iowa), and Kevin Verhulst (Office of the State Archaeologist, The University of Iowa) – *Projectile Points from the Palace Site (13PK966): An Iowa Raddatz Type-Site*

One of the most characteristic projectile point styles originating from the Middle Archaic time period in the Midwest is the Raddatz point. The recently excavated Middle Archaic Palace Site in Des Moines, Iowa has produced a large sample of side-notched points that are similar in form to the Raddatz type. In our analysis we compare the Palace site point assemblage to the Raddatz point type from four Midwestern sites including the Raddatz Rock Shelter Site in Wisconsin. In this analysis we expand on and build from previous characterizations of the Raddatz point type by exploring a suite of metric attributes in order to gain a sense of morphological variations between Raddatz points within their midcontinent distribution.

Poster Session 3: *Lithics and Specialized Studies*, Friday, 9:00–11:00 AM, Room D

King, Jason L. (Center for American Archeology), **Taylor H. Thornton** (University of Illinois at Urbana-Champaign), **Ang DeMarco** (Utah Valley University), and **Jane E. Buikstra** (Arizona State University) – *Middle and Late Woodland Habitation Occupations at the Mound House Site (11GE7), Greene County, Illinois*

The Mound House site (11GE7) and similar floodplain mound sites in the Lower Illinois Valley were important loci upon the prehistoric built landscape. Constructed during the Middle Woodland period, these sites served as multi-community gathering places contemporaneous with Middle Woodland bluff crest moundbuilding and material residues, including those indicative of the Hopewell phenomenon. Archaeological research at these sites has historically centered upon associated tumuli and Middle Woodland/Hopewell material culture. Habitation areas and post-Middle Woodland occupations have received less scholarly attention. Beginning in 2007, the Arizona State University Field School at the Center for American Archeology in Kampsville, IL has conducted fieldwork to document habitation areas at the Mound House site, as well as post-Middle Woodland/Hopewell occupations. In this paper, we present recent findings from our ongoing fieldwork, comparing and contrasting mound and habitation signatures over time at the site.

General Session 7: Middle and Late Woodland, Saturday, 8:45 AM, Room A

King, Jason L. – see Herrmann, Jason T.

Kooiman, Susan (Illinois State University) – *Old Pots, New Approaches: A Functional Analysis of Woodland Pottery and Decoration along the South Shore of Lake Superior*

Two Northern Michigan sites, Naomikong Point (20CH2) and Sand Point (20BG14), were excavated in the 1960s, the purported “golden age” of Great Lakes archaeology. In the following decades, academic interest in the region waned, and the collections from these sites have since received little attention. A recent resurgence of research in the Upper Great Lakes has produced a need for new perspectives on these old collections. This paper will outline the methodology to be employed in a functional re-analysis of pottery from the Middle Woodland site of Naomikong Point and the Late Woodland site of Sand Point. Technical attributes, use-alteration traces, and residue samples will be evaluated to provide insight into intended and actual vessel functions. Correlations between ceramic decoration and vessel function will be examined to explore the nature of the communicative function of design.

General Session 1: Woodland and Oneota, Thursday, 2:15 PM, Room A

Kritsch, Anson – see Pope, Melody K.

Krook, Susan H. – see Bonnie, G. Patrick

Krus, Anthony – see Ausel, Erica; also see Monaghan, G. William

Kubicek, Richard H. (Great Lakes Archaeological Research Center), Nicholas J. Weber (Great Lakes Archaeological Research Center), and Jennifer Haas (Great Lakes Archaeological Research Center) – *A Preliminary Report on Recent Excavations at the Finch Site (47JE0902) in Jefferson County, Wisconsin*

The Finch Site is a stratified, multi-component open-air site with evidence for Late Paleo-Indian/Early Archaic, Middle Archaic, Late Archaic/Early Woodland, Middle Woodland/Hopewell, and Late Woodland activity. The site is located on the western and southern banks of Pritchard's Pond, approximately 1.8 kilometers east of Hights Bay on Lake Koshkonong. A twenty-five percent sample (1197.75 square meters) of the site within the State Highway 26 right-of-way was excavated by the Great Lakes Archaeological Research Center, Inc., during the 2001, 2009 and 2010 field seasons. Laboratory analysis is currently in progress. This paper will outline preliminary results, highlighting the horizontal and vertical distribution of projectile points/knives. This project is sponsored by the Wisconsin Department of Transportation and the Federal Highway Administration.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 1:30 PM, Room A

Kuehn, Steven R. (Illinois State Archaeological Survey) – *A Preliminary Analysis of the Fort Johnson/Cantonment Davis Faunal Assemblage, Hancock County, Illinois*

This presentation reports on faunal remains from the 1814–1816 occupation of Fort Johnson and Cantonment Davis in western Illinois. Recent archaeological investigations at these two War of 1812–era military installations resulted in the recovery of a sizeable faunal assemblage. Although preservation is limited, the composition of the assemblage indicates consumption of domesticated taxa as well as locally available wild fauna. In addition to beef, pork, and chicken, the site inhabitants incorporated a variety of large and small wild mammals, waterfowl, game birds, turtles, and fish into the diet. The types of food resources represented are consistent with historic accounts relating to the occupation of the site, and in general with archaeological data and historic records from other early nineteenth-century military sites in the Midwest.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 3:30 PM, Room B

Kuehn, Steven R. – *see Wilson, Gregory*

Kujawa, David (Commonwealth Cultural Resources Group Inc./Indiana University Northwest) – *Archaeological Survey of the Material Service: Documenting 23 Years of History*

The unique design of the Material Service allowed for the motor powered barge to fit under the bridges on the Chicago River without them needing to be raised. This unique design however could not save the barge from meeting an untimely end on July 29, 1939. Through the use of new technology using sidescan sonar remote sensing techniques and direct diver survey the Material Service was archaeologically re-investigated in the summer of 2011. Some major changes have occurred to the wreck's condition since it was first documented, some 23 years ago. One major change is the increased

presence of invasive species of animals, namely the zebra mussels, which completely cover the exposed portions of the wreck. The key architectural features, although hidden now, appear to have survived. The Material Service remains a solid display of Great Lakes maritime architecture and continues to be popular with recreational divers.

General Session 6: *Historic Archaeology*, Friday, 4:00 PM, Room C

Kullen, Douglas (Cultural Resource Analysts, Inc.), and Andrew Martin (Cultural Resource Analysts, Inc.) – *Floodplain Landforms and the Age of Prehistoric Sites in the “Big Bend” of the Ohio River, Vanderburgh County, Indiana*

Recent survey has provided the opportunity to examine the relationship between floodplain landforms and the age of prehistoric sites in the “Big Bend” of the Ohio River near Evansville in Vanderburgh County, Indiana. Geomorphological studies indicate that low terraces were exposed beginning in the early Holocene and that floodplain ridges and swales developed continuously and rather rapidly through later prehistory. The presence of archaeological sites from specific cultural periods roughly confirms the rates of channel migration developed from geomorphological data.

General Session 4: *Regional Studies*, Friday, 2:30 PM, Room A

Kurtz, William – *see Stiles, Cynthia*

LaBounty, Andrew E. (National Park Service, Midwest Archeological Center) – *Awaiting the Call: Historic Sites Monitoring and Preservation at Fort Charlotte (21CK7), Grand Portage National Monument, Minnesota*

Undisturbed archeological deposits at Fort Charlotte—a component of Grand Portage National Monument, Minnesota—reflect the daily activities and social dynamics of the Great Lakes fur trade. These remains are threatened by both natural and human factors, and park managers have sought methods to monitor the site, protect its archeological resources from destruction, and maintain the potential for significant research into all aspects of the fur trade. This presentation discusses trends and current attitudes toward historic preservation, then advances a specific archeological monitoring plan tailored to Fort Charlotte. Such a plan draws from both environmental and geological management strategies, and aims to protect, preserve, and study archeological resources. Preliminary implementation of a monitoring plan was completed during the summer of 2010, and some positive impacts of the strategy are already apparent.

General Session 6: *Historic Archaeology*, Friday, 1:45 PM, Room C

Lange Mueller, Allison (University of Wisconsin–Milwaukee, Commonwealth Cultural Resources Group, Inc.) – *A Regional Analysis of Prehistoric Rock Art Sites in Iowa and Juneau Counties, Wisconsin*

This study focuses on the spatial analysis of rock art sites found within Iowa and Juneau Counties, Wisconsin. The study applies a regional approach to contextualizing rock art in southwestern Wisconsin. An attempt to discern spatial patterning on a regional level was accomplished through the statistical assessment of environmental characteristics, taxonomic classes, and site associations at 26 rock art sites in Iowa

County and 19 sites in Juneau County. The results of the analyses suggest the possibility that a broad, regional interaction or communication sphere is represented at rock art sites in Wisconsin's Driftless Area; consequently, rock art production within the region may indicate a longstanding, pan-regional rock art tradition, potentially spanning thousands of years.

General Session 4: Regional Studies, Friday, 2:45 PM, Room A

Langseth, Jared (Minnesota State University, Mankato) – *Preliminary Results of Lithic Analysis from the Langseth Site (21NO11), Nobles County, Minnesota*

The Langseth Site (21NO11) consists primarily of a Woodland habitation site (200 B.C.– A.D. 1200) in the Prairie Lake Region of Southwestern Minnesota. Excavations of a large refuse midden at this site have yielded a wide variety of lithic raw materials from throughout the Midwest. This paper will present information on the variety of lithic raw materials found at this site and how they were used. Specifically, raw material distribution throughout the midden, patterning in raw material usage throughout the Woodland period, and the relationship between chipping debris and formalized tools will be explored. These data will help place a little-understood area of Minnesota into a broader regional perspective in terms of lithic resource procurement and utilization.

General Session 1: Woodland and Oneota, Thursday, 1:15 PM, Room A

Leigl, Megan (University of Wisconsin–La Crosse) – *A Faunal Analysis of the Northern Engraving Site (47Lc164) and Comparison to the Pammel Creek (47Lc61) and Jim Braun (47Lc59) Sites*

The Oneota lived in the La Crosse, Wisconsin locality for approximately 300 years, dating from A.D. 1300 to 1625. During that time span they engaged in a variety of subsistence strategies that were characterized by cultivating agricultural crops, as well as harvesting riverine and wetland fauna and the occasional large ungulate. By comparing the faunal assemblages from the Sand Lake, Pammel Creek and Jim Braun sites it is possible to show that Oneota hunting and fishing preferences were consistent throughout their occupation of the La Crosse area. The pattern that emerges from the comparison reveals that a majority of small animals were harvested from backwater habitat (marshes and small channels), whereas main river channel and dry terrace animals, while larger, were probably supplementary to the diet.

Poster Session 1: Floral and Faunal Studies, Thursday, 2:00–4:00 PM, Room D

Leith, Luther J. (University of Oklahoma) – *Food or Friend: Analysis of Woodland Period Dog Remains in Eastern Oklahoma*

The earliest domesticated animal was the dog (*Canis lupus familiaris*). Dogs have served many purposes, from food source, to beast of burden, to family pet in prehistoric and historic societies. On the Southern Plains dogs were generally used as beasts of burden before the introduction of the horse, and during times of need they were used as food sources. In the greater Southeast dogs usually served as hunting companions, camp alarms and camp cleaners. The dogs in the Southeast may even have been kept as pets. Analysis of the dog remains recovered from several Woodland period (Fourche

Maline) black midden sites was conducted to determine if the Fourche Maline people were following a Plains or Southeast pattern. The identification of articulated dog burials with no evidence of cut marks suggest these people were following a Southeastern pattern of dog use.

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 3:15 PM, Room B

Lensink, Stephen C. – see *Tiffany, Joseph A.*

Logan, Brad (Kansas State University) – *Taxonomic Revision of Kansas City Hopewell: The Quarry Creek Case*

Through various publications culminating in 2001, Alfred Johnson proposed a model for development of Kansas City Hopewell triggered by population increase. It posits three phases of 250 years distinguished by settlement patterns, as well as projectile point and ceramic types: Trowbridge (A.D. 1–250)—extensive base camps, Synders points, and dentate, cord-wrapped stick impressed, or embossed-rim vessels; Kansas City (A.D. 250–500)—base camps supported by ancillary camps, Steuben points, and cross-hatched, punctated, rocker-marked pottery; Edwardsville (A.D. 500–750)—smaller, dispersed camps, Scallorn arrow points, and crenated-lip or undecorated pots. Chronological and formal data from the Quarry Creek site, Fort Leavenworth, Kansas, now indicate late fourth century transition to Edwardsville with regard to ceramic types but no change then in projectile point form. Transition from a Middle Woodland adaptation in the Kansas City locality after A.D. 400 parallels that in the Illinois River valley, long assumed to have influenced Hopewell development in the Kansas City locality.

Poster Session 4: Settlement Studies, Saturday, 2:00–4:00 PM, Room D

Lovis, William A. – see *Carr, Dillon H.*

Lurie, Rochelle (Midwest Archaeological Research Services, Inc.), Clare Tolmie (The University of Iowa), and Jay Martinez (Midwest Archaeological Research Services, Inc.) – *Nesswe Neppa, The Meeting of the Three Waters: Material Remnants of Oral History*

In June 2011, Midwest Archaeological Research Services, Inc. conducted an Intensive Phase I archaeological reconnaissance survey of 3.5 acres in Benton County, Iowa's Tobin Cabin Recreation Area. The entire parcel at the confluence of the Cedar River, Lime Creek and Lime Lake, an old channel of the Cedar River, is a Late Prehistoric and Historic site (13BE222). Oral history indicates that the property was used as a village site in the early 19th century and later as a hunting camp by members of the Meskwaki Nation. A Late Woodland/Late Prehistoric or possibly historic Native American archaeological component is located primarily on the highest portion of the parcel to the west and a mid 20th century recreational cabin formerly owned by locally prominent conservationist Judge John W. Tobin occupies the area to the east and south.

General Session 6: Historic Archaeology, Friday, 2:00 PM, Room C

Lynott, Mark (National Park Service), **Rolfe Mandel** (Kansas Geological Survey), **James A. Brown** (Northwestern University), and **Bret Ruby** (National Park Service) – *New Evidence Relating to the Construction of Mound #7, Mound City Group, Chillicothe, Ohio*

Mound 7 is the largest mound among the 26 mounds located inside the enclosure wall at the Mound City site in Ross County, Ohio. Squier and Davis (1846) provided the first description of the mound and sunk a 9 x 9 ft. shaft into it. They noted the presence of a prepared floor at the base of the mound with a large number of mica objects resting on it. The Ohio Archaeological and Historical Society excavated the mound in 1921–22 and they also uncovered a floor consisting of a “cement-like” layer. Testing in 2011 along the south side of Mound 7 was designed to search for evidence of top-soil stripping as has been documented under the embankment walls. A single test unit revealed that the mound has been reconstructed north of its original location and the southern edge of the floor described by previous excavators is still intact. Examination of the sub-floor soil revealed that the A horizon and part of the B horizon had been removed from this location, and then left exposed to weather and plant growth long enough to develop an immature A horizon. Implications for understanding the construction and time depth of Mound City are considered.

General Session 2: Hopewell, Thursday, 4:00 PM, Room A

Mahaney, Robert – *see Herrmann, Edward*

Mandel, Rolfe – *see Lynott, Mark*

Martin, Terrance (Illinois State Museum), and **Angela Perri** (Durham University) – *Animal Remains from the Getewaaking Site (20MK457), A Multi-Component Late Woodland Site on Mackinac Island, Michigan*

Construction activities behind the nineteenth-century Indian Dormitory building on Mackinac Island necessitated archaeological mitigation in 2009. A faunal assemblage in excess of 2,000 specimens was recovered from deposits that contained a mixture of predominately Late Woodland refuse. An interesting array of mammals, fish, birds, and turtles were encountered along with numerous culturally-modified specimens. Among the findings reminiscent of the Juntunen site on nearby Bois Blanc Island are the abundant remains of large, young canids.

General Session 1: Woodland and Oneota, Thursday, 2:30 PM, Room A

Martin, Andrew – *see Kullen, Douglas*

Martin, Terrance – *see Franzen, John*

Martinez, Jay – *see Lurie, Rochelle*

Mason, Richard – *see Davis-Foust, Shannon*

Mather, David (Minnesota Historical Society) – *The Zooarchaeology of Voyageurs National Park: A View from the Rainy Lake City Saloon*

Voyageurs National Park is located in northeastern Minnesota, along the Canadian border in St. Louis and Koochiching Counties. Although the region's thin, rocky soils generally limit bone preservation, NPS archaeological research spanning several decades has documented a rich and diverse zooarchaeological record. The vicinity of the Rainy Lake City Saloon (21KC13) within the Gold Mine Historic District illustrates the park's zooarchaeological potential, with identifiable faunal remains from Historic, Woodland and Archaic components. Analysis of the 21KC13 assemblage and subsequent discussion with NPS resource managers has prompted the inclusion of a "Zooarchaeology/Paleofauna" section in the upcoming Terrestrial Synthesis for Voyageurs National Park, an overview of park wildlife and resources. Other zooarchaeological highlights include indications of Middle Woodland bear ceremonialism from a single component Laurel site, and equid remains from several historic Ojibwe sites that may represent the former presence of the Lac La Croix Indian Pony.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 11:00 AM, Room B

McConaughy, Mark A. (Pennsylvania Bureau for Historic Preservation), Gretchen E. Anderson (Carnegie Museum of Natural History), and Deborah G. Harding (Carnegie Museum of Natural History) – *A Close-up Look at Two Early Woodland Copper Objects from West Virginia and Pennsylvania*

Two Cresap phase Early Woodland Period sites, McKees Rocks Mound, Pennsylvania, and Cresap Mound, West Virginia, provided the copper objects used in this study. A copper imitation bear canine from McKees Rocks Mound and a copper quadriconcave gorget from Cresap Mound were examined using a Dino-Lite digital microscope. Object materials and residues were digitally photographed. Fabric was preserved on the McKees Rocks copper bear canine. Residues of hide and hair were found adhering to the Cresap Mound gorget. The preserved materials provide insights into the perishable goods placed with Cresap phase burials.

Poster Session 3: Lithics and Specialized Studies, Friday, 9:00–11:00 AM, Room D

McCord, Robert – *see Carr, Christopher*

McGill, Dru (Indiana University Bloomington) – *Investigating Technological Style and Assemblage Diversity in Mississippi Plain Pottery and Pottery Trowels from Angel Mounds (12Vg1)*

Mississippi Plain pottery and pottery trowels are frequent finds at many Mississippi-archaeological sites in the Midwest. The analytical utility of these artifacts, however, has not been thoroughly investigated. In this paper, I will discuss the results of analysis of over 1,000 Mississippi Plain rimsherds and 180 pottery trowel fragments recovered from multiple geographic locations within the site of Angel Mounds (12Vg1). Both artifact classes were found to have extensive variability in production measurements. The discovery of culturally meaningful patterns in these variations (associated with variables such as space, time, and function) may complement existing studies of decorated wares

and augment understanding of ceramic production, consumption, and technological style within Mississippian sites. Specifically, these samples were selected to test a theory of the existence of neighborhood (or multi-house) groups inside the “borders” of Angel Mounds.

General Session 8: Mississippian, Saturday, 10:15 AM, Room B

McKinnon, Duncan P. – *see Herrmann, Jason T.*

McMahon, Catherine – *see Pulliam, Christopher*

Michlovic, Michael (Minnesota State University Moorhead), George Holley (Minnesota State University Moorhead), and Rinita Dalan (Minnesota State University Moorhead) – *A Survey Perspective on Settlement and Culture History on the Southwest Minnesota Prairie.*

A 2010 archaeological survey in the southwestern Minnesota prairies was designed to locate sites in areas regarded as high potential for archaeological remains, and was based on previous survey and planning efforts such as the MnSAS and MN-Model. High potential areas were surveyed in different sub-locales to aid in understanding settlement preferences in grassland settings. A concerted effort, including reviews of private collections, was made to recover diagnostic materials for reconstructing culture history in this poorly known area. Results of the survey, including sub-surface remote sensing protocols, indicate sites are situated in moderately predictable locations within high potential areas. Occupational history was documented from the Paleoindian onward, and Archaic point types indicated this area were clearly affiliated with Plains complexes. During the Woodland and Late Prehistoric periods influences from eastern lake-forest areas predominate.

General Session 1: Woodland and Oneota, Thursday, 1:00 PM, Room A

Millhouse, Philip G. (Illinois State Archaeological Survey), and Scott Wolfe (Galena African American Foundation) – *Dominant Narratives and Forgotten Communities: The Archaeological Potential for Illuminating the 19th Century African American Community in Jo Daviess County, Illinois*

In 1822 Colonel James Johnson brought a force of workmen and enslaved African Americans to labor in the lead mines of northwestern Illinois. These enslaved individuals became the seed for a thriving African American community in Jo Daviess County. This community eventually faded in the face of a changing local economy. As the area later developed into a prime tourist destination, a historic narrative was created that left out the African-American community. Recent work has indicated that archaeology can play a vital role in illuminating the past contributions of this forgotten community.

General Session 6: Historic Archaeology, Friday, 2:30 PM, Room C

Milner, George R. (Penn State) – *Warfare in the Late Prehistoric Midwest: New Information from Norris Farms in Illinois*

Since the late 1980s, Norris Farms in Illinois (ca. A.D. 1300) has been recognized as providing one of the clearest views of late prehistoric warfare in the Midwest. Most

conflict-related casualties (injured and killed) were adults. Newly revised age estimates, especially for adults, improve our understanding of who was likely to become a casualty. The accuracy of the new estimates is assessed using known-age modern skeletons selected to approximate the mortality characteristics typical of “anthropological” populations. The age distributions of the Norris Farms male and female victims are similar, and male mortality is consistent with early historic descriptions of warrior ages. Men differed from women, however, when conflict-related deaths are compared to all other deaths (unknown causes). Also discussed is why it seems that adults with disabilities that interfered with mobility were more likely to be killed than their healthier counterparts.

General Session 8: Mississippian, Saturday, 8:00 AM, Room B

Mollerud, Katy (University of Wisconsin–Milwaukee) – *Compositional Analysis of Cambria Phase Pottery Using X-Ray Fluorescence*

The Cambria phase (A.D. 1000–1200) is a poorly understood archaeological phenomenon centered on a small portion of the Minnesota River in south-central Minnesota. Currently, the Cambria phase is classified as part of the Middle Missouri tradition, although previous typological analyses have identified characteristics in Cambria phase pottery from several different late prehistoric cultural traditions, including Plains, Mississippian and Woodland. This study represents an initial attempt to couple an attribute analysis with X-ray fluorescence (XRF) technology and compositional analysis. The research is designed to investigate whether the observed morphological differences of pottery types at two understudied Cambria phase sites, Owen D. Jones (21BE5) and Price (21BE36), correlate with elemental variation.

General Session 8: Mississippian, Saturday, 8:45 AM, Room B

Monaghan, G. William (Glenn A. Black Laboratory of Archaeology/Mathers Museum, Indiana University Bloomington), Timothy Schilling (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), Anthony Krus (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington), and Timothy Baumann (Glenn A. Black Laboratory of Archaeology/Mathers Museum, Indiana University Bloomington) – *Refining Time: A Bayesian Approach to Chronology at the Angel Site*

The period A.D. 1000–1400 witnessed a dramatic expansion in demography and social complexity across the lower Ohio River Valley. Angel Mounds, which was one of the largest Mississippian towns in this region, was established, grew in prominence, and was eventually abandoned during this interval. Although extensively excavated beginning in the 1930s, until recently absolute ages from the site were sparse and the chronology of the town’s settlement and growth has been poorly understood. Through a Bayesian approach, the archaeological record will be used to model likely construction sequences of earthworks, palisades, and structures at Angel Mounds and refine the chronology of site development. Formulating well-supported, site-specific chronological frameworks has important implications for better understanding the broader late prehistoric settlement patterns and cultural history across the midcontinent.

General Session 8: Mississippian, Saturday, 9:15 AM, Room B

Monaghan, G. William – see *Ausel, Erica*

Monroe, Robert W. – see *Pisell, James M.*

Moore, Christopher R. – see *Raymer, C. Martin*

Mueller, Kevin – see *Kaufmann, Kira E.*

Mueller, Kevin J. – see *Watson, Robert J.*

Mulholland, Stephen L. (Duluth Archaeology Center, LLC), and Susan C. Mulholland (Duluth Archaeology Center, LLC) – *The Cloquet River: A Paleoindian Highway in Northeastern Minnesota*

The Cloquet River drainage has the highest concentration of Early and Late Paleoindian points documented in Northeastern Minnesota. Recent geomorphological field investigations show the Cloquet River drainage as ice free during the Early period. In addition, archaeological field investigations and documentation of private collections over the past twenty years have identified over half a dozen Early Paleoindian and scores of Late Paleoindian points from the Cloquet River drainage, many more than known previously. The point assemblages suggest dynamic populations with connections extending far beyond the region.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 10:30 AM, Room B

Mulholland, Stephen L. – see *Mulholland, Susan C.*; also see *Mulholland, Susan C., and Jennifer Hamilton*; also see *Mulholland, Susan C., and Mark P. Muñiz*

Mulholland, Susan C. (Duluth Archaeology Center, LLC) – *Knife Lake Siltstone off Knife Lake: The Amoeba 1 Quarry Site*

Knife Lake siltstone is one preferred lithic type for the Paleoindian of northeastern Minnesota. Quarries on the Canadian side of Knife Lake are well-known; a few quarries on the American side were known prior to the 2009 discovery of a complex of new quarry sites. In 2010, a quarry was discovered on the south side of Amoeba Lake off the North Arm of Knife Lake; survey by the University of Minnesota field school in 2010 and 2011 recorded bedrock outcrops of grey and black beds of Knife Lake siltstone with associated debitage concentrations. This area was not part of a prescribed burn so survey had to contend with dense vegetation and blowdown. However, limited shovel testing indicates cultural deposits associated with the more accessible portions of the outcrops. The topography suggests the bedrock outcrops may be quite extensive. The site indicates that other bedrock exposures of Knife Lake siltstone may be present south of Knife Lake along the strike of the Knife Lake Group beds.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 9:00 AM, Room B

Mulholland, Susan C. (Duluth Archaeology Center, LLC), and Stephen L. Mulholland (Duluth Archaeology Center, LLC) – *Early Paleoindian Occupations in Southeastern Pine County: Implications for Northern Minnesota*

The largest concentration of fluted projectile points documented in Minnesota to date is in the privately held Neubauer Collection in southeastern Pine County. Identified types include Folsom, Gainey, and Holcombe; Clovis (*sensu strictu*) may also be present. These data indicate a concentration of activity during the earliest Paleoindian Traditions along the Snake River and its tributaries. This area was deglaciated relatively early in the Late Pleistocene sequence and was open to colonization prior to other areas. Point types characteristic of both the Great Plains and the Great Lakes suggest a long and complex sequence of human occupations. This area could have provided the source populations for entry into northeastern Minnesota as the glacial retreat continued.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 10:15 AM, Room B

Mulholland, Susan C. (Duluth Archaeology Center, LLC), Stephen L. Mulholland (Duluth Archaeology Center, LLC), and Jennifer Hamilton (Duluth Archaeology Center, LLC) – *Points and Pits: Survey Results on the Lake Superior Shore (SHPO Region 9)*

Survey and documentation of private collections from the Lake Superior Shore (SHPO region 9) illustrates the difficult nature of archaeological field work in this area. Only six new prehistoric sites were recorded from field survey targeted to areas of high potential; many other areas were either negative or untestable, although pits were documented. Most new recorded sites were previous find spots of artifacts by private individuals. However, these sites were usually identifiable to specific historic contexts, providing a framework for the prehistory of the region. No Early Paleoindian artifacts are documented to date but Late Paleoindian is definitely present. Archaic occupations are sparser, while Woodland occupations are indicated in some areas.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 11:15 AM, Room B

Mulholland, Susan C. (Duluth Archaeology Center, LLC), Mark P. Muñiz (St. Cloud State University), and Stephen L. Mulholland (Duluth Archaeology Center, LLC) – *The Status of Archaeology in Northeastern Minnesota: A Retrospective*

Archaeology in northeastern Minnesota has not always been considered to be an area worthy of study. Early Minnesota archaeology tended to focus on other areas, in part a result of dense vegetation and abundant Federal lands here as much as well-known or more easily accessible areas elsewhere. That changed when the Superior National Forest hired an archaeologist in the mid 1970s; considerable field work has scratched the surface with a “mere” 3000 sites and counting. Research for management at the Reservoir Lakes has also recorded significant human occupations in the Cloquet River and tributaries. On-going research in the Knife Lake area (SNF), the Reservoir Lakes, Voyageurs National Park, and other areas illustrates that the region has a broad and rich past.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 8:00 AM, Room B

Mulholland, Susan C. – see *Mulholland, Stephen L.*

Muñiz, Mark P. (St. Cloud State University) – *Preliminary Results of Recent Research at the Knife Lake Paleoindian “Daughter District”*

Recent research on Knife Lake at the Minnesota-Canadian border has identified a district of 11 sites in close proximity to several outcrops of high quality Knife Lake Siltstone. The production areas of these sites demonstrate a range of lithic technology including manufacture of bifaces, blades, adzes, flake cores, and flake blanks. Several sites also indicate more generalized habitation areas with discard of exhausted tools and production and finishing of new tools. An Agate Basin point base recovered from one site along with Agate Basin/Hell Gap point preforms recovered from other sites indicate a middle Paleoindian occupation of the district. Unique characteristics of biface and blade production at several sites suggest a fluted point occupation may also be present.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 8:45 AM, Room B

Muñiz, Mark P. – see *Mulholland, Susan C., and Stephen L. Mulholland*

Munson, Cheryl Ann (Indiana University Bloomington), and David Pollack (Kentucky Archaeological Survey/ University of Kentucky) – *Far and Wide: Late Mississippian/Protohistoric Extra-Regional Interactions at the Mouth of the Wabash*

Evidence of Caborn-Welborn extra-regional interactions points north/northwest and south/southwest of the lower Ohio Valley. The occurrence of redstone, cupric metals, shell, and bison bone represent the arrival of transportable material items or raw materials. In contrast, locally manufactured ceramic vessels represent the transmission of non-local styles or the presence of potters who relocated to the Caborn-Welborn region. Some may be actual “trade vessels.” The presence of these goods and vessels reflect Caborn-Welborn participation in protohistoric interaction networks. These networks may have played an important role in the sustaining of Caborn-Welborn culture following the widespread collapse of neighboring Mississippian polities.

Symposium 6: Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-Cultural Interaction in the Northeast and Midcontinent, 1500 to 1750, Saturday, 3:00 PM, Room B

Munson Scullin, Wendy (Midwest Ethnohorticulture), and Michael Scullin (Midwest Ethnohorticulture) – *Phytolith Profiles: Maize Typologies as Identified through Phytolith Analysis*

Grasses accumulate silica as phytoliths and potentially as other polymeric forms in the leaves, stems, and some reproductive tissues. Variations in phytolith assemblages from maize cob glumes in different geographical and culturally-associated landraces show subtle trends as maize diverges genetically—as people select for a type of maize that produces best for their particular location. Phytoliths are no surrogate for genetics; distant grass relatives can have nearly identical individual phytolith forms, but rather different assemblages. Relying on assemblages of all phytolith forms makes use of the fact that maize glumes contain forms other than the frequently recognized “rondel” and these other forms may represent the distinguishing characteristic in the assemblage.

Thus a database of maize phytolith assemblages has the potential to assist in identifying maize landraces from pottery residues and from maize macrofossils. We use a similar “assemblage” paradigm to determine climates and ecosystems from soil samples.

Poster Session 1: *Floral and Faunal Studies*, Thursday, 2:00–4:00 PM, Room D

Myster, Susan M. T. (Hamline University), Lindsey Jo Helms (Illinois State University), and Maria O. Smith (Illinois State University) – *Post-Mortem Human Bone Modification: Demographic Analysis of Mortuary Tapping in Northern Minnesota.*

A unique and regionally circumscribed post-mortem modification of human osseous remains occurs in the Late Woodland (A.D. 800–contact) of northern Minnesota. This modification is referred to as “tapping” which describes the method used to puncture crania and the metaphyses of long bones. The human remains (with and without tapping) are also subject to postmortem scraping and cutting and red ochre painting. The MNI of the individuals with tapping is 52 or 18.98 percent of the collective sample (N = 274) from the White Oak Point (21-IC-01), Osufsen (21-IC-02), Crookston (21-PL-09), Noyse (21-PO-14), Shocker (21-BL-01), and Round Mound (21-TR-01) sites. There is no predilection by sex, but there is for age. The method is similar to postmortem modification reported in Michigan. Several motivations for the practice are considered. The skeletal material has been repatriated; all Minnesota osteological material assessed in the present study derives from the site files of Hamline University’s Osteological Laboratory.

General Session 1: *Woodland and Oneota*, Thursday, 2:00 PM, Room A

Nealis, Stuart (University of Kentucky) – *The Effect of Freshwater Mussel Consumption on Dental Wear during the Late Archaic Period*

This study addressed the effect of eating freshwater mussels on the dental wear rate and amount seen during the Late Archaic period (5,000–3,000 B.P.) in the Mid-western USA. The Indian Knoll population from Kentucky, with heavy shellfish utilization, was compared to the Black Earth population from Illinois, which exhibited no shellfish exploitation. The results show that no significant difference in rate or amount can be seen between these two populations. These populations were then compared to the Late Woodland period (1500–1000 B.P.) Libben population from Ohio. Both the rate and amount of wear were found to be significantly greater in the Archaic period. The results suggest that shellfish did not noticeably impact dental wear in the Archaic, and that the grit introduced from groundstone tool technology and food processing techniques such as stone boiling was the main cause of such drastic wear levels.

Poster Session 1: *Floral and Faunal Studies*, Thursday, 2:00–4:00 PM, Room D

Nelson, Jon (Confederation College, retired) – *KLS Quarries—Searching the Canadian Side of Knife Lake*

Shoreline and ground surveys of Knife Lake siltstone quarry activity on the Ontario side of Knife Lake were carried out in 1988. Nineteen quarry sites and a workshop area were identified. Evidence of quarry activity included flake scars, hammerstone marks on quarry faces, quarry debris, and hammerstones. Workshops had bifaces in various stages of manufacture. A controlled burn was carried out on Knife Lake in 2000 and a ground survey the following spring found three new workshop areas. The

two surveys indicated that much of the quarry activity was concentrated in a mile-long 'macro-site' that encompassed four quarry sites and three workshop areas. The finding of an intact late Paleo-Indian biface in addition to a previously found tip of a parallel-flaked biface strongly indicates the use of Knife Lake quarries during the late Paleo-Indian period.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 8:30 AM, Room B

Neubauer, Fernanda (University of Wisconsin–Madison, CAPES Foundation), and Michael J. Schaefer (University of Wisconsin–Madison) – *Patterns of Settlement, Subsistence, Seasonal Mobility and Cultural Interaction of the Late Archaic Hunter Gatherer Groups of Michigan's Upper Peninsula (4,500–2,000 B.P)*

Due to a paucity of archaeological data on the Late Archaic period in Michigan's Upper Peninsula, we know little about the lifestyles of the indigenous inhabitants of the region. Recent excavations on Grand Island have yielded a sizable body of evidence of Late Archaic occupations. Based on my analysis of data from these excavations and considering the inventory of known sites in the region, I propose that a system similar to Robertson's (1987) model of settlement and seasonal mobility for the people of Saginaw Valley in Lower Michigan was implemented by the peoples in the Upper Peninsula during the Late Archaic. Within this system, Grand Island would have served as the center of a social network where population groups aggregated in the fall to exchange information and goods. Other seasons were characterized by a dispersed, mobile population of groups of about 25 individuals in size, as in the Saginaw Valley.

General Session 9: *Paleo and Archaic*, Saturday, 8:45 AM, Room C

Nolan, David J. (Illinois State Archaeological Survey), and Claire P. Dappert (Illinois State Archaeological Survey) – *Fort Johnson/Cantonment Davis: War of 1812–Era Military Installations at the Des Moines Rapids*

In September 1814 Brevet Major Zachary Taylor established Fort Johnson on the eastern bluffs of the Mississippi to assert American control over the mouth of the Des Moines River and points northward. Completed in a matter of weeks, the fort and its works were razed in late October of the same year when the troops ran out of provisions and retreated downriver to the St. Louis area. The following October, a temporary winter camp called Cantonment Davis was established near the fort ruins as a staging ground for building Fort Edwards, a subsequent military trading post. This paper presents highlights from the archaeological search for the fort/cantonment location and recent excavations undertaken at the site.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 2:45 PM, Room B

Nolan, Kevin (Ball State University) – *Changes in Prehistoric Landscape Exploitation Strategies in Central Ohio: A GIS Analysis*

Using raw data from the Ohio Archaeological Inventory, I examine changes in landscape patterns through time for seven counties in central Ohio (Franklin, Licking, Madison, Pickaway, Fairfield, Fayette, Ross, and Hocking). While not a complete or perfect dataset, GIS-based analysis of the distribution of sites and site types (where recorded)

within the SHPO database will provide a coarse picture of changes in distribution on the landscape through time associated with changes in lifeways in the major temporal periods of Ohio's prehistory.

General Session 4: *Regional Studies*, Friday, 2:00 PM, Room A

O'Gorman, Jodie – see *Conner, Michael*; see also *Upton, Andrew J.*

Pacheco, Paul J. (SUNY Geneseo) – *Investigating Ohio Hopewell Settlement and Subsistence Patterns in the Central Scioto Valley: An Overview of the Brown's Bottom Project*

The Brown's Bottom project was started in 2005 with the intention of investigating Ohio Hopewell settlement and subsistence patterns in the critical Central Scioto heartland. Working on settlements first discovered and excavated by Olaf Prufer in 1963, but rejected by him in favor of working at the McGraw site, in the 6 years of the project we have investigated and documented the site layouts for two distinct Middle Woodland habitations, located approximately 100 meters apart. We excavated 3 complete Ohio Hopewell structures and numerous pit and refuse deposits. This presentation will put the project into context, outlining our research goals, field & laboratory strategies, and a broad overview of our results. Emphasis will be placed on spatial patterns, chronology, and seasonality evidence.

Symposium 4: *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 9:45 AM, Room C

Parker, Kathryn E. – see *Fortier, Andrew*; also see *Franzen, John*

Pater, Kimberly – see *Edwards, Richard W., IV*

Pauketat, Timothy R. – see *Benden, Danielle M.*; also see *Boszhardt, Robert "Ernie"*

Pearson, Charlotte L. – see *Jordan, Kurt A.*

Perri, Angela – see *Martin, Terrance*

Perry, Michael (Office of the State Archaeologist, The University of Iowa) – *An Early Archaic Component in Southeastern Iowa*

Southeastern Iowa Early Archaic components have generally consisted of surface finds of Dalton, Thebes and Hardin Points or chipped stone adzes at sites with overall poor integrity. A majority of the components appear to have been encountered along U.S. 61 in Des Moines County. One of these sites, 13DM999 located in the Smith Creek watershed in northern Des Moines County, is an exception. Test excavations suggest a shallowly buried occupational horizon in a portion of the site not presently under cultivation. The component has yielded at least one chipped stone adz, other chipped stone tools, and the remains of lithic reduction activities. The site appears to be part of a cluster of sites that have yielded chipped stone adzes or adz performs and other Early Archaic diagnostics.

General Session 9: *Paleo and Archaic*, Saturday, 8:30 AM, Room C

Peterson, Cynthia L. (Office of the State Archaeologist, The University of Iowa), **Anton Till** (Office of the State Archaeologist, The University of Iowa), and **Steven L. DeVore** (Midwest Archaeological Center, National Park Service) – *Archaeology at Iowaville, the 1765–1820 Báxoje (Ioway) Village on the Des Moines River*

Iowaville (13VB124), a Báxoje village, housed up to 800 people in southeast Iowa from 1765–1820. Known to archaeologists and collectors for its remarkable surface and metal detector finds—beads, silver ornaments, a large faunal assemblage, and nested copper alloy kettles containing fur and uncharred seeds—little was known about the site’s preservation or lack thereof. The 2010 fieldwork goal was to assess site integrity in this cultivated farm field. The National Park Service assisted greatly by conducting a geophysical survey, covering over 19 acres. Their results, coupled with archaeological testing, revealed astonishing news about the level of site preservation. This talk will discuss archaeological findings and the changing Báxoje way of life during the Western Frontier period.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825, Thursday, 1:15 PM, Room B*

Peterson, Cynthia L. – *see Doershuk, John F.*

Pisell, James M. (Illinois State Archaeological Survey), **Lauren M. Fitts** (Illinois State Archaeological Survey), and **Robert W. Monroe** (Illinois State Archaeological Survey) – *Investigations at the Trinity Hill Site (11JY582): Late Woodland and Archaic Occupation of the Piasa Creek Valley, Jersey County, Illinois*

Trinity Hill (11JY582) is a large bluff base prehistoric site that produced the remains of several buried Late Archaic components and a dense, early Late Woodland habitation that had both near surface and submerged feature clusters that extended onto an adjacent low alluvial terrace. The site was investigated as part of an IDOT compliance project in 2010 and the excavations resulted in the discovery and sampling of 131 Woodland features and a buried Archaic midden that produced 17 associated pits. This paper discusses the various site components, which provide some of the first excavated data associated with these particular cultural groups in the Piasa Creek drainage basin.

General Session 9: *Paleo and Archaic, Saturday, 9:00 AM, Room C*

Pollack, David – *see Munson, Cheryl Ann*

Pope, Melody K. (Office of the State Archaeologist, The University of Iowa), and **Anson Kritsch** (Office of the State Archaeologist, The University of Iowa) – *Hidden in Stone: Plant Processing with Chert Implements*

As part of a larger on-going study aimed at exploring relationships between subsistence and sedentism in the Neolithic Near East and Archaic Midwest, this poster introduces the results of an experimental microwear study of stone tool plant processing. Midwest researchers typically study plant remains but chert plant processing implements have received little attention. Researchers working in the Old World typically focus on both plants and plant working technologies. If lithic data are to be integrated

into studies of past economies it is necessary to differentiate between tools used for manufacturing and those used in subsistence tasks. To this end, our poster introduces the results of experimental work on silica-accumulating plants including cattails, rushes, reeds, grasses, and cattail tubers. As the findings demonstrate, chert implements are effective for procuring and processing woody stemmed plants and tubers, work that leaves behind key microwear attributes observable with high power optical microscopy.

Poster Session 1: *Floral and Faunal Studies*, Thursday, 2:00–4:00 PM, Room D

Pulliam, Christopher (U.S. Army Corps of Engineers, St. Louis District), Andrea Adams (U.S. Army Corps of Engineers, St. Louis District), and Catherine McMahon (U.S. Army Corps of Engineers, St. Louis District) – *Our Nation's Veterans and Indiana's Archaeological Heritage: Curation of Archaeological Collections at the St. Louis Veterans Curation Program Facility*

In December 2009, the U.S. Army Corps of Engineers Mandatory Center of Expertise for the Curation and Management of Archaeological Collections opened the second laboratory for the Veterans Curation Program (VCP) in St. Louis, Missouri. The goal of the VCP is to provide veterans with tangible work skills through the rehabilitation and preservation of archaeological collections and to advance the public stewardship of federally owned archaeological collections. Since 2009, the St. Louis VCP has employed 28 veterans; of which 15 have gained permanent employment and 10 are pursuing higher education. The St. Louis VCP has worked with the Glenn Black Laboratory of Archaeology (University of Indiana) and the Applied Archaeological Laboratory (Ball State University) to curate USACE, Louisville District archaeological collections. Currently the St. Louis VCP is processing 353 cubic feet of artifacts and 12 linear feet of archival materials. This poster provides information about the program and collections.

Poster Session 3: *Lithics and Specialized Studies*, Friday, 9:00–11:00 AM, Room D

Ramond, Sara (University of Wisconsin–Milwaukee), Kathleen M. Foley Winkler (University of Wisconsin–Milwaukee), Robert Jeske (University of Wisconsin–Milwaukee), Kristin Hedman (Illinois State Archaeological Survey), Phil Slater (University of Illinois at Urbana-Champaign), and Matthew Fort (University of Illinois at Urbana-Champaign) – *Late Archaic Lifeways in Southeastern Wisconsin: Evidence from the Jaco Site (47JE1192)*

Remains from four individuals were excavated as part of a rescue operation of the Jaco Site, a Late Archaic Red Ocher burial site in Jefferson County, Wisconsin. UW–Milwaukee, Great Lakes Archaeological Research Center and personnel from the Wisconsin Historical Society conducted the excavation. The University of Wisconsin–Milwaukee conducted laboratory, and skeletal analyses. The Illinois State Archaeological Survey at the University of Illinois at Urbana-Champaign conducted isotopic analyses. Archaeological information, skeletal data, and results of isotope analyses are combined to discuss diet, health, and human interaction circa 900–500 B.C. in the Great Lakes region.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 1:15 PM, Room A

Raslich, Frank J. – *see Upton, Andrew J.*

Raslich, Nicole A. (Michigan State University) – *By the Community, for the Community: Engaging Archaeology in Contemporary Urban Contexts*

Indigenous populations, universities and archaeologists frequently engage in the process of cultural heritage management. Often, through inadvertent discoveries and federal policy adherence, native and local communities are called upon to mitigate and implement cultural resource recovery plans that fall outside of their local communities and extend into their ancestral territories. This paper examines the processes of mitigation resulting from the disturbance of a Late Woodland cemetery in Michigan that resulted in a participatory and inclusive community recovery project developed by the Saginaw Chippewa Indian Tribe of Michigan and the University of Michigan–Flint. Issues encompassed here include: what constitutes a community based archaeology project? How can native interests concerned with access to and exposure of ancestral remains be reconciled with the interest of the larger community? What challenges do archaeologists face when working with multiple constituencies? And finally, can archaeology, civic engagement and governmental policies coincide to work towards positive outcomes?

General Session 7: Middle and Late Woodland, Saturday, 9:00 AM, Room A

Raymer, C. Martin (Kentucky Archaeological Survey), and Christopher R. Moore (University of Indianapolis) – *A Consideration of the Social and Historical Context of Site 12D123, a Middle Fort Ancient Circular Village in Dearborn County, Indiana*

While Anderson ceramic assemblages from Fort Ancient sites in southwestern Ohio have been thoroughly examined and discussed in the literature, ceramics from contemporary sites along the southern and western periphery of the Anderson tradition in Indiana and Kentucky have received less attention. In this paper we describe and compare the Site 12D123 assemblage with four other Anderson ceramic assemblages from Dearborn County, Indiana and one from across the Ohio River in Boone County, Kentucky. While no chronometric dates are available for Site 12D123, radiocarbon dates are available from the Boone County site and most of the Dearborn County sites allowing an evaluation of the relative chronological position of Site 12D123 through detailed ceramic attribute analysis. When considered with chronometric dates and settlement patterns, ceramic attribute analyses extend ceramic studies beyond their traditional chronology building roles and permit analysts to evaluate temporally micro-scalar activities like village relocation practices and identity formation.

General Session 8: Mississippian, Saturday, 9:00 AM, Room B

Richards, Carol (Illinois State University) – *A Behavioral Analysis of Cordage: Looking Beyond Final Twist Direction of Cordage Impressions*

Cordage and fabric impressions found on ceramic surfaces are one of the many traits used to help identify and estimate the date of an archaeological site. Although cordage impressions are often seen as part of a ceramic tradition, they are also the physical representation of a much older perishable tradition of turning plant and animal fibers into cords and textiles. Since the late nineteenth century, clay casts of these impressions have been used to study and document the many variations of fabric and

cordage used to decorate the surfaces of prehistoric ceramics. Recent research has focused on identifying the possible choices available in the production of a two ply cord and how these choices affect the structure of the cord. A behavioral chain analysis is used in this study to identify the different steps of cordage production and as a way to help organize the research findings.

General Session 5: *New Approaches*, Friday, 4:00 PM, Room A

Richards, John D. (University of Wisconsin–Milwaukee), and Thomas J. Zych (University of Wisconsin–Milwaukee) – *Recent Archaeological Investigations at the Aztalan Site (47JE0001)*

During summer 2011, archaeological investigations were conducted by a UW–Milwaukee (UWM) archaeological field school at Aztalan State Park. Excavations targeted six locations adjacent to the west bank of the Crawfish River within the formerly palisaded portion of the Aztalan site. Work by UWM in 1984 in this area documented a primarily Late Woodland midden present in a ravine formed by headward erosion of a former spring. The 2011 research was directed toward exposing similarly stratified sequences that might document midden deposits associated with the later Mississippian occupation and abandonment of the site. Results confirmed the presence of intact midden deposits in four of the six areas tested. In addition, excavations in a ravine south of the 1984 excavations documented the presence of massive aboriginal filling that may have been an attempt to enclose the running water of the Crawfish River within the palisade.

Poster Session 2: *Field Reports*, Thursday, 2:00–4:00 PM, Room D

Rodell, Roland L. (University of Wisconsin–Rock County), and Norman C. Sullivan (Marquette University) – *Notched Teeth and Trophy Taking in the Northern Mississippi Valley*

In 1974, the University of Wisconsin–Milwaukee excavated a portion of the Diamond Bluff village site (47-Pi-2) in the Red Wing–Pepin locality of the northern Mississippi Valley. The site assemblage is dominated by Oneota and Mississippian related materials, which date within the period of circa A.D. 1000–1300. Among the fragmented human remains are 69 loose human teeth of which seven of the teeth were intentionally modified by cutting notches into the roots to facilitate suspension on necklaces. In 1948, two similarly notched human teeth were also recovered at the nearby Bartron site (21-Gd-2). It is our contention that these notched teeth are trophies from intergroup warfare, which emerged as competition for resources intensified and participation in an interregional exchange network.

Poster Session 3: *Lithics and Specialized Studies*, Friday, 9:00–11:00 AM, Room D

Rosebrough, Amy (Wisconsin Historical Society) – *The East Branch Site (47-LG-0123): An Unusual Late Post-Contact Textile Assemblage*

In 2010 construction workers inadvertently disturbed a late post-Contact (ca. 1830–1900) Native American gravesite in Langlade County, Wisconsin. The burial pit had been lined with a rare and unusual assemblage of cut textile scraps. Textiles range from probable blanket or shawl fragments, to possible clothing remnants, representing

both machine-made and hand-woven fabrics. The East Branch textiles represent one of only a few instances of textile preservation in archaeological contexts in Wisconsin.

General Session 6: *Historic Archaeology*, Friday, 3:30 PM, Room C

Rovanpera, Jennifer (Saint Cloud State University) – *Insights from the Debitage Analysis at the Lillian Joyce Site*

The Lillian Joyce site is located in northern Minnesota along the Canadian border in the Superior National Forest. It is one of many Paleoindian sites found near an outcropping of high quality Knife Lake Siltstone. Flake frequency from two excavation units is used to determine the number of manufacturing episodes or occupations at the site. Types of flakes, quality of the material and the presence of exotic material are then analyzed to distinguish the similarities and differences between the occupations and to give insights into the type of lithic reduction occurring at the site.

Symposium 2: *Archaeology in Northeastern Minnesota: From Paleo to Historic*, Friday, 9:30 AM, Room B

Ruby, Bret – see Lynott, Mark

Sasso, Robert F. (University of Wisconsin–Parkside) – *Le Boeuf Sauvage: Cultural Manifestations and Importance of Bison in Oneota and Historic Cultures of the Upper Midwest*

Evaluating the importance of the bison among the late prehistoric Oneota solely on the basis of its presence in faunal assemblages is at best equivocal. Yet the importance of bison in Oneota culture seems undeniable. In addition to remains recovered from Oneota sites, we have evidence from other aspects of Oneota archaeology, including lithic artifacts and numerous and varied examples of symbolic artistic expression emphasizing this most sizable grazing herd mammal. Historic Native American groups linked either directly or indirectly to the Oneota shared in many elements of a well-developed, well-integrated seasonal focus on bison hunting that offered a variety of benefits extending well beyond mere subsistence. The increasing importance of maize agriculture and intergroup warfare effectively co-evolved with bison exploitation and the elaboration of attendant ceremonialism. The author discusses many features of the ethnohistoric patterns and recognizes a number of connections to the late prehistoric Oneota lifeway.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 2:00 PM, Room B

Schaefer, Michael J. – see Neubauer, Fernanda

Schantz, Regena (Colonel Davenport Historical Foundation) – *More than a Company of Soldiers: Fort Armstrong in the 1820s*

In the years after the War of 1812, Fort Armstrong at Rock Island served a peace-keeping mission in the Upper Mississippi Valley. Located in the Mississippi River, three miles from the Indian Village of Black Hawk and his British Band of Sauk, the fort was strategically located to monitor tribal trading practices and protect U. S. mineral

interests in northwestern Illinois. As friendly trading relationships with the Sauk and Mesquakie developed, the fort site expanded in four main areas: the Indian Agency, garden and stable area, family housing, and the trading post of George Davenport. Despite being surrounded by a modern military installation, excavations at the Davenport site have offered rich archaeological evidence of life at this military outpost that enhance the historical record.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 3:45 PM, Room B

Schilling, Timothy (Glenn A. Black Laboratory of Archaeology, Indiana University Bloomington) – *Mound Explorations at Angel, Retrospective Thoughts and Prospective Opportunities*

The Angel Mounds site was a center of Middle Mississippian life along the Ohio River in Southern Indiana. Even though the mounds are a salient feature of the site, knowledge of their age and use is limited. Much of it can trace origins to the work of Glenn Black in the mid-20th century. Early work was embedded in ideas and methods of the times. In this presentation, I review the history of mound explorations at Angel. In particular, it is necessary to know how and why earlier workers excavated the mounds. This work provides a stepping off point for new investigations using modern low impact methods designed to create a better understanding of when and, perhaps why, the residents of Angel built these monuments. New data are needed because interpretation is limited by the available database.

General Session 8: *Mississippian*, Saturday, 9:30 AM, Room B

Schilling, Timothy – *see Monaghan, G. William*

Schneider, Seth A. – *see Ahlrichs, Robert E.; see also see Schuetz, Eric J.*

Schuetz, Eric J. (University of Wisconsin–Milwaukee), Robert E. Ahlrichs (University of Wisconsin–Milwaukee), and Seth A. Schneider (University of Wisconsin–Milwaukee) – *Paste Compositional Analysis of Oneota Pottery Vessels in the Lake Koshkonong Region*

At least six large Oneota sites are distributed along the northwestern shore of Lake Koshkonong, which is more than 50 km from other known Oneota settlements. Temporal and material cultural relationships among these sites have been unclear. Pottery production and acquisition of raw materials are significant unresolved questions. Did the occupants of Oneota sites on Lake Koshkonong utilize the same raw material resources? Did they follow the same paste recipes in pottery production? The close proximity of sites suggests strong social interaction and sharing of knowledge, but these connections have yet to be demonstrated. Paste compositional analysis of pottery sherds from three sites: the Crescent Bay Hunt Club, Schmeling, and Koshkonong Creek Village, is conducted to determine the degree of connection and/or autonomy among occupants of Oneota sites in the region.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 2:00 PM, Room A

Schulenburg, Marcus (University of Wisconsin–Milwaukee), and Richard W. Edwards (University of Wisconsin–Milwaukee) – *Washington Island Archaeology: Preliminary Ceramics Analysis of the Gibson Site (Door County, WI)*

In 1967 a field school on Washington Island recovered a collection of ceramic materials, and other artifacts, which were deposited in the University of Wisconsin–Milwaukee artifact storage. Preliminary analysis was not undertaken until spring 2011; in this paper that preliminary analysis will be presented. This paper will discuss not only the assemblage description, but also the research potential of materials that have accumulated in storage facilities. During the course of this analysis potentially new ceramic technologies have been identified. This new evidence from an old collection has the potential to change our understanding of the Middle Woodland in the Door Peninsula.

General Session 7: Middle and Late Woodland, Saturday, 9:15 AM, Room A

Schurr, Mark R. (University of Notre Dame), and Della C. Cook (Indiana University Bloomington) – *The Temporal and Cultural Contexts of the Enigmatic Cremation Burials from the Yokem Site, Illinois*

The region near the confluence of the Mississippi and Illinois Rivers in southwestern Illinois has produced evidence that fire was used in mortuary rituals for several thousand years, and that cremation was employed in different ways at different times. Gregory Perino's 1967–68 excavations at the Yokem site identified two rock-lined burial features that had been burned. Tomb location, burial attributes, radiocarbon dating, stable isotope analyses and electron spin resonance are all used to understand better the significance of the cremation feature located between Mounds 6 and 7 at the site, and to place the feature within its temporal and cultural contexts. Although the available radiocarbon dates are limited, when combined with other evidence they suggest that the Yokem "crematories" may not have been burned as part of the burial ritual, but in a deliberate attempt by successor populations to "erase" earlier mortuary features.

General Session 7: Middle and Late Woodland, Saturday, 8:30 AM, Room A

Schwab, Gregory (Saint Cloud State University), and Philip Bauschard (Saint Cloud State University) – *Cultural Palimpsest Deposition at the Lillian Joyce Site, BW-CAW*

The Lillian Joyce Site is located at Knife Lake in the Boundary Waters Canoe Area Wilderness of the Superior National Forest, Lake County, Minnesota. At this site the exposed root mass of a fallen tree and its associated tree bowl were excavated. The five arbitrary levels of collected lithics were sampled proportionately by independent experimenters and then tested for some of the characteristics that distinguish lithic reduction strategies. Analysis of variance tests were run on these recorded measurements and the initial results indicated that the source of the most significant size distinctions was associated with artifact depth. Additional testing of the collected material determined that multiple lithic reduction strategies were reflected in all of the represented strata. This not only confirms the presence of multiple reduction episodes, it also shows that these lithics have been disturbed and mixed.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 9:45 AM, Room B

Schwartz, Saul (Princeton University), and William Green (Logan Museum of Anthropology, Beloit College) – *Grounding Metaphors, Materially: Perspectives from Iowaville on Culture and Power in Colonial Interaction*

During a period of intense imperial competition between Spain and Britain in the Mississippi River valley, Ioway Indians relocated from the Missouri River to the lower Des Moines River, where they lived ca. 1765–1820 at a village site known today as Iowaville (13VB124). Models for understanding contemporary Indian–European interaction in the “middle ground” of the Great Lakes (White 1991) or the “native ground” of the Arkansas River valley (DuVal 2006) present cultural continuity and change as determined by and therefore an index of objective power structures. These interpretations reproduce the very assumptions they were intended to challenge by framing colonial interactions as binaries of assimilation or resistance. In contrast, archaeological and archival data on Iowaville suggest Ioway material cultural practices generated, rather than simply reflected, potentially powerful positions in relation to and relations with other indigenous and colonial interests in the social landscape.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825*, Thursday, 1:30 PM, Room B

Scullin, Michael – *see Munson Scullin, Wendy*

Seeman, Mark E. (Kent State University) – *Hopewell Time and Materiality*

Over the past forty years, the archaeology of those Midwestern Middle Woodland societies that participated in “Hopewell” relations has progressed, both dramatically and unevenly. As an empiricist-at-heart, I tend to look at these advances primarily from the bottom up. What have we learned, why is it important, and have we kept pace with developments in the field at large? In this talk, I will discuss Hopewell chronology, recent discoveries, and the “fit” they provide with vying interpretations of our most distinctive Midwestern archaeological concept.

Banquet Presentation, Saturday, 6:30–9:00 PM, Banquet Room

Seeman, Mark (Kent State University) – *Modeling Fluted Point and White-Tail Deer Densities in Eastern North America*

The assumption that fluted point densities in various portions of North America are useful estimates of real early Paleoindian behavior on the land has been the subject of research projects of varying scale and sophistication. Human population density and ground cover as potential sources of bias figure prominently in critiques of this general program. To understand better the linkage among these variables, the present study seeks to establish some comparative control by examining an independent case of modern collecting behavior presumed to be density- and ground-cover dependent, white-tailed deer hunting. James L. Theler was an important contributor in 1961 to the first distributional study of fluted points in Ohio and also knows a thing or two about *Odocoileus virginianus*.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 3:30 PM, Room B

Shaver, Douglas (University of Missouri Kansas City) – *Steed-Kisker Archaeology: Cooperative Research on the Smith's Fork Site, Clay County, Missouri*

Recorded in 1976 during development of Smithville Lake, Missouri, the Smith's Fork site (23CL223) has emerged as an significant locality for studying the Steed-Kisker culture. Archaeologists from the U.S. Army Corps of Engineers, the University of Missouri, Kansas City and the Center for Archaeological Research, Missouri State University have all contributed to this research. Archaeological survey and testing of the Smith's Fork site reveals well-preserved domestic features and artifacts related to the cultural adaptations of one of Missouri's earliest Native American farming societies. The Smith's Fork research offers a useful model of multi-agency research in Missouri archaeology.

General Session 8: Mississippian, Saturday, 10:45 AM, Room B

Simon, Mary – see Fortier, Andrew

Skousen, B. Jacob (University of Illinois) – *The Emerald Site: The 1960s Excavations*

The Emerald site is the largest mound center in the Illinois uplands east of Cahokia. A number of salvage excavations have taken place at Emerald in the past 50 years, but very little of this data has been reported in any detail. Two of these salvage jobs were performed by Howard Winters and Stuart Streuver in 1961 and Robert Hall in 1964. This paper is a summary of these two digs, which includes information from notes, maps, and the artifacts recovered. These crucial excavations, coupled with other information, suggest that Emerald was a key component in early Cahokian history.

General Session 3: American Bottom, Friday, 10:15 AM, Room A

Slater, Phil – see Ramond, Sara

Smith, Burton (University of Minnesota) – *The Little Pottery Collection That Could: Exploring the Research Potential of a 130-Year-Old Historically Collected and Unprovenanced Mississippian Ceramic Vessel Assemblage*

This paper explores a case study in the importance of reconstructing provenance in old, or historically collected, archaeological collections and their potential to benefit contemporary research as well as their caveats and shortcomings. The case study in question involves an orphaned collection of pottery vessels which is probably remnant of the mostly lost and largely forgotten survey work of T. H. Lewis, a 19th century archaeologist who excavated prehistoric mound sites extensively throughout the entirety of the Mississippi valley. This paper discusses the process by which the author has attempted to salvage provenance from the Lewis-excavated material, including tracing its source to the site of Cherry Valley, an enigmatic Middle Mississippian mortuary type-site located in northeastern Arkansas. The paper concludes by exploring the potential this new pottery data has for reevaluating Cherry Valley and, subsequently, its role in the cultural history of the Central Mississippi Valley.

General Session 5: New Approaches, Friday, 3:45 PM, Room A

Smith, Daniel R. (Illinois State Archaeological Survey) – *Late Woodland Discoidals from the Clinton Silt Site, Jersey County, Illinois*

In the American Bottoms and adjacent areas of Illinois and Missouri distinctive ground stone discoidals have been associated with the game of “chunkey”. These artifacts have been recorded on sites dating from the Late Woodland through the Mississippian periods in this region. An unusually high density of these uncommon items were recently recovered from the Clinton Silt (11JY398) site, a small upland habitation north of the American Bottoms dated to the Late Woodland Patrick phase. The evidence for identifying these relics as game pieces, and their antecedental relationship to the “chunkey stone” discoidals of the Mississippian period, is examined in this presentation.

General Session 3: American Bottom, Friday, 11:00 AM, Room A

Smith, Jerry – *see Stiles, Cynthia*

Smith, Levi (University of Northern Iowa) – *Ceramics from the Black Medicine Site: A Woodland Camp in Black Hawk County, Iowa*

The University of Northern Iowa archaeological field school excavated 13BH164, also known as Black Medicine, at Hartman Reserve in Waterloo, Iowa over the course of four field seasons from 2008 to 2011. Archaeological evidence suggests that the site is the location of a Middle to Late Woodland camp. Recent analysis of the pottery indicates a complex multi-component site lying in the heart of the Cedar Valley that was host to small seasonal populations that repeatedly visited the site. This presentation discusses the types of pottery recovered and the Woodland cultures that occupied the Black Medicine site.

General Session 7: Middle and Late Woodland, Saturday, 10:45 AM, Room A

Smith, Maria O. – *see Myster, Susan M. T.*

Speth, Janet (University of Wisconsin–Green Bay) – *The Birds of Brogley Rockshelter*

Ongoing analysis of the bird bones from the Brogley Rockshelter (47GT156) focuses on which species are present and how that contributes to our knowledge of the taphonomy and the past environments of the rockshelter.

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 2:15 PM, Room B

Spott, Elizabeth (University of Wisconsin–Milwaukee) – *A Gendered Use of Space: Description and Spatial Analysis of Material Culture Recovered from the Chief Richardville House (12AL1887)*

Archaeological excavations were conducted at the Chief Richardville House (12AL1887) during the 1992 and 1995 field seasons as part of the Indiana University–Purdue University Fort Wayne field school. John B. Richardville (aka Jean Baptiste de Richardville) served as Miami Civil Chief from 1816–1841 and built the Greek Revival structure in 1827. While Richardville lived in the grand structure, his Miami wife, Natoequa, reportedly occupied a nearby wikiup. The material culture recovered from those excavations is considered within the context of the gendered use of space. The

spatial distribution of material is examined to determine if they reflect a gendered use of space during the occupation of the Richardville House.

General Session 6: *Historic Archaeology*, Friday, 2:15 PM, Room C

Stager, Jeremiah – *see Busch, Ashley Evans*

Sterner, Katherine (University of Wisconsin–Milwaukee) – *Oneota Lithics: A Functional Analysis of the Crescent Bay Hunt Club Assemblage*

There is a noticeable dearth of literature on Late Prehistoric lithic assemblages in the Midwest where pottery remains king. The lithic assemblage from the Crescent Bay Hunt Club site (47JE904) provides a significant addition to our knowledge of Oneota lithic technology. The lithic assemblage from the 2004 field season is composed of 1,221 pieces of debitage and 252 tools that provide valuable insight into Oneota material culture and technology. The topics of resource procurement, tool complexity and diversity and tool function are addressed. Additionally, these data are examined in relation to the lithic material from the 2000 and 2002 field seasons at Crescent Bay, presenting new information about the functional and cultural connotations of Oneota lithic materials.

Symposium 5: *New Research in the Lake Koshkonong Region in Southeastern Wisconsin*, Saturday, 2:45 PM, Room A

Stevenson, Katherine P. (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse) – *Understanding Oneota Adaptations to the La Crosse Locality: The Contributions of James L. Theler*

Extensive research on Oneota sites in the La Crosse, Wisconsin, locality over the past 33 years has led to a rich understanding of Oneota lifeways and adaptations to the region. James L. Theler's extensive, systematic studies related to resource use and environmental adaptations have been key components of this research. Theler's comprehensive analytical approaches to faunal studies, together with his roles in numerous site excavations, have contributed greatly to current understanding of regional Oneota cultures and lifeways and will continue to guide future research. This paper highlights some of Theler's faunal-analysis contributions and what they have meant for regional Oneota research.

Symposium 3: *Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler*, Friday, 1:30 PM, Room B

Stiles, Cynthia (Cynthia M. Stiles, RPA Consulting), William Kurtz (Bureau of Indian Affairs), and Jerry Smith (Lac Courte Oreilles Tribal Historic Preservation Office) – *Archaeological Investigation and Site Conservation on the Chippewa Flowage, Lac Courte Oreilles Reservation, Wisconsin*

In 1923, a reservoir on the Chippewa River was created to stem flooding downriver and create a potential for hydro-electric power. The reservoir inundated 30,000 acres of small lakes, wetlands, wild rice beds, and an occupied Ojibwe village. In 2007, the Lac Courte Oreilles Tribal Historic Preservation Office and Tribal Conservation Department designed a project to identify cultural sites within the flowage and target the most critical natural habitat and culturally sensitive areas for shoreline protection. Twelve agency

and landowner partners are participants. This report describes the 2009–2011 Phase I and Phase II archaeological investigations, funded by Xcel Energy Corporation, Lac Courte Oreilles Tribe and Bureau of Indian Affairs.

General Session 4: Regional Studies, Friday, 1:45 PM, Room A

Stiles, Cynthia (Cynthia M. Stiles, RPA Consulting), and Melinda J. Young (Lac du Flambeau Tribal Historic Preservation Office), Organizers; Kelly S. Jackson (Wisconsin Department of Transportation Statewide Tribal Liaison), Moderator – *WisDOT Workshop: Changes in the Wisconsin Department of Transportation Facilities Development Manual*

Through the efforts of the Wisconsin Inter-Tribal Repatriation Committee and the Wisconsin Department of Transportation Statewide Tribal Liaison Office, significant changes have been made in the tribal consultation process for WisDOT projects. The workshop panel consists of Tribal Historic Preservation staff from the eleven Wisconsin tribes. The panel will discuss a variety of topics with conference participants, including: protocol for inadvertent discovery of human remains, use of tribal monitors, role of tribal experts, and the National Association of Tribal Historic Preservation Officers protocol for consultation.

Workshop sessions: Thursday, 8:00–10:00 AM 1:00–3:00 PM; Room C

Stiles, Cynthia (Cynthia M. Stiles, RPA Consulting), and Melinda J. Young (Lac du Flambeau Tribal Historic Preservation Office), Organizers; Kelly S. Jackson (Wisconsin Department of Transportation Statewide Tribal Liaison), Moderator – *NAGPRA Workshop: Native American Graves Protection and Repatriation Act from a Tribal Perspective*

In November, NAGPRA ends its first 20 years as law. The workshop panel, composed of tribal experts, will discuss a variety of topics with conference participants, including: treatment of human remains and sacred objects, treatment of inadvertent discoveries in general, how tribes treat inadvertent discoveries on tribal lands, Campbelsport, and tribal experience with museums.

Workshop sessions: Thursday 10:00 AM–NOON, 3:00–5:00 PM; Room C

Stoltman, James B. (University of Wisconsin–Madison) – Discussant

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 4:30 PM, Room B

Stothers, David M. (University of Toledo, Firelands Archaeological Research Center) – Five New Middle Woodland Hopewellian Phases in Northern Ohio

Based on more than four decades of archaeological research in areas surrounding Lake Erie, five new Middle Woodland (100 B.C.–A.D. 500) Hopewellian phases have been defined. These new phases in northern Ohio are designated: Cedar Point, Gladioux, Wingston, Nettle Lake and Cuyahoga. Research suggests trade and exchange among these new phases took place not only with Southern Ohio Hopewell but also with Havana/Goodall Hopewell populations. These two traditions within the “Hopewellian Trade and Exchange Network” culturally interacted with Couture, Saugeen, and Point Peninsula phase populations in southwestern Ontario. The focus of

much of this trade and exchange passed through Northern Ohio and the Erie Islands across Lake Erie into southwestern Ontario.

General Session 2: Hopewell, Thursday, 3:00 PM, Room A

Stothers, David – see *Abel, Timothy J.*; see also *Boatman, Glenwood*

Sturdevant, Jay T. (Midwest Archeological Center, National Park Service) – *Recent Archeological Investigations at Fort Charlotte, Grand Portage National Monument, Minnesota*

In 2009–2010, the Midwest Archeological Center conducted an archeological evaluation of Fort Charlotte prior to the development of a site stewardship plan. The Fort Charlotte complex includes a unique North West Company staging fort and a competing XY Company fort. Both forts represent rare examples of undisturbed archeological resources from the late 18th century. This project was the first research at Fort Charlotte since the early 1980s to employ current archeological field methods to better understand the archeological resources at this premier fur trade site. The preservation conditions at Fort Charlotte have the potential to provide new data on how archeological sites, and historic fur trade sites in particular, are influenced by environmental and human factors that modify the archeological record studied by archeologists. This presentation will discuss the results of the archeological research and the development of a site stewardship plan that emphasizes preservation and non-consumptive future research.

General Session 6: Historic Archaeology, Friday, 1:30 PM, Room C

Sullivan, Norman C. – see *Rodell, Roland L.*

Thornton, Taylor H. – see *King, Jason L.*

Tiffany, Joseph A. (Mississippi Valley Archaeology Center, University of Wisconsin–La Crosse), and Stephen C. Lensink (Office of the State Archaeologist, The University of Iowa) – *Correlating Climate and Culture Change with Plains Village Sites on the Prairie-Plains Border, A.D. 900–1675.*

Plains archaeologists have long argued for correlation of climatic change with late Plains Village cultural development. The climatic model developed by Baerreis and Bryson for the Mill Creek culture of northwest Iowa in particular has been used by archaeologists for nearly two generations to examine the influence of climate on culture development. Recent research on freshwater diatoms from lakes in North Dakota, Minnesota and Canada now provide precise proxy data in 10-year intervals for climatic variation in the late prehistoric period. The diatom studies suggest that there is considerable regional variation in climate data during this period. We conclude that existing climate data are so difficult to extrapolate regionally and models so unsupported as to make specific hypotheses about the influence of climate on culture untenable at this time, except in a very restricted sense.

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 2:30 PM, Room B

Till, Anton – see *Peterson, Cynthia L.*

Tolmie, Clare – see *Lurie, Rochelle*

Tosi, Maurizio – see *Valeri, Marco*

Upton, Andrew J. (Michigan State University), Frank J. Raslich (Michigan State University), Jodie A. O’Gorman (Michigan State University), Michael D. Conner (Illinois State Museum, Dickson Mounds), and Timothy J. Horsley (Museum of Anthropology, University of Michigan) – *An Assessment of Magnetometry at Morton Village*

Morton Village (11F2) is the focus of a multi-year research project examining the social context of late prehistoric social interaction and warfare as evidenced at the associated Norris Farms Cemetery #36. A preliminary magnetometer survey in 2010 was initially applied to gather data that will help us evaluate multiple working research questions focused on interactions between Oneota and Mississippians and the spatial and cultural makeup of the community. The resulting survey identified multiple structures, features, as well as other anomalies. In 2011 field excavations we sampled magnetic anomalies to assess whether the magnetometer results were reliably identifying structures, and whether the nature of stronger or weaker signals might be indicative of architectural patterns between single post and wall-trench structures, structures that had burned, or other distinctions. This poster compares the 2011 excavation results with the magnetometer survey analysis and evaluates the efficacy of magnetometry at the site as a non-destructive archaeological tool to gather data and guide excavations.

Poster Session 2: Field Reports, Thursday, 2:00–4:00 PM, Room D

Valeri, Marco (University of Bologna), Immacolata Valesse (University of Bologna), Davide Domenici (University of Bologna), Maurizio Cattani (University of Bologna), Florencia Debandi (University of Bologna), John Kelly (Washington University), and Maurizio Tosi (University of Bologna) – *Mapping Cahokia: New Perspectives and Approaches to Cahokia’s West Plaza*

As part of an exchange agreement with the University of Bologna and Washington University in St. Louis efforts are under way to employ some of the methodology used on various projects conducted by the University of Bologna in Italy, Oman, Turkmenistan, and Chiapas, Mexico. This presentation examines this past spring’s efforts at defining one of the large enclosures at the north end of the West Plaza and completing the past excavations. Photometrical Recording and Geographical Information System have been used to record and manage new data as well as those deriving from previous excavations in adjacent areas, such as Tract 15B, in order to better interpret the settlement dynamics of the plaza and associated structures. The same techniques will be applied to previous excavation data from other areas in order to start up the building of a GIS of the entire Cahokia site.

Poster Session 4: Settlement Studies, Saturday, 2:00–4:00 PM, Room D

Valese, Immacolata – see Valeri, Marco

Verhulst, Kevin – see Kettler, Kurtis

Walder, Heather (University of Wisconsin–Madison) – *Glass Trade Beads as Temporal Markers for the Contact Era of Wisconsin: Compositional Analysis Results*

Typologically and visually similar glass trade beads, found on many archaeological sites of Native and French interaction in Wisconsin dating to the 17th and 18th centuries, often vary in chemical composition. These chemical differences likely indicate both fluctuating technological processes in European glass “recipes” and changes to suppliers of trade goods to North America. Laser Ablation – Inductively Coupled Plasma – Mass Spectrometry (LA-ICP-MS) is a virtually non-destructive, quantitative way to determine major, minor, and trace elemental composition of these artifacts. To investigate regional differences among bead compositions, 79 opaque turquoise-blue beads from five different contact-era sites in Wisconsin were analyzed using LA-ICP-MS. The different glass recipes appear to cluster both by chronological period assigned to the archaeological site and by geographic proximity of sites to one another. The analysis reveals details about both the exchange of trade goods and the dynamic population movements characteristic of this period of culture contact.

General Session 6: Historic Archaeology, Friday, 1:15 PM, Room C

Walder, Heather (University of Wisconsin–Madison) and Richard W. Edwards IV (University of Wisconsin–Milwaukee), organizers – *Building Your Career in Archaeology*

This workshop will be an informal yet informational opportunity for students and other interested parties to learn how to develop a career in archaeology. A panel of prominent Midwestern archaeologists will discuss finding and succeeding at a variety of archaeology positions, from government work to CRM, small museum jobs to large research universities. A question and answer session with the panelists and a small reception will follow the workshop. **Speakers:** Lynn Goldstein, Robert Sasso, William Green, Sean Dunham, Terrance Martin, John Doershuk

Students’ Workshop: Building your Career in Archaeology, Saturday, 10:30 AM–NOON, Room D

Wanamaker, Alan D. – see Hill, Matthew G.

Watson, Robert J. (Commonwealth Cultural Resources Group), Kira E. Kaufmann (Commonwealth Cultural Resources Group), and Kevin J. Mueller (Commonwealth Cultural Resources Group) – *Reinterpreting and Revising Mound Boundaries through Interdisciplinary Means: The Inlet Mound Group*

With support from the Wisconsin Department of Transportation, Commonwealth Cultural Resources Group Inc. (CCRG) conducted geophysical and archaeological investigations of the Inlet Mound Group on Delevan Lake in Walworth County, Wisconsin. Initially mapped by Charles E. Brown in 1924, the group included a bird effigy, two conicals, a club-shaped linear mound, and a fifth previously destroyed mound. For

over fifty years, Brown's map provided the only record of these mounds. This map was used to guide later investigations that documented only one intact mound at the site. In 2010, a GPR survey identified subsurface expressions of this mound as well as subsurface expressions that correspond with a second, low lying earthwork. The GPR dataset was integrated using GIS to facilitate comparisons with historic maps. The GIS analysis suggests that the two mound remnants identified by the GPR survey represent two portions of the club-shaped linear mound first mapped by Brown.

Poster Session 4: *Settlement Studies*, Saturday, 2:00–4:00 PM, Room D

Watts, Elizabeth L. (Indiana University Bloomington), and Susan M. Alt (Indiana University Bloomington) – *Building Community at The Dead Man's Curve Site*

Excavations by the Investigating Yankeetown project at the Dead Man's Curve site in Posey County, Indiana, have recovered data that lead us to suggest that the people who lived in this locale built structures in diverse ways throughout multiple occupation periods. The unique details of the particular architectural technologies employed here have implications for understanding identity, continuity and change in southern Indiana pre-Columbian communities. In this paper we discuss construction details for several of the structures that we excavated at DMC and provide comparison with buildings excavated at other sites in southern Indiana as well as at Late Woodland and Mississippian sites in the greater region to explore the relationships between ethnicity, interaction and architecture technologies.

General Session 7: *Middle and Late Woodland*, Saturday, 10:30 AM, Room A

Weber, Nicholas J. – *see Kubicek, Richard H.*

Wells, Joshua (Indiana University Bloomington, South Bend) – *Digital Dimensions of Mississippian Settlement: Strengths and Weaknesses of Scalar Efforts with Curated Data for GIS Analysis and Modeling*

This poster details a test of the predictive modeling capacities of multiple archaeological databases created for the organizational functions of State Historic Preservation Offices and their partner offices in state governments. Geographic information system (GIS) databases for four states (Illinois, Indiana, Kentucky, and Missouri) are examined regarding interoperability. The Mississippian Vincennes phase from the central Wabash drainage regions of Indiana and Illinois is used as a test case against models for potential site distribution developed on both broad and targeted patterns across the area of investigation. Applicable best practices and results capable of informing further GIS investigations are discussed.

Poster Session 4: *Settlement Studies*, Saturday, 2:00–4:00 PM, Room D

Wendt, Dan (Minnesota Historical Society, Volunteer Program) – *Evaluation of Hydration and Heat Treatment to Improve Knife Lake Siltstone*

Knife Lake Siltstone, KLS, is a lithic material that was mastered by Paleo-Indians living in the Boundary Waters region between Minnesota and Ontario but modern experimenters have had difficulty replicating their results. A series of replication experiments were performed to determine if hydration or heat treatment would enable pressure flaking, which is particularly difficult in raw KLS. A designed experiment around

pretreatment conditions compared KLS in a field of eight lithic materials. The results of pretreatment were material specific but on average, hydration showed no benefit, heat treatment was beneficial, fast heating was beneficial, fast cooling was detrimental and hydration post heat treatment had no benefit. KLS had the poorest pressure flaking performance in a raw state but followed these typical results of pretreatment. Heat treatment, between 550°F and 700°F, improved KLS enough to facilitate pressure flaking in strategies that replicate Paleo-Indian use of the material.

Symposium 2: Archaeology in Northeastern Minnesota: From Paleo to Historic, Friday, 9:15 AM, Room B

Whittaker, William E. (Office of the State Archaeologist, The University of Iowa) – Overview: *When the American Frontier Stalled along the Upper Mississippi, 1804–1832*

After the Louisiana Purchase, the Upper Mississippi valley became the frontier of the United States. This frontier was unstable, and missteps by the U.S. government and losses during the War of 1812 stalled settlement and forced a military retrenchment. It was not until the Blackhawk Uprising was crushed in 1832 that the frontier was able to push beyond the Mississippi Valley. Recent archaeological research helps to illuminate this poorly understood period, from the peculiar forts built by the U.S. to the complex interactions between Indians, traders, and soldiers.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825, Thursday, 1:00 PM, Room B*

Whittaker, William E. (Office of the State Archaeologist, The University of Iowa) – *Searching for Quashquame's Village*

Quashquame (ca. 1764–ca. 1832) was one of the principal hereditary leaders of the Sauk at the turn of the 19th century. He was blamed and reviled by Black Hawk for the 1804 treaty that ceded much of Illinois to the U.S., however this controversy overshadowed a lifetime of skillful mediation between Sauk and U.S. interests. Quashquame maintained several settlements along the Missouri and Mississippi rivers, his largest was near the town of Montrose, Iowa. This paper reviews the life of Quashquame and the historical and geographical evidence for the location of his village.

Symposium 1: *The Cultural Landscape of the Western Frontier, 1800–1825, Thursday, 2:00 PM, Room B*

Whittaker, William E. – see Doershuk, John F.

Widga, Christopher C. – see Hill, Matthew G.

Williamson, Ronald F. – see Carnevale, Andrea

Wilson, Gregory (University of California, Santa Barbara), and Steven Kuehn (Illinois State Archaeological Survey) – *Getting to the Point of Diversity in Mississippian Projectile Frequencies*

Remarkable variation in arrow point frequencies existed throughout the Mississippian World. Was this variation the result of regional and temporal differences in hunting practices, warfare, or the availability of high-quality, knappable stone? This

paper examines these challenging issues through the compilation and detailed analysis of faunal and lithic datasets from the American Bottom, Central Illinois River Valley, and upper Mississippi Valley region of Illinois. Specific attention is given to variation in deer exploitation patterns in these regions as it relates to arrow point frequencies, a comparison which has not been fully addressed in previous studies.

General Session 8: Mississippian, Saturday, 11:30 AM, Room B

Wilson, Jeremy – *see Ausel, Erica*

Winkler, Daniel M. (Carroll University) – *The Early Paleoindian Occupation of the Lake Koshkonong Region*

The Lake Koshkonong region in southeast Wisconsin is well known for its Late Prehistoric Oneota occupations. Research at the Schmeling site provided evidence of a substantial early Paleoindian occupation of the region as well. The materials from the Schmeling collection are compared to other late Pleistocene sites in the region, and implications for early Paleoindian settlement patterns and lithic resource procurement are discussed.

Symposium 5: New Research in the Lake Koshkonong Region in Southeastern Wisconsin, Saturday, 1:00 PM, Room A

Wolfe, Scott – *see Millhouse, Philip G.*

Wyckoff, Don G. (University of Oklahoma) – *No Past, Little Future: A Brief, Select History of Southern Plains Paleoenvironmental Studies*

For over a century, archaeologists, geologists, and paleontologists have documented sites and localities pertaining to Pleistocene and Holocene settings on the Southern Plains. While most such studies were site specific, broader local and regional perspectives were undertaken by research teams led by E. B. Howard, Claude Hibbard, Paul Sears, E. H. Sellards, Fred Wendorf, and others. Consequently, buried soils and lacustrine deposits became recognized sources for diverse faunal and floral proxy records of mid to full glacial conditions and the early advent of humans. These findings and the research responsible for them still represent standards sought in current paleoenvironmental studies. These researchers and their findings will be highlighted in this presentation.

Symposium 3: Archaeology, Biogeography, and Zooarchaeology: A Symposium Honoring the Legacy and Career of James L. Theler, Friday, 4:00 PM, Room B

Wymer, DeeAnne (Bloomsburg University of Pennsylvania) – *The Paleoethnobotanical Assemblage from the Brown's Bottom Project: Hopewell Kith, Kin, and Hearth*

This paper presents the analysis of paleoethnobotanical materials from the Brown's Bottom 1 and Lady's Run sites, Chillicothe, Ohio. Data from a large number of flotation and macrobotanical samples, from all feature types and site proveniences, will be utilized to assess intrasite variability as well as disposal practices and deposition patterns of the plant materials and the insights this offers in understanding the dynamics of spatial utilization at the site. In addition, the environmental impact the Hopewell inhabitants had upon their local landscape and the implications this information has

for interpreting the human-land dynamics for the Middle Woodland period will be explored. Overall, the data reveal that the population relied upon the Eastern Agricultural Complex, gathered resources from the forest and garden edges, utilized a formal disposal of waste material linked to feature usage and structure interior/exterior space, and had significantly impacted their local environment—a thoroughly Hopewell way of life!

Symposium 4: *The Brown's Bottom Project—Ohio Hopewell Settlement and Subsistence in the Central Scioto Valley*, Saturday, 11:00 AM, Room C

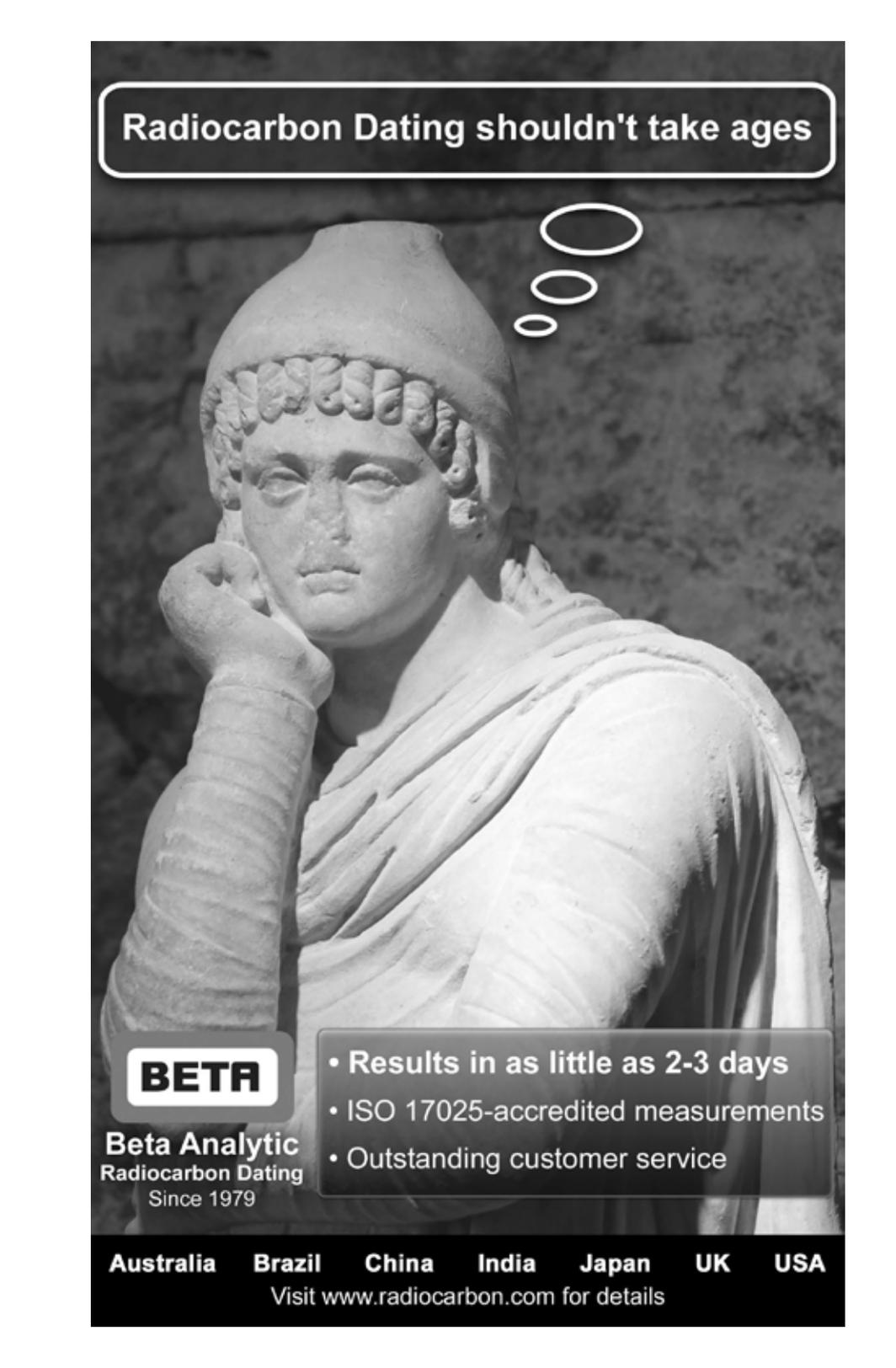
Young, Melinda J. – *see Stiles, Cynthia*

Zelin, Alexey (Prairie Research Institute, Illinois State Archaeological Survey) – *The Sponemann Ceramic Component of the Vaughn Branch Upland Locality, Northern American Bottom*

The Vaughn Branch Upland Locality, situated within the dissected uplands of the Northern American Bottom, encompasses upland ridges and lobes that overlook and are adjacent to Vaughn Branch creek. Four prehistoric sites were excavated in this locality by ISAS in the late 1990's and early 2000's as part of the IDOT proposed FAP 310 project, a highway connecting existing FAI 270 to points as far north as Jacksonville in Western Illinois. The extensive analysis of sites in this locality began during the spring of 2010 and is still ongoing. The ceramic analysis indicated that all four sites in the locality, some containing only a single component, such as Reilley (11MS27) and Husted (11MS1960), others including the multicomponent Bay Pony (11MS477) and Grove (11MS89), contain Late Woodland Sponemann phase occupations. Hybrid Sponemann assemblages resulted from interaction between local Patrick and non-local Fall Creek phase populations. A short summary of these hybrid Sponemann ceramic components will be presented in this paper.

General Session 3: *American Bottom*, Friday, 9:45 AM, Room A

Zych, Thomas J. – *see Richards, John D.*



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Faculty will be available in the hotel bar Thursday 8:00 p.m. to talk with prospective graduate students.

For More Information:

Department of Anthropology: anthropology.msu.edu/ and also on Facebook or phone us at 517-353-2950

Campus Archaeology: campusarch.msu.edu/ and also on Facebook or follow us on Twitter @capmsu

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