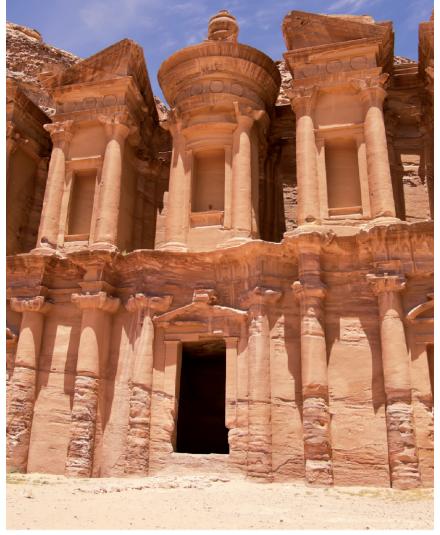


# 60th Midwest Archaeological Conference, Inc.

**Programs & Abstracts** 

October 6–8, 2016 Sheraton Iowa City Hotel Iowa City, Iowa

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## 60<sup>th</sup> Annual Midwest Archaeological Conference

October 6–8, 2016 Iowa City, Iowa

Hosted by

## University of Iowa Office of the State Archaeologist and the Midwest Archaeological Conference, Inc.

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Midwest Archaeological Research Services



## Welcome!

## Midwest Archaeological Conference 2016 Iowa City, Iowa

Welcome to Iowa City and the 2016 Midwest Archaeological Conference! Those who have attended MAC gatherings here in previous years know there are many excellent restaurant and bar options close at hand to our meeting venue at the Sheraton Hotel along Iowa City's walking-only "Ped Mall." Be sure to visit the new UI Voxman School of Music and the Pentacrest Museums if you are out and about downtown.

As the program amply demonstrates, there are copious papers and posters that will be well worth attending. In addition to the more traditional 15 minute papers we are happy to include several sessions which will involve brief (ca. 5 minute) presentations by invited participants followed by time for audience involvement in large-group discussion. There are also three workshops, including open sessions for all meeting attendees about MCJA publishing with editorial staffers Tom Emerson and Sarah Boyer as well as a session organized by Elizabeth Reetz on a topic of central importance to our collective future, that of communicating effectively with the public.

We are delighted to partner with the Illinois Archaeological Survey as a major sponsor of the Thursday evening opening reception following the MAC, Inc. Executive Board Sponsored Symposium. This reception is in honor of Elaine Bluhm Herold, who will also be recognized through a symposium on Saturday morning.

The Friday evening reception marks the dual anniversary of the National Historic Preservation Act (50 years) and the passage of the laws protecting ancient human remains in Iowa (40 years). The Iowa law promotes both the conduct of systematic scientific investigations of remains as well as their respectful treatment through consultation with descendant communities. The Friday reception will include brief remarks by several invited individuals who will comment on the implementation of this ground-breaking legislation.

Our Saturday banquet speaker, Steve Shackley, will provide a lively introduction to an increasingly important technology in archaeology: XRF. Steve promises to cover the basics in a way understandable to us all and demonstrate the applicability of XRF to broader questions of anthropological interest!

Enjoy!

John Doershuk & Angela Collins

#### 2016 Midwest Archaeological Conference—Summary Schedule

	THURSDAY	FRIDAY	SATURDAY
MORNING	Registration/Check-in opens at 10:30 am (Sheraton, Lower Level)	Symposia, Fora, and Presentations » GBL Turns 50! Forum (2) 8:30–9:45, ADB-A » GBL Collections Forum (3) 10:00–11:30, ADB-A » Milwaukee Cemetery, MCPFC (4) 8:45–11:15, ADB-B » Communication Open Workshop (5) 10:00–11:30, ADB-C » Morton Site Posters (6) 10:00–11:15, ADB-D » Paleoethnobotany Workshop (7) 10:00–12:00, OSA* Other Events » MAC Executive Board Meeting, 11:30–1:30, Lucas » Illinois Archaeological Survey Board Meeting, 11:30–1:30, Lindquist	Symposia and Presentations » Elaine Bluhm Herold Legacy (14) 8:45–11:00, ADB-A » Prehistoric—Spaces and Places, Part 1 (15) 9:00–11:15, ADB-B » Protohistoric and Historic (16) 8:45–11:15, ADB-C » Historic Posters (17) 8:30–9:45, ADB-D » General Posters (18) 10:15–11:30, ADB-D
AFTERNOON	MAC Sponsored Symposium » "Encounters, Exchange, Entanglement—Current Perspectives on 17th- and 18th-Century Intercultural Interactions Throughout the Western Great Lakes" (1), 1:30–4:30, ADB-A&B	Symposia and Presentations » Prehistoric—Food, Cooking, Chert (8) 2:00-4:00, ADB-A » Prehistoric Burials & Earthworks (9) 1:30-4:00, ADB-B » MCJA Publishing Tips (10) 1:30-3:00, ADB-C » Student Symposium (11) 3:15-4:45, ADB-C » Mounds and Burials Posters (12) 1:30-2:45, ADB-D » Iowa Burial Law Posters (13) 3:15-4:30, ADB-D Other Events » Tour the OSA, 1:30-4:00, OSA*	Symposia and Presentations » Prehistoric—Artifact Analyses (19) 1:30–4:00, ADB-A » Prehistoric—Spaces and Places, Part 2 (15) 1:30–3:00, ADB-B » Prehistoric (21) 1:45–4:00, ADB-C » Prehistoric Analyses Posters, Part 1 (22) 1:45–3:00, ADB-D » Prehistoric Analyses Posters, Part 2 (23) 3:15–4:30, ADB-D Other Events » MAC, Inc. Business Meeting, 5:00–6:00, ADB-A » Illinois Archaeological Survey Business Meeting, 4:00–5:00, ADB-B » Iowa Archeological Society Business Meeting, 4:00–5:00, Lindquist
EVENING	Welcome Reception » 5–7:30, Prefunction Area » Cash bar and light appetizers	50/40 NHPA/Iowa Burial Laws Celebration » 5:00–7:00, Prefunction Area » Brief remarks at 5:30 » Cash bar and light appetizers	Pre-banquet Cash Bar » 5:30–6:30, Prefunction Area Banquet » 6:30, ABD-C&D » 7:30, Speaker: M. Steven Shackley, Professor Emeritus, University of California, Berkeley

ADB = Amos Dean Ballroom

\* OSA is located at 700 Clinton Street Building, just over four blocks south of the conference hotel (see map)

## 60<sup>th</sup> Annual Midwest Archaeological Conference

October 6-8, 2016, Iowa City, Iowa

### Registration

#### Sheraton Iowa City Hotel, Prefunction

Thursday, October 6, 10:30 am–5:00 pm Friday, October 7, 7:30 am–5:00 pm Saturday, October 8, 7:30 am–2:00 pm

#### **Computer Access**

Free wireless throughout the Sheraton Meeting Area

## Vendor & Book Room

#### Johnson Room

Friday, October 7, 7:30 am–5:00 pm Saturday, October 8, 8:00 am–4:30 pm \*Vendors are required to clear their materials prior to 5:00 pm on Saturday

#### MAC Meeting Vendors

Illinois State Archaeological Survey Gustav's Library Wisconsin Archeological Society Iowa Archeological Society DirectAMS Beta Analytic Elliot Werner Publications University of Iowa Office of the State Archaeologist Great Lake Graphics \*Student Paper Award donations courtesy of our generous book vendors



Purchase a 2016 MAC hat at the registration desk (while supplies last)

\$15 each

## **Meetings and Special Events**

### Midwest Archaeological Conference Reception Welcome to Iowa City

Sponsored by Illinois Archaeological Survey in honor of Elaine Bluhm Herold Prefunction Area: cash bar and light appetizers Thursday, October 6, 5:00–7:00 pm

## Midwest Archaeological Conference Executive Board Meeting and Lunch

Lucas Room (by invitation) Friday, October 7, 11:30 am–1:30 pm

### 50/40 NHPA/Iowa Burial Laws Celebration

Prefunction Area: cash bar and light appetizers Friday, October 7, 5:00–7:00 pm, brief remarks at 5:30 pm

### Iowa Archeological Society Business Meeting

Lindquist Room Saturday, October 8, 4:00 pm

### Illinois Archaeological Survey Business Meeting

Amos Dean B Saturday, October 8, 4:00 pm

## Midwest Archaeological Conference Business Meeting

Distinguished Career Awards, Student Paper Competition Awards Amos Dean A Saturday, October 8, 5:00 pm

### Pre-banquet Cash Bar

Prefunction Area Saturday, October 8, 5:30–6:30 pm

### Midwest Archaeological Conference Banquet

Amos Dean Ballroom Saturday, October 8, 6:30 pm Buffet Dinner

Guest Speaker, 7:30 pm, M. Steven Shackley, Professor Emeritus, University of California, Berkeley: *Hohokam Social Identity Unraveled Through XRF and the Southwest Archaeological Obsidian Project.* 



## Celebrating 60 years of Illinois Archaeology!

Proud sponsor of the Welcome Reception in honor of Elaine Bluhm Herold

## **Distinguished Career Award Recipients**

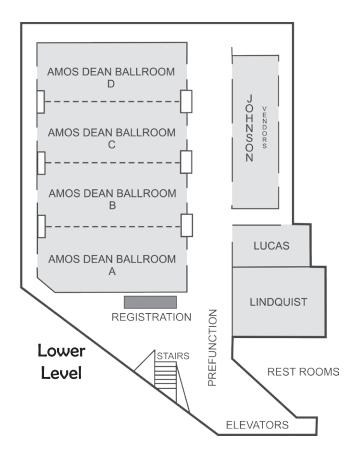


James Theler (University of Wisconsin–La Crosse)



David Overstreet (College of Menominee Nation)





## MAC Meeting Schedule

October 6-8, 2016

## Thursday Afternoon October 6

#### 1. MAC SPONSORED SYMPOSIUM

1:30-5:00 PM

Encounters, Exchange, Entanglement—Current Perspectives on 17th- and 18th-Century Intercultural Interactions throughout the Western Great Lakes

Amos Dean Ballrooms A & B

Co-Chairs: Jessica Yann and Heather Walder

- 1:30 **Heather Walder** (Michigan State University) and **Jessica Yann** (Michigan State University) Introduction
- 1:45 Michael S. Nassaney (Western Michigan University) Embracing Anomalies
- 2:00 **Kathleen L. Ehrhardt** (Illinois State Museum) and **Jamie Kelly** (Field Museum of Natural History) Revisiting Dumaw Creek
- 2:15 **Scott J. Demel** (Northern Michigan University) Processes of Acculturation on "Island Time"—Improving Dating Accuracy during the Late Woodland to Protohistoric Transition on Remote Beaver Island
- 2:30 **John L. Creese** (North Dakota State University) From Wendake to Chequamegon: Bridging the Wendat Diaspora in Quimby's Early Historic Period
- 2:45 **Susan Sleeper-Smith** (Michigan State University) Kethtippecanuck: Trading Entrepôt of the Eighteenth-Century Wabash River Valley
- 3:00 Amélie Allard (University of Minnesota) Communities on the Move, Communities of Practice: The Case of the Late Eighteenth-Century Fur Trade in Minnesota
- 3:15 **Rob Mann** (St. Cloud State University) People, Portages, and Powerful Places: Miami Indians at the Forks of the Wabash during the War of 1812 Era

DISCUSSION

## Thursday Evening October 6

#### WELCOME RECEPTION

5:00 PM

Sponsored by Illinois Archaeological Survey in honor of Elaine Bluhm Herold

Prefunction Area Cash bar and light appetizers

## Friday Morning October 7

#### 2. FORUM

#### 8:15-9:45 AM

#### The Glenn A. Black Laboratory of Archaeology Turned 50!

#### Amos Dean Ballroom A

Chair: Melody Pope

- 1 **Rebecca M. Barzilai** (Indiana University) The Problems and Benefits of Using Legacy Collections for Material Science Research
- 2 **Leslie Drane** (Indiana University) The Challenges and Goals of Creating a Public-Oriented Online Ceramic Resource
- 3 Alex Elliott (Glenn A. Black Laboratory of Archaeology) Curating the Mann Site: The Importance of Investing in Rehousing
- 4 **Terry Harley-Wilson** (Glenn A. Black Laboratory of Archaeology) Order Trumps Chaos: Museum Registration Best Practices to the Rescue!
- 5 Liam Murphy (Glenn A. Black Laboratory of Archaeology) The Island of Misfit Artifacts: Refining the Education Collection at the GBL
- 6 Melody Pope and Jennifer St.Germain (Glenn A. Black Laboratory of Archaeology) The GBL Type Collections: Past, Present and Future
- 7 April K. Sievert (Indiana University), Meghan Buchanan (Auburn University), Dru McGill (North Carolina State University), Melody K. Pope (Indiana University), and Elizabeth Watts-Malouchos (Indiana University) — The Angel Foodways Project: Piloting New Research with Legacy Collections
- 8 **Jennifer St.Germain** (Glenn A. Black Laboratory of Archaeology) Preserving the Glenn Black Lab's Historic Image Collections
- 9 Elizabeth Watts Malouchos (Glenn A. Black Laboratory of Archaeology) and Meghan E. Buchanan (Auburn University) — Partnering for the Past: GBL Collaborations with Local Institutions

#### DISCUSSION

#### 3. FORUM

#### Describing Collections for the Digital Age

Amos Dean Ballroom A

Co-Chairs: Jennifer St. Germain, Elizabeth Watts, and April Sievert

- 1 **Jennifer St. Germain** (Glenn A. Black Laboratory of Archaeology) The Pre-Columbian Ceramic Vessel Ontology: A Test Case for Rich Artifact Description
- 2 **Melissa R. Baltus** (University of Toledo) Border Crossing in the Digital Age: Typology, Technological Style, and the Need to See (Thoughts from the 2014 Late Prehistoric Ceramics Workshop)
- 3 Elizabeth Watts Malouchos (Glenn A. Black Laboratory of Archaeology) and Meghan E. Buchanan (Auburn University) — Tempering Typologies: Implications of Identifying of Mixed-Tempered Ceramics
- 4 **Madeleine Hoofnagle** (University of Iowa) The Winding Ceramic Typological Timeline of Site 13DK96
- 5 **Leslie Drane** (Indiana University) The Beginning Classification Steps for an Online Ceramic Collection

10:00-11:30 AM

- 6 **Brian G. Redmond** (Cleveland Museum of Natural History) Cataloging is Not Analysis: Naming Protocols as Used at the CMNH
- 7 Victoria Pagel (University of Wisconsin–Milwaukee) Requirements for Standardization: Considering Staff Resources, Funding, and Complex Typologies
- 8 **Jacqueline M. Pozza** (University of Wisconsin–Milwaukee) Taking Care of Business: Processes, Workflow, and the Logistics of Large-Scale Collections Management Projects
- 9 Mara Taft (University of Wisconsin–Madison) Big Erasers Are Handy: The Challenges of Standardization and Employee Training in Collections Management Projects
- 10 Angela R. Collins (University of Iowa Office of the State Archaeologist) Utilizing Metadata for Information Sharing
- 11 Tamira K. Brennan and Alleen M. Betzenhauser (Illinois State Archaeological Survey) — The Importance of Being Explicit: Data Collection and Reporting for Replication
- 12 Kevin C. Nolan and Christine K. Thompson (Applied Anthropology Laboratories, Ball State University) — Private Collections for the Public: Case Studies in Recording Private Artifact Collections

DISCUSSION

#### 4. SYMPOSIUM

#### 8:45-11:15 AM

Updates from the Milwaukee County Poor Farm Cemetery Project

Amos Dean Ballroom B

Chair: Patricia Richards

- 8:45 **Patricia B. Richards** (University of Wisconsin–Milwaukee) A summary of the 2013 excavations at the Milwaukee County Poor Farm Cemetery
- 9:00 **Catherine R. Jones** (University of Wisconsin–Milwaukee) Bioarchaeological Evidence of Life and Death in "The Healthiest City"
- 9:15 **Brianne E. Charles** (University of Wisconsin–Milwaukee) The Dividing Line: a proposal to distinguish between prenatal and full-term remains through dental development and the neonatal line among individuals recovered from the Milwaukee County Poor Farm Cemetery
- 9:30 **Jessica L Skinner** (University of Wisconsin–Milwaukee) The Application of NextEngine<sup>™</sup> Scanning Technology to Commingled Analysis at the Milwaukee County Poor Farm Cemetery: A Replicable Method for Restoring Individuality
- 9:45 (BREAK)
- 10:00 Helen Werner (University of Wisconsin–Milwaukee) A Meta-Analysis of IS6110 and Tuberculosis Skeletal Lesions: an update to the prior with the Milwaukee County Poor Farm Cemetery data
- 10:15 Ashley L. Brennaman (University of Wisconsin–Milwaukee) Bring out your dead! An Examination of the Postmortem Treatment of Human Remains During the 1918 Influenza Pandemic in Milwaukee
- 10:30 **Shannon K. Freire** (University of Wisconsin–Milwaukee) Archaeology, Law, and the Milwaukee County Poor Farm Cemetery Project

- 10:45 Alexander W. Anthony (University of Wisconsin–Milwaukee) The Changing
- Accessibility of Historic Documents in a Digital World: Modern Research Methods and Historic Atrocities at the Milwaukee County Poor Farm Cemetery
  11:00 Thomas J. Zych (University of Toledo), Brian D. Nicholls (University of
- Wisconsin–Milwaukee), and **Patricia B. Richards** (University of Wisconsin– Milwaukee) — Landscapes of the Forgotten: Milwaukee County Poor Farm Cemetery

#### 5. WORKSHOP (OPEN)

Effectively Communicating Archaeology to the Public in Three Minutes or Less

Amos Dean Ballroom C (open to all attendees) Chair: Elizabeth Reetz

#### 6. POSTER SYMPOSIUM

An Update on Recent Morton Village Research

Amos Dean Ballroom D

Co-chairs: Jodie O'Gorman and Michael Conner

- Autumn M. Beyer (Michigan State University) and Terrance J. Martin (Curator Emeritus of Anthropology, Illinois State Museum) — Food and Public Ritual at Morton Village: A Pilot Study of the Faunal Remains from Structure 16
- 2 Autumn Beyer (Michigan State University), Michael Conner (Dickson Mounds Museum), and Jodie O'Gorman, Jeffrey Painter, Sarah Jane Potter, and Nikki Silva (Michigan State University) — There's No Place Like Home: Domestic Negotiations at Morton Village
- 3 **Jodie O'Gorman** (Michigan State University) and **Michael Conner** (Dickson Mounds Museum) Variability in Ritual at the Intersection of Oneota and Mississippian Worlds
- 4 **Jeffrey M. Painter** (Michigan State University) Ceramic Function at the Morton Village Site: A Pilot Study
- 5 **Frank J. Raslich** (Michigan State University) Exploring the Chert Assemblage at Morton Village with Handheld Spectrometry
- 6 Nikki Silva and Jodie O'Gorman (Michigan State University), Michael Conner (Dickson Mounds Museum), and Autumn Beyer and Jeffrey Painter (Michigan State University) — 9 Years and Counting: Update on the Morton Village Archaeological Project

#### 7. WORKSHOP

#### Paleoethnobotany

By invitation only

University of Iowa Office of the State Archaeologist, 700 Clinton Street Building Co-Chairs: Richard W. Edwards and Madeleine McCleester

#### MAC EXECUTIVE BOARD MEETING

Lucas Room (by invitation)

11:30 AM-1:30 PM

10:00 AM-12:00 PM

#### Friday Morning

### 10:00-11:30 AM

10:00-11:15 AM

#### Friday Afternoon

## Friday Afternoon October 7

8. GENERAL SESSION

2:00-4:00 PM

Prehistoric—Food, Cooking, and Chert

Amos Dean Ballroom A

Chair: Fernanda Neubauer

- 2:00 **Fernanda Neubauer** (University of Wisconsin–Madison) Hot-Rock Cooking: Feature Signatures and Functions of a Late Archaic Earth Oven
- 2:15 **Richard W. Edwards IV** (University of Wisconsin–Milwaukee) Oneota Agricultural Systems of the Koshkonong Locality
- 2:30 Fernanda Neubauer (University of Wisconsin–Madison), Michael J. Schaefer, Terrance Martin (Illinois State Museum), and James M. Skibo (Illinois State University) — Late Archaic Foodways and Seasonality: Faunal and Floral Evidence from the Popper Site on Grand Island, Michigan
- 2:45 **Fernanda Neubauer** (University of Wisconsin–Madison) Use-Alteration Analysis of Fire-Cracked Rocks
- 3:00 (BREAK)
- 3:15 **Dan Wendt** (Minnesota Historical Society Volunteer) Spring Coulee PDC Chert Quarry and Workshop Complex in Far Western Wisconsin
- 3:30 **Toby A. Morrow** (Wapsi Valley Archaeology, Inc.) An Early Archaic Burlington Chert Quarry and Processing Site in Southeastern Iowa.
- 3:45 Brian Hoffman (Hamline University), Thomas Sanders (Minnesota Historical Society), Liesl Weber Darnell (Hamline University), Forest Seaberg-Wood (Minnesota Historical Society), Charles Broste (Minnesota Historical Society), and Chelsea Starke (Hamline University) — Archaeology of the Red Rock Quarry Site (21-CO-56), Cottonwood County, Minnesota

#### 9. GENERAL SESSION

1:30-4:00 PM

Prehistoric Burials, Mounds, and Earthworks

Amos Dean Ballroom B

Chair: Amanda Butler

- 1:30 William E. Whittaker (University of Iowa Office of the State Archaeologist) Measuring Prehistoric Mounds: Problems and Approaches
- 1:45 **Michael Strezewski** (University of Southern Indiana) The New Harmony Mound Group, a Middle Woodland Ceremonial Center in the Lower Wabash River Valley
- 2:00 **George W. Shurr** (GeoShurr Resources) Subdivisions within the Main Mound Group of Iowa's Blood Run National Historic Landmark
- 2:15 **Jamie Davis** (Ohio Valley Archaeology, Inc.) Modeling Earthworks of the Ohio River Valley
- 2:30 Della Collins Cook and Cheryl Ann Munson (Indiana University), Susan Spencer Helfrich (University of Southern Indiana), Steven Kuehn (Illinois State Archaeological Survey), Mark Schurr (University of Notre Dame), and Katie Zedjlik (University of Western North Carolina) — A Young Man with Developmental Delays at the Murphy Site, 12Po1: Can Grave Goods Shed Light on Social Identity?

15

- 2:45 **Amanda J. Butler** (University of Illinois at Urbana-Champaign) A Mound with a Mission: New Excavations at the Collins Site in East-Central Illinois
- 3:00 (BREAK)
- 3:15 Thomas E. Emerson, Kjersti E. Emerson, Kristin M. Hedman, and Matthew A. Fort (Illinois State Archaeological Survey) — Fisher Mound 5: The Cultural Context, Chronology, and Isotopic Analysis of a Terminal Late Woodland Mortuary Mound in Northeastern Illinois.
- 3:30 Margaret Robinson (University of Nebraska-Lincoln) Hopewell Legacy: Confronting the Challenges of Legacy Collections and Using GIS to Discern New Research Questions
- 3:45 Jennifer R. Haas and Richard H. Kubicek (University of Wisconsin–Milwaukee) — Results of Recent Survey and Excavation along the Western Shore of Lake Koshkonong in Southeastern Wisconsin

#### 10. WORKSHOP (OPEN)

MCJA Publication Tips

Amos Dean Ballroom C (open to all attendees) Co-Chairs: Sarah Boyer and Thomas Emerson

#### **11. STUDENT WORKSHOP**

Issues and Opportunities in Midwest CRM

Amos Dean Ballroom C Chair: Addison Kimmell Panelists:

- 1 Nurit Finn (President, Wapsi Valley Archaeology, Inc)
- 2 Elizabeth Reetz (Director of Strategic Initiatives, University of Iowa Office of the State Archaeologist)
- 3 Steven A. Katz (P. I., Global Archaeological Consulting)
- 4 Alex Anthony (Crew Leader, University of Wisconsin–Milwaukee)
- 5 Dean Anderson (State Archaeologist of Michigan)
- 6 **Mark Branstner** (Senior Historical Archaeologist, Illinois State Archaeological Survey-Retired)

### 12. GENERAL POSTER SESSION

#### Mounds and Burials

Amos Dean Ballroom D

- Emily Helmer (University of California, Santa Cruz) and Joy Mersmann (Washington University) — Visibility of Monks Mound from a Cahokian Neighborhood During the Lohmann Phase
- Kristen E. Squires (Center for American Archeology), Bonnie L. Etter (Southern Methodist University), Claire Norton (Rhodes University), Angela Cooper (University of Tulsa), Amanda Wissler (Arizona State University), Taylor H. Thornton (University of Toronto), Jason L. King (Center for American Archeology), Jason T. Herrmann (Eberhard Karls Universität Tübingen), Jane E. Buikstra (Arizona State University), and Taylor H. Thornton (University of Toronto) Geophysical Survey and Excavations at Golden Eagle (11C120) Mound 2

3:15-4:45 PM

1:30-3:00 PM

1:30-2:45 PM

- 3 **Marshall Stay** (Luther College) Geophysical Investigations at the Heritage Valley Mound Site (13AM129) in Allamakee County, Iowa
- 4 **Ryann Seifers** (Indiana University) A Survey of the Axial Skeleton: Neural Arch Closure and Spondylolysis of the Morton Site (Fulton Country, Illinois)
- 5 **Margaret Gaca** (Albion College) and **Emma Wink** (Eastern Connecticut State University) — Relative Soundscapes between Monks Mound and the Grand Plaza
- 6 **Sarah A. Boncal** (University of Wisconsin–Milwaukee) Milwaukee Lost and Found: Forgotten Cemeteries among the Urban Sprawl
- 7 Alleen Betzenhauser, Craig Kitchen, and Steve Boles (Illinois State Archaeological Survey) — Massive Pit Features at the East St. Louis Mound Complex

#### 13. POSTER SYMPOSIUM

#### 3:15-4:30 PM

Communication, Collaboration, and Archaeology: a Poster Session in Honor of the Iowa Burial Law

Amos Dean Ballroom D

Chair: Lara Noldner

- Brennan J. Dolan (Iowa Department of Transportation) and Libby J.C. Wielenga (Iowa State Historic Preservation Office) — Hand-Held LiDAR: Aiding in the Management of Cultural Resources in Iowa
- Suzanne Buffalo and Johnathan Buffalo (Meskwaki Nation), and Lara Noldner and Shirley Schermer (University of Iowa Office of the State Archaeologist) — Attimoni (ah-jee-MOOUHN)—The Stories We Have to Tell: Relationships among the Meskwaki Nation, Tribes with Historic Ties to Iowa, and the Iowa Office of the State Archaeologist
- 3 Melody Pope (Glenn A. Black Laboratory of Archaeology), and Lynn M. Alex, Shirley J. Schermer, and Will Thomson (University of Iowa Office of the State Archaeologist) — Stewarding Past Places into the Future—Cultural Landscapes, Byways, and Heritage Studies in Archaeological Practice
- 4 Elizabeth Reetz (University of Iowa Office of the State Archaeologist), William Quackenbush (Ho-Chunk Nation Department of Heritage Preservation, Cultural Resources Division) — Creating Collaborative Learning Opportunities for Indigenous Youth with Archaeology-Based Environmental Education
- 5 April K. Sievert (Indiana University), Wayne Huxhold (Indiana University), Ben Barnes (Shawnee Tribe), Kelli Mosteller (Citizen Potawatomi Nation) — Tribal History Partnerships and the Great Lakes-Ohio Valley Ethnohistory Collection at Indiana University
- 6 William E. Whittaker (University of Iowa Office of the State Archaeologist) Variations in Historic-Era Indian Funerary Practices in Iowa

#### TOUR THE OSA

1:00-4:00 PM

Visit the OSA (700 Clinton Street Building) and self-tour our facility. See map for directions.

50/40 NHPA/IOWA BURIAL LAWS CELEBRATION

5:00-7:00 PM

Brief remarks at 5:30 pm

Prefunction Area Open to all attendees Cash bar and light appetizers (drink tickets for those pre-registered)

## Saturday Morning October 8

#### 14. SYMPOSIUM

#### 8:45-11:00 AM

Illinois Archaeological Survey Symposium: The Legacy of Elaine Bluhm Herold—An Archaeological Pioneer

Amos Dean Ballroom A

Chair: Eve Hargrave

- 8:45 **James Brown** (Northwestern University) Elaine Bluhm's Place in the History of Illinois Archaeology
- 9:00 **Shannon M. Fie** (Beloit College) Sinnissippi Mounds: Revisiting Elaine Bluhm Herold's Investigations along the Lower Rock River
- 9:15 **Douglas K. Jackson** (Illinois State Archaeological Survey) Following Elaine at Hoxie Farm: A Summary of the ISAS Investigations
- 9:30 **Kjersti E. Emerson** (Illinois State Archaeological Survey) The Hoxie Farm site: An Updated Understanding of Upper Mississippian Ceramics
- 9:45 (BREAK)
- 10:00 **Eve A. Hargrave** and **Kristin M. Hedman** (Illinois State Archaeological Survey) The People of Hoxie—Bringing the Past and Present Together
- 10:15 Eve A. Hargrave (Illinois State Archaeological Survey) and Mark J. Wagner (Center for Archaeological Investigations, Southern Illinois University, Carbondale)
   — Longhouses and Peace Medals: Elaine Bluhm Herold and the Beginning of Contact Period Archaeology in Illinois
- 10:30 Steven Kuehn (Illinois State Archaeological Survey) Zooarchaeological Remains from the Crawford Farm Site (11RI81): Nativist Faunal Exploitation and Bone Use by the Historic Sauk in Illinois
- 10:45 Ferrel Anderson (Quad Cities Archaeological Society) Elaine Bluhm Herold: Contributions to Avocational Archaeology, Public Archaeology, and Working with Knaves

#### 15. GENERAL SESSION

Prehistoric—Spaces and Places, Part 1

Amos Dean Ballroom B

Chair: Rachel McTavish

- 9:00 Bonnie W. Styles and Mona Colburn (Illinois State Museum), and Sarah W. Neusius (Indiana University of Pennsylvania) - Exploring Comparability and Variability of Eastern Archaic tDAR Faunal Databases and Human Use of Animals
- Beverley A. Smith (University of Michigan-Flint), Steven R. Kuehn (Illinois 9:15 State Archaeological Survey) — Aquatic Faunal Resources in the Middle and Late Archaic Periods: Using tDAR Integration to Compare the Saginaw Valley and the Northern Prairie Peninsula Regions of the Upper Midwest
- Brian G. Redmond (Cleveland Museum of Natural History) Settling Down in 9:30 Northern Ohio: Late Archaic Clay-Floored Structures at the Burrell Orchard Site 9:45
- (BREAK)
- 10:00 Sissel Schroeder (University of Wisconsin-Madison), and Jake Pfaffenroth, Marissa Lee, Kelly Martin, and Kelly Tyrrell (University of Wisconsin-Madison) - Uncovering Ancient Life at Aztalan: Domestic Structures, Palisade Walls, and **Reconfigured Spaces**
- 10:15 Jarrod Burks (Ohio Valley Archaeology, Inc.), Paul Pacheco (SUNY Geneseo) Hopewell Settlement in Southern Ohio: Geophysics, Surface Artifact Data, and a Common Site Structure
- 10:30 Ken Williams (Cahokia Mounds Museum Society), Michael Hargrave (Construction Engineering Research Laboratory, Southern Illinois University) -Kuhn Station Village Revisited
- Rachel C. McTavish (University of Wisconsin-Milwaukee) Viewshed Analyses 10:45 for the Oneota Lake Koshkonong Locality: Defensibility as a Critical Variable in Settlement Studies
- 11:00 Jeffery D. Kruchten (University of Illinois) Exploring the Deep History of the Old Vincennes Trace across Southern Illinois

#### 16. GENERAL SESSION

#### 8:45-11:15 AM

Protohistoric and Historic

Amos Dean Ballroom C

Chair: Mark Schurr

- Mark R. Schurr (University of Notre Dame), Madeleine McLeester (University of 8:45 Chicago) — Middle Grant Creek: A Rare Example of a Single Component Huber Phase Site on the Illinois Prairie
- John Flood and Scott Hipskind (Indiana University-Purdue University 9:00 Indianapolis), and Edward Herrmann (Indiana University) - A Diachronic Analysis of Early and Late Mississippian Lithic Procurement and Utilization at the Lawrenz Gun Club Site (11Cs4)
- Ema B. Angeles and Mark R. Schurr (University of Notre Dame) Evidence of 9:15 Resistance: Stable Isotope Analysis of Removal Period Food Web
- Sarah Tate (University of Wisconsin-Madison) Good Distance Makes Good 9:30 Neighbors: Strategic Positioning of Native American Settlements in Late 19th- to Early 20th-Century Wisconsin
- (BREAK) 9:45

- 10:00 **Lydia Wilson Marshall** (DePauw University) The Archaeology of Exodusters: African-American Migrants in 19th-Century Putnam County, Indiana
- 10:15 **Christopher Fennell** (University of Illinois) Ethnicity, Race, and Commodities in Illinois and Virginia
- 10:30 CANCELED (will be presented in Session 9)—Jennifer R. Haas and Richard H. Kubicek (University of Wisconsin–Milwaukee) — Results of Recent Survey and Excavation along the Western Shore of Lake Koshkonong in Southeastern Wisconsin
- 10:45 **Michael J. Meyer** (Missouri Department of Transportation) Preservation or Exploitation: How Public Interactions Affect Archaeological Sites
- 11:00 **Susannah Oettle** (Southern Illinois University–Edwardsville) Jane, His Wife: An Analysis of Spouses' Gravestones in a Rural Midwestern Cemetery

#### **17. GENERAL POSTER SESSION**

#### 8:30-9:45 AM

#### Historic

Amos Dean Ballroom D

- 1 **Daniel S. Amick** and **David S. Hanley** (Loyola University Chicago) Spatial Analysis of Subsurface Metal Artifacts at 11MH515, an Early 19th-Century Pioneer Farmstead in Northern Illinois
- Emily Fox (DePauw University) and Katherine McKean (DePauw University)
   The John L. Sellers Site: Production and Consumption at a Late 19th-Century Indiana Farmhouse
- 3 **Daniel S. Amick, Emma Hall,** and **Nicole Claudio** (Loyola University Chicago) Analysis of the Domestic Artifact Assemblages at the Early 19th-Century Walkup Farmstead, Northern Illinois
- 4 **Angela R. Collins** (University of Iowa Office of the State Archaeologist) Don't Uncork that Bottle! The Unanticipated Contents Preserved in a Nineteenth Century Proprietary Medicine Bottle
- 5 Robert F. Sasso (University of Wisconsin–Parkside), Daniel J. Joyce (Kenosha Public Museums) — Reconstructing the 1976 Kenosha County Archaeological Society Investigations at the Montgomery Cabin Site, Kenosha County, Wisconsin
- 6 Andrew Anklam (University Wisconsin–La Crosse) Using LiDAR to Identify Historic Features in the Superior National Forest

#### **18. GENERAL POSTER SESSION**

#### 10:15-11:30 AM

#### General

Amos Dean Ballroom D

- 1 **Melissa R. Baltus** (University of Toledo) Of Sand Dunes and Sheet Middens: Excavations at the Welles Site (33LU25), Lucas County, Ohio
- 2 Randy Dickson, William Kemps, Casandra Tobin, Coggin Heeringa, and James Clark (Midwest Archaeological Consultants) — Public Archaeology at Crossroads at Big Creek in Sturgeon Bay, Wisconsin
- 3 Ian C. Dunshee (University of Iowa) Towards Standards for the Manual Digitization and Vectorization of Analog Historical Maps and Records
- 4 **George Horton** (Iowa Archeological Society) From Creation to the Great Depression: A Fox Nation Time Line

- 5 Kevin C. Nolan, Christine K. Thompson, Jamie Leeuwrik, and Amanda Balough (Applied Anthropology Laboratories, Ball State University) — Recent Survey in Benton and Newton Counties: Data Deficient, or Differently Populated
- 6 **Jim Peters** (Samaritan Detection Dogs) Historic Human Remains Detection Dogs: A Summary of the Research and Applications
- 7 Mara Taft (University of Wisconsin–Madison), and Jacqueline Pozza and Victoria Pagel (University of Wisconsin–Milwaukee) — Rehousing the Past: Curation of the Tillmont site (47Cr460) Collections at UW–Madison

## Saturday Afternoon October 8

#### **19. GENERAL SESSION**

1:30-4:00 PM

Prehistoric—Artifact Analyses

#### Amos Dean Ballroom A

Chair: Michael Hambacher

- 1:30 **Michael J. Hambacher** A Summary of Late Prehistoric and Other Woodland Ceramics from the M-231 Project in the Lower Grand Valley of Michigan
- 1:45 **Rebecca M. Barzilai** (Indiana University) Compositional Characterization of Ceramics and Clays from Indiana, Kentucky, and Illinois
- 2:00 Marcus Schulenburg (University of Wisconsin–Milwaukee) and Robert Cook (Ohio State University) — Analysis of Ceramics from an Avocational Collection of an Early Fort Ancient Village Site
- 2:15 Sissel Schroeder, Jake Pfaffenroth, Marissa Lee, and Sarah Taylor (University of Wisconsin–Madison) Photogrammetry and 3D Models of Fabric from Impressions in Pottery
- 2:30 Andrew J. Upton (Michigan State University) Function or Style? Cultural Transmission and Artifact Variation in Late Prehistoric West-Central Illinois
- 2:45 **Jacqueline M. Pozza** (University of Wisconsin–Milwaukee) Peering Past the Patina: An Analysis of Copper Artifacts from Four Oneota Sites in the Lake Koshkonong Area
- 3:00 (BREAK)
- 3:15 **Rob Ahlrichs** (University of Wisconsin–Milwaukee) Analysis of the Jim Bussey Collection: A Case study in Copper Use during the Archaic Period in Wisconsin
- 3:30 **Katherine M. Sterner** (University of Wisconsin–Milwaukee) Integrating Use-Wear Analysis: A Case Study from the Holdorf I Site
- 3:45 **Douglas Kullen** (Burns & McDonnell), and **Thomas J. Loebel** (Illinois State Archaeological Survey) — End Scrapers and Hide Processing at Hunters Home

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#### 1:30-3:00 PM

Prehistoric—Spaces and Places, Part 2

Amos Dean Ballroom B

20. GENERAL SESSION

Chair: Richard Edwards

- 1:30 Mark L. Madsen (Chicago and South Suburban Archaeological Societies; Illinois Association for Advancement of Archaeology) — Possible Effigy Art Noted in Stone Tools from the Shepard Site on Senachwine Creek, the John Harvey Plainfield-Lockport Collection, and a Du Page River Survey.
- 1:45 **Scott Hipskind** and **Jeremy J. Wilson** (Indiana University–Purdue University Indianapolis) — The Walsh Site and the Central Illinois River Valley: A Century of Speculation on Mississippian Occupation Tested by Geophysical Prospection and Artifact Analysis
- 2:00 Zachary Allain (University of Wisconsin–La Crosse) The Understatement of the Importance of the Missouri River System on the Mississippian World
- 2:15 **Robert J. Jeske, Seth A. Schneider, Richard W. Edwards, Katherine Sterner,** and **Rachel C. McTavish** (University of Wisconsin–Milwaukee) — Strangers in a Strange Land: The Lake Koshkonong Oneota Locality in Context
- 2:30 **Nurit Goldman Finn** (Wapsi Valley Archaeology, Inc.) Excavations at Site 13DM1043, a Small Late Woodland Habitation Site in Des Moines County, Iowa
- 2:45 **James Enloe, Amy Meehleder,** and **James McGrath** (University of Iowa) The Hawkeye Horizon: Post-Woodland Occupations of Woodpecker Cave (13JH202)

#### 21. GENERAL SESSION

1:45-4:00 PM

#### Prehistoric, general

Amos Dean Ballroom C

Chair: William Lovis

- 1:45 William A. Lovis and Alan F. Arbogast (Michigan State University), G. William Monaghan (Indiana Geological Survey), Jennifer L. B. Milligan (PaleoResearch Institute, Inc.), and Frank J. Raslich (Michigan State University) Current Research Status of the Parkhill Phase Paleoindian Hipwater Locale
- 2:00 Christopher T. Hays (University of Wisconsin–Washington County) and Cheryl Ann Munson (Midwest Archaeology Laboratory, Indiana University) — Poverty Point Culture in the Lower Ohio Valley: The Clarksville and Murphy Sites
- 2:15 **Janet G Brashler** (Grand Valley State University), **Jarrod Burks** (Ohio Valley Archaeology), **Wesley Jackson** (Grand Valley State University) — Late Prehistoric Pit Features and Remote Sensing: A Case Study from Michigan
- 2:30 Melissa R. Baltus and Sarah E. Baires (University of Toledo) Exploring New Cahokian Landscapes: Report on the 2016 CABB Tract Excavations
- 2:45 **G. Logan Miller** (Illinois State University) Spracklen: A Hopewell encampment in the Little Miami River Valley
- 3:00 (BREAK)
- 3:15 William A. Lovis (Michigan State University), G.William Monaghan (Indiana Geological Survey), and Alan F. Arbogast (Michigan State University) Reconstructing the Development of Landforms and Associated Woodland Occupation at Sleeping Bear Point, Michigan

- 3:30 **Julie A. Zimmermann** (Southern Illinois University–Edwardsville) Four Years of Excavation and 10,000 Years of Occupation at the Gehring Site
- 3:45 **Susan M. Kooiman, Lynne Goldstein,** and **William A. Lovis** (Michigan State University) The Class of 2000 B.C.: A Late Archaic Site on the Michigan State University Campus

#### 22. GENERAL POSTER SESSION

#### 1:30-2:45 PM

Prehistoric Analyses, Part 1

Amos Dean Ballroom D

- 1 **Jeremy L. Skeens** (University of Iowa) Finding the Past in the Paste: Variance in Woodland Ceramics at Woodpecker Cave (13JH202)
- 2 **James R. McGrath, Rebekah Truhan, Adam M. Skibbe,** and **James G. Enloe** (University of Iowa) — Heads Up for Falling Rocks!: Site Formation Processes at Woodpecker Cave, Johnson County, Iowa
- 3 **Warner, Vincent** (Amec Foster Wheeler Environment & Infrastructure) It's About Time: Using Relative Dating and Seriation to Identify Trends in Northeastern Missouri Late Woodland Period Pottery Decoration
- 4 **Rachel C. McTavish** and **Amy Klemmer** (University of Wisconsin–Milwaukee) Bone, Horn, and Antler Technologies: A Worked Fauna Analysis from Oneota Sites in the Lake Koshkonong Locality
- 5 Rebekah Truhan and Jacob Foubert (University of Iowa), and Luke Stroth (University of California, San Diego) — Technological Approach to Fire Cracked Rock
- 6 Erin Donovan and Katie Hunt (Indiana University–Purdue University Indianapolis), and Ryan Kennedy (Indiana University) — A Tale of Two Houses: Assessing Late Mississippian Diet and Subsistence from Two Burnt Structures at Lawrenz Gun Club (11Cs4)
- 7 **Drew Agnew** and **AmySue Greiff** (Beloit College), and **Rachel C. McTavish** and **Amy Klemmer** (University of Wisconsin–Milwaukee) — Investigations of Risk Management and Cultural Continuity: Oneota Faunal Patterns in the Lake Koshkonong Locality
- 8 **Elizabeth Davidson** and **Cynthia Strong** (Cornell College), and **Joseph A. Tiffany** (University of Iowa Office of the State Archaeologist) X-Ray Fluorescence Analysis of Mill Creek Pottery

#### 23. GENERAL POSTER SESSION

#### 3:15-4:30 PM

Prehistoric Analyses, Part 2

Amos Dean Ballroom D

- 1 **Jaelyn Roland** (University of Wisconsin–La Crosse) Ceramic Analysis of La Crosse County and Houston County Rim Sherds
- 2 William Green (Beloit College), Mary Whelan (Arizona State University), Adam Barnes (University of Arkansas), William Whittaker (University of Iowa Office of the State Archaeologist), and Emilia Bristow (University of Iowa) — Gast Farm Revisited: New Tools Revitalize "Old" Data
- 3 Zachary Allain (University of Wisconsin–La Crosse) The Finer Points of Lithics Found at CABB Tract 11S34 in Cahokia.
- 4 **Daniel S. Amick** and **Rita Smith** (Loyola University Chicago) Ongoing Results of an Experimental Study of Lithic Artifact Movement and Damage from Tillage

- 5 William A. Burcham, Haley Hoernschmeyer, and Jeremy Wilson (Indiana University-Purdue University Indianapolis) - A Geospatial Analysis of Mississippian Period Travel and Organization in the Central Illinois River Valley
- Michael Giller and John Hahn (Wapsi Valley Archaeology, Inc.) Stone Tools of 6 Minnesota
- Eric C. Olson (Ball State University), Kevin C. Nolan (Applied Anthropology 7 Laboratories, Ball State University) — Evaluating Late Early Woodland Paired-Post Circle Function through Multiple Model Evaluation

IOWA ARCHEOLOGICAL SOCIETY BUSINESS MEETING Lindquist Room	4:00 PM
ILLINOIS ARCHAEOLOGICAL SURVEY BUSINESS MEETING Amos Dean Ballroom B	4:00 PM
MAC, INC. BUSINESS MEETING	5:00 PM
Student Paper Awards, Distinguished Career Awards	
Amos Dean Ballroom A	

Saturday Evening		
October 8		

## **CASH BAR**

Prefunction Area

#### MAC BANOUET

Amos Dean Ballrooms C & D

## **GUEST SPEAKER, 7:30 PM**

M. Steven Shackley (Professor Emeritus, University of California, Berkley)

Hohokam Social Identity Unraveled through XRF and the Southwest Archaeological Obsidian Project

For more than 30 years through the Southwest Obsidian Project, and analyses mainly by x-ray fluorescence spectrometry (XRF) of more that 50 obsidian sources and tens of thousands of artifacts, an emerging picture of a multi-ethnic/linguistic, gender differentiated Preclassic Hohokam of central Arizona has emerged changing our view of prehistory. While the subject is focused on the

Hohokam of central Arizona, the inferences and the processes through which we arrive at these inferences are appropriate for much of North America. Migration, multi-ethnicity and complex social identity seems to be the norm from the Preclassic through the Late Classic Southwest, and geoarchaeology and analytical chemistry has proven central to the research.

#### 23

6:30 PM

5:30 PM

# Directions from the Sheraton to the Office of the State Archaeologist







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Midwest Archaeological Conference, Inc.

Indianapolis, Indiana October 19–21, 2017

## 60<sup>th</sup> Annual Midwest Archaeological Conference

October 6–8, 2016 — Iowa City, Iowa

## Symposia, Workshop, & Fora Abstracts

(Listed in Chronological Order)

#### [1] Encounters, Exchange, Entanglement—Current Perspectives on 17th- and 18th-Century Intercultural Interactions throughout the Western Great Lakes

#### Jessica Yann and Heather Walder (Michigan State University)

In 1966 George Irving Quimby published a short text, *Indian Culture and European Trade Goods*, which divided time after European contact in the Great Lakes into Early, Middle, and Late historic eras. This acculturation-based typology of diagnostic material culture remains a standard reference in Midwest historical archaeology today. Over the last fifty years, researchers have worked from multiple perspectives to understand the material outcomes of colonial encounters among the diverse Native American peoples present here. Today's theoretical frameworks challenge acculturation-based models and decolonize attempts to understand this period by breaking down dichotomies such as Indian or European, History and Prehistory, and Colonizer or Colonized. This approach allows for more thorough discussions of intercultural interaction and expands on Quimby's oft cited text. We emphasize new techniques and perspectives that both build on and revise our understanding of historical archaeology and Quimby's historic chronology in the Western Great Lakes in 2016.

#### [2] The Glenn A. Black Laboratory of Archaeology Turned 50!

#### Melody Pope (Glenn A. Black Laboratory of Archaeology)

The 1965 Angel Mounds Agreement transferred archaeological collections, images, and documents formerly held by the Indiana Historical Society and Indiana Department of Conservation to Indiana University. Six years later, Indiana University–Bloomington dedicated the Glenn A. Black Laboratory of Archaeology to house Indiana's legacy archaeology collections and honor Glenn Black. Now 50 years later, we face many familiar challenges as we chart the next 50 years. How to rehouse and preserve legacy collections, develop integrative data management processes, meet federal mandates, set new agendas for collaborative research and public programming, and contribute to the evolving mission of IU are all key areas where strategic planning is necessary. In this session, we present a series of lighting talks from staff and students that speak to the ways we are integrating the functions of a lab-museum to meet the challenges of moving into an increasingly open access and digital 21st century.

Symposia, Workshop, & Fora Abstracts

#### [3] Describing Collections for the Digital Age

## Jennifer St. Germain, Elizabeth Watts Malouchos, and April K. Sievert (Glenn A. Black Laboratory of Archaeology)

Establishing standards for classification and rich description of archaeological materials is becoming increasingly important, particularly in respect to new expectations for digital accessibility, scholarly research, and cross-institutional collaboration. Categories for describing artifacts, particularly ceramics materials, have shifted over time and can vary across institutions. Resulting mostly from differing theoretical perspectives and the types of research questions asked, other impacting factors include differences in documentation standards, collections management systems, or staff and funding resources required for detailed cataloging. Indiana University's School of Informatics and Glenn Black Laboratory of Archaeology propose a roundtable bringing together archaeology, museum, and information professionals to discuss these issues of classification and standardization, with a focus on ceramic materials in particular. Participants will give brief, five minute presentations addressing any of the following topics: material classification systems, ceramic typologies, metadata construction, collections management systems, linked data or related digital initiatives. Moderated discussion will follow presentations.

#### [4] Updates from the Milwaukee County Poor Farm Cemetery Project

#### Patricia Richards (University of Wisconsin–Milwaukee)

The Milwaukee County Poor Farm Cemetery Project was initiated in 2008 and is a collaborative effort of the University of Wisconsin–Milwaukee (UWM) Archaeological Research Laboratory, UWM Anthropology Department graduate students, UWM Undergraduate Research Opportunity Students, and the staff of UWM-CRM. The Wisconsin Historical Society granted the UWM Archaeological Research Laboratory final disposition of all human remains, material culture, and documentation associated with 1991 and 1992 excavations of 1649 individuals at the Milwaukee County Poor Farm Cemetery (MCPFC). In 2013, Historic Resource Management Services of the University of Wisconsin–Milwaukee returned to the cemetery and conducted excavations of an additional 632 individual coffin burials representing over 800 individuals. This symposium presents historical, archaeological, and osteological research related to those excavations. While the goals of individual projects are diverse, all research is guided by the goal of returning a voice and an identity to individuals robbed of both by burial in the MCPFC.

#### [5] Effectively Communicating Archaeology to the Public in Three Minutes or Less

#### Elizabeth Reetz (University of Iowa Office of the State Archaeologist)

One of the many ethical responsibilities of an archaeologist is to demonstrate the relevance of historic preservation to a diverse public in a meaningful way. Communication is crucial to gaining public support for archaeological resources, programs, and institutions, especially considering recent trends towards funding reductions and legislative impacts. Additionally, communication skills are increasingly valued in the archaeology job market. Often, archaeologists must communicate information quickly, simply, and sometimes with little preparation. This lightning round is an opportunity for archaeologists to present a three minute "elevator pitch" focused on: what is archaeology, public benefits of archaeology, or how archaeology addresses contemporary problems. Presenters may use one PowerPoint slide and will get immediate feedback from panelists. A group discussion will follow the individual presentations, and the panelists will provide further advice for communicating with the public. Sign up for a three-minute slot by emailing <u>elizabeth-reetz@uiowa.edu</u> by 8:00 pm on October 5.

#### [6] An Update on Recent Morton Village Research

#### Jodie O'Gorman (Michigan State University) and Michael Conner (Dickson Mounds Museum)

Recent research at the Morton Village site in Fulton County, Illinois, includes field and lab investigations designed to assess the social context and cultural negotiations of Oneota and Mississippian groups around the fourteenth century C.E. Pilot studies of the role of foodways in social negotiations, and new domestic evidence of co-habitation, along with the array of ritual spaces and related material culture are presented.

#### [7] Paleoethnobotany

#### Richard W. Edwards IV (University of Wisconsin–Milwaukee) and Madeleine McCleester (University of Chicago)

This workshop at the Office of the State Archaeologist facility is by invitation (see map for directions). Please contact Rick Edwards (**wedwards@uwm.edu**) to determine if spaces are available.

#### [10] MCJA Publication Tips

#### Sarah Boyer and Thomas Emerson

This open workshop will address commonly encountered issues involved with submitted articles for publishing in the *Midcontinential Journal of Archaeology*. All attendees are welcome.

#### [11] Issues and Opportunities in Midwest CRM

#### Addison Kimmel

With Cultural Resource Management as the primary employment sector for archaeologists, the 2016 Midwest Archeological Conference student workshop will explore current issues and opportunities in Midwestern Cultural Resource Management. According to the U.S. Bureau of Labor Statistics, jobs in archaeology are expected to grow by only four percent by 2024. This will increase competition for archaeological jobs, making it important for potential applicants to be prepared for employment in all sectors. A panel made of archaeologists from a variety of CRM firms, both in the private and government sectors, will engage with students in an open forum designed to explore opportunities outside of the university. All interested students are invited to attend and contribute to the discussion as we dig outside of the academy

## [13] Communication, Collaboration, and Archaeology: a Poster Session in Honor of the Iowa Burial Law

#### Lara Noldner (University of Iowa Office of the State Archaeologist)

This invited poster symposium will honor the 40th anniversary of the Iowa Burial Law by serving as a venue to continue building on the dialogue concerning collaboration and its many shared benefits, as well as dialogues concerning implementation of the Iowa Burial Law and the Native American Graves Protection and Repatriation Act (NAGPRA). Participants will present a wide variety of case studies from across the Midwest and represent the successes that have come from various forms of collaboration among Native American communities, museums, colleges-universities, archaeologists, state and federal agencies, and other stakeholders. Presentations will focus on the relationships that have been built as a result of consultation and repatriation events, as well as the successes of public education and outreach events, especially instances where upcoming generations have been educated about the importance of maintaining the ties that have been made or strengthened through these processes.

#### [14] Illinois Archaeological Survey Symposium: The Legacy of Elaine Bluhm Herold— An Archaeological Pioneer

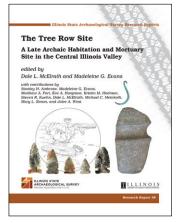
#### Eve Hargrave (Illinois State Archaeological Survey)

Elaine Bluhm Herold was one of Illinois's earliest professional female archaeologists at a time when women's participation in Illinois archaeology was limited. Her achievements— spanning from 1947–1967—included completing several graduate degrees, conducting field schools and salvage excavations at numerous endangered sites in northern Illinois, working closely with professional and avocational archaeologists alike, mentoring students in archaeology, and becoming one of the first officers (Treasurer/Secretary and later Editor) of the newly formed Illinois Archaeological Survey (IAS) in 1956. The presentations in this session honor Elaine Herold's efforts in Illinois archaeology by discussing current research derived from sites she excavated over 50 years ago—Crawford Farm, Hoxie Farm, and Sinnissippi Mounds—and the remarkable influence she had on avocational and professional archaeology in Illinois. As one of the original founders of the IAS 60 years ago, Elaine Bluhm Herold remains a role model for many generations of Midwestern archaeologists.



Come visit the ISAS table in the MAC book room to receive up to 50% off list price on selected titles—including our newest publications:

- The Tree Row: A Late Archaic Habitation and Mortuary Site in the Central Illinois Valley
- Main Street Mound: A Ridgetop Monument at the East St. Loius Mound Complex





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## 60<sup>th</sup> Annual Midwest Archaeological Conference October 6–8, 2016 — Iowa City, Iowa

## Presentation Abstracts

(Listed in Alphabetical Order)

## [22] Investigations of Risk Management and Cultural Continuity: Oneota Faunal Patterns in the Lake Koshkonong Locality

Drew Agnew (Beloit College), AmySue Greiff (Beloit College), Rachel C. McTavish (University of Wisconsin–Milwaukee), and Amy Klemmer (University of Wisconsin–Milwaukee)

The Koshkonong Creek Village site (47JE379) is a Late Prehistoric Oneota site located in Jefferson County, Wisconsin, dating to A.D. 1050–1400. The site is located in an atypical location for the locality along a creek rather than the lake shore. This project re-examined previous assertions of local resource emphasis as a risk management strategy for inter-group conflict and the demands of sedentary horticultural practices. This analysis includes 100 percent samples from four feature contexts to investigate questions of risk management strategies and cultural continuity, and provide a baseline for future zooarchaeology research at the site.

## [19] Analysis of the Jim Bussey Collection: A Case Study in Copper Use during the Archaic Period in Wisconsin

#### Rob Ahlrichs (University of Wisconsin–Milwaukee)

The Old Copper Complex is represented by tens of thousands of copper artifacts recovered from locations widely scattered across the landscapes of the Western Great Lakes. Scholarly study of this complex has been mostly restricted to the consideration of copper as a symbolically potent object and the construction of artifact typologies. This has resulted in a lack of emphasis on the role that copper played in the subsistence and economic systems of the people who depended on it. This research addresses the collection, use and discard of copper through the systematic study of the Jim Bussey Collection which was collected from both northern and southern Wisconsin localities. Consideration of morphological artifact types, their relative distributions through space and time, and use-wear patterns suggest systematic differences in the way that people utilized copper during the Archaic.

## [20] The Understatement of the Importance of the Missouri River System on the Mississippian World

#### Zachary Allain (University of Wisconsin–La Crosse)

Much of what is talked about and taught regarding the Mississippian world revolves mainly around all things east of the Mississippi River. While it is obvious this region played a heavy influence, much of what students, such as myself, are taught really passes over the Missouri River and its tributaries, lumping anything west of the Mississippi as areas traded with or in other general terms. Using a blend of historical accounts, climate data, analysis of languages, cultural groups and the interpretation of artifacts, this paper hopes to widen the scope of the Mississippian world held by some people in order to allow them to better understand, and hopefully decide to contribute to, research of people's along the Missouri River system between 900–1300 A.D., as well as their descendants today.

#### [23] The Finer Points of Lithics Found at CABB Tract 11S34 in Cahokia.

#### Zachary Allain (University of Wisconsin–La Crosse)

This poster analyzes projectile points and other notable lithic artifacts found the summer of 2016 at site 11S34 at Cahokia. By analyzing these artifacts, and stating both the style and dates to the best of my ability, it is hoped that they may be able to help date aspects of the site as well as who may have been living at the site at certain times. The sourcing of artifacts may help to show shifts in trade in certain periods or even just trends of who was immigrating to the region at times.

#### [1] Communities on the Move, Communities of Practice: the Case of the Late Eighteenth-Century Fur Trade in Minnesota

#### Amélie Allard (University of Minnesota)

From biographies of objects to ethnogenesis, many explanatory frameworks have emerged since Quimby's seminal publication. My approach to fur trade society as a community on the move pulls away from notions of ethnicity, and rather emphasizes the emergence of a community among fur traders through their shared mobile lifestyle and place-making activities, which occurred through movement (and its politics) as well as through the daily transmission of knowledge from old-timers to newcomers, or from Indigenous hunters to Euro-Canadian traders. These activities and practices were at the heart of social dynamics and worked to integrate a disparate group of people into a particular community of practice whose boundaries were constantly contested and redefined. Using data from Réaume's Leaf River Post, a trade post located in Central Minnesota, I argue that, through this transmission of knowledge, Indian groups played an essential role in the formation and maintenance of this community of practice, and also in the movement of traders within this overwhelmingly Indigenous landscape.

#### [17] Spatial Analysis of Subsurface Metal Artifacts at 11MH515: an Early 19th-Century Pioneer Farmstead in Northern Illinois

#### Daniel S. Amick and David S. Hanley (Loyola University Chicago)

This research seeks to document spatial distribution of buried metal remains at 11MH515, an early 19th-century farmstead in Northern Illinois in order to identify locations of buildings and their probable functions, dumps, and activity areas. Excavations from a 59 square meter block have already produced numerous iron nails, tin cans, and farm tools and hardware. The goals of this study were: 1) determine the reliability and effectiveness of a commercial metal detector as a geophysical prospecting tool; 2) develop a subsurface map of anomaly readings for spatial analysis and excavation planning. A metal detector with a pin pointer was used to create density maps from 195 anomalies found at depths between 5 and 25 cm across a 3,250 m<sup>2</sup>. Eight anomalies were tested with shovel probes, five yielded metal artifacts (62.5 percent success); another eight probes serving as randomly spaced control points failed to yield any metal artifacts.

# [17] Analysis of the Domestic Artifact Assemblages at the Early 19th-Century Walkup Farmstead, Northern Illinois

### Daniel S. Amick, Emma Hall, and Nicole Claudio (Loyola University Chicago)

Ceramic, button, and tableware assemblages from the early 19th-century Walkup Pioneer Farmstead (11MH515) confirm its chronological placement as well as indicate aspects of domestic life, the demography of the inhabitants, and national market access for settlers in northern Illinois. Spatial patterning of the artifacts suggest dumping adjacent to a residential structure and losses of small items (buttons and pins) through the floorboards. Although the 1850 *Agricultural Schedule* indicates that the Walkup family farm was fairly prosperous, the household assemblage is quite modest. Access to goods seems to have presented little problem for these pioneer settlers.

# [23] Ongoing Results of an Experimental Study of Lithic Artifact Movement and Damage from Tillage

### Daniel S. Amick and Rita Smith (Loyola University Chicago)

Archaeological research in the Midwest commonly occurs in plowed fields. This study reports results from 5 years studying movement and damage on lithic artifact replicas in an experimental plot. Chipped-stone replicas with paint-coatings (n = 140) were placed at 75-cm intervals on a 5-by-15-m plot cultivated using hugelkultur and traditional methods employing a rotary tiller. Translocation and damage found on the replicas was documented at periodic intervals. Most artifacts have moved below the surface, but excavation of 10 m<sup>2</sup> yielded only one of these specimens. Lateral movement extends up to several meters. Breakage and edge-damage which can mimic use wear is frequent.

# [14] Elaine Bluhm Herold: Contributions to Avocational Archaeology, Public Archaeology, and Working with Knaves

### Ferrel Anderson (Quad Cities Archaeological Society)

When Elaine arrived in 1956 at the University of Illinois as Assistant Professor of Anthropology, she started at a run by helping to organize the professional community, initiating an effort to establish an amateur archaeological society, and informing the public about the archaeology of Illinois. As Editor of the Illinois Archaeological Survey (IAS), she first issued an illustrated summary of Illinois archaeology. She was also a driving force in the presentation of current field work at the IAS annual meetings. She and colleagues encouraged the formation of an amateur archaeological organization of invited and recognized amateur archaeologists from across the state which became the nucleus of the succeeding Illinois Association for Advancement of Archaeology. To illustrate the exceptional challenges she faced, her wrestling matches with collectors and land owners at the Crawford Farm excavation are described.

# [16] Evidence of Resistance: Stable Isotope Analysis of Removal Period Food Web Ema B. Angeles and Mark R. Schurr (University of Notre Dame)

Stable isotope analysis of bone collagen has become a mainstay in archaeological research due to its aid in reconstructions of diet and environment. Recently there has been more interest in addressing issues of human dietary patterns, influence and competition with domesticates by creating complex food webs that aid in the understanding of the regional

isotopic ecology and therefore, the dietary strategies of prehistoric humans. This study analyzed bone collagen stable carbon and nitrogen isotopes from 44 samples representing 17 different taxa. These faunal remains were found in conjunction with multiple artifacts at the Pokagon's Village site, a Potawatomi Removal Period site (A.D. 1795–circa 1840), which suggest various survival strategies enabled inhabitants to resist removal. A comprehensive food web of fauna found at this site will detail the isotopic ecology of the Pokagon Village Native American Indians and may reveal additional evidence that led to their successful survival and resilience.

### [17] Using LiDAR to Identify Historic Features in the Superior National Forest

# Andrew Anklam (University Wisconsin-La Crosse)

LiDAR is a relatively new remote sensing tool that has been used as a way for archaeologist to remotely observe surface features. These observations can be fine-tuned to remove vegetation cover and only show the bare ground. By using LiDAR as a survey tool archaeologist in forested areas of the United States have been able to identify previously unmapped historic features. With the advent of Minnesota's LiDAR survey, there are now opportunities for archaeologist to use LiDAR in northern Minnesota's heavily wooded boreal forest as a way to check an area of interest before heading into the field to do reconnaissance. In 2015 the author used LiDAR as a tool to identify derelict rail roads in boreal forests. This poster is a continuation of that project in conjunction with the Superior National Forest looking at different types of cultural resources as example for how LiDAR can be used for archaeology.

#### [4] The Changing Accessibility of Historic Documents in a Digital World: Modern Research Methods and Historic Atrocities at the Milwaukee County Poor Farm Cemetery

### Alexander W. Anthony (University of Wisconsin–Milwaukee)

Since the initial excavations at the Milwaukee County Poor Farm Cemetery (MCPFC) in 1991, the way in which we approach historic document research has changed tremendously. Documents that could be found only through laborious hours of sorting through microfilm and archives are now available through an internet search of digital collections. This paper will examine how the digital accessibility of historic documents has affected the interpretation of archaeological data from the MCPFC. I will discuss how the discovery of grave desecration and reuse of graves through digital resources, paired with more traditional research methods, has created a greater understanding of events throughout the Milwaukee County Institutions and ultimately of the management of the Poor Farm Cemetery. Finally, I will explore how recent events may be creating new limitations on what were previously openly accessible digital resources and the potential impact on the future research of historical sites.

### [18] Of Sand Dunes and Sheet Middens: Excavations at the Welles Site (33LU25), Lucas County, Ohio

# Melissa R. Baltus (University of Toledo)

The Welles Site (11LU25), located on an ancient beach ridge formed by glacial Lake Warren, was recorded from surface collections in the 1970s as having Archaic and Late Woodland occupations. Recent test excavations sought to better define the extent of this site, as well as understand the nature of occupation of this inland area of the Western Lake Erie basin. These excavations were geared towards exploring changing use of the landscape in Northwest Ohio over time and investigating regional relationships as demonstrated through changes in raw materials and technological styles of pottery and lithics. Presented here are the preliminary results of our limited testing.

# [21] Exploring New Cahokian Landscapes: Report on the 2016 CABB Tract Excavations

### Melissa R. Baltus and Sarah E. Baires (University of Toledo)

Using evidence from recent excavations, we examine how Cahokians engaged with the natural and the supernatural through earth-moving activities while contributing to the construction of the urban landscape. We present data from our 2016 excavations at Cahokia's CABB (Courtyard Area Between Borrows) Tract, located southeast of Woodhenge and west of the Grand Plaza. This tract is situated north of two known borrow pits and includes an additional, previously unidentified borrow pit. We consider practices of borrow pit excavation and reclamation, re-excavation into special buildings, and deposits of pottery to demonstrate the ways in which the supernatural intersects with daily life.

# [19] Compositional Characterization of Ceramics and Clays from Indiana, Kentucky, and Illinois

# Rebecca M. Barzilai (Indiana University, Department of Anthropology)

Building on previous research characterizing Mississippian and Late Woodland ceramics in the Lower Ohio River Valley, this study will serve as a baseline for further research into the movement of peoples and objects throughout the Midcontinent around A.D. 1000. Funded by a Summer Research Grant from the Glenn A. Black Laboratory of Archaeology and an Indiana Academy of Science Senior Research Grant, Yankeetown phase, Late Woodland, and Mississippian ceramics were compositionally characterized and compared to compositional data of clays from Southwest Indiana, Illinois, and Missouri. Petrographic and geochemical data will be presented here from these studies and used as a foundation for a larger study tracking the interactions of Late Woodland Yankeetown phase peoples and Mississippian peoples throughout the Midcontinent.

### [12] Massive Pit Features at the East St. Louis Mound Complex

# Alleen Betzenhauser, Craig Kitchen, and Steve Boles (Illinois State Archaeological Survey)

Several massive pit features were excavated during the Illinois State Archaeological Survey's investigations of the East St. Louis Mound Complex for the New Mississippi River Bridge Project. These features were similar in size and shape in plan to structure basins but reached depths greater than 1.5 m. Most were associated with a large Terminal Late Woodland II village comprised of a series of courtyard groups. In this poster, we illustrate examples of these unusual features paying particular attention to their placement, depositional sequences, and material contents in order to investigate the roles they served in the community.

# [6] Food and Public Ritual at Morton Village: A Pilot Study of the Faunal Remains from Structure 16

# Autumn M. Beyer (Michigan State University), and Terrance J. Martin (Curator Emeritus of Anthropology, Illinois State Museum)

This poster will present a preliminary study on the ritual faunal remains at the Morton Village site located near Lewistown, Illinois. Structure 16 was a public space integrating both Oneota and Mississippian characteristics and artifacts that indicate that it was used for ritual presentations. The structure selected for this study was nearly excavated in its entirety over several field seasons, giving a good representation of the purpose and activities that took place within the building. A total of eight features and 18 test squares were included in this study, and analyzed following standard zooarchaeological methods. Two large features were located in the south and the east structure corners and contained different amounts and types of species. Overall, the animal remains from the structure indicate that there were a variety of faunal resources being exploited from the Central Illinois River Valley, with white-tailed deer being the most utilized.

### [6] There's No Place Like Home: Domestic Negotiations at Morton Village

### Autumn Beyer (Michigan State University), Michael Conner (Dickson Mounds Museum), Jodie O'Gorman, Jeffrey Painter, Sarah Jane Potter, and Nikki Silva (Michigan State University)

During the of summer 2016, the joint Michigan State University and Dickson Mounds Museum field school at Morton Village focused on excavating Structure 26 in its entirety. Reported here are some of the preliminary findings from this excavation. Structure 26 was a burned, wall-trench domestic structure located on the southern edge of the main occupation zone at the site. After removing house basin fill, an intact floor partially covered in baked clay was uncovered, on top of which numerous artifacts were found in association. Bone, chipped stone, and groundstone tools were recovered, as well as large concentrations of ceramics. Both Mississippian and Oneota ceramics were present on the floor, likely representing in situ deposits that signify the presence of both groups within the structure.

### [12] Milwaukee Lost and Found: Forgotten Cemeteries Among the Urban Sprawl

# Sarah A. Boncal (University of Wisconsin–Milwaukee)

As cities grew over the centuries, numerous cemeteries were forgotten, lost and/or subsumed under urban expansion. Historical documents, while informative, frequently failed to note cemeteries on early maps. Concurrently, various cemeteries were relocated in the late 19th and early 20th centuries as urban areas expanded. Prompted by the rediscovery of multiple cemeteries related to the Milwaukee County Institution Grounds Poor Farm in 1991 and 2013, a GIS study was undertaken to determine how many cemeteries might still remain within the greater city of Milwaukee. A series of historical platt maps were georeferenced and overlaid with known and recorded cemetery sites gleaned from the Wisconsin Archaeological Sites Inventory. According to the results, there are at least 21 potential cemeteries that remain intact under the city limits. This number could increase as more maps are incorporated, providing valuable information for CRM archaeologists and historical preservation as urban expansion and construction continues.

### [21] Late Prehistoric Pit Features and Remote Sensing: A Case Study from Michigan

# Janet G. Brashler (Grand Valley State University), Jarrod Burks (Ohio Valley Archaeology), and Wesley Jackson (Grand Valley State University)

Much attention has been paid in recent years to the chronology, function, and meaning of Late Prehistoric pit features in the Upper Great Lakes. These somewhat enigmatic features manifest as circular depressions on the surface and occur in groups of a few up to a hundred plus. This paper describes the recent efforts of the 2016 Grand Valley State University archaeological field school to locate features that might not be visible on the surface using magnetometry.

#### [4] Bring out your dead!: An Examination of the Postmortem Treatment of Human Remains During the 1918 Influenza Pandemic in Milwaukee

### Ashley L. Brennaman (University of Wisconsin–Milwaukee)

The 1918 influenza pandemic is estimated to have killed 20 to 50 million people worldwide, with over half a million of those deaths being American citizens. This disease tended to selectively target males within the young and middle adult cohorts. The selective mortality and virulence of the Spanish Influenza was compounded by its comorbidity with pneumonia and tuberculosis. This project employs documentary data from Milwaukee County, Wisconsin, to assess the patterns of postmortem disposition of human remains in both respiratory and non-respiratory deaths during the 1918 influenza epidemic in Milwaukee. Results indicate a marked discrepancy in postmortem treatment between these two groups, specifically involving designation as an anatomical specimen and interment at the County Cemetery or in a Potter's Field. Analysis revealed that the location of death played a pivotal role in determining the postmortem disposition of human remains during this time.

### [14] Elaine Bluhm's Place in the History of Illinois Archaeology

### James Brown (Northwestern University)

Not widely known is the important role Elaine Bluhm had in a formative period of professional archaeology in Illinois during the 1950s and 1960s. Dr. Bluhm brought to the fledgling Illinois Archaeological Society a personal affinity with the archaeological potential of the Chicago area. As the tempo of archaeology increased in Illinois, her interest blossomed into a focus on archaeological work in corners of the state left out of funded projects at a time when state highway mitigation was beginning. Out of this focus came a legacy that has informed Illinois archaeology to this date.

# [23] A Geospatial Analysis of Mississippian Period Travel and Organization in the Central Illinois River Valley

# William A. Burcham, Haley Hoernschmeyer, and Jeremy Wilson (Indiana University–Purdue University Indianapolis)

During the Mississippian Period, a series of larger villages emerged along the Illinois River and its tributaries from A.D. 1150 onward in west-central Illinois. The location, distribution, and chronological associations between these villages raises questions about socio-political organization and networks within the central Illinois River valley. The current research utilizes a cost-distance analysis to determine the least-cost routes between larger Mississippian villages. Waterway and overland travel routes are quantified using geophysical analyses that compare the cost of movement and spatial relationship between each site. Overland and waterway travel speed are determined using variables such as land cover, topography, and hydrology. Weighted variables are applied to certain villages as a means to understand how least-cost paths differ depending on settlement size and longevity, as well as socio-political significance. Results show that waterway travel yielded the least-cost in most southward travel routes, while overland yielded the least-cost in most northward movement.

# [15] Hopewell Settlement in Southern Ohio: Geophysics, Surface Artifact Data, and a Common Site Structure

### Jarrod Burks (Ohio Valley Archaeology, Inc.) and Paul Pacheco (SUNY Geneseo)

Hopewell settlements are not uncommon discoveries in southern and central Ohio. They number in the hundreds, probably the thousands. But few have been studied sufficiently to allow for a detailed examination of site structure—that is, the layout of the settlement, with its structures, surrounding yards, and activity areas. Over the last decade, ongoing work on Hopewell settlements in southern Ohio is beginning to reveal a common set of features and their layout across many sites. In this presentation, we explore the results of geophysical surveys, surface artifact data, and excavations at a select number of Hopewell settlements in the Scioto River Valley of south central Ohio. At the surface, these sites tend to be small clusters of fire-cracked rock and lithic debitage, with only the occasional projectile point and bladelets. In magnetic surveys, they almost always produce a cluster or two of pit features, including numerous earthovens.

# [9] A Mound with a Mission: New excavations at the Collins Site in East-Central Illinois

### Amanda J. Butler (University of Illinois at Urbana-Champaign)

The Collins complex is a Mississippian mission located in East-Central Illinois and includes an 18-m-high bluff overlooking a floodplain terrace of the Middle Fork River in Vermillion County, Illinois. Previous investigations indicate a complex Mississippian presence and engagement through built space, ceremonies, and things. The mounds, buildings, and alignments at Collins were not static backdrops, but were active participants in an animated process of missionizing local late Woodland peoples. This paper focuses on recent examinations of the terrace Mound A, which highlights a complex religious space with pulses of interactions and ceremonies with local Late Woodland groups.

#### [4] The Dividing Line: A Proposal to Distinguish between Prenatal and Full-Term Remains through Dental Development and the Neonatal Line among individuals Recovered from the Milwaukee County Poor Farm Cemetery

# Brianne E. Charles (University of Wisconsin–Milwaukee)

The neonatal line in developing teeth is a layer of hypomineralized enamel caused by a drop in serum calcium levels shortly after birth. Fetal and infant age estimation methods rely on skeletal and dental development in relation to gestational age but do not take into consideration children who were born premature or underweight. The neonatal line is identifiable after approximately one week of postnatal survival and will be used in this proposed research to identify duration of survival after birth of individuals buried at the Milwaukee County Poor Farm Cemetery. Although premature individuals who died shortly after birth cannot be identified without the presence of the neonatal line, we can apply dental development standards to determine those who reached full term but did not survive the first week of postnatal life. These methods will become the basis for research on infant mortality and the medicalization of childbirth in Milwaukee during the early 20th century.

#### [17] Don't Uncork that Bottle! The Unanticipated Contents Preserved in a Nineteenth Century Proprietary Medicine Bottle

### Angela R. Collins (University of Iowa Office of the State Archaeologist)

Beware the potentially hazardous contents inside such a seemingly harmless package. One medicine bottle recovered from an urban archaeological site in downtown Iowa City (13JH1436) was found nearly full of an unknown brown liquid. Recent analysis of the bottle's contents revealed a surprising active ingredient—phenol, also known as carbolic acid. Carbolic acid was discovered in 1834 with an initial application as an antiseptic aerosol to be used during surgery. Unfortunately, it damaged the surgeons and nurses who were routinely exposed to it. During the late 1800s, when this particular bottle was filled at an Iowa pharmacy, the carbolic acid solution was likely intended to be used as a topical disinfectant. Today, the substance is considered to be a highly toxic poison that absorbs well by inhalation and skin contact, even at diluted concentrations such as inside this particular bottle.

# [9] A Young Man with Developmental Delays at the Murphy Site, 12Po1: Can Grave Goods Shed Light on Social Identity?

#### Della Collins Cook (Indiana University), Cheryl Ann Munson (Indiana University), Susan Spencer Helfrich (University of Southern Indiana), Steven Kuehn (Illinois State Archaeological Survey), Mark Schurr (Notre Dame), and Katie Zedjlik (University of Western North Carolina)

An adolescent male from the Late Prehistoric Murphy site in southern Indiana, 12Po1, exhibits massive clinoid bridges associated with small regions of premature suture closure. Dental and skeletal development are discrepant; the third molar roots are nearly fully formed, whereas the sphenooccipital synchondrosis is open, as are the wrist epiphyses. Clinoid bridges are associated with several syndromes, but features characteristic of these are normal in Burial 1. Nevertheless, developmental delay suggests some abnormality. We compare his dentition, skeleton, and isotopic signatures to larger studies to ask whether he is an outlier. A necklace of trumpeter swan beads may indicate that this young man was still considered a child, suggesting some physical or cognitive deficit. We explore age and sex associations of bone beads from Mississippian and other Late Prehistoric sites. Bone beads are unusual to the northwest and south, and more commonly found with juveniles and adult males to the northeast.

# [1] From Wendake to Chequamegon: Bridging the Wendat Diaspora in Quimby's Early Historic Period

### John L. Creese (North Dakota State University)

Quimby's seminal volume, *Indian Culture and European Trade Goods* (1966), was inspired by his desire to build bridges between historic and prehistoric times in the western Great Lakes. By this, he hoped to pave the way for a more secure application of the direct historic approach. Connecting indigenous histories across the prehistoric-historic divide remains an important one, ironically, perhaps, more especially in light of postcolonial critiques of the acculturation paradigm in which Quimby worked. Inspired by his theme of bridging, but reimagining the problem of cultural continuity and change in non-dichotomous terms, this paper will trace the pathway of refugee Tionnantate-Wendat from their southern Ontario homeland westward to Green Bay, the Wisconsin interior, and finally Chequamegon Bay, Lake Superior between 1649 and 1671.

# [22] X-Ray Fluorescence Analysis of Mill Creek Pottery

# *Elizabeth Davidson and Cynthia Strong (Cornell College), and Joseph A. Tiffany (University of Iowa Office of the State Archaeologist)*

Mill Creek culture is located in the Big Sioux and Little Sioux valleys in northwest Iowa and dates from 1100 to 1250 A.D.. Archaeological research has revealed many aspects of Mill Creek village life, but questions remain regarding the extent of trade between Mill Creek and Mississippian peoples. Determination of trace element composition with x-ray fluorescence can shed light on the origin of Mill Creek villages were analyzed by portable X-ray fluorescence spectrometry. Thirteen elements were determined with good precision, and four elements were found to be particularly useful in distinguishing between the Big Sioux and Little Sioux villages. Several sherds identified as Mississippian fell into a separate cluster. The results of this study are interpreted in terms of the proximity of the villages to one another and direct contact with Mississippian cultures.

### [9] Modelling Earthworks of the Ohio River Valley

# Jamie Davis (Ohio Valley Archaeology, Inc.)

Photogrammetry has proven to be a valuable tool in archaeology from the documentation of complex features, to the archiving of decaying buildings for historic-preservation and restoration, to complex surface modeling at survey grade accuracy. Combined with Unmanned Aerial Vehicles (UAVs) or drones, photogrammetry has also proven to be an effective means to model the subtle topography of prehistoric earthworks. Three wellknown earthworks in the Ohio Valley have been modeled through photogrammetry: the Snake Den Group, Grave Creek Mound and Serpent Mound. Each earthwork site presented its own challenges such as trees, highly variable surfaces, and the need for exceptional precision. Through the combination of experience, equipment, and preplanning, however, photogrammetry and commercially available drones demonstrated the ability to meet these challenges and in some cases exceed expectations to reveal new insights into these well documented earthworks.

# [1] Processes of Acculturation on "Island Time"—Improving Dating Accuracy during the Late Woodland to Proto-Historic Transition on Remote Beaver Island

# Scott J. Demel (Northern Michigan University)

This paper explores how processes of acculturation on remote islands in the Great Lakes are affected in part by geographic distance, cultural preferences, and economic constraints. Such delays in the acquisition of goods and extended periods of use can make determining the period of occupation on sites problematic. Through artifact use-life examples from the historical period on Beaver Island, a method of adjustment for improving dating accuracy is suggested. I apply this method to the Late Woodland/Proto-historic archaeological re-

cord and compare the results to Quimby's (1966) list of seven categories of cultural change reflected among artifacts.

#### [18] Public Archaeology at Crossroads at Big Creek in Sturgeon Bay, Wisconsin

### Randy Dickson, William Kemps, Casandra Tobin, Coggin Heeringa, and James Clark (Midwest Archaeological Consultants)

Crossroads at Big Creek is a forested educational preserve located in Door County, Wisconsin, emphasizing science, history and the environment. One of the missions of Crossroads at Big Creek is to pass on the history of the Door Peninsula to future generations. From 2013 through 2016, Midwest Archaeological Consultants conducted Phase I and II archaeological investigations at Crossroads involving grade school and middle school students and teachers with hands-on experience conducting archaeological fieldwork and laboratory analysis. Through shovel testing, students discovered site 47DR-487 and worked on two other sites, 47DR-0035 and 47DR-0428. During 2015 over 450 students were taught the basics of archaeological survey, scientific recording, archaeological site formation, stone tool manufacture and use, flotation method, environmental adaptations and regional prehistory. Future plans include teaching archaeology annually to local and regional students and teachers.

#### [13] Hand-Held LiDAR: Aiding in the Management of Cultural Resources in Iowa

# Brennan J. Dolan (Iowa Department of Transportation) and Libby J.C. Wielenga (Iowa State Historic Preservation Office)

Identifying, recording, and evaluating some cultural resources is more difficult for some site types than for others. Recently, Iowa DOT staff have begun to incorporate a hand-held Light Detecting and Ranging (LiDAR) unit into their management toolkit. This poster reviews a sample of Iowa DOT applications of hand-held LiDAR; some of these applications are related to Section 106 undertakings, and some are related to historical site management as required by the Code of Iowa. Based on these results, the advantages of LiDAR technology for cultural resources managers are many. We have been able to document some sites like burial mounds in detail far beyond other field methods. Also, collecting LiDAR data at regular intervals allows cultural resource managers the ability to continuously assess and analyze risks to a given historic property. We argue that hand-held LiDAR technology allows us to be better stewards of the resources we manage.

# [22] A Tale of Two Houses: Assessing Late Mississippian Diet and Subsistence from Two Burnt Structures at Lawrenz Gun Club (11Cs4)

### Erin Donovan and Katie Hunt (Indiana University–Purdue University Indianapolis), and Ryan Kennedy (Indiana University)

Faunal assemblages from domestic contexts on archaeological sites provide direct evidence of diet and subsistence practices, access to local and regional resources, and the social context for consumption. Excavations conducted by Indiana University–Purdue University Indianapolis from 2010 through 2016 at Lawrenz Gun Club, a Mississippian period village in west-central Illinois, have yielded substantial faunal remains from a variety of contexts, including two burnt households in the northern third of the fortified community dating to the late 13th and early 14th century. Situated within the central Illinois River valley, the resources available to the village's inhabitants would have been as diverse as the physiography and ecology of the region. This presentation provides a preliminary analysis and overview of identifiable species diversity within the faunal assemblage, establishing baseline measures of diet and subsistence, and compares these findings to other contemporary Mississippian site faunal data from west-central Illinois.

### [18] Towards Standards for the Manual Digitization and Vectorization of Analog Historical Maps and Records

# Ian C. Dunshee (University of Iowa)

While the development of automatic object recognition and vectorization algorithms used on scanned or digitized maps is a vibrant area of study today, most are not developed for or suitable for use with archaeological field maps. This study proposes one possible set of standards for manual vectorization derived from the University of Iowa Archaeological Field School excavations at Woodpecker Cave (13JH202). The proposed methodology is explained and demonstrated. As part of this study, a quantitative comparison between newly digitized polygons and theodolite point locations of the artifacts taken in the field is made to determine how far off the drawn artifacts are from their "true" locations of the theodolite points. Results here suggest that the artifact polygons not only are a valuable supplement to the site's field records but that the vector format enables the artifacts of the site to be analyzed in a more complex way using GIS software.

### [8] Oneota Agricultural Systems of the Koshkonong Locality

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

Researchers have long known that maize and other agricultural products have played an important role in Oneota subsistence systems. However, little is known about the specific agricultural practices, or how the fields or garden plots fit into larger landscape management systems. At sites without raised gardens (e.g., garden beds or corn hills), little is known about the nature or composition of the fields themselves. This project begins to explore the nature of Oneota agricultural systems within the Koshkonong locality. Paleo-ethnobotanical data are combined with an analysis of recovered agricultural implements, and environmental reconstructions at the Koshkonong Creek Village (47JE379) and the Crescent Bay Hunt Club (47JE904) in Jefferson County, Wisconsin.

### [1] Revisiting Dumaw Creek

# Kathleen L. Ehrhardt (Illinois State Museum) and Jamie Kelly (Field Museum of Natural History)

The Dumaw Creek site figured prominently in George Quimby's 1966 *Indian Culture...* and was the subject of a monograph he published that same year. Quimby could not have foreseen how relevant the collection he documented at The Field Museum and the material and cultural questions he posed would remain to ethnohistorians and archaeologists throughout subsequent decades. He also had no way of knowing how directly his approaches and interpretations would fall on the critical gaze of modern intellectual perspectives, viewpoints, and accumulated knowledge as the processes of repatriation unfolded. Here, we review the results of a recent technological and material reexamination of the copper and associated materials from Dumaw Creek in advance of repatriation in 2014. Findings are presented within larger contexts of modern collection documentation and the repatriation process. Results affirm our understanding of Dumaw Creek's temporal position in regional chronology and illuminate the complex uses of these materials.

#### [14] The Hoxie Farm site: An Updated Understanding of Upper Mississippian Ceramics

#### Kjersti E. Emerson (Illinois State Archaeological Survey)

Elaine Bluhm's 1990 analysis of the Hoxie Farm site ceramic assemblage, though thorough, suffered under a lack of comparative datasets by which to seriate the Late Fisher from the Huber wares at the mixed component site. In the early 2000s, however, large-scale investigations at the site uncovered a Late Fisher fortified village, which provided an unadulterated Late Fisher ceramic assemblage. Using this dataset, we were better able to tease apart the two ceramic components in the Main Occupation Area at Hoxie Farm. In addition, our understanding of the Fisher and Huber phase ceramic sequences has been greatly expanded by these new investigations.

# [9] Fisher Mound 5: The Cultural Context, Chronology, and Isotopic Analysis of a Terminal Late Woodland Mortuary Mound in Northeastern Illinois.

# Thomas E. Emerson, Kjersti E. Emerson, Kristin M. Hedman, and Matthew A. Fort (Illinois State Archaeological Survey)

In 1940 Gretchen Cutter and a WPA crew conducted excavations at the Fisher site Mound 5 in Will County, Illinois. We are examining those materials as part of our reanalysis of the Fisher site excavations by George Langford and the University of Chicago. The Md. 5 cultural affiliation appears linked to the Des Plaines complex or Starved Rock Collared phase. Eight C14 dates place the mortuary use at A.D. 800–1000. There is isotopic evidence of limited maize consumption with C13 collagen ratios ranging from -13.5 to -17.5 with an average of -16.2. Fisher Mound 5 represents the first and earliest Terminal Late Woodland collective mortuary facility currently reported in northeastern Illinois. The identification of such terminal Late Woodland mortuary practices lends support to their providing the cultural base for the emergence of the distinctive Langford tradition accretional mounds.

# [20] The Hawkeye Horizon: Post-Woodland Occupations of Woodpecker Cave (13JH202)

### James Enloe, Amy Meehleder, and James McGrath (University of Iowa)

Archaeological excavations in prehistoric sites frequently encounter superimposed or intrusive historical materials. These materials may constitute later occupations of the site rather than random occurrences of modern trash. While this complicates the task of archaeologists seeking to investigate earlier cultures, treating the historic materials in the same manner as prehistoric finds may yield information pertinent to interpretation of the prehistoric component, as well as helping modern investigators understand how such locations have been used in older and more recent occupations. Woodpecker Cave is a rockshelter purportedly entirely excavated in 1956; recent investigations have yielded areas of undisturbed prehistoric occupations. One major problem has been to find the limits of the earlier excavation. Historic and modern photographs in conjunction with meticulous mapping of modern artifacts have been essential in establishing spatial relationships between early and later excavations and in discovering evidence of unanticipated more recent occupation with spatial and behavioral implications.

# [16] Ethnicity, Race, and Commodities in Illinois and Virginia

# Christopher Fennell (University of Illinois)

Using case studies from frontier regions in nineteenth-century America, this study examines how marginalized ethnic and racial communities resisted the attempts of governing officials and investors to control them through capitalist economic and government frameworks. In Illinois, free African Americans in the towns of New Philadelphia, Brooklyn, and Equal Rights worked to obtain land, engage as entrepreneurs, produce agricultural commodities, and defy structural racism that was meant to channel resources and economic value away from them. In backcountry Virginia, immigrants from Germany opted to purchase ceramic wares produced by their own local communities instead of buying manufactured goods supplied by urban centers like Washington, D.C. These small choices and actions had large ripple effects. Looking at the economic systems of these regions in relation to transatlantic and global factors, this study offers insights into the development of America's consumer economy and the usefulness of analytic concepts of racism and ethnicity.

# [14] Sinnissippi Mounds: Revisiting Elaine Bluhm Herold's Investigations along the Lower Rock River

### Shannon M. Fie (Beloit College)

During the summer of 1961, Elaine Blume Herold directed test excavations at Sinnissippi Village, the remnant of a Middle Woodland occupation associated with the better-known Sinnissippi Mounds site. Sinnissippi Village was one of three sites tested that summer as part of a regional survey of the Lower Rock River Valley by the University of Illinois, Urbana. Some fifty years later, Herold's excavations provide the only professional record of the site's habitation area, now lost to the rising water of the Rock River. Despite the loss of the excavation notes, the recovered artifacts, associated photographs, preliminary report, and newspaper accounts attest to a conscientious excavation that documented a significant Middle Woodland occupation while also successfully engaging the public.

# [20] Excavations at Site 13DM1043, a Small Late Woodland Habitation Site in Des Moines County, Iowa

# Nurit Goldman Finn (Wapsi Valley Archaeology, Inc.)

Site 13DM1043, a Late Woodland site in Des Moines County, Iowa, represents a relatively rare site type as a likely small, short-term winter habitation with distinct activity areas and rather unique technological characteristics. The prehistoric assemblage at the site includes pottery, ground stone, and chipped stone tools, with a number of expedient flake tools and only minor proportions of stone tool manufacturing debris present. Spatial patterning in the distributions of artifacts suggests activity areas are represented at site 13DM1043. Activities appear to relate to tool maintenance, food processing, and other domestic functions, with only limited reduction of lithic raw materials associated with stone tool production. As indicated by the nature of features and the artifact assemblage, including cached artifacts, the site was likely occupied seasonally over successive years.

# [16] A Diachronic Analysis of Early and Late Mississippian Lithic Procurement and Utilization at the Lawrenz Gun Club Site (11Cs4)

# John Flood, Scott Hipskind, and Edward Herrmann (Indiana University–Purdue University Indianapolis)

Lawrenz Gun Club (11Cs4) is a Mississippian Period village located in the central Illinois River valley of west-central Illinois. While best known for the heavily fortified village that resided on the landform from A.D. 1150 to 1350, geophysical and archaeological investigations in 2015 and 2016 documented an early Mississippian component to the site with radiometric assays and ceramic attributes consistent with the Lohmann phase and "Big Bang" in the American Bottom. These discoveries raise a series of important questions about the origins of Mississippian peoples at Lawrenz and other sites in the region. As part of the larger research project, this study examines the diversity of lithic procurement and utilization at the site, specifically comparing early and later Mississippian lithic assemblages from household contexts. Preliminary results suggest a shift in procurement strategy from inter- to intra-regional after palisade construction with increasing ubiquity of expedient, unifacial tools.

# [17] The John L. Sellers Site: Production and Consumption at a Late 19th-Century Indiana Farmhouse

### Emily Fox and Katherine McKean (DePauw University)

John L. Sellers and his family lived on a farm in Greencastle, Indiana from the late 1800s to the early 20th century. This site is part of a larger study comparing the lives of European Americans, like the Sellers, and African Americans who migrated from the South to the area after the Civil War. Excavation and analysis of the Sellers' midden reveals an active and productive farm, with horse rein hardware, a horse shoe, thousands of nails, and over 100 pieces of canning jars recovered. Yet, the Sellers also enjoyed luxuries. The majority of identifiable bottles recovered were medicine bottles, with very little evidence for alcohol consumption in the glass assemblage. The Sellers also chose to spend their income on ceramic wares, particularly ironstone and porcelain tea sets. This poster provides a preliminary analysis of how market access and ideologies of gentility and domesticity shaped the Sellers' consumption choices.

### [4] Archaeology, Law, and the Milwaukee County Poor Farm Cemetery Project

### Shannon K. Freire (University of Wisconsin–Milwaukee)

As archaeologists, we frequently view our relationship with the law in thoroughly modern terms, with prescriptions for where, how, why, or if excavation occurs. However, the relationship between the law and how sites form and change is equally worthy of attention, particularly in historic cemetery contexts where rules and regulations are generally well documented. This paper examines the relationship between the Milwaukee County Poor Farm Cemetery (MCPFC) and the law, from Rule 17 and the Wisconsin Anatomy Acts to Wisconsin Burial Law 157.7 and our contemporary experiences with the site. Excavations at the MCPFC have provided a more nuanced understanding of laws in practice over time, challenging expectations and providing incomparable information and insight into the post-mortem experience of those interred within Cemetery II, while the law continues to inform how we know what we know about the largest cemetery project in the state.

### [12] Relative Soundscapes Between Monks Mound and the Grand Plaza

# *Margaret Gaca (Albion College) and Emma Wink (Eastern Connecticut State University)*

Soundcapes are how humans perceive their acoustic environment. They are an important part of how people interact within their surroundings, however studies of soundscapes have been largely excluded from research at Cahokia. Therefore, we have performed a preliminary study on how sound travels from Monks Mound to the Grand Plaza in order to test the viability of mass communication from the mound itself. Using a decibel reader and GPS coordinates, we monitored the reach of sound waves at various points throughout the Grand Plaza coming from the highest point of the Southern edge of Monks Mound. Analyzing relative soundscapes is vital to understanding daily life in Cahokia because sound is an important channel of communication that influences how humans interact in an anthropogenic landscape to amplify or inhibit the spread of ideas and shape the greater Cahokian culture.

#### [23] Stone Tools of Minnesota

### Michael Giller and John Hahn (Wapsi Valley Archaeology, Inc.)

A State of Minnesota grant from the Arts and Cultural Heritage Fund, administered through the Minnesota Historical Society, afforded Wapsi Valley Archaeology the opportunity to compile a handbook of Minnesota stone tools. As a result, the authors were given the exciting opportunity to visit, assess, and document various collections at repositories and private locations throughout the state. The resulting book is by no means exhaustive but provides a basic framework of the various stone tools and raw material types represented in Minnesota.

### [23] Gast Farm Revisited: New Tools Revitalize "Old" Data

### William Green (Beloit College), Mary Whelan (Arizona State University), Adam Barnes (University of Arkansas), William Whittaker (University of Iowa), and Emilia Bristow (University of Iowa)

In the early 1990s the University of Iowa and Iowa Archeological Society conducted fieldwork at Gast Farm (13LA12), a multicomponent site situated atop and within a Mississippi River valley alluvial fan in southeast Iowa. Early, Middle, and Late Woodland residential and ritual loci were identified through aerial photography, controlled surface collection, and excavation. Several dissertations, theses, and other papers were prepared but relatively little material was formally published and no synthesis was written. We are now preparing a summary report. To facilitate analysis, we are employing geospatial digital tools, e.g., building a GIS and processing aerial imagery. Results allow us to better visualize and define each component's residential loci. Aerial imagery also permits a clearer view of the likely Hopewell geometric earthwork in the center of the site. We will conduct geophysical survey in the late fall of 2016 to acquire new data on this feature and other near-surface anomalies.

# [9] Results of Recent Survey and Excavation along the Western Shore of Lake Koshkonong in Southeastern Wisconsin

# Jennifer R. Haas and Richard H. Kubicek (University of Wisconsin–Milwaukee)

In the early nineteenth century, two antiquarian archaeologists, A. B. Stout and H. L. Skavlem conducted survey along the west shore of Lake Koshkonong, identifying numerous mound groups and village sites. Over a century later, a series of recent compliance driven surveys have re-investigated several of the sites identified by Stout and Skavlem. Survey and excavation at Crab Apple Point (47JE0093), Rufus Bingham Mound Group (47JE0096), Taylor House Mound Group (47RO0181), Noe Springs Mound Group (47DA0004), North Mound Group (47DA0028), and the Noe Springs Village (47DA0272) have generated evidence of Early Woodland, Middle Woodland, Late Woodland, and Oneota occupations. Despite extensive urban and residential development, many mounds remain extant and there is evidence for subsurface integrity. This paper summarizes recent research at these sites and highlights the still-relevant utility of Stout and Skavlem's seminal mound survey for modern compliance investigations.

### [19] A Summary of Late Prehistoric and Other Woodland Ceramics from the M-231 Project in the Lower Grand Valley of Michigan

### Michael J. Hambacher

Large scale excavations at 20OT283 and 20OT3 revealed the presence of extensive deposits associated with the acquisition, processing, and storage of seasonally abundant resources by residentially mobile groups in the Lower Grand River valley of west-central Michigan. Radiocarbon dates and other attributes place the most intensive period of use during the Late Prehistoric period after about A.D. 1400, although evidence for less intensive Archaic and earlier Woodland occupations is also present. This paper will present a summary of the ceramic assemblages from these two sites with an emphasis on the Late Prehistoric wares. Aspects of their relationships with other regionally-based Upper Mississippian and Woodland wares will be examined and implications for the regional cultural dynamics will be outlined.

### [14] The People of Hoxie—Bringing the Past and Present Together

# Eve A. Hargrave and Kristin M. Hedman (Illinois State Archaeological Survey)

In 1953, Elaine Bluhm organized a volunteer crew of archaeologists and avocational archaeologists to salvage parts of the Hoxie Farm site prior to the construction of the first interstate (I-80) in Illinois. In addition to numerous habitation features, they excavated 11 burial features. Additional burials salvaged by local avocational archaeologists after the 1953 excavations were described to Elaine and, in several instances, the remains were donated to the University of Illinois. More recently, ISAS excavations from 2000 to 2003 encountered 30 burials and multiple habitation features with isolated remains. Combining the available information from all the Hoxie Farm burials gained from the reanalysis of earlier collections and ISAS excavations, this paper presents an updated overview of the mortuary patterns for this important Upper Mississippian population.

# [14] Longhouses and Peace Medals: Elaine Bluhm Herold and the Beginning of Contact Period Archaeology in Illinois

# *Eve A. Hargrave (Illinois State Archaeological Survey) and Mark J. Wagner (Center for Archaeological Investigations, Southern Illinois University, Carbondale)*

The study of the types of cultural entanglement that occurred between late eighteenth- to early nineteenth-century Native and Euro-American societies in eastern North American has become an increasing area of study over the past two decades. Elaine Bluhm Herold began investigating such sites in Illinois, however, as early as the 1950s, at a time when others in the state regarded them as unimportant. This paper reviews her contributions to the development of contact period archaeology within Illinois including her excavations at the Crawford Farm site, which was a major Native village associated with the famous Sac leader Black Hawk.

### [21] Poverty Point Culture in the Lower Ohio Valley: The Clarksville and Murphy Sites

### Christopher T. Hays (University of Wisconsin–Washington County) and Cheryl Ann Munson (Midwest Archaeology Laboratory, Indiana University)

The Poverty Point culture is well known to archaeologists as one of the most spectacular Terminal Archaic cultures in the Lower Mississippi Valley (LMV). In this paper, we discuss two sites in the Lower Ohio Valley that compared to the Poverty Point site are little known but appear to be important northern outposts of the Poverty Point culture: the Clarksville (Kelly) site (12CL1) at the Falls of the Ohio and the Murphy site (12PO1) at the juncture of the Wabash and Ohio Rivers. Both sites contain baked clay objects very similar in form to the Poverty Point objects of the LMV, as well as at least one distinctive Poverty Point culture artifact type such as decorated plummets and possible human figurines. We report on our ongoing research that includes thin section analyses and discuss how these sites fit into the widespread Poverty Point culture.

# [12] Visibility of Monks Mound from a Cahokian Neighborhood During the Lohmann Phase

# *Emily Helmer (University of California, Santa Cruz) and Joy Mersmann (Washington University)*

The site 11S34/CABB Tract was a residential neighborhood located to the southwest of Monks Mound. Magnetometry data collected in 2015 identified a courtyard group and one of its structures was ground truthed during a 2016 excavation. Preliminary analysis suggests that this was a domestic structure occupied during the Lohmann phase of the Mississippian period. Viewshed analysis was performed in order to determine the visibility of Monks Mound from the neighborhood during this period. At a time when Cahokia's cultural influence was increasing, visibility of this central monument would have been an important factor for incoming populations deciding where to settle on the Cahokian landscape.

# [20] The Walsh Site and the Central Illinois River Valley: A Century of Speculation on Mississippian Occupation Tested by Geophysical Prospection and Artifact Analysis

### Scott Hipskind and Jeremy J. Wilson (Indiana University–Purdue University Indianapolis)

Walsh (11Br11) is a unique Mississippian period village in the central Illinois River valley being the only site described and mapped by Cyrus Thomas (1894) as a multi-mound center with numerous circular "house basins." During 2016, a geophysical survey of Walsh covering 68,350 m<sup>2</sup> was conducted using magnetometry. These data revealed a complex series of rectilinear and circular anomalies on several bluff-top ridges overlooking the convergence of the Illinois and McKee Creek valleys. This survey provided new information concerning the site's internal organization, boundaries, and preservation. Meanwhile, ongoing analyses of extant artifact assemblages are being used to address questions concerning temporal affiliation(s) and possible associations with neighboring sites. The goals are to provide chronological measures of site settlement and abandonment, while also generating information on why this locale was selected. This research provides another valuable example of how geophysical surveys and reanalysis of extant collections can benefit modern archaeological investigations.

#### [8] Archaeology of the Red Rock Quarry Site (21-CO-56), Cottonwood County, Minnesota

### Brian Hoffman (Hamline University), Thomas Sanders (Minnesota Historical Society), Liesl Weber Darnell (Hamline University), Forest Seaberg-Wood (Minnesota Historical Society), Charles Broste (Minnesota Historical Society), and Chelsea Starke (Hamline University)

Red pipestone, a soft, carvable stone, is a highly valued and widely traded mineral utilized over the last 2500 years by American Indian groups living in the Upper Midwest. The best-known source of this material is Pipestone National Monument, a fact which is well documented by ethnohistoric and archaeological data. Previous research has pointed at the presence of other pipestone sources in southwestern Minnesota but has been unable to specify a source location. We recently documented a prehistoric pipestone quarry in Cottonwood County just two miles west of the Jeffers Petroglyphs Historic Site. This quarry site, along with results of our other fieldwork in the area, helps us understand the Jeffers site as part of a complex cultural landscape. We will describe this landscape and discuss the results of our research at the quarry site in this paper.

### [18] From Creation to the Great Depression: A Fox Nation Time Line

# George Horton (Iowa Archeological Society)

The stylized beaded panels on this Meskwaki beaded strip represent a visual language, read from right to left, that utilizes familiar patterns from ancestor history through the time of the Great Depression in order to teach and enable cultural survival. Some of these panels may represent Meskwaki travels through ancestral lands with familiar mound patterns. Patterns that are recognized in Earth Mother, Brothers, and Earth Diver stories as interpreted by Mary A. Owen in *Folk-Lore of the Musquakie Indians of North America* (1904). The panels are also believed to depict not only Meskwaki creation, ancestor history, and travels, but reunions with the Sac, removal, citizenship, and a 1925 eclipse.

# [14] Following Elaine at Hoxie Farm: A Summary of the ISAS Investigations

# Douglas K. Jackson (Illinois State Archaeological Survey)

Elaine Bluhm and David Wenner conducted volunteer salvage excavations at the important Upper Mississippian Hoxie Farm site in 1953 and, although limited, represented an important contribution to Chicago area archaeology. The Illinois State Archaeological Survey conducted extensive excavations at the site from 2000 to 2003 for an Interstate 80 corridor expansion project. The ISAS work revealed a 14th-century, fortified community packed with structures dating to the late Fisher phase and a separate area of intense Late Fisher and early Huber phase occupations. This paper will present a summary of the ISAS results.

### [20] Strangers in a Strange Land: The Lake Koshkonong Oneota Locality in Context

# Robert J. Jeske, Seth A. Schneider, Richard W. Edwards, Katherine Sterner, and Rachel C. McTavish (University of Wisconsin–Milwaukee)

The distribution of Oneota sites in Wisconsin has long been recognized as clustered within distinct areas referred to as localities. At least seven localities are now generally accepted by Oneota researchers in Wisconsin; several others appear to exist in northern Illinois. However, recent research at the Lake Koshkonong locality shows that it stands as a distinctive outlier among all of the other localities. It is unique in terms of landscape patterns, subsistence strategies, distance from other localities, and inter-regional and/or interlocality economic and political relationships. A demonstration of this distinctiveness, and an explanation for it, are offered.

### [4] Bioarchaeological Evidence of Life and Death in "The Healthiest City"

# Catherine R. Jones (University of Wisconsin–Milwaukee)

Excavations at the Milwaukee County Poor Farm Cemetery have recovered more than 2,300 individuals interred between 1882 and 1925. These individuals represent a population that lived through an age of social- and governmental-driven health reform in Milwaukee, beginning with the establishment of a Board of Health in 1867, that would eventually earn the city a national title as "The Healthiest City". Skeletal remains excavated at the site in 2013 were evaluated for indicators of health such as dental disease, stature, infectious disease, and trauma. The burials examined provide an opportunity to further understand the efficacy of public health reform and the lives and deaths of the poor and working class of a growing Midwestern urban center.

# [21] The Class of 2000 B.C.: A Late Archaic Site on the Michigan State University Campus

# Susan M. Kooiman, Lynne Goldstein, and William A. Lovis (Michigan State University)

The Campus Archaeology Program (CAP) at Michigan State University documents historical sites and structures on the MSU campus. The only known intact prehistoric site on campus, 20IN205, was excavated by CAP field schools in 2010 and 2011. The site dates to the Late Archaic period and consists of a single hearth feature, four projectile points, and lithic debitage. The location of the site on a sandy, well-drained bank of a glacial drainage near the Red Cedar River makes it a singularly suitable locale for settlement on the otherwise swampy prehistoric campus landscape. This paper summarizes the contents of the site and the interpretation of the materials, as well as highlighting the importance of archaeological survey on college campuses.

# [15] Exploring the Deep History of the Old Vincennes Trace across Southern Illinois Jeffery D. Kruchten (University of Illinois)

When traversed by the French in the early part of the 18th century, the Vincennes Trace was little more than a poorly marked path that would later become an important transportation corridor for Euroamericans. As noted for many early overland settler roads, it followed previously established Native American routes. In this paper, I will reconstruct the trajectory of the Vincennes-to-St. Louis branch of the Vincennes Trace to explore potential ancient iterations of it. Given the deep historical connections between the American Bottom and the Wabash Valley and southeastern Indiana (from Clovis through Mississippian), determining exactly where it was located and what was along it should provide insights into its use through time. The historical implications of the pre-Columbian trail will be explored, especially as it pertains to Mississippian Cahokia.

#### [14] Zooarchaeological Remains from the Crawford Farm Site (11RI81): Nativist Faunal Exploitation and Bone Use by the Historic Sauk in Illinois

### Steven Kuehn (Illinois State Archaeological Survey)

Elaine Bluhm Herold's 1958–1962 excavations at the Crawford Farm site (or Saukenauk) resulted in the recovery of over 20,000 faunal remains from a late 18th- to early 19th-century historic Native American village. A broad-based, nativist faunal exploitation strategy is indicated, focused on deer but including a variety of aquatic and other local faunal resources. Domesticated animal remains are minimal, consistent with nativist prohibitions regarding Euroamerican material culture and foodstuffs. Differences in deer element representation and age patterns were noted between the Crawford Farm and Rhodes deer assemblages, suggesting variations in hunting patterns. In addition, the Crawford Farm faunal assemblage contains a wide array of modified bone and shell artifacts, providing insight on the traditional range of tools, weapons, ornaments, and ritual items manufactured from these resources.

### [19] End Scrapers and Hide Processing at Hunters Home

### Douglas Kullen (Burns & McDonnell) and Thomas J. Loebel (Illinois State Archaeological Survey)

Testing and data recovery at the Hunters Home site (11Wi398) in Naperville, Illinois, recovered nearly 60 formal end scrapers. Microwear analysis determined that more than 80 percent of them exhibited traces of use-wear, and, of those, more than 90 percent showed evidence of hide working. These observations corroborate other lithic use-wear studies in central and eastern North America which suggest that formal end scrapers were manufactured almost exclusively for use as hide scraping tools.

### [21] Current Research Status of the Parkhill Phase Paleoindian Hipwater Locale

William A. Lovis and Alan F. Arbogast (Michigan State University), G. William Monaghan (Indiana Geological Survey), Jennifer L. B. Milligan (PaleoResearch Institute, Inc.), and Frank J. Raslich (Michigan State University)

The Hipwater locale is a Parkhill phase Paleoindian component in central lower Michigan. The Parkhill phase dates ~10,700–10,500 14C B.P. (~12,700–12,500 cal B.P.), conforming to the local manifestation of Folsom in the form of Barnes fluted points. Hipwater is situated on a gradual slope rising a few meters from an adjacent kettle lake that is now largely a marsh. This slope is underlain by (peri- and post-) glacial silt/loam outwash and till sediments. A small assemblage of twelve formal tools and associated lithic materials, the latter including FCR and a core fragment, has been subjected to refitting, initial analysis of manufacturing stages, elemental analysis of raw material (pXRF), and protein residue analysis (CIEP). Additional analyses are pending, including high power microwear. Despite attenuated fieldwork, the spatial distribution appears highly constrained, and in primary depositional context. Implications of the various analyses to date are explored.

#### [21] Reconstructing the Development of Landforms and Associated Woodland Occupation at Sleeping Bear Point, Michigan

# William A. Lovis (Michigan State University), G. William Monaghan (Indiana Geological Survey), and Alan F. Arbogast (Michigan State University)

Sleeping Bear Point (SBP), a prominent coastal landform within the Sleeping Bear Dunes National Lakeshore in northwestern lower Michigan, evolved in the late Holocene due to the interaction of many variables. These include lake level fluctuations, resulting in multiple prograded linear cobble beach ridges, eolian-sand activation that has variably mantled and/ or exposed land surfaces at varying depths, and dune stabilization and forest development resulting in the formation of now buried soil horizons. It is unlikely that isostasy contributed significantly to this development. Evidence for human occupation has been systematically explored by the National Park Service since about 1990. Late Woodland occupation of SBP is present in the context of buried soil horizons, including ceramics dateable between A.D. 900 and 1300. Here, we explore the current status of geological, dune geomorphological, remote sensing, and archaeological investigations, which collectively have clarified the natural developmental taphonomy and contexts of occupation at SBP.

# [20] Possible Effigy Art Noted in Stone Tools from the Shepard Site on Senachwine Creek, the John Harvey Plainfield-Lockport Collection, and a Du Page River Survey.

# Mark L. Madsen (Chicago and South Suburban Archaeological Societies; Illinois Association for Advancement of Archaeology)

Animistic beliefs were shared by many past cultures in which magical spirits were thought to lurk in everything including the stone tools people used on a daily basis. This paper will deal with the theory that these were visualized as effigy figures in tools to give them power in the hunt or in producing finished products. Since Paleo times, chert blades were shaped into mammoth effigies at the Shepard site on Senachwine Creek in Illinois. In this study, tools from a Du Page River survey and also the John Harvey Plainfield-Lockport Collection were photographed to determine whether animal or anthropomorphic images were intentionally fashioned into these tools too while they were being made, used, and then re-sharpened. As a control in this experiment, a comparison was made to natural images in modern-made, flint-knapped tools. Regarding "animism," Wilson D. and Ruth Sawtell Wallis noted that if the Micmac saw a natural stone or plant that resembled a familiar object which they called "keskamzit," it was thought that this had immense power as long as its secret identity was never revealed to anyone else. If an effigy looked too real or wasn't hidden, the spirit in the charm would be lost forever.

# [1] People, Portages, and Powerful Places: Miami Indians at the Forks of the Wabash during the War of 1812 Era

### Rob Mann (St. Cloud State University)

George Quimby's work remains foundational to archaeological studies of the colonial encounters in the Western Great Lakes. However, rather than the homogenous "Pan-Indian" culture assumed by Quimby's chronology, the Late Historic period was a time of social strife among many indigenous groups. This paper examines evidence from the Forks of the Wabash Miami Indian village, located at the Maumee-Wabash portage. The focus is on how the agentic aspects of the landscape including the Miami's social relations with the rivers, the portage, and the local fauna, shaped and were shaped by the struggle over what it meant to be Miami.

#### [16] The Archaeology of Exodusters: African-American Migrants in 19th-Century Putnam County, Indiana

### Lydia Wilson Marshall (DePauw University)

The Exodus of African Americans from the U.S. South in the late 1870s and early 1880s encompassed the relocation of tens of thousands of people to a variety of Midwestern and western states, including Kansas, Missouri, Oklahoma, Colorado, and Indiana. Hundreds of migrants were lured to Indiana's Putnam County with promises of available farm work, good wages, and the opportunity to exercise their hard-fought right to the vote. This paper presents a preliminary analysis of the spatial dynamics and material dimensions of the lives of these so-called "Exodusters." Census and archaeological data together provide insight into migrants' precarious position in the regional economy and their relationship with longer established African-American residents. I also consider the legacies of slavery that Exodusters, most of whom were formerly enslaved, continued to confront in freedom.

# [23] Heads Up for Falling Rocks!: Site formation Processes at Woodpecker Cave, Johnson County, Iowa

# *James R. McGrath, Rebekah Truhan, Adam M. Skibbe, and James G. Enloe (University of Iowa)*

Woodpecker Cave is a small limestone rockshelter occurring on a drainage of the Coralville Reservoir in Johnson Country, Iowa. The site was originally excavated in 1956 and has been the home of the University of Iowa archaeological field school since 2012. The University of Iowa excavations identified Late and Terminal Woodland materials with a high concentration of roofspall contributing to the archaeological deposits. When combined with recent terrestrial LIDAR scans of the rock shelter, these data provide insights into the site formation processes occurring at Woodpecker Cave. Particular attention is given here to roofspall morphology and the fabric of the archaeological deposits to better understand how active formation processes occurring within the rockshelter influenced human occupations.

# [15] Viewshed Analyses for the Oneota Lake Koshkonong Locality: Defensibility as a Critical Variable in Settlement Studies

# Rachel C. McTavish (University of Wisconsin–Milwaukee)

Previous research and landscape studies for Oneota groups in the midcontinent have used various models, focusing on economic and ecological variables for site location choices. This project examines the socio-political landscape as an additional lens to interpretations for the economic variables that likely made the Lake Koshkonong locality an attractive area. Specifically, this research highlights the relationship between a defensible location and site-settlement patterning. By using multiple lines of investigation (e.g., catchment, viewsheds, topography) the potential for defensibility as a variable in semi-permanent or permanent village site selection is investigated.

# [22] Bone, Horn, and Antler Technologies: A Worked Fauna Analysis from Oneota Sites in the Lake Koshkonong Locality

# Rachel C. McTavish and Amy Klemmer (University of Wisconsin–Milwaukee)

Oneota technology studies have long been the subject of research. However, the majority of technological studies have emphasized lithic assemblages, especially in relation to triangular points and scrapers, or ceramic assemblage and clay composition studies. Little attention has been paid to how animal remains have directly influenced and are an integral incorporation into the technological organization of Oneota groups. This research project presents a worked bone, horn, and antler analysis of two Oneota sites, Crescent Bay Hunt Club (47JE904) and the Koshkonong Creek Village (47JE379).

### [21] Preservation or Exploitation: How Public Interactions Affect Archaeological Sites

# Michael J. Meyer (Missouri Department of Transportation)

Since 2008 the Missouri Department of Transportation has been conducting near-continual archaeological investigations in the city of St. Louis. During this time, a concerted effort has made to engage various interest groups and members of the general public in our preservation work. Publicizing archaeological fieldwork is in line with the goals of CRM by engaging the public and supplying added value (beyond scientific data recovery) to publically-funded projects. However, this often endangers the archaeological resources as it can serve as an invitation to vandalize both recorded and unrecorded archaeological properties. A common refrain from collectors is that they are "preserving history" that would otherwise be lost to construction projects. However, without proper scientific documentation what is actually being preserved? The author offers a critical examination of the effects that public outreach efforts have on archaeological sites, both positive and negative, using recent work in St. Louis as an example.

### [21] Spracklen: A Hopewell Encampment in the Little Miami River Valley

# G. Logan Miller (Illinois State University)

The Spracklen site (33-GR-1585) is one of a small but growing number of Hopewell non-earthwork sites in the Ohio Valley subject to systematic investigation. First recorded during surface survey by Wright State University in 2003, Spracklen was the focus of investigation by the Illinois State University field school in archaeology during the late spring of 2016. Spracklen lies about 3 km south of the Pollock earthworks in an upland setting in southwest Ohio. Although heavily impacted by historic agricultural practices, surface collection, geophysical survey, shovel testing, and unit excavation indicate that Spracklen was a short-term camp repeatedly utilized during the Middle Woodland period. The Hopewell connection at Spracklen is demonstrated by the presence of numerous bladelets—many of which can best be described as microblades—made from exotic cherts. This presentation will discuss the feature and artifact assemblage at Spracklen while highlighting the importance of small sites in regional Hopewellian dynamics.

# [8] An Early Archaic Burlington Chert Quarry and Processing Site in Southeastern Iowa.

### Toby A. Morrow (Wapsi Valley Archaeology, Inc.)

Excavations at 13DM1044 in central Des Moines County in southeastern Iowa yielded a massive assemblage of Burlington Chert debris. Situated on a footslope adjacent to Big Hollow Creek, the site contains a single, contiguous 20- to 30-cm-thick layer chock full of chert chunks, cores, flakes, unfinished and rejected bifaces and several hammerstones. Unlike many sites where chert procurement was accompanied by other day-to-day tasks, 13DM1044 was almost exclusively an extractive site. The recovery of a Hardin and a Graham Cave point place the site in the mid- to late-Early Archaic period. What was left at the site—and what was taken away—will be discussed.

#### [1] Embracing Anomalies

#### Michael S. Nassaney (Western Michigan University)

George Irving Quimby developed a relatively robust database for his time and used it to chronologically order sites in the western Great Lakes region. However, he struggled to rectify observations that contradicted his theoretical framework of acculturation such as the persistence of Native subsistence and settlement practices despite Native adoption of European goods. I argue that we must embrace anomalies in contemporary archaeology if we are to decolonize the discipline and our understandings of the subtleties of cultural interactions. Social relations with Native groups always impinge on our understandings of the past.

# [8] Hot-Rock Cooking: Feature Signatures and Functions of a Late Archaic Earth Oven

#### Fernanda Neubauer (University of Wisconsin–Madison)

Earth oven usage was a common practice among hunter-gatherer populations in North America, yet these features are often generically mischaracterized as hearths. An earth oven, however, is a specific layered cooking arrangement of fire, heated rocks, and food items designed to indirectly bake foods at an even temperature for periods ranging from a few hours to several days. They are remnants of ancient domestic life, and, therefore, the analysis of hot rocks allows for an investigation of how foods were processed and cooked. In this paper, I describe the archaeological signatures of earth ovens to facilitate their identification at archaeological sites, and I discuss their functions by providing a case study of an archaeological earth oven feature from the Late Archaic site 914 on Grand Island, Michigan.

# [8] Late Archaic Foodways and Seasonality: Faunal and Floral Evidence from the Popper Site on Grand Island, Michigan

### Fernanda Neubauer (University of Wisconsin–Madison), Michael J. Schaefer and Terrance Martin (Illinois State Museum), and James M. Skibo (Illinois State University)

This paper discusses the faunal and floral analyses from the Popper site, the oldest and largest dated Late Archaic settlement in Michigan's Upper Peninsula. Previously, a total of 296 pieces of animal bones had been recovered from all dated Late Archaic sites on the southern shore of Lake Superior in the Upper Peninsula. However, our study at the Popper site alone identified 494 additional faunal remains. The faunal and floral results at Popper indicate that hunter-gatherers there were engaged in various activities, including berry collecting, fishing, and the hunting of medium- to large-sized mammals. Hearth features were also identified that were likely used in small scale domestic activities to process foods. We argue that the Popper site represented an important place on the landscape to Late Archaic populations who repeatedly occupied the settlement, predominantly during the fall when spawning whitefish were abundant in the shallower waters surrounding the shores.

### [8] Use-Alteration Analysis of Fire-Cracked Rocks

# Fernanda Neubauer (University of Wisconsin–Madison)

Although it is now commonplace for archaeologists to study use-alteration patterns on ceramics, the same cannot be said of one of the most ubiquitous classes of hunter-gatherer artifacts, fire-cracked rocks (FCR). It can be shown, however, that many of the same methods and theories applied to the study of cooking ceramics are also relevant to the investigation of rocks as heating elements. Because use-alteration analyses of FCR are almost non-existent, I have developed a methodology for studying the material by describing a range of signatures that are useful in the identification of thermal alteration patterns. This methodology considers various alterations caused by heat exposure and provides a comprehensive view of the thermal processes that affected stones. FCR is often abundant at hunter-gatherer sites and the behaviors resulting in its creation were likely important daily activities, therefore an expanded understanding of FCR may help explain both feature and site formation processes.

# [18] Recent Survey in Benton and Newton Counties: Data Deficient or Differently Populated

### Kevin C. Nolan, Christine K. Thompson, Jamie Leeuwrik, and Amanda Balough (Applied Anthropology Laboratories, Ball State University)

The Applied Anthropology Laboratories, Department of Anthropology, Ball State University received two FY 2015 Historic Preservation Fund grants in Benton and Newton counties. Both counties are characterized by low absolute quantities of documented archaeological sites, and low relative densities. These projects focused on a pedestrian survey of 800 acres of land in the northern half of each county. We seek to determine the reason for the relative paucity of official archaeological data in northwestern Indiana. This region presents a relatively unique environment dominated by wetlands and prairies. We examine the distribution of past activities against the uniquely productive environment presented by these northwestern Indiana wetland and prairie landscapes.

#### [16] Jane, His Wife: An Analysis of Spouses' Gravestones in a Rural Midwestern Cemetery

### Susannah Oettle (Southern Illinois University–Edwardsville)

This article discusses the gravestones of spouses buried together in Hartland Cemetery in Morgan County, Illinois, with a goal of better understanding how biological sex may influence gravemarkers in a rural Midwestern community. The gravestones wives and husbands were compared to those of their respective spouses. The purpose was to isolate sex as a variable because married couples in this type of community would typically share religious beliefs, economic status, and ethnicity, among other characteristics. It was thought that the gravemarkers of women would nearly always be less costly than those of their spouses reflecting the assumed subordination of women in rural communities during the 1800s and early 1900s. In actuality, however, the gravestones of men at Hartland Cemetery were often less expensive than those of their wives. Age at death and the duration of widow(er)hood also seem to be key factors.

# [23] Evaluating Late Early Woodland Paired-Post Circle Function through Multiple Model Evaluation

# *Eric C. Olson (Ball State University) and Kevin C. Nolan (Applied Anthropology Laboratories, Ball State University)*

Paired-post circles (PPCs) are an architectural design that occur between 400 B.C. and A.D. 50. The activities conducted within PPCs have been debated for decades. Past interpretations have included house, village, mortuary camp, and funeral feast localities. We formulate an alternative hypothesis and formalize the empirical consequences of three alternative models to test all four models against the record. The four models are: habitation, mortuary processing, feasting, and feminine space. Using a paradigmatic classification to measure assemblage similarity, we compare the expected artifactual distributions from each model to the empirical distributions of each PPC. To assess similarity objectively we used Multiple Correspondence Analysis to compare ideal distributions for each model and the empirical distributions from each site. The feasting model exhibits the best fit to the empirical data from PPCs. The three alternative models are poor predictors of the empirical composition of artifact and feature frequencies within PPCs.

#### [13] Attimoni (ah-jee-MOOUHN)—The Stories We Have to Tell: Relationships among the Meskwaki Nation, Tribes with Historic Ties to Iowa, and the Iowa Office of the State Archaeologist

# Suzanne Buffalo and Johnathan Buffalo (Meskwaki Nation), Lara Noldner and Shirley Schermer (University of Iowa Office of the State Archaeologist)

A long-standing relationship has existed between the University of Iowa Office of the State Archaeologist (OSA) and tribal entities, including the Meskwaki Nation. The precedent-setting burial law established in Iowa in 1976, 14 years prior to the passage of NAGPRA, has long required equal treatment and reburial of Native American remains. The law gave the OSA statutory authority for upholding the law and established the OSA Indian Advisory Council (IAC). Maria Pearson (Yankton Sioux) and Donald Wanatee (Meskwaki) were instrumental for the passage, implementation, and success of the law and served on the IAC from the start. The OSA and its Burials Program (recently renamed the Bioarchaeology Program) has an exemplary record of collaboration in the protection and proper treatment of human remains, its success leading to a variety of other tribal collaborations. The OSA, the IAC, and tribes took a proactive approach to allow reburial of culturally unidentifiable remains prior to development of NAGPRA regulations, ultimately developing a NAGPRA-approved process for the reburial of culturally unidentifiable remains in Iowa's established cemeteries.

### [6] Variability in Ritual at the Intersection of Oneota and Mississippian Worlds

# Jodie O'Gorman (Michigan State University) and Michael Conner (Dickson Mounds Museum)

Ritual contexts at the Morton Village site (11F2) are explored in a multi-scalar framework from the level of individual artifact to site-wide distribution and integration of facilities. Evidence for ritual behavior at the site is now well beyond that associated with mortuary activities as most obviously portrayed at the site's well-known cemetery (Norris Farms 36). Integrative structures built specifically for ritual purposes, domestic-based ritual, the remains of ritual activity, and ritually charged artifacts are considered.

### [6] Ceramic Function at the Morton Village Site: A Pilot Study

# Jeffrey M. Painter (Michigan State University)

Morton Village is a multi-ethnic habitation site in the Central Illinois River Valley occupied by local Mississippian and migrant Oneota peoples in the 14th century. While there is increasing evidence that the two groups occupied the site contemporaneously, how they interacted with each other is still unclear. One avenue through which I hope to explore this interaction is through food and cooking. Food is one of the most ubiquitous and culturally expressive aspects of human culture and is one way that people of diverse backgrounds can interact and share ideas. In order to begin exploring food practices at the site, I conducted a functional ceramic analysis pilot study on some of the largest sections of pottery recovered from past and recent excavations. The preliminary results will be discussed here along with possibilities for future directions.

# [18] Historic Human Remains Detection Dogs; a Summary of the Research and Applications

### Jim Peters (Samaritan Detection Dogs)

Dogs are extraordinary among mammals for their abilities in both reception and discrimination of odorants. While human beings may have five million olfactory sensory cells, German shepherd dogs may have 220 million olfactory sensory cells. Research has identified 490 volatile organic compounds (VOCs) related to the human decomposition process, 60 were identified as key markers of human decomposition which were detectable at the soil surface. HHRD dogs are trained to detect the VOCs related to historic human remains by using operant conditioning. The repetitive process of the training strengthens their behaviors so that they will reliably alert on the target scent. HHRD dogs have demonstrated the ability to identify buried human remains over 500 years old and can be an asset when it is necessary to locate unmarked or obscure burial locations.

# [13] Stewarding Past Places into the Future—Cultural Landscapes, Byways, and Heritage Studies in Archaeological Practice

### Melody Pope (Glenn A. Black Laboratory of Archaeology), and Lynn M. Alex, Shirley J. Schermer, and Will Thomson (University of Iowa Office of the State Archaeologist)

Between 2010 and 2013, archaeologists at the University of Iowa Office of the State Archaeologist collaborated with local communities, traditionally associated peoples, and other stakeholders in planning processes involving archaeological sites, cultural resource districts, and archaeological preserves in Iowa and Illinois. Each project built on and extended partnerships with and between Native American communities and fostered new multidisciplinary relationships between archaeologists, architects and museum specialists, all of whom contributed greatly to each projects success, exposing commonalities, tensions and complexities involved in managing cultural and heritage places and landscapes. Multidisciplinary partnerships are critical aspects of these projects, but are not without challenges and tensions. In this poster we present outcomes, challenges, successes, tensions and lessons learned along the way that will hopefully benefit others working in these diverse arenas of archaeological practice.

# [19] Peering Past the Patina: An Analysis of Copper Artifacts from Four Oneota Sites in the Lake Koshkonong Area

### Jacqueline M. Pozza (University of Wisconsin–Milwaukee)

Over 500 pieces of Oneota copper artifacts were documented and analyzed over the course of the past year in order to assess copper production, utilization, and the ideological and social significance behind this raw material. Artifacts from this study were recovered from four Oneota sites adjacent to Lake Koshkonong in Jefferson County, Wisconsin: Crabapple Point (47Je93), Schmeling (47Je833), Koshkonong Creek Village (47Je379), and Crescent Bay Hunt Club (47Je904). Manufacturing marks and use wear on these artifacts provide arguments for multiple manufacturing traditions in the area and calls into question our previous assumptions of their technical utility. Additionally, the distribution of these artifacts and the iconographic symbols present among the collections suggest larger ideological and social significance of copper within Oneota groups. Overall, this research presents standardized methods for future Oneota copper studies and a wealth of information that further illuminates prehistoric copper traditions and Oneota lifeways.

### [6] Exploring the Chert Assemblage at Morton Village with Handheld Spectrometry

### Frank J. Raslich (Michigan State University)

Avon chert, found in the Central Illinois River Valley (CIRV), is postulated as providing most of the tool stone raw material recovered from sites situated in the CIRV. The Morton Village (11F2) site has produced a significant amount of chert recovered from various contexts. Following an Oneota in-migration, data supports the interpretation that the Morton village was a multiethnic village where Mississippian and Oneota populations cohabitated. Lithic collections excavated from both public and private spaces will help us further our understanding of raw material selection behaviors. By focusing upon several workshops of Avon chert, I explore the differences in the cultural lithic raw material selection and distribution decision making processes. These behaviors can potentially be demonstrated

through the variation in the lithic raw materials. Using portable X-Ray Fluorescence, this poster is a preliminary examination of the elemental range of variation detected within a sample of the chert assemblage analyzed from Structure 26 at Morton Village as well as several features. These data help clarify differences within the selection and distribution of lithic raw material that took place at the Morton Village.

# [15] Settling Down in Northern Ohio: Late Archaic Clay-floored Structures at the Burrell Orchard Site

### Brian G. Redmond (Cleveland Museum of Natural History)

One hallmark of decreased mobility among foraging populations in much of eastern North America is the appearance of substantial domestic architecture. In the Ohio region, early evidence of large, multi-seasonal occupations is manifested at Late Archaic period sites in the middle Ohio Valley, but significant labor investments in domestic architecture appear lacking. The few Late Archaic habitations known for northern Ohio are equally modest but occur within small habitation sites. Recent discovery of several clay structural floors at the Burrell Orchard site—along with deep midden and storage facilities—provides the first evidence for significantly decreased seasonal mobility among some Late Archaic social groups in north-central Ohio. Subsistence remains, including domesticated squash, nuts, and deer bone, as well as post mold outlines of ovoid structures erected on clay floors with interior hearths point to extended and recurrent occupations by single to extended family groups during the third millennium B.C.

# [13] Creating Collaborative Learning Opportunities for Indigenous Youth with Archaeology-Based Environmental Education

# *Elizabeth Reetz (University of Iowa Office of the State Archaeologist) and William Quackenbush (Ho-Chunk Nation Department of Heritage Preservation, Cultural Resources Division)*

Archaeologists are in a unique position to promote heritage and preservation through environmental education, the fundamentals of which have overlapping and parallel themes in archaeology education and outreach. Recently, successful community-based collaborative research and archaeology fieldwork initiatives between archaeologists and Native American-First Nations communities have prompted tribal leaders to pursue ways for youth in their communities to engage in contemporary cultural and natural resources work, thus inspiring future stewardship and introducing youth to professional pathways. With the guidance of archaeologists and tribal community educators, youth can participate in authentic, hands-on archaeological activities that place them into the roles of scientists and researchers and allow them to interpret their own archaeological heritage. A July 2015 partnership between archaeologists and the Ho-Chunk Nation in Wisconsin provided a place-based archaeological learning experience at a site area that was personally relevant to the student participants. A solid and collaborative planning process between archaeologists and tribal staff contributed to a successful workshop where all parties met their goals of strengthening partnerships and providing an enriching experience for the students. The integration of science-based archaeology with a traditional cultural learning environment provided a comfortable setting that resulted in noticeable engagement and enthusiasm.

# [4] A Summary of the 2013 Excavations at the Milwaukee County Poor Farm Cemetery

# Patricia B. Richards (University of Wisconsin–Milwaukee)

The Milwaukee County Poor Farm Cemetery Project was initiated in 2008 and is a collaborative effort of the University of Wisconsin–Milwaukee (UWM) Archaeological Research Laboratory, UWM Anthropology Department graduate students, UWM Undergraduate Research Opportunity Students, and the staff of UWM-CRM. The Wisconsin Historical Society granted the UWM Archaeological Research Laboratory final disposition of all human remains, material culture, and documentation associated with 1991 and 1992 excavations at the Milwaukee County Poor Farm Cemetery. In 2013 Historic Resource Management Services of the University of Wisconsin–Milwaukee returned to the cemetery and conducted excavations of an additional 632 individual coffin burials representing over 800 individuals. This paper provides a summary of the overall progress of the project as well as the results of analyses of human remains and material culture recovered as a result of the 2013 excavations.

# [9] Hopewell Legacy: Confronting the Challenges of Legacy Collections and Using GIS to Discern New Research Questions

### Margaret Robinson (University of Nebraska-Lincoln)

The Hopewell culture was a unique cultural fluorescence consisting of monumental earthwork construction, elaborate funerary practices and extensive exchange networks of exotic materials. These burial mounds and earthwork structures, dotted across the southern Ohio landscape, are what captured the interest of early American archaeologists. One such excavation by Warren K. Moorehead (1891) at the Hopewell "type-site," Hopewell Mound Group, resulted in thousands of archival materials and artifacts which are currently housed at the Field Museum of Natural History. Despite the lack of academic standards employed during this early investigation, the data can still provide new insights into mound construction and artifact placement. This paper investigates the usability of plan maps for Mound 23 at Hopewell Mound Group, recently made available by the Ohio Hopewell: Ancient Crossroads of the American Midwest archive. This paper confronts the challenges of reconstructing legacy collections within GIS and discusses legacy collection research via digital archives.

### [22] Ceramic Analysis of La Crosse County and Houston County Rim Sherds

### Jaelyn Roland (University of Wisconsin–La Crosse)

This study analyzed rim sherds from late prehistoric and protohistoric sites in La Crosse County, Wisconsin, and Houston County, Minnesota. The analysis includes measurements of the rims and necks as an indicator of approximate vessel size and motif observation. The results were compared to look at changes associated with the movement from La Crosse localities into Houston County localities. Some major sites looked at include, but are not limited to Stanley Hahn, the Farley Village site, and the Yucatan Village site all located within Houston County and the Valley View site located in La Crosse County.

# [17] Reconstructing the 1976 Kenosha County Archaeological Society Investigations at the Montgomery Cabin Site, Kenosha County, Wisconsin

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

The Montgomery Cabin (ca. 1834–1839) in the Petrifying Springs–Pike Woods locality in Somers Township is reputed to be the first Euroamerican structure built within Kenosha County. Marked by a significant cellar depression and stone pile since its destruction in the mid-19th-century, the cabin site was partially excavated by avocational archaeologists from the Kenosha County Archaeological Society (KCAS) as a sponsored Bicentennial project in 1976. No report was ever produced describing the work the KCAS performed at the site, nor any of their finds or findings. However, field maps, excavation forms, participant accounts, and a few newspaper articles allow us to reconstruct the research methods employed, a sense of the nature and variety of findings made, as well as an appreciation for certain challenges the KCAS crew faced. Recent field research conducted by UW–Parkside and the Kenosha Public Museum in 2013 and 2015 has added greatly to this understanding.

# [15] Uncovering Ancient Life at Aztalan: Domestic Structures, Palisade Walls, and Reconfigured Spaces

# Sissel Schroeder, Jake Pfaffenroth, Marissa Lee, Kelly Martin, and Kelly Tyrrell (University of Wisconsin–Madison)

The 2016 UW–Madison field school excavations at Aztalan, Wisconsin, unearthed numerous superimposed features in an area of the site just beyond an inner palisade wall that has been conventionally interpreted as separating the plaza from the residential sector. The features in the so-called plaza are consistent in size and shape with residential structures and are filled with domestic debris, including both Mississippian and Late Woodland artifacts. Large postmolds intrusive into those features may be a previously undiscovered inner palisade wall. In sum, considerable spatial reconfiguration occurred within the site during the ca. A.D. 1100–1200 period of Mississippian and Late Woodland coresidence. This presentation describes the features and postmolds, their formation histories, and discusses the implications of these findings for a dynamic understanding of ancient life at Aztalan

# [19] Photogrammetry and 3D Models of Fabric from Impressions in Pottery

# Sissel Schroeder, Jake Pfaffenroth, Marissa Lee, and Sarah Taylor (University of Wisconsin–Madison)

Fabric impressions in pottery are typically investigated by making casts in clay, Sculpey, or other substances that can potentially contaminate the ceramic. As an alternative to these traditional methods we use Structure from Motion photogrammetry as a low-cost tool to image Mississippian textile impressed salt pan sherds and construct 3D images of the fabric that show variations in cordage twist, weaving, twining, and other methods of production. Preliminary results indicate that this is an effective method for creating digital and physical models of ancient textiles that can be widely shared and brought in to the classroom.

# [19] Analysis of Ceramics from an Avocational Collection of an Early Fort Ancient Village Site

# Marcus Schulenburg (University of Wisconsin–Milwaukee) and Robert Cook (Ohio State University)

In the 1980's avocational excavations were conducted at the Guard site (12D29) in southeast Indiana. These excavations uncovered several houses, and a tremendous amount of material culture. As part of ongoing excavations at Guard site and exploration of the nature of Early Fort Ancient identity, we returned to these ceramics and have begun the task of cataloging and analysis. In addition to providing a tremendous resource in helping to characterize Early Fort Ancient ceramics, this collection also provides examples of atypical forms, motifs, and construction, which may prove useful in examining connections with other regions and ceramic traditions in the Mississippian world.

# [16] Middle Grant Creek: A Rare Example of a Single Component Huber Phase Site on the Illinois Prairie

# Mark R. Schurr (University of Notre Dame) and Madeleine McLeester (University of Chicago)

Our understanding of the protohistoric Huber phase is limited by our small sample of sites from this complex period. We present preliminary findings from the summer 2016 excavation at the Middle Grant Creek (MGC) site at Midewin National Tallgrass Prairie in Wilmington, Illinois. The site is a well-preserved single component Huber phase, warm weather camp that survived historic farmsteads and the construction and abandonment of an Army arsenal. MGC expands the sample of Huber sites and provides needed data on lifeways during the final period before European arrival. We expect data from MGC to help refine our understandings of seasonality, mobility, and site types of Huber phase communities as well as inform possible down-the-line impacts of the fur trade. As one of the few single component sites in the region, data also help us untangle the complex relationships between late prehistoric communities in the region and refine existing regional typologies.

# [9] Subdivisions within the Main Mound Group of Iowa's Blood Run National Historic Landmark

# George W. Shurr (GeoShurr Resources)

The mound group in Area B of the Blood Run NHL in northwestern Iowa has four distinct zones. Small mounds generally less than 2 feet (.6 m) high were distributed along the edge of the terrace and have been largely removed by erosion. Within the group, large mounds greater than 3 feet (.9 m) high are subdivided into two distinct areas. Mounds in the northeast area have higher erosion rates than those in the southwest area. These two precincts of large mounds are separated by a transition zone that trends perpendicular to the terrace margin. Size and erosion rate are calculated using published measurements from historical field surveys. The large mounds also show as distinct clusters on a cross plot of initial height and erosion rate. Cross plots of regional data have similar clusters and also document a direct relationship between initial height and erosion rate, viz. tall mounds tend to erode faster than low mounds.

# [12] A Survey of the Axial Skeleton: Neural Arch Closure and Spondylolysis of the Morton Site (Fulton Country, Illinois)

# Ryann Seifers (Indiana University)

The Morton site collection, which resides at Indiana University, was excavated in the 1930s but there are few publications from the collection since. This project aimed to observe Spina Bifida Occulta as a confounding variable in determining the normal rate-of-closure for the inferior sacral spine. The 'normal' rate of sacral spinal closure is variable, as some have a complete neural spine and other a hiatus, and the quantified Morton site vertebrae demonstrate the average rate-of-closure for this pre-contact collection. Overall axial skeleton health was also noted during the initial inventory. Data illustrate an unexpected amount of spondylolysis cases and a surprising absence of open sacral arches.

# [13] Tribal History Partnerships and the Great Lakes-Ohio Valley Ethnohistory Collection at Indiana University

### April K. Sievert (Indiana University), Wayne Huxhold (Indiana University), Ben Barnes (Shawnee Tribe), and Kelli Mosteller (Citizen Potawatomi Nation)

Relationships initiated through repatriation-related consultation can foster collaborations to improve access to historic resources for federally recognized tribes and institutions alike. The Great Lakes and Ohio Valley Ethnohistory Collection at Indiana University (IU) comprises material gathered to provide evidence for 20th-century Indian Claims Commission lawsuits in the US. Tribal scholars are working with IU's Glenn Black Laboratory staff to plan and implement a digitization program to make archives available online to tribal scholars. In the process a resource for researching cultural affiliation is being revitalized and preserved, while tribal scholars acquire sources that meet multiple tribal cultural heritage objectives.

### [6] 9 Years and Counting: Update on the Morton Village Archaeological Project

### Nikki Silva and Jodie O'Gorman (Michigan State University), Michael Conner (Dickson Mounds Museum), and Autumn Beyer and Jeffrey Painter (Michigan State University)

Summer 2016 marked the 9th field season at the Morton Village site located near Lewistown, Illinois through collaborative efforts of Michigan State University and the Dickson Mounds Museum. This poster provides a summary of the 2016 findings, provides background, and discusses research goals. In 2016 we focused on further testing of a large circular structure discovered in 2014 and a large wall-trench domestic structure discovered in 2012. The latter structure (Structure 26) was excavated in its entirety, while smaller test excavations confirmed rebuilding episodes of the large ritual structure and provided other information on site structure. Broadly defined research goals and the articulation of specific research projects are also summarized.

# [22] Finding the Past in the Paste: Variance in Woodland Ceramics at Woodpecker Cave (13JH202)

# Jeremy L. Skeens (University of Iowa)

Five field seasons of excavations by the University of Iowa field school have recovered hundreds of ceramic pottery sherds from the Woodpecker Cave site. Previous typological analysis of the ceramic assemblage has supported the hypothesis of a multicomponent site that was host to seasonal occupations spanning hundreds of years. Woodpecker Cave provides a unique opportunity to study variation in ceramic technology within Midwestern cooking vessels across the Middle Woodland and Late Woodland periods. Microscopic examination of ceramic thin sections and their included minerals will showcase the progression of resource use within the region during that time period, and changes in technological choices made during production that aid in vessel function. Combined with spatial analysis, this interpretation can also aid in establishing the chronology of Woodpecker Cave.

#### [4] The Application of NextEngine<sup>™</sup> Scanning Technology to Commingled Analysis at the Milwaukee County Poor Farm Cemetery: A Replicable Method for Restoring Individuality

### Jessica L Skinner (University of Wisconsin–Milwaukee)

The analysis and subsequent disentanglement of human skeletal elements from commingled or mixed burial contexts is an essential step in creating individual identifications of those individuals represented in these burials. This work is integral to the overall goal of using methodologically robust techniques to contextualize and represent individuals recovered in archaeological or forensic settings. A suite of commingled burial analysis methods are currently used to achieve this goal. These methods are essential to the field, but can still introduce error. To provide additional lines of evidence to support these analyses, this study investigates the efficacy of a three-dimensional pair-matching technique, using a NextEngine<sup>™</sup> scanner and both open source and proprietary software to test two methods of mesh-to-mesh value comparison for reliability and replicability.

# [1] Kethtippecanuck: Trading Entrepôt of the Eighteenth-Century Wabash River Valley

### Susan Sleeper-Smith (Michigan State University)

Environmental history, archaeological data, historical records, and visual art are combined to recreate Kethtippecanuck, an eighteenth-century Indian trading town in the Wabash River Valley. This center was directly linked to both Vincennes and Miamitown and was located at the nexus of the Wabash and Tippecanoe Rivers, its surrounding grassy plains supported extensive bison herds and rich wetlands supplied plentiful edible plants. Today, these lands are in the Prophetstown State Park and have been a fertile field for archaeological exploration. There is substantial evidence for diverse housing structures, multi-ethnic residential patterns, a rich material culture, and carbonized floral material for the foods consumed at this site. French, British, and American records detail the site's early history and include eyewitness records from the Kentuckians who destroyed this village as well as descriptions from a white captive who lived here. This body of evidence is further supplemented by the art of George Winter, an English artist, who lived in nearby, Logansport, Indiana.

# [15] Aquatic Faunal Resources in the Middle and Late Archaic Periods: Using tDAR integration to Compare the Saginaw Valley and the Northern Prairie Peninsula Regions of the Upper Midwest

# Beverley A. Smith (University of Michigan–Flint), Steven R. Kuehn (Illinois State Archaeological Survey)

Within the broad region of the central and upper Midwest, zooarchaeologists of the Eastern Archaic Faunal Working Group (EAFWG) are using tDAR (the Digital Archaeological Record) to explore the utility of fine-scale comparison of faunal databases to address the use of aquatic resources during the Archaic period. This paper addresses the Middle and Late Archaic periods in the upper Midwest/Great Lakes with a comparison of sites in the Saginaw Valley and northern Illinois Prairie Peninsula using data integration analytic tools in tDAR at multiple scales. The paper will demonstrate that when datasets are rendered comparable through structured ontologies, observable trends emerge in the use of aquatic and terrestrial resources within and between subregions. With the tools to consider a range of variables, we can test hypotheses that we have generated about the use of animals during the Archaic and assess existing models using the comparable EAFWG faunal datasets.

### [12] Geophysical Survey and Excavations at Golden Eagle (11C120) Mound 2

Kristen E. Squires (Center for American Archeology), Bonnie L. Etter (Southern Methodist University), Claire Norton (Rhodes University), Angela Cooper (University of Tulsa), Amanda Wissler (Arizona State University), Taylor H. Thornton (University of Toronto), Jason L. King (Center for American Archeology), Jason T. Herrmann (Eberhard Karls Universität Tübingen), and Jane E. Buikstra (Arizona State University)

The Golden Eagle site (11C120), Calhoun County, Illinois, is located near the confluence of the Mississippi and Illinois rivers, and is the only known mound site in the Lower Illinois Valley with an enclosure. Since 2013 archeologists at the Center for American Archeology have conducted geophysical survey and test excavations to better document this enigmatic site, particularly its built structures. In 2015 and 2016, excavations by CAA archeologists and field schools focused on defining the limits of Mound 2 as indicated by magnetic and ground-penetrating radar data collected in 2013. In this poster, we report excavation results and place Mound 2 in the context of earthen construction at Golden Eagle and in the region.

# [12] Geophysical Investigations at the Heritage Valley Mound Site (13AM129) in Allamakee County, Iowa

# Marshall Stay (Luther College)

The internal structure of linear mounds is largely unknown due to a lack of data from excavations or previous investigations. Remote sensing is able to provide information on these details through the use of non-intrusive methods, a necessity for mound structures. In June of 2016, the Heritage Valley site (13AM129), a singular linear mound on a terrace in the Upper Iowa River valley in northeastern Iowa, was surveyed using a Bartington Grad 601-2 fluxgate gradiometer. Subsequent data not only reveals the mound itself through differentiation in soil magnetism, but we are also able to determine potential construction techniques. This research highlights the utility of remote sensing methods for investigating

the structure and clues to the construction of these mounds. Further research along these lines may be able to provide insight as to the function and meaning of linear mounds.

#### [19] Integrating Use-Wear Analysis: A Case Study from the Holdorf I Site

### *Katherine M. Sterner (University of Wisconsin–Milwaukee)*

Many studies of lithic technology utilize the concept of tool economy but they rarely integrate direct evidence of tool function in their conceptualizations. Similarly, use-wear analysts have produced a body of literature on the function of stone tools but have rarely integrated their results into the larger context of human behavior. Stone tool use-wear is often included as a separate section of archaeological reports and is rarely considered in conjunction with tool morphology, assemblage composition, or spatial distribution. Recognizing the overall role that lithics play in complex economies requires a multifaceted approach to tool function. Examination of a sample of both the ground stone and chipped stone tool assemblages from the Holdorf I site, a multicomponent campsite in Door County, Wisconsin, shows the transformative effect that targeted use-wear analysis of a small sample of artifacts can have on overall site interpretations as part of a large data recovery project.

# [9] The New Harmony Mound Group, a Middle Woodland Ceremonial Center in the Lower Wabash River Valley

### Michael Strezewski (University of Southern Indiana)

The New Harmony, Indiana mound group was first described by naturalist Charles Alexander Lesueur in the 1830s. While researchers have known of its existence for some time, little work has been done at the site, and basic information is lacking. Recent magnetometry and resistivity survey has identified a previously unknown earthwork surrounding the remaining mounds. This earthwork consists of a low embankment with shallow ditches on either side. Excavations adjacent to the mounds have revealed the presence of substantial amounts of cultural material. Artifacts date to the early and later Middle Woodland periods —consisting of at least two Crab Orchard-like and one Allison-LaMotte component. While artifacts are relatively abundant, features appear to be few, suggesting repeated short-term occupation related to the ceremonial activities taking place there. Despite the close proximity of the Mann site, little material from this immense Middle Woodland ceremonial center has been identified at New Harmony.

# [15] Exploring Comparability and Variability of Eastern Archaic tDAR Faunal Databases and Human Use of Animals

# Bonnie W. Styles and Mona Colburn (Illinois State Museum), and Sarah W. Neusius (Indiana University of Pennsylvania)

The Eastern Archaic Faunal Working Group uploaded faunal databases for 21 archaeological sites into tDAR to examine variability in human use of animals. To ensure comparability of datasets we addressed variable structure and mapped key faunal attributes to existing and new tDAR ontologies. We analyzed variables related to bone preservation and destruction for eight pilot sites and developed a final taphonomic protocol based on evaluation of fragmentation, burning, and bone density-mediated attrition to assess comparability for all sites. We also developed a protocol for examining comparability for site type, context type, and recovery method. Taphonomic biases and recovery strategies affected bone representation at all sites, but most of our datasets appear to be relatively comparable. With the help of tDAR integration tools, we are making meaningful comparisons of sites and exploring the influences of cultural preferences, population size and demography, and environmental conditions on human use of aquatic fauna.

#### [18] Rehousing the Past: Curation of the Tillmont site (47Cr460) Collections at UW-Madison

### Mara Taft (University of Wisconsin–Madison), and Jacqueline Pozza and Victoria Pagel (University of Wisconsin–Milwaukee)

Tillmont is a deeply stratified multi-component site located in Crawford County, Wisconsin. The site is owned by the U.S. Fish and Wildlife Service (USFWS) and was excavated as a university field school under the direction of James Stoltman in 1995. In the summer of 2016, personnel at UW–Madison undertook an extensive re-curation of the Tillmont site collections under contract with the USFWS Midwest Regional Office. This poster provides an overview of the rehabilitation, including the processes, challenges, solutions, and end results. Furthermore, it illustrates the sub-standard state of many under-funded university field school collections, and offers an effective process that may be used to curate collections long-term.

### [16] Good Distance Makes Good Neighbors: Strategic Positioning of Native American Settlements in Late 19th- to Early 20th-Century Wisconsin

# Sarah Tate (University of Wisconsin–Madison)

After the Sioux Uprising of 1862 in Minnesota, efforts to remove Native American tribes from Wisconsin escalated through the latter half of the nineteenth century. Some individuals evaded removal forces, while others embarked upon the arduous journey back to Wisconsin from as far away as Nebraska. Known as 'strolling' Indians for their transient nature, these bands sought to establish new communities in the Wisconsin Northwoods. Using historic newspapers, contemporary county histories, archaeological surface finds, and historic census data for four sites in the Northwoods—Rozellville-Austin Farms, Skunk Hill, McCord Indian Village, and Perkinstown—I demonstrate that the placement of these communities was a strategic decision to secure economic opportunities while maximizing cultural seclusion.

### [22] Technological Approach to Fire-Cracked Rock

# Rebekah Truhan and Jacob Foubert (University of Iowa), and Luke Stroth (University of California, San Diego)

Fire-cracked rock (FCR) is an artifact category that has not received much attention, normally reduced to counts and weights. However, FCR is a dynamic material that undergoes a specific sequence of changes. In this poster, the authors propose different 'stages' corresponding to different hot rock technologies and features, such as hot rock cookery, hearths, and limestone temper. An experiment is designed to identify the physical and geochemical changes that occur during hearth construction and maintenance, and a methodology is proposed to identify those changes in the archaeological record. Using the archaeological assemblage of FCR from Woodpecker Cave, a Late Woodland rockshelter, we are able to use physical and geochemical changes combined with ethnographic analogy to show the sequence of maintenance behaviors performed on a hearth feature.

### [19] Function or Style? Cultural Transmission and Artifact Variation in Late Prehistoric West-Central Illinois

# Andrew J. Upton (Michigan State University)

Archaeologists have long recognized the potential of technological characterizations of material culture for assessing interactions, relational social ties, and cultural origins. However, there is little agreement within technological characterization studies as to what constitutes style or function, how these concepts relate to artifact variation and, ultimately, to human behavior. I report here on findings from the application of a quantitative model derived from cultural transmission theory focused on measurable variation in artifact assemblages instead of using vague concepts of style and function. Of particular concern is differentiating between variation in artifact attributes mainly affected by engineering constraints ("functional") from those affected mainly by social constraints ("stylistic signaling" or social information bearing). Variation is explored across twenty artifact type-attributes representing three ceramic vessel types on a database of over 1,300 vessels from two dozen sites for the period of A.D. 1200–1450 from the central Illinois River valley.

# [22] It's About Time: Using Relative Dating and Seriation to Identify Trends in Northeastern Missouri Late Woodland Period Pottery Decoration

### Vincent Warner (Amec Foster Wheeler Environment & Infrastructure)

This poster explores the temporal aspect to the location of Late Woodland period (A.D. 450–900) pottery lip decoration on cooking vessels; that is, does the location of the lip decoration (interior, crest, and exterior) change through this period in northeast Missouri. This study also investigates the Middle to Late Woodland period regional trend for thinner-walled cooking pots that has been related to engineering pots for increased thermal efficiency when cooking starchy seeds.

# [8] Spring Coulee PDC Chert Quarry and Workshop Complex in Far Western Wisconsin

### Dan Wendt (Minnesota Historical Society Volunteer)

A cluster of PDC chert quarries and workshop sites have been identified in the uplands around Spring Coulee in Pierce County, Wisconsin. Quarrying activity is focused on a specific high quality strata of tabular chert within the Oneota Formation. Quarrying is evidenced by circular pits and linear trenches that follow the elevation contour of the targeted chert. Workshop areas are situated in the uplands immediately above quarry locations or above natural outcrops of high-quality chert. This source was utilized from late Paleoindian through late Woodland. Artifacts made from chert that matches the characteristics of this source have been tentatively identified in collections from over 100 km away in Pine and Steel counties in Minnesota.

# [4] A Meta-analysis of IS6110 and Tuberculosis Skeletal Lesions: An Update to the Prior with the Milwaukee County Poor Farm Cemetery Data

### Helen Werner (University of Wisconsin-Milwaukee)

A meta-analysis was undertaken in order to further elucidate the relationship between osteological lesions suggestive of *Mycobactierum* tuberculosis infection and the insertion sequence 6110, a repetitive element marker used for identification of tuberculosis. Seven-

teen primary research studies were found to have data recording the presence or absence of lesions and which of those individuals were positive for IS6110. A Bayesian analysis was carried out in order to determine the prior proportion of individuals who had IS6110 present in their DNA from within the lesion positive population. Data collected from the Milwaukee County Poor Farm Cemetery served as an update to this prior proportion, leading to a posterior proportion of .4455. The purpose of this study was to determine the prior proportion of successes in previous literature, to update the prior using the Milwaukee County Poor Farm Cemetery data, and to aid future investigations of the relationship between IS6110 and osteological lesions.

### [9] Measuring Prehistoric Mounds: Problems and Approaches

### William E. Whittaker (University of Iowa Office of the State Archaeologist)

Using a set of 98 mounds in and near Effigy Mounds National Monument which were measured at least twice between 1901 and 2014, long-term changes in mounds were analyzed. These measurements reveal more about the limitations of mound measurements than they do about changes in the size of mounds. There are many variables that can cause mounds to change shape, including natural and anthropogenic modifications. A better system of monitoring mound change is recommended.

### [13] Variations in Historic-Era Indian Funerary Practices in Iowa

# William E. Whittaker (University of Iowa Office of the State Archaeologist)

The Historic Indian Location Database (HILD) contains location information on 787 places in Iowa associated with post-contact Native Americans derived from historic records or archaeological sites. Within the HILD, there are 139 funerary locations. These locations are analyzed for variation in mortuary practices by different tribes, including use of mounds, roofed burials, and scaffold or tree placements.

### [15] Kuhn Station Village Revisited

### Ken Williams (Cahokia Mounds Museum Society) and Michael Hargrave (Construction Engineering Research Laboratory, Southern Illinois University)

Kuhn Village is a unique, palisaded, 'house basin' village site located on a ridge spur above the upper headwaters of Silver creek. The site was placed on the National Historic Register in 1980 due to its unparalleled state of preservation. This report, the first attempt at a condition assessment/evaluation in 35 years, yields significant new data further reinforcing how critical Kuhn Village is to a data based understanding of the extent and nature of the remaining regional influences of the waning Cahokia phenomena in the 1300–1400s.

### [1] Introduction

# Heather Walder and Jessica Yann (Michigan State University)

The acculturation-based typology of diagnostic material culture presented in George Quimby's 1966 text Indian Culture and European Trade Goods has guided investigations into the era of contact among Native American and European communities. Since the 1960s, archaeologists, historians, descendant communities, and others have worked to better understand the material outcomes of intercultural encounters in the Midwest from a variety of perspectives. Here we introduce the new theoretical frameworks that continue to challenge acculturation-based models and inform current research. We provide an overview of how presenters in this session decolonize their research by breaking down dichotomies such as Indian or European, history or prehistory, and colonizer or colonized. The new techniques and perspectives emphasized in this session allow us to build on and revise our understanding of the historical archaeology of the Western Great Lakes in 2016, just in time for both the 50th anniversary of Quimby's text.

#### [21] Four Years of Excavation and 10,000 Years of Occupation at the Gehring Site

### Julie A. Zimmermann (Southern Illinois University Edwardsville)

The multicomponent Gehring site (11MS99) is located between Cahokia Creek and the bluff in the northern American Bottom, eight miles north of Cahokia. Southern Illinios University Edwardsville field school investigations indicate use of the site from late PaleoIndian through historic periods. This paper will focus on Middle Woodland and Mississippian occupations at the site. Middle Woodland features excavated include pits and one or more possible structures; Middle Woodland artifacts recovered include Hopewell and Havana pottery, an unusual figurine (Casper-the-ghost style from the waist up, but wellformed below the waist), mica, and obsidian. These finds are noteworthy given that the American Bottom was peripheral to Hopewellian activity in the Illinois Valley. Mississippian features excavated at the site include three wall trench structures; Mississippian artifacts include highly fragmented pottery, Cahokia points, a discoidal, and flint clay figurine fragment. The site was probably a farmstead during the Mississippian period, one of several known in the vicinity.

### [4] Landscapes of the Forgotten: Milwaukee County Poor Farm Cemetery

# Thomas J. Zych (University of Toledo), Brian D. Nicholls (University of Wisconsin–Milwaukee), and Patricia B. Richards (University of Wisconsin–Milwaukee)

The land use history of the Milwaukee County Institutional Grounds (County Grounds) is one beginning in the mid 1800s and continuing through to today. Through the years, the County Grounds has seen many transformation of the landscape. These include the construction of numerous buildings associated with various services provided by Milwaukee County. Additionally, a series of cemeteries, referred to as the Milwaukee County Grounds. In 1991 and 1992 and again more recently in 2013, portions of one of the cemeteries were excavated in advance of proposed expansion to the modern medical complex. This paper will focus on the distribution of existing and former facilities throughout the County Grounds and explore spatial patterns within the cemetery itself to help better define the relationship and chronology of the cemetery and County Grounds landuse.

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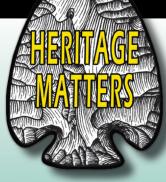
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