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61st Annual

Midwest Archaeological Conference October 19th to 21st, 2017 Indianapolis, Indiana

Hosted by

Department of Anthropology
Indiana University-Purdue University Indianapolis
and the

Indiana State Museum and Historic Sites

Department of Anthropology, University of Indianapolis

Department of Anthropology, Ball State University

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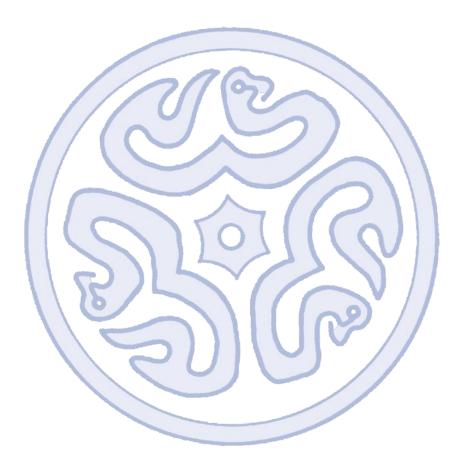
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Jeremy J. Wilson

Department of Anthropology

Indiana University-Purdue University Indianapolis

Student Paper Competition Judge

Mark Hill

Department of Anthropology, Ball State University





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2017 Midwest Archaeological Conference-Summary Schedule

	Thursday, October 19th	Friday, October 20th	Saturday October 21st
MORNING	Check-in & Registration open at 11:00 am on the second floor of The Alexander Hotel	Symposia & Sessions » Under Our Busy Feet (2), 9:00-12:00, Fletcher Place » Early Paleoindian Mobility (3), 10:00-12:00, Alexander Ballroom I » Mississippian & Fort Ancient Communities (4), 9:00-12:00, Alexander Ballroom II » Pre-Columbian Lithic Technologies & Foodways (5), 9:00-11:45, Pogue's Run » Women at Work (6), 8:00-12:00, IMOCA Other Events » MAC Inc. Executive Board Meeting, 11:30-1:30, Market Table	Symposia, Sessions, & Workshops » Woodland Societies and Pre-Columbian Ceramics (12), 9:00-12:00, Fletcher Place » The Midwestern Legacies of Lynne Goldstein (13), 9:00- 12:00, Alexander Ballroom I » Compliance, Collections, Consultation & CRM (14), 9:00- 11:30, Alexander Ballroom II » Digital Lithic Raw Material Reference Collections Roundtable Discussion (15), 9:00-11:00, Pogue's Run » The Late Pre-Columbian Lower Midwest (16), 8:00-12:00, IMOCA
AFTERNOON	MAC, Inc. Sponsored Symposium »Collaborative Engagement: Working with Responsible Private Collectors and Collections (1), 1:00- 4:45, Alexander Ballroom I/II »Current Research in Indiana Middle Woodland and Beyond Workshop and Open House, 4:00- 6:00, Indiana State Museum	Symposia, Sessions, & Workshops » Colonial Entanglements, Historic Forts, & Early Euro-American Settlements (7), 2:00-4:30, Fletcher Place » From the Highest Dune to the Lowest Floodplain (8), 1:00-5:00, Alexander Ballroom I » The Irish Diaspora and the Wisconsin Frontier (9), 2:00-4:00, Alexander Ballroom II » 2017 MAC Student Workshop (10), 3:00-5:00, Pogue's Run » Geomorphology, Built Landscapes, and Resource Utilization (11). 1:00-5:00, IMOCA	Symposia, Sessions, & Workshops » Archaeological Collections Management in the Midwest During the Curation Crisis (17), 3:00-5:00, Fletcher Place » The Midwestern Legacies of Lynne Goldstein (18), 1:30- 4:15, Alexander Ballroom I » Geophysics, Remote Sensing & Geomorphology (19), 1:30-3:00, Alexander Ballroom II » Worker's Lives in the Coalwood Logging District (20), 3:30-4:25, Alexander Ballroom II » The Deam Project (21), 1:00-5:00, IMOCA » Historic Archaeology, CRM & Campus Archaeology (22), 1:00-5:00, IMOCA
EVENING	»Welcome Reception at the Indiana State Museum, 6:00-8:00 pm, Indiana State Museum »NOTE: A shuttle bus to/from The Alexander Hotel to the museum will operate from 4:30-8:30 pm.	» Student Workshop Reception, 5:00 to 7:00 pm, Plat 99: Mixology Lounge	» MAC, Inc. Business Meeting, 5:00 to 6:00 pm, Fletcher Place » MAC, Inc. Banquet, 6:30 to 8:30 pm, Alexander Ballroom Speaker: Barbara Mills (University of Arizona); Social Network Approaches to Pre-Hispanic North American Migration and Coalescence



Midwest Archaeological Conference, Inc.

Indianapolis, 2017

Welcome to the 2017 Midwest Archaeological Conference! While various university campuses in Indiana have served as the host for previous MACs, this is the first time that the conference has taken place downtown Indianapolis. The "Circle City" has fundamentally changed over the past two decades with a vibrant arts and cultural scene, terrific culinary experiences downtown and in adjoining neighborhoods, and plenty of venues for live music and libations. We encourage you to explore the city while here and hope that you will find the neighborhood guides inserted in your registration packet useful. Beyond the convention district and downtown Indy, Fletcher Place, Fountain Square, and Mass Ave. are all in close proximity to The Alexander Hotel, offering a whole host of dining and drinking options. If you have Yelp on your tablet or phone, you will find the descriptions and ratings to be fairly accurate, especially for locally owned restaurants. If you have any questions about where to go or what to see, please feel free to ask a local IUPUI archaeologist.

It is important to note that your conference badge and registration permits you to experience the Indiana State Museum free-of-charge through Sunday, October 22nd. In addition, you will find free tickets to the Indiana Historical Society among the registration materials. We cannot thank these two institutions enough for their generous contributions.







Michigan State University

Department of Anthropology

Archaeology Program

This year's meeting includes 134 papers and 49 posters distributed between 22 sessions, including 12 symposia, workshops, and roundtable discussions. At the time of printing, this year's conference was on course to have more than 300 attendees. The MAC Treasurer, Dr. Jarrod Burks, also reports that MAC membership has significantly increased, a hopeful sign for the future of the organization. We are also excited to be hosting Dr. Barbara Mills from the University of Arizona during the conference. Her Saturday evening talk at the MAC, Inc. Banquet promises to be engaging and enlightening with likely utility for practitioners examining social networks and population interactions in mid-continental North America.

The Alexander Hotel was selected for a variety of reasons, including proximity to entertainment, the unique design, artwork, and layout, and a responsive and courteous staff. Furthermore, at the time of contract negotiations, The Alexander was one of the first businesses to publicly oppose Indiana's Religious Freedom Restoration Act (*aka* RFRA).

Many individuals contributed to the planning and organizing of this conference. We are indebted to Curator Michele Greenan, CEO Cathy Ferree, and former CEO Tom King of the Indiana State Museum and Historic Sites for their generosity and support. Similarly, none of this would have been possible without our sponsors that are listed throughout the program and showcased around the venue. We must also thank our colleagues at Ball State University and the University of Indianapolis for their support. Lastly, Angela Collins, John Doershuk, Nick Alhambra, Erica Ausel, Ryan Peterson, Paul Mullins, Eric Hamilton, and Jeannie Regan-Dinius were invaluable during the entire process; we cannot thank them enough for their support and encouragement.

We hope everyone enjoys their time in Indianapolis at the 2017 MAC.

~Jeremy J. Wilson, Conference Organizer & Program Chair and the Graduate Student Cohort from the Department of Anthropology at IUPUI







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61st Annual Midwest Archaeological Conference October 19th to 21st, 2017 Indianapolis, Indiana

Registration:

The Alexander Hotel, Second Floor Lobby

Thursday, October 19th, 11:00 am to 5:00 pm Friday, October 20th, 7:30 am to 5:00 pm Saturday, October 21st, 7:30 am to 2:00 pm

Computer Access:

Free wireless internet throughout The Alexander Hotel

Vendor & Book Room: Renaissance Place

Thursday, October 19th, 1:00 to 5:00 pm Friday, October 20th, 8:00 am to 5:00 pm Saturday, October 21st, 8:00 am to 4:30 pm

MAC Meeting Vendors:

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Meetings & Special Events

Indiana Archaeological Council (IAC) Meeting

Room 008 of Good Hall (1396 Windermire St.) at the University of Indianapolis; Thursday, October 19th, 10:00 am

Workshop on Current Research in Indiana Middle Woodland and Beyond Indiana State Museum; Thursday, October 19th, 4:00-6:00 pm

Midwest Archaeological Conference Reception

Indiana State Museum; Thursday, October 19th, 6:00-8:00 pm

MAC, Inc. Executive Board Meeting and Lunch

Market Table Restaurant; Friday, October 20th, 11:30 am-1:30 pm

MAC Student Workshop Reception

Plat 99: Mixology Lounge; Friday, October 20th, 5:00-7:00 pm

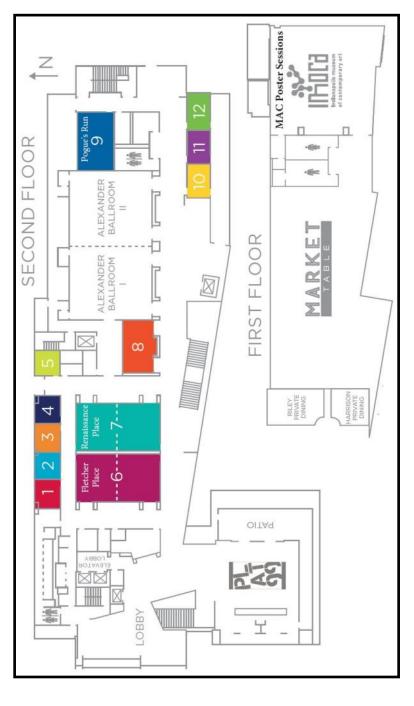
MAC, Inc. Business Meeting

Fletcher Place; Saturday, October 21st, 5:00-6:00 pm

MAC, Inc. Banquet

Alexander Ballroom; Saturday, October 21st, 6:30-8:30 pm with 7:30 pm Speaker: Barbara Mills, Professor, University of Arizona; Social Network Approaches to Pre-Hispanic North American Migration and Coalescence

The Alexander Hotel Floor Plan



Thursday Afternoon, October 19th

1. 2017 MAC Sponsored Symposium

Collaborative Engagement:

Working with Responsible Private Collectors and Collections

Alexander Ballroom I/II: 1:00 to 4:45 pm

Co-Chairs: Michael Shott (University of Akron), Mark Seeman (Kent State University), and Kevin Nolan (Ball State University)

1:00 pm	Michael Shott (University of Akron); The Ethics of Profes sional-Collector Collaboration
1:15 pm	Madeleine G. Evans (Illinois State Archaeological Survey), Brad H. Koldehoff (Illinois Department of Transportation), Thomas J. Loebel (Illinois State Archaeological Survey); Documenting Private Collections in Illinois: The Robert Reber Collection
1:30 pm	Collector Contributions; Charlie Fulk
1:45 pm	Constance Arzigian (University of Wisconsin-La Crosse), Jean Dowiasch (University of Wisconsin-La Crosse); Avoca tional Archaeology: Expanding the Archaeological Record beyond CRM
2:00 pm	James R. Leak; The Headwaters of Redwood Creek and Vicinity within the Iroquois Till Plain Physiographic Zone
2:15 pm	W. Lorenz Bruechert ; Who is Interested in Archaeology? Building a Trusting Relationship among Land Owners and Collectors in Haldimand-Norfolk County, Ontario, Canada
2:30 pm	BREAK
2:45 pm	Jerrel Anderson ; Between Two Worlds: An Avocational's Account of the Gulf Between Academics and Collectors
3:00 pm	William A. Lovis (Michigan State University); Preserving Michigan's Archaeological Heritage: A Collective Endeavor

3:15 pm	Dan Wendt (Minnesota Archaeological Society); Informatics for the Stone Age: Knowledge Management Approach to Lithic Raw Material Identification
3:30 pm	Brian G. Redmond (Cleveland Museum of Natural History), Ann S. DuFresne (Cleveland Museum of Natural History); Dealing with Museum Legacy Collections in the Twenty- first Century: Three Case Studies from Ohio
3:45 pm	Mark F. Seeman (Kent State University); Windows to Ohio's Past: The Professional/Amateur Archaeological Nexus
4:00 pm	Kevin C. Nolan (Ball State University); The Single-Pass Sur vey and the Collector: A Reasonable Effort in Good Faith?
4:15-4:45 pm	Panel Discussion

Thursday Afternoon, October 19th from 4:00 to 6:00 pm

Current Research in Indiana Middle Woodland and Beyond: A workshop and open house hosted by the Indiana State Museum and Historic Sites and Indiana Archaeology Council at the Indiana State Museum (650 W Washington St).

Thursday Evening, October 19th from 6:00 to 8:00 pm

Welcome Reception at the Indiana State Museum with a preview their new exhibit *The Power of Poison*, organized by the American Museum of Natural History, New York, and locally supported by Uncle Bill's and Barnes & Thornburg LLP.

NOTE: A shuttle bus to and from The Alexander Hotel to the Indiana State Museum will be operating from 4:30 to 8:30 pm. Discount parking passes for the state museum garage will be available at the reception.

Friday Morning, October 20th

2. Under Our Busy Feet:

Historical Archaeology in Urban Contexts in the Midwest

Fletcher Place: 9:00 am to 12:00 pm

Chair: Amy L. Johnson (Indiana Division of Historic Preservation & Archaeology)

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dence from South Bend, Indiana

11:00 am	Michael Striker (Gray & Pape); The Dead Under Our Feet: An Urban Cemetery in Cincinnati
11:15 am	Bob Genheimer (Cincinnati Museum Center); Under Overthe-Rhine: An Emergency Salvage of 19th Century Urban Features in Cincinnati.
11:30 am	Christine Thompson (Ball State University), Kevin C. Nolan (Ball State University); A Village Built over a Battlefield: Ur ban Archaeology at the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794)
11:45 am	Kevin Cupka Head (University of Illinois); The Old Prison South: Antebellum Institutional Confinement in Southern Indiana

3. Early PaleoIndian Mobility and Interaction in the Upper Midcontinent

Alexander Ballroom I: 10:00 am to 12:00 pm

Chair: Brad Koldehoff (Illinois Department of Transportation)

10:00 am	Brad Koldehoff (Illinois Department of Transportation), Henry Wright (University of Michigan); The "Shoop Effect": Early PaleoIndian Long-distance Mobility
10:15 am	Thomas La Duke (Michigan Archaeological Society), Henry Wright (University of Michigan); The Palmer Site: An Early PaleoIndian Site in the Western Erie Basin
10:30 am	Christopher Ellis (University of Western Ontario), Scott Eckford (University of Western Ontario), William Fox (Trent University), Adrian Burke (Université de Montréal), D. Brian Deller (University of Western Ontario); Rogers: Lithic Procurement Patterns at a Large Ontario "Clovis-Like" Site
10:45 am	Jonathan C. Lothrop (New York State Museum); Late Pleis tocene Peoples in Western New York

11:00 am

G. Logan Miller (Illinois State University), Metin I. Eren
(Kent State University), Brian G. Redmond (Cleveland Muse
um of Natural History), Briggs Buchanan (University of
Tulsa), Matthew T. Boulanger (Southern Methodist University); Paleo Crossing: A Synthesis of Recent Research

11:15 am

Edward W. Herrmann (Indiana University), Mackenzie J.

Cory (Indiana University), Katie Hunt (Indiana UniversityPurdue University, Indianapolis), John Flood (Indiana
University-Purdue University, Indianapolis), Josh Myers
(Indiana University-Purdue University, Indianapolis); Early
PaleoIndian Mobility and Lithic Resource Use in Indiana

11:30 am

Brad Koldehoff (Illinois Department of Transportation),

Daniel S. Amick (Loyola University), Thomas J. Loebel

(Illinois State Archaeological Survey); From the Wabash to
the Mississippi: Long-Distance Mobility and the MuellerKeck Complex, St. Clair County, Illinois

11:45 am Thomas J. Loebel (Illinois State Archaeological Survey),
Matthew G. Hill (Iowa State University), John Lambert
(Illinois State Archaeological Survey); The Big Picture:
Patterns in the Clovis, Folsom, and Late PaleoIndian Records
of Wisconsin and Illinois

4. General Session:

Mississippian & Fort Ancient Communities of the Lower Midwest Alexander Ballroom II: 9:00 am to 12:00 pm

9:00 am

Allison L. Huber (Illinois State Archaeological Survey); Pre
historic Dog Pathology in the American Bottom: Reanalysis
of the Range Site (11S47) Canid Assemblage, St. Clair
County, Illinois

9:15 am Amanda J. Butler (University of Illinois at Urbana-Champaign); The Mission, Should You Accept It: The Built Space of a Mississippian Mission

9:30 am	Erin M. Benson (University of Illinois at Urbana-Champaign); Composing the Late Cahokian Countryside: Excavations at the Rhea Site (11S2086), St. Clair County, Illinois
9:45 am	Duane Esarey (Illinois State Archaeological Survey), Robert McCullough (Illinois State Archaeological Survey), Gregory Wilson (UC, Santa Barbara); Fandel Mounds: A Lohmann Horizon Mississippian Mound Center in the Central Illinois River Valley
10:00 am	Meghan E. Buchanan (Auburn University), Mary Wernette; Early Mississippian Faunal Practices at Angel Mounds: Re sults from the Analysis of Feature 37
10:15 am	Erin Donovan (Indiana University-Purdue University Indian apolis), Jeremy J. Wilson (Indiana University-Purdue University Indianapolis); Context is Everything: Addressing Radiometric Dating Needs at Orendorf Mounds
10:30 am	BREAK
10:45 am	Alexander W. Anthony (University of Wisconsin-Milwaukee), Marcus A. Schulenburg (University of Wiscon sin-Milwaukee), Robert A. Cook (Ohio State University); Dig ging in the Archives: Using Historic Land Ownership Docu ments to Analyze the Guard Site, an Early Fort Ancient Vil lage in Southeast Indiana
11:00 am	Matthew Davidson (Daniel Boone National Forest), Amber E. Osterholt (University of Nevada, Las Vegas); Buried with Children: Mortuary and Bioarchaeological Patterns at the Fort Ancient Hardin Site
11:15 am	David Pollack (Kentucky Archaeological Survey), A. Gwynn Henderson (Kentucky Archaeological Survey); The Middle Ohio Valley's Fort Ancient Transformation – A View

from Fox Farm

11:30 am

9:30 am

Thomas Royster (University of Kentucky), Bruce L. Manza no (University of Kentucky), David Pollack (Kentucky Ar chaeological Survey), Jonathan Davis (University of Kentucky); Deer Element Distribution within Fox Farm, a Large Fort Ancient Village in Mason County, Kentucky: Evidence of Meat Sharing?

5. General Session:

Pre-Columbian Lithic Technologies & Foodways

9:00 am

Katherine M. Sterner (University of Wisconsin-Milwaukee),
Paul J. Moriarity (University of Wisconsin-Milwaukee);
Communities in Stone: Examining Group Identity in Late
Prehistoric Wisconsin through Lithic Analysis

9:15 am Sarah Hinkelman (Ohio State University); From Formal to Efficient: Variation in Lithic Technology from the Late Wood land to Fort Ancient Period in the Ohio River Valley

Metin I. Eren (Kent State University), Michelle R. Bebber (Kent State University), Stephen J. Lycett (University at Buffalo); Developing a stable point: Evaluating the Temporal and Geographic Consistency of Late Prehistoric Unnotched Triangular Point Functional Design in Midwest

9:45 am Molly R. Mesner (Indiana University), Melody K. Pope (Indiana University); Polishing Our Understanding: Micro

wear Analysis at the Mann Site

10:00 am William Green (Logan Museum of Anthropology, Beloit College), Meghan C. Caves (Anchorage, Alaska), Leslie Lea Williams (Beloit College); The Myrick Park Mound Group

(47LC10), La Crosse, Wisconsin: Early Investigations and

Recent Analyses

ern North America

10:15 am	Christopher W. Schmidt (University of Indianapolis); Dental Microwear Texture Analysis in Bioarchaeology
10:30 am	BREAK
10:45 am	Emily Bartz (Illinois State University); Pit Features: A View from Grand Island, Michigan
11:00 am	Natalie Carpiaux (University of Wisconsin-Milwaukee), Richard W. Edwards IV (University of Wisconsin- Milwaukee); Pits, Pots, and Paleobot: Feature Analysis at the Koshkonong Creek Village
11:15 am	Wendy Munson-Scullin (Midwest Ethnohorticulture); Dis tribution of C4 and C3 Plants in the North-Central States
11:30 am	Richard W. Edwards IV (University of Wisconsin-Milwaukee), Robert J. Jeske (University of Wisconsin-Milwaukee); How Much is Enough? Evaluating the Role of Maize in the Late Prehistoric of the Prairie Peninsula

6. Women at Work: Acknowledging Women's Legacy in Archaeology IMOCA (Indianapolis Museum of Contemporary Art; First Floor): 8:00 am to 12:00 pm

Co-Chairs: Leslie Drane & Kelsey T. Grimm, Indiana University

- Leslie E. Drane (Indiana University), Elizabeth Watts Malouchos (Indiana University), Sarah E. Baires (Eastern Connecticut State University); Harriet M. Smith: The First Female Field Archaeologist in Illinois -
- **2. Kelsey T. Grimm** (Indiana University); Dr. N'omi Greber: A Monumental Professional of the Ohio Hopewell
- **3. Alex E. Elliot** (Indiana University); Retyping the 'Female Archaeologist': The Career and Contributions of Dr. Emily J. Blasingham
- **4. Kelsey T. Grimm** (Indiana University), **Lydia Lutz** (Indiana University); Mother of the GLOVE: Erminie Wheeler-Voegelin (1903-1988)

- **5. Molly R. Mesner** (Indiana University); Passion to Spare, Publications to Prove It: The Story of Frances Martin
- 6. Angela R. Collins (University of Iowa), John F. Doershuk (University of Iowa), David M. Gradwohl (Iowa State University); Mildred Mott Wedel—A Pioneering Iowan Archaeologist
- 7. Della Collins Cook (Indiana University); Charlotte Day Gower Chapman (1902-1982): Archaeologist, Ethnologist, or Physical Anthropologist?
- **8. Savannah Leach Newell** (Indiana University); Alice Struever: Crucial Contributor to Flotation Methodology
- Eve A. Hargrave (Illinois State Archaeological Survey/Prairie Research Institute); Elaine Bluhm Herold: A Renaissance Woman of Illinois

Friday Morning/Afternoon, October 20th

11:30 am to 1:30 pm MAC Inc. Executive Board Meeting and Lunch by invitation at The Market Table in Riley Private Dining Room, First Floor, The Alexander Hotel

Friday Afternoon, October 20th

7. General Session:

Colonial Entanglements, Historic Forts, & Early Euro-American Settlements

Fletcher	Place:	2:00 to	4:30	pm
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2:00 pm	Matthew E. Velguth; The Gills Rock Petragraphs: Archives of Stone
2:15 pm	Janet Brashler (Grand Valley State University), Wesley Jackson (Grand Valley State University); Who Knew? The 18th Century Historic Component at Spoonville (200T1)
2:30 pm	Michael Strezewski (University of Southern Indiana), Dar rin Rubino (Hanover College); Dendrochronology in the Midwest? - Dating a Burned Native American Structure from Fort Ouiatenon
2:45 pm	Rob Mann (St. Cloud State University); Moravians, a Proph et, and Pipes: A Critical Evaluation of the Smoking Parapher nalia at the Forks of the Wabash Miami Indian Village
3:00 pm	BREAK
3:15 pm	Mark J. Wagner (CAI-SIUC), Ryan M. Campbell (CAI-SIUC); Bound to the Western Waters: Searching for the Site of Lew is and Clark's Fort Kaskaskia
3:30 pm	Charles Peliska (St. Cloud State University); Searching for Fort Holes
3:45 pm	Heather Walder (Northern Illinois University), Alexander D. Woods (Center for Environmental Management of Military Lands); An Early-mid 19th Century Component at Stillwell Crossing, Fort McCoy, Wisconsin
4:00 pm	Kyla Valenti (Michigan Technological University), Cooper D. Sheldon (Michigan Technological University), Morgan Da vis (Michigan Technological University); Excavations in

Copper Harbor: The Astor House and Range Light Keeper's House

4:15 pm **Brendan Doucet** (Michigan Technological University); The Contemporary Uses of Stamp Sands

8. From the Highest Dune to the Lowest Floodplain

(and most places in between):

The Archaeological Journey of William A. Lovis in the North American Mid-Continent

Alexander Ballroom I: 1:00 to 5:00 pm

Co-Chairs: Sean B. Dunham (USDA Forest Service) & G. William Monaghan (Indiana University)

1:00 pm	Dillon H. Carr (Grand Rapids Community College); Territori al Mobility during the Parkhill Phase in Southern Michigan and Ontario
1:15 pm	Janet Brashler (Grand Valley State University), Donald Gaff (University of Northern Iowa); The View from On Top: Land scapes and Spaces Along the Lower Muskegon River in Michigan
1:30 pm	Sean B. Dunham (USDA Forest Service); Location, Location, Location or Home is Where the Hearth Is? A Foray into Per sistent Places in da UP
1:45 pm	Andrew Upton (Michigan State University); Cultural Trans mission and Multilayer Social Network Relationships at the Intersection of Mississippian and Oneota Worlds
2:00 pm	Lynne Goldstein (Michigan State University); Marshes, Swamps, and Other Wetlands: Landscape and Meaning in the Great Lakes
2:15 pm	Terrance J. Martin (Illinois State Museum and Michigan State University), Angela R. Perri (Durham University and

	Max Planck Institute for Evolutionary Anthropology); Osteological Distinctions between White-tailed Deer and Caribou: Implications for Environmental Archaeology in the Northern Great Lakes Region
2:30 pm	Michael J. Hambacher ; Challenges in the Identification and Interpretation of Large Deep Pit Features: A Case Study from the M-231 Project in West-Central Lower Michigan
2:45 pm	Kathryn Frederick (Michigan State University), Rebecca Albert (Michigan State University), William Lovis (Michigan State University); I'll Take Mine Well-done: A Closer Look at an Acorn Parching Pit
3:00 pm	BREAK
13:15 pm	Susan M. Kooiman (Michigan State University); Cooking Upper Great Lakes Fish: New Perspectives from Stable C:N Isotope Analysis of Carbonized Pottery Residues
3:30 pm	Mark Hill (Ball State University); Kevin C. Nolan (Ball State University); Prehistoric Copper Mining in the Ontonagon Basin
3:45 pm	John P. Hart (New York State Museum); Ancient Cooking Messes and the Search for Early Maize in the Lower Great Lakes Region
4:00 pm	Jodie O'Gorman (Michigan State University); William Lovis, Curator of Anthropology
4:15 pm	Katie Egan-Bruhy (Commonwealth Heritage Group, Inc.); "We've Come A Long Way Baby" – Lovis' Contributions to Great Lakes Subsistence Research
4:30 pm	G. William Monaghan (Indiana University); My Colleague, Friend, and Mentor William A. Lovis: 40 years of Collabora tion across the Great Lakes
4:45 pm	G. William Monaghan (Indiana University), Sean B. Dun ham (USDA Forest Service); From the Highest Dune to the

Lowest Floodplain (and most places in between): The Archaeological Journey of William A. Lovis in the North American Midcontinent

9. The Irish Diaspora and the Wisconsin Frontier:

A View from the McHugh Site

Alexander Ballroom II: 2:00 to 4:00 pm

consin

Chair: John D. Richards (University of Wisconsin-Milwaukee)				
2:00 pm	John D. Richards (University of Wisconsin-Milwaukee); The Archaeology of the McHugh Site			
2:15 pm	Jennifer L. Picard (University of Wisconsin-Milwaukee); McHugh Family History in the Context of Irish Immigrant Settlement in the Rural American Midwest			
2:30 pm	Alexander W. Anthony (University of Wisconsin-Milwaukee); The Materiality of Ethnic Identity: A Study of the Ceramic Assemblage at the McHugh Site			
2:45 pm	Robert W. Vander Heiden (University of Wisconsin-Milwaukee); Material Culture at the McHugh Site: Glass Bottles, Immigrant Health, and the Emergence of American Popular Culture			
3:00 pm	BREAK			
3:15 pm	Rachel C. McTavish (University of Wisconsin-Milwaukee); Investigating Cultural Identity and Assimilation Through Foodways: A Case Study from the McHugh Site			
3:30 pm	Patricia B Richards (University of Wisconsin-Milwaukee); Irish-American Cemeteries and the McHugh Family Burials			
3:45 pm	Robert J. Jeske (University of Wisconsin-Milwaukee); Find ing Identity: Rural Irish Settlement in mid-19th Century Wis			

10. 2017 MAC Student Workshop:

Collaboration and Consultation with Descendant,

Local, and Displaced Communities

Pogue's Run: 3:00 to 5:00 pm

The 2017 Midwest Archaeological Conference Student Workshop will focus on collaboration and consultation with descendant, local, and displaced communities. A panel of six archaeologists from a variety of state and federal agencies, academic institutions, and museums will engage students in an open forum designed to foster conversations about regulated and effective forms of collaboration and consultation. All interested students are invited to attend and participate in this discussion as we work towards an open and productive profession. This workshop will be followed by a student reception in the Plat 99: Mixology Lounge on the second floor at The Alexander Hotel.

Organizers: John Flood (Indiana University-Purdue University, Indianapolis), Katie Hunt (Indiana University-Purdue University, Indianapolis), Deniz Enverova (University of Notre Dame), and Seth Grooms (Washington University-St. Louis)

Panelists: Angie Doyle (Hoosier National Forest), Elizabeth Watts Malouchos (Indiana University), John Doershuk (University of Iowa Office of the State Archaeologist), Paul Mullins (Indiana University-Purdue University, Indianapolis), Larry Zimmerman (Indiana University-Purdue University, Indianapolis), and Brad Koldehoff (Illinois Department of Transportation)

11. General Poster Session:

Geomorphology, Built Landscapes, and Resource Utilization

IMOCA (Indianapolis Museum of Contemporary Art; First Floor): 1:00 to 5:00 pm

- Andrew Anklam (University Wisconsin, La Crosse), Dan Wendt (Minnesota Archaeological Society); Modeling Proglacial Shore Lines of Glacial Lake Agassiz Around Prehistoric Quarries in Northern Minnesota
- Matthew P. Purtill (Ball State University); Windblown Sediments and their Potential for Late Pleistocene/Holocene Site Burial: An Indiana and Ohio Example
- S. Gideon Katz (Midwest Archaeological Research Services), Jay Martinez (Midwest Archaeological Research Services); Coulee Detached: Frozen Ground Excavation Along the Kankakee River
- 4. James Hill (Illinois State University), James Skibo (Illinois State University), G. Logan Miller (Illinois State University); Methodological Considerations for the Study of Quartz and Quartzite Stone tools: A Case Study From Grand Island Michigan
- 5. Kaye Grob (Cardno, Inc.), Kathleen Settle (Cardno, Inc.); The Chronology of Site 12LA0091, Representing the Unique Use of a Landform in the Kankakee Marsh, Lake County, Indiana
- Tyler R. E. Heneghan (Illinois State University); In Search of the Ohio Hopewell in the Uplands: A Lithic Analysis of the Spracklen site (33GR1585)
- 7. Bret J. Ruby (National Park Service), Friedrich Lueth (German Archaeological Institute), Rainer Komp (German Archaeological Institute), Jarrod Burks (Ohio Valley Archaeology, Inc.), Timothy Darvill (Bournemouth University); Revealing Ritual Landscapes at Hopewell Culture National Historical Park
- 8. Elizabeth Straub (Center for American Archeology), Erin Donovan (Indiana University-Purdue University Indianapolis), Kenzie May

- (Illinois State University), Laila Blumenthal-Rothchild (Center for American Archeology), Amanda Wissler (Arizona State University), Jason L. King (Center for American Archeology), Jane E. Buikstra (Arizona State University); Recent Excavations at Mound House (11GE7): A Preliminary Analysis of Features
- Timothy D. Everhart (University of Michigan), Laura M. Bossio (University of Michigan), James P. Torpy (University of Michigan); The Woodland Ohio Monumentality Project (W.O.M.P.): Report from the 2017 Field Campaign at the Steel Group site in Ross County, Ohio
- Alexandra Flores (Beloit College), Jarrod Burks (Ohio Valley Archaeology, Inc.); Putting Ohio Mounds in Context: Geophysical Survey around Miamisburg Mound and Clark Mound
- 11. Paige Dobbins (Illinois State University), Abigail Peeples (Illinois State University); Imagining Schroeder: Contextualizing Mortuary Patterning in an Illinois Mound site using GIS
- **12. Elizabeth Wilk** (EBI Consulting), **Maria O. Smith** (Illinois State University); Lower Limb Posturing Behavior in a Late Woodland West-Central Illinois Population
- 13. Jennifer Benish (Illinois State Archaeological Survey), Luke Cavallaris (Illinois State Archaeological Survey); The Huber Site: Revisiting a Type Site
- 14. AmySue Greiff (Beloit College), Drew Agnew (Beloit College), Rick Edwards (University of Wisconsin-Milwaukee), Rachel McTavish (University of Wisconsin-Milwaukee); Fauna For Thought: Preliminary Comparative Analysis of Oneota Faunal Refuse Among Different House Structures
- 15. **Robert E. Ahlrichs** (University of Wisconsin–Milwaukee); The Dunn Farm Site: A New Find in Northwest Iowa
- 16. Robert F. Sasso (University of Wisconsin-Parkside), Daniel J. Joyce (Kenosha Public Museums), Joy J. Wolf (University of Wisconsin-Parkside); A Wisconsin Archeological Society Forum on Culturally Modified Trees

Saturday Morning, October 21st

12. General Session:

Woodland Societies and Pre-Columbian Ceramics

Fletcher	Place:	9:00	am to	12:00	pm
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Fletcher Place: 9:00 am to 12:00 pm				
9:00 am	David W. Benn (Bear Creek Archeology); A Unified Theory of Cosmogram Decorations on Potteries of the Upper Mid west: Part I, Early Woodland Period			
9:15 am	Michelle Rae Bebber (Kent State University), Linda Spur lock (Kent State University), David M. Price (University of Wollongong), Metin I. Eren (Kent State University); Description and Thermoluminescence (TL) Dating of an Al leged Mobiliary Clay Human Figurine from Hopeton Earth works, Ross County, Ohio			
9:30 am	Christopher Carr (Arizona State University); Three World View Metaphors that Scioto Hopewell Peoples Lived			
9:45 am	David W. Benn (Bear Creek Archeology); A Unified Theory of Cosmogram Decorations on Potteries of the Upper Mid west: Part II, Middle Woodland Period			
10:00 am	Ashley M. Rutkoski (Kent State University); Michelle Rae Bebber (Kent State University), Metin I. Eren (Kent State University); Assessing the Distribution of Limestone Temper in Southern Ohio			
10:15 am	Adam Sutherland (University of Illinois, Urbana- Champaign); Recent Analysis of Ceramic and Lithic collec tions from the Carlin Site (11C124): A White Hall Phase site in the Lower Illinois Valley			
10:30 am	BREAK			
10:45 am	Katy J. Mollerud (Peabody Museum, Harvard University); Connecting Cambria: Ceramic Attribute Analysis and Model			

ing Intra-Site Interaction

11:00 am	Ronald C. Schirmer (Minnesota State University Mankato); A New Phase Sequence for Red Wing Oneota
11:15 pm	Tania Milosavljevic (University of Wisconsin-Milwaukee), Hannah Blija (University of Wisconsin-Milwaukee), Sean Gleason (University of Wisconsin-Milwaukee), Richard W. Edwards (University of Wisconsin-Milwaukee); The Koshko nong Style: An Examination of the 2017 KCV Ceramic Assem blage
11:30 am	Madeleine McLeester (University of Notre Dame), Mark Schurr (University of Notre Dame), Terrance Martin (Illinois State Museum); Marine Shell, Painted Pottery, and a Curious Point: A Report on Ongoing Excavations at the Very Late Prehistoric Middle Grant Creek site in Northern Illinois
11:45 am	Jaelyn E. Roland (University of Wisconsin-La Crosse); Cul tural Changes during the Protohistoric Period: An Oneota Case Study

13. The Midwestern Legacies of Lynne Goldstein:

A Symposium in Her Honor, Part 1

Alexander Ballroom I: 9:00 am to 12:00 pm

Co-Chairs: Sissel Schroeder (University of Wisconsin-Madison) and Jodie O'Gorman (Michigan State University)

9:00 am	Sissel Schroeder (University of Wisconsin-Madison); Jodie O'Gorman (Michigan State University); Lynne Goldstein: Midwesterner, Mortuary Archaeologist, Mentor, and Much More
9:15 am	James A. Brown (Northwestern University); Mortuary Anal ysis in the Hands of Lynne Goldstein
9:30 am	Jane E. Buikstra (Arizona State University, CAA), Jason L. King (Center for American Archeology); Where, Oh Where are the Early Late Woodland Burials in the LIV?

9:45 am	Lynne P. Sullivan (University of Tennessee); Deciphering Mississippian Communities in East Tennessee: Mortuary Studies, Spatial Data, and Lynne Goldstein
10:00 am	Donald Gaff (University of Northern Iowa); Pretty Girls Make Graves: Sex and Death at Aztalan
10:15 am	Jodie O'Gorman (Michigan State University); Jennifer Beng ston (Southeast Missouri State University); Oneota Vulner ability and Resiliency
10:30 am	BREAK
10:45 am	Della Collins Cook (Indiana University); A Dissertation with Legs: Lynne Goldstein's Influence on Physical Anthropology
11:00 am	William Green (Logan Museum of Anthropology, Beloit College); Inventing and Reinventing Wisconsin's Burial Site Legislation
11:15 am	Paula Porubcan Branstner (Illinois State Archaeological Survey); The Southeastern Wisconsin Archaeology Program (SEWAP) 30 Years Later: A Model for Heritage Steward ship in the Forest Preserves of Cook County, Illinois
11:30 am	Lisa N Bright (Michigan State University); The Michigan State University Campus Archaeology Program
11:45 am	Autumn M. Painter (Michigan State University), Jeffrey M. Painter (Michigan State University), Susan M. Kooiman (Michigan State University); Documenting Historic Foodways at Michigan State University

14. General Session:

Compliance, Collections, Consultation & CRM

Alexander Ballroom II: 9:00 to 11:30 am

9:00 am	Sharron Santure (Illinois Natural Resources Conservation Service); NRCS Prototype PA - Another Way to do Section 106
9:15 am	Thomas E. Emerson (Illinois State Archeological Survey), Steve Boles (Illinois State Archeological Survey), Made leine Evans (Illinois State Archeological Survey), Thomas Loebel (Illinois State Archeological Survey), David Nolan (Illinois State Archeological Survey), Dale L. McElrath (Illinois State Archeological Survey), Robert Reber (Illinois State Archeological Survey); Bridging Troubled Waters: Pro fessionals, Avocationals, and Collectors find Common Ground at the Illinois State Archaeological Survey
9:30 am	Erin I. Donovan (Indiana University-Purdue University Indianapolis), Teresa Nichols (Indiana University), Leslie E. Drane (Indiana University), Davina R. Two Bears (Indiana University), Krystiana Krupa (Indiana University), Ricardo Higelin Ponce de León (Indiana University); NAGPRA Matters: Reflections from Emerging Professionals
9:45 am	Philip G. Millhouse (Red Gates Archaeology LLC), Christie Trifone-Simon (Jo Daviess Conservation Foundation); Ar chaeological Preservation in Northwestern Illinois: Cultural Landscapes, Native American Communities and Public Participation
10:00 am	Sara Pfannkuche (University of Wisconsin-Waukesha/Rock County); The Archives: A Good Place for Finding Documenta tion of Native American Mounds
10:15 am	Veronica Parsell (Cardno, Inc.), Cathy Draeger-Williams (Indiana SHPO), Paul Leffler (USACE Chicago District), George Strack (Miami Nation of Oklahoma), Jason Wesaw

(Pokagon Band of Potawatomi); One Project, Multiple Per spectives: An Example of Successful Section 106 Consulta

tion in Northwest Indiana

10:30 am BREAK

10:45 pm Mark L. Madsen (Chicago Archaeological Society); Survey

> of Prehistoric Sites at the Carl W. Steiber Farm, Which Be came Part of Lincoln Fields Race Track in 1926 and Balmoral

Park Race Track in 1955

11:00 am **Pete Geraci** (University of Wisconsin–Milwaukee); Why

Archaeology and Environmentalism Make the Perfect Cou

ple: Love Stories from an Archaeologist's Tryst

with the Environmental Community in Milwaukee, WI

11:15 am Monette Bebow-Reinhard (Grimms Etc); Tracking Copper

Artifact Trade with the Copper Artifact Master Database

(CAMD)

15. 2017 Midwest Archaeology Conference Round Table Discussion:

Digital Lithic Raw Material Reference Collections

Pogue's Run: 9:00 to 11:00 am

Over the past decade, several lithic raw material reference collections from the upper Midwest have been organized and made available for archaeological research. These resources vary from web-based assemblages to CD resources to paper copies and all have proved effective and useful. Participants at four upper Midwest lithic workshops have agreed that providing lithic raw material information and access through current and expanding digital media is the most effective way to reach the widest audiences. These biannual gatherings have yielded a loose set of guidelines regarding collection contents and displays that would be useful to archaeological research on a variety of lithic topics. Functional standards for digital dissemination have yet to be established. This round table will be devoted to discussing deployment via extant media, best practices, and issues around creation, management and sustainability. Join your lithic colleagues and help produce a working document that

will guide the construction, establishment, and continuation of lithic raw material reference enabling current and future archaeological research.

Chair: Mark Anderson (University of Iowa Office of the State Archaeologist)

16. General Poster Session:

The Late Pre-Columbian Lower Midwest

IMOCA (Indianapolis Museum of Contemporary Art; First Floor): 8:00 am to 12:00 pm

- Alleen Betzenhauser (Illinois State Archaeological Survey), Sarah
 Harken (Illinois State Archaeological Survey), Victoria Potter (Illinois
 State Archaeological Survey); Investigating Stumpware: Evidence for
 Pre-Mississippian Nixtamalization in Illinois
- 2. Robert G. McCullough (Illinois State Archaeological Survey), Tom Crapnell, Rachel Lawrence (Illinois State Archaeological Survey), Tom Loebel (Illinois State Archaeological Survey), Sarah Scattergood (Illinois State Archaeological Survey), Spencer Skadden, B. Jacob Skousen (Illinois State Archaeological Survey), Daniel Smith (Illinois State Archaeological Survey); Geophysical Survey at the Multiethnic Noble-Wieting site (11ML24) in the East Central Illinois Prairie
- 3. G. Logan Miller (Illinois State University), B. Jacob Skousen (Illinois State Archaeological Survey), Robert G. McCullough (Illinois State Archaeological Survey); Preliminary Results of a Joint ISU and ISAS Field School at the Noble-Wieting Site (11ML24)
- 4. B. Jacob Skousen (Illinois State Archaeological Survey), Robert G. McCullough (Illinois State Archaeological Survey); Magnetometry Survey at the Otter Pond Site (11LW9), a Vincennes Phase Town in Southeastern Illinois
- 5. Melissa R. Baltus (University of Toledo), Sarah E. Baires (Eastern Connecticut State University); Daily Life on Downtown Cahokia's Edge: Summary of Spring Lake Tract Excavations

- 6. Caitlin G. Rankin (Washington University-St. Louis); Sub-mound Platform Construction at Cahokia Mounds: New Evidence from 2017 Excavations
- 7. Michael Brent Lansdell (Illinois State Archaeological Survey), Tamira K. Brennan (Illinois State Archaeological Survey), Alleen Betzenhauser (Illinois State Archaeological Survey); Wings, Warriors, and Weeping Eyes: Spatial and Temporal Distribution of Ramey Incised Motifs at the East St. Louis Mound Precinct
- Eve A. Hargrave (Illinois State Archaeological Survey), Lenna M.
 Nash (Illinois State Archaeological Survey); Human Cranial
 Earspools at the East St. Louis Precinct, St. Clair County, Illinois
- Melinda Martin (University of Memphis); Mississippian Cultural
 Period Iconography and Ethnohistoric Accounts of Tornado Folklore
- 10. Kayla Kauffman (Indiana University-Purdue University Indianapolis); Unearthing Prehistoric Settlement Patterns: Using GIS to Understand Mississippian Settlement Patterns in the Central Illinois River Valley
- 11. John Flood (Indiana University-Purdue University Indianapolis), Lawrence A. Conrad (Upper Mississippi Valley Archaeology Research Foundation); Star Bridge's Conflagration and Archaeologists' Consternations: A Preliminary Analysis of the Glen and Marry Hanning Collection
- **12. Scott Hipskind** (Indiana University-Purdue University, Indianapolis); Pardon Our Dust: Extant Artifact Collections and the Walsh Site (11Br11)
- 13. Nicole Silva Klarmann (Michigan State University); Within These Walls: A Report of 2017 Test Excavations on the Structures of Morton Village
- 14. Marcus Schulenburg (University of Wisconsin-Milwaukee), Kevin Garstki (Marquette University), Robert A. Cook (Ohio State University); Field Applications of Digital Photogrammetry in the Midwest

- **15. Robert A. Cook** (Ohio State University), **Aaron R. Comstock** (Ohio State University); Climate, Corn, and Culture Change: the shift to Mississippian village life on the northeastern periphery
- 16. Claiborne Sea (East Tennessee State University), Eileen Ernenwein (East Tennessee State University); Determining Community Organization and the Use of Space at the Singer-Hieronymus Site Complex in Scott County, Kentucky

Saturday Afternoon, October 21st

17. Archaeological Collections Management in the Midwest During the Curation Crisis

Fletcher Place: 3:00 to 5:00 pm

Chair: Katherine Sterner (University of Wisconsin-Milwaukee)

3:00 pm

Kristin M. Hedman (Illinois State Archaeological Survey),
Laura Kozuch (Illinois State Archaeological Survey), Mary R.
Hynes (Illinois State Archaeological Survey); Collections
Management at the Illinois State Archaeological Survey—
Challenges and Opportunities

3:15 pm

Melody Pope (Indiana University Glenn A. Black Laboratory of Archaeology), April Sievert (Indiana University Glenn A. Black Laboratory of Archaeology), Jennifer St. Germain (Indiana University Glenn A. Black Laboratory of Archaeology), Kelsey T. Grimm (Indiana University Glenn A. Black Laboratory of Archaeology), Terry Harley-Wilson (Indiana University Glenn A. Black Laboratory of Archaeology and Mathers Museum of World Cultures); Confronting Collections at the Glenn A. Black Laboratory of Archaeology for the 21st Century

3:30 pm Katherine M. Sterner (University of Wisconsin-Milwaukee),

John D. Richards (University of Wisconsin-Milwaukee);

Rediscovering the UWM-ARL Collections: The Things We
Find During Rehabilitation

3:45 pm

Nicolette Meister (Logan Museum of Anthropology, Beloit
College); A Long-term Look: Two Decades of Archaeological
Collections Care at the Logan Museum of Anthropology

4:00 pm

Robert A. Genheimer (Cincinnati Museum Center); Centu
ries of Collecting: The Changing Nature of Archaeological
Collections at the Cincinnati Museum Center

4:15 pm

Panel Discussion

18. The Midwestern Legacies of Lynne Goldstein:

A Symposium in Her Honor, Part 2

Alexander Ballroom I: 1:30 to 4:15 pm

Co-Chairs: Sissel Schroeder (University of Wisconsin-Madison) and Jodie O'Gorman (Michigan State University)

1:30 pm	Robert J. Jeske (University of Wisconsin-Milwaukee), Kath
	erine M. Sterner (University of Wisconsin-Milwaukee), Han
	nah Blija (University of Wisconsin-Milwaukee), Tania
	Milosavljevic (University of Wisconsin-Milwaukee), Saman
	tha Bomkamp (University of Wisconsin-Milwaukee); Ten
	Seasons Later: The Crescent Bay Hunt Club Site and
	Wisconsin Oneota Lifeways
1:45 pm	William A. Lovis (Michigan State University); Landscape
	Marking, the Creation of Meaning, and the Construction of
	Sacred and Secular Spaces: Rethinking The Birney
	"Mound" in the City of Bay City
2:00 pm	John D. Richards (University of Wisconsin-Milwaukee);
	"Heaved By Spirits From the Earth": A Reconsideration of

Aztalan's Mounds

2:15 pm	Michael F. Kolb (Strata Morph Geoexploration, Inc.); Evalu ation of Geoarchaeological Research at the Aztalan Site and its Surroundings
2:30 pm	Sissel Schroeder (University of Wisconsin-Madison), Jarrod Burks (Ohio Valley Archaeology, Inc.), Sarah Taylor (University of Wisconsin-Madison), John D. Richards (University of Wisconsin-Milwaukee); Seen and Unseen Traces of Life in Ancient Aztalan
2:45 pm	BREAK
3:00 pm	Robert A. Cook (Ohio State University); Developing an Ar chaeological Philosophy: Lessons Learned (Mostly) from My PhD Adviser
3:15 pm	Robert A. Birmingham (University of Wisconsin-Waukesha); Lynne Goldstein and Wisconsin Archaeology
3:30 pm	John E. Kelly (Washington University-St. Louis), Lucretia S. Kelly (Washington University-St. Louis); Reminiscing on Lynne Goldstein's Contributions and Impacts in the Study of Mississippian Societies: A Perspective from the American Bottom and Cahokia
3:45 pm	Bonnie W. Styles (Association of Science Museum Direc tors); Plummets, Patterns, Persistence, and Professional Responsibility
4:00 pm	Lynne Goldstein (Michigan State University); Discussant

19. General Session:

Geophysics, Remote Sensing & Geomorphology

Alexander Ballroom II: 1:30 to 3:00 pm

1:30 pm William Green (Logan Museum of Anthropology, Beloit
College), Steven L. DeVore (Midwest Archeological Center,
National Park Service), Adam S. Wiewel (Midwest Archeo

	logical Center, National Park Service); Geophysical Survey and Remote Sensing at Gast Farm, Southeast Iowa: Hidden Mounds and Middle and Late Woodland Community Plans
1:45 pm	Jamie Davis (Ohio Valley Archaeology, Inc.); Extracting Sur face Features from Photogrammetry Data
2:00 pm	Robert G. McCullough (Illinois State Archaeological Survey); Comparing Magnetic Susceptibility and Magnetome try: Two Case Studies from Illinois
2:15 pm	Jarrod Burks (Ohio Valley Archaeology, Inc.); Junction Group and Steel Earthworks in Southern Ohio: Exploring the Emergence of Monumental Architecture through Magnetometry
2:30 pm	Ji Hoon Park (University of Cincinnati), Changjoo Kim (University of Cincinnati), Kenneth B. Tankersley (University of Cincinnati); Exploring Formation of Serpent Mound from a Geomorphological Perspective: Water Man agement of Native Americans
2:45 pm	Andrew Saleh (University of Wisconsin-Milwaukee); Geo spatial Considerations Involving Historic General Land Office Maps and Late Prehistoric <i>Bison bison</i> Remains near La Crosse, Wisconsin

20. Worker's Lives in the Coalwood Logging District

Alexander Ballroom II: 3:30 to 4:15 pm

Chair: James Schwaderer (Michigan Technological University)

and Worker Autonomy

3:30 pm	James Schwaderer (Michigan Technological University); A
	Preliminary Interpretation of Faunal Remains from three
	Camps in the Coalwood Logging District
3:45 pm	Tyler Allen (Michigan Technological University); Alcohol

21. The Deam Project:

A Collaboration with IUPUI and Hoosier National Forest

IMOCA (Indianapolis Museum of Contemporary Art; First Floor): 1:00 to 5:00 pm

Co-Chairs: John Flood (Indiana University-Purdue University, Indianapolis), Angie Doyle (Hoosier National Forest)

- John Flood (Indiana University-Purdue University, Indianapolis), Angie Doyle (Hoosier National Forest), Joshua Myers (Indiana University-Purdue University, Indianapolis), Edward Herrmann (Indiana University), Jeremy J. Wilson (Indiana University-Purdue University, Indianapolis); Collaboration in the Wilderness: IUPUI and Hoosier National Forest
- Joshua Myers (Indiana University-Purdue University, Indianapolis), Edward Herrmann (Indiana University), John Flood (Indiana University-Purdue University, Indianapolis); The Town of Todd: A Digital Reconstruction of a Lost 19th Century Landscape in South-Central Indiana
- Katie Hunt (Indiana University-Purdue University, Indianapolis),
 Joshua Myers (Indiana University-Purdue University, Indianapolis),
 John Flood (Indiana University-Purdue University, Indianapolis); The
 Eroding Mortuary Landscape of the Charles C. Deam Wilderness
- 4. Ashley Brown (Indiana University-Purdue University, Indianapolis), Joshua Myers (Indiana University-Purdue University, Indianapolis), John Flood (Indiana University-Purdue University, Indianapolis; What We Learned at School: Reconstructing the Life History of a 19th Century Schoolhouse
- Madeline Fasel (Indiana University-Purdue University, Indianapolis),
 John Flood (Indiana University-Purdue University, Indianapolis),
 Tyler Donaldson (Indiana University-Purdue University, Indianapolis),

- **Edward Herrmann** (Indiana University); Fault the Fault: Lithic Procurement at 12Mo1555 Courtesy of the Mount Carmel Fault
- Melissa Long (Indiana University-Purdue University, Indianapolis),
 Matt Young (Indiana University-Purdue University, Indianapolis),
 Joshua Myers (Indiana University-Purdue University, Indianapolis),
 John Flood (Indiana University-Purdue University, Indianapolis); Following the Footprints: A Survey of Domestic Structures in the Charles
 C. Deam Wilderness

22. General Poster Session:

Historic Archaeology, CRM & Campus Archaeology

IMOCA (Indianapolis Museum of Contemporary Art; First Floor): 1:00 to 5:00 pm

- Heather Walder (Northern Illinois University), Alexander D. Woods (Center for Environmental Management of Military Lands); Stillwell Crossing Mitigation and Military Training Aid for Archaeological Site Protection;
- Patrick R. Durst (Illinois State Archaeological Survey), Robert G.
 McCullough (Illinois State Archaeological Survey); Discovery of the Gilles Maddeaux Homestead in Lebanon, Illinois;
- 10. Jessica M. Chevrolet (University of Indianapolis), Brenda L. Detty (University of Indianapolis), Erin L. Edwards (University of Indianapolis), Arysa Gonzalez (University of Indianapolis), Megan R. Hoffman (University of Indianapolis), Christa D. Kelly (University of Indianapolis), Christopher R. Moore (University of Indianapolis); Spatial Analysis of a Historical Site: The House of Blue Lights
- Susan M. Kooiman (Michigan State University), Autumn M. Painter (Michigan State University); Capturing Campus Cuisine: An 1860s Luncheon Reconstruction at MSU
- **12. Megan M. McCullen** (Wayne State University), **Kelsey Jorgensen** (Wayne State University), **Carly Slank** (Wayne State University); Midwestern Archaeological Collections at the Gordon L. Grosscup Museum of Anthropology

Saturday Evening, October 21st

Fletcher Place: 5:00 to 6:00 pm

MAC, Inc. Business Meeting

MAC, Inc. Banquet

Alexander Ballroom: 6:30 to 8:30 pm

Speaker: Barbara Mills (University of Arizona); Social Network Approaches

to Pre-Hispanic North American Migration and Coalescence

Abstract: Late pre-Hispanic societies in many areas of North America went through dynamic cycles of migration, aggregation, and coalescence. In the Southwest these resulted in some of the well-known social formations that we call Chaco, Mesa Verde, Kayenta, Hohokam, Rio Grande, Zuni, and Hopi. Some of these persisted, but others did not, resulting in additional episodes of migration and coalescence. Tracking social changes over large areas that includes hinterlands as well as these denser and more iconic historical trajectories has been enhanced by large-scale regional data collection and interpretation through social network analysis. In this presentation I summarize and discuss the advantages of such a relational approach to the Southwest and how it complements traditional ways of looking at interaction through provenance analysis focusing on two case studies: (1) the rise and fragmentation of the Chaco World, A.D. 800-1200; and (2) the migration and reorganization of Southwest societies from A.D. 1200-1550.

Symposia Abstracts

1. 2017 MAC Sponsored Symposium

Collaborative Engagement: Working with Responsible Private Collectors and Collections

Co-Chairs: Michael Shott (University of Akron), Mark Seeman (Kent State University), & Kevin Nolan (Ball State University)

Midwestern archaeology traces its roots at least as far back as Squier and Davis's mapping of Ohio earthworks in the 1840s. Today, hundreds of Midwestern professionals work in government agencies, consulting organizations, and universities. Yet since Euroamerican occupation began, farmers and others across the Midwest collected stone tools from fields, probed mounds, and documented rock art. Some are accomplished researchers in their own right. Owing to the region's large modern population and the cultivation that regularly exposed large tracts, the Midwestern surface record probably has been more accessible over larger areas for longer than anywhere else in North America. Private collections have been accumulating over six generations, and private individuals have made a number of research contributions. Traditionally, the profession has neglected private collections, its attitudes ranging from indifference to competition and hostility. We have failed to fully explore the ethical issues sometimes cited to justify refusal to engage with collectors. Even today, therefore, we know very little about the scale, pattern, and history of private collection, and practically nothing about its aggregate effect upon the record we sample and document. Symposium contributions document the scale and pattern of collecting, and benefits and implications of collaboration for both research and preservation practice. Failure to engage collaborators alienates an important and motivated constituency that shares our interests and generally supports the preservation and study of the Midwest's archaeological record. At the same time, we acknowledge the need for careful consideration of data-access issues that arise from collaboration. Collaborative Engagement: Working with Responsible Private Collectors and Collections is not designed merely to acknowledge the value of documented private collections nor the accomplishments of private researchers, although it may serve these important purposes. It also interprets SAA's ethical principles not merely to permit but practically to require us to engage in constructive collaboration with responsible or responsive collectors, in our role as stewards of all segments and contexts of the record. Contributors document the scale of regional collections and their value as complements to professional research, showcase original research by nonprofessionals, and illustrate the challenges to comprehensive preservation that neglect of private collection engenders.

2. Under Our Busy Feet: Historical Archaeology in Urban Contexts in the Midwest

Chair: Amy L. Johnson (Indiana Division of Historic Preservation & Archaeology)

The definition of "artifact" in Indiana's archaeology law (IC 14-21-1) expanded in 2008 to protect artifacts and features formed before Dec. 31, 1870, rather than Dec. 11, 1816. This greatly increased the number and types of archaeological resources protected under state law. Historical archaeological investigations in Indiana, and surrounding Midwestern states, have been increasing through the last several decades. Especially in urban settings, Midwestern historical archaeological sites are providing valuable and interesting insights into the people and places of the past. What lies beneath our feet in urban settings is helping broaden the spectrum of archaeological understanding. Continuing to help dispel a still sometimes popularly held belief by the public - "it is in an urban context, there can't be anything left archaeologically," -- this Symposium features presenters from universities, CRM firms, and state government, who highlight their unique experiences with urban archaeological projects and research themes in Midwestern historical archaeology.

3. Early PaleoIndian Mobility and Interaction in the Upper Midcontinent

Chair: Brad Koldehoff (Illinois Department of Transportation)

This symposium brings together researchers from the United States and Canada to explore the mobility patterns and social networks of the earliest fluted-point producing groups in the Upper Midcontinent. The researchers focus on interpreting the big, early sites employing new data and new theoretical perspectives. The Upper Midcontinent, for this study, encompasses the states and provinces around the southern Great Lakes east of the Mississippi River,

north of the Ohio River, and west of Appalachian Highlands. Early fluted-point groups in this region colonized a largely if not entirely vacant landscape. The papers in this symposium use primarily lithic procurement data to explore patterns of mobility and interaction with the goal of forging new insights into the social lives of the region's late Pleistocene pioneering populations.

6. Women at Work: Acknowledging Women's Legacy in Archaeology

Co-Chairs: Leslie Drane & Kelsey T. Grimm (Indiana University)

The acknowledgements of women working in archaeology has notably flour-ished in recent memory, but who were the pioneering American women of our profession? For over a century, women have taken on many roles in archaeology with varying levels of professional education and have been successful in contributing to the field. Whether toiling over lab work or excavating great features, these archaeologists have not always been given proper recognition for their work. This session highlights the contributions of several female archaeologists from across the Midwest and brings to light the often undervalued contributions of those who helped make archaeology what it is today. By telling these stories we hope to start a conversation about the politics of recognition and inspire others to provide a more complete understanding of women's influence in shaping archaeology and the Midwest.

8. From the Highest Dune to the Lowest Floodplain (and most places in between): The Archaeological Journey of William A. Lovis in the North American Midcontinent

Co-Chairs: Sean B. Dunham (USDA Forest Service) & G. William Monaghan (Indiana University)

William (Bill) Lovis has made significant contributions to Midwestern Archaeology since the early 1970s and was conferred MAC's Distinguished Career Award in 2011. His research and publications have included a staggering array of topics including the entirety of Upper Great Lakes prehistory, geoarchaeology, analytical methods, ethnoarchaeology, hunter-gatherers, and pedagogy to name a few. He has been many things to many people including an archaeologist, mentor, colleague, and teacher. The papers assembled in this session, presented by students and colleagues, reflect the broad impact of his career

with an emphasis on Bill's archaeological legacy in the Upper Great Lakes and the Midcontinent.

9. The Irish Diaspora and the Wisconsin Frontier: A View from the McHugh Site

Chair: John D. Richards (University of Wisconsin-Milwaukee)

Archaeological excavations at the McHugh site in north-central Wisconsin uncovered the remains of a dugout structure that may have served as the initial residence of Irish-born Michael and Mary (McCoy) McHugh and their family. The McHugh's emigrated to the United States in 1825 along with Michael's parents and initially settled in Ohio before moving to Wisconsin. Their story provides information on an understudied aspect of the Irish diaspora; pre-Famine Irish immigrants engaging in rural Irish homesteading in frontier America. The McHugh dugout is the first such structure to be archaeologically excavated in Wisconsin. It is unclear how long the McHugh's inhabited the dugout, but sometime after the close of the Civil War, the structure basin was used as a trash dump. Excavation of the basin fill has provided a cornucopia of mid-to-late 19th Century material culture reflecting a continuous occupation of the McHugh property through the early 20th Century.

13. The Midwestern Legacies of Lynne Goldstein: A Symposium in Her Honor

Co-Chairs: Sissel Schroeder (University of Wisconsin-Madison) & Jodie O'Gorman (Michigan State University)

In a career spanning half a century and counting, Lynne Goldstein's impact on the archaeology of the Midcontinent is evident in dialogues on what and how we know about the past, the character of legislation, and what it means to be engaged in archaeology inquiry. Areas of her many contributions to theory and practice include historic and prehistoric mortuary studies, spatial data analysis, regional studies, digital archaeology, public archaeology, and heritage stewardship. She helped shape state and national legislation to protect archaeological resources and ensure ethical treatment of diverse groups. Her service to the discipline is tireless. Passionately committed to mentoring and training her students, she encourages them to model ethical and professional conduct as they pursue scientific inquiry in archaeology. The papers in this

symposium exemplify the impact of her contributions and career on the archaeology of the Midwest.

17. Archaeological Collections Management in the Midwest During the Curation Crisis

Chair: Katherine Sterner (University of Wisconsin-Milwaukee)

The archaeological curation crisis has required collections personnel in the Midwest to reevaluate their collections and develop innovative solutions to issues of limited space, funding, accessibility, and conservation materials and experience. Many repositories have only slowly been able to rehouse their collections and digitize their catalogs. This symposium is intended to create a dialogue among collections professionals in the Midwest to increase collaboration and communication about the issues being faced in repositories. It also provides a wealth of examples indicating that the problems posed by the curation crisis are not insurmountable. A panel of academic archaeologists, curators, collections managers, CRM archaeologists, and agency personnel will take an in-depth look at the state of curated collections across the region and facilitate discussion with audience participation.

20. Worker's Lives in the Coalwood Logging District

Chair: James Schwaderer (Michigan Technological University)

Papers in this symposium will focus on multiple aspects of worker's daily lives at a series of lumber camps located in the Coalwood Logging District just south of Munising, Michigan, in the Hiawatha National Forest. This district was operated by Cleveland-Cliffs Iron Company (CCI) to supply much of the cordwood used in the company's pig iron furnaces. Excavations at three camps in the district, Coalwood, Roscoe, and Zerbal, were conducted in the summers of 2014 and 2016. Research designs focused on the lives of workers, looting behavior, and a comparison between family and boarding house context. Excavated features included a series of privies, middens, structural depressions, and looted zones. Close to 70,000 artifacts were revealed in the course of this project. The recovered data and its analysis will be the subject of this symposium.

21. The Deam Project: A Collaboration with IUPUI and Hoosier National Forest

Co-Chairs: John Flood (Indiana University-Purdue University, Indianapolis) & Angie Doyle (Hoosier National Forest)

The Charles C. Deam Wilderness was designated in 1982 and includes 13,000 acres of rugged and remote wilderness on the south shore of Lake Monroe in south-central Indiana. In 2016, Indiana University-Purdue University Indianapolis (IUPUI) and the Hoosier National Forest initiated a collaborative research and service learning project within this wilderness with the goal of providing valuable field experience and research opportunities for students while conducting site surveys and preparing management plans as part of Section 110 of the National Historic Preservation Act. This poster symposium highlights the student-driven research projects, including the identification of eight previously unknown prehistoric and historic sites, and over 109.5 acres surveyed to date. These survey results and the collaboration provide evidence for the development of additional academic and governmental partnerships.

Paper & Poster Abstracts

The Dunn Farm Site: A New Find in Northwest Iowa

Robert E. Ahlrichs (University of Wisconsin-Milwaukee)

Archaeological investigation in Pocahontas County in northwest Iowa has been extremely limited. In this rural portion of the state there are few waterways and very limited modern development resulting in stagnant site identification and analysis. There are currently only around two dozen recorded prehistoric sites in the county and a total of only 36 sites in the Iowa State site files. Recently a large collection of prehistoric artifacts has come to light originating from two recorded prehistoric sites and one unrecorded site on the east side of the county near Lizard Lake. This assemblage was surface collected by three generations of the Dunn family and has now been brought to the attention of local naturalists and archaeologists from the area. Cataloging and analysis of the collection materials indicates several multicomponent habitation sites including an intensive Oneota occupation.

Alcohol and Worker Autonomy

Tyler D. Allen (Michigan Tech University)

Much has been written about the way companies controlled their labor force through regulating social behaviors. This is especially true for alcohol which has a direct correlation with worker productivity. This paper will focus on alcohol related artifacts recovered from Coalwood, a cordwood lumber camp operated by the Cleveland Cliffs Iron Company (CCI) from 1900-1912. CCI began logging in the early twentieth century as a way to internalize the smelting process and cut costs. This goal of cutting costs was reflected in the way CCI managed their lumber camps, which involved investing the bare minimum. Systematic archaeological excavations of the Coalwood site began in 2014, and continued in the summer of 2016. The large number of recovered alcohol related artifacts suggests that CCI did not regulate worker behavior. This goes against the common idea that most lumber camps were dry and may have led to greater worker autonomy for residents.

Between Two Worlds: An Avocational's Account of the Gulf Between Academics and Collectors

Jerrel Anderson (Archaeological Society of Ohio)

The experiences, good and bad, of an avocational archaeologist comfortable in both the collector and professional worlds will be described. Being trained by both professionals and an accomplished amateur, and knowledgeable to boths' ethics and strongly held beliefs, sometimes coincident and often at crossroads, results in a bizarre worldview of the archeological world. Some confessions must follow.

Modeling Proglacial Shore Lines of Glacial Lake Agassiz Around Prehistoric Quarries in Northern Minnesota

Andrew Anklam (University Wisconsin-La Crosse), Dan Wendt (Minnesota Archaeological Society)

Since 2009 the Knife Lake siltstone quarries in the Boundary Waters Canoe Area Wilderness of Minnesota U.S. quarry district have been the focus of archaeological and geoarchaeological research. A recent survey conducted in 2014 and 2015 identified several relic beach features at varying elevations above the current water line of Knife Lake. GIS was used to model these proglacial lake shoreline features to better understand the procurement of Knife Lake siltstone, a prominent lithic material in Minnesota. It is believed that these beachlines were formed by successive phases of a proglacial lake and may relate to an extension of glacial Lake Agassiz during the Late Paleoindian period when the Knife Lake siltstone quarries were active. Using the elevation of relic beach features identified by survey, several different inundation maps were made using GIS to visualize the Knife Lake area during each of the different phases of the hypothesized proglacial lake.

Digging in the Archives: Using Historic Land Ownership Documents to Analyze the Guard Site, an Early Fort Ancient Village in Southeast Indiana

Alexander W. Anthony (University of Wisconsin-Milwaukee), Marcus A. Schulenburg (University of Wisconsin-Milwaukee), Robert A. Cook (Ohio State University)

It has long been known that examination of historic land-use and ownership records can greatly inform our understanding of the prehistoric past. This study examines such documentation associated with the Guard site (12D29) a Fort Ancient village dating to ca. AD 1050-1300 in Lawrenceburg, Indiana. This project began with one basic question: Where were mounds noted by Glenn Black in 1934 located? While we gained some useful insights into this question, we also learned about other information that only came up during the research process. These questions range from geological ones, such as the movement of rivers in the last few hundred years, to site-specific ones, such as the impact of historic uses on geophysical patterning. In sum, this paper will show various key insights that the historic record contains when working with prehistoric sites.

The Materiality of Ethnic Identity: A Study of the Ceramic Assemblage at the McHugh Site

Alexander W. Anthony (University of Wisconsin-Milwaukee)

A study of the ceramic assemblage recovered at the McHugh site provides information about the socio-economic status of the McHugh family throughout the latter half of the 19th century, but is less informative about their ethnic identity. Through an analysis of the ceramic assemblage I explore to what extent the family's ethnic identity can be interpreted through the material culture they left behind. How discernable is the family's Irish heritage based on the material remains of the late 19th century occupation period at the farmstead? The analysis sheds light on the relationship of the archaeological deposits to the McHugh's Irish identity and the temporal variability of the manifestation of that ethnic identity during this period. While the analysis suggests that there is little material evidence of the McHugh's ethnic identity in the archaeological record, the analysis provides an examination of the intersection of ethnicity and materiality in the archaeological record.

Avocational Archaeology: Expanding the Archaeological Record Beyond CRM

Constance Arzigian (University of Wisconsin-La Crosse), Jean Dowiasch (Mississippi Valley Archaeology Center, University of Wisconsin-La Crosse)

Over the past 35 years, the Mississippi Valley Archaeology Center, University of Wisconsin-La Crosse, has documented hundreds of archaeological sites in southwest Wisconsin that were first identified by collectors or avocational archaeologists. The sites and their geographic distribution complement and significantly expand the information collected by professional archaeological projects. Local residents who collect on their farm, and avocational archaeologists intensively surveying "their" region encompass a wider distribution of landscape settings and a broader survey area than otherwise examined by typical Cultural Resource Management projects, and allow a more complete understanding of landscape utilization and regional distribution patterns. GIS distribution maps with and without collector information are generated to compare our understanding of various cultural stages and regions. Without the non-professional sources of data, there might be significant biases in our understanding of the archaeological record.

Daily Life on Downtown Cahokia's Edge: Summary of Spring Lake Tract Excavations

Melissa R. Baltus (University of Toledo), Sarah E. Baires (Eastern Connecticut State University)

Recent investigations at Cahokia's Spring Lake Tract, located at the western margin of "Downtown" Cahokia, have revealed evidence of a heavily occupied landscape in relation to a series of extant and reclaimed borrow pits. This neighborhood, seemingly occupied from the Terminal Late Woodland through Moorehead phases, provides significant information in regards to daily and episodic practices of earth-moving and soil manipulation. This poster summarizes the geophysical survey and excavation data from two seasons of work at the Spring Lake Tract, with a consideration of the importance of anthropogenic landscapes in the creation of Cahokia.

Pit Features: A View from Grand Island, Michigan

Emily Bartz (Illinois State University)

This study investigates Woodland period pit features on Grand Island, Michigan located just off the southern shore of Lake Superior. This research utilizes the behavioral approach to understand pit feature manufacture, use/function, deposition, recovery and analysis. Pit features play a pivotal role in archaeological inquiry of past human behavior, offering insights into the lifeways of the seasonal habitation of the hunter-gatherers that once occupied the island. Despite being one of the most common archaeological features in North America and Europe, a lack of associated material remains make it difficult to understand the activities associated with these features. By using methods such as flotation, microbotanical analysis, stratigraphic examination, and ethnographic research, this study aims to contribute to a more comprehensive understanding of prehistoric Native American lifeways while introducing an example of pit feature life-history into the Upper Great Lakes regional discourse.

Tracking Copper Artifact Trade with the Copper Artifact Master Database (CAMD)

Monette Bebow-Reinhard (Grimms Etc)

The locations where the celt tool designs VI-B and VI-C (Wittry typology), axes and adzes, have been found will demonstrate the trade potential of precontract copper artifacts. This precontract tool is widely distributed, ranging from Canada all the way to South America. The CAMD is a database currently at over 65,000 precontact copper artifacts, with over 300 museums contacted, online museums repositories gathered, and numerous collectors queried. The database is arranged by location to see how far reaching the trade in the copper industry was, and is a handy tool to demonstrate everything found in a single location but kept in numerous depositories. With PowerPoint, I'll show the evolution of the Celt from archaic to late woodland; a handout with a map and the description of two types of celts will help viewers note which is which.

The Huber Site: Revisiting a Type Site

Jennifer Benish, Luke Cavallaris (Illinois State Archaeological Survey)

The 2016 field survey of the Huber Site (11CK1) has provided additional information on this Upper Mississippian ceramic type site by updating site limits, adding temporal affiliations, and defining clusters. The portion of the site currently stewarded by the Forest Preserves of Cook County is the only remaining vestige of this important village site. Management efforts to preserve, nominate for Illinois Nature Preserve status, and repair damage from decades of looting is underway as part of the Natural and Cultural Resources Master Plan.

Unified Theory of Cosmogram Decorations on Potteries of the Upper Midwest: Part I, Early Woodland Period

David W. Benn (Bear Creek Archeology)

Early Woodland Liverpool (EW Black Sand variant) pottery decorations occur as belts or triangular/rectilinear panels encircling the vessel rim to body. Vertically arranged thematic motifs reflect the structure of the cosmos in its simplest form: Below realm, Earth's disk, Above realm. Employing the insights of Robert Hall's "deep-time perspective," this paper shows the EW decorative tradition was an enduring symbolic system shared by women making some of the earliest potteries in the upper Midwest. Investigation of cosmograms in pottery motifs and vessel designs traces three universal metaphors of the Woodland era belief system. 1) As three-dimensional tools, decorations on cooking vessels espoused all manner of cosmological symbols. Vessels were non-human "beings." 2) The form of the EW cullinary vessel was shaped like the female body representing her biological destiny as the reproductive vessel for humankind. Cooking was a ritual action ("prayer"), a metaphor for the creation of new members of society. 3) Round pots are like the disk of the earth at the horizon, so the cooking pot was a mandala for cosmogram expressions of daily life, ritual practice, or the cosmic realms.

Unified Theory of Cosmogram Decorations on Potteries of the Upper Midwest: Part II, Middle Woodland Period

David W. Benn (Bear Creek Archeology)

The Havana variant of the Illinois River and Upper Mississippi River valleys is the subject of analysis of pottery decorations. Havanoid potteries developed out of Early Woodland traditions, perpetuating the principle that the vessel was a non-human, feminine "being." Havana ware, Baehr ware, Hopewell ware, and other regional potteries from Iowa, Missouri, Wisconsin, and Minnesota are illustrated to analyze cosmograms in Havanoid decorative designs. The basic motif was a belt of stamps bordered by hemiconical punctates or trailed lines on the upper rim and/or shoulder represented the surface of the earth or body of water, i.e., the "disk of the earth," where human rituals took place. Stamps, trailing, and punctates comprising the horizontal belt and other decorations were cosmograms of Nature: e.g., Hemiconical punctates stand for the nasal openings of waterbirds, and belts of patterned stamping, cross-hatching, and rocker stamping stand for the rhythmic patterns of fish scales and feathers. Natural beings and spirit powers of the Below realm are represented on most Havanoid vessel designs with vessel symmetry in patterns of twos, threes, and fours depicting the order of the cosmos.

Composing the Late Cahokian Countryside: Excavations at the Rhea Site (11S2086), St. Clair County, Illinois

Erin M. Benson (University of Illinois at Urbana-Champaign)

The transition between early (AD 1050-1200) and late Mississippian (AD 1200-1350) in the American Bottom is recognized as a significant moment of sociopolitical and religious change in the historical trajectory of Cahokia. During this time, relationships between persons, places, and things transformed, resulting in different ways of engaging with both Cahokia and the non-human powers that underwrote it and the broader Mississippian world. With a goal of investigating a rural Moorehead phase occupation, the 2017 University of Illinois field school undertook excavations at 11S2086, the Rhea site, located in the uplands east of the American Bottom and south of Cahokia. Our work uncovered an unexpectedly complex transitional Mississippian occupation with specialized architecture and materials, suggesting a possible "nodal" site.

This paper presents results from these excavations and begins to address the changing composition of special-purpose sites and the relationships between Cahokia and its hinterland inhabitants after AD 1200.

Investigating Stumpware: Evidence for Pre-Mississippian Nixtamalization in Illinois

Alleen Betzenhauser, Sarah Harken, Victoria Potter (Illinois State Archaeological Survey, Prairie Research Institute)

Stumpware is an unusual ceramic utensil that appears abruptly in the early Terminal Late Woodland period (ca. AD 900) in the American Bottom region of Illinois. Several functions have been postulated but the timing of its introduction (coincident with the beginning of maize horticulture in the region) and the prevalence of white residue are suggestive of their role in the production of quicklime for use in the nixtamalization of corn to make hominy (see Benchley 2003). We present the initial results of our efforts to test this hypothesis by creating replica stumpware and using them to convert limestone to quicklime.

Lynne Goldstein and Wisconsin Archaeology

Robert A. Birmingham (University of Wisconsin-Waukesha)

This paper details the many contributions of Lynne Goldstein to Wisconsin archaeology since joining the faculty at the University of Wisconsin-Milwaukee in 1975. Lynne developed the long- term Southeastern Archaeology Program focusing on Wisconsin's southern eastern Wisconsin counties where she used systematic sampling to study the distribution of archaeological sites including effigy and other mounds. The Mississippian site of Aztalan became a research focus and continued after she moved to Michigan State University. Her excavations resulted in important new discoveries about the nature of this northern Mississippian town. Through research, publications, reports, and papers, Lynne Goldstein has made outstanding contributions to Wisconsin archaeology. Along the way, she has engaged students, many who have gone on to successful careers, as well as the general public in her important work.

Who Knew? The 18th Century Historic Component at Spoonville (200T1) Janet Brashler, Wesley Jackson (Grand Valley State University)

This presentation introduces the relatively little known historic component at the Spoonville Site in Ottawa County Michigan. Spoonville has been known to avocational and professional archaeologists for over a hundred years primarily for its Early, Middle and Late Woodland components including Hopewellian burial mounds and associated village materials. Excavations in the 1960s through the early 1990s by Grand Valley State University revealed the presence of a variety of late 18th, early 19th century artifacts diagnostic of the fur trade including ball clay pipes, French and British gun flints, ceramics and a ring. The artifact signature appears to confirm historic accounts of a joseph and/or Madelaine LaFramboise trading post at the mouth of Crockery Creek in this location.

The View from On Top: Landscapes and Spaces Along the Lower Muskegon River in Michigan

Janet Brashler (Grand Valley State University), Donald Gaff (University of Northern Iowa)

One of the many contributions made to Michigan archaeology by William Lovis over a long, prodigious career was the contextualization of Michigan Archaic research that appeared in 2009's Archaic Societies. In his chapter, "Hunter-Gatherer Adaptations and Alternative Perspectives on the Michigan Archaic: Research Problems in Context," Lovis outlines a half dozen potentially profitable areas of Archaic research. This paper utilizes some of those ideas to examine a complex series of multi-component sites within the Lower Muskegon River drainage, focusing primarily on the Muskegon State Game area. Framing the Late Archaic component at these sites within the cultural and environmental factors laid out by Lovis, the paper then extends those considerations into the Woodland. By investigating a singular location, changes in the mobility over time, especially in response to an evolving landscape and continually changing social dynamics come into focus.

Wings, Warriors, and Weeping Eyes: Spatial and Temporal Distribution of Ramey Incised Motifs at the East St. Louis Mound Precinct

Michael Brent Lansdell, Tamira K. Brennan, Alleen Betzenhauser (Illinois State Archaeological Survey)

Ramey Incised jars are a well-established diagnostic marker of the Stirling phase (A.D. 1100–1200) in the American Bottom. The motifs they display are thought to represent various aspects of a Mississippian worldview. The recovery of a large sample of these jars from the East St. Louis Mound Precinct during recent excavations offers the opportunity to evaluate their chronological and spatial distributions. Using statistical analysis, we assess if and how the Ramey motifs at East St. Louis reflect our current understanding of the historical trajectory of the Cahokian polity, and identify chronologically sensitive design elements.

The Michigan State University Campus Archaeology Program

Lisa N Bright (Michigan State University)

Dr. Goldstein founded the Michigan State University Campus Archaeology Program (CAP) in 2007. CAP works to mitigate and protect archaeological resources on MSU's campus. MSU graduate and undergraduate students have the opportunity to work on every step of an excavation project from design, historical research, communicating with facilities management, excavation, reporting, and public outreach. The biennial on-campus field school allows students who might otherwise not be able to attend a field school a chance to learn archaeological methods and techniques. CAP is truly a unique program that has directly impacted the education and career trajectory of dozens of students. Dr. Goldstein has created a program that not only contributes to the understanding of MSU's cultural heritage, but also has changed the attitudes and approaches of the campus administration and employees. CAP's publicly oriented nature has also ensured that its reach extends far beyond the campus itself.

What We Learned at School: Reconstructing the Life History of a 19th Century Schoolhouse

Ashley Brown, Joshua Myers, John Flood (Indiana University-Purdue University Indianapolis)

The Todd Schoolhouse (12Mo1551) was an early European-American schoolhouse in Monroe County, and the first in Polk Township. Located by our survey utilizing a combination of historical plat maps and targeted shovel test probing, the Todd Schoolhouse provides important lessons on early life in what is today the Charles C. Deam Wilderness. In this study, we analyze historical and phase-1a archaeological data to reconstruct the life history of this structure throughout its occupation, as well as its broader role in Polk Township and the town of Todd. Preliminary data suggest habitation as a domestic structure after its use as a schoolhouse. In addition, as much of the site is disturbed from forest faunal, we analyze the probability of further in situ archaeology.

Mortuary Analysis in the Hands of Lynne Goldstein

James A. Brown (Northwestern University)

Lynne Goldstein has used Midwestern archaeology to advance our understanding of mortuary analysis in general, and it bought this region of the archaeological world to the attention of mortuary studies more generally. She started with a seminal analysis of the Schild cemetery, a Mississippian site overlooking the Lower Illinois valley. This work was particularly important because it marked a systematic approach to the complexities in the treatment of the dead that had global implications. Lynne has continued her contributions to the place-marking aspect of cemeteries more recently with an analysis of the topographic referencing of Effigy Mounds in Wisconsin.

Who is Interested in Archaeology? Building a Trusting Relationship Amongst Land Owners and Collectors in Haldimand-Norfolk County, Ontario, Canada

W. Lorenz Bruechert

The agricultural landscape surrounding rural communities of Haldimand and Norfolk County is the focus of a systematic archaeological regional project. The Haldimand-Norfolk Archaeological Regional Project (HNARP) began as an interdisciplinary survey to record settlement patterns, identifying and interpreting evidence of past human behaviour in response to climate change, and external cultural influences through exchange and bartering. However, concerns of landowners and the general public on the impact of archaeological surveys in their communities by cultural resource management archaeologists, archaeological researchers, and events surrounding First Nations concerns regarding land claims, influenced new directions this project under took to promote support for community archaeology. This paper discusses a public outreach initiative by HNARP to strengthen relationships with landowners, collectors, and the general public about the significance of archaeology to protect both the indigenous and historical heritage of their community.

Early Mississippian Faunal Practices at Angel Mounds: Results from the Analysis of Feature 37

Meghan E. Buchanan (Auburn University), Mary Wernette

Angel Mound's Feature 37, was a large, shallow pit in the East Village that predated the construction of the palisade. Excavated by WPA workers in 1940, the artifacts from the feature include a high percentage of decorated ceramics and almost 2000 faunal fragments. In this presentation, we discuss the results of our analysis of the faunal remains from Feature 37 including taphonomic biases, taxonomic diversity, and deer body part representation. We also discuss the implications these results have in interpreting practices in Angel's East Village prior to the construction of the fortification wall.

Where, Oh Where are the Early Late Woodland Burials in the LIV??

Jane E. Buikstra (Arizona State University, Center for American Archaeology), Jason L. King (Center for American Archeology)

Lynne Goldstein has significantly advanced knowledge of ancient peoples in many theoretical and empirical domains, including her seminal studies of ancient cemeteries, especially their spatial organization and interpretation through the judicious use of ethnographic sources, critically evaluated. In this paper, we address a long intractable issue for Lower Illinois Valley (LIV) mortuary archaeology, in a region that anchored Dr. Goldstein's long and productive career. While Middle Woodland (Hopewell) and late Late Woodland mounded tumuli are well represented in the archaeological record, not so for cemeteries from the several intervening centuries. Relying on data from the archaeological record, primarily radiocarbon dates, variation in cemetery structure, mound location, and material culture, we address this issue. Possible explanations include depopulation and regional cultural discontinuity and more complex interpretations of funerary activities and interment facilities. We also critically evaluate ethnographic and ethnohistoric sources in refining our models.

Junction Group and Steel Earthworks in Southern Ohio: Exploring the Emergence of Monumental Architecture through Magnetometry

Jarrod Burks (Ohio Valley Archaeology, Inc.)

Small earthen monument sites from the Early and Middle Woodland periods abound in the Middle Ohio valley. Clearly these sites are the antecedents to the region's massive earth and timber enclosure complexes. However, the shift in monument scale and complexity is so dramatic that it seems to defy explanation. Recent magnetic surveys at two earthwork sites in southern Ohio, Junction Group and Steel Earthworks, suggest the transition from small to mega-sized architecture occurred stepwise, through a period when small monument accretion resulted in mega-scale complexes. In this paper I explore new magnetic data from Junction and Steel and highlight the range of newly detected features, including post circles and several classes of earthen enclosures. The surprising number and clustered arrangement of newly identified enclosures at Steel, especially, suggest the road to massive enclosures began

as a shift in the use of space—mirroring the change in mound distribution through time.

The Mission, Should You Accept It: The Built Space of a Mississippian Mission

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

Mississippian cultural expansions and intrusions have been considered primarily in political or economic terms. Missionizing — defined as the intent to convert someone or something to a new idea or religion - in cultural and religious change may have facilitated the spread of a Mississippian religion from Cahokia. This paper examines the built space at the Collins site in East-Central Illinois, a hypothesized Mississippian mission. The structuration and appropriation of space is at the heart of what a mission site is. The mission is the reorganization of space, both physical and cosmological, while also coopting daily practices for new or different purposes. The creation and manipulation of mounds, architecture, and space, both monumental and otherwise, evidences the alteration or rearranging of worldviews. The reorganization of built space, specially constructed buildings, and the appropriation of sacred spaces subvert daily practices and movements to facilitate conversion.

Pits, Pots, and Paleobot: Feature Analysis at the Koshkonong Creek Village Natalie Carpiaux, Richard W. Edwards IV (University of WisconsinMilwaukee)

The Koshkonong Creek Village (47JE0379), an Oneota habitation site in Jefferson County, Wisconsin, was occupied between AD1050 and 1400. It has been excavated over four field seasons. Excavations have identified dozens of pit features and multiple house structures. This study aims to explore diachronic and interhousehold variation through a detailed analysis of feature contents. Analysis focuses on features identified in 2012 and 2014. Multiple lines of evidence are used to evaluate subsistence shifts, ceramic function, and intragroup dynamics. Macrobotanical and ceramic analysis are the foci of the study.

Three World View Metaphors that Scioto Hopewell Peoples Lived

Christopher Carr (Arizona State University)

Hopewellian communities in the Scioto-Paint Creek area established alliances among themselves in part by interring their dead together within single charnel houses in multiple instances, by intermixing the cremation ashes of their dead within a single depository, and by placing, burning, and fusing together within single depositories on multiple occasions their ceremonial paraphernalia from jointly performed rituals. These practices, along with close ethnohistorical analogs, point to the operation of three basic world view principles—metaphors for the idea of interpersonal cooperation—that were harnessed to build intercommunity alliances: spatially associating souls, blending souls, and the equation of the domicile with a large ceremonial building, mound, and ceremonial center as expressions of the extension of family-like ties and ethics of cooperation to the scales of the community, multiple communities, and the cosmos. Insights are drawn from mortuary and nonmortuary ceremonies of the historic Huron, Cherokee, and Munsee-Delaware and other Woodland tribes.

Territorial Mobility During the Parkhill Phase in Southern Michigan and Ontario

Dillon H. Carr (Grand Rapids Community College)

Although new data from Paleoindian sites in the Great Lakes region has been limited, ongoing refinements in theoretical and methodological approaches to data analysis continue to deepen our understanding of Paleoindian lifeways. This paper utilizes existing data documenting the geographic distribution of lithic toolstone sources, but incorporates fresh insights from recent research on the role of information within foraging economies and the structuring of forager networks across differing temporal and spatial scales. More specifically, territorial mobility is estimated by documenting the geographic distribution of Bayport and Fossil Hill cherts during the Parkhill phase (circa 12,200 – 11,800 cal yr BP) in the lower Great Lakes region. Estimates of territorial mobility are subsequently compared to ethnographic data from sub-arctic caribou hunting populations suggesting that Parkhill phase toolstone movement operated on a scale similar to that of a single-tiered local network of foragers.

Spatial Analysis of a Historical Site: The House of Blue Lights

Jessica M. Chevrolet, Brenda L. Detty, Erin L. Edwards, Arysa Gonzalez, Megan R. Hoffman, Christa D. Kelly, Christopher R. Moore (University of Indianapolis)

Local folklore surrounds the House of Blue Lights, the estate of Indianapolis millionaire, Skiles Test. As an archaeological tool, spatial analysis illustrates human behavioral patterns through recorded GPS coordinates of in situ artifacts, which define a site's overall structure. We used spatial analysis to overlay GPS coordinates of artifacts onto a geographical memory map, as well as historical, aerial photographs of the site. A memory map was constructed to define these points and associate them with the original and documented structures of Skiles Test's land. GPS points from pedestrian surveys were taken from living areas around the main house, garage, and swimming pool. By preserving the remaining artifacts and creating digital representations of this historical site, we are able to preserve more than the physical, allowing public interest and local legend to continue.

Mildred Mott Wedel—A Pioneering Iowan Archaeologist

Angela R. Collins, John F. Doershuk, David M. Gradwohl (Iowa State University)

Mildred Mott Wedel (1912–1995) was a pioneering lowan archaeologist and a distinguished scholar, most notably for Prairie-Plains ethnohistory. Born in Marengo in Iowa County, Mildred majored in History at the University of Iowa and subsequently studied Anthropology at the University of Chicago. Her Master's thesis in 1938 entitled "The Relation of Historic Indian Tribes to Archaeological Manifestations in Iowa" was ground-breaking, utilizing the direct -historical approach to substantiate links between historic Ioway and Oto Native American tribes with prehistoric Oneota archaeological deposits in Iowa. Mildred worked with other Iowa archaeological pioneers including Ellison Orr and Charles Keyes. Mildred's research interests focused primarily on enthnohistory, specifically the relationship between history and anthropology. Not only was Mildred one of the first trained female archaeologists in the country, her lasting legacy lies in her rigorous approach to the direct-historical method and archival research.

Climate, Corn, and Culture Change: The Shift to Mississippian Village Life on the Northeastern Periphery

Robert A. Cook, Aaron R. Comstock (Ohio State University)

Recent archaeological and biological investigations into Late Prehistoric period villages in the Middle Ohio Valley have produced clear evidence that migration was a catalyst for the sudden emergence of maize agriculture. Ongoing work at the Guard (12D29) and Turpin (33HA19) sites has shown that early Fort Ancient (c. AD 1050-1275) villages in this region have distinctly Mississippian characteristics, including wall trench structures, shell tempered ceramics, and biologically non-local individuals. These migrant villages appeared as the Central Mississippi Valley experienced abrupt multidecadal droughts, suggesting people left the Mississippian heartland in search of greener pastures. This poster outlines current evidence and future directions for a project focused on understanding the broader connections between climate, migration, and maize agriculture in the American Midcontinent. In particular, we focus on themes of cultural transmission, resilience, and sustainability to better understand small-scale subsistence agricultural adaptations.

A Dissertation with Legs: Lynne Goldstein's Influence on Physical Anthropology

Della Collins Cook (Indiana University)

Lynne Goldstein's dissertation is the most successful product of the so-called Binford-Saxe paradigm in generating conversations across the disciplinary boundary between archaeology and physical anthropology. Characteristics of the Schild site explain part of this productivity. Lynne's departures from the paradigm explain another part. Most important is her continuing engagement with those of us on the other side of the wall.

Charlotte Day Gower Chapman (1902-1982): Archaeologist, Ethnologist, or Physical Anthropologist?

Della Collins Cook (Indiana University)

Charlotte Day Gower was the first woman to earn a PhD at the University of Chicago, and she figures prominently but silently in Cole and Deuel's Rediscovering Illinois. Her dissertation on Sicilian peasants was lost for many years,

depriving her of the place she deserved in ethnology. In his compendium on women in American archaeology, Cultural Negotiations, David Browman celebrates her field work with Cole in Illinois in 1926-27, although she might better be remembered as a Caribbeanist on the strength of her published masters thesis. Her undergraduate thesis at Smith College was published in American Journal of Physical Anthropology, and is still cited today. She taught four-field anthropology at University of Wisconsin from 1930 to 1938. Sexism in academia clearly limited her career as an archaeologist. She was swept up in World War II, and spent the balance of her life in government service.

Developing an Archaeological Philosophy: Lessons Learned (Mostly) from My PhD Adviser

Robert A. Cook (Ohio State University)

While serving as my PhD adviser and beyond, Lynne Goldstein and those I have come to know through her, have taught me several lessons about archaeology and anthropology more generally that I continue to think about as I further develop my archaeological philosophy. In this paper, I outline a few of these lessons, particularly as they have been applied to my own research on Mississippian/Fort Ancient cultures. The most general influences can be summarized as the instilling of a sense of skeptical curiosity, the blending of traditional and contemporary approaches, and the need to effectively convey findings to a variety of audiences. More specific influences that I have also employed in my research include the importance of theoretical breadth, that archaeology is a form of anthropology, the utility of using different spatial scales for examining cultural behavior, and understanding and identifying the significance and completeness of a research problem.

The Old Prison South: Antebellum Institutional Confinement in Southern Indiana

Kevin Cupka Head, RPA (University of Illinois at Urbana-Champaign)

In response to a shift in public attitudes towards crime and punishment, Indiana established a state penitentiary in Jeffersonville. The penitentiary was Indiana's first, and operated from 1822 until 1846. During investigations conducted on behalf of the Indiana Department of Transportation, Cultural Resource Analysts, Inc. identified intact early-to-mid-nineteenth century depos-

its associated with the prison. Excavations uncovered structural remnants and other features at this site. A large sample of faunal material and a variety of other artifacts were recovered. The features and material have provided data on the architectural landscape of the prison and about the daily lives of those confined there.

Buried with Children: Mortuary and Bioarchaeological Patterns at the Fort Ancient Hardin Site

Matthew Davidson (Daniel Boone National Forest), Amber E. Osterholt (University of Nevada, Las Vegas)

This paper describes and compares mortuary patterns at the Terminal Prehistoric (A.D. 1400-1500) and Protohistoric (A.D. 1550-1630) occupations of the Fort Ancient Hardin Site, located in Greenup County, Kentucky. Previous research at the site hypothesized demand from the colonial hide trade may have caused an increase in hide production during the protohistoric occupation. This hypothesis did not find strong support, however mortuary analysis conducted as part of the study did identify several patterns including: an increase in female associations with hide processing tools, a lack of association between hide processing tools and nonlocal material culture, and an increase in the association of nonlocal material culture with children. New contributions to this research include bioarchaeological indicators of health, especially the well-being of children, which may better contextualize the mortuary findings within broader protohistoric eastern North America.

Extracting Surface Features from Photogrammetry Data

Jamie Davis (Ohio Valley Archaeology, Inc.)

Drone based photogrammey can provide a relatively quick way to produce a high resolution Digital Surface Model (DSM), and with the proper equipment, those surface models are capable of reaching centimeter resolution. Even at such high resolutions, however, many of the fine details can be lost with the most common rendering techniques: directly viewing the DSM, or creating a hillshade image of the DSM. Both have advantages and disadvantages over the other. The DSM can show the general slope of a landscape, but hide all the small details; while a hillshade shows most of the small details, but hides the overall slope of a landscape. This paper discusses a third technique: re-

moving the natural surface and viewing only the surface features significant to archaeologists. With the natural surface removed, the contrast between slight elevation changes can resolve details even beyond that of a typical hill-shade rendering.

Imagining Schroeder: Contextualizing Mortuary Patterning in an Illinois Mound Site Using GIS

Paige Dobbins, Abigail Peeples (Illinois State University)

Schroeder mounds (11HE177) is a Late Woodland period (BCE 900-1150) mortuary context in West-Central Illinois. The site lacks archaeological context and modern research has been limited to analysis of the 120 human burials. The original site report indicates two possible cultural origins for the site; the Illinois River Valley's Maples Mills culture and the Effigy Mound culture based on preliminary analysis of fabric pressed and cord marked pottery and white chert side notched Madison points. As this material culture is now lost, this research explored the use of GIS as an alternate tool to explore spatial patterns and further investigate Schroeder's relationship with contemporaneous cultures. Utilizing ArcGIS 10.3, spatial analyses were performed on Schroeder mounds, Illinois River Valley site locations, and a sample of Effigy mounds found in Dane County, Wisconsin. The results of which revealed unique spatial patterns that could support a more complex reconstruction of Schroeder's cultural history.

Context is Everything: Addressing Radiometric Dating Needs at Orendorf Mounds

Erin Donovan, Jeremy J. Wilson (Indiana University-Purdue University, Indianapolis)

Orendorf (11F107) is a Mississippian Period village and mortuary complex within the central Illinois River valley in Fulton County, Illinois. Salvage excavations within the mortuary complex conducted between 1970 and 1990 yielded one of the largest and best-preserved skeletal assemblages in the central Illinois River valley. Radiometric dates from village contexts place occupation from A.D. 1150 to A.D. 1250, but radiometric dating of the burial contexts is lacking. Through georectification of spatial data from the original excavation paperwork, distinct stratigraphic episodes within the burial mound have been

assessed and seven individuals have been sampled for radiocarbon dating. This presentation will synthesize the demographic and epidemiological data from the Orendorf skeletal assemblage, while also establishing a chronology for the Orendorf mortuary complex to provide a more nuanced understanding of previous bioarchaeological research conducted with the Orendorf skeletal collection within a temporal context.

NAGPRA Matters: Reflections from Emerging Professionals

Erin I. Donovan (Indiana University-Purdue University, Indianapolis), Teresa Nichols (Indiana University), Leslie E. Drane (Indiana University), Davina R. Two Bears (Indiana University), Krystiana Krupa (Indiana University), Ricardo Higelin Ponce de León (Indiana University)

The teaching and learning of ethical practice is a central concern for all disciplines, particularly for anthropologists who study other people and must consider both the harms and benefits their research brings. Understanding education about the Native American Graves Protection and Repatriation Act (NAGPRA), a law passed by Congress in 1990, is an excellent path to explore how students can engage with Indigenous and human rights issues relating to research practices, repatriation, and more. The "Learning NAGPRA" project (2015-2018) has studied the challenges in preparing professionals for work related to NAGPRA, created educational materials for several audiences, and held an annual Collegium workshop to bring together graduate students, educators, and tribal cultural specialists to discuss these issues. In this paper, former participants reflect on how their Collegium experiences have enriched their understandings of NAGPRA-related issues, discuss educational practices, and consider their goals for their future careers.

The Contemporary Uses of Stamp Sands

Brendan Doucet (Michigan Technological University)

The stamp sands in Gay, Michigan are the last surviving example of copper stamp sand deposits in the Keweenaw Bay. They were created by the Mohawk and Wolverine mills which operated form 1912-1932 and whose foundations and launder systems remain at the site. This black dune-like landscape stands as testament to the iconic Keweenaw copper mining industry but its historical significance is overshadowed by the ecological threat the rapid ero-

sion of the sands pose to fisheries within the bay as well as its nature as a site of mixed use by the local community and municipalities. Exploring the contemporary uses of this site through documentation of material culture left behind by its users will lead to a better understanding of how to manage the sands to preserve their role as a historically significant site while also mitigating the environmental threats it poses and respecting it as a community gathering ground.

Harriet M. Smith: The First Female Field Archaeologist in Illinois

Leslie E. Drane (Indiana University), Elizabeth Watts Malouchos (Indiana University), Sarah E. Baires (Eastern Connecticut State University)

Harriet M. Smith (1911-1992) was Illinois's first female field archaeologist. Smith began her career as a graduate of Fay-Cooper Cole's program at the University of Chicago, one of the only programs at the time that trained women in archaeology. In 1937, she earned her Ph.D. with her dissertation, titled "On the Coincidence of Folklore Subject Matter with Culture Areas." Entering the workforce during the New Deal, in 1938, Smith was employed by the Illinois State Museum as the State Supervisor of the Museum Project. Smith is best known for leading Works Progress Administration (WPA) excavations at Cahokia in 1941, directing the first professional large-scale excavation at Cahokia. Harriet Smith contributed many original, although controversial at the times, ideas about Cahokian archaeology; several of these for which she never received credit. This poster describes Smith's academic life and the contributions she made to midwestern archaeology.

Location, Location or Home is Where the Hearth is? A Foray into Persistent Places in da UP

Sean B. Dunham (USDA Forest Service)

My doctoral dissertation research involving the review, synthesis, and quantification of Late Woodland archaeological sites in Michigan's Upper Peninsula was guided by Bill Lovis who served as the chair of my thesis committee. The resulting dissertation revealed much about Late Woodland settlement and subsistence in the UP and provided new ways of thinking about how Late Woodland hunter-gatherers operated within the landscape. A subset of the sites examined exhibited attributes of persistent places. A persistent place is

characterized as an archaeological site or locality that is used repeatedly over a long period of time. Such locations may be defined by economic, geographic, or social variables, or any combination of such factors. Another aspect of persistent places is that the long term human occupation of the locale may alter the physical environment. This paper will summarize the results of that research.

The Materiality of Music at Coalwood Lumber Camp

Matthew J Durocher (Michigan Tech University)

Coalwood was a cordwood lumber camp operated by Cleveland Cliffs Iron Company from 1901-1912 in the Coalwood lumber district located just south of Munising, Michigan, in the Hiawatha National Forest. Archaeological investigations at this camp recovered a large and diverse collection of musical reed plates. This demonstrates the significant role that music played in the worker's social life. My paper will make two methodological contributions. First, a typology of musical reed plates will establish a generalized idea of musical instruments on site. Second, a method to determine a minimum number of vessels (MNV) will establish the number of individual instruments. The distribution of musical remains around the site contributes to an effort at understanding the social role of music at Coalwood. The goal is to recognize that music and sound played a significant role in the daily life of these loggers that is reflected through the material record.

Discovery of the Gilles Maddeaux Homestead in Lebanon, Illinois

Patrick R. Durst, Robert G. McCullough (Illinois State Archaeological Survey)

During spring 2014, personnel from the American Bottom Field Station of ISAS completed archaeological investigations in Lebanon, Illinois prior to a proposed new roadway project for the Illinois Department of Transportation. This work resulted in the identification of the town's first homestead, which was established by a native of Georgia named Gilles Maddeaux by 1807. Investigative techniques included pedestrian survey, metal detecting, and magnetometry, leading to the delineation of this early nineteenth century occupation.

How Much is Enough? Evaluating the Role of Maize in the Late Prehistoric of the Prairie Peninsula

Richard W. Edwards IV, Robert J. Jeske (University of Wisconsin-Milwaukee)

The Late Prehistoric of the Eastern Woodlands (AD900-1100) is marked by population aggregation and shifts in material culture. The development of distinct contemporaneous archaeological cultures (e.g., Oneota, Langford and Middle Mississippian) has often been connected to assumed differences in maize consumption. A commonly used model is that increased complexity in social structures result from, and/or are required for, increased production and consumption of maize. However, most comparisons among Late Prehistoric groups in Illinois and Wisconsin have relied on incompatible or incomplete datasets, or were of limited geographic scope. This paper applies the Canine Surrogacy Approach to add isotopic data about dietary profiles from Late Prehistoric sites across northern Illinois and southern Wisconsin. Coupled previously published data, a more nuanced pattern of the relationships among maize agriculture, political complexity, economic structures and social institutions emerges.

"We've Come a Long Way Baby" – Lovis' Contributions to Great Lakes Subsistence Research

Katie Egan-Bruhy (Commonwealth Heritage Group, Inc.)

Throughout Bill's career he has led the way exploring new techniques for expanding our understanding of the archaeological record. Subsistence studies is one of the areas in which he has contributed significantly, both through his own work and encouragement of his student research. This paper reviews a number of his contributions and influence on my research.

Retyping the 'Female Archaeologist': The Career and Contributions of Dr. Emily J. Blasingham

Alex E. Elliott (Indiana University)

Dr. Emily J. Blasingham (1926-2007) was an exceptionally accomplished professional woman who took on various roles throughout Midwestern archaeology. Though most remembered for her contributions to the identification of Yankeetown ceramic types, Blasingham's diverse career included a variety of

publications and research focuses. Remembering her as merely a 'female archaeologist' would be a mistake; she did ample fieldwork, including field schools and salvage archaeology, and the lab work that accompanies it, as well as ethnohistoric research, (asst.) professorships, and curatorships. Blasingham, like the other women of her time, is commendable for pursuing a career that held reservations against women, but she is remarkable for her numerous contributions regardless of her sex.

Rogers: Lithic Procurement Patterns at a Large Ontario "Clovis-Like" Site

Christopher Ellis (University of Western Ontario), Scott Eckford (University of Western Ontario), William Fox (Trent University), Adrian Burke (Université de Montréal), D. Brian Deller (University of Western Ontario)

The Rogers site, located in the Niagara Peninsula region, represents the largest Ontario fluted point assemblage reported to date not associated with the strandline of pro-glacial Lake Algonquin/Ardtrea. Discovered by a non-professional, the late Merle Franklin, the assemblage consists of ca. 900 tools/ preforms and over 5500 waste flakes. As a whole the assemblage most closely resembles that from the Shoop site, Pennsylvania. It includes over 40, large, parallel-sided, partially fluted, often slightly "fishtailed," points/preforms that represent the most "Clovis-like" bifaces yet reported in Ontario. We believe it predates sites with stereotypically "Gainey/Bull Brook" type points. The assemblage is mainly on more local cherts, primarily Onondaga, but as at Shoop trace amounts of exotic materials such as Ohio cherts and Pennsylvania jasper are present. Implications of the lithic procurement patterns are explored as they pertain to questions and models surrounding how Paleoindian peoples colonized and explored the area.

Bridging Troubled Waters: Professionals, Avocationals, and Collectors Find Common Ground at the Illinois State Archaeological Survey

Thomas E. Emerson, Steve Boles, Madeleine Evans, Thomas Loebel, David Nolan, Dale L. McElrath, Robert Reber (Illinois State Archeological Survey)

Professional archaeologists and collectors have had a stormy relationship for decades, ever since the archaeological community "professionalized" in the 1920-30s – excluding early 20th century avocational practitioners – while still relying on a network of collectors to provide information on site locations and

finds. In this paper we relate the two decades long interaction between ISAS archaeologists and Illinois collectors to document collections, to produce a public oriented poster of Illinois projectile points, and eventually to publish a well-received book on Illinois point types placed in a historic and environmental context. This was a "labor of love" over the course of years by ISAS regional archaeologists and countless collectors, for the most part unfunded. The resulting publication has received strong praise from the collector community for its collaborative nature and for the acknowledgement of the value of their materials and knowledge.

Developing a Stable Point: Evaluating the Temporal and Geographic Consistency of Late Prehistoric Unnotched Triangular Point Functional Design in Midwestern North America

Metin I. Eren (Kent State University), Michelle Rae Bebber (Kent State University), Stephen J. Lycett (University at Buffalo)

Following Engelbrecht's (2015) analysis of points from the Eaton site (1550 CE) in western New York, we assessed potential functional—design characteristics of a large sample of complete and broken unnotched-triangular points from Blain Village, Ohio, an archaeological context several centuries older than, and approximately 550 km southwest of, the Eaton site. Our results are consistent with the hypothesis that Late Prehistoric points were designed to effectively penetrate the thoracic cavity of a deer, as well as potentially cause greater trauma during warfare through breakage. Moreover, given that these results are fully consistent with Engelbrecht's (2015) analysis from the Eaton site, our results indicate that there was a broad, strong selective pressure (i.e., functionally related biases) driving the design stability of unnotched triangular points across the Midwest for an extended period.

Fandel Mounds: A Lohmann Horizon Mississippian Mound Center in the Central Illinois River Valley

Duane Esarey (Illinois State Archaeological Survey), Robert McCullough (Illinois State Archaeological Survey), Gregory Wilson (University of California, Santa Barbara)

To date seven Central Illinois River Valley Mississippian mound centers, all documented between 50 and 120 years ago, have played central roles in in-

terpreting Mississippian history in the upper Midwest. In 2017 the Illinois State Archaeological Survey added an eighth Illinois River Valley mound center to this list, using remote sensing at a newly discovered mound center along Upper Lake Peoria. Three platform mounds (one unplowed) have been verified. Fandel Mounds appears to not only preserve evidence of Lohmann horizon Mississippian monumentality in the Central Illinois River Valley, but surface materials from the site's mounds and village indicate a single component late Mossville phase affiliation. Results of three types of geophysical sensing and a review of surface materials provide context for Fandel as one of a very few Lohmann horizon mounds and villages north of Cahokia in the period immediately after Cahokia's Big Bang.

Documenting Private Collections in Illinois: The Robert Reber Collection

Madeleine G. Evans (Illinois State Archaeological Survey), Brad H. Koldehoff (Illinois Department of Transportation), Thomas J. Loebel (Illinois State Archaeological Survey)

As the official archaeological agency for the state of Illinois, ISAS, along with IDOT, values the contributions of many avocational collaborators and private collectors who have assisted with our mission of investigating, preserving, and interpreting the archaeological heritage of the state. This paper highlights our collaboration with Robert Reber, who for sixty years has collected and documented the archaeology of southern Ford County, Illinois. These efforts exemplify the importance of privately-generated site documentation toward the recognition of important sites and the identification of large-scale land-use patterns in parts of the state that fall through the cracks of both compliance-driven and research-driven study.

The Woodland Ohio Monumentality Project (W.O.M.P.): Report from the 2017 Field Campaign at the Steel Group Site in Ross County, Ohio

Timothy D. Everhart, Laura M. Bossio, James P. Torpy (University of Michigan, Museum of Anthropological Archaeology)

The Woodland Ohio Monumentality Project (W.O.M.P.), established in 2016, investigates the variability in monumental forms constructed in Ohio during the Woodland period. To date, the Scioto-Paint Creek confluence area has served as the bounds of the study region. The 2017 field campaign provided

the first excavation at the Steel Group site, located in Ross County, Ohio. The campaign included shovel testing, coring, additional geophysical survey and large-scale excavation. Various specialized analyses of collected materials remain ongoing, with the results of a portion of these reported. The 2017 fieldwork revealed elements of the construction history at the Steel Group site, and lend insight into associated ceremonial practices.

Fault the Fault: Lithic Procurement at 12Mo1555 Courtesy of the Mount Carmel Fault

Madeline Fasel (Indiana University-Purdue University, Indianapolis), John Flood (Indiana University-Purdue University, Indianapolis), Edward Herrmann (Indiana University)

Site 12Mo1555 is a large pre-contact lithic scatter running over two miles throughout Saddle Creek and its tributaries in the Charles C. Deam Wilderness. Located through a combination of shovel test probes and pedestrian surveys, it appears to be an important location for prehistoric chert procurement, specifically the Harrodsburg and Ramp Creek cherts. The results of this study will help us to understand both the spatial and temporal characteristics of the site, how it was used in prehistory and how the Mount Carmel Fault contributed to site formation. Furthermore, the study will build upon previous studies looking at the adverse effects to cultural resources that the damming of Salt Creek caused during the creation of Monroe Reservoir. Previous studies have focused on the lakeshore, while this study proposes a need to examine cultural resources located upstream on the tributaries of Salt Creek.

Star Bridge's Conflagration and Archaeologists' Consternations: A Preliminary Analysis of the Glen and Marry Hanning Collection

John Flood (Indiana University-Purdue University, Indianapolis), Lawrence A. Conrad (Upper Mississippi Valley Archaeology Research Foundation)

Star Bridge, a late Mississippian Period village in the central Illinois River valley (CIRV), was extensively collected by avocational archaeologists in the 20th century as the result of shallow deposition and deep historical plowing. The Glen and Mary Hanning collection represents the largest of these collections. In the late 1970s, a deep plowing event also revealed a fair amount about the community's spatial design and probable conflagration during the mid-14th

century. Now curated by the Western Illinois Archaeological Research Center, the Glen and Mary Hanning Collection from Star Bridge is being analyzed, raising a series of questions about the collection's research potential and unknown biases. In this poster, we showcase some aspects of the collection and discuss the ongoing research. Preliminary observations indicate a complete absence of Bold Counselor Oneota wares that differs from other communities upstream, suggesting the village resided along an Oneota-Mississippian boundary within the CIRV.

Collaboration in the Wilderness: IUPUI and Hoosier National Forest

John Flood (Indiana University-Purdue University, Indianapolis), Angie Doyle (Hoosier National Forest), Joshua Myers (Indiana University-Purdue University, Indianapolis), Edward Herrmann (Indiana University), Jeremy Wilson (Indiana University-Purdue University, Indianapolis)

Indiana University-Purdue University, Indianapolis (IUPUI) and the Hoosier National Forest (HNF) have entered into a collaborative project to conduct cultural resource surveys in the rugged and remote 13,000 acres Charles C. Deam Wilderness. This project trains students for future careers in Cultural Resource Management (CRM), as well as benefits the HNF through participation in the Wilderness Stewardship Challenge program. In this poster we offer a survey of the 2017 field work completed by this collaboration, which utilized the Charles C. Deam Wilderness to train student volunteers as part of the Wilderness Stewardship Challenge. In addition, we discuss the difficulties of locating and managing cultural resources on federal lands given current fiscal shortfalls, including lands designated as a wilderness by Congress.

Putting Ohio Mounds in Context: Geophysical Survey Around Miamisburg Mound and Clark Mound

Alexandra Flores (Beloit College), Jarrod Burks (Ohio Valley Archaeology, Inc.)

Like many states in the Midwest, Ohio contains thousands of mounds, many of which stand alone on the landscape—or do they? Recent remote sensing discoveries suggest otherwise. This summer we undertook a pilot project, part of an internship, to determine the efficacy of geophysical survey for detecting supporting features at two solitary mound locations: Miamisburg mound,

Ohio's tallest, and Clark mound, a more modest feature. Magnetometry surveys at both located numerous anomalies but few appear to be archaeological and related to the mounds. The most important takeaway from this project is that the process of conducting geophysics around mounds is not as easy as we thought! Given that mounds in Ohio are often accompanied by other features (e.g., post circles, geometric enclosures, pit-type features), our efforts to date suggest that (1) larger areas need to be surveyed around the mounds, and (2) data from other instrument types are needed.

I'll Take Mine Well-done: A Closer Look at an Acorn Parching Pit

Kathryn Frederick, Rebecca Albert, William Lovis (Michigan State University)

The Green site, in Shiawassee County, Michigan comprises a single deep, burned, circular feature, 130cm in diameter, consisting of a thin 20 cm layer of hundreds of carbonized acorns and wood. It was hypothesized that the Green site feature was an acorn processing pit - used to dry acorns to prolong their shelf-life; a necessary first step before subterranean caching. A cal AD783 14C age reveals substantial time depth for the process of parching acorns for preservation. Features such as this, which reveal the technology for such processing, have only been identified at a handful of other sites and therefore are still poorly understood. A replicative archaeological experiment was conducted to inform on the methodology behind this approach to acorn drying and charring. We summarize the excavation, analysis, and experimental results of the Green Site feature.

Collector Contributions

Charles Fulk

Thousands of collectors accumulate artifacts and related information in various formats. These resulting perishable databases contain information such as raw material usage, localized artifact style variants, size and shape attributes, wear patterns, and site locational information over vast areas of the Midwestern United States. Collectors' backgrounds, interests and varied exposures to archaeology form the base for the ways that they organize and record their materials, which in turn dictates the potential usefulness of their artifact assemblages to the professional community. Privately owned collections can oftentimes be studied and recorded by interested professionals who have a

unique opportunity at that time to increase collectors' knowledge and appreciation of both their artifacts and the practice of professional archaeology. Also, collectors, because of their long-term relationship with sites, landowners, and agricultural practices can bring their own unique knowledge and perspective to relationships with professional archaeologists. Collector/professional collaboration and cooperation are built one positive encounter at a time.

Pretty Girls Make Graves: Sex and Death at Aztalan

Donald Gaff (University of Northern Iowa)

One of the innumerable hallmarks of Lynne Goldstein's archaeological career has been the pursuit of novelty and innovation in theory, methodology, and technology. Oftentimes, the Aztalan site, a late prehistoric palisaded settlement in Wisconsin, has served as a proving ground for many of these new ideas with one main approach being the continual reexamination of old data and old assumptions. In that fashion, this paper looks at some different views that might offer insight into the changing social relationships within Mississippian society and extrapolates what those changes might have meant for Aztalan.

Under Over-the-Rhine: An Emergency Salvage of 19th Century Urban Features in Cincinnati

Robert A. Genheimer (Cincinnati Museum Center)

While walking the Over-the-Rhine neighborhood of downtown Cincinnati, a series of 19th century features was noted along a bulldozed escarpment separating lots of differing elevations. The features included a heavily disturbed brick beehive cistern, a circular brick-lined privy shaft, a rectangular wood-lined privy shaft, and an unknown rectangular brick-lined structure. Unfortunately, the re-exposure and upper zone testing of the brick-lined privy revealed that it had been recently looted. The unknown brick-lined rectangle was relatively undisturbed, although its precise function could not be ascertained. This thermal feature exhibited a double crescent of bricks for placement of a metal vat or barrel. It is hypothesized that it may have used to render lye. The wood-lined privy box, although partially disturbed by heavy equipment, produced significant quantities of pottery, bottle glass, butchered

animal bone, marbles, buttons, metal, and clay smoking pipes, all dating to the first half of the 19th century.

Centuries of Collecting: The Changing Nature of Archaeological Collections at the Cincinnati Museum Center

Robert A. Genheimer (Cincinnati Museum Center)

The Cincinnati Museum Center (CMC) can trace its antecedents to the Western Museum (1818), the first natural history museum west of the Alleghenies. In those two centuries, CMC's archaeological collections have grown dramatically from cabinets of curiosities to millions of pieces from collectors, donors, and amateur and professional surveys and excavations. While excavated collections began to arrive in the latter half of the 19th century, their numbers accelerated after WWII, and have grown more dramatically since the 1980s. Much of the excavated collections derive from in-house expeditions, and the largest percentage are Late Prehistoric. Since WWII the utility of these collections has shifted from exhibit-based to research-based. Collections were rehoused and restructured after movement to a new collections facility in 2001, and our currently undergoing rehousing and reordering due to an impending absence of growth space. As collections increase, digitization of data has become increasingly important.

Why Archaeology and Environmentalism Make the Perfect Couple: Love Stories from an Archaeologist's Tryst with the Environmental Community in Milwaukee, WI

Pete Geraci (University of Wisconsin-Milwaukee)

Ethnographic data is typically employed to bolster archaeological interpretations; however, it is a lens we rarely cast back on ourselves. This paper will discuss lessons learned from ethnographic work with the environmentalism community in Milwaukee including new perspectives on human ecology, sociology, and collective action. Qualitative data was collected across several sites via participant observation and was supplemented with formal and informal interviews of organization leaders, employees, volunteers and other participants. Using these observations, I analyze how archaeology and environmentalism can benefit from increased communication and collaboration. Some of these benefits include creating enhanced public outreach opportunities, im-

proving methods for environmental restoration and archaeological site interpretation, and strengthening political influence through collective action.

Marshes, Swamps, and Other Wetlands: Landscape and Meaning in the Great Lakes

Lynne Goldstein (Michigan State University)

Not surprisingly, over the course of a successful, well-established career, Bill Lovis has addressed a variety of research topics. Three broad areas that he has returned to repeatedly are Great Lakes archaeology, human-environment interaction, and regional survey. As an archaeologist with similar interests, it is not surprising that our work has overlapped and complemented each other. In this paper, I focus on specific regional work done by Lovis in Michigan and by me in Wisconsin on regional surveys and wetland resources. Prior to these projects, wetland resources were often overlooked and understudied, but intensive surveys and an appreciation for resource potential shifted discussion of past adaptations and strategies.

Inventing and Reinventing Wisconsin's Burial Site Legislation

William Green (Logan Museum of Anthropology, Beloit College)

Legislators, attorneys, tribal representatives, and anthropologists worked together in 1984-1985 to craft Wisconsin's burial site legislation. Lynne Goldstein was one of the key participants in that successful effort. A proposal to weaken the law in 2015 precipitated protests and eventually another round of bill drafting. The bill introduced in April 2017 and currently (September 2017) in committee makes modest changes to the law but preserves its central provisions. This presentation describes and contrasts the 1984-1985 and 2015-2017 deliberative processes and results.

The Myrick Park Mound Group (47LC10), La Crosse, Wisconsin: Early Investigations and Recent Analyses

William Green (Logan Museum of Anthropology, Beloit College), Meghan C. Caves (Anchorage, Alaska), Leslie Lea Williams (Beloit College)

One of the earliest documented excavations of an effigy mound group by a professional archaeologist occurred in 1883 when Frederic Ward Putnam and local acquaintances excavated portions of four mounds at the Myrick Park site

(47LC10) in La Crosse, Wisconsin. Putnam recorded one effigy (similar to the short-tailed turtle form) and three conical mounds. Theodore H. Lewis visited the site in 1885 and mapped one additional conical mound. We examined documentation and collections housed at the Peabody Museum of Archaeology and Ethnology at Harvard University. Human remains represent a minimum of 23 individuals: 18 adults and 5 subadults. Dental and skeletal evidence indicates a relatively healthy population with low levels of nutritional deficiency, early-life stress, and trauma. Artifacts include a portion of a Madison Cordimpressed jar (a common Effigy Mound offering) and a Great Oasis rim sherd, consistent with other records of Great Oasis connections with western Wisconsin.

Geophysical Survey and Remote Sensing at Gast Farm, Southeast Iowa: Hidden Mounds and Middle and Late Woodland Community Plans

William Green (Logan Museum of Anthropology, Beloit College), Steven L.

DeVore (Midwest Archeological Center, National Park Service), Adam S.

Wiewel (Midwest Archeological Center, National Park Service)

Gast Farm (13LA12), situated on a Mississippi River valley alluvial fan, has been a focus of interdisciplinary study since 1990. Surface collections and excavations documented two Woodland communities and one mound. The Weaver community (Late Woodland, ca. A.D. 400) was determined to have been a circular village with a central plaza, but details of the Havana community (Middle Woodland, ca. A.D. 100) and mound structure were not clear. Aerial imagery seemed to indicate the presence of geometric earthworks. Magnetic survey in 2016 confirmed the circular-plaza layout of the Weaver village and discovered that the Havana community was apparently organized as a ca. 130 x 110-m ring of domestic features surrounding a central plaza. This may be the first complete plan of a Havana village (as opposed to a hamlet) to be documented. The 2016 survey also found no evidence of geometric earthworks but discovered six additional mounds.

Fauna for Thought: Preliminary Comparative Analysis of Oneota Faunal Refuse Among Different House Structures

AmySue Greiff (Beloit College), Drew Agnew (Beloit College), Rick Edwards (University of Wisconsin-Milwuakee), Rachel McTavish (University of Wisconsin-Milwaukee)

The Koshkonong Creek Village (47JE379) is a Late Prehistoric Oneota site located in Jefferson County, Wisconsin, dating to AD 1050-1400. This project examines vertebrate faunal remains from refuse pits associated with two different house structures. Evidence of intrasite subsistence differences among households is explored. Proportional differences of faunal remains among multiple features is examined to assess potential broad-scale dietary variation.

Dr. N'omi Greber: A Monumental Professional of the Hopewell

Kelsey T. Grimm (Indiana University)

Mable N'omi Beeman Greber (1929-2014) was one of Ohio's most notable archaeologists. Her first step into Midwest archaeology occurred in 1974, presenting at the Midwest Archaeological Conference on the Middle Woodland Period. That paper lead to a 40-year career contributing to Ohio and Midwest Archaeology, most specifically on the Ohio Hopewell. She wrote numerous reports, articles, book chapters, and other works on almost every topic related to the Hopewell; as well as served on multiple boards and several professional committees across the region. Dr. Greber was an archaeologist, a mentor, an author, a colleague, and a ground-breaking leader in teaching others about the importance of the Ohio Hopewell.

Mother of the GLOVE: Erminie Wheeler-Voegelin (1903-1988)

Kelsey T. Grimm, Lydia Lutz (Indiana University)

Erminie Wheeler-Voegelin was a pioneer within the field of anthropology, folklore, as well as ethnohistory and her successes and progressions in the field paved a pathway for future women. Not only was she the first woman to earn her doctorate in anthropology from Yale University but she also founded the American Society for Ethnohistory. Her largest contribution to her field was the organization and collection of the GLOVE (Greater Lakes-Ohio Valley

Ethnohistoy). Her research within the GLOVE collection provides a thorough examination of 16 Native American Tribes and has been used to support treaties during government trials. During her time at Indiana University she was a professor of the first college-level ethnohistory course in the United States. Despite trials of being a female academic and researcher in the 1940s and 50s, she managed to make herself known in a man's world and thrive in it.

The Chronology of Site 12LA0091, Representing the Unique Use of a Landform in the Kankakee Marsh, Lake County, Indiana

Kaye Grob, Kathleen Settle (Cardno, Inc.)

Site 12La0091 represents a unique archaeological setting in northwestern Indiana. The site is located on a sandy dune remnant situated on a topographical rise within the historically drained Kankakee Marsh. Analysis of artifacts and features indicate that the site may represent a seasonal waypoint in travel for resource extraction and regional subsistence activities from the Early Woodland through Protohistoric Periods. The data recovery provided information that refines the chronological framework for site occupation. The recovered lithics, ceramics, botanical samples, and faunal remains also provide greater insight into the temporal sequencing of the region and prehistoric seasonal activities within the Kankakee Marsh. These artifacts indicate material trade and reuse as well as regional manufacture; however, no indication of permanent settlement was identified at the site. This investigation generated important information to better understand the prehistoric temporal sequence of the region and the use of a unique landscape; the Kankakee Marsh.

Challenges in the Identification and Interpretation of Large Deep Pit Features: A Case Study from the M-231 Project in West-Central Lower Michigan

Michael J. Hambacher

Food storage among mobile hunter-foragers in the Upper Great Lakes has a long history of practice, extending back into the Archaic period. During the Late Woodland period, particularly after A.D. 1200, changes in the nature of food storage in the adaptive strategies of the region is signaled by the appearance of cache pit locales located away from residential base camps. Consisting of clusters of surface depressions representing large deep features, these sites have long been recognized as a feature of the prehistoric landscape. It is

only over the last several decades, however, that these features have become a focus of investigation. Extensive excavations at 20OT283 and 20OT3 in the lower Grand River valley provided an opportunity to examine a large sample of Late Prehistoric deep features associated with food processing and storage. This paper examines some of the issues faced in the classification and interpretation of these large deep features.

Human Cranial Earspools at the East St. Louis Precinct, St. Clair County, Illinois

Eve A. Hargrave, Lenna M. Nash (Illinois State Archaeological Survey, Prairie Research Institute)

Two earspools made out of human crania were recovered from the late prehistoric East St. Louis Precinct (115706) near St. Louis where excavations were conducted by the Illinois State Archaeological Survey as part of the IDOT New Mississippi River Bridge project. In the American Bottom region of Illinois, earspools are rare and often recovered from elite or ritual contexts. Typically made of stone, animal bone, copper, or ceramic, the use of human cranial elements for these two examples is unique and represents the only known human cranial earspools in the region. Our poster focuses on the possible roles that such modified human remains played in Mississippian society during the height of Cahokia's power.

Elaine Bluhm Herold: A Renaissance Woman of Illinois

Eve A. Hargrave (Illinois State Archaeological Survey, Prairie Research Institute)

Elaine Bluhm Herold (1925-2015) was one of Illinois's earliest professional female archaeologists at a time when women's participation in Illinois archaeology was limited. Her participation in the University of Chicago field school at Zimmerman site (1947) was the start of her love of archaeology and led her to positions at the University of Chicago, Field Museum of Natural History, and the University of Illinois. Elaine's many accomplishments included engaging both professional and avocational archaeologists in salvaging threatened archaeological sites, educating students and the general public about Illinois archaeological heritage, becoming the sole female founding member of the Illinois Archaeological Survey (IAS) in 1956, and IAS secretary and report edi-

tor. The IAS bulletins she produced were a critical resource for the development of regional chronologies throughout Illinois. Elaine's diverse interests, concerns for endangered sites, and enthusiasm for public education provides a role model for many subsequent generations of female archaeologists.

Ancient Cooking Messes and the Search for Early Maize in the Lower Great Lakes Region

John P. Hart (New York State Museum)

When was maize first adopted by Native Americans? Two articles published by Bill Lovis in 1990 changed the course of investigations on this long-standing question in the lower Great Lakes region. The articles, concerned with the preservation of charred cooking residues encrusted on pottery sherds and their potential for AMS dating, were an inspiration for a multi-institutional research program on maize histories. This program involves microbotanical and isotope analyses, AMS dating, and experimental archaeology, to which Bill and his students have made and continue to make critical contributions. The on-going results are substantially altering our understandings of maize histories in the lower Great Lakes and regions to the east.

Collections Management at the Illinois State Archaeological Survey— Challenges and Opportunities

Kristin M. Hedman, Laura Kozuch, Mary R. Hynes (Illinois State Archaeological Survey, University of Illinois)

The Illinois State Archaeological Survey (ISAS) stewards cultural material and documents from over 100 years of archaeological investigations in Illinois. Our primary partner and funding source is the Illinois Department of Transportation. The goals of ISAS are to protect, preserve, and interpret the irreplaceable, nonrenewable cultural resources of Illinois, and disseminate knowledge to both the professional community and the people of Illinois. Integral to our mission is the curation of extensive archaeological research and museum-quality collections, including artifacts, photographs, and paper and digital documents from several thousand archaeological sites. In addition to our main facilities in Champaign, Illinois, ISAS has field stations across the state—each responsible for the initial management of collections generated during the hundreds of field projects that ISAS conducts annually. This presen-

tation will share some challenges we face, and highlight initiatives aimed at preserving and making more accessible several important legacy collections.

In Search of the Ohio Hopewell in the Uplands: A Lithic Analysis of the Spracklen Site (33GR1585)

Tyler R. E. Heneghan (Illinois State University)

Earthen works of the Ohio Hopewell peoples have long been the focus of archaeologists. As a result, contemporary habitation sites in the region are understudied. A holistic understanding of community organization must involve investigation of all regions within and surrounding these earthworks. This project investigates the lithic tool acquisition, production, consumption, and use at the Spracklen site, an Ohio Hopewell site located in the uplands of Greene County, Ohio. This includes a comparison with earthworks in the region, such as the Fort Ancient Earthworks and the Pollock Works. Results demonstrate that the occupants relied heavily on Harrison County chert (70% of total assemblage) and bladelet technology. Results of a preliminary use-wear analysis indicate that bladelets were utilized for a variety of purposes. These findings have an impact on our understanding of lithic tools in ceremonial and habitation occupations among the Ohio Hopewell peoples.

Early Paleoindian Mobility and Lithic Resource Use in Indiana

Edward W. Herrmann (Indiana University), Mackenzie J. Cory (Indiana University), Katie Hunt (Indiana University-Purdue University, Indianapolis), John Flood (Indiana University-Purdue University, Indianapolis), Josh Myers (Indiana University-Purdue University, Indianapolis)

In this paper, we present data that shows Early Paleoindian groups in Indiana primarily used local sources of tool stone. Mapping of site distributions and chert type concentrations highlights mobility patterns. Comparisons of Early Paleoindian projectile point distributions and lithic sources indicate that the points are overwhelmingly produced from local chert. Extraregional chert types represent less than ten percent of points in Indiana and likely indicate long-distance travel or trade with groups in adjacent regions (states). Although regional early fluted-point groups are often considered to have colonized a relatively vacant landscape, our results may show that terrestrial and

river-based travel corridors were already known and in use by the Clovis Period.

Prehistoric Copper Mining in the Ontonagon Basin

Mark A. Hill (Ball State University), Kevin C. Nolan (Ball State University)

The Ontonagon River basin sits at the southwestern end of the Keweenaw Peninsula along the south shore of Lake Superior. Historic records indicate the area was used extensively for the procurement of copper, and limited archaeological investigations have documented copper production activities dating from the early Late Archaic to the Late Woodland. Archaeologists from Ball State University are beginning a program of research at site 20 ON 209 located on the East Branch of the Ontonagon River and representing an intensively quarried placer deposit of copper. The site represents one of the best examples of copper procurement sites in the Keweenaw region. During the summer of 2017, ground penetrating radar surveys examined the structure of quarry pits and features at this site, and copper was collected from the site for elemental analysis. We present our preliminary findings, and outline our future research goals in this paper.

Methodological Considerations for the Study of Quartz and Quartzite Stone Tools: A Case Study from Grand Island Michigan

James Hill, James Skibo, Gregory Logan Miller (Illinois State University)

My project assessed 100 artifacts from Grand Island Michigan Late Archaic sites. I have selected two Late Archaic sites from the island, Duck Lake and Popper, respectively. I have divided my project into three phases. Phase one was a simple presence/absence study of microwear on a sample of informal and formal tools from Grand Island Michigan. The goal of this phase was to determine what types of wear appear, if any, on the tools from Grand Island Michigan. Phase two involved several tasks. Initially, I reconstructed several tools from quartz, quartzite, and chert from Grand Island and then use these pieces to do several tasks. The tasks included hard medium working such as wood, antler, and bone, medium level activities such as organic workings as well as several animal processing type activities, and lastly soft medium activities such as cutting of flesh and soft organic processing. Lastly, the third phase was to compare the use marks from my experimental section to the use

marks on the artifacts in order to attempt to determine the activities that these tools were used for and potentially how long they were used. Through these three questions I have successfully been able to compare two Late Archaic sites from Grand Island, Michigan.

From Formal to Efficient: Variation in Lithic Technology from the Late Woodland to Fort Ancient Period in the Ohio River Valley

Sarah Hinkelman (Ohio State University)

From the Late Woodland period (AD 700-1000) to the Fort Ancient period (AD 1000 - 1650) multiple social and economic changes occurred, among them was a prominent shift in lithic technology. This shift is evident in the morphology of projectile points and raw material usage which is possibly a product of a change in manufacturing techniques, from freehand hard-hammer reduction to bipolar reduction. The overall goal of this study is to understand how lithic production may have changed between Late Woodland and Fort Ancient communities through the lens of cultural transmission via differential learning strategies; guided variation and indirect bias. These strategies may be extrapolated by observing reduction techniques among lithic debitage. This problem will be analyzed with the lithic assemblages from the Clark site (33WA124), a Late Woodland period site, and the Guard site (12D29), an early Fort Ancient period site, both located on the Ohio River.

Pardon Our Dust: Extant Artifact Collections and the Walsh Site 11Br11 Scott Hipskind (Indiana University-Purdue University, Indianapolis)

Walsh, one of several Mississippian centers in the central Illinois River valley (CIRV), was first documented by the Bureau of Ethnology and Cyrus Thomas in 1894. However, given its remote bluff top location on the southern margin of the CIRV, only a few surface collections by the Center for American Archaeology and one excavation by Indiana University were conducted at Walsh in the 1970s. These assemblages, along with artifacts from donated collections, were curated, but never fully analyzed and documented until 2016. This was done as part of a larger research project that included a geophysical survey of the site and surrounding landscape. These collections offer a great representation of the ceramics styles, lithic raw material utilized, and fauna exploited for subsistence at the site. Also, the excavated biological remains provided

dateable material to secure Walsh's chronological placement during the late 13th and early 14th centuries.

Prehistoric Dog Pathology in the American Bottom: Reanalysis of the Range Site (11S47) Canid Assemblage, St. Clair County, Illinois

Allison L. Huber (Illinois State Archaeological Survey)

For thousands of years, domestic dogs (Canis familiaris) have sustained a unique and complex relationship with humans, figuring prominently in both spiritual and prosaic realms of Native American society. Archaeological investigations at the late prehistoric Range site (11S47) in the American Bottom region of Illinois resulted in the recovery of over 3,500 dog remains, representing 52 individuals. This well-preserved faunal assemblage allows for a detailed study that provides important insight on the daily lives of Native American dogs during the Late Woodland Patrick phase (A.D. 650-900) and Terminal Late Woodland period (A.D. 900-1050). My reanalysis of this collection focuses on the documentation and interpretation of prehistoric pathology and trauma. This paper serves as a preliminary summary of the paleopathology observed on the Range dog remains, makes comparisons with contemporaneous canid assemblages in the region, and highlights patterns observed that will guide future research.

The Eroding Mortuary Landscape of the Charles C. Deam Wilderness

Katie Hunt (Indiana University-Purdue University, Indianapolis), Joshua Meyers (Indiana University-Purdue University, Indianapolis), John Flood (Indiana University-Purdue University, Indianapolis)

The defunct town of Todd, Indiana existed within what is now known as the Charles C. Deam Wilderness in Monroe County, Indiana. Located within this unincorporated town, the Todd Cemetery contains an unexpected proportion of sandstone grave markers to the more traditional limestone markers. Through this project, we will analyze this cemetery, and compare it to contemporaneous cemeteries in of various socio-economic standing throughout the region. This will be achieved by examining census, death, probate records, and archaeological data in order to understand the reasoning behind using sandstone grave markers. By looking at this cemetery in relation to other cemeteries in the Deam Wilderness area, as well as the surrounding Monroe

County, this project hopes to gain a better understanding of socio-economic stressors in this rural region by studying population, family diversity, and mortuary practices within the project area.

Finding Identity: Rural Irish Settlement in Mid-19th Century Wisconsin

Robert J. Jeske (University of Wisconsin-Milwaukee)

Material culture is wrapped within the notion of choosing one's identity and externalizing its expression. The potential for recognizing identities of rural Irish as expressed through material culture in the pre-1850's Great Lakes region is discussed. The McHugh site rural Irish farmstead is contextualized in relation to other Irish immigrant sites in Wisconsin and adjacent states. Emphasis is placed on occupational preferences, landscape utilization, architectural choices, and subsistence practices of Irish immigrants of Wisconsin in the mid-18th century.

Ten Seasons Later: The Crescent Bay Hunt Club Site and Wisconsin Oneota Lifeways

Robert J. Jeske, Katherine M. Sterner, Hannah Blija, Tania Milosavljevic, Samantha Bomkamp (University of Wisconsin-Milwaukee)

The Crescent Bay Hunt Club site (47JE0904) was first noted 1908, and UW Madison's David Baerreis conducted limited excavations there in 1968. The site was relocated and reported in Lynne Goldstein's Southeastern Wisconsin Archaeology Program Report for 1995. In 1998, UW-Milwaukee began a long-term, systematic survey and excavation program to understand the prehistory of the Lake Koshkonong region. The 2017 field season marks ten seasons of UWM excavations at Crescent Bay. This year's excavations at Crescent Bay revealed postmold evidence for a third longhouse; a large number of pit features containing significant quantities of floral, faunal, ceramic, and lithic material; a cylindrical pit filled with mussel shells, and the primary burial of an elderly female. Combined with data from UWM excavations at the nearby, contemporary Koshkonong Creek Village, Schmeling, and Carcajou Point sites in the region, recognizable patterns of Oneota life and death in eastern Wisconsin are presented.

Even if You Don't See it, There's Still a Lot There: History and Development of Urban Archaeology in Indiana

James R. Jones III (Indiana Division of Historic Preservation & Archaeology)

After the establishment of the National Historic Preservation Act, the Society for Historical Archaeology, and the Indiana Historic Preservation and Archaeology law, urban archaeology projects in Indiana have increased notably, especially noticeable over the past 2-3 decades. Specialists trained in historical archaeology have filled positions at many universities in the state, in research positions, and in CRM companies. Large projects, many under the purview of federal agencies, and research projects have resulted in the proliferation of historical archaeology projects of a wide variety of site types, originally unseen to urban residents, but present in urban Indiana settings. This paper briefly looks at the rise and examples of urban archaeology projects throughout Indiana, demonstrating that a significant part of our heritage lies right beneath where we live every day.

Coulee Detached: Frozen Ground Excavation Along the Kankakee River

S. Gideon Katz, Jay Martinez (Midwest Archaeological Research Services)

For two weeks in January 2017, archaeologists with Midwest Archaeological Research Services conducted limited Phase II testing on 11Ka288 prior to ComEd utility pole replacement. 11Ka288 is located on a sandy terrace along the eastern bank of the Kankakee River. The site was recorded in 1991 during the Phase I survey for the Kankakee River State Park. Surface collection as part of the 1991 survey, yielded numerous diagnostic artifacts including Archaic and Woodland points. This poster presents an overview of site specific excavation methodologies employed by the authors to recover archaeological material in completely frozen ground.

Unearthing Prehistoric Settlement Patterns: Using GIS to Understand Mississippian Settlement Patterns in the Central Illinois River Valley

Kayla Kauffman (Indiana University-Purdue University, Indianapolis)

Since the 1970s, researchers have examined Mississippian settlement patterns in mid-continental North America, regularly invoking a three or four-tiered system. In the central Illinois River valley, Harn and others have hypoth-

esized that a multi-tiered system existed around larger villages and socio-political hubs working in tandem or competition with each other. The current research utilizes GIS to test the assumed settlement hierarchy around larger villages and centers by applying quantifiable parameters. The aim is to examine the dispersion and diversity of sites in relationship to sites previously identified as significant villages or centers through the use of Thiessen polygons. These polygons offer a way to assign regions based on straight-line distance between sites. The goal is to provide insight into why larger settlements appear where they do on the landscape and whether a predictable pattern of subsidiary settlements can be discerned from the extant database.

Reminiscing on Lynne Goldstein's Contributions and Impacts in the Study of Mississippian Societies: A Perspective from the American Bottom and Cahokia

John E. Kelly, Lucretia S. Kelly (Washington University)

While it is relatively easy for us to enumerate the many areas of archaeology where Lynne Goldstein has made contributions, what is equally important is the impact that her work has not only on us her professional colleagues and their research, but also the students who bring a certain level of freshness and enthusiasm to the field. Being a fellow Beloiter our interaction with Lynne extends back six decades, beginning in the Lower Illinois River valley and eventually Cahokia. We want to focus our attention on her contributions and impacts to the Mississippian world from Aztalan to Cahokia and beyond.

Evaluation of Geoarchaeological Research at the Aztalan Site and its Surroundings

Michael F. Kolb (Strata Morph Geoexploration, Inc.)

Lynne Goldstein and her students have conducted research at the Aztalan site over the last three decades. This research was often augmented by investigations from a geoarchaeological perspective. A brief summary of the geoarchaeological research and its contribution to understanding the complex anthropogenic and natural stratigraphy at the site is presented. The results of these investigations indicate that glacial and anthropogenic stratigraphy at the site is more complex and varied than previously thought and direct and indirect modification of the landscape by Native populations more extensive.

From the Wabash to the Mississippi: Long-Distance Mobility and the Mueller-Keck Complex, St. Clair County, Illinois

Brad Koldehoff (Illinois Department of Transportation), Daniel Amick (Loyola University), Thomas Loebel (Illinois State Archaeological Survey)

Situated in the uplands near Prairie du Pont Creek about 5km from the Mississippi River floodplain, the Mueller and Keck sites occupy adjacent landforms. Decades of cultivation and erosion have brought numerous early PaleoIndian lithic artifacts to the surface. Controlled excavations have, unfortunately, demonstrated that the artifacts are confined to the plowzone. Avocational and professional investigations have recovered nearly identical assemblages from both sites. No definite early PaleoIndian artifacts are made from local or regional lithic materials. All fluted points and preforms, for example, are made from lithic materials with sources areas in Indiana. The dominant raw material is Attica chert along with traces amounts of Holland, Lead Creek, and Allen's Creek. The Mueller-Keck Complex appears to have been repeatedly reoccupied by groups that "geared-up" at the Attica source in the Wabash Valley and moved across Illinois to the Mississippi Valley.

The "Shoop Effect:" Early PaleoIndian Long-distance Mobility

Brad Koldehoff (Illinois Department of Transportation), Henry Wright (University of Michigan)

The Shoop site, situated in south-central Pennsylvania, is emblematic of an important PaleoIndian site type: the big, early habitation site. Big, early habitation sites, while infrequent, have been identified across Eastern North America. They typically, (1) include multiple artifact concentrations, (2) are often situated in seemingly inexplicable locations, (3) produce large tool assemblages dominated by points and endscrapers, and (4) the assemblages are primarily manufactured from distant raw materials (greater than 100 km), often only one or two materials. These large sites have been interpreted as archaeological signatures of caribou hunting, colonization, and/or aggregation. In this paper, we examine these and other interpretations, and we propose that the movement of entire lithic toolkits by groups to distant locations warrants further study as a distinctive early PaleoIndian pattern, first recognized 65 years ago at the Shoop site.

Cooking Upper Great Lakes Fish: New Perspectives from Stable C:N Isotope Analysis of Carbonized Pottery Residues

Susan M. Kooiman (Michigan State University)

Carbonized food residue from 30 pottery vessels from the Cloudman site (20CH6) on Drummond Island off the Upper Peninsula of Michigan were sampled and subjected to stable carbon and nitrogen analysis. The results reveal consistent δ -13C and δ -15N levels in vessels from the Middle Woodland (AD 1 – AD 500/600), early Late Woodland (AD 500/600 – AD 1000), and late Late Woodland (AD 1000 – AD 1600) periods. Stable isotope assays on residue from all vessels, regardless of temporal affiliation, fall within measured ranges of high trophic-level freshwater fish, such as pike, lake trout and whitefish. These results run counter to findings from lipid residue analysis of pottery from other coastal Woodland sites in the Upper Peninsula as well as prior ethnographic reviews, and requires a re-assessment of cooking habits in the precontact Upper Great Lakes. They also suggest continuity in the resources cooked at the site over an extended period of time.

Capturing Campus Cuisine: An 1860s Luncheon Reconstruction at MSU

Susan M. Kooiman, Autumn M. Painter (Michigan State University)

As part of a project documenting historic foodways at Michigan State University (MSU), the Campus Archaeology Program (CAP) coordinated a reconstruction of a meal consisting of foods served at MSU in 1860s. Archaeological floral and faunal remains discovered on campus provided evidence of foods consumed by students, accounting books from the MSU Archives gave insight into ingredients purchased by early boarding halls, and recipes popular during this era were found in historic cookbooks from MSU Library Special Collections. Together, this information helped form an interpretation of campus cuisine. In cooperation with MSU Culinary Services, we developed a menu and prepared and served the historic dishes to invited guests from across the MSU community. In combination with social media announcements and development of a website, the project was an example of successful public outreach and proved that our stomachs can be exceptionally satisfying pathways to the past.

The Palmer Site: An Early Paleoindian Site in the Western Erie Basin

Thomas LaDuke (Michigan Archaeological Society), Henry Wright (University of Michigan)

The Palmer site in southwestern Michigan has been excavated from 2010 until the present. The site is located on sandy lakeshore features of the proglacial Grassmere Phase of Lake Erie, but is thought to have been occupied after the lake had diminished, leaving a vast plain covered with spruce parkland. Early Paleoindian tools are scattered over about two hectares. Predominant are small multiple fluted points with shallow bases and small triangular end scrapers. The tools were made predominantly on variants of Attica chert found 250 km westward, with a few points made on Onondaga or Haldiman cherts from a similar distance eastward and various other Ohio and Indiana cherts. The most distant imports appear to be point fragments of Hixton quartzite. This paper summarizes the ongoing research.

The Headwaters of Redwood Creek and Vicinity within the Iroquois Till Plain Physiographic Zone

James R. Leak (Warren Co., IN)

West-central Warren County, Indiana provides a unique environmental setting for prehistoric settlement that has not been systematically examined as a survey database. The Iroquois till plain physiographic zone is characterized by a black, silt clay loam and is poorly drained. I hypothesize that there was prehistoric occupation throughout West Central Warren County Indiana based on unique natural features of this area. I propose that prehistoric peoples occupied land forms that are five (5) feet or less in elevation based on a March 31st, 1992 reconnaissance of four (4) sites as well as informal documented surface collecting from 1969 to present day. A systematic, thousand acre survey, initiated by a professional archaeologist, whose findings could support or disprove this aforementioned hypothesis, is required. At a minimum, a comprehensive archaeological survey of this region would aid in our knowledge base of prehistoric settlement patterns in West Central Indiana.

The Big Picture: Patterns in the Clovis, Folsom, and Late Paleoindian Records of Wisconsin and Illinois

Thomas J. Loebel (Illinois State Archaeological Survey), Matthew G. Hill (Iowa State University), John Lambert (Illinois State Archaeological Survey)

Regional patterns of hunter-gatherer land use and mobility across the Late Pleistocene cultural complexes in the western Great Lakes region (IL/WI) are briefly examined in relation to regional environmental structure. Shifting patterns in site locations, raw material use, mobility, and technological organization are explored and new radiocarbon data related to the presence or absence of historically inferred prey species potentially driving shifts in regional adaptations is presented.

Following the Footprints: A Survey of Domestic Structures in the Charles C. Deam Wilderness

Melissa Long, Matt Young, John Flood, Joshua Myers (Indiana University-Purdue University, Indianapolis)

The Charles C. Deam Wilderness contains the remnants of early 19th and 20th century settlements. While nature has long since overtaken the farmlands and structures of these pioneer settlers, fieldwork and database research allows us to illustrate these early settlements and specific domestic structures. This project uses the archaeological remains of domestic buildings, photographs, and existing literature to illuminate historic domestic life in south-central Indiana. In particular, we are interested in determining if patterns in domestic construction exist that allude to the socioeconomic setting to which Polk Township settlers were subjected to. This study utilizes ArcMap and other Geographic Information System tools to compile and analyze house types for Hoosier National Forest's educational outreach purposes.

Late Pleistocene Peoples in Western New York

Jonathan C. Lothrop (New York State Museum)

Western New York, located east of Lake Erie and south of Lake Ontario, represents a distinct region for Early Paleoindian occupation. Before human colonization, deglaciation was accompanied by the formation of high-stand and low-stand lakes in the Erie and Ontario basins, and a terminal Pleistocene pale-

oenvironment that lacked a clear-cut signature of the Younger Dryas climatic reversal. Here, we focus on three iconic sites that have dominated discussions of early Paleoindian lifeways in western New York: Arc, Hiscock and Lamb. We begin by reviewing these sites in terms of assemblage evidence for relative dating, site functions and settlement poses. We then focus on the toolstone profiles as evidence of seasonal group movements and social interaction. We close by examining potential relationships between these western New York sites and early Paleoindian occupations in neighboring southwestern Ontario and the larger eastern Great Lakes region.

Landscape Marking, the Creation of Meaning, and the Construction of Sacred and Secular Spaces: Rethinking the Birney "Mound" in the City of Bay City

William A Lovis (Michigan State University)

The so-called "Birney Mound" on the Saginaw River in lower Michigan is revisited from the vantage point of long term landscape perception, marking, naming, and memory. The natural raised postglacial beach feature, composed of light sand, is a major landscape prominence on the Saginaw River drainage. At times it was the system entrepot from Lake Huron, and later became the first prominent landform encountered in upstream travel. The "mound" was employed for ritual purposes including mortuary behaviors for 5000 years. By the late 18th century it harbored a Native American cemetery, and during the mid -19th century it continued as the site of major tribal gatherings. Such continuity reifies its status as a persistent place with attached and transmitted intergenerational information, potentially transcending individual ethnic/tribal groups; it is a cumulative historical space. Rethinking the Birney "Mound" situates it as a multigenerational landscape anchor point in indigenous knowledge and wayfinding systems.

Preserving Michigan's Archaeological Heritage: A Collective Endeavor William A Lovis (Michigan State University)

Effective working relationships involve choices about who to interact with, the focus and intensity of the interaction, and often hinges on perceptions of shared goals, the potential for mutually beneficial outcomes, and a foundation of trust. Interactions between professional and avocational archaeolo-

gists (aka "amateurs" or "collectors") pose no exception to this suite of necessities. Trust, personality, and ethical principles all figure into who we might effectively interact with. Many professionals do not trust avocationalists. Likewise many avocationalists do not trust professionals. Often, such notions may be transmitted inter-generationally. The result, alas, is loss of archaeological knowledge and a further threat to the diminishing archaeological resource we both in our own, sometimes different ways, cherish. Transcending such barriers is a significant challenge. In this personal case study I discuss three very different avocationalists with whom I've worked, whose friendships I've enjoyed, and who have in different ways enhanced Michigan's archaeological record.

Alice Struever: Crucial Contributor to Flotation Methodology

Savannah Leach Newell (Indiana University)

Alice Struever is often written about in association with her more well-known husband, Dr. Stuart Struever. Both Alice and Stuart were large parts of the early years of the Center for American Archaeology in Kampsville, Illinois. Although she was a school teacher and not classically trained as an archaeologist, Alice spent countless hours wading through creek waters to develop and implement flotation techniques. Once deemed a "mud puppie" by Gregory Perino, Alice committed herself to separating soil from tiny, otherwise unrecoverable archaeological items, such as charred seeds and fish bones. Alice's skills were utilized at several Midwest sites including Apple Creek Site during the early 1960s and the Koster excavations in the 1970s. Alice played a pivotal role in the development of these flotation methods, sparking a new era of paleobotany. Alice Struever's dedication to flotation spurred a greater understanding of subsistence strategies across the region.

Survey of Prehistoric Sites at the Carl W. Steiber Farm, Which Became Part of Lincoln Fields Race Track in 1926 and Balmoral Park Race Track in 1955

Mark L. Madsen (Chicago Archaeological Society)

The Carl Steiber Farm Site is located in Will County along the Westmont Moraine at a high point of 731 feet above sea level. It overlooks a North Branch of Plum Creek and was among several stopping-off places for prehistoric people following the Vincennes Trail prior to Gurdon Hubbard rerouting it along

Route 1. Diagnostic knives and points indicate scattered encampments from Paleolithic through Late Woodland times. Test grids have revealed Terminal Archaic-Early Woodland post molds and features near the farm house. The site is between a string of possible mounds and those at Goodenow Grove and Balmoral Woods. The Steiber farm house was registered with the Will County Historic Preservation Agency in 2001. Important race track guests like Jack Dempsey, James Cagney, Robert Mitchum, and Lucille Ball who wanted privacy from the crowds at the track are said to have stayed at the Steiber farm house.

Moravians, a Prophet, and Pipes: A Critical Evaluation of the Smoking Paraphernalia at the Forks of the Wabash Miami Indian Village

Rob Mann (St. Cloud State University)

Although tobacco was an integral component of Miami sacred and secular life, very few tobacco-related items were recovered from the early 19th-century Forks of the Wabash River Miami Indian village. One intriguing object is a Moravian stub-stemmed, probably anthropomorphic, pipe bowl. During this period the Moravians operated a mission among the Delaware villages on the White River, in present-day central Indiana. In 1806, around the time the Miami established a village at the Forks of the Wabash, Tenskwatawa—the Shawnee Prophet—and a group of his followers among the Delaware tortured and killed several other Delaware accused of being witches. The Forks of the Wabash Miami, while virulently anti-American, were never strict followers of the Prophet's nativistic movement. This singular, evocative Moravian pipe suggests some level of interaction between the Miami and people associated with the Moravian mission and Delaware villages on the White River.

Osteological Distinctions between White-tailed Deer and Caribou: Implications for Environmental Archaeology in the Northern Great Lakes Region

Terrance J. Martin (Illinois State Museun, Michigan State University), Angela R. Perri (Durham University, Max Planck Institute for Evolutionary Anthropology)

As co-director of the 1974-1975 Inland Waterway Survey and Excavation Project in the northern part of Michigan's Lower Peninsula, William Lovis and colleagues acquired considerable archaeological data pertaining to landscape

history and resource potential for the area. Additional archaeological investigations have provided complementary information on human-environment interactions in northern Michigan. Although the inland shore fishery was of critical importance for local populations, large terrestrial mammals also provided significant sources of meat, as well as hides. In addition to the 1960s excavations at the Juntunen site, recent discoveries of caribou (Rangifer tarandus) remains have been made at three other Late Woodland sites in northern Michigan. By illustrating some key osteological distinctions between white-tailed deer (Odocoileus virginianus) and caribou, we call attention to the importance of accurate identifications of fragmentary cervid remains and their implications for a better understanding of human adaptations and subsistence for the region.

Mississippian Cultural Period Iconography and Ethnohistoric Accounts of Tornado Folklore

Melinda Martin (University of Memphis)

The purpose of this research centers on how pre-Columbian societies, such as the Mississippian culture of eastern North America, perceived and reacted to acute weather conditions, in this case tornadoes. Archaeologists are often at a disadvantage in interpreting and understanding how past cultures viewed the world around them. Data sources used to construct interpretations included the archaeological record itself, ethnohistoric accounts, climate data, folklore, and iconography. The concurrent research shows natural environmental conditions played an important part in Native American cosmology and should be further evaluated.

Midwestern Archaeological Collections at the Gordon L. Grosscup Museum of Anthropology

Megan M. McCullen, Kelsey Jorgensen, Carly Slank (Wayne State University)

The Gordon L. Grosscup Museum of Anthropology at Wayne State University houses archaeological and ethnographic collections from around the world, with an emphasis on archaeological collections from the greater Detroit Area. Large collections include those from Fort Wayne, Fort Lernoult and Summer Island. Macomb and Wayne county collections are varied and abundant. Additionally several smaller collections from across the state of Michigan and

surrounding midwestern states are present and available for researchers to examine in our collections.

Comparing Magnetic Susceptibility and Magnetometry: Two Case Studies from Illinois

Robert G. McCullough (Illinois State Archaeological Survey)

Geophysical survey techniques are becoming increasingly routine in archaeological investigations where ground-penetrating radar, soil resistivity, and magnetometry are widely familiar. Magnetic susceptibility surveys have been employed, but are underutilized in the United States and Britain. However, with the development of improved electromagnetic induction (EMI) instrumentation, the collection of magnetic susceptibility data for wide-area archaeological surveys is becoming more practical. Magnetometry and magnetic susceptibility are complementary geophysical survey techniques, which, when used together, can provide a more complete evaluation of subsurface anomalies. This paper compares the results of both magnetometry and magnetic susceptibility surveys on a 19th-century cemetery and a Late Prehistoric village in Illinois, demonstrating the utility of the newer dual-coil EMI instruments in close-interval spatial surveys. A Bartington Grad 601-1 gradiometer and a Geonics EM38-MK2 EMI were employed for this study, and the pros and cons of each technique will also be presented.

Geophysical Survey at the Multiethnic Noble-Wieting Site (11ML24) in the East Central Illinois Prairie

Robert G. McCullough, Tom Crapnell, Rachel Lawrence, Tom Loebel, Sarah Scattergood, Spencer Skadden, Jacob Skousen, Daniel Smith (Illinois State Archaeological Survey)

The Illinois State Archaeological Survey conducted a geophysical survey at the Noble-Wieting site in McLean County, Illinois. The site is located on a rise near the confluence of the Kickapoo and Little Kickapoo creeks in an ecotone where the bottoms once supported large oak groves surrounded by the central Illinois prairie. The village site extends approximately 5.8 acres and previously had a mound within its boundaries. Previous investigations have produced both Langford and Mississippian ceramics and a few radiocarbon dates that place this site within the 13th to 14th centuries. A magnetometer survey

indicated an oval pattern of structures around a central plaza, a possible stockade wall, and clusters of large storage pits in some areas of the site. This pattern is presumably more Langford than Mississippian. A magnetic susceptibility survey was also conducted in selected areas that augmented the magnetometer survey, identifying additional structures and the potential mound location.

Marine Shell, Painted Pottery, and a Curious Point: A Report on Ongoing Excavations at the Very Late Prehistoric Middle Grant Creek Site in Northern Illinois

Madeleine McLeester (University of Notre Dame), Mark Schurr (University of Notre Dame), Terrance Martin (Illinois State Museum)

The Middle Grant Creek (MGC) site at Midewin National Tallgrass Prairie in Wilmington, IL is a well-preserved very late prehistoric Huber phase village. Our work at MGC aims to refine existing understandings of Huber communities with particular focus on human-environment entanglements, mobility, and long distance trade. The second year of ongoing excavations expands our understandings of lifeways during the final period before European arrival. We discuss our current work with geophysics, excavation, and ongoing analyses and contextualize the regional significance of unexpected finds in the faunal, ceramic, and lithic assemblages. These include marine shell, painted pottery, and a unique point. We also discuss the precision and efficacy of geophysical surveys on prairie landscapes. Conducted at one of the few single component sites in the region, this public archaeological project exposes the richness and diversity of regional, late prehistoric assemblages.

Investigating Cultural Identity and Assimilation through Foodways: A Case Study from the McHugh Site

Rachel C. McTavish (University of Wisconsin-Milwaukee)

The investigation of foodways can be used to investigate questions regarding cultural assimilation or identity retention. Food is a necessity, but what is grown, purchased, harvested, prepared, and how such preparation occurs can indicate a divergence from, or assimilation to, a new culture or lifeway. These small daily comforts are indicative of a group's habitual preferences and possibly their economic choices (e.g., home butchering vs purchasing from a

butcher). This study uses a holistic approach to foodways at the McHugh site in north central Wisconsin by contextualizing the faunal assemblage with items that relate to obtaining, preparing, and serving food. Comparison with roughly contemporaneous sites in southern Wisconsin and Northern Illinois allows for a broad scale contextualization to investigate the assimilation of the McHugh family to the larger frontier American culture.

A Long-term Look: Two Decades of Archaeological Collections Care at the Logan Museum of Anthropology

Nicolette Meister (Logan Museum of Anthropology, Beloit College)

The Logan Museum curates nearly 400,000 archaeological objects that are world-wide in scope and span thousands of years. Over the past 18 years, care of and access to these collections has increased dramatically with support from federal grants. This presentation provides an overview of our improvement initiatives, addresses the remaining challenges, and offers tips for securing federal grants for collection improvements.

Polishing Our Understanding: Microwear Analysis at the Mann Site

Molly R. Mesner, Melody K. Pope (Indiana University)

A pilot microwear study of Wyandotte blades from the Mann Site (12P02) is providing new insight on the use of these stone tools during the Middle Woodland period. Of the 30 blades recovered from a 1977 field school, all exhibited clear use wear traces. Of those, 5 were selected for further detailed observation. Results to date indicate butchery and hide working use and possible haft traces. As we expand our analysis, variability in use contexts and tool design at the Mann site will be compared to other studies of Middle Woodland blade tool use.

Passion to Spare, Publications to Prove It: The Story of Frances Martin

Molly R. Mesner (Indiana University)

Frances Louise Patton Martin was an active avocational archaeologist who worked and traveled to sites all across the Midwest with her husband, George. Though Frances and George were not formally trained or educated in archaeology, Frances can be seen in photographs working at Angel Mounds with Glenn Black as early as 1945, and she eventually took part in the all-

women field school of 1954. Frances is present in pictures at Branchville Rockshelter in 1950, as well as Raaf Mound (better known as Crib Mound) and Yankeetown in 1951. Transcending the standards of her time, Frances was the sole author of two ceramic studies: one on her work at the Ellerbusch site in Warrick County, Indiana and another on site 'Vg 44' in Vanderburgh County, Indiana. Notably, both were published in the 'Proceedings of the Indiana Academy of Science'.

Paleo Crossing (33 ME 274): A Synthesis of Recent Research

G. Logan Miller (Illinois State University), Metin I. Eren (Kent State University), Brian G. Redmond (Cleveland Museum of Natural History), Briggs Buchanan (University of Tulsa), Matthew T. Boulanger (Southern Methodist University)

Paleo Crossing is a multicomponent site with a major Clovis component located in Medina County, northeast Ohio. Excavations in the early 1990s uncovered intact features (including shallow pits and postmolds) as well as Clovis points, bifacial preforms, endscrapers and other unifacial tools, blades, and debitage. This presentation provides a summary of what is currently known, and still unresolved, about the site. After providing a brief review of the site setting, excavations, and dating, we review the results of a suite of lithic analyses applied to the assemblage in the new millennium. Detailed information has been gained on lithic procurement, production, maintenance, and use at Paleo Crossing. Overall, the Paleo Crossing assemblage represents the largest quantity of a single raw material from such a distance (>500 km) at any currently known Clovis site. Yet the lithics do not appear to represent a depleted assemblage, thus providing fascinating insights into the technological choices of those colonizing the recently deglaciated lower Great Lakes region.

Preliminary Results of a Joint ISU and ISAS Field School at the Noble-Wieting Site (11ML24)

G. Logan Miller (Illinois State University), B. Jacob Skousen (Illinois State Archaeological Survey), Robert G. McCullough (Illinois State Archaeological Survey)

The Noble-Wieting site (11ML24) is a 5.8 acre Langford mound and village settlement located in central Illinois. The ceramics, site structure, and envi-

ronmental setting of Noble-Wieting are typical of the northern Illinois Langford Tradition, but previous investigations at the site recovered Langford and Mississippian ceramics from the same contexts, possible evidence of interaction between these groups. Here we present preliminary results of a collaborative field school at Noble-Wieting involving Illinois State University and the Illinois State Archaeological Survey. Our excavations focused on two areas: a linear arrangement of anomalies believed to represent a stockade wall and an isolated structure. Rather than a palisade, we encountered a series of shallow pits. The structure exhibited unique characteristics — continuous wall trenches, an entryway, and a mix of Langford and Mississippian pottery. While these excavations did not clarify the relationship between Langford and Mississippian peoples, they did provide new information on Langford Tradition architecture.

Archaeological Preservation in Northwestern Illinois: Cultural Landscapes, Native American Communities and Public Participation

Philip G. Millhouse (Red Gates Archaeology LLC), Christie Trifone-Simon (Jo Daviess Conservation Foundation)

Over the past decade the Jo Daviess Conservation Foundation (JDCF) has preserved over 700 acres in the Driftless Area of northwestern Illinois that contains a spectacular array of burial mounds, habitation sites and rock shelters. As a private land trust JDCF has brought together a team of businesses, donors and public entities to assist in preserving this heritage. In addition, JDCF has made cultural heritage a part of its mission alongside natural conservation. This unique model has allowed them to cast a much wider net for public interest, donations, grants and support at all level. These large scale cultural landscapes are currently being restored and maintained in consultation and cooperation with Native American communities and local volunteer groups. Some of the preserves are now publicly accessible and also serve as places for children to learn, engage and participate in the conservation of their local natural and cultural heritage.

The Koshkonong Style: An Examination of the 2017 KCV Ceramic Assemblage

Tania Milosavljevic, Hannah Blija, Sean Gleason, Richard W. Edwards (University of Wisconsin-Milwaukee)

Excavations at the Koshkonong Creek Village (47JE379), an Oneota site in southeastern Wisconsin, have uncovered multiple houses and numerous pit features. Dating between AD 1050 and 1400, the site provides an opportunity to investigate aspects of Oneota culture at multiple scales. This current project assesses variation in ceramic style across the site. Materials from the 2017 excavations, which centered on a newly identified house structure, will be compared to ceramics from past excavations. This paper evaluates the potential of stylistic variation among households and across the site.

Connecting Cambria: Ceramic Attribute Analysis and Modeling Intra-Site Interaction

Katy J. Mollerud (Peabody Museum, Harvard University)

The Cambria Locality is a small aggregate of Late Prehistoric sites dating from AD 1050-1300 that occupy the southern terraces of the Minnesota River Valley in south-central Minnesota. Cambria Locality pottery demonstrates technical and stylistic influences from several different late prehistoric cultural traditions, including Mississippian, Plains Village and Woodland. A comparative ceramic attribute analysis was completed for three of the most comprehensively excavated sites in the Locality: Cambria, Price and Jones. Utilizing a bottom-up approach, this paper identifies and interprets ceramic variation at the site level in order to tease out the intensity and duration of interaction between the three sites. A model of intra-site interaction is presented for the Cambria, Price and Jones sites, along with a brief discussion of how the Cambria Locality fits into the broader cultural matrix of the region.

From the Highest Dune to the Lowest Floodplain (And Most Places in Between): The Archaeological Journey of William A. Lovis in the North American Midcontinent

G. William Monaghan (Indiana University), Sean B. Dunham (USDA Forest Service)

This space offers an opportunity for friends and colleagues to share anecdotes and comments in honor of Bill.

The Archaeology of Race and the 20th Century City: An Archaeology of Urban Renewal on a University Campus

Paul R. Mullins (Indiana University-Purdue University, Indianapolis)

This paper examines urban renewal in Indianapolis, Indiana's near-Westside, a historically African-American community that was displaced by postwar urban clearance programs. In the wake of World War II Indiana University and the state government spearheaded the wholesale removal of the century-old African-American neighborhood, purchasing roughly a thousand individual properties that became the campus of Indiana University-Purdue University, Indianapolis. Today, that neighborhood is almost completely physically effaced, and this mass displacement is largely unaddressed. This paper examines how an engaged community archaeology can illuminate the processes that created this landscape and document the now-erased neighborhood.

Distribution of C4 and C3 Plants in the North-Central States

Wendy Munson-Scullin (Midwest Ethnohorticulture)

There seems to be a fairly widespread impression that C4 plants are uncommon in the North-Central States. C4 grasses are in actuality both common and widely distributed in this region. The evolution of C4 metabolism in plants may have been driven by higher temperatures and low water supplies, but those variables do not geographically limit C4 plants exclusively to warm or dry climates. Aridity, relative humidity, topography, and phenology are selective factors for the distribution and abundance of C4 grasses in plant communities. C4 plants are important to archaeologists because of their influence on radiocarbon dating, and in related disciplines such as phytolith analysis.

The Town of Todd: A Digital Reconstruction of a Lost 19th Century Landscape in Southern Indiana

Joshua Myers (Indiana University-Purdue University, Indianapolis), Edward Herrmann (Indiana University), John Flood (Indiana University-Purdue University, Indianapolis)

Prior to federal purchase, the Charles C. Deam Wilderness hosted a population of rural farmsteads and settlements, with many of the structures dating to the early to mid-19th century. By the Great Depression, national economic decline coalesced with poor agricultural and conservation practices throughout the region, forcing residents to sell their properties. After federal purchase, the United States Forest Service allowed the acquired properties to return to nature. Presently, the lost landscape of 19th-century Polk Township exists solely within historical maps, oral histories, and the archaeological record. By digitally reconstructing the lost landscape of the unincorporated, and now defunct, town of Todd using Geographic Information System methods and archival records, this poster attempts an analysis of the relationship between land use in Polk Township and the pervasive economic decline common in rural and agricultural areas during the early 20th-century.

The Single-Pass Survey and the Collector: A Reasonable Effort in Good Faith? Kevin C. Nolan (Ball State University)

Single-pass surveys are the norm in CRM. Private collection over decades or centuries can make such surveys unreliable indicators of the true nature of the distribution of archaeological materials. While it is often acknowledged that this is possible with small lithic scatters or isolated finds, even substantial habitation sites can be missed or mischaracterized by a single-pass survey in heavily collected areas. I present a case study of a Phase I survey in Dearborn County, Indiana that failed to identify a multi-component site including a terminal Archaic habitation and a Late Prehistoric village due to extensive collecting. Only with the aid of the landowner's collection could the true nature and significance of the National Register of Historic Places eligible site be discovered. This example, and many others, raise the question of what constitutes a "reasonable and good faith effort" to identify and evaluate archaeological remains within a project area.

William Lovis, Curator of Anthropology

Jodie O'Gorman (Michigan State University)

William (Bill) Lovis is widely known as a distinguished researcher on a variety of topics central to mid-continental archaeology and beyond as reflected in the papers in this symposium. Perhaps not as widely known, although the impact has arguably been equally significant and long-term, is his work building and managing the archaeological collection at Michigan State University. Taking form in the 1950s with donation of the Boudeman Collection, the collection grew and diversified under the care and contributions of Moreau Maxwell, James Brown, and Charles Cleland. Curator Lovis would then build the prehistoric parts of the collection and significantly increase its accessibility while modernizing its housing and curation. Today the archaeological collections at Michigan State University are an excellent resource for researchers, students, and museums. This paper celebrates Lovis' curatorial achievements over the past half century and highlights important resources within the collection available for research use.

Oneota Vulnerability and Resiliency

Jodie O'Gorman (Michigan State University), Jennifer Bengtson (Southeast Missouri State University)

Throughout much of our recent collective history humankind has engaged in violence and warfare resulting in increased vulnerability of individuals and communities. Common areas of vulnerability in these situations include food security, health, and community viability. Adaptive practices and social innovations are implemented to mitigate resulting risks. However, the responses and resiliency of different cultural groups to these same threats may be quite different. While local cyclical trends may develop, the introduction of new groups and/or ideas into an area can shift regional trends, and perhaps ultimately lead to large scale changes. We consider the migration of the Oneota into the Central Illinois River Valley within this framework. Drawing on community data, foodways, bioarchaeology and mortuary analysis, the Morton Village case study offers insight into effects of diverse social responses to risk.

Documenting Historic Foodways at Michigan State University

Autumn M. Painter, Jeffrey M. Painter, Susan M. Kooiman (Michigan State University)

The Campus Archaeology Program at Michigan State University (MSU) strives to connect the modern day campus with the past. A recent endeavor has been to document and re-introduce past foodways on campus. This was accomplished through tandem research on ceramic, floral, and faunal remains recovered from campus excavations, in conjunction with archival research. Pulling from these various sources available on MSU's campus, information about foodways and dining in the early period of MSU were uncovered, which were then translated into public blog posts on the Campus Archaeology website, an interactive website focusing on the early food on campus, and a small meal reconstruction event. Dr. Goldstein's guidance and support throughout this year-long endeavor was invaluable, and her commitment to making the past public and accessible shows through in our work today.

Exploring Formation of Serpent Mound from a Geomorphological Perspective: Water Management of Native Americans

Ji Hoon Park, Changjoo Kim, Kenneth B. Tankersley (University of Cincinnati)

Serpent Mound is a well-known landmark built by the ancient American Indian cultures of Ohio. It is an effigy mound representing a snake with a curled tail. There are considerable debate on the site's purpose and history. Although its construction chronology is well studies, little work is done to understand its purpose beyond astronomical significance, arguing for the Serpent Mound's coils being aligned to the two solstice and two equinox events each year (Flecher et al., 1996; Hardman and Hardman, 1987; Romain). In this study, the shape and location of the earthwork were analyzed from a topographical and a geomorphological perspective, focusing on locational factors by the micro landforms. Our recent field and laboratory investigations show that the earthwork was constructed on a karst landscape, which contains numerous sinkholes and springs allowing water to accumulate in a depressed area in an otherwise barren upland environment. We also analyzed the shape by 7 curvature segments using a sinuosity index demonstrating each curvature acts as a dam created to store water in the depression and changes the

direction of water channel. GIS and a transit survey were used to illustrate the original karst landscape demonstrating topography change before and after construction of Serpent Mound. We investigated if Native Americans had a special intention to manage water when they constructed the earthwork. In summary, the earthwork is closely related to the symbolic meaning of water, which is the driving force of agricultural living at that time. Depressions and sinkholes are products of artificial activities for water management of Native Americans.

One Project, Multiple Perspectives: An Example of Successful Section 106 Consultation in Northwest Indiana

Veronica Parsell (Cardno), Cathy Draeger-Williams (Indiana SHPO), Paul Leffler (USACE Chicago District), George Strack (Miami Nation of Oklahoma), Jason Wesaw (Pokegan Band of Potawatomi)

Parties involved in Section 106 can have differing opinions and goals regarding the consideration of cultural resources. Completion of a Phase III data recovery project at a prehistoric site in northwest Indiana highlights the Section 106 process as a successful tool for communication regarding the consideration of significant cultural resources between multiple entities. While there were varied opinions and goals regarding the project, through the Section 106 process, successful mitigation was completed such that impacts to the resource were mitigated, prehistoric human remains were protected, and the project proceeded with minimal delay. This presentation discusses aspects of the Singleton Quarry data recovery project from the perspectives of different parties involved in the Section 106 process, including the USACE, the SHPO, Native American tribes, and the CRM contractor. This dialogue provides insight regarding the position and viewpoints of various entities often involved in projects pursuant to Section 106 of the NHPA.

Searching for Fort Holes

Charles Peliska (St. Cloud State University)

In 1862 the news of the US-Dakota War spread, and the fear it instilled in citizens, was fanned by the writings of news publishers like Jane Grey Swisshelm of St. Cloud, Minnesota. This fear and panic drove the people of communities throughout the state to construct their own fortifications. Fort Holes was one

of these fortifications in St. Cloud. This will be a presentation on the analysis of tests I conducted in searching for Fort Holes.

DigIndy Deep Tunnel Project: A New Approach to Urban Archaeology Ryan Peterson, Veronica Parsell, Kathleen Settle (Cardno)

As part of the archaeological investigations for the DigIndy Deep Tunnel project, which is designed to reduce combined sewer overflow in the city of Indianapolis, the Cardno team has developed a new approach to address the 30+ urban locations that require investigation. Our process includes standard, archival research coupled with Ground Penetrating Radar investigations to identify potential historic archaeological features at any given project area. This research and analysis is then followed by controlled excavation with vacuum trucks to locate and excavate features more accurately than traditional Phase I methodology. In addition, this technique has the potential to determine National Register of Historic Places eligibility without the need for a traditional Phase II and has the potential to minimize accidental discoveries after project construction has begun. The early results of this process will be discussed as well as the applicability to the remainder of the project and beyond.

The Archives: A Good Place for Finding Documentation of Native American Mounds

Sara Pfannkuche (University of Wisconsin-Waukesha)

Numerous earthen mounds built by Native Americans extending back millennia can be found across the Midwest. Early Americans such as Thomas Jefferson, Squier and Davis, Theodore Lewis, and Increase Lapham all contemplated and studied these mounds. Other people, whose names are not so well known, also left records of what they saw and learned about the mounds in letters, journals, and maps. Recent research in the Wisconsin-Illinois Stateline area of the Rock River, (between Rockford, Illinois and Beloit, Wisconsin), located some of these early mound records, the earliest going back to the 1850s. This presentation will discuss a number of these finds located within the Charles E. Brown Collection at the Wisconsin Historical Society, the Beloit College Archives, Logan Museum archives, and the archives of local historical societies.

McHugh Family History in the Context of Irish Immigrant Settlement in the Rural American Midwest

Jennifer L. Picard (University of Wisconsin-Milwaukee)

The stream of Irish emigration began well before the mid-nineteenth century, influenced by both push and pull factors. The McHugh family serves as an example of immigration to rural America in the 1820s, followed by migration within the United States – moving from Ohio to become among the first Euroamerican settlers of Waupaca County, Wisconsin. Although many pre-Famine immigrants to the United States settled in rural areas, this aspect of the Irish diaspora is comparatively understudied. While mid-nineteenth century immigrants to urban areas held strongly to an Irish immigrant identity, life on the frontier appears to have pushed the McHugh family toward identification as pioneers first, with Catholic and Irish identities following after. Understanding the entrepreneurial nature of early Irish immigration to North America helps to untangle the question of ethnic identity in the material culture record at the McHugh site.

The Middle Ohio Valley's Fort Ancient Transformation – A View from Fox Farm

David Pollack, A. Gwynn Henderson (Kentucky Archaeological Survey)

Archaeologists have documented region-wide changes in Fort Ancient material culture and settlement patterns ca. A.D. 1400, which they have characterized as the Madisonville Horizon. These archaeological changes reflect changes in Fort Ancient social, political, and economic organization. Fox Farm in northern Kentucky was established ca. A.D. 1300, and its unbroken occupation before, during, and after this period of change provides a unique opportunity to look closely at the details and examine the underlying processes at work during this Fort Ancient transformation (A.D. 1375-1425). Fox Farm's growth and its establishment as a central place within the Middle Ohio Valley represents a local response to the volatile cultural landscape of the late fourteenth/early fifteenth century. In this paper, we highlight changes in Fort Ancient material culture and settlement patterns that immediately predate the Madisonville Horizon and consider Fox Farm's role in the development of an emerging regional Fort Ancient identity.

Confronting Collections at the Glenn A. Black Laboratory of Archaeology for the 21st Century

Melody Pope (Indiana University Glenn A. Black Laboratory of Archaeology), April Sievert (Indiana University Glenn A. Black Laboratory of Archaeology), Jennifer St. Germain (Indiana University Glenn A. Black Laboratory of Archaeology), Kelsey T. Grimm (Indiana University Glenn A. Black Laboratory of Archaeology), Terry Harley-Wilson (Indiana University Glenn A. Black Laboratory of Archaeology and Mathers Museum of World Cultures)

The Glenn A. Black Laboratory of Archaeology is a collections-holding research center at Indiana University with archaeological and ethnohistory collections from Indiana, the Great Lakes, and Ohio Valley regions. Its combined material and documentary assets contribute to education and research at IU, were instrumental in the development of the Anthropology Department, and contribute to the heritage, culture, and history of the peoples of the Ohio Valley. Aligned with present IU initiatives, we share how we are confronting collections to meet real world 21st century problems that we hope will move mission and reach forward while preserving institutional legacy.

The Southeastern Wisconsin Archaeology Program (SEWAP) ... 30 Years Later: A Model for Heritage Stewardship in the Forest Preserves of Cook County, Illinois

Paula Porubcan Branstner (Illinois State Archaeological Survey)

The Forest Preserves of Cook County (FPCC) manages 70,000 acres of publically-held lands that provide essential wildlife habitat, recreational venues for metropolitan Chicago's five million residents, and protection for more than 620 archaeological sites. In 2014, the FPCC and the University of Illinois' Prairie Research Institute (PRI) worked cooperatively to develop the FPCC Natural and Cultural Resources Master Plan. Units within PRI, including the Illinois Natural History Survey, the Illinois State Water Survey, and the Illinois State Archaeological Survey, collaborated with FPCC staff, resource professionals, and Cook County residents to develop a long-term management plan that integrates natural and cultural resource preservation goals with the needs of Chicago's urban communities. The archaeological component of the FPCC Plan was heavily inspired by and modeled after SEWAP – a pioneering region-

al archaeological resource management program developed in the 1980s by Dr. Lynne Goldstein during her tenure at the University of Wisconsin-Milwaukee.

Windblown Sediments and their Potential for Late Pleistocene/Holocene Site Burial: An Indiana and Ohio Example

Matthew P. Purtill (Ball State University)

Windblown, or aeolian, sediments blanket portions of high terraces in alluvial valleys and upland settings throughout the midcontinental U.S. Aeolian sedimentation traditionally is thought to date to the late Pleistocene soon after the Last Glacial Maximum (~21 ka) and largely prior to human occupation of eastern North America. In contrast, recent geochronological research, primarily through optically stimulated luminescence, demonstrates that considerable reactivation or remobilization of aeolian sediments occurred throughout the Holocene often in response to periods of high aridity or wildfire activity. The potential that late Pleistocene or Holocene aeolian sediments blanket currently undocumented archaeological deposits across the landscape has received limited attention. This research provides a preliminary evaluation of the potential that a significant portion of the Indiana and Ohio archaeological record remains obscured by aeolian sedimentation processes. Developing methods to evaluate this potential is essential if we hope to fully document our prehistoric past.

Description and Thermoluminescence (TL) Dating of an Alleged Mobiliary Clay Human Figurine from Hopeton Earthworks, Ross County, Ohio

Michelle Rae Bebber (Kent State University), Linda Spurlock (Kent State University), David M. Price (University of Wollongong), Metin I. Eren (Kent State University)

Human figures made of fired clay occurred in many prehistoric cultures around the world, as early as 31,000 B.P. In Eastern North America, such human clay figures are relatively rare. The earliest known occurrence is dated to the Middle Woodland Period (100 B.C – A. D. 400). Here we present the known background, technical descriptions, stylistic analyses, and direct chronometric assessment via luminescence dating of a clay figurine alleged to have come from Hopeton Earthworks in Ross County, Ohio. The results and possi-

ble interpretations of these analyses will be discussed as well as future avenues of research regarding Hopewell figurines and early Midwestern ceramic production in general.

Sub-mound Platform Construction at Cahokia Mounds: New Evidence from 2017 Excavations

Caitlin G. Rankin (Washington University-St. Louis)

Recent excavations at Cahokia Mounds State Historic Site during summer 2017 revealed a large sub-mound construction that is not observable on the modern landscape. Underneath Mound 5, the largest mound in the North Plaza complex, is approximately 2.25 meters of stratiform and basket loaded fill deposits associated with sub-mound platform construction. Directly below the human constructed platform are natural fluvial sand deposits associated with Cahokia and Canteen creeks. The new evidence suggests Mound 5 was a more significant feature on the landscape during Mississippian occupation than it is modernly. This poster presents on the recent and ongoing findings at Mound 5 excavations, with consideration given to how these findings alter our understanding of the Mississippian landscape.

Dealing with Museum Legacy Collections in the Twenty-first Century: Three Case Studies from Ohio

Brian G. Redmond, Ann S. DuFresne (Cleveland Museum of Natural History)

As curation costs rise, curators of archaeological materials find it necessary to pay increased attention to maintenance of their museum's collections, which most often include legacy collections, i.e., materials donated decades ago. Proper commitment of funding, care, and space to collections is an ethical requirement for Museum professionals; however, the often unstated motivation for such effort is the belief that they maintain some degree of research value. To more fully examine this, case studies of three legacy collections at the Cleveland Museum of Natural History were prepared. These assemblages, collected by non-professionals between 1846 and 1950, include associated documentation of variable depth and quality. The case studies were compared to not only highlight various curation challenges they present but also to explore their utility for professional research. The results indicate that in-

deed such collections retain significant research value, but of widely varying kind and degree.

"Heaved by Spirits from the Earth": A Reconsideration of Aztalan's Mounds John D. Richards (University of Wisconsin-Milwaukee)

Lynne Goldstein has written extensively on mounds and mound-focused ritual and has devoted particular attention to earthworks at and near the Aztalan site in southeast Wisconsin. Historical records suggest that the site and its environs once harbored as many as 70 aboriginal mounds. By the early twentieth century few remained, and most of those that survived had been vandalized or partially destroyed. Nonetheless, these features continue to attract attention as focal points of the site's structure and landscape setting. Beginning with Increase Lapham's investigations in the nineteenth century, Aztalan's mounds have been subjected to episodic professional excavations from the 1920s through the present. This paper reviews the history of mound investigations at Aztalan, summarizes what is known of the existing mound remnants, and describes recent attempts to update the radiocarbon record of construction and use of these features.

The Archaeology of the McHugh Site

John D. Richards (University of Wisconsin-Milwaukee)

This introductory paper provides a review and summary of project history and archaeological data sets. The relevance of the McHugh site to the pre-famine and famine era Irish diaspora in the Midwestern U.S. is discussed also.

Irish-American Cemeteries and the McHugh Family Burials

Patricia B Richards (University of Wisconsin-Milwaukee)

The burial places of three generations of McHughs, grandparents James and Mary (Shevlin) McHugh, Mary McCoy McHugh, wife of James' son Michael, and the children of Michael and Mary McCoy McHugh are located in Calumet, Outagamie and Waupaca Counties, Wisconsin in close proximity to the McHugh homestead. Three arguments are presented here based on the analysis of the burial traditions of the McHugh family. First, identity, as reflected in burial practice, is defined on the basis of Catholicism primarily and secondarily on the basis of family. Second, the Catholic cemeteries of Calumet, Out-

agamie, and Waupaca counties do not reflect national, state, or even local trends with regard to place of birth. Lastly, while the Catholic cemeteries examined can be broadly characterized within the Garden or Rural Cemetery Movement these rural agrarian cemeteries differ from urban Catholic cemeteries with regard to identity reflected in iconography.

Cultural Changes During the Protohistoric Period: An Oneota Case Study Jaelyn E. Roland (University of Wisconsin-La Crosse)

George Milner argues in his 2015 work, "Population Decline and Culture Change in the American Midcontinent: Bridging the Prehistoric and Historic Divide", that reactions and changes by Native Americans during the Protohistoric period were highly localized, and that each tribe was affected differently through direct and indirect contacts with Europeans. The La Crosse locality was inhabited by the Oneota until c. 1625 when the area was abandoned for the Riceford Creek locality (in southeastern Minnesota). This study analyzes how the Oneota were affected by European presence on the continent, even before direct contact was made. We see evidence of stress in a change in settlement patterns between La Crosse and Riceford to more protected areas, more utilitarian ceramic vessels, the abandonment of key resources (e.g. wild rice, large river fish, large river mussels, etc.), and an increase in catlinite pipes. During the Protohistoric period, we see the Oneota shifting to a more protective and secluded stance.

Irish-Catholic Experiences in the Midwest: Historical and Archaeological Evidence from South Bend, Indiana

Deb Rotman (University of Notre Dame)

Father Edward Sorin purchased land south of the University of Notre Dame in north central Indiana in the 1850s and created a residential neighborhood for Catholic immigrants, many of whom were Irish. The university's 2007 archaeological field school investigated a homelot in this immigrant enclave, known as Sorinsville. The research team sought to understand how affiliation with the university shaped use of the spatial and material worlds of late 19th- and early-20th-century Irish immigrants to the city. The archaeo-logical and historical evidence from South Bend illuminates a complex picture that suggests the Irish experienced both alienation from as well as incorporation into their

new social and cultural milieus. For the immigrants south of Notre Dame's campus, being Catholic was as important to their identities and lived experiences as being Irish.

Deer Element Distribution within Fox Farm, a Large Fort Ancient Village in Mason County, Kentucky: Evidence of Meat Sharing?

Thomas Royster (University of Kentucky), Bruce L. Manzano (University of Kentucky), David Pollack (Kentucky Archaeological Survey), Jonathan Davis (University of Kentucky)

Examination of the spatial distribution of deer mandibles and astragali recovered from Fox Farm (A.D. 1300-1650), a large Fort Ancient site in northern Kentucky, identified intra-site differences in their distribution, with some areas showing a strong preference for the left and others the right side. Though both elements contain little in the way of meat, it was suggested that the observed patterns reflected the redistribution of meat within the village. To evaluate this suggestion, the spatial distribution of deer long bone elements was examined. Only those elements that contained the distal or proximal end were included in this study, and the minimum number of elements were determined by side. Although this study has yet to be completed, preliminary results are consistent with the sharing of meat brought back to the village following a successful hunt.

Revealing Ritual Landscapes at Hopewell Culture National Historical Park

Bret J. Ruby (National Park Service), Friedrich Lueth (German Archaeological Institute), Rainer Komp (German Archaeological Institute), Jarrod Burks (Ohio Valley Archaeology, Inc.), Timothy Darvill (Bournemouth University)

Hopewell Culture National Historical Park preserves six monumental mound and earthwork complexes in south-central Ohio. Archaeological attention in the 19th and 20th centuries remained narrowly focused on mounds and mortuary contexts, ignoring the vast spaces between the monuments. At the same time, agricultural plowing steadily eroded the above-grade features. Recently, the National Park Service forged an international partnership to conduct high-resolution, landscape-scale geomagnetic surveys in collaboration with the German Archaeological Institute, SENSYS GmbH, Bournemouth University, and Ohio Valley Archaeology, Inc. This poster presentation will

present highlights from the nearly 500 ha surveyed, along with the results of targeted ground-truth excavations. These investigations are revealing subsurface landscapes of unexpected integrity and complexity, marked by ditched enclosures, wooden post circles, communal earth ovens, and other previously unknown ritual architecture.

Assessing the Distribution of Limestone Temper in Southern Ohio Ashley M. Rutkoski, Michelle Rae Bebber, Metin I. Eren (Kent State University)

The earliest known occurrence of limestone temper usage in Ohio began sometime during the Middle Woodland Period, and becomes common in Late Woodland cave sites in the southern part of the state. However, little is known about the overall temporal and geographic distribution of this temper type. Toward this end, we analyze pottery throughout the southern Ohio Woodland period by assessing it with HCL for the presence or absence of limestone. The results of this examination have relevance for understanding the broader adoption of limestone temper.

Urban Historical Archaeology in Detroit: 60 Years and Counting

Krysta Ryzewski (Wayne State University)

Next year, 2018, marks the 60th anniversary of the first professional historical archaeological excavation project in Detroit. This presentation reviews the growth of urban historical archaeology within the bounds of present-day Detroit since the 1950s, noting how particular priorities, practices, and topics have evolved alongside new trends in the field archaeology and in tandem with the difficult socio-economic circumstances that continue to face the city. The overview also looks to the future to consider how urban archaeologists might contribute to ongoing revitalization efforts in the city.

Geospatial Considerations Involving Historic General Land Office Maps and Late Prehistoric Bison Remains Near La Crosse, Wisconsin

Andrew Saleh (University of Wisconsin-Milwaukee)

This study uses geographic information systems, prehistoric archaeological contexts, and vegetation notes from historic General Land Office (GLO) maps. An inter-site analysis was conducted involving La Crosse, Wisconsin area Oneota sites with reported Bison bison remains. Scholars in and around Wisconsin have been in continuous discussion surrounding the potential reasons why bison remains appear in late prehistoric contexts. This study attempts to add new depth to that discussion with vegetation maps and analysis, while also providing a case study example showing the value of historic GLO maps in archaeological studies. The analysis also suggests that creating your own maps in coordination with publicly available GLO maps is more accurate than using the publicly available Wisconsin DNR vegetation polygon.

NRCS Prototype PA - Another Way to do Section 106

Sharron Santure (Illinois Natural Resources Conservation Service)

Federal Agency compliance with the National Historic Preservation Act can be more focused and efficient by adopting an Alternate Procedure to the normal Section 106 review protocol. The Natural Resources Conservation Service of the U.S. Dept. of Agriculture utilizes a National Prototype Programmatic Agreement to develop procedures that concentrate on undertakings that have the most potential for effect on historic properties, while eliminating time and resources on reviewing/consulting on undertakings that have no potential to affect historic properties. The framework was developed in consultation with the ACHP, the NCSHPO, Tribes, NHOs, and interested historic preservation organizations. It allows each state to tailor its cultural resources review procedures according to its suite of conservation practices, natural resources, types of historic properties, consulting parties, and client base. The author presents Illinois procedures as an effective example.

A Wisconsin Archeological Society Forum on Culturally Modified Trees

Robert F. Sasso (University of Wisconsin-Parkside), Daniel J. Joyce (Kenosha Public Museums), Joy J. Wolf (University of Wisconsin-Parkside)

A forum entitled "Culturally Modified Trees: Questions, Data, and Ideas" was held at the Wisconsin Archeological Society Fall Meeting at Beloit College on September 30, 2017. Interested parties were invited to share photographs, maps, and information on location, age, and nature of modification for trees either documented as having been modified by human cultural agency, known as culturally modified trees ("CMTs") or are suspected of this treatment. In addition, participants were encouraged to discuss ideas regarding their interpretation and other topics relevant to their study. The forum was open as well to those interested in the structure and form of trees, how they grow under variable conditions of physical stress, natural and human sources of modification, or related topics. In this poster, the authors describe the nature of the discussions and data presented during the forum, the varieties of CMTs encountered in our region, and suggestions for future studies.

A New Phase Sequence for Red Wing Oneota

Ronald C. Schirmer (Minnesota State University Mankato)

A clear understanding of Oneota occupations in Red Wing has long been obscured by conflation and fascination with the enigmatic Middle Mississippian-related Silvernale phase. Research during the last decade has done much to rectify this, and now enables a clearer articulation of Red Wing Oneota sequential phases. Early, pure Oneota occupations of the Bartron phase (AD 1150 - 1300) existed contemporaneously with Silvernale phase occupations (AD 1150 - 1250). Oneota occupations continued in the Red Wing region for another 100 years in the form of the Spring Creek phase (AD 1300 - 1400). The Spring Creek phase is thus partly contemporaneous with Brice Prairie phase Oneota occupations at La Crosse, Wisconsin, and Blue Earth phase Oneota occupations in southern Minnesota, raising interesting questions for existing models of population movements and relationships.

Dental Microwear Texture Analysis in Bioarchaeology

Christopher W. Schmidt (University of Indianapolis)

Dental microwear texture analysis (DMTA) employs a white-light confocal profiler to study dental chewing surfaces in order to reconstruct diets. For the most part, DMTA has been used for interspecific comparisons of primates and hominins. Recent efforts have been made to apply DMTA to bioarchaeological contexts. Its advantages are that it is non-destructive, it can detect dietary shifts not indicated by stable isotopes, and it is more automated than previous means of microwear analysis. The present study includes humans from Middle/Late Archaic, Early/Middle Woodland, Late Woodland, and Mississippian groups located primarily in Kentucky and Indiana. DMTA indicates variation among the Archaic groups and a shift from Early/Middle Woodland to the Late Woodland and Mississippian. Interestingly, it also detects a reliance on hard food eating (i.e., nut consumption) for some Late Woodland and Mississippian people. Overall, DMTA is a promising means of elucidating dietary nuances in the archaeological record.

Lynne Goldstein: Midwesterner, Mortuary Archaeologist, Mentor, and Much More

Sissel Schroeder (University of Wisconsin-Madison), Jodie O'Gorman (Michigan State University)

Lynne Goldstein has been a Midwesterner all her life and her deep commitment to the region is evident in her long career. Her regional legacies range from contributions to knowledge about the past in the Midwest, mortuary studies, spatial data analysis, legislation and heritage stewardship, and public archaeology to a passionate commitment to mentoring and service. This paper offers an introduction to a vibrant session in her honor.

Seen and Unseen Traces of Life in Ancient Aztalan

Sissel Schroeder (University of Wisconsin-Madison), Jarrod Burks (Ohio Valley Archaeology, Inc.), Sarah Taylor (University of Wisconsin-Madison), John D. Richards (University of Wisconsin-Milwaukee)

A 2017 magnetic gradient survey of much of the palisaded interior of Aztalan, complemented by recent excavations and other investigations over the past century, is producing new perceptions of site structure and ancient life at the site, aiding in stewardship of the site, and enhancing our discussions on what we think we know about the site and how we know what we think we know about the site. Our evolving understandings about the site and its internal organization, which are made possible by geophysical methods, are enriched when evaluated in light of time perspectivism and accompanied by advances in archaeological theory. Our research builds on Lynne Goldstein's significant contributions to archaeological inquiry at Aztalan, particularly her efforts to assemble all excavations undertaken at the site into a single GIS map, and highlights her contributions to practice, theory, spatial data analysis, and heritage stewardship.

Field Applications of Digital Photogrammetry in the Midwest

Marcus Schulenburg (University of Wisconsin-Milwaukee), Kevin Garstki (Marquette University), Robert Cook (Ohio State University)

The use of close-range digital photogrammetry for field documentation has been steadily increasing in the past half-decade, especially in Europe, Mesoamerica, and the Near East. However, this technology has not been widely utilized in archaeological contexts in the American Midwest. We present here a case study of the use of close-range photogrammetry on the Guard Site (12D29), a Fort Ancient village in southeastern Indiana dating to ca. AD 1000 - 1200. This poster outlines the methods used to produce georeferenced 3D models of the excavation trenches during the 2016 field season, shares the final results, and our experiences in using these methods as part of our ongoing site interpretation. Working within existing excavation methods, this technology presents an extremely useful tool to aid in the reconstruction of an excavation, and does so at a limited cost and time expenditure.

A Preliminary Interpretation of Faunal Remains from Three Camps in the Coalwood Logging District

James Schwaderer (Michigan Tech University)

The Coalwood Logging District was owned and operated by the Cleveland-Cliffs Iron Company (CCI). CCI entered into logging following the acquisition of extensive lands associated with the railroad from Munising to Marquette. The work of logging in CCI camps in the twentieth century was both hard and dangerous. On average loggers burned over 9000 calories per day and required quality food in large quantities. Unlike most lumber camps where food was provided by the company, Coalwood's choppers were piece workers responsible for their own food. In this context, we would expect the faunal remains to exhibit a great deal more variability based on worker's ethnicity, family size and organization, and experience cooking for large groups of people. Examining the foodways in the Coalwood logging district sheds light on worker's diet and contributes to our understandings of the lives of loggers in the Great Lakes region.

Determining Community Organization and the Use of Space at the Singer-Hieronymus Site Complex in Scott County, Kentucky

Claiborne Sea, Eileen Ernenwein (East Tennessee State University)

The Singer-Hieronymus site is a complex of four Fort Ancient villages scattered along a single ridgetop in present-day Scott County, Kentucky. The Fort Ancient lived in parts of Kentucky, Ohio, Indiana, and West Virginia from roughly A.D. 1000 – 1750. Radiocarbon and the ceramic typology date the occupation of Singer-Hieronymus to roughly A.D. 1200 - 1550. The horizontal arrangement of these villages along the ridgetop make it possible to examine internal village organization from a remote sensing perspective with subsequent limited archaeological excavation. The combined information has revealed a great deal about the site. This poster focuses on a single village at Singer-Hieronymus (Village B), where research has revealed a circular midden, multiple archaeological features, and patterns of recent terracing, plowing, and erosion. In the context of historic land use impact, the applicability of this approach to other villages within the complex and more broadly throughout the region is also evaluated.

Windows to Ohio's Archaeological Past: The Professional/Amateur Nexus

Mark F. Seeman (Kent State University)

This paper will discuss the situational boundaries between professional and amateur archaeologists in Ohio against the backdrop of the competing priorities and needs of each community. The particular focus will be on the insights gained from the Nobles Pond project, a joint professional/amateur collaboration. From this perspective, attaining congruency among all aspects of the SAAs Principles of Archaeological Ethics regarding commercialization, public education, and the preservation of collections and records is reexamined.

The Ethics of Professional-Collector Collaboration

Michael Shott (University of Akron)

Across the midcontinent, merely the private collectors and collections that exist today are too many to count. Collectors and other nonprofessionals vary widely in motivations and standards from near-professional to irresponsible. In turn, professional attitudes to collaboration range from enthusiastic through indifferent to actively hostile. Correctly or not, some professionals perceive categorical ethical barriers to collaboration. Yet ethical concerns cut both ways; the reasonable standards of many collectors and the undeniable aggregate size and information content of private collections justify engagement with responsible nonprofessionals and opposition to irresponsible ones. I consider ethical issues that counsel such engagement, propose serious study of collecting as a sociological phenomenon, and advocate documentation of private collections in research and conservation practice, but also care in avoiding encouragement of irresponsible behavior.

Within These Walls: A Report of 2017 Test Excavations on the Structures of Morton Village

Nicole Silva Klarmann (Michigan State University)

During the Summer of 2017, test excavations were conducted at the Morton Village site in the central Illinois River valley to expand the dataset on the site's architectural and spatial organization. These excavations were conducted as part of the author's doctoral dissertation project which focuses on better understanding the spatial relationship between the Oneota and Middle

Mississippian occupants at the village, using the theoretical viewpoint of coalescence. Ceramic attributes and architectural styles have typically been used to differentiate between Oneota and Middle Mississippian contexts at the village. Although material culture provides a valuable line of evidence for examining coalescence, the analysis of the site's spatial organization will allow an innovative and finer contextualization of the distinctions and the merging of material culture. This poster reports the findings of these test excavations and provide initial interpretations of the spatial distribution of the differing architectural styles across the site.

Magnetometry Survey at the Otter Pond Site (11LW9), a Vincennes Phase Town in Southeastern Illinois

B. Jacob Skousen, Robert G. McCullough (Illinois State Archaeological Survey)

The Otter Pond site (11LW9), located in Lawrence County, Illinois, is the largest Mississippian mound site attributed to the Vincennes phase. The site exhibits up to 12 mounds, a plaza, and Mississippian and Late Woodland pottery, all indicative of a sizable, multiethnic town. This poster presents the results of a 2017 magnetometry survey of Otter Pond. The survey, which covered approximately 50% of the total site area, proved that large portions of the site are still intact. It also revealed 1) dense residential clusters, 2) a complex occupational history, 3) potential status differences among residents, and 4) mound locations and orientations. This survey provided much-needed information on the internal configuration of this settlement. It may also shed light into how the construction and use of space in large settlements Mississippianized local groups in southeastern Illinois from A.D. 1100 to 1400.

Communities in Stone: Examining Group Identity in Late Prehistoric Wisconsin through Lithic Analysis

Katherine M. Sterner, Paul J. Moriarity (University of Wisconsin-Milwaukee)

Previously, scholars considered Oneota material culture and behavior to be relatively homogenous, with few characteristics distinguishing one community from another. In the last decade, this view has changed. Identifying communities in the archaeological record through their material culture has always relied on formal stylistic variation. However, the lack of systematic diver-

sity in Late Prehistoric lithic tool types has made this approach impossible. Most Oneota tool assemblages are composed primarily of expedient flake tools with little to no formal modification. An integrated approach that combines information on lithic procurement, production, use and discard can be used as a proxy for interpreting stylistic variation in lithic tools where no formal variation in tool style exists between communities. This study characterizes a large lithic assemblage from ten field seasons of excavations at the Crescent Bay Hunt Club site and uses correspondence analysis to identify communities within and across site boundaries.

Rediscovering the UWM-ARL Collections: The Things We Find During Rehabilitation

Katherine M. Sterner, John D. Richards (University of Wisconsin-Milwaukee)

The University of Wisconsin-Milwaukee Archaeological Research Laboratory has housed archaeological collections since the 1960s. The ARL repository is home to more than 4000 boxes of archaeological materials, from over 1400 archaeological sites in the United States and Mexico. It also curates more than 480 linear feet of archival materials associated with the archaeological collections, maps from 150 archaeological projects, and approximately 1200 reports of investigations produced by the ARL and Great Lakes Archaeological Research Center. These materials are the product of both academic and CRM fieldwork. In 2012, ARL staff began the long progress of systematically digitizing and updating the ARL collections inventory. The rehousing, inventory, and accession of these collections has meant the discovery of treasures ranging from Melvin Fowler's hat collection to the original Cahokia Mound 72 photos. The rehabilitation of the ARL collections exemplifies the challenges and rewards of operating an archaeological repository during the curation crisis.

Recent Excavations at Mound House (11GE7): A Preliminary Analysis of Features

Elizabeth Straub (Center for American Archeology), Erin Donovan (Indiana University-Purdue University, Indianapolis), Kenzie May (Illinois State University), Laila Blumenthal-Rothchild (Center for American Archeology), Amanda Wissler (Arizona State University), Jason L. King (Center for American Archeology), Jane E. Buikstra (Arizona State University)

The Mound House site (11GE17) is one of several floodplain mound sites thought to have been important gathering places during the Middle Woodland (ca 2000-1650 BP) period and beyond in the Lower Illinois Valley. In recent years, the Center for American Archeology's fieldwork at Mound House has focused on documenting the non-mounded portions of the site, particularly the dense debris scatter north of Mound 1 where individual pits, post molds, and other features remain intact. This effort has focused on systematic geophysical survey and targeted excavation of features that would inform on activities other than moundbuilding. In this poster, we present preliminary results of analyses of features excavated during the 2017 field season and place them in the context of the site and other floodplain mound centers.

Dendrochronology in the Midwest? - Dating a Burned Native American Structure from Fort Ouiatenon

Michael Strezewski (University of Southern Indiana), Darrin Rubino (Hanover College)

While dendrochronology has been used successfully to date standing structures in the Midwest, its application in archaeological contexts has been limited. Recently, a large Native American structure was partially excavated from an area adjacent to Fort Ouiatenon, in Tippecanoe County, Indiana. Though Native American occupation of the Fort Ouiatenon vicinity is known from ca. 1709 through 1791, very few artifacts were found in association with the structure, making it difficult to determine its approximate occupation date. One item, however, that was found in abundance was charcoal, as the structure had burned down. Recent efforts at developing a dendrochronological sequence for Indiana have made it possible to estimate its construction date. Through crossdating, a 43 year-long hickory and a 35 year-long maple chro-

nology was developed. While additional data are still being collected in order to refine our estimates, preliminary results suggest that the structure was built in either 1776 or 1798.

The Dead Under Our Feet: An Urban Cemetery in Cincinnati

Michael Striker (Gray & Pape)

In 1860, the Episcopal Society of Christ Church Burial Grounds in Cincinnati was converted to a city park. Although the burials were reportedly exhumed and reburied, maintenance at the park in the 1990s revealed evidence that the relocation was incomplete. In 2010, Gray & Pape conducted historical and archaeological investigations in anticipation of redevelopment of the park. More than 90 grave shafts were excavated, revealing that many of those who were reported to have been moved were left behind.

Plummets, Patterns, Persistence, and Professional Responsibility

Bonnie W. Styles (Association of Science Museum Directors)

I learned many things from Lynne Goldstein, some of which I dare not share. I have known Lynne since 1972 when we became graduate students at Northwestern University. We have shared experiences and ideas as starving graduate students, colleagues, and friends for 45 years. The publication of her rigorous study of plummets in the lower Illinois River valley demonstrates her strong focus on the search for patterns in regional data. It also demonstrates persistence in the publication of research that she completed 30 years earlier as an undergraduate student. Her mortuary research also exemplifies this rigorous search for patterns. As graduate students, Lynne organized our participation in the state, regional, and national meetings of professional associations. She instilled professional responsibility in us and also emphasized the importance of advocacy of archaeology to the public and legislators. I thank Lynne for modeling all of these behaviors, which have benefited my career.

Deciphering Mississippian Communities in East Tennessee: Mortuary Studies, Spatial Data, and Lynne Goldstein

Lynne P. Sullivan (University of Tennessee)

Lynne Goldstein pioneered the interpretation of spatial data related to mortuary practices in her 1976 dissertation research on two Mississippian cemeteries in the Lower Illinois Valley. As her graduate student in the late 1970s and early 1980s, I followed her lead for my dissertation research on the organization of Late Mississippian communities in East Tennessee. The spatial patterning of mortuary features initially proved to be a significant clue to the basic plan of these communities. Continued analysis of spatial patterning of mortuary features eventually led to an understanding of community political dynamics in many late prehistoric communities in Southern Appalachia. Most recently, this research has led to a proposal regarding how this political organization may have come about.

Recent Analysis of Ceramic and Lithic collections from the Carlin Site (11C124): A White Hall Phase Site in the Lower Illinois Valley

Adam Sutherland (University of Illinois at Urbana-Champaign)

This paper will look at recently analyzed ceramic and lithic materials from the Carlin Site (11C124); a, mostly, White Hall Phase site, located along the Illinois River bluff base. Previous research has indicated that this was likely a long-term habitation site; I will argue that my analysis agrees with this conclusion. Further, this paper will briefly attempt to locate the Carlin Site within Green's Late Woodland Frontier Model. Although this model was developed more specifically for the Central Illinois Valley, it has been applied to the American Bottom region and I believe it can similarly be applied to the Lower Illinois Valley.

A Village Built Over a Battlefield; Urban Archaeology at the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794)

Christine Thompson, Kevin C. Nolan (Ball State University)

The Applied Anthropology Laboratories, Department of Anthropology, Ball State University has completed six years of archaeological and historical research at the battlefield of the Battle of the Wabash (1791) and the Battle of

Fort Recovery (1794), two significant Northwest Indian War battles that took place in present day Fort Recovery, Ohio. Although a portion of the battlefield was used as to build the village, large portions within and adjacent to the village corporation limits are providing new archaeological information. Our research has focused on creating a more comprehensive picture of the battles through both determination of extent, and bringing the stories of both combatant parties. Funded by multiple federal, state, and university grants, we have reshaped the understanding of both conflicts. We present a summary of our results and products, specifically the use of GIS data modeling and the KOCOA landscape analysis method to highlight probable Native American battle strategy and movement, U.S. military strategy, and possible placement of the original Fort Recovery built in 1793. We conclude with a framework for using our results to support future archaeological research, plan for site preservation, and community engagement.

In the Light of the Kiln: The Valentine Conrad Redware Pottery Site, Louisville, Kentucky

Anne Tobbe Bader (Corn Island Archaeology LLC)

Situated in the heart of downtown Jeffersontown on the former Main Street, the Valentine Conrad house and pottery site forms a National Register District along a busy, heavily trafficked corridor amid a growing concern of businesses and government agencies. The house, built in 1803, is now commercial space, and the small side yard contains intact the buried kilns, potters shop foundations, and waster piles of this early redware pottery. For ten years, the site has been interpreted to the public during the city's three-day long annual street festival event in September, and the public has actively participated in excavation and artifact processing. The study of this site has revealed invaluable information regarding early pottery production and the wares of this sophisticated potter, whose colorful slip-trailed designs and artistic designs hearken to the Moravian tradition of North Carolina which he once called home.

Cultural Transmission and Multilayer Social Network Relationships at the Intersection of Mississippian and Oneota Worlds

Andrew Upton (Michigan State University)

Archaeologists, including the venerable Bill Lovis, have long recognized the potential of technological characterizations of material culture for assessing interactions, relational social ties, and cultural origins. I demonstrate the application of a multiple relations, or multilayer, network approach for the analysis of networks derived from technological attribute data that connected frontier communities of Mississippian and Oneota ceramic artisans in the Late Prehistoric central Illinois River valley (1200-1450 A.D.). Relational data is obtained from technological characterizations of two pottery classes, jars and plates, through the application of a quantitative cultural transmission model. Each pottery class forms a distinct network layer and together form a multilayer social network. Measures for influence and overlap between these typeattribute networks are calculated prior to and post-dating the circa 1300 AD Oneota in-migration to demonstrate the role of network interrelationships as indicators of how both indigenous societies and migrant peoples approach intercultural social and economic relations.

Excavations in Copper Harbor: The Astor House and Range Light Keeper's House

Kyla Valenti (Michigan Technological University), Cooper D. Sheldon (Industrial Archaeology, Michigan Technological University), Morgan Davis (Michigan Technological University)

The 2017 Michigan Technological University (MTU) field season was conducted at Fort Wilkins Historic State Park in Copper Harbor, MI. The goals of the field season were to locate the Astor House and investigate the privy, washhouse/summer kitchen, and midden associated with the Range Light Keeper's House. Thirty units were excavated and a sample of material culture associated with each site was recovered. Artifacts were transported to MTU upon completion of excavations for identification and analysis. This paper will present an overview of the project and its results. The information gained through this project will help the park better understand and interpret the historic locations within its boundaries.

Material Culture at the McHugh Site: Glass Bottles, Immigrant Health, and the Emergence of Popular Culture

Robert W Vander Heiden Jr. (University of Wisconsin-Milwaukee)

Patent medicine bottles offer a window into the popular culture of 19th Century America and highlight the ways isolated populations were connected into broader social and economic networks. Settlers on the Wisconsin frontier in the mid-to-late 19th century had limited access to formal health care. Physicians who did provide services to remote populations were often poorly trained and had a limited understanding of the causes of many diseases. Thus, self-medication and alternative forms of health care became an attractive option for many frontier occupants. This paper illustrates how patent medicine bottles recovered from the McHugh site provide an indication of how the McHugh family responded to the need for health care in northeastern Wisconsin during the mid-to-late 19th century, and shows how broadly changing social conditions and the emergence of American popular culture may have shaped how the McHughs conceptualized ideas of sickness and disease.

Telling Their Stories: How Pushed Aside Items Can Give Voice to Marginalized Peoples

James M. VanderVeen (Indiana University-South Bend)

The initial goal of the IU South Bend archaeological field school was to study the commercial aspect of a property adjacent to one of the most prosperous sections of 19th and early 20th century South Bend. After excavations began, however, a series of additional research questions came to light. Although there are a plethora of documents concerning the wealthy families in the neighborhood, the domestic workers in the same houses are unknown. Likewise, while male names come up in census records and business directories, the female-run households and small businesses were absent. Finally, although archaeological training of students was the intent, they ended up being the teachers of a host of stakeholders in the community. At the literal intersection of two busy historic streets, the concept of intersectionality needed to be addressed by all involved.

The Gills Rock Petragraphs: Archives of Stone

Matthew E. Velguth

One of the most fascinating pieces of Wisconsin Native American history took place here in Hedgehog Harbor, Gills Rock, WI in 1657, a Battle between the Ojibwa and the Iroquois neither of whom lived here. The story of the battle was kept alive as oral tradition by the Pottawatomie, and this has now been vindicated by the rediscovery of a 360 tear old Ojibwa mural nearly 400 feet in length. The site is an international treasure, a one-off unique for it's size commemorating the single event which likely saved Wisconsin Woodland Indians from the armed incursion of the fur-hungry Iroquois. The mural was placed on the National Register of Historic sites in 1993 but at the time it's origin and significance was not understood. The nation may owe its very founding to these Ojibwa victories that kept the British-allied Iroquois off the Great Lakes before and during the American Revolution.

Bound to the Western Waters: Searching for the Site of Lewis and Clark's Fort Kaskaskia

Mark J. Wagner, Ryan M. Campbell (Center for Archaeological Investigations -Southern Illinois University Carbondale)

Lewis and Clark recruited 11 soldiers from Ft. Kaskaskia (1803-1806), Illinois, to join their expedition to explore the American West. This event traditionally has been identified as occurring at a 1750s French fort of the same name. SIU summer field school investigations within the French fort located the remains of a 1750s-1780s occupation but found no evidence of use by the US Army. GPR and hand investigations of a nearby hilltop named "Garrison Hill" located an extensive brick scatter intermixed with early 1800s US Army artifacts that clearly represents the remains of the long-lost 1803-1806 Ft. Kaskaskia visited by Lewis and Clark. This paper describes the remains encountered at both sites and their potential to correct both French colonial and early American period history in the central Mississippi River Valley.

An Early-mid 19th Century Component at Stillwell Crossing, Fort McCoy, Wisconsin

Heather Walder (Northern Illinois University), Alexander D. Woods (Center for Environmental Management of Military Lands)

Recent Phase IIII excavations targeted a multicomponent occupation area spanning three NRHP-eligible sites (47MO054, 47MO360, and 47MO660) at Stillwell Crossing, on the Fort McCoy military installation near Tomah, Wisconsin. These excavations explored depositional processes and subsequent disturbances in the sandy soils of the project area. Artifacts of European origin included two tiny glass trade beads recovered in flotation of feature fill from both the 1997 Phase II investigations and the current project. Glass bead compositions were analyzed and compare favorably with Venetian glass embroidery beads of the 19th century. Additional radiocarbon dating of Phase II feature material returned pre-Columbian results, providing evidence of considerable mixing of even the more recent components. Other temporally diagnostic historic-era artifacts from the project area included two metal bracelet fragments, a clay pipe, and a hawk bell. Taken together, these indicate occupation c. 1800 to 1837, and a probable Ho-Chunk cultural affiliation is proposed.

Stillwell Crossing Mitigation and Military Training Aid for Archaeological Site Protection

Heather Walder (Northern Illinois University), Alexander D. Woods (Center for Environmental Management of Military Lands)

Recent mitigation work at Fort McCoy in Monroe County, Wisconsin provided an opportunity to study site formation processes and develop innovative management strategies, with construction of a mock cultural site as a military training aide on the excavated areas. The archaeological research design tested two questions: 1) How effective is subsurface geophysical prospecting in such contexts? and 2) How do spatial distributions of artifacts reflect both depositional and post-depositional processes at the site? Archaeologists obtained valuable research data, while the mock site construction reduces damaging vehicle traffic and provides training opportunities for cultural property awareness. This is a win-win project for archaeological protection and military

training, turning a potential limitation into an asset for the client. Soldiers training at the site will gain awareness of the need to protect sensitive cultural properties and adhere to international laws and agreements of the host country, while building trust and awareness with communities.

Informatics for the Stone Age: Knowledge Management Approach to Lithic Raw Material Identification

Dan Wendt (Minnesota Archaeological Society)

Lithic raw material identification has been a foundational approach to telling the story represented by a stone tool. Minnesota has over a hundred lithic material varieties that show up on archaeological sites as a complex geological history and the result of human, glacial or river transport. A subjective macroscopic approach to lithic analysis is the realm of experts with years of experience. Practices and nomenclature are inconsistent and the approach is fallible. New informatics approaches are needed to manage knowledge and information and make it available to those who apply it. The term "informatics" broadly describes the study and practice of creating, storing, manipulating and sharing information. New knowledge sharing approaches and tools have been developed and assessed.

Lower Limb Posturing Behavior in a Late Woodland West-Central Illinois Population

Elizabeth Wilk (EBI Consulting), Maria O. Smith (Illinois State University)

This study examines the prevalence and pattern of osseous reactive change at the knee indicative of habitual posturing behavior within an osteoarchae-ological sample from West-Central Illinois. Specific markers examined are the tibial imprint of the distal femur and the anterior facet of the proximal tibia. The Schroeder Mounds (11-He-177) osteological sample reflects a Late-Woodland (~700-1100 AD) forager-farmer subsistence economy. The sample consists of 46 adults who preserve at least one lower limb. 80.9% of the sample exhibits the presence of reactive change at minimally one tibio-femoral location. The presence of the tibial imprint (p=0.680) or the anterior facet (p=0.186) was not significant between the sexes. No bilateral asymmetry of either marker was found within the population (p=0.801 and p=0.426, respectively). The results indicate no sex difference in postures requiring a bi-

lateral acute knee flexion (e.g., squatting, seiza). The postures reflect a cultural sitting position performed by both sexes irrespective of sex-based division of labor.

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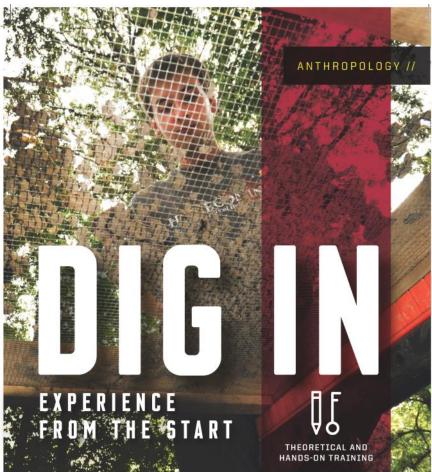
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