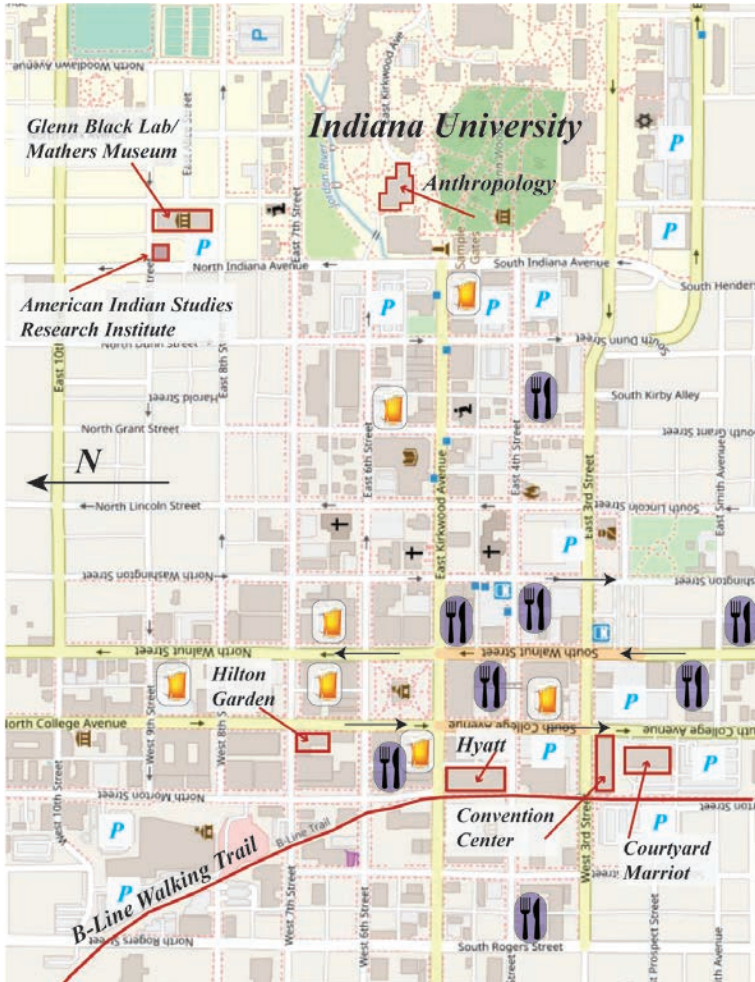


77th Annual  
**PLAINS ANTHROPOLOGICAL  
CONFERENCE**



BLOOMINGTON, INDIANA  
OCTOBER 16-19, 2019

# MAP OF DOWNTOWN BLOOMINGTON





# WELCOME TO BLOOMINGTON, INDIANA

The 77th Annual Plains Anthropological Conference is held in Bloomington, Indiana, home of Indiana University. Bloomington is definitely a college town, with a student population of 43,000 out of 85,000 total residents. Both the town and the university are celebrating their 200 Year Bicentennial. Bloomington is well-known across the region for its limestone quarries, music scene, bike races, and basketball. We hope you enjoy your stay and come back to see us again sometime! Our local marketing organization, Visit Bloomington, will be in the lobby during the conference on Wednesday and Thursday to provide guides to the city and answer any questions. <https://www.visitbloomington.com>

## **Getting Around:**

The conference will be held at the Monroe County Convention Center, which is a 10-minute walk (½ mile) from Campus. Rideshares such as Uber and Lyft are easily obtained within a few minutes of almost anywhere in town. Note that the Convention Center and most of the hotels are located on one-way streets, so be careful when driving. The Bloomington B-line trail runs on the west side of the Convention Center, connecting to several bars and restaurants to the north. This rails-to-trails walking path extends for several miles in both directions, with art showcases.

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*The 2019 Plains Anthropological Conference Organizers wish to honor the Miami, Delaware, Potawatomi, and Shawnee people, on whose ancestral homelands and resources the city of Bloomington, Indiana, and Indiana University were built.*



# ACKNOWLEDGMENTS

## Conference Hosts:

**Glenn A. Black Laboratory of Archaeology**

**&**

**American Indian Studies Research Institute**

**at Indiana University, Bloomington, Indiana**

## Conference Committee

- Laura L. Scheiber, organizer
- Courtney Scheiber, co-organizer
- Amanda Burt, co-organizer


## Logistics Command Centers:

- Chris Johnston
- Courtney Ziska
- Sam Pierce
- Abigail Springer

## Graphics and Web Design

- Nicky Belle (merchandise)
- Cynthia Ramlo and Travis Myers (program)
- Chad Caswell (app designer)
- Courtney Ziska, Josiah Salsbury, and Angela Collins (website)

**And Many Thanks to Our Wonderful  
Volunteers!**



The 77th Annual Plains Anthropological Conference marks the first time that Plains has come to Bloomington. The local community responded with great enthusiasm in providing their expertise on a wide variety of topics, and they found ways to support the conference with discounts and subsidies for every event. Thank you Bloomington!

The conference committee would like to especially thank the Monroe County Convention Center (Lisa LaMarca and Jean Kautt) and Visit Bloomington (Teal Strabbing) for their planning assistance during the last year and for their hospitality during the conference. We are grateful to the Glenn A. Black Laboratory and the Mathers Museum of World Cultures for hosting the Wednesday behind-the-scenes collections tours, the Thursday reception, and the Saturday tour of Angel Mounds. Thank you to our tour leaders and facilitators: April Sievert, Melody Pope, Kelsey Grimm, Kelly Wherley, and Amanda Burt (Glenn A. Black Laboratory of Archaeology); Ellen Sieber and Jason Jackson (Mathers Museum of World Cultures); and Mike Linderman and April Sievert (Angel Mounds). We also extend a huge thank you to Dr. Timothy Pauketat, our banquet keynote speaker, whose research over the years has inspired many of us to re-consider how we think about religion, theory, agency, memory, and tradition on the Plains.

One World Enterprises helped sponsor the Student Workshop Luncheon (Pizza X) and the Thursday Reception (Hive and Lennie's). We extend our gratitude to Pam Thrash, Abigail Springer, and Matt Houghton for all of their assistance. Upland Breweries donated the free beer for the Thursday reception. Many thanks to Erin McFadden and Edward Herrmann! The C3 Restaurant staffed the bar. Underground Printing and In Case of Emergency Press produced the Plains 2019 souvenirs. Live music was provided by Thee Vatos Supreme at the Early Bird Party and acoustic guitarist Keith Skooglund at the Thursday Reception. The Monroe County History Center (Megan McDonald) provided us with additional information about the Convention Center, our home away from home during the conference. Lastly, the IU Department of Earth and Atmospheric Sciences (coordinated by David Polly and John Hettle Jr.) loaned us their portable poster stands.



# CONFERENCE SPONSORS

**The conference committee is extremely grateful for the generous donations and in-kind support from our sponsors:**

- Glenn A. Black Laboratory of Archaeology, Indiana University
- American Indian Studies Research Institute, Indiana University
- Department of Anthropology, Indiana University
- Beta Analytic
- UGA Center for Applied Isotope Studies
- Berghahn Books
- Paleocultural Research Group (PCRG)
- Upland Brewing Company
- Indiana Archaeology Council
- One World Enterprises: Hive, Lennie's, Pizza X
- Mathers Museum of World Cultures, Indiana University
- Paleoindian Research Lab (PiRL), University of Wyoming
- William R. Adams Zooarchaeology Laboratory
- Bighorn Archaeology

Silent Auction items donated by ReeCreations, Fred Schneider, Noel Two Leggings, Eliot Werner Publications, and Visit Bloomington.



**GLENN A. BLACK  
LABORATORY OF ARCHAEOLOGY**

INDIANA UNIVERSITY  
Bloomington



**AMERICAN INDIAN STUDIES  
RESEARCH INSTITUTE**

INDIANA UNIVERSITY  
Bloomington





# CONFERENCE VENDORS & EXHIBITS

- Center for Applied Isotope Studies – University of Georgia
- InTerris Registries
- Plains Anthropological Society
- Silent Auction
- Wichita State University

## GENERAL INFORMATION

### Conference Headquarters

All conference events, except for the tours on Wednesday and Saturday, the reception on Thursday evening, and the Student Luncheon will be held at the *Monroe County Convention Center* (302 S. College Ave.). The Convention Center is a former Henry Ford Model T assembly plant and showroom. Built in 1923, it was recently remodeled into a stylish event venue located in the heart of downtown Bloomington. Complimentary amenities in this modern and visually pleasing facility include surface level parking and wireless internet. <https://www.bloomingtonconvention.com/>. The Courtyard Marriott connects to the Convention Center via an open glass hallway across from the lobby.

### Local Transportation

- Car Rentals
- Red Tire Taxi: (812) 269-2690
- Ridesharing: Uber, Lyft
- Scooters: Lime, Bird

### Parking

Free parking is available for conference attendees at the Monroe County Convention Center.





Graham Motor Sales Company Building, Bloomington, Indiana. ca. 1935.

## **Transportation to and from the Indianapolis Airport**

- Go Express Travel: shuttle service to and from the airport for \$23 each way. They run every two hours on Tuesday, Wednesday, and Saturday, and hourly on Sunday, Thursday, and Friday. [www.goexpresstravel.com](http://www.goexpresstravel.com)
- Classic Touch Limo service: chauffeured transportation [www.classictouchlimo.com](http://www.classictouchlimo.com).
- Uber and Lyft: rideshares also drive to and from the airport.

## **Registration**

The registration and information table is located in the Lobby of the Monroe County Convention Center. Hours of operation: Wednesday, October 16 from 5:00 to 8:00 p.m., Thursday, October 17 from 8:00 a.m. to 4:00 p.m., and Friday, October 18 from 8:00 a.m. to 4:00 p.m. The registration area will likely be closed during the lunch breaks.

## **Presentation Preview Area**

Computers are available for use by conference attendees at the hotel business centers.

## **Sessions**

All symposia, round table, and paper sessions are in the Hansen

and Zebendon Rooms on the ground level of the Convention Center on Thursday, Friday, and Saturday.



## **Poster Sessions**

All poster sessions are located in the Cook West Room on the ground level of the Convention Center on Thursday and Friday.

## **Session Moderators and Presenters**

Moderators and organizers *need to bring their own pc laptop computers to their sessions* to attach to the data projectors. Make sure to arrive with enough time before your session to check your equipment. Session moderators must adhere to the presentation schedule and keep presenters on time. Please give each presenter a two-minute warning before the end of their allotted time. All papers are 20 minutes in length. If a presenter is a “no-show” the session moderator will call a break for the appropriate amount of time. Moderators are asked to remind all attendees to silence cell phones. Presenters and moderators are expected to arrive at the meeting room 20 minutes prior to the beginning of the session in order to load your presentation onto the session computer unless it has been pre-loaded by the moderator/organizer. All presentations must be in Microsoft Office format.

## **Vendors & Exhibits**

Vendor and exhibit space is in Cook East on the ground level of the Convention Center. The room is open 8:00 a.m. to 5:00 p.m. on Thursday and Friday. The room will be accessible starting at 7:30 a.m. for use by vendors/exhibitors.



## **Silent Auction**

A silent auction table will be located in Cook East on the ground level of the Convention Center. The auction will open 8:00 a.m. on Thursday and end 4:30 p.m. on Friday. Recipients can pay for and pick up their items Friday evening. Proceeds from the silent auction will go toward funding the free student registration fees.

## **Conference Souvenirs**

Conference t-shirts, hats, and pint glasses may be purchased at the registration table. Supplies are limited. The eco-friendly and reusable stainless-steel pint cups are made with lead free & BPA free materials. They are shatterproof and dishwasher safe.

## **Social Media**

We will be posting updates and photos on our social media pages:

Facebook: Plains Anthropological Conference 2019

Instagram: plains2019

Tag us at #plains2019

## **Smart Phone App**

The Plains 2019 schedule is available on a mobile app for your android and iPhone smart phones. Download **PAC 2019**.

## **Breaks and Refreshments**

Local Bloomington Hopscotch Coffee and water will be available in the main hallway all-day during presentations. Light refreshments and iced tea will also be served at mid-morning and mid-afternoon near the lobby. Other food and drinks are available at the Courtyard Marriott through the glass hallway next door.



Inside Graham Motor Sales. Now the Great Room of the Convention Center.

### **Calling All Students!**

The Conference Committee is proud to host a large number of student attendees and presenters at Plains 2019 in Bloomington! Forty percent of the authors this year are students! To encourage student participation and attendance, we decided to offer free registration to all student presenters. The Board of Directors also offered student travel grants for the first time this year. In addition, we continued the Student Papers Award and Student Poster Award Competitions. Each presenter receives two free banquet tickets for their participation. The winners receive prize money and opportunities for publication. If you want these practices to continue, get involved in the Student Affairs Committee!

The *Student Affairs Committee* invites students to come introduce themselves at their informal table at the Early Bird Party. They also encourage everyone to attend the Board Meeting and their Student Workshop Luncheon.

## **Conference Events: Highlights**

### **Wednesday (October 16)**

*Pre-Conference Tours:* Behind-the-scenes collections tours are scheduled at the Glenn A. Black Laboratory of Archaeology and



the Mathers Museum of World Cultures for Wednesday, October 16, 2019. These two museums share a building and are located on the campus of Indiana University. Transportation is on your own. Tour leaders are Melody Pope for the Glenn Black Lab and Ellen Sieber for the Mathers Museum.

Registration: The registration table will be open in the Lobby of the Convention Center from 5:00-8:00.

Board Meeting: The Plains Anthropological Society Board of Directors will meet Wednesday, October 16, at 6:00 p.m. in the Rogers Room.

Early Bird Party: The Early Bird Party will be held from 7:00 p.m. to Midnight in the Great Room, on the second floor of the Convention Center. Free food and drinks are available while they last. A cash bar is available. Attendees are encouraged to purchase and use the reusable metal Plains 2019 cups instead of plastic ones. Live music will be performed by the band Thee

Vatos Supreme, a roadhouse rocking Vintage, and Alt. Country & Western, Tex-Mex band from Bloomington, Indiana.

# plains

ANTHROPOLOGICAL SOCIETY

## Thursday (October 17)

Registration: The registration table will be open in the Lobby of the Convention Center from 8:00 a.m. - 5:00 p.m.


Exhibits, Vendors, and Silent Auction: 8:00 a.m. - 5:00 p.m. in Cook East.

Papers, Poster, and Workshop: 9:00 a.m. to 4:40 p.m. in Cook West, Hansen, and Zebendon.

Evening Reception: The annual reception for conference attendees is planned from 6:00 to 8:00 p.m. at the Glenn A. Black Laboratory of Archaeology, located at 423 N. Fess Avenue, on the Indiana University campus. Appetizers and free beer will be provided. Other drinks will be available at a *CASH-ONLY* bar. Transportation is on your own for this event. The reception is an easy walk from the conference center, less than a mile away. Free parking is available, and rideshare cars are never more than five minutes away.

The Glenn Black Lab is a university-centered research laboratory, museum, library, and meeting place for the discovery, preservation, exhibition, and celebration of Indiana's rich cultural and archaeological heritage. It is also a repository for archaeological artifacts, data, and documentation for sites in the Midwest including





those associated with Indiana's largest archaeological site, Angel Mounds State Historic Site and National Historic Landmark.

### **Friday (October 18)**

Registration: The registration table will be open in the Lobby of the Convention Center from 8:00 am. - 5:00 p.m.

Exhibits, Vendors, and Silent Auction: 8:00 am. - 5:00 p.m. in Cook East.

Papers, Poster, and Workshop: 9:00 a.m. to 4:20 p.m. in Cook West, Hansen, and Zebendon.

Special Session: **STUDENT PAPER COMPETITION** (Session 11, Hansen Room, 1:20-2:40). Students competing for the Plains Anthropological Society Student Paper Award will present their research.

Student Workshop: **TRANSITIONING FROM STUDENT TO PROFESSIONAL.** The Plains Anthropological Society Student Affairs Committee will host a workshop in the patio of the Courtyard Marriot from noon to 1:00 p.m. This workshop features three recent PhD's in the field. Free pizza lunch will be provided to students who register for the event with the Student Affairs Committee.

Special Session: **STUDENT POSTER COMPETITION** (Session 15, Cook West, 3:00-5:00). Students competing for the Plains Anthropological Society Student Poster Award will present their research.

Student Affairs Committee Meeting: The committee will meet 4:30-5:00 at the end of the Student Poster Session in Cook West to recruit new members.

Silent Auction: Last chance to bid on items in the silent auction will be at 4:30 in Cook East.

Business Meeting: The annual business meeting of the Plains Anthropological Society is open to all society members from 5:00-6:00 p.m. in the Zebendon Room. Please take an active part in your society.

PaleoIndian Research Lab



<http://www.uwyo.edu/anthropology/pirl/>

***Board Meeting:*** The second Plains Anthropological Society Board of Directors meeting will take place at 6:00 p.m. in the Rogers Room.

***Pre-Banquet Cash Bar:*** A cash bar will be set up after the business meeting at 6:00, upstairs in Duke East.

***Conference Banquet:*** The Conference Banquet will begin at 7:00 p.m. in the Great Room of the Convention Center. *Banquet tickets must have been purchased prior to the conference.* Awardees for the Distinguished Service Award, the Student Paper Competition, and the Student Poster Competition will be announced.



**MATHERS MUSEUM**  
OF WORLD CULTURES



*Post-Banquet Speaker:* **KEYNOTE ADDRESS**

All conference attendees are invited to the presentation by our post-banquet speaker in the Great Room, which will take place after the banquet, approximately 8:00 p.m. This year's keynote address speaker is **Timothy R. Pauketat**.



Dr. Pauketat is the Director of the Illinois State Archaeological Survey (ISAS) and Professor of Anthropology and Medieval Studies at the University of Illinois. He is an archaeologist who has worked extensively around the Greater Cahokia region and in the Mississippi valley on the problems of that ancient behemoth's historical impacts. Having previously held posts in Oklahoma and New York, he is the author or editor of 15 books and numerous other papers and data monographs. These include considerations of big history, religious movements, agency, archaeoastronomy, and North American archaeology generally, such as *An Archaeology of the Cosmos: Rethinking Agency and Religion in Ancient America* (2012), *Cahokia: Ancient America's Great City on the Mississippi* (2010), *Chieftdoms and Other Archaeological Delusions* (2007), and *The Oxford Handbook of North American Archaeology* (2015). With his recent move to ISAS, Tim has recommitted himself to the goals of scientific and compliance archaeology, some of which will spill into his presentation.

Dr. Pauketat's Keynote Address is entitled:  
***A Return to Archaeology's ABCs: Astronomy, Bundles, Corn, and Climate Change***

What can we know about the human past and why should we care? One answer to these questions comes from shifting our point of view back to a focus on non-human agencies as these caused certain things to "matter." Doing so is consistent both with scientific, materialist approaches in archaeology, old and new, and with pre-urban ontologies around the world. Global archaeological cases from China to Cahokia suggest how things mattered in the past. In an homage to the late Robert Hall, I trace some specific instances relevant to Plains archaeology – sweat lodges, pottery temper, maize, and the Medieval Warm Period.



**Saturday (October 19)**

*Registration:* The registration table will be open in the Lobby of the Convention Center from 8:00 am. - 11:00 a.m.

*Half-day of Papers:* 9:20 a.m. to 11:20 a.m. in Hansen.

*Post-Conference Tour:* A half-day tour to the Angel Mounds State Historic Site and National Historic Landmark will occur Saturday after the symposium. Vehicles will promptly leave the Courtyard Marriott at noon and return at approximately 7 p.m. The tour will be led by April Sievert. The trip includes water and a lunch. Please wear outdoor clothing and shoes.



WILLIAM R. ADAMS  
ZOOARCHAEOLOGY LABORATORY



BIGHORN  
ARCHAEOLOGY

77th PLAINS ANTHROPOLOGICAL CONFERENCE  
Bloomington, Indiana

## PRESENTATION SCHEDULE

### THURSDAY MORNING, OCTOBER 17, 2019

#### **Session 1, Zebendon Room**

General Session: *Education, Curation, and Outreach*

Clara Steussy, Moderator

- 9:00-9:20** David T. Williams and Katherine Lamie: *Dusting off "Legacy" Projects: Balancing Budgets and Curation Needs to Complete 30 Year-Old Projects*
- 9:20-9:40** Timothy Weston: *Public Archeology in Rice County Kansas, A Long-Term Legacy of Cooperation and Friendship*
- 9:40-10:00** Reagan Duranski, Jennifer Banks, and Nolan Johnson: *Dig into Archeology: Public Excavations at 25MO201*
- 10:00-10:20** Debra K. Green: *The Role of Geoarchaeology in Public Outreach and Education in Oklahoma*
- 10:20-10:40** Emily C. Van Alst: *From Incising to Instagram: Examining the Changing Roles of Oceti Sakowin Women in the Creation of Traditional Art*
- 10:40-11:00** **Break**
- 11:00-11:20** Clara Steussy: *Celebration: Expanding the Story of Wyoming's Haiku Stone*

#### **Session 2, Hansen Room**

Symposium: *Living in Greatness: Being a Person in the Indigenous Plains and Great Basin, a Session in Honor of Raymond J. DeMallie*

Thierry Veyrié and David C. Posthumus, Organizers

- 9:00-9:20** Sebastian Braun: *Indigenous Personhood and the Ontological Turn. Does it Matter Where I (Don't) Turn?*

*Bloomington, Indiana*

- 9:20-9:40** David C. Posthumus: *Journey to “The Center of the Earth”: Exploring Traditional Lakota Conceptions of Place, Landscape, and Personhood*
- 9:40-10:00** Richard Meyers: *Memes in Indian County: Implications for Identity*
- 10:00-10:20** Thierry Veyrié: *Finding Footing: Positional Experiences of Space and Belonging in Paiute-Shoshone Historical Expression*
- 10:20-10:40** Indrek Park: *The Extent of Mandan and Hidatsa Territories: Native Perspectives*

### **Session 3, Cook West**

General Poster Session: *Eastern Plains*

#### **9:00-11:00**

- A. Brandi Bethke, Sarah Trabert, Sheila Savage, and William Taylor: *Morphological Modeling and Biomolecular Analysis of Horse Remains from Three Wichita Sites in Oklahoma*
- B. William T. Billeck: *The Greenshield site (32OL17): Interpreting the Glass Bead Assemblage*
- C. Steven L. De Vore: *Compliance Geophysical Investigations of Proposed Maintenance Facility, Knife River Indian Villages National Historic Site, North Dakota*
- D. Cherie Haury-Artz: *A Locally Made Freshwater Mussel Bead from the Dixon Site, 13WD8*
- E. Nolan Johnson and Adam Wiewel: *A Geophysical Survey of Sharp Homestead, Stanton County, Nebraska*
- F. Rachel Thimmig, Kacy L. Hollenback, Christopher I. Roos, Andrew Quicksall, Fern Swenson, Blair Betik, and Mary Hagen Erlick: *A Tale of Two Houses: Soil*

*Chemical and Floor Assemblage Evidence of  
Domestic Activities at the Menoken Site,  
North Dakota.*

**Session 4, Hansen**

*Round Table: Native American Graves Protection and  
Repatriation Act (NAGPRA) Round Table Discussion*  
Jayne-Leigh Thomas, Organizer and Moderator

**11:00-12:00** Jayne-Leigh Thomas: NAGPRA in 2019

**THURSDAY AFTERNOON, OCTOBER 17, 2019**

**Session 5, Hansen Room**

*Symposium: Perspectives in Plains Anthropology and  
Linguistics: Papers in Honor of Douglas R. Parks*  
Indrek Park, Organizer

- 1:20-1:40** Sebastian Braun: *Setting the Standard: Douglas Parks and Plains Anthropology*
- 1:40-2:00** Erik D. Gooding: *Ethnonym Semiotics: Towards an Understanding of Tribal Names of the Great Plains and Prairies*
- 2:00-2:20** Indrek Park: *The Role of Dictionaries in Language Reclamation*
- 2:20-2:40** Logan Sutton: *Northern Caddoan Linguistic Analysis: The Rich Legacy of Douglas Parks*
- 2:40-3:00** Joshua Richards: *Continuing Doug Parks' Commitment to Documenting Caddoan Languages: Arikara Personal Names and Preston Holder's Like-A-Fishhook Village Papers*
- 3:00-3:20** **Break**

- 3:20-3:40** Christina Burke: *Lakota Literacies: The World According to Bad Heart Bull*
- 3:40-4:00** Mauricio Mixco: *Reminiscences of My Friendship with Douglas Parks*
- 4:00-4:20** David C. Posthumus: *Individual Sovereignty and Indigenous Collectivism: A Lakota Case Study*
- 4:20-4:40** Laura L. Scheiber: *Legacies, Genealogies, and Inheritance: The American Indian Studies Research Institute as Repository*

### **Session 6, Zebendon Room**

General Session: *Beyond Subsistence: Humans and their Relationships with Plants, and Animals*  
 Alison M. Hadley, Moderator

- 1:20-1:40** Gerald A. Oetelaar: *Natural Disasters and Interregional Interactions: La Longue Durée in Northern Plains Historical Developments*
- 1:40-2:00** Cherie Haury-Artz: *Feathers, Beads, and Animal Symbolism: Fauna from the Dixon Site (13WD8)*
- 2:00-2:20** Alison M. Hadley: *Pawnee Mud Pony and Horse Figurines*
- 2:20-2:40** Crystal A. Dozier: *Mind-Altering Substances and Feasting in the Pre-Hispanic Southern Plains: Residue Analysis of Leon Plain Ware*
- 2:40-3:00** Cheryl Claassen: *Three Possible Burial Rites among Ancient Plains Groups*
- 3:00-3:20** **Break**
- 3:20-3:40** Fred Schneider: *Intertribal Trade for Native Plant Materials Exotic to North Dakota to the Mandan, Hidatsa, and Arikara Tribes*

3:40-4:00

Mary L. Simon: *New Dates on Old Maize*

4:00-4:20

Kent J. Buehler: *You Dirty Rat!: Eastern Wood Rats as a Significant Taphonomic Factor in the Forensic Recovery of Human Skeletal Remains*


### Session 7, Cook West

Poster Symposium: *Rediscovering Angel Mounds*

Amanda Burt, Organizer

1:20-3:20

- A. Amanda Burt: *Ripe for Research: Angel Mounds Fauna*
- B. Preet Gill: *The Mystery of the Tooth Scale*
- C. Kelsey T. Grimm: *“Let’s Go On a Journey...” Telling Angel Mounds’ Stories Using Social Media*
- D. Maclaren Guthrie: *Angel Mounds: Taking a Bite out of Identifying Animal Teeth*
- E. Anne Hittson: *The Use of the Petrous Bone to Further Understand Faunal Life at Angel Mounds*
- F. Krystiana L. Krupa: *Identifying Human Remains in Commingled Faunal Assemblages: Strategies for Working with Archaeological Collections*
- G. Molly Mesner Bleyhl: *Keeping Up with the Collections: Issues with Documentation of Artifacts from Angel Mounds*
- H. Amanda Pavot: *Curating Angel Mounds: Methods and Issues*

- 
- I. Ryan Edward Peterson: *Integrating the Mixed Materials of the Angel Mounds Collection*
  - J. Melody Pope and April Sievert: *Curating Angel is Underway!*
  - K. Lauren Schumacher: *Campus Archaeology: Bringing Communities and Students Together*

## **FRIDAY MORNING, OCTOBER 18, 2019**

### **Session 8, Hansen Room**

General Session: *Windows to the Past: Interpretive Spatial Modeling*

Christina Friberg, Moderator

- 9:00-9:20** David Massey, Christina Friberg, Quinn Lewis, and Edward Herrmann: *Pump Up the Volume: Aerial and Drone Based LiDAR Volumetric Calculations at Angel Mounds (12VG1)*
- 9:20-9:40** Andrew J. Clark, Kenneth L. Kvamme, and Timothy A. Reed: *Recent Remote Sensing Investigations at Two Middle Missouri Village Sites in North Dakota*
- 9:40-10:00** Kenneth L. Kvamme: *GPR Investigations in Northern Plains Village Sites*
- 10:00-10:20** Mark D. Mitchell, Jay T. Sturdevant, Rinita A. Dalan, Kenneth L. Kvamme, and Stephen M. Perkins: *Archaeological and Geophysical Investigations at Awatixa Village, Knife River Indian Villages National Historic Site*
- 10:20-10:40** **Break**
- 10:40-11:00** Cambria Haley, Jeremiah Perkins, and David Klamm: *The Cooperative Future of Archaeology and 3D Terrestrial Scanning: Preliminary Results from Etzanoa (14CO3)*



- 11:00-11:20** Kirsten M. Hawley and Laura L. Scheiber:  
*Spatial Data Analysis and Visualization  
Techniques of Shoshone Occupations in the  
Washakie Wilderness of Northwestern Wyoming*
- 11:20-11:40** Courtney L.C. Ziska, Nolan L. Johnson, and  
Anthony L. Layzell: *The Nebraska Buried Sites  
GIS in Practice: Initial Results and Next Steps*
- 11:40-12:00** Brian Goodrich: *The Search for Fort Lisa: A  
Site Location Model*

### **Session 9, Zebendon Room**

Round Table: *Plains Anthropology in the 21st Century. Human  
Agency, and Why It Matters*

Sebastian Braun, Organizer and Moderator

- 9:00-10:20** Joshua Smith: *Repatriation and History*  
David C. Posthumus: *Cultures and Meanings*  
Christina Burke: *Museums and Collaborations*  
Christina Gish Hill: *National Parks and  
Communities*

**10:20-10:40** **Break**

- 10:40-12:00** Gerald A. Oetelaar: *Landscapes and Meanings*  
Richard Meyers: *Tribal Colleges and  
Researchers*  
Sebastian Braun: *Cultures and Meanings*

### **Session 10, Cook West**

General Poster Session: *Western Plains*

**9:00-11:00**

- A. Brendon P. Asher and James M. Warnica, *90  
Years at Blackwater Draw: The Contributions of  
the Clovis Type-Site to American Archaeology*
- B. Paul Burnett, *Comparing Probability Models  
from the Great Plains to the Rocky Mountains*
- C. Jack De Morgan: Ashley Neff: Mullin Scotia:  
Jessica Wriedt, Sashuan Armbrister, Kody

- Rolle, Rachael Shimek, Marcel Kornfeld, and Mary Lou Larson: *Continuing Studies at the Hell Gap Site, Wyoming: The 2019 Season*
- D. Naomi Ollie, Spencer R. Pelton, and Cody Newton: *Continuing Investigations at the Sisters Hill Paleoindian Site (48JO314)*
- E. Alix Piven, Gideon Maughn, and Suzann Henrickson: *Preliminary Results of a Geometric Morphometric Analysis on Early Holocene Projectile Points from Owl Cave, Wasden Site, Idaho*
- F. Cody Sharphead: *Mapping the Points: Investigating the Besant Phase in Alberta with GIS Technology*
- G. Cody Sharphead: *The Archaeology of My Bones: Investigating the Excavation and Repatriation of the Sharphead Site Burials*
- H. María Nieves Zedeño, Francois Lanoe, Danielle Soza, and Lucas Reis Bond: *That's the Spot! Long-Term Place Persistence in the Greater Northwest Plains*

**Student Workshop Luncheon, Courtyard Marriott Patio  
12:00-1:00**

*Transitioning from Student to Professional*

Conversations with Brandi Bethke, Nicky Belle, and Brendon Asher

**FRIDAY AFTERNOON, OCTOBER 18, 2019**

**Session 11, Hansen Room**

Symposium: *Student Paper Competition*

Laura Scheiber, Organizer and Chair

Committee in Attendance: Bob Hoard, Kacy Hollenback,

Marcel Kornfeld; Committee Readers: Ryan Breslawski, Scott

Brosowske, Edward Knell

- 1:20-1:40** Carlton Gover: *Dating Apps in Archaeology: Matching the Archaeological Record with Indigenous Oral Traditions through Glottochronology, Summed Probability Distributions, and Bayesian Statistical Analysis*
- 1:40-2:00** Evelyn Pickering: *Creation and Creative Recreation: Blackfeet Resilience Capacity on the Northern Plains*
- 2:00-2:20** Marie Taylor: *Playa Morphology and Hunter-Gatherer Site Selection on the Great Plains*
- 2:20-2:40** Raymond V. Sumner: *The Days After Colorado's Darkest Day: Initial Work at the Overland Trail Julesburg Station in Northeastern Colorado*

### **Session 12, Cook West**

Symposium: *Building Visual Connections with the Past: Using Virtual Reality and 3D Models to Investigate, Preserve, and Promote Cultural Heritage*

Elizabeth M. Lynch and Clare Bowen-O'Connor, Organizers

**1:20-3:00**

- A. Clare Bowen-O'Connor, Kody Rolle, Sashuan Armbrister, Kyle Summerfield, and Elizabeth Lynch: *Beyond Plains Archaeology: Engaging Students with Digital Data Capture of Bahamian Landscapes*
- B. Clare Bowen-O'Connor, Kyle Summerfield, and Elizabeth Lynch: *Taking a Walk Through Time: Preliminary Results of a Virtual Reality Tour of Hell Gap National Historical Landmark*
- C. AnnMarie Harrison: *Documenting Cultural Heritage: Developing Photogrammetric Models of the Main Tolar Petroglyphs*
- D. Kenneth F. Humphrey: *Applying DStretch® to Photogrammetric Three-dimensional Models of a Painted Rock Art Panel*
- E. Kenneth F. Humphrey: *Statistically Delineating*

*Soil Strata using a Photogrammetric  
Three-dimensional Model of an Archaeological  
Profile Wall: A Work in Progress*

- F. Jacob C. Lewis: *Using Photogrammetry to Determine Superposition of Plains Indian Rock Art*
- G. Elizabeth M. Lynch and Clare Bowen-O'Connor: *An Exploration of Methods: The Potential for Photogrammetric Models of the Tipi Ring Features at Hell Gap National Historic Landmark*
- H. Elizabeth M. Lynch, Andrea Colón, Kyle Summerfield, Mark Wittstock, and Emma Jane Alexander: *Engaging Millennials: Teaching Digital Archaeology to High School Students in the TRIO-Upward Bound Program*
- I. Judy Wolf, Clare Bowen-O'Connor, Kyle Summerfield, and Elizabeth Lynch: *Virtual Reality and the National Register Nomination Process: Examples from the Tolar Petroglyph and Gateway Rock Art Sites*

**Session 13, Zebendon Room**

*Archaeological Sites through Space and Time*

Travis W. Jones, Moderator

- 1:20-1:40** Eric Skov: *Collection Grids: A Technique for Systematic Surface Sampling Within Sites*
- 1:40-2:00** Travis W. Jones, Carla S. Hadden, Jeff Speakman: *Reassessing Site-Level Chronologies at Flaming Arrow and Menoken Villages*
- 2:00-2:20** Donald J. Blakeslee: *It's the Pits: Murphy's Law and Etzanoan Cache Pits*
- 2:20-2:40** Tricia J. Waggoner: *Into the Weeds at Fool Chief's Village (14SH305)*

- 2:40-3:00**      **Break**
- 3:00-3:20**      Mackenzie J. Cory: *Tipi and Thi'ikčeya: The Importance of Toy Tipis in the Understanding of Indigenous Childhood*
- 3:20-3:40**      Leland Bement, Dakota Larrick, Charles Rainville, and Natalie Patton: *Defining Late Paleoindian Activities along Bull Creek: Oklahoma Panhandle*

**Session 14, Hansen Room**

General Session: *Lithic Analysis*

Patrick D. Trader, Moderator

- 3:00-3:20**      Patrick D. Trader: *The Occurrence and Distribution of Knife River Flint in Indiana: A Pilot Study*
- 3:20-3:40**      Christopher M. Johnston and Kevin D. Black: *Lithic Quarries Large and Small: A Comparison from Northern Colorado*
- 3:40-4:00**      Alice M. Tratebas: *Avonlea Bison Jump in the Wyoming Black Hills*
- 4:00-4:20**      Melody Pope: *Chasing Histories in Stone: New Evidence from the Eastern Central Plains*

**Session 15, Cook West**

Symposium: *Student Poster Competition*

Cherie Haury-Artz, Kathleen Holen, and Joe Artz, Judges

**3:00-5:00**

- A. Zachary R. Day: *Sourcing Analysis of Kansas City Hopewell Ceramics: Using Geochemistry to Analyze Interaction*
- B. Carlton Gover: *Recovering from Bad Dates: A Reanalysis of Radiocarbon Data in the Central Plains Tradition*

- C. Ann Marie Harrison: *Documenting Cultural Heritage: Developing Photogrammetric Models of the Main Tolar Petroglyphs*
- D. Kenneth F. Humphrey: *Statistically Delineating Soil Strata using a Photogrammetric Three-dimensional Model of an Archaeological Profile Wall: A Work in Progress*
- E. Jennifer L. Lemminger: *Agate Basin Stratified Paleoindian Site: Faunal Analysis from Area I*
- F. Jacob C. Lewis: *Using Photogrammetry to Determine Superposition of Plains Indian Rock Art*
- G. Sylvia M. Sandstrom: *The Boller Site Platter - A Northern Plains Ceramic Anomaly*
- H. Lauren Schumacher: *Campus Archaeology: Bringing Communities and Students Together*
- I. Danielle R. Soza: *Soil Chemistry and Stone Ring Sites: Preliminary Results from Four Horns Lake, Montana*
- J. Raymond V. Sumner: *The Days After Colorado's Darkest Day: Metal Detecting Survey of the 1865 Julesburg Stage Station*


## **SATURDAY MORNING, OCTOBER 19, 2019**

### **Session 16, Zebendon Room**

Symposium: *Learning from the Past and Looking to the Future: A Discussion of Native Language Revitalization*

Richard Henne-Ochoa, Organizer

**9:20-9:40** Melissa Strickland: *Maḥpíya Lúta Lakḥól'iyapi Waiḥspewičhakhíyapi: Teaching Lakota to Red Cloud Students*

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- 9:40-10:00** Cynthia Ramlo and Joshua Richards: *Learning from the Elders: Using Stories to Develop Nakóda Literacy*
- 10:00-10:20** Logan Sutton: *Language(s) Revitalization in the MHA Nation: Assessment and Prospects*
- 10:20-10:40** **Break**
- 10:40-11:00** Indrek Park: *The Role of Dictionaries in Language Reclamation*
- 11:00-11:20** Richard Henne-Ochoa: *Acquiring Native Languages through Family and Community Endeavors*

# SYMPOSIA ABSTRACTS

## **Living in Greatness: Being a Person in the Indigenous Plains and Great Basin, a Session in Honor of Raymond J. DeMallie**

Session 2 (*Thursday Morning*)

Organized by Thierry Veyrié (Indiana University) and David C. Posthumus (University of South Dakota)

This session presents an anthropological exploration of native narratives of being as positional statements in relation to others, to space, and to creation in the interior of the North American subcontinent. Using historical and contemporary primary ethnographic sources, this panel examines the realities of indigenous peoples of the Plains and beyond, and how native cultures define and place individuals in symbolic networks and systems of meaning that continually constitute and reconstitute them as persons, animated beings-in-the-world. The perspectives used are resolutely phenomenological and ontological, emphasizing processual lived experience and purpose, and the manners in which the natural world, the landscapes of the Plains and Great Basin, and the nonhuman dwellers that inhabit them, support singular expressions of the nature of being.

## **The Native American Graves Protection and Repatriation Act Office at Indiana University (Round Table)**

Session 4 (*Thursday Morning*)

Organized and moderated by Jayne-Leigh Thomas (Indiana University)

The Native American Graves Protection and Repatriation Act provides a process for transferring Native American human remains and cultural items back to their rightful communities. Despite this federal law being nearly 30 years old, there is often still confusion and conflicting opinions on how the law should be interpreted or complied with. This informal roundtable discussion will discuss the requirements and procedures mandated by the law, strategies and case studies for successful consultation, and recent initiatives across the country which are focused on to increasing capacity for repatriation work.


## **Perspectives in Plains Anthropology and Linguistics: Papers in Honor of Douglas R. Parks**

Session 5 (*Thursday Afternoon*)

Organized by Indrek Park (American Indian Studies Research Institute, Indiana University)

Douglas R. Parks, a long-time participant in the annual





meetings of the Plains Anthropological Society, has spent almost half a century engaged in fieldwork. In the Plains region he has set a standard for meticulous documentary study of language that is always informed by a deep understanding of culture. Trained as a linguist, he has nonetheless always been concerned with symbolic understanding of culture. He has often stated that any serious inquiry into the culture and history of Native Americans without linguistic insight would remain incomplete. His main research interests include the languages, history, and culture of the Caddoan and Siouan peoples; the intricacies of their social organization; and language revitalization. The papers in this session are presented in recognition of Douglas Parks and attempt to follow where his work has led and carry it further to new understandings of the Plains Indians cultures and languages.

### **Rediscovering Angel Mounds**

Session 7 (*Thursday Afternoon*)

Organized by Amanda Burt (Glenn A. Black Laboratory of Archaeology, Indiana University)


Research presented in this poster session highlight the ongoing efforts of the Glenn A. Black Laboratory of Archaeology in rehousing collections from Angel Mounds. Excavations at the Angel Mounds site (12Vg1) conducted during the WPA era recovered more than two million artifacts. With a Federal Save America's Treasures grant, these collections are being removed from their original paper bags and boxes and upgraded with archival grade bags, tags, and boxes. A team of graduate and undergraduate students have been instrumental in this process, learning about curation practices while rediscovering the material remains of Angel Mounds residents. Posters represent various aspects of curating this legacy collection and the interests of those that have been on the front lines of this exciting project including research on curation practices and community involvement in archaeology, as well as archaeological investigation into food-ways, tool use, and fauna remains from Angel Mounds.

### **Plains Anthropology in the 21st Century. Human Agency, and Why It Matters (Round Table)**

Session 9 (*Friday Morning*)

Organized and moderated by Sebastian Braun (Iowa State University)

Plains Anthropology, which stood at the forefront of the development of anthropology as a discipline in the United States, has seen a steady decline in academic positions, funding, and



attention. Few universities focus on Plains anthropology. Instead, the field has on one hand been replaced by American Indian Studies and on the other shifted into, mostly private, Cultural Resource Management. This roundtable will take up questions of what plains anthropology means and addresses issues important to the future of the field. We would like to have a conversation on collaboration, the focus on (pre-)historicity, identity politics, cultural appropriation, academic obscurity, tribal and university IRBs, and other issues. Underlying all of these questions is an overarching issue of acknowledging and respecting human agency as the main building block for cultures.

### **Building Visual Connections with the Past: Using Virtual Reality and 3D Models to Investigate, Preserve, and Promote Cultural Heritage**

Session 12 (*Friday Afternoon*)

Organized by Elizabeth M. Lynch (University of Wyoming) and Clare Bowen-O'Connor (University of The Bahamas)

Visualization of cultural heritage is rapidly changing due to advances in user-friendly 3D and virtual reality technologies. Data capture and model development of cultural heritage sites and landscapes is relatively straightforward, yet managing data sets and access to the final products can be problematic. Often the data collected in the field remains sheltered as researchers struggle to bring the results to the public. To encourage timely publication of these data sets, this symposium brings together students and scholars engaged with digital visualization to model a variety of approaches that develop engaging connections with the past. Posters explore multiple methodologies, present results from fieldwork, and consider how digital methods support the preservation of cultural heritage through research, outreach, and education.

### **Learning from the Past and Looking to the Future: A Discussion of Native Language Revitalization**

Session 16 (*Saturday Morning*)

Organized by Richard Henne-Ochoa

This session presents Native language revitalization efforts carried out by the Lakota, Nakota, and Mandan-Hidatsa-Arikara Nations in collaboration with the American Indian Studies Research Institute at Indiana University. It addresses a broad spectrum of revitalization approaches, from developing a K-12 curriculum for a single school, to working with primary research materials, to exploring how language learning can fit in to wider discussions of individual and cultural resiliency, to

using language in a natural home setting. All of the individual presentations build on the same theme: developing deep university-community collaborations that function on the basis of indigenous goals, values, and sovereignty.

## PAPER & POSTER ABSTRACTS

**Alexander, Emma Jane**, see Lynch, Elizabeth M.

**Armbrister, Sashuan**, see Bowen-O'Connor, Clare

**Armbrister, Sashuan**, see De Morgan, Jack

**Asher, Brendon P.** (Eastern New Mexico University), **James M. Warnica** (Eastern New Mexico University)

Session 10: *90 years at Blackwater Draw: The Contributions of the Clovis Type-Site to American Archaeology*

Since initial discovery in 1929, Blackwater Draw Locality 1 has served as a benchmark in shaping our understandings of Paleoindian lifeways on the southern High Plains. The site has experienced a dynamic and complex history of investigations by numerous institutions and countless individuals. This poster reviews the past 90 years of research conducted at the Clovis type-site (LA 3324). As one of the first multi-component Paleoindian sites excavated in the Americas, research at Blackwater Draw contributed greatly to early discussions regarding the first entry of people into the New World. Here, we provide a timeline of significant events, discoveries, and excavations that have occurred at the site, and highlight ongoing research projects, demonstrating that the locality continues to add to our current understanding of Clovis and later Paleoindian adaptations on the southern Plains and beyond.

**Banks, Jennifer**, see Duranski, Reagan

**Bement, Leland** (Oklahoma Archeological Survey), **Dakota Larrick** (Oklahoma Archeological Survey), **Charles Rainville** (University of Oklahoma), **Natalie Patton** (Northern Arizona University)

Session 13: *Defining Late Paleoindian Activities along Bull Creek, Oklahoma Panhandle*

The 2019 investigations at the Late Paleoindian age Bull Creek camp and Ravenscroft bison kill in the Oklahoma

*Bloomington, Indiana*

panhandle were goal oriented. At Bull Creek, excavations were expanded to the south to search for additional post holes aligned with those identified during the 2018 season, and to the north and east to better define an area of dense lithic reduction activity, bison marrow extraction, and, of all things, bone needle manufacture using a vintage obsidian tool. At Ravenscroft, excavations were expanded to the south to delimit a bison skull pile that had earlier been determined to contain at least 10 skulls only to find a second skull pile against the eastern wall of the arroyo. Excavations during 2019 met these goals, providing clarity, puzzlement, and intrigue.

**Bethke, Brandi** (Oklahoma Archeological Survey), **Sarah Trabert** (University of Oklahoma), **Sheila Savage** (Oklahoma Archeological Survey), **William Taylor** (University of Colorado Museum of Natural History)

Session 3: *Morphological Modeling and Biomolecular Analysis of Horse Remains from Three Wichita Sites in Oklahoma*

This poster presents preliminary results of our analysis of horse remains identified from three Ancestral Wichita sites—Deer Creek (34Ka3), Bryson-Paddock (34Ka5), and Longest (34Jf1). Following a detailed morphological examination, the remains were 3D modeled and sampled for radiocarbon dating, stable isotope analysis, and ancient DNA. Data gathered for this project will be used for both local research on understanding the dynamics of horse husbandry among the Wichita, as well as part of a larger project studying the introduction and spread of domestic equids among Native communities across the Plains, Southwest, and Great Basin.

**Betik, Blair**, see Thimmig, Rachel

**Billeck, William T.** (Smithsonian Institution)

Session 3: *The Greenshield site (32OL17): Interpreting the Glass Bead Assemblage*

Located along the Missouri River in North Dakota, the earthlodge village known as Greenshield has an Arikara occupation that has been solidly dated to 1795 – 1798 by historical records, although earlier and later occupations have also been proposed. Two separate archaeological excavations yielded glass beads which are reexamined here to evaluate the site's chronology. In 1929 Alfred Bowers excavated surface depressions outside the village that contained burials and he also examined cache/refuse pits both in and outside the village. In 1968 and in 1973 Raymond Wood and Donald Lehmer excavated

several test units within the village and recovered glass beads that are typical of the late 18th century, whereas the Bowers glass bead assemblage likely has a broader time span. The two assemblages together provide a date range for the historic period occupation of the site.

**Black, Kevin D.**, see Johnston, Christopher M.

**Blakeslee, Donald J.** (Wichita State University)

Session 13: *It's the Pits: Murphy's Law and Etzanoan Cache Pits*


Radiocarbon dates from the site of Etzanoa indicate that the occupation there lasted for a minimum of two and a half centuries, yet no coherent chronological sequence has been forthcoming, in spite of a huge excavation project in the 1990s. Recent excavations have revealed a partial reason in the form of complex stratigraphy within cache pits, including reverse stratigraphy, occasional mixing of deposits of significantly different ages, while deposits from the very bottom and very top of features are nearly equal in age. The same excavations have also revealed the reason for the apparent presence of cache pits of an unusual form.

**Bond, Lucas Reis**, see Zedeño, María Nieves

**Bowen-O'Connor, Clare** (University of The Bahamas), **Kody Rolle** (University of The Bahamas), **Sashuan Armbrister** (University of The Bahamas), **Kyle Summerfield** (University of Wyoming, Shell 3D Visualization Center), **Elizabeth Lynch** (University of Wyoming)

Session 12: *Beyond Plains Archaeology: Engaging Students with Digital Data Capture of Bahamian Landscapes*

The University of The Bahamas (UB) campus like most tertiary level institutions is a blend of concrete structures for teaching, open green space with trees, shrubs and grasses, and training fields. This landscape mixture provides a learning opportunity for all students within the institution. Right plant, right place is a landscaping concept. Plant selection is based on a combination of intended purpose and the existing features identified, which may include soil moisture, slope of the land, shade, ground cover, soil texture and nutrient composition. During the Fall 2018, the University of Wyoming 3D Visualization Center supported the development of a virtual tour which served as a recruitment and research tool for UB staff, students, and faculty as well as for the local communities and the global community at large. We demonstrate the importance



of global, multidisciplinary application of digital technologies to create engaged learning experiences to solve real world problems.

**Bowen-O'Connor, Clare** (University of The Bahamas), **Kyle Summerfield** (University of Wyoming, Shell 3D Visualization Center), **Elizabeth Lynch** (University of Wyoming)

Session 12: *Taking a Walk Through Time: Preliminary Results of a Virtual Reality Tour of Hell Gap National Historical Landmark*

Hell Gap Paleoindian Archaeological Site near Guernsey, Wyoming plays a prominent role in our understanding of North American prehistory. In 2016 it became a National Historic Landmark, thus recognizing its importance not only to North American but to World Prehistory. In order to preserve and promote this valuable cultural heritage site, we developed a virtual reality model that can be used as a research, education, and outreach tool. We used an Insta360 VR Camera to capture landscape images, key localities, and archaeological excavations. The images were then merged, using Unity, into a virtual reality experience. We tested the user experience by revisiting the excavations and interviewing current field school personnel and the excavation field director. Our results indicate the user experience is “beyond cool” but also has the potential to support scientific research and problem-solving.

**Bowen-O'Connor, Clare**, see Lynch, Elizabeth M.

**Bowen-O'Connor, Clare**, see Wolf, Judy

**Braun, Sebastian** (Iowa State University)

Session 2: *Indigenous Personhood and the Ontological Turn. Does it Matter Where I (Don't) Turn?*

This paper takes a look at the “ontological turn” in anthropology and its application to the people with whom we work. Phenomenological questions - questions on how we perceive the world - and ontological questions - questions on being - have always been important in plains anthropology, perhaps because plains Native cultures themselves focus around these questions. This paper takes up some of the methodological and analytical issues this poses for archaeology and cultural anthropology in the 21st century and asks the questions, What does it mean to be a person and to live in greatness, and how can we find out what it means?

**Braun, Sebastian** (Iowa State University)

Session 5: *Setting the Standard: Douglas Parks and Plains Anthropology*

As a linguistic anthropologist, Douglas Parks' overall contributions to plains anthropology have often been overlooked. However, not only has his work on Caddoan and Siouan languages been extraordinary, he has literally set the standard in many ways for cultural and linguistic work on Native peoples. This paper will take a personal look at this ongoing legacy.

**Braun, Sebastian** (Iowa State University)

Session 9: *Cultures and Meanings*

Round Table: Plains Anthropology in the 21st Century. Human Agency, and Why It Matters.

**Buehler, Kent J.** (Crime Scene Archaeology Recovery Group, LLC)

Session 6: *You Dirty Rat!: Eastern Wood Rats as a Significant Taphonomic Factor in the Forensic Recovery of Human Skeletal Remains*

Years of experience in the forensic recovery and documentation of human skeletal remains has shown that woodrats (*Neotoma floridana*), commonly known as pack rats, can play a significant role in the damaging, dispersal, and even the disappearance of human skeletal remains from forensic scenes. Heretofore, the forensic literature has focused on bone gnawing as the primary impact rodents have on human remains while mentioning only in passing their proclivity for removing "small bones" from a scene. Actually, they are capable of moving even large bones into their nests to remain unobserved by investigators unfamiliar with pack rat behavior. In areas with high rat populations, more bones may have been "squirreled away" than remain on the surface. Moreover, pack rat impact is fluid and dynamic with bones being moved into, or out of, nests on a sporadic basis. Oklahoma forensic cases are used to illustrate this underappreciated taphonomic factor.

**Burke, Christina** (Philbrook Museum of Art)

Session 5: *Lakota Literacies: The World According to Bad Heart Bull*

Amos Bad Heart Bull (Lakota, c. 1868-1913) created a remarkable record of Native life drawing hundreds of pictures with Lakota inscriptions that captured both historical events and daily life in the late 19th and early 20th centuries. Taken together, these images and texts provide an insider perspective on Lakota

history during a critical period of change and adaptation.

**Burke, Christina** (Philbrook Museum of Art)

Session 9: *Museums and Collaborations*

Round Table: Plains Anthropology in the 21st Century.  
Human Agency, and Why It Matters.

**Burnett, Paul** (SWCA Environmental Consultants)

Session 10: *Comparing Probability Models from the Great Plains to the Rocky Mountains*

Geographic Information Systems and statistical software were used to develop multiple discovery-based prehistoric archaeological probability models across millions of acres in the United States using similar techniques. “Discovery-based” refers to the modeling that has the goal of identify areas where archaeological material is likely to be exposed on the modern ground surface, rather than modeling patterns of prehistoric land-use, which are two different things. While the topographically restricted Rocky Mountains were presumed to produce more efficient models than the comparably subtle terrains of the Great Plains, results indicate that this is not necessarily the case. By comparing multiple models developed in Kansas, Colorado, and Wyoming, similarities and differences between site probabilities in the different landscapes are identified. Certain Great Plains environments were found to be highly amenable to discovery-based probability modeling, with model accuracies rivaling those of the Rocky Mountains.

**Burt, Amanda** (Glenn A. Black Laboratory of Archaeology,  
Indiana University)

Session 7: *Ripe for Research: Angel Mounds Fauna*

This poster highlights diverse fauna present in collections from the Angel Mounds site (12Vg1) and their potential use in research. The residents of this Mississippian town were supplementing their agricultural diets with various local animals and coming in contact with a diverse set of mammals, birds, reptiles, and fish. With excellent preservation, faunal remains from Angel Mounds may be analyzed to answer a suite of diverse questions about animal use in the past. Using examples from the collection, several research trajectories are explored here to emphasize the vast range of inquiry possibilities.

**Claassen, Cheryl** (Appalachian State University)

Session 6: *Tracking a Hunt God Rite in Texas, Kansas and Illinois*



The author has made the case for a hunt god rite during the Early and Middle Archaic in Tennessee, Kentucky, Illinois, Wisconsin. In this paper I propose this rite also occurred in Texas in Early Archaic times, and in the Kansas City area and Utica Mounds in the Woodland period. The story of this hunt god is now well documented in Pecos River rock art panels slightly later. Visualization of the rite involved is enabled by the burial of four or five people. Utica and Kansas City sites show the addition of mounds to the rite, continued in Mississippian mound sites of Illinois.

**Clark, Andrew J.** (State Historical Society of North Dakota), **Kenneth L. Kvamme** (University of Arkansas), **Timothy A. Reed** (State Historical Society of North Dakota)

Session 8: *Recent Remote Sensing Investigations at Two Middle Missouri Village Sites in North Dakota*

The State Historical Society of North Dakota and the University of Arkansas conducted remote sensing investigations at two Plains Village sites north of Bismarck. The Heart River Complex Harmon Village (32MO42) dates to late-16th to early-17th centuries. It is small and enclosed by a bastioned fortification ditch. Ft. Mandan Overlook (32ML400) is a 14th century Scattered Village Phase site with a late-18th to mid-19th century historic component. Though also enclosed by a fortification, no earthlodge depressions or bastions are visible on the surface. Historic aerial photographs, an aerial drone survey with DSM extraction, and ground-based magnetic gradiometry permit the identification of significant new features within these sites. At Harmon Village, numerous houses, storage pits, hearths, and a better definition of the fortification system are revealed. Results at Fort Mandan Overlook show a village mostly empty of features although at least two houses are indicated.

**Cory, Mackenzie J.** (Indiana University)

Session 13: *Tipi and Thi'ikčeya: The Importance of Toy Tipis in the Understanding of Indigenous Childhood*

Despite the importance of tipis to our understanding of the archaeological and historic records of the Northwest Plains, the smaller version used by children is often overlooked or ignored by researchers in both fields. In the course of my research, I have identified three different varieties of play tipis, with variation in size, construction, and manner of play. The consensus among researchers who have studied the largest variety of play tipi is that though they are smaller than full-sized tipis, they are anchored identically, and would leave a discernable

feature in the archaeological record, a small stone circle. I propose that the study of play tipis should not be limited to only the largest variety but to all three types, from both colonial and precolonial contexts. This will help us to understand indigenous childhood in a more holistic manner and allow us to engage in broader discussions being held worldwide.

**Colón, Andrea**, see Lynch, Elizabeth M.

**Dalan, Rinita A.**, see Mitchell, Mark D.

**Day, Zachary R.** (The University of Kansas)

Session 15: *Sourcing Analysis of Kansas City Hopewell Ceramics: Using Geochemistry to Analyze Interaction*

The Kansas City Hopewell (KCH) is the western-most center of the Hopewell culture. It has been suggested that KCH originated from migration with Illinois-valley based Hopewell populations, based in part on similar ceramic designs. Recent research into KCH timelines has redefined the chronologies of KCH sites and suggests these similarities in ceramic design occurred contemporaneously with eastern neighboring Hopewell populations, such as the Havana Hopewell. In addition, some KCH ceramic designs share similarities with southern Hopewell groups, such as Marksville. In order to gain a better understanding of interaction within KCH; both on a local and regional scale; this research is focused on sourcing analyses of ceramics from KCH sites throughout eastern Kansas and central Missouri using X-Ray Fluorescence (XRF) and X-Ray Diffraction (XRD) methodologies. The use of these methodologies in tandem with one another may be able to provide crucial data toward a better understanding of interaction.

**De Morgan, Jack** (University of Wyoming), **Ashley Neff** (University of Wyoming), **Mullin Scotia** (University of Wyoming), **Jessica Wriedt** (Northern Colorado University), **Sashuan Armbrister** (University of The Bahamas), **Kody Rolle** (University of The Bahamas), **Rachael Shimek** (Wyoming State Historical Preservation Office), **Marcel Kornfeld** (University of Wyoming)

Session 10: *Continuing Studies at the Hell Gap Site, Wyoming: The 2019 Season*

After nearly 20 years of excavation, the field studies at the Pleistocene/Holocene transition Hell Gap Paleoindian site have hit a significant milestone in research. All units initiated in 1999 surrounding the witness block that was left following the

1960s investigations, have reached sub-cultural late Pleistocene strata. These pre-Clovis strata, greater than approximately 13,000 radiocarbon years ago have not yielded cultural material at Hell Gap in current or previous investigations. Because this season we focused on the subcultural sediments, the artifact recovery was minimal, but information yield was enormous. An adjacent unexcavated block to the east, where excavation begun in 2014, yielded significant additional information on the Agate Basin component of the site. Preliminary results of the work are presented.

**De Vore, Steven L.** (National Park Service)

Session 3: *Compliance Geophysical Investigations of Proposed Maintenance Facility, Knife River Indian Villages National Historic Site, North Dakota*

Geophysical investigations were conducted at Knife River Indian Villages National Historic Site in advance of the proposed construction of a new maintenance facility. The compliance activities were conducted in order to evaluate the potential for buried archeological resources within the proposed project area. Magnetic, conductivity, and magnetic susceptibility surveys were conducted during July 2019. The project area covered 26,800 m<sup>2</sup> or 6.00 acres. The magnetic survey was conducted with a dual fluxgate gradiometer. An electromagnetic induction meter was used to collect conductivity and magnetic susceptibility data at 0.5 and 1.0 meter coil separations. A magnetic susceptibility meter with a 0.5 meter coil was also used to collect reconnaissance level magnetic susceptibility data. The geophysical data indicated the presence of archeological features associated with Sites 32ME411 and 32ME412 in the project vicinity, as well as old road bed and park related utility lines, fences, and vegetation plot markers.

**Dozier, Crystal A.** (Wichita State University)

Session 6: *Mind-Altering Substances and Feasting in the Pre-Hispanic Southern Plains: Residue Analysis of Leon Plain Ware*

Archaeological remains from the Toyah Phase (1300-1650 CE), prior to Spanish colonization of the American Southern Plains in central and south Texas, suggest that foraging indigenous peoples maintained a feasting economy. Throughout human history, mind-altering beverages, such as caffeinated or alcoholic drinks, are a common attraction of feasts worldwide. Fifty-four sherds from six archaeological sites were chemically analyzed using ultra high performance liquid chromatography tandem mass spectrometry (UHPLC-MS/MS). Six samples

contained biomarkers associated with caffeinated beverage(s)—either black drink, Yaupon Holly (*Ilex vomitoria*) ceremonial tea, or chocolate, derived from cacao (*Theobroma cacao* or *bicolor*). Six samples contained biomarkers associated with grape (*Vitis* spp.) wine production. Pollen and starch were also recovered from the sherds, but not at densities high enough to recommend potential use of the vessels. The implications of mind-altering substance use at Toyah feasting locales, absent from later Spanish colonial reports, is discussed.

**Duranski, Reagan** (History Nebraska), **Jennifer Banks** (History Nebraska), **Nolan L. Johnson** (History Nebraska)  
Session 1: *Dig into Archeology: Public Excavations at 25MO201*


As part of Archeology Month 2019 History Nebraska (HN) hosted a two day volunteer excavation. HN has hosted volunteer excavations for the past four years as a way to connect people to the practice and excitement of field archeology. This year's excavation took place at 25MO201 a Pre-Contact Native American site on the north side of Courthouse Rock in the Nebraska Sandhills. Participants were given a brief overview of the site and then set to work. Other events included artifact identification, presentations, and a family fun day held at the nearby Ethel and Christopher J. Abbott Visitor Center. The goal of this and other HN volunteer excavations is twofold. First is to engage the interested public and foster a greater appreciation for Nebraska Archeology. Second is to use the opportunity to add to our knowledge of sites that would otherwise go un-investigated.

**Erlick, Mary Hagen**, see Thimmig, Rachel

**Friberg, Christina**, see Massey, David

**Gill, Preet** (Indiana University)  
Session 7: *The Mystery of the Tooth Scale*

During the 1930s, excavations led by Glenn A. Black began at the Angel Mounds site, located in southern Indiana. Now, decades later, these artifacts are being rehoused at the Glenn A. Black Laboratory of Archaeology. During this rehousing process, it was found that several bags of faunal remains were originally mislabelled as “tooth scales”. Such mislabelling caused confusion, as teeth do not have scales. Upon further investigation, they were discovered to be the scales of gar, a fish found in shallow bodies of water, including parts of the Ohio River. These hard, enamel-like scales cover the bodies of gar, creating a protective exterior. This poster will explore the



uses of these armor-like scales by the Mississippian people at the site of Angel Mounds.

**Gooding, Erik D.** (Minnesota State University Moorhead)  
Session 5: *Ethnonym Semiotics: Towards an Understanding of Tribal Names of the Great Plains and Prairies*

Drawing upon the distinguished work of Douglas R. Parks on the tribal synonymies for the Plains volumes of the Smithsonian's Handbook of North American Indians, this presentation strives to understand intratribal, intertribal, and external relationships of the native peoples of the Prairies and Plains through the explication of tribal ethnonyms (both endonyms and exonyms). It proceeds from a semiotic approach, from the notion that ethnonyms are communicative events with varying levels of indexicality, that can further be understood by drawing upon ideas from Scale Theory and Actor-network Theory. Tribal ethnonyms will be analyzed and categorized in terms of their sources, essential qualities, and alterations, then framed by theoretical understandings in order to conceptualize ever-changing social landscapes. Examples will be drawn primarily from Caddoan, Algonquian, and Siouan languages.

**Goodrich, Brian** (History Nebraska)  
Session 8: *The Search for Fort Lisa: A Site Location Model*

Fort Lisa was an important Euro-American fur trade site in the vicinity of what would become Omaha, Nebraska. It was a prominent location for trade with local Native American tribes as well as a waypoint for those travelling up the Missouri River from St. Louis in the early 19th Century. After the death of Manuel Lisa and the dissolution of the Missouri Fur Company, Fort Lisa was abandoned and its location was subsequently forgotten as what remained of the establishment disappeared. Due to the lack of precise data about the location of Fort Lisa, it is difficult to know where to begin searching for the site. Fortunately though, several contemporary accounts discuss the fort's proximity to nearby extant landmarks. I employed the data from those historical accounts in a Geographic Information System (GIS) to develop a site specific suitability model in order to identify likely locations of the fort.

**Gover, Carlton** (University of Colorado / Pawnee Nation of Oklahoma)  
Session 11: *Dating Apps in Archaeology: Matching the Archaeological Record with Indigenous Oral Traditions through Glottochronology, Summed Probability Distributions, and*

### *Bayesian Statistical Analysis*

Affiliating prehistoric archaeological cultures with contemporary Indigenous Nations in American archaeology is often met with skepticism. To overcome it, I use oral traditions of the migration of the Northern Caddoan-speaking tribes to construct a relative chronology for their movements into and within the Central Plains, and to identify population diffusion between the Chaticks-si-Chaticks (Pawnee) and Sahnish (Arikara). Using previous glottochronological analysis of linguistic separation between the Chaticks-si-Chaticks and Sahnish, Summed Probability Distributions of radiocarbon dates, and Bayesian Statistical of radiocarbon data I test three hypotheses: the Chaticks-si-Chaticks and Sahnish are descendent communities of the Central Plains tradition and Initial Coalescent Variant populations, oral tradition accounts of Northern Caddoan migration into the Central Plains from southeast of Nebraska are factual, ethnogenesis of the Chaticks-si-Chaticks and Sahnish begins, ostensibly, by the sixteenth century. This study proves Indigenous oral traditions are an effective line of evidence for interpreting and understanding the archaeological record.

**Gover, Carlton** (University of Colorado / Pawnee Nation of Oklahoma)

#### *Session 15: Recovering from Bad Dates: A Reanalysis of Radiocarbon Data in the Central Plains Tradition*

Identifying cultural chronologies in archaeology has been a principle aspect of investigation in the field since its professional inception in the early twentieth century. As new techniques in dating have been developed, archaeological chronologies are refined and reevaluated for their accuracy. However, managing and interpreting large data sets of radiocarbon dates has become increasingly feasible within the last three decades with the advent of statistical computational packages that are designed to process and illustrate radiocarbon data. Even with these advanced computational methods for utilizing radiocarbon data, concerns regarding the accuracy of radiocarbon samples and their effect on constructing cultural chronologies have arisen. As such, radiocarbon data used to construct cultural chronologies needs to be re-investigated. The Central Plains tradition, which has a large radiocarbon data set, provides a good case study for an analysis of radiocarbon samples and the effects of sampling strategies on constructing cultural chronologies.

**Green, Debra K.** (Oklahoma Archeological Survey)  
Session 1: *The Role of Geoarchaeology in Public Outreach and Education in Oklahoma*


The practice of geoarchaeology has been an important component in academic research and cultural resources management for decades. However, little attention has been given to using geoarchaeology as part of public outreach and education programs as they pertain to cultural resource preservation issues. This paper discusses the series of geoarchaeology workshops held over three, two-day weekends in the spring of 2018 as part of the Oklahoma Public Archaeology Network (OKPAN) Archaeological Skills Workshop Series. Participants consisted of archaeological consultants, federal agency archaeologists, university students (undergraduates and graduates), K-12 students, and the general public. Participants were taught the basic principles of geoarchaeology and its role in archaeological investigations into ancient landscapes and environments. Participants came away with greater awareness of the various geological forces that affect archaeological preservation issues in Oklahoma.

**Grimm, Kelsey T.** (Indiana University)  
Session 7: *“Let’s Go On a Journey...” Telling Angel Mounds’ Stories Using Social Media*

The Glenn A. Black Laboratory of Archaeology utilized social media, archaeological records, journals, correspondence, official reports, and many pictures to tell the stories of the 1939 Angel Mounds excavations. Using the hashtag #AngelArchaeo80, people and moments from 80 years ago came to life through screens, while also bringing attention to the major Angel Mounds rehousing project presently occurring. Twitter, Facebook, and Instagram’s unique features were leveraged to tell these stories. Our goals were to engage the community, educate the public on the types of collections housed in our facility, show that different types of research are possible using archaeological collections, and connect with others. Social media can technologically join people together, but stories connect people to one another.

**Guthrie, Maclaren** (Indiana University)  
Session 7: *Angel Mounds: Taking a Bite out of Identifying Animal Teeth*

In September 2018, Indiana University’s Glenn A. Black Laboratory of Archaeology (GBL) was awarded a Save America’s Treasures grant through the National Park Service to facilitate the rehousing and rehabilitation of the Angel Mounds



collections housed at the GBL. This project plans to rehouse 2.8 million artifacts, an estimated 2,000 boxes, within a duration of 3 years. This project allows the GBL to provide long-term and safe preservation of these artifacts and associated documentation from Angel Mounds while also allowing for easier access for research and education. Throughout the duration of this project, teeth from various faunal species have been rediscovered and they allow us to learn more about the animals that the people of Angel Mounds came into contact with.

**Hadden, Carla S.**, see Jones, Travis W.

**Hadley, Alison M.** (Texas A&M International University)

Session 6: *Pawnee Mud Pony and Horse Figurines*

Excavations conducted at the late eighteenth century Pawnee site 14RP1, in north-central Kansas uncovered multiple clay, quadruped figurines. These artifacts closely resemble horses and similar artifacts have been found at historic village sites across the Plains. The many ethnographic accounts of Pawnee life did not contain information about the context and use of clay figurines. However, there are several Pawnee folktales that reveal the possible uses and roles of horse figurines in Pawnee life. One story that was enlightening was “The Boy and the Mud Pony” recorded by Dorsey (1904). Pawnee folktales and myths have the potential to reveal aspects of everyday life that were not recorded by ethnographers. This paper explores further avenues of research using folktales and mythology to understand the archaeological record of the Pawnee.

**Haley, Cambria** (Wichita State University), **Jeremiah Perkins** (Wichita State University), **David Klamm** (Wichita State University)

Session 8: *The Cooperative Future of Archaeology and 3D Terrestrial Scanning: Preliminary Results from Etzanoa (14CO3)*

Over the past two summers, at the Wichita State University Field School archaeological excavation of Etzanoa (14CO3), we used a Leica P40 scanner to create 3-D models of the excavation units. The accuracy of the measurements is + 1 mm. It is possible to take measurements of features and object from the model. The scanner has some limitations for recording deep excavations, and a novel method for overcoming them is discussed.

**Harrison, Ann Marie** (University of Wyoming)

Session 12 and 15: *Documenting Cultural Heritage: Developing*





*Photogrammetric Models of the Main Tolar Petroglyphs*

An ongoing concern during and after the National Register of Historic Places (NRHP) nomination process is managing site integrity, particularly erosional processes that might affect the design and materials. The four most important elements of site integrity for archaeological sites being nominated under Criterion D include location, design, materials, and association. The Tolar Petroglyph site (an NRHP), which displays a high degree of integrity for these aspects, is managed by the Bureau of Land Management (BLM) and has a site steward. We proposed that photogrammetric models would aid the BLM in the monitoring of the petroglyphs. We captured stereo-overlapping photos using two different Canon DSLR cameras on three occasions. The resulting models were brought to the BLM for consultation. This poster presents the process of creating 3D models, and the results of consultation. We propose methods for future research into the evaluation of petroglyph integrity using photogrammetry.

**Haury-Artz, Cherie** (University of Iowa, Office of the State Archaeologist)


Session 3: *A Locally Made Freshwater Mussel Bead from the Dixon Site, 13WD8*

A large shell bead was recovered from a trash-filled pit feature at the Dixon site (13WD8), a large Oneota village in northwest Iowa. The lustrous thick layers resulting from aragonite (nacre) indicate that this specimen was made from a freshwater mussel shell. Marine shells were highly prized trade items that were utilized to create a variety of ornaments during the Late Prehistoric period. Ornaments made from locally obtained freshwater mussels are much more rare. Shell fragments from elsewhere at the Dixon site indicate that during prehistoric times some varieties of freshwater mussels available in the region could reach sizes sufficient for producing a bead of this size. This suggests that the bead could have been manufactured locally. In cross-section, circular marks of a drill are visible on the interior surface near both openings. The hourglass shape of the interior channel indicates that it was drilled from both ends.

**Haury-Artz, Cherie** (University of Iowa, Office of the State Archaeologist)

Session 6: *Feathers, Beads, and Animal Symbolism: Fauna from the Dixon Site (13WD8)*

A large sample of faunal specimens was recovered from the 2016-17 excavations at the Dixon site (13WD8), a large



Oneota village in northwestern Iowa. Analysis of this assemblage provides evidence for discussion of hunting practices and the utilization of animal resources. This paper, however, focuses beyond basic survival strategies for obtaining food and utilitarian objects. Evidence for ornaments such as bone and shell beads, delicate bone pins, and carved items which might be gaming pieces, speak to the aesthetic side of life. A number of the less common species such as cougar and bobcat, which are not commonly recognized as edible by Oneota descendants, and the narrow selection of bird elements focused on wing and tail specimens may have had culturally symbolic functions. These specimens may have been hunted for personal or social use in regalia or ceremonies or they may have been part of an Oneota trading system.

**Hawley, Kirsten M.** (Indiana University), **Laura L. Scheiber** (Indiana University)


Session 8: *Spatial Data Analysis and Visualization Techniques of Shoshone Occupations in the Washakie Wilderness of Northwestern Wyoming*

Interpreting past uses of mountainous regions of the American West is hampered by difficult access, excessive ground vegetation, and wilderness restrictions. Remote campsites often contain tens of thousands of artifacts that represent a greater commitment to mountain resources and places than previously considered. In this paper, we focus on the seventeenth-century Caldwell Creek site (48FR7091) in the Shoshone National Forest as a case study. At more than 30,000 square meters in area, Caldwell is a massive campsite with over 70,000 recorded artifacts including diagnostic lithics, sourced obsidian, carved pipestone, and the largest quantity of ceramics found in western Wyoming. We discuss challenges in data recording, evolving methodologies, and ways to combine disparate data sets, photographs, and field maps. In order to better visualize the campsite, we present the results of three-dimensional models and photogrammetry. Using emerging technologies increases our ability to participate in wider discussions of cultural heritage and preservation.

**Henne-Ochoa, Richard** (Indiana University)

Session 16: *Acquiring Native Languages through Family and Community Endeavors*

This presentation describes a grounded approach to Indigenous language revitalization that honors Indigenous peoples' desire to restore Indigenous language use in their daily



lives. Drawing from studies of informal learning processes in Indigenous-heritage communities in North and Central America, the approach here promotes Indigenous language communicative competence through participation in everyday family and community endeavors. It capitalizes on the prevalent practice in Indigenous communities of “learning by observing and pitching in” (LOPI), which serves as social and cultural scaffolding onto which communication in Indigenous languages can be intentionally reattached. In this way, the approach suggests how Indigenous language revitalization initiatives that rely almost completely on formal, daycare- and school-based programs might be counterbalanced by and realigned with informal, family and community language acquisition through Indigenous language immersion. It also offers a way of sustaining and revitalizing Indigenous cultures, especially traditional communicative practices.

**Henrickson, Suzann**, see Piven, Alix

**Herrmann, Edward**, see Massey, David

**Hill, Christina Gish** (Iowa State University)

Session 9: *National Parks and Communities*

Round Table: Plains Anthropology in the 21st Century. Human Agency, and Why It Matters. A discussion of the processes involved with engaging Native communities in collaborative research spearheaded through the National Park Service, with particular focus on my own experience conducting ethnography with Cheyenne and Arapaho people about Mount Rushmore.

**Hittson, Anne** (Glenn A. Black Laboratory of Archaeology, Indiana University)

Session 7: *The Use of the Petrous Bone to Further Understand Faunal Life at Angel Mounds*

Wedge-shaped in the temporal bone on either side of the skull is one of the densest bones in the body, the petrous temporal bone. It is the density of this structure, housing the middle and inner ear, that prolongs its decay and makes it unique to archaeological researchers in DNA studies. While macroscopic analysis can determine species of animal, the DNA analysis of well-preserved petrous bones can inform a range of demographics including sex, diseases, and placing it on a timeline in its evolution alongside other species.

**Hollenback, Kacy L.**, see Thimmig, Rachel

**Humphrey, Kenneth F.** (University of Wyoming)

Session 12: *Applying DStretch® to Photogrammetric Three-Dimensional Models of a Painted Rock Art Panel*

Rock art researchers understand only small portions of panels are discernible to the naked eye as images are obscured by natural or cultural processes over time. DStretch® is a digital image color enhancement application rock art researchers commonly use to discover latent rock art images which would otherwise remain hidden. Photogrammetry is a digital modeling process allowing researchers to manipulate the three-dimensional attributes of rock art to detect latent images. Photogrammetry uses the same digital data to construct models as DStretch uses to enhance the color of rock art images. This research applied DStretch at two different stages of the photogrammetry modeling process to produce two variations of enhanced 3-dimensional models to determine if both avenues of image enhancement can be combined. This method was tested on images of the Sommers Site rock art panel in Platte County, Wyoming.

**Humphrey, Kenneth F.** (University of Wyoming)

Session 12 and 15: *Statistically Delineating Soil Strata using a Photogrammetric Three-Dimensional Model of an Archaeological Profile Wall: A Work in Progress*

Archaeologists are often tasked with documenting site geomorphology to recognize the sequence of natural and cultural soil deposition. Field assessments of soil characteristics are often limited to subjective observations. A geomorphologist may also rely on soil characteristics such as grain size or clay content measured in a lab, which is not easily quantified by an archaeological field crew. As a result, an inexperienced observer not familiar with local soils may lose valuable resolution while recording deposition in a profile wall. This experiment is to determine if a photogrammetric model of a soil profile can objectively capture visual soil characteristics like color or inclusions and differentiate soil characteristics typically identified in a lab. This research is working towards statistically analyzing the individual parts of a three-dimensional mesh. The large witness profile wall at Hell Gap Paleoindian National Historic Landmark was modeled to start the experiment.

**Johnson, Nolan L.** (History Nebraska), **Adam Wiewel** (Midwest Archeological Center)

Session 3: *A Geophysical Survey of Sharp Homestead, Stanton County, Nebraska*

Nebraska Department of Transportation is currently undertaking steps to improve and expand a major traffic corridor through rural northeast Nebraska. As part of this process, History Nebraska Highway Archeology staff are revisiting previously recorded sites and searching for new sites along the route that may be impacted by construction. Among these archeological sites is Sharp Homestead (25ST16), the earliest Euroamerican farm in Stanton County. Based on homestead records, the site dates to the mid-1860s and included several farm-related buildings besides the house. Aerial photographs from the mid-20th century also show the locations of many structures, although the relationship between these and the original homestead buildings is unclear. To locate possible 19th-century homestead features and facilitate mitigation work by History Nebraska, the National Park Service, Midwest Archeological Center conducted a multi-instrument geophysical survey at the site in June. The geophysical data reveal several potential 19th-century homestead structures.

**Johnson, Nolan L.**, see Ziska, Courtney L.C.

**Johnson, Nolan L.**, see Duranski, Reagan

**Johnston, Christopher M.** (Paleocultural Research Group),  
**Kevin D. Black** (History Colorado-Retired)

Session 14: *Lithic Quarries Large and Small: A Comparison from Northern Colorado*

Two PCRG research projects conducted in 2019 focused on prehistoric quarrying at lithic sources in the Southern Rockies with quite distinctive site characteristics. The smaller of these two sources is the Pinkham site in Jackson County, Colorado. Here, several small surface depressions spatially associated with abundant chert nodules, cores and flaking debris suggested focused quarrying of shallowly buried toolstone. Another much larger and better-known quartzite quarry, Windy Ridge, is 75 km to the southwest in Grand County. Quarrying activity at Windy Ridge covers an estimated area of 1.3 ha, with a much larger workshop area about 1 km north of the quarry. Well-documented in a 1993 field school project, the 2019 field effort concentrated on defining the sprawling northern extent of the site. This paper will provide a progress report on these field investigations, comparing site quarrying features and artifact

assemblages between two toolstone sources with contrasting surface expressions.

**Jones, Travis W.** (University of Georgia), **Carla S. Hadden** (Center for Applied Isotope Studies), **Jeff Speakman** (Center for Applied Isotope Studies)

Session 13: *Reassessing Site-Level Chronologies at Flaming Arrow and Menoken Villages*

This study presents an analysis of new and extant radiocarbon dates from two Late Woodland villages located in the Middle Missouri region of the Northern Plains. Incorporating elements resembling both Late Woodland and Middle Missouri Tradition material culture, both Flaming Arrow (32ML4) and Menoken (32BL2) may represent early transitions to village life in the northern Middle Missouri. Although previous studies have produced a seemingly homogenous suite of radiocarbon dates at each village, the work presented here suggests occupational histories and formation processes at both sites may have been more complex than previously envisioned. Multiple techniques for evaluating and analyzing radiometric assays are discussed and preliminary site-level chronologies are evaluated. This study highlights the importance of sample context and sample number as well as the limitations and advantages of different analytical approaches when creating site-level chronologies.

**Klamm, David**, see Haley, Cambria

**Kornfeld, Marcel**, see De Morgan, Jack

**Krupa, Krystiana L.** (Indiana University)

Session 7: *Identifying Human Remains in Commingled Faunal Assemblages: Strategies for Working with Archaeological Collections*

Rehousing faunal material from Angel Mounds led Indiana University's NAGPRA team to determine that the large quantity of faunal bone from the site needed to be checked for accidental commingling of human remains with this material. Due to the nature of collection history at many archaeological sites, it is reasonable to expect that collections sometimes contain mixed materials or are incorrectly identified. This poster presents strategies identified during the Angel project intended to help museum researchers and staff properly isolate human remains from commingled osteological material. This includes the types of human bone often mistaken for faunal bone, and vice versa, as well as the importance of utilizing reference

materials and building collaboration between osteologists and zooarchaeologists. Correctly separating human and faunal bone is necessary for NAGPRA work, but also to avoid accidental inclusion of human bone in faunal research projects and to ensure correct cataloging of archaeological assemblages.

**Kvamme, Kenneth L.** (University of Arkansas)

Session 8: *GPR Investigations in Northern Plains Village Sites*

Nearly two decades of GPR investigations have been carried out intermittently in large village sites of the Northern Plains of the Dakotas. The sites in question date between approximately AD 1250-1861. Most projects have focused on wide-area magnetic gradiometry because of generally excellent responses, but electrical resistivity, electromagnetic induction, and GPR surveys have also proved to be useful. The last have generally been targeted to smaller specific areas of interest. Worthwhile GPR results often depend on levels of ground moisture and a low amount of rodent damage. Nevertheless, GPR has revealed house forms, their interior details, the presence of multiple floors, depths, and stratigraphy. The identification of fortification ditches and storage pits is possible, but remains problematic. Many of the presented results utilize custom-written software in the TerrSet GIS and in the R language.

**Kvamme, Kenneth L.**, see Clark, Andrew J.

**Kvamme, Kenneth L.**, see Mitchell, Mark D.

**Lamie, Katherine**, see Williams, David T.

**Lanoe, Francois**, see Zedeño, María Nieves

**Larrick, Dakota**, see Bement, Leland

**Larson, Mary Lou**, see De Morgan, Jack

**Latham, Mark A.** (Burns & McDonnell Engineering Company, Inc.)

Session 14: *Source Determination of Obsidian Recovered from the Jumper Creek Site (34SM87), South Central Oklahoma*

Twenty-two obsidian flakes were recovered during the 2014 and 2016 archaeological field investigations for the Oklahoma Department of Transportation of the Jumper Creek site (34SM87) in southern Seminole County, Oklahoma. A total of 24 AMS assays were obtained and determined that this site

dates to the Late Archaic, which makes Jumper Creek one of very few Late Archaic sites in the Southern Plains with sourced obsidian artifacts. The obsidian flakes were submitted to Dr. M. Steven Shackley to conduct obsidian sourcing analysis using energy-dispersive x-ray fluorescence. He identified two different sources of the obsidian. This paper explores the significance of these findings.

**Layzell, Anthony L.**, see Ziska, Courtney L.C.

**Lemming, Jennifer L.** (University of Wyoming)

Session 15: *Agate Basin Stratified Paleoindian Site: Faunal Analysis from Area 1*

Agate Basin is a significant stratified Paleoindian site with multiple kill/processing localities and campsites. The Area 1 bone bed was excavated in 1942, 1961 and 1975 by the Smithsonian Institute and the University of Wyoming. Bone was collected in 2004 and 2008 when the back dirt from previous work was excavated. The results of 2004 zooarchaeological analysis were inconclusive with regards to Paleoindian behavior due to small sample and attritional bias. The bones from the 2008 analyzed here increase the sample size and provide a more precise composition of the faunal assemblage. Previous studies of Area 2 of the Agate Basin site suggest that Area 1 was the primary kill area for the Agate Basin components of Area 2. Comparisons between the Area 1 bonebed and the Area 2 bonebed and other bonebeds could support this hypothesis or provide evidence supporting different interpretation.

**Lewis, Jacob C.** (University of Wyoming)

Session 12 and 15: *Using Photogrammetry to Determine Superposition of Plains Indian Rock Art*

Artifact digitization is an increasingly popular means of preservation for the anthropological community. The most popular methodologies involve the use of GIS software, RTI software, and photogrammetric processes. Photogrammetry is particularly useful for analyzing cultural materials on a submillimeter level. By using these methodologies, it is possible to examine rock art panels and determine both the presence of carvings that display continuous, stylistic integrity and their relative ages based upon the Law of Superposition. We evaluated a set of photos taken at the Gateway Rock Art site in Wyoming, in July 2019. It is vital to study this set of panels, as they have been nominated for inclusion in the National Register of Historic Places and are the only known example of the Uncompahgre



style in Wyoming. Our models show the presence of Archaic, pecked patterns, over which newer, Seedskaadee style carvings have been superimposed.

**Lewis, Quinn**, see Massey, David

**Lynch, Elizabeth M.** (University of Wyoming, Anthropology), **Clare Bowen-O'Connor** (University of The Bahamas)  
Session 12: *An Exploration of Methods: The Potential for Photogrammetric Models of the Tipi Ring Features at Hell Gap National Historic Landmark*

Three-dimensional models developed using photogrammetry, from terrestrial or drone photo captures, are increasingly employed to understand and document archaeological features. They provide a means of preserving cultural resources while strengthening public outreach and education. Although, traditional methods of recording tipi rings are adequate for describing the features as well as answering many research questions, 3D models allow us to refine our research while hedging against observer bias when recording the features and, due to the high level of accuracy, provide a means of efficient replication of experiments by multiple researchers with access to the same data sets. However, many problems exist with modeling these types of features such as vegetation interference. To test the possibility of developing 3D models for tipi rings, we used photogrammetry to capture data of one structure at the Hell Gap Archaeological Site. Results highlight the potential for 3D modeling to augment existing data sets.

**Lynch, Elizabeth M.** (University of Wyoming, Anthropology), **Andrea Colón** (University of Wyoming, TRIO-Upward Bound Program), **Kyle Summerfield** (University of Wyoming, Shell 3D Visualization Center), **Mark Wittstock** (University of Wyoming, Academic Technology Services), **Emma Jane Alexander** (University of Wyoming, Shell 3D Visualization Center)  
Session 12: *Engaging Millennials: Teaching Digital Archaeology to High School Students in the TRIO-Upward Bound Program*

The TRIO-Upward Bound (TRIO-UB) Summer 2019 program visited two important Wyoming cultural heritage sites, Hell Gap National Landmark and the Tolar Petroglyphs, as part of the Digital Archaeology Mentorship. The objective was to provide a hands-on experience for the digital data collection processes while providing an overview of current methods in digital archaeology. The nine students, aged 14 to 17, were from schools throughout Wyoming. While some were familiar

video games, none had any experience with archaeology or with developing digital projects. This poster describes the goals of the Digital Archaeology Mentorship within the context of the TRIO-UB summer program with a focus on the fieldwork, to present a model for teaching digital archaeology methods to the public.

**Lynch, Elizabeth**, see Bowen-O'Connor, Clare

**Lynch, Elizabeth**, see Bowen-O'Connor, Clare

**Lynch, Elizabeth**, see Wolf, Judy

**Massey, David** (Indiana University), **Christina Friberg** (Indiana University), **Quinn Lewis** (Indiana University), **Edward Herrmann** (Indiana University)

Session 8: *Pump Up the Volume: Aerial and Drone Based LiDAR Volumetric Calculations at Angel Mounds (12VG1)*

Increased accessibility to drone-mounted remote sensing technologies has provided archaeologists with unprecedented control over the frequency and spatial resolution of data collection. This trend toward “personal” remote sensing enables the use of non-invasive and cost-effective survey methods in challenging landscapes, and it provides more precise and accurate measurements than traditional aerial methods. We demonstrate the practicality of drone-mounted sensors for three-dimensional modeling of earthworks at the Angel Mounds State Historic Site in Vanderberg County, Indiana. We calculate the volume of Mound A using models based on drone and aircraft-fixed Light Detection and Ranging (LiDAR) and compare the results to assess each strategy’s viability in the field. These findings are extrapolated to assess labor investments for the mound’s construction and implications for the degree of sociopolitical complexity among Angel’s earliest inhabitants. Finally, we discuss the application of these methods for informing site management and preservation efforts.

**Maughn, Gideon**, see Piven, Alix

**Mesner Bleyhl, Molly** (Indiana University)

Session 7: *Keeping Up with the Collections: Issues with Documentation of Artifacts from Angel Mounds*

Museums and their repositories were originally established to act as trustworthy guardians of their collections and deemed to be reliable records of human cultures, the natural world, and scientific knowledge, yet the paucity of artifact

documentation in the past has led to artifact identification and location issues among others. One current challenge at the Glenn Black Laboratory of Archaeology is preparing associated funerary objects (AFOs) from the Angel Mounds site to be repatriated. Of the 2.8 million Angel Mounds artifacts, roughly 5,000 are AFOs, the majority of which lack adequate documentation due to a long history of curatorial neglect, stalling the repatriation of objects to whom they belong. This poster seeks to call attention to the current documentation status of Angel Mounds AFOs, to present the process by which those AFOs are being prepared for repatriation, and to provide an inspiring argument for the significance of documentation for archaeological collections.

**Meyers, Richard** (Oglala Lakota College)

Session 2: *Memes in Indian County: Implications for Identity*

This presentation will examine and explore the implications of memes and their circulation throughout Indian Country.

**Meyers, Richard** (Oglala Lakota College)

Session 9: *Tribal Colleges and Researchers*

Round Table: Plains Anthropology in the 21st Century. Human Agency, and Why It Matters. Acknowledging and respecting human agency is critical to effective collaborations with tribal colleges and native communities.

**Mitchell, Mark D.** (Paleocultural Research Group), **Jay T.**

**Sturdevant** (National Park Service - Midwest Archeological

Center), **Rinita A. Dalan** (Minnesota State University-

Moorhead), **Kenneth L. Kvamme** (University of Arkansas),

**Stephen M. Perkins** (Oklahoma Archeological Survey)

Session 8: *Archaeological and Geophysical Investigations at Awatixa Village, Knife River Indian Villages National Historic Site*

Awatixa Village, also known as Sakakawea Village, is one of three major Hidatsa settlements preserved at the Knife River Indian Villages National Historic Site. Although perhaps best known as the early nineteenth-century home of Lewis and Clark's interpreter Toussaint Charbonneau and his American Indian wife Sacagawea, Awatixa Village contains a detailed and well-preserved record of Hidatsa history during an especially tumultuous period. To better understand the site's history of occupation—as well as the effects that burrowing rodents and riverbank erosion have had on its archaeological

deposits—our research team carried out a program of focused archaeological and geophysical research during 2019. The fieldwork incorporated high-resolution magnetic gradiometer surveys, downhole and cutbank magnetic susceptibility surveys, terrestrial lidar scanning, cutbank photogrammetry, and targeted testing. Preliminary results of the 2019 project are described and the implications of observed differences in earthlodge occupation histories are explored.

**Mixco, Mauricio** (University of Utah)

Session 5: *Reminiscences of My Friendship with Douglas Parks*

In this talk, I offer brief reminiscences of my friendship and professional relationship with Douglas Parks from the time we first met as undergraduate students at the University of California, Berkeley, to the present. I recount our experiences as graduate students in the environment of Berkeley in 1960s as well as our fieldwork on undocumented, endangered Native American languages for the Survey of California and Other Indian Languages, under the directorship of Prof. Mary Haas. I further recall how our friendship and professional contacts continued after graduate school, recollecting the times we shared together at Idaho State University and our adventures in fieldwork in North Dakota.


**Neff, Ashley**, see De Morgan, Jack

**Newton, Cody**, see Ollie, Naomi

**Oetelaar, Gerald A.** (University of Calgary)

Session 6: *Natural Disasters and Interregional Interactions: La Longue Durée in Northern Plains Historical Developments*

The eruption of Mount Mazama 6730 14C BP prompted small, dispersed bison hunting groups to abandon temporarily their traditional homelands and seek refuge among their distant relatives in the east. During their stay, they established new social ties and learned new technologies such as stone boiling. They then adapted this technology to extract bone grease and produce pemmican. As a reliable, storable, portable, and nutritious foodstuff, pemmican provided food security and gave the people a valuable trade good. The natural disaster also initiated a series of practices designed to maintain and expand the regional social safety net. From the simple exchange of goods and information to the development of extensive trade centers, the bison hunters and their neighbors established an ever-expanding network where economic, social, ritual and



historical practices evolved in tandem with local developments. The objective of this presentation is to explore these interregional interactions through time.

**Oetelaar, Gerald A.** (University of Calgary)

Session 9: *Landscapes and Meanings*.

Round Table: Plains Anthropology in the 21st Century. Human Agency, and Why It Matters.

**Ollie, Naomi** (SWCA Environmental Consultants), **Spencer R. Pelton** (Transcon Environmental), **Cody Newton** (Central Wyoming College)

Session 10: *Continuing Investigations at the Sisters Hill Paleoindian Site (48JO314)*

Reinvestigations over the last three years have shown that there are multiple Paleoindian occupations at the Sisters Hill Site spanning approximately 1,250 calendar years. Beginning in the Late Pleistocene, the site stratigraphy spans the entirety of the Holocene. Carbon and nitrogen assays from 13 sediment samples in a dated context provide a long-term paleoenvironmental record giving insight into the conditions that facilitated hunter-gatherer use of the site. In 2019, the Hell Gap component at the site was discovered to extend significantly to the south indicating that a large block of this cultural level remains intact. This poster presents these results along with a summary of the archaeological findings to date.

**Park, Indrek** (American Indian Studies Research Institute, Indiana University)

Session 2: *The Extent of Mandan and Hidatsa Territories: Native Perspectives*

Most ethnolinguistic maps of North America depict the Mandan and Hidatsa territories at the time when the realities the Plains Indian Wars of the late 19th century had much distorted the traditional settlement patterns. Historically, the Mandan and Hidatsa had developed an elaborate system of medicine bundles with an associated ceremonial complex that clearly demarcated the limits of their territory. Other tribes, particularly the Lakota, were considered trespassers within these ceremonially sanctioned boundaries. This paper examines the conflicting ideologies of the sedentary village tribes of the Upper Missouri and the surrounding nomads in respect to their territorial claims.

**Park, Indrek** (American Indian Studies Research Institute, Indiana University)

Session 5: *Confused No More: Mandan-Hidatsa Bands and Villages*

For two hundred years, historians and other Plains scholars have engaged in an endless debate over the “correct” spelling and meaning of the Mandan and Hidatsa village names found in the accounts of early travelers. Some of the confusion can be traced back to the original elicitation of Hidatsa names from Mandan informants and Mandan names from Hidatsa informants. Another source of confusion is the inconsistent identification of individual villages either by their name or by the band affiliation of the inhabitants. Finally, the names of villages occasionally migrated alongside with the villagers as circumstances forced them to dislocate. This paper strives to present a linguistically motivated account that collates the village and band names both in Mandan and Hidatsa at different time periods.

**Park, Indrek** (American Indian Studies Research Institute, Indiana University)

Session 16: *The Role of Dictionaries in Language Reclamation*


The two major types of bilingual dictionaries are 1) passive dictionaries for translating from the target language (Lang2 → Lang1) and 2) active dictionaries for translating into the target language (Lang1 → Lang2). A typical passive dictionary comprises easily searchable entries of alphabetized headwords that are supplemented by lexicalized set phrases, irregular paradigmatic forms, and a few sample sentences to illustrate usage. The majority of Native American dictionaries are passive, even if supplemented by a glossary of words in Lang1 that serves as an index for finding words in Lang2. I argue that active-type dictionaries are preferable in the context of language revitalization. This entails building active entries in the L1→L2 half of the dictionary that goes far beyond a simple reversal index by providing instructions for differentiating between similar forms (e.g. instrumental verbs), information on unattested and/or impossible derivations and inflections, and examples of usage based on real-life situations.

**Patton, Natalie**, see Bement, Leland

**Pavot, Amanda** (Indiana University)

Session 7: *Curating Angel Mounds: Methods and Issues*

The artifacts excavated from the Angel Mounds archaeological site provide an example of curation practices and methods over time, as well as examples of issues curators



may have with archaeological collections. The efforts of Glenn Black and the nature of the site itself provide a unique example of tracking the provenience of artifacts. Original documentation from the excavation aids modern curation efforts, especially the ongoing Saving America's Treasures rehousing project. Research projects, repatriation efforts, the rehousing project, and other interactions with the collection highlight past curatorial issues with the collection and the need for a modern update.

**Pelton, Spencer R.**, see Ollie, Naomi

**Perkins, Jeremiah**, see Haley, Cambria

**Perkins, Stephen M.**, see Mitchell, Mark D.

**Peterson, Ryan Edward** (Indiana University)

Session 7: *Integrating the Mixed Materials of the Angel Mounds Collection*

The Angel Mounds collection, which is currently housed at the Glenn Black Laboratory (GBL) at Indiana University in Bloomington, began with the excavation of Angel Mounds in 1939. Over the years to follow, the collection grew to include over 2.5 million artifacts. Recently, the GBL received a Saving America Treasures (SAT) Grant to rehouse this large collection. Chief among the many opportunities and challenges in this project is the need to reintegrate mixed materials found throughout the collection. The rough sorting and cataloging done during the Works Progress Administration era has left relatively small amounts of materials sorted into the wrong locations. While going through artifact bags containing bone; other artifacts such as lithic and pottery were also found. This poster focuses on the quantity and types of mixed materials that are being found as the SAT team rehuses the collection, as well as how these materials are being managed.

**Pickering, Evelyn** (University of Arizona)

Session 11: *Creation and Creative Recreation: Blackfeet Resilience Capacity on the Northern Plains*

Current efforts to indigenize research and reservations are observed in actions to revitalize cultural practices and decolonize institutions. Theories on survivance and cultural resilience explicate these endeavors. While the history of dispossession and assault on traditional life is clear, the methods for absorbing, adapting, and transforming are rarely documented and therefore remain abstract. This paper will investigate

historical and contemporary examples of cultural creativity that have contributed to the resilience capacity of the Blackfeet Indian Tribe. Cultural creativity, as an endeavor, are direct actions taken to navigate colonial oppression with cultural logic and practice. The cases included in this paper will demonstrate specific ways in which the Blackfeet Tribe resisted the concerted efforts of the United States to have them disappear into mainstream American society. Blackfeet worldview, culture, and language are active on the reservation and continue to be utilized through leadership to protect the tribe, natural, and cultural resources.


**Piven, Alex** (Utah State University), **Gideon Maughn** (Utah State University), **Suzann Henrickson** (Idaho National Laboratory, Cultural Resource Management Office)  
Session 10: *Preliminary Results of a Geometric Morphometric Analysis on Early Holocene Projectile Points from Owl Cave, Wasden Site, Idaho*

This poster details preliminary results of a 3D geometric morphometric (GM) analysis conducted on projectile points associated with a mass bison kill from the Wasden site (10BV30), located in Idaho's Snake River Plain. Original excavations conducted in the 1960s at the Wasden site identified twenty Agate Basin-type lanceolate projectile points from a bison kill layer. The rarity of bison drives and Agate Basin points in the Desert West indicates a potential Plains-adapted lifeway on the edges of the Great Basin. This research compares the twenty bison layer projectile points to casts of 32 points from the Agate Basin type site in Eastern Wyoming. 3D GM analysis provides an objective measure of the morphological similarity or potential variation between the Wasden and Agate Basin points.

**Pope, Melody** (Glenn A. Black Laboratory of Archaeology, Indiana University), **April Sievert** (Glenn A. Black Laboratory of Archaeology, Indiana University)  
Session 7: *Curating Angel is Underway!*

In 2018 the Glenn A. Black Laboratory of Archaeology at Indiana University received a 3-year grant from the Save America's Treasures program to rehabilitate its core collection, the Angel Mounds NHL legacy (1939-1983) collection of artifacts, associated documents and images. Angel Mounds is a large fortified Mississippian town site on the Ohio River, excavated nearly continuously for over 30 years beginning with WPA crews in 1939. Housed in original containers, most of the collection has remained untouched for the past 50 to 80 years. This poster describes our process for rehousing Angel within





an ongoing initiative focused on Angel Mounds at Indiana University. We share some of the challenges and future plans to increase awareness of and access to this valuable research and teaching collection.

**Pope, Melody** (Indiana University, Glenn A. Black Laboratory of Archaeology)

Session 14: *Chasing Histories in Stone: New Evidence from the Eastern Central Plains*

Traditional studies of pre-contact Plains hunter-gatherer-farmer societies tend to compartmentalize past peoples based on subsistence, geography, artifact taxonomies, or mobility without a full understanding of how social, economic, material, and ritual practices map onto land, things, and people. A recent finding suggests that people living in lodges on the eastern edge of the Central Plains were heavily involved in hunting and hide working. Detailed use-wear and technological data on bipointed knives, end scrapers, and triangle points places a strong hunting stamp onto people generally portrayed as farmers. This evidence encourages us to move away from taxonomic categorizations and to explore new ways to reveal the material effects of practices that are social, economic, and historically situated.

**Posthumus, David C.** (University of South Dakota)

Session 2: *Journey to “The Center of the Earth”: Exploring Traditional Lakota Conceptions of Place, Landscape, and Personhood*

In traditional Lakota culture places and landscapes are imbued with an energy or personality of their own. Sites are significant not only as places where hunting and gathering occurred and families are raised, but also as loci of power that humans can tap into and wield to the best of their abilities. Humans relate to nonhumans and places in their environment according to a kinship paradigm, the dominant interpretive principle of Lakota culture. At the heart of this understanding of the universe is an animist relational ontology poetically expressed by the Lakota axiom *mitákuye oyás’i* (all my relatives, we are all related). In this paper I draw upon the work of Ella Deloria and Vine Deloria, Jr., putting it into dialogue with recent theoretical excursions in ontology and “new animism” in an attempt to reach a broader, more nuanced understanding of Lakota conceptions of place and landscape.

**Posthumus, David C.** (University of South Dakota)  
Session 5: *Individual Sovereignty and Indigenous Collectivism: A Lakota Case Study*

In the contemporary popular imagination Native American people are generally described and understood as communalistic or collectivist in nature, privileging the group or collective over the individual. But is this assumption tenable, supported by the historical and ethnographic literature and native oral traditions, or is it a pervasive misconception or a case of historical and cultural ignorance? This paper explores cultural notions of collectivism and individualism among the various tribes of the Očhéthi Šakówiŋ (Seven Council Fires), more commonly known in English as the Sioux. While all cultures exhibit and value both collectivism and individualism contextually, I argue that in many ways the Sioux were more oriented toward an individualist ethos and that the assumption of the privileging of collectivism is more rooted in contemporary political and ideological claims and identity politics and less in the ethnohistorical literature or Sioux oral traditions.

**Posthumus, David C.** (University of South Dakota)  
Session 9: *Cultures and Meanings*  
Round Table: Plains Anthropology in the 21st Century.  
Human Agency, and Why It Matters.

**Quicksall, Andrew**, see Thimmig, Rachel

**Rainville, Charles**, see Bement, Leland

**Ramlo, Cynthia** (American Indian Studies Research Institute, Indiana University), **Joshua Richards** (American Indian Studies Research Institute, Indiana University)  
Session 16: *Learning from the Elders: Using Stories to Develop Nakóda Literacy*

Today one of the foremost concerns of many Indian communities is language loss and language retention. In this presentation we will discuss how the Nakóda Language Project is developing the first K-12 Nakóda language curriculum. This partnership between AISRI and members of the Fort Belknap and Fort Peck Nakóda communities grew from long term collaborations between AISRI scholars and Nakóda elders. The collections of narratives they preserved now provide the foundation for this language curriculum. The abundance of recorded stories allows us to create children's storybooks narrated by elders and illustrated by Nakóda artists. Combined with

traditional textbooks and classroom materials, these resources will help children learn Nakóda by listening to the words of their elders using twenty-first century technology.

**Reed, Timothy A.**, see Clark, Andrew J.

**Richards, Joshua** (Indiana University)

Session 5: *Continuing Doug Parks' Commitment to Documenting Caddoan Languages: Arikara Personal Names and Preston Holder's Like-A-Fishhook Village Papers*

In this presentation I will discuss my work with Preston Holder's notes from his 1938 survey of Like-A-Fishhook Village. These unpublished notes contain an abundance of Arikara language material, documenting personal names as well as biographical information regarding the residents of individual lodges recorded as part of the survey of this 19th century Mandan, Hidatsa, and Arikara village. As a result, Holder's work provides a contribution to linguistics, ethnohistory, and archaeology as well. The work collecting these names and retranscribing them in a standard orthography for inclusion in a full Arikara dictionary represents a continuation of Doug Parks' commitment to documenting all records of the Arikara language, with a particular awareness of the importance of personal names.

**Richards, Joshua**, see Ramlo, Cynthia

**Rolle, Kody**, see Bowen-O'Connor, Clare


**Rolle, Kody**, see De Morgan, Jack

**Roos, Christopher I.**, see Thimmig, Rachel

**Sandstrom, Sylvia M.** (Minnesota State University-Moorhead)

Session 15: *The Boller Site Platter - A Northern Plains Ceramic Anomaly*

An inventory of the Alfred Bowers archaeological collection in North Dakota recently revealed a unique ceramic container. The pot is unique in that its shape, shallow plate, appears to be unparalleled and the incised design on the interior, which conforms to the shallow shape, is inconsistent with the known register of ceramic designs. Given its supposed date ranging in the early 1800s, it is possible that it represents a skeuomorph of a Euro-American artifact. However, the use of concentric lines does fit within an ancient design system linking back to the beginnings of the Woodland period in the



Upper Midwest and Plains. This singular vessel opens up the possibility of examining the convergence of indigenous stylistic and technological changes at the cusp of Euro-American contact. Whether it is a one-of-a-kind Native creation, or something else entirely, it is clear that this vessel is unique among others in the Northern Plains.

**Savage, Sheila**, see Bethke, Brandi

**Scheiber, Laura L.** (Indiana University)

Session 5: *Legacies, Genealogies, and Inheritance: The American Indian Studies Research Institute as Repository*

Indiana University faculty members Douglas Parks and Raymond DeMallie formed the American Indian Studies Research Institute at Indiana University in 1985. For decades, they conducted ethnographic and linguistic fieldwork at numerous reservation communities throughout the Plains. IU is the repository of a rich body of materials collected by Parks and DeMallie as they worked with hundreds of collaborators. In this paper I will present a short history of the Institute as well as discuss one of the little-known legacies of their impressive scholarship – the curation of significant ethnographic and ethnohistoric materials entrusted to them by an earlier generation of anthropologists. I highlight the works of Preston Holder, Alfred Bowers, Alexander Lesser, Gene Weltfish, and Melvin Gilmore and discuss the importance of these archives for future research.

**Scheiber, Laura L.**, see Hawley, Kirsten M.

**Schneider, Fred** (University of North Dakota, retired)

Session 6: *Intertribal Trade for Native Plant Materials Exotic to North Dakota to the Mandan, Hidatsa, and Arikara Tribes*

Trade on the Great Plains has long held the interest of anthropologists and archaeologists. There is however one area of trade that has lagged behind the others. What I will speak to is the documented intertribal exchange of plant materials exotic to North Dakota to the Mandan, Hidatsa, and Arikara tribes. I will also address the somewhat unusual situation of trade of plants locally available to these three tribes. My ongoing development of ethnobotanies for the three tribes has so far revealed that the Mandan received three exotic plant materials, the Hidatsa received 6 exotic plant materials, and the Arikara received 5 exotic plant materials. Several of these plant materials traveled for several hundred miles to reach these tribes. In some instances

it is know what tribe or tribes brought these materials. I will also provide an update on the ethnobotanies I am preparing for these three tribes.

**Schumacher, Lauren** (Indiana University)

Session 7 and 15: *Campus Archaeology: Bringing Communities and Students Together*

Campus archaeology engages communities, preserves cultural resources, and gives students practical experience. At Indiana University (IU), students can gain experience in archaeology, archival science, and museum studies thanks to the partnership between the Glenn Black Laboratory of Archaeology (GBL) and the Wylie House Museum (WHM). IU's first campus field school took place at WHM during the summer of 2018, where students searched for two 1860's sunken greenhouses. Given its proximity to campus, the field school focused on community involvement through volunteer days, blog posts, and site tours. A subsequent laboratory methods class gave students experience in artifact processing and ceramic analysis. Simple artifact guides, interactive maps, and digital filing forms were also created to help WHM volunteers record and catalogue artifacts they may find on the property.

**Scotia, Mullin**, see De Morgan, Jack

**Sharphead, Cody** (University of Alberta/ Enoch Cree Nation Consultation Department)

Session 10: *Mapping The Points: Investigating the Besant Phase in Alberta with GIS Technology*

The Besant phase is characterized by morphologically distinct side notched projectile points that are typically dated, by Plains archaeologists, to 2,500-1,350 B.P. Numerous archaeological sites in Alberta have been assigned to the Besant phase. This research will rely on GIS programs to compile and display interpretive data that can answer many questions about this archaeological phase. Density maps can be created to highlight the areas in which Besant projectile points and associated tools are found in order to interpret modes of cultural mobility and act as a baseline for other research questions. Important to this research is the appearance of Knife River Flint (KRF) as a dominant toolstone used throughout Besant assemblages in Alberta. This poster will utilize geospatial methods to interpret the raw data into a story of mobility during the Besant phase in Alberta.

**Sharphead, Cody** (University of Alberta/ Enoch Cree Nation Consultation Department)

Session 10: *The Archaeology of My Bones: Investigating the Excavation and Repatriation of the Sharphead Site Burials*

The Sharphead burials were discovered and excavated in the mid 1960's during a powerline construction project on land near the Battle River just west of present-day Ponoka, Alberta, Canada. The remains were those of individuals associated with the Sharphead Stoney Indian Reserve, totaling 28 in number with individuals of varying ages. The burials tell stories of diseases, starvation, and hardship in a new colonialist society. Much controversy surrounds the surrender of land given to the Sharphead members as a reserve in 1885 and further discussion about related descendant communities has stalled repatriation attempts. What remains after reburial? Rumors of remaining burials on private land linger along with obvious repatriation failures that highlight the good and bad of archaeology. The Sharphead remains were kept unburied for decades and this research will act to keep their story alive while their souls finally rest.

**Shimek, Rachael**, see De Morgan, Jack

**Sievert, April**, see Pope, Melody

**Simon, Mary L.** (Illinois State Archaeological Survey)


Session 6: *New Dates on Old Maize*

Accelerated mass spectrometry and carbon isotope analyses provide strong tandem methodologies used by archaeologists to evaluate and re-evaluate the histories of maize use in the Midwest. In this paper I present newly obtained dates and carbon isotope assays from a series of maize samples thought to date from the Middle through Terminal Late Woodland I periods in the Midwest. These data both cast doubt on the overall antiquity of maize cultivation in the Eastern Woodlands and suggest that maize cultivation was not an integral part of pre-AD 950 subsistence systems in the American Bottom. Rather, revised direct dates from that region suggest that reliance on maize as a staple crop preceded the “big bang” of Cahokian development by decades rather than by centuries.

**Skov, Eric** (Kansas Historical Society)

Session 13: *Collection Grids: A Technique for Systematic Surface Sampling Within Sites*

Traditional pedestrian survey techniques carry a set of



biases that affect the usefulness of surface collection data for assessing such aspects of sites as intrasite density, assemblage diversity, etc. For the 2019 Kansas Archeology Training Program (KATP) field school, we devised a simple method for controlled surface sampling that attempted to remove as much of the biases of pedestrian survey as possible, while also limiting the sheer volume of artifacts collected. Two portable grids were constructed that could be pinned down at sampling points throughout the site. The controlled surface collection was combined with limited sub-surface testing at each sampling location. The new technique shows promise, but was far from an unqualified success. This paper will discuss the strengths and weaknesses of portable collection grids as a tool for future site investigations, and circumstances favoring or disfavoring the use of this technique.

**Smith, Joshua** (Iowa State University)

Session 9: *Repatriation and History*

Round Table: Plains Anthropology in the 21st Century.  
Human Agency, and Why It Matters.

**Soza, Danielle R.** (University of Arizona)

Session 15: *Soil Chemistry and Stone Ring Sites: Preliminary Results from Four Horns Lake, Montana*

Archaeological investigation of stone rings on the Great Plains often leaves archaeologists with relatively little information. With notoriously low artifact densities and low to no visibility of activity areas, human activity at these stone ring sites remains dependent on ethnohistorical analogues and interior spatial analysis. Although these studies have made significant contributions to stone ring research, adding creative methodologies may allow Plains archaeologists to understand the overall site structure and activities beyond the interior features. This poster presents the results from a study at Four Horns Lake on the Blackfeet Reservation in Montana, where a combination of geophysical survey and soil chemical analysis revealed potential for identifying extramural features and different types of human activity. Although this does not present any conclusive results, this study demonstrates the need for further investment in geophysical and geochemical techniques for the interpretation of stone ring sites.

**Soza, Danielle**, see Zedeño, María Nieves

**Speakman, Jeff**, see Jones, Travis W.

**Steussy, Clara** (Indiana University)

Session 14: *Celebration: Expanding the Story of Wyoming's Haiku Stone*

In 2016, the Haiku Rock of Heart Mountain, Wyoming was nominated as one of the state's top ten artifacts. Here, I present on my research into the poetry of the Heart Mountain Japanese American incarceration site, and how that research expands the context of the Japanese haiku inscribed on this stone.

**Strickland, Melissa** (Red Cloud Indian School)

Session 16: *Maḥpíya Lúta Lakhól'iyapi Waúŋspewičhakhiyapi: Teaching Lakota to Red Cloud Students*

Red Cloud Indian School, located on the Pine Ridge Reservation in South Dakota, developed the first comprehensive K-12 Lakota textbook curriculum in partnership with the American Indian Studies Research Institute (AISRI) at Indiana University from 2008-2014 as part of the Lakota Language Project (LLP). Now in the third phase of its development, the project not only continues to support language instruction at every grade level, but it also serves to integrate the language across the RCIS organization. By providing curricular materials, extracurricular activities, and a setting for language immersion, RCIS is ensuring that our students, parents, and community are engaging with the language on a regular basis. My discussion walks through the three major phases of the project, beginning with the AISRI partnership, followed by the development of resource materials and community outreach, and culminating in our current immersion model.

**Sturdevant, Jay T.**, see Mitchell, Mark D.

**Summerfield, Kyle**, see Bowen-O'Connor, Clare

**Summerfield, Kyle**, see Bowen-O'Connor, Clare


**Summerfield, Kyle**, see Lynch, Elizabeth M.

**Summerfield, Kyle**, see Wolf, Judy

**Sumner, Raymond V.** (Center for Mountain and Plains Archaeology, Colorado State University)

Session 11: *The Days After Colorado's Darkest Day: Initial Work at the Overland Trail Julesburg Station in Northeastern Colorado*





Julesburg Station and Camp Rankin are located in northeastern Colorado along the South Platte River. In January and February 1865, they became the focal point of the Cheyenne, Arapaho, and Lakota response to the Sand Creek Massacre. During this period ranches and stage stations along 150-miles of the Overland Trails were raided and attacked in response to the massacre. Remarkably, no academic historians or professional archaeologists have studied or worked at the sites. Unfortunately, though, the sites have been heavily disturbed by private collectors. Initial work is focused on identifying the exact site boundaries using multiple geophysical methods, ground survey, and limited excavation. Privately collected and museum artifacts are being documented to form a digital repository of site artifacts. The initial work also includes the initiation of tribal consultation with the Cheyenne, Arapaho, and Lakota nations and an active outreach and education program with the local community and the public.

**Sumner, Raymond V.** (Center for Mountain and Plains Archaeology, Colorado State University)

Session 15: *The Days After Colorado's Darkest Day: Metal Detecting Survey of the 1865 Julesburg Stage Station*

Julesburg Station is located in northeastern Colorado along the South Platte River. In early 1865 the station became the focal point of the Cheyenne, Arapaho, and Lakota response to the Sand Creek Massacre when a party of over 1,000 warriors attacked the station and associated Overland Stage Company warehouses on January 7 and February 2 in an effort to obtain the material needed by the survivors of Sand Creek to endure the remaining winter months. In an effort to confirm the exact location of the station and its size a metal detector survey was conducted over 9-days. During the 600-hours of fieldwork, over 200 meters square were survey with and 2,500 artifacts were recovered including diagnostic artifacts to the period of interest. The process developed at the site will also be applied during research at related sites in the coming months.

**Sutton, Logan** (Indiana University / MHA Nation)

Session 5: *Northern Caddoan Linguistic Analysis: The Rich Legacy of Douglas Parks*

This talk discusses grammatical constructions found in the Arikara and Pawnee text corpora from a comparative Caddoan perspective. The Caddoan language family was once a cultural landmark of the Plains, extending from southeastern Texas to South Dakota. Recent years have witnessed the passing

of the last fluent L1 speakers of every Caddoan language. While all attested languages did receive some documentation and basic analysis, there are many questions that cannot now be answered. However, in the case of Arikara and Pawnee, those there is promise of finding some of those answers to the innumerable questions that accompany linguistic analysis. This is thanks to the career-long efforts of Dr. Douglas Parks, who collected and recorded voluminous bodies of texts and extensive lexicons for those Northern Caddoan languages. This paper will present novel analyses of Arikara and Pawnee grammar that are only possible because of Dr. Parks' prodigious work.

**Sutton, Logan** (Indiana University / MHA Nation)

Session 16: *Language(s) Revitalization in the MHA Nation: Assessment and Prospects*


This talk will present a linguist's perspective on a Tribal language program with which he is collaborating. In 2018 the Mandan-Hidatsa-Arikara Nation Tribal Education Department initiated a Master-Apprentice language program to create new speakers and teachers for the three Tribal languages. Modeling a Montana Salish language program, the MHA program is forging ahead even though two of the three Tribal languages have no fluent L1 speakers remaining. A year on, despite some missteps, the MHA program shows great promise for success. The greatest struggle has been limited language learning materials and linguistic or L2 pedagogical training. Recent collaboration with linguists from AISRI seeks to assist in overcoming both of these obstacles. This presentation will describe the current state of affairs and future avenues and bridges that this collaboration hopes to build and traverse in order to achieve a rare success in language revitalization endeavors.

**Swenson, Fern**, see Thimmig, Rachel

**Taylor, Marie** (Center for Mountain and Plains Archaeology, Colorado State University)

Session 11: *Playa Morphology and Hunter-Gatherer Site Selection on the Great Plains*

Playa archaeology has been well established in the Southern High Plains, with numerous sites illuminating prehistoric hunter-gatherer strategies centered around these ecological oases. Despite this, playas in the Central Plains have been understudied. Using a regional wetland GIS dataset, this paper compares the morphology of over 4,000 playas in the South Platte River Basin of Colorado with 20 previously



unreported archaeological playa sites and several playa sites on the Southern High Plains. This research analyzes playa shape and size, hypothesizing that these characteristics are important components of plant diversity, animal migration and water reliability. Furthermore, it explores the possibility that such ecological variables are closely intertwined with hunter-gatherer site choice. With this paper, I will present an analysis of playa acreage by size class and will contextualize playa morphology at the 20 archaeological sites, ultimately aiming to identify broad patterns of land-use and site selection across the Plains.

**Taylor, William**, see Bethke, Brandi

**Thimmig, Rachel** (Southern Methodist University), **Kacy L. Hollenback** (Southern Methodist University), **Christopher I. Roos** (Southern Methodist University), **Andrew Quicksall** (Southern Methodist University), **Fern Swenson** (State Historical Society of North Dakota), **Blair Betik** (Yale University), **Mary Hagen Erlick** (Utah State University)

Session 3: *A Tale of Two Houses: Soil Chemical and Floor Assemblage Evidence of Domestic Activities at the Menoken Site, North Dakota*

Often used to identify domestic activity areas, floor assemblages are influenced by diverse formation processes. By contrast, soil chemical traces are less vulnerable to alteration by subsequent activity and may be treated as primary residue of activities in their original location. Although the formation histories of these two types of evidence differ, the integration of these independent data sets improves our ability to generate holistic inferences about the structure and use of domestic space. Here we compare geoarchaeological and artifact data to identify traces of behavior in two Late Woodland (ca. AD 1200) lodges at Menoken, North Dakota. Excavations by Stanley Ahler reveal that the structures have different architectural styles despite a similar shape, size, and penecontemporaneity of occupation. We integrate evidence to compare patterns of use and abandonment of these houses to evaluate if the uses of these spaces were comparable despite the architectural variation.

**Thomas, Jayne-Leigh** (Indiana University)

Session 4: *NAGPRA Roundtable Discussion*

The Native American Graves Protection and Repatriation Act provides a process for transferring Native American human remains and cultural items back to their rightful communities. Despite this federal law being nearly 30 years old, there is often

still confusion and conflicting opinions on how the law should be interpreted or complied with. This informal roundtable discussion will discuss the requirements and procedures mandated by the law, strategies and case studies for successful consultation, and recent initiatives across the country which are focused on to increasing capacity for repatriation work.

**Trabert, Sarah**, see Bethke, Brandi

**Trader, Patrick D.** (Gray & Pape, Inc.)

Session 14: *The Occurrence and Distribution of Knife River Flint in Indiana: A Pilot Study*

The use of Knife River Flint on the Northern Plains is well known. However, the occurrence and distribution of Knife River Flint in Indiana is not well documented. Building on previous studies by Braun et al. (1982), Clark (1984), and Conrad (2004), I examine the distribution of Knife River Flint across Indiana. My study focuses primarily on the occurrence of Knife River Flint in Middle Woodland sites, as its occurrence increases significantly during the Middle Woodland as a result of extensive trading networks during this period. Through an in-depth literature review and inspection of Indiana's State Historic Architectural and Archaeological Research Database, and examination of Knife River artifacts found at curation facilities in Indiana, I present a pilot study of the distribution of Knife River Flint in Indiana. I also discuss a possible means of distribution from the Knife River Flint quarries region of North Dakota into Indiana.

**Tratebas, Alice M.** (Bureau of Land Management)

Session 14: *Avonlea Bison Jump in the Wyoming Black Hills*

Keyhole bison jump is 60 kilometers WSW of the Vore site. Vore is a classic Late Prehistoric jump, and assuming the Keyhole jump would similarly date toward the end of the Late Prehistoric is understandable. However, the site has thin delicate, often serrated points which are clearly Avonlea and compare with other "Avonlea-like" sites in northern Wyoming and southeastern Montana. The points resemble descriptions of Benson's Butte points except for more frequent serration. Keyhole adds the expected bison jump to a complex of sites in northern Wyoming which includes open habitations with lodge structures, dense FCR scatters, and heavily reused slab-lined hearths. Rock shelters and burials also occur in the northern Wyoming "Avonlea-like" complex. Rather than continuing to refer to these sites as "Avonlea-like," we should work on

defining regional cultural groups which made similar but variable points as part of adapting bow and arrow technology.

**Van Alst, Emily C.** (Indiana University)

Session 1: *From Incising to Instagram: Examining the Changing Roles of Oceti Sakowin Women in the Creation of Traditional Art*

This paper explores how Lakota and Dakota women of the Oceti Sakowin can be understood as artists in their communities, pre-, peri-, and post-colonization. Historically, we recognize that Oceti Sakowin women have a special role – economic, political, and often spiritual. They are the creators of much of the material culture in our communities, their wisdom is held in high regard by other members of the communities, and many ceremonies cannot take place without their presence. This project expands upon our understanding of the social presence of Lakota and Dakota women by examining their role in artistic practice, specifically how they have affected media including rock art, quillwork, beadwork, and others. This work has implications for our understanding of how a return to traditional artistic expression now works as resistive practice to colonialism even within strongly colonial contexts.

**Veyrié, Thierry** (American Indian Studies Research Institute, Indiana University)


Session 2: *Finding Footing: Positional Experiences of Space and Belonging in Paiute-Shoshone Historical Expression*

Exploring the struggle of the expression of history in the McDermitt Paiute-Shoshone and other communities (NV), I propose a typology of how speakers position themselves physically and figuratively when telling about events of the past. Rather than a detached exposition of facts, both historic and contemporary Paiute public figures propose a challenging and organic history that does not abide by the codes of Euro-American views of time, and has additional interactive conditions. From examples, I show that a good Paiute historian demonstrates kinship relations to the characters, also places the action in a cardinal space centered around the speaker, and proposes a prospective history rather than a retrospective one. Doing so, I suggest these storytellers manifest an epistemology grounded in spiritually sanctioned occupation and resistance.

**Waggoner, Tricia J.** (Kansas Historical Society)

Session 13: *Into the Weeds at Fool Chief's Village (14SH305)*

The excavations at Fool Chief's Village lasted one year and represent the largest ever excavation of a Kansa Village.



Such a large sample of a village, including the excavation of multiple houses and pits, gives us a clearer window into the lives of the Kansa during the early to mid-1800s. The final report for this excavation is now out and the over-all findings and a general summary have been discussed at multiple conferences. This presentation will, instead, be a deep dive into some of the more interesting findings and surprising results from this excavation. What new things have we learned from this excavation and what does it tell us about the lifeways of the Kansa in this time of immense cultural change?

**Warnica, James M.**, see Asher, Brendon P.

**Weston, Timothy** (Kansas Historical Society)

Session 1: *Public Archeology in Rice County Kansas, A Long-Term Legacy of Cooperation and Friendship*

Cooperation and friendship between archeologists, landowners, and other local residents is not always a given. But it has been in Rice County Kansas, where an extraordinary connection between archeologists and local folks has endured for nearly 8 decades. A cluster of well-known Great Bend Aspect sites along the Little Arkansas River originally brought researchers, including Waldo Wedel, to the area. Excavations were undertaken this past summer at one of the most prominent among them, the Tobias site (14RC8), by the Kansas Archeology Training Program (KATP). That work provided an opportunity to reflect on the long-term value of public engagement to both archeologists and local residents.

**Wiewel, Adam**, see Johnson, Nolan

**Williams, David T.** (South Dakota State Historical Society Archaeological Research Center), **Katherine Lamie** (South Dakota State Historical Society Archaeological Research Center)  
Session 1: *Dusting off “Legacy” Collections: Balancing Budgets and Curation Needs to Complete 30 Year-Old Projects*

Reports for a number of large-scale contract and outreach archaeological field projects that were initially conducted by the SD Archaeological Research Center (ARC) over the past 30 years have not been completed. Time, budget, and personnel constraints all contributed to the incompleteness of these final project reports and the associated artifact curation, which are referred to as “legacy” projects. Now, a powerful combination of renewed research interests, re-aligned priorities, upgraded project management policies, and a framework of

support and collaboration has facilitated the completion of final excavation reports and collection processing tasks. In this presentation, the ARC Contracts Manager will discuss three main points: the factors that created legacy projects, the plan to address them today, and how to avoid a backlog into the future.

**Wittstock, Mark**, see Lynch, Elizabeth M.

**Wolf, Judy** (Wyoming State Historical Preservation Office), **Clare Bowen-O'Connor** (University of The Bahamas), **Kyle Summerfield** (University of Wyoming, Shell 3D Visualization Center), **Elizabeth Lynch** (University of Wyoming, Anthropology)


Session 12: *Virtual Reality and the National Register Nomination Process: Examples from the Tolar Petroglyph and Gateway Rock Art Sites*

An important part of the evaluation process for the National Register of Historic Places (NRHP) documents the integrity of a site. Seven aspects of integrity (location, design, setting, materials, workmanship, feeling, and association) must be discussed often requiring at least one site visit. In this paper, we propose that virtual reality experiences would be useful 1) during the writing process and NRHP presentation, and 2) to better understand the long-term integrity of rock art sites in Wyoming. To do this we created VR experiences using an Insta 360 Pro and Unity Gaming Software. We brought the VR models to the BLM managers and SHPO for consultation. While some concerns arose over the accessibility of the VR models to the general public and the costs of creating and storing such data sets, the results indicate that the models support the NRHP nomination process and have the potential for monitoring site integrity.

**Wriedt, Jessica**, see De Morgan, Jack

**Zedeño, María Nieves** (University of Arizona), **Francois Lanoe** (University of Arizona), **Danielle Soza** (University of Arizona), **Lucas Reis Bond** (University of Arizona)  
Session 10: *That's the Spot! Long-term Place Persistence in the Greater Northwest Plains*

What made mobile hunters return to the same place over millennia? Long-term, repeated occupations of certain sites, often separated by centuries, are not uncommon in the archaeological record of the Northwestern Plains and adjacent Rocky Mountain Front. They are characterized by Paleoindian colonization (13,500 – 10,000 cal bp), Archaic transitions, and



recolonization after the eruption of Mount Mazama (7,600 cal bp). Recolonization begins 250-500 years post-eruption and continues episodically through the Archaic (7,100 - 1500 cal BP) and Late Prehistoric (1,500 – 250 cal bp) periods. This poster explores evidence of persistence and its possible reasons through a comparative analysis of multi-component sites within the Plains and other regions. Location, key resources, technological traditions, and types of occupation are considered as important dimensions of persistence and of diversity in persistence, as they are ultimately indicative of memory work, place-making, and cultural landscape formation.

**Ziska, Courtney L.C.** (History Nebraska), **Nolan L. Johnson** (History Nebraska), **Anthony L. Layzell** (Kansas Geological Survey)

Session 8: *The Nebraska Buried Sites GIS in Practice: Initial Results and Next Steps*

In 2016, History Nebraska and the Kansas Geological Survey (University of Kansas) collaborated on creating a GIS model of the geologic potential for buried cultural deposits across Nebraska based on existing soil surveys and geomorphological data contained within decades of archeological survey reports. Since its completion in 2018, the resulting Nebraska Buried Sites GIS resource has been used as a tool by History Nebraska archeologists in determining whether future transportation project areas warrant deep subsurface testing. This paper will present the initial results of utilizing the GIS to identify areas with a potential for buried resources, evaluate the value of implementing this tool early in the review process, and discuss the next steps to be taken as the second phase of the research project begins this year.



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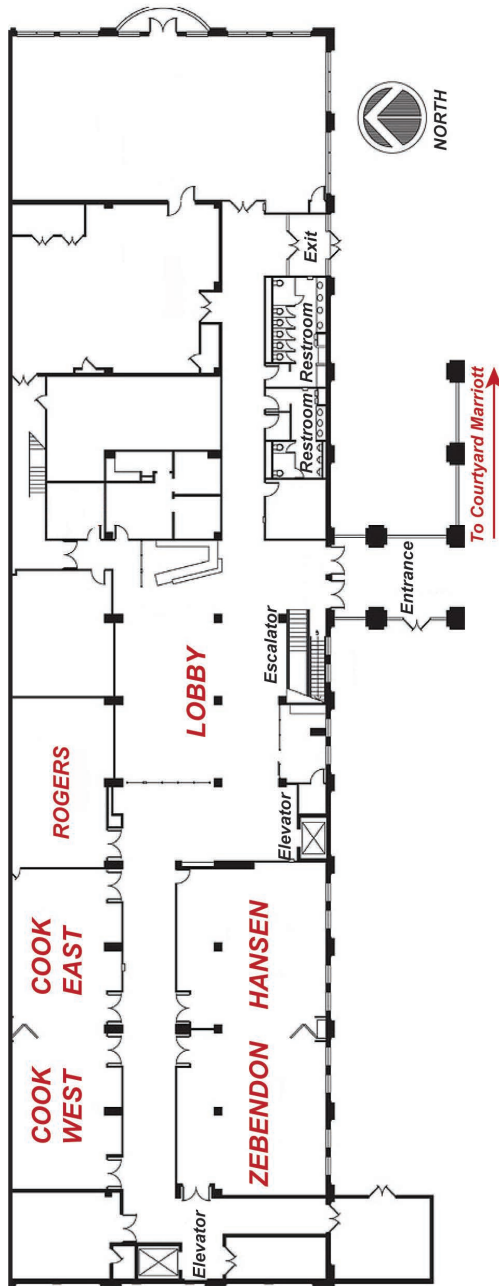
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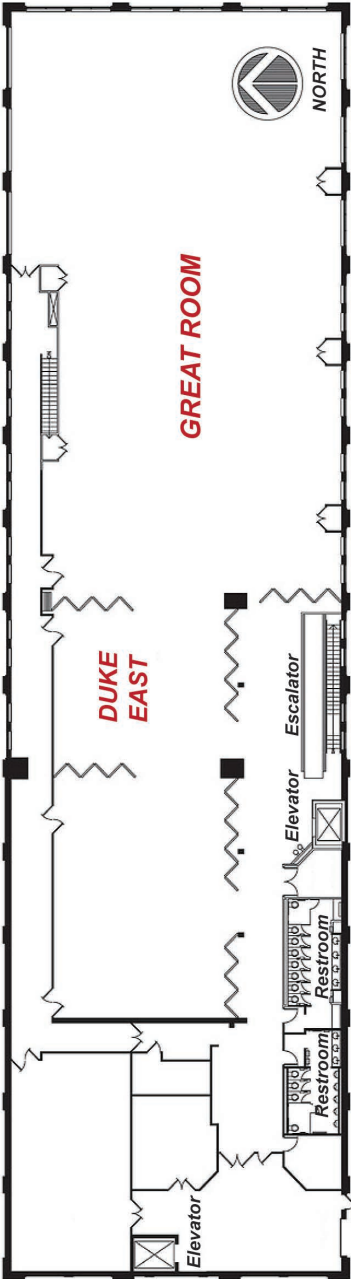
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## NOTES



## NOTES

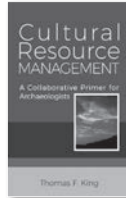


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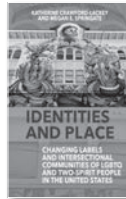
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