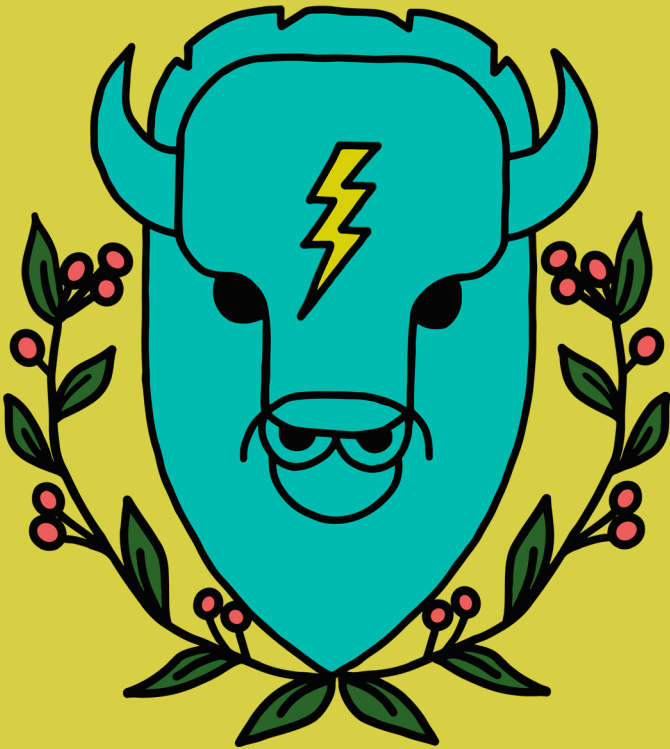


79th Annual
Plains Anthropological Society Conference



October 12-15, 2022
Oklahoma City, Oklahoma



CONFERENCE HOSTS

The Oklahoma Archeological Survey
The University of Oklahoma Department of Anthropology

CONFERENCE COMMITTEE

Brandi Bethke
Sarah Trabert
Delaney Cooley

CONFERENCE SUPPORT

We would like to thank Courtney Ziska, Chris Johnston, Alison Hadley, Amanda Regnier, Lee Bement, Ruthie Rink, Sridhar Radhakrishnan, Eric Singleton, OKPAN, students from the University of Oklahoma, and all of the volunteers who helped us with organizing and running this conference.

CONFERENCE LOGO

The 79th Annual Conference Logo was designed by Brandi Bethke who drew inspiration from the painted bison skull at the Cooper site in Oklahoma. The mistletoe wreath was chosen as Oklahoma Territory's floral emblem in 1893.

WE WOULD LIKE TO THANK OUR CONFERENCE SPONSORS!

OU Dodge Family College of Arts and Sciences
Oklahoma Archeological Survey
The University of Oklahoma Department of Anthropology
The University of Oklahoma School of Geosciences
Oklahoma Department of Transportation
Oklahoma Public Archaeology Network
The National Cowboy & Western Heritage Museum
The Whitten-Newman Family Foundation
Beer Distributors of Oklahoma
Karma and Cooper Robinson, Cooper-Freeman Land Co.
McSpadden Milner Robinson, LLC
Center for American Paleolithic Research
Paleoindian Research Lab, University of Wyoming
Susan Vehik
Carl Falk
Algonquin Consultants, Inc.
AmaTerra Environmental, Inc.
Afendras Archaeology, LLC
Cojeen Archaeological Services, LLC
Metcalf Archaeological Consultants
Regan Smith
Stantec (formerly Cox|McLain Environmental Consulting)

CONFERENCE VENDORS AND EXHIBITORS

Oklahoma Public Archaeology Network
Department of Anthropology, Wichita State University
Chase Earles
Wayne Earles
Brent Greenwood
The University of Utah Press
Susan Vehik
Jeanne Eder Rhodes and Curt Rhodes

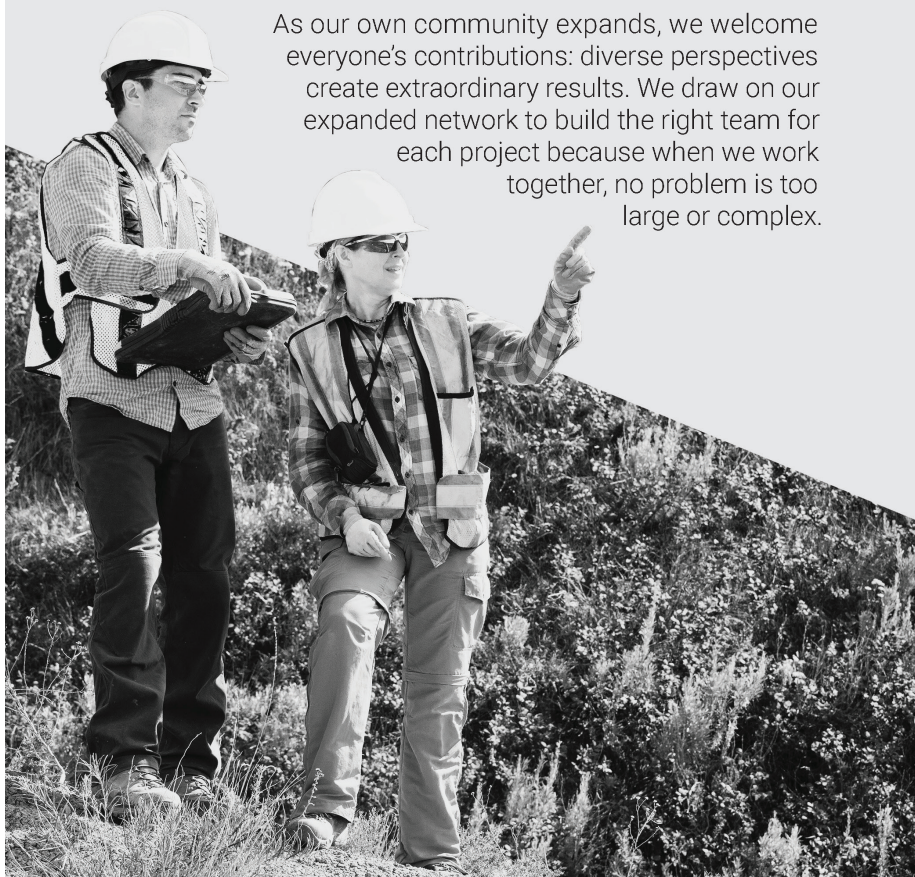


Together we can do great things.

**When smart, passionate, creative people
come together, real possibilities are unleashed.**

Stantec is beyond excited to welcome talented and experienced cultural resources colleagues from Paleo Solutions, Cardno, and Cox McLain. Our combined cultural resources team now includes more than 300 professionals in the U.S.

As our own community expands, we welcome everyone's contributions: diverse perspectives create extraordinary results. We draw on our expanded network to build the right team for each project because when we work together, no problem is too large or complex.



LIVE YOUR *West* LIFE™

Plan your visit today.

nationalcowboymuseum.org



Open Daily • 15 minutes north of Downtown OKC
1700 NE 63rd St. • Oklahoma City, Oklahoma
(405) 478-2250

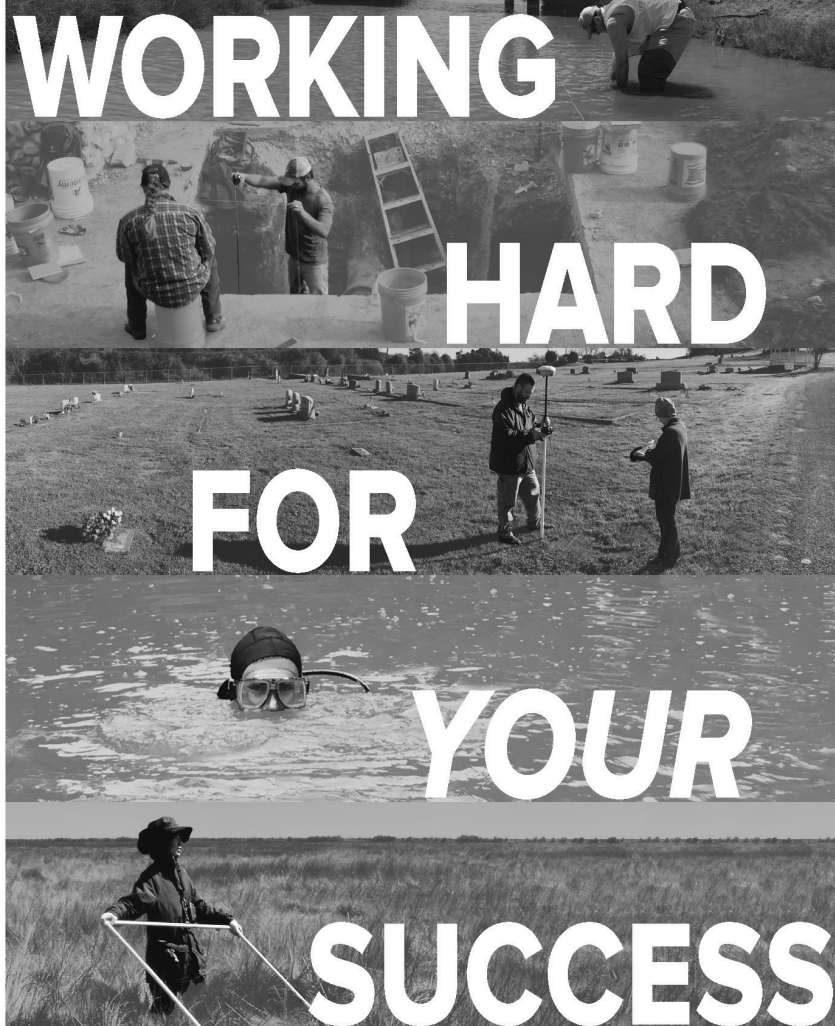
ATLATL ARCHAEOLOGY LABORATORY SERVICES

- PROTEIN RESIDUE ANALYSIS
- WOOD CHARCOAL ANALYSIS
- PHYTOLITH ANALYSIS
- DENTAL POLISH ANALYSIS
- GEOARCHAEOLOGY ANALYSIS
- SEDIMENT/SOIL ANALYSIS
- MACROBOTANICAL ANALYSIS
- CATALOGUING SERVICES

inquiries@atlatlarchaeology.com
www.atlatlarchaeology.com
403-359-1239

841 11 ST. S, Lethbridge, AB, Canada, T1J 2P6





WORKING HARD FOR YOUR SUCCESS

Strong, personable, award-winning expertise in **Archaeology, Water Quality/Wetlands, NEPA, Historic Resources, Biology, Permitting and Compliance, GIS, and Geophysical Studies** in Texas, the Southwest, and across the United States.

AmaTerra 
ENVIRONMENTAL, INC.

www.amaterra.com

info@amaterra.com

512 | 329-0031



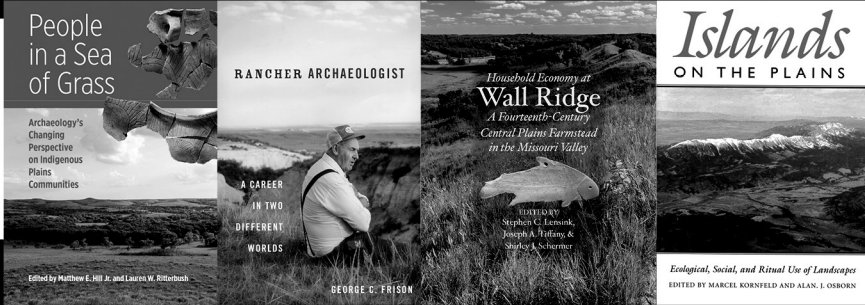
TEXAS ARCHEOLOGICAL SOCIETY®

www.txarch.org

PRESERVE YOUR HERITAGE

Promoting the Study, Preservation, and Awareness of Texas Archeology

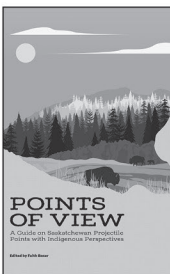
Visit us at PAC or use code PAC35 on our website www.uofupress.com for 35% OFF our Plains titles



THE UNIVERSITY OF UTAH PRESS

THE UNIVERSITY OF UTAH PRESS
WILLARD MARSHALL LIBRARY | THE UNIVERSITY OF UTAH

Points of View: A Guide on Saskatchewan Projectile Points with Indigenous Perspectives



\$29.95 CDN

Available This Fall

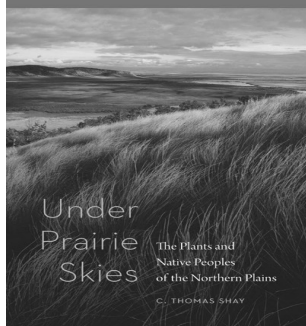
- Go-to manual for identifying projectile points found in Saskatchewan, the northern plains and boreal forest
- Indigenous perspectives on artistry, knowledge systems, connections to people and land, and curation of projectile points
- Lay flat guide - 300 high quality photographs; 200 pages



**Saskatchewan
Archaeological Society**

TheSAS.ca/store/ general@TheSAS.ca

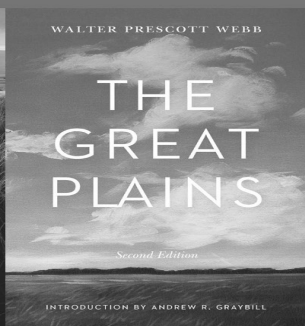
UNIVERSITY OF NEBRASKA PRESS



UNDER PRAIRIE SKIES

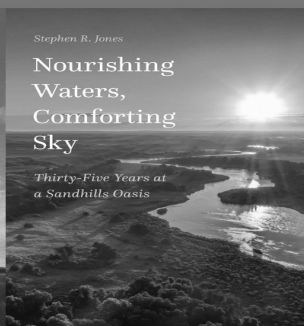
The Plants and
Native Peoples of
the Northern Plains
C. THOMAS SHAY

~~\$29.95~~ NOW \$17.97
paperback



THE GREAT PLAINS,
SECOND EDITION
WALTER PRESCOTT
WEBB INTRODUCTION
BY ANDREW R. GRAYBILL

~~\$35.00~~ NOW \$21.00
paperback



NOURISHING WATERS, COMFORTING SKY

Thirty-Five Years at a
Sandhills Oasis
STEPHEN R. JONES

~~\$19.95~~ NOW \$11.97
paperback

UNIVERSITY OF
NEBRASKA PRESS
www.nebraskapress.unl.edu

USE CODE 6AAA22 TO RECEIVE
40% OFF WITH FREE SHIPPING
ON THESE AND MORE TITLES.

Our Goals

LEADERS

To be the industry leader while
maintaining the integrity and
confidence of our clients

CONFIDENTIALITY

To provide the highest level of
confidentiality in order to protect our
clients' interest

GOOD STEWARDS

To be good stewards of the environment
and natural resources when developing
and executing solutions

TURN-KEY

To provide turn-key land, regulatory,
and environmental solutions to ensure
timely development of our clients' projects

EXPERIENCE

To provide a knowledgeable, experienced,
and cross-trained staff that maintain
high ethical standards

TEAM WORK

To provide an energetic and enjoyable
workplace that allows employees to
thrive and prosper by encouraging an
atmosphere of teamwork, resourcefulness
and job excellence

 **REAGAN SMITH**

3909 N. CLASSEN BLVD, SUITE 100
OKLAHOMA CITY, OK 73118
INFO@REAGANSMITH.COM | (405) 286-9326

PLAINS ANTHROPOLOGICAL SOCIETY ANNUAL MEETING CODE OF CONDUCT

This code of conduct applies to all participants, presenters, guests, volunteers, and other attendees at the annual Plains Anthropological Conference (PAC). We ask that all PAC attendees read and understand this code of conduct prior to the conference. As an organization, the Plains Anthropological Society (PAS) promotes inclusivity and opportunity at its annual meeting. To that end, the PAS will not tolerate any form of harassment, assault, bullying, or intimidation at PAC events, as set forth in the PAS Anti-Harassment Policy. No attendee at PAC events should be subjected to such misconduct. Accordingly, some behaviors are specifically prohibited, whether directed at other attendees, PAS volunteers, speakers, exhibitors, or event venue staff. Prohibited behaviors include any intimidating, harassing, abusive, discriminatory, or derogatory conduct.

Harassment is defined as verbal, written, or physical conduct—whether on-line or in-person—related to one's protected-class identity that unreasonably interferes with an individual's work or academic performance or creates an intimidating or hostile work, educational, or living environment. Sexual harassment specifically refers to an attempted or actual sexual act directed against another person, without the affirmative consent of the person, including instances where the person is incapable of giving consent. Sexual harassment includes any verbal, physical, or visual conduct of a sexual nature that is unwelcome and offensive to the recipient such that it impairs the recipient's ability to fully participate, enjoy, or engage in PAC events. Discrimination occurs when an individual suffers an adverse consequence on the basis of a protected-class identity. Unacceptable behavior at a PAC event also includes physical or verbal abuse, intimidation, bullying, threats, efforts to annoy others, stalking, pushing, shoving or use of any physical force whatsoever against any person that creates a disturbance that is disruptive or dangerous, or creates reasonable apprehension in a person. Discussion of opposing or different viewpoints is appropriate when conducted in a respectful tone and manner that avoids personal attacks.

We expect all attendees to recognize that harassment, assault, bullying, discrimination, and intimidation are forms of professional misconduct that are antithetical to the principles and values of the PAS and the lives and careers of our members. We expect all attendees to conduct themselves with regard to codes of professional ethics, workplace guidelines and behavioral expectations, and U.S. and Canadian law.

If You Have Been Harassed or Assaulted:

For immediate help, call 911, local police can accompany you to a local hospital or health center. There is no time limit on making a police report and filing a report does not mean you have to press a criminal case.

If you wish to have an anonymous conversation rather than make a report, the YWCA of Oklahoma City provides a 24-hour Sexual Assault Crisis Hotline (405) 943-7273. The National Sexual Assault Hotline 1-800-656-HOPE or the National Sexual Violence Resource Center 877-739-3895 can also connect you with a local resource. Universities also often offer free counseling or other places to anonymously discuss sexual assault and harassment.

GENERAL INFORMATION

Ethics and Inclusion Policy Statement

The Plains Anthropological Society (PAS) is committed to ensuring the safety, well-being, and inclusion of all our members and guests at PAS-sponsored functions. We request that all participants at our annual meeting, including guests and other attendees, follow our conference code of conduct as well as verify they have not been cited or censured under Title IX, by the Register of Professional Archaeologists, or by any other adjudicating body, such as a college or university, nor are they subject to a current restraining or no-contact order issued by a judicial authority that will be violated by attending this conference. Questions about this policy can be directed to the PAS President.

Conference Venue

The 21c Museum Hotel is situated in a former Ford Motor Company assembly plant and is listed on the National Register of Historic Places. Building upon this strong foundation and its rich industrial heritage, the 21c Museum Hotel Oklahoma City is a contemporary art museum, a 135-room boutique hotel with spacious guest rooms, a cultural civic center, and the home of Mary Eddy's Dining Room led by executive chef Jeff Patton. There will also be additional dining and bar areas open only to guests of the Plains Anthropological Conference!

Transportation to and from Will Rogers Airport

The Will Rogers World Airport services Oklahoma City and is a short 10-minute drive away from the conference venue and hotel. While there is no shuttle from/to the airport, the 21c hotel is just 8.5 miles away. Rental cars can be booked out of the airport terminal and taxis, Lyft, and Uber are other options.

For those who would like to schedule transportation to/from the airport in advance, Airport Express offers transportation between the airport and 21c Museum Hotel for around \$20. They normally have bright blue vans waiting at the airport for anyone, but if you would like to book your transportation in advance, visit their website: <https://www.airportexpressokc.com/>

Parking

There is valet parking available for \$28 per day or a self-parking garage is across the street from the hotel for \$5 per day.

Registration

The registration and information table is in the 21c Museum Hotel lobby near guest check-in. It will be open Wednesday, October 12th, from 3:00 to 8:00 PM; Thursday, October 13th from 9:00 AM to 4:00 PM; and Friday, October 14th from 9:00 AM to 3:00 PM and may be closed during the lunch breaks.

Sessions

All sessions will be in Galleries Two, Three, and Four on Thursday, Friday, and Saturday.

Session Moderators and Presenters

Session organizers and chairs must provide laptops (and appropriate dongles if needed to connect to HDMI projectors) for their sessions or symposiums. Projectors will be available in each room. 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. We ask moderators to remind all attendees to silence cell phones. Presenters and moderators should 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.

Vendors and Exhibits

Vendor and exhibit space is in the Video Lounge at 21C and in Gallery One. The Video Lounge room is open 8:00 AM to 5:00 PM on Thursday and Friday. Spaces will be accessible starting at 8:00 AM for use by vendors/exhibitors. Vendors will be contacted in advance with details on arriving and setting up.

Conference Merchandise

We will be selling conference t-shirts, bandanas, and stickers at the registration table. Supplies are limited.

Smart Phone App

The Plains 2022 schedule is available on a mobile app for your android and iPhone smart phones. Download PAC 2022. If you have the app from 2021, you will still need to download the newest version when it becomes available. The old app will not update.

Breaks and Refreshments

Coffee, tea, and water will be provided in the Sponsors Lounge (Gallery Five) on Thursday and Friday from 10:00 AM to 4:00 PM. Light refreshments will be provided during the mid-morning break. Other food and drink options are available on site at the Bodega, Pool Bar, and Mary Eddy's Dining Room.

CONFERENCE EVENT HIGHLIGHTS

WEDNESDAY, OCTOBER 12TH

Pre-Conference Tour: Touring Paleoindian Beaver River Complex Bison Kills

This once-in-a-blue moon tour will take you to northwest Oklahoma, but not quite to the panhandle. There, along the Beaver River valley, you will visit Jake Bluff, the largest Clovis era bison kill site on the Plains; Cooper site, home to the oldest painted bison skull on the Plains; and Badger Hole, just another Folsom bison kill for your viewing pleasure. Together, these three sites define one of the densest concentrations of Paleoindian large-scale bison kill sites on the Plains. You will see for yourself the unique geomorphologic setting of these three sites and wonder in awe at the possibility that many more such sites are preserved along this reach of the Beaver River. In addition to learning about late summer/early fall bison hunting, you will hear the latest on paleoenvironmental reconstructions in this area.

Vans will load at 9:00 AM near valet parking on the north side (W. Main Street) of the 21c hotel. Lunch and two bottles of water will be provided. Please wear sturdy shoes and bring extra water. We will return around 6:00 PM.

Registration

The registration and information table is in the 21c Museum Hotel lobby near guest check-in. It will be open Wednesday, October 12th, from 3:00 PM to 8:00 PM.

Early Bird Party

The Early Bird Party will be held from 6:00 PM to 10:00 PM in the Main Gallery, on the ground floor of the 21c Museum Hotel. There will be complementary light refreshments, beer, wine, and non-alcoholic beverages. Cocktails may be purchased.

Board Meeting

The Board Meeting will take place in the Mary and Eddy's Restaurant Dining Room from 6:00 PM to 10:00 PM. Board Members can tell the restaurant host they need to be seated in the private dining room.

THURSDAY, OCTOBER 13TH

Registration

The registration and information table is in the 21c Museum Hotel lobby near guest check-in. It will be open Thursday, October 13th, from 9:00 AM to 4:00 PM.

Vendors and Exhibitors

8:00 AM to 5:00 PM in the Video Lounge and Gallery One.

Paper and Poster Presentations

See program for schedule

Student Paper Competition

Gallery Two 9:00 AM to 11:40 AM

Student Poster Competition

Gallery Four 1:20 PM to 3:40 PM

Thursday Evening Reception and Networking Event

The annual Thursday Night Reception will take place at the Oklahoma History Center (800 Nazih Zuhdi Dr, Oklahoma City) from 6:30pm to 8:30pm. This year, guests will be able to tour the exhibits and also participate in a networking event sponsored by the Oklahoma Public Archaeology Network (OKPAN), government agencies, and contract firms. Organizations and companies will have booths set up to advertise their excellent work and to speak with potential new hires. OKPAN will also have a poster session at this event entitled "From the Ground Up: Student-Led Efforts in Social Activism on the Great Plains."

This reception will be especially relevant for students and other conference attendees who are looking for new employment opportunities. Light refreshments and a selection of alcoholic and non-alcoholic beverages will be served complementary.

Thursday Evening Reception Transportation

Transportation from the 21c Museum Hotel to the Oklahoma History Center will be provided. The first bus arrives at the 21c at 6:00 PM and will leave at 6:15 PM. Subsequent buses will arrive/depart at: 6:15 PM/6:30 PM, 6:30 PM/6:45 PM, 6:45/7:00. The buses will leave the Oklahoma History Center at 7:45 PM, 8:00 PM, 8:15 PM, 8:30 PM to return to the 21c. Buses to and from the reception will not be continuous, they will only depart at these designated times, so please plan accordingly. Parking is also widely available and free at the Oklahoma History Center for those who would like to drive themselves.

FRIDAY, OCTOBER 14TH

Registration

The registration and information table is in the 21c Museum Hotel lobby near guest check-in. It will be open Thursday, October 14th, from 9:00 AM to 3:00 PM.

Exhibits, Vendors

8:00 AM to 5:00 PM in the Video Lounge and Gallery One.

Paper and Poster Presentations

See program for schedule

Student Workshop Lunch

12:00 PM to 1:00 PM in the Pool Bar

Open to all currently enrolled students. Lunch will be provided on a first-come, first-served basis!

So, You Want a Job?: A workshop for career preparations in archaeology and anthropology

Navigating a career path in anthropology or archaeology can seem daunting. This student-focused workshop, led by Graduate Coordinator for the Department of Anthropology at Wichita State, Dr. Crystal Dozier, will highlight different options and considerations for finding fulfilling (or, at least, paid) employment in the field. Topics covered will include a discussion on career options, marketable skills, application materials, and a discussion on choosing graduate pathways. The workshop will be tailored to the demographics of the participants and may include break-out activities.

Business Meeting

The annual business meeting of the Plains Anthropological Society is open to all society members from 4:00 PM to 5:00 PM in Gallery Three. This is open to all conference attendees, please consider attending to learn more about the society, its leadership, finances, and initiatives.

Second Board Meeting

The second Plains Anthropological Society Board of Directors meeting will take place at 5:00 to 6:00 PM Gallery Three.

Pre-Banquet Cash Bar

A cash bar will be set up after the business meeting at 6:00 PM in Gallery One.

Conference Banquet

The Conference Banquet will begin at 6:30 PM in the Main Gallery. Banquet tickets must have been purchased prior to the conference. Awardees for the Distinguished Service Award, Native American Student Award, Student Paper Competition, and Student Poster Competition will be announced. If you would like to attend the banquet presentation but did not purchase a ticket, please plan on arriving around 8:00 PM. Limited seating will be available.

SATURDAY, OCTOBER 15TH

Poster Sessions

See program for schedule.

Post-Conference Tour: The National Cowboy & Western Heritage Museum

The National Cowboy & Western Heritage Museum in Oklahoma City is America's premier institution of Western history, material culture, and art. Founded in 1955, the Museum exhibits an internationally renowned collection of art and objects that reflect the variety of peoples, cultures, and histories from the American West. This field trip includes lunch followed by a private behind the scenes tour of the collections and unlimited access to all galleries and grounds. While exploring on your own, you can tour the galleries and exhibits as well as the traditional Native American dwelling spaces.

The bus will leave from 21c at 11:45 AM near valet parking on the north side (W. Main Street) of the 21c and return at 2:45 PM.

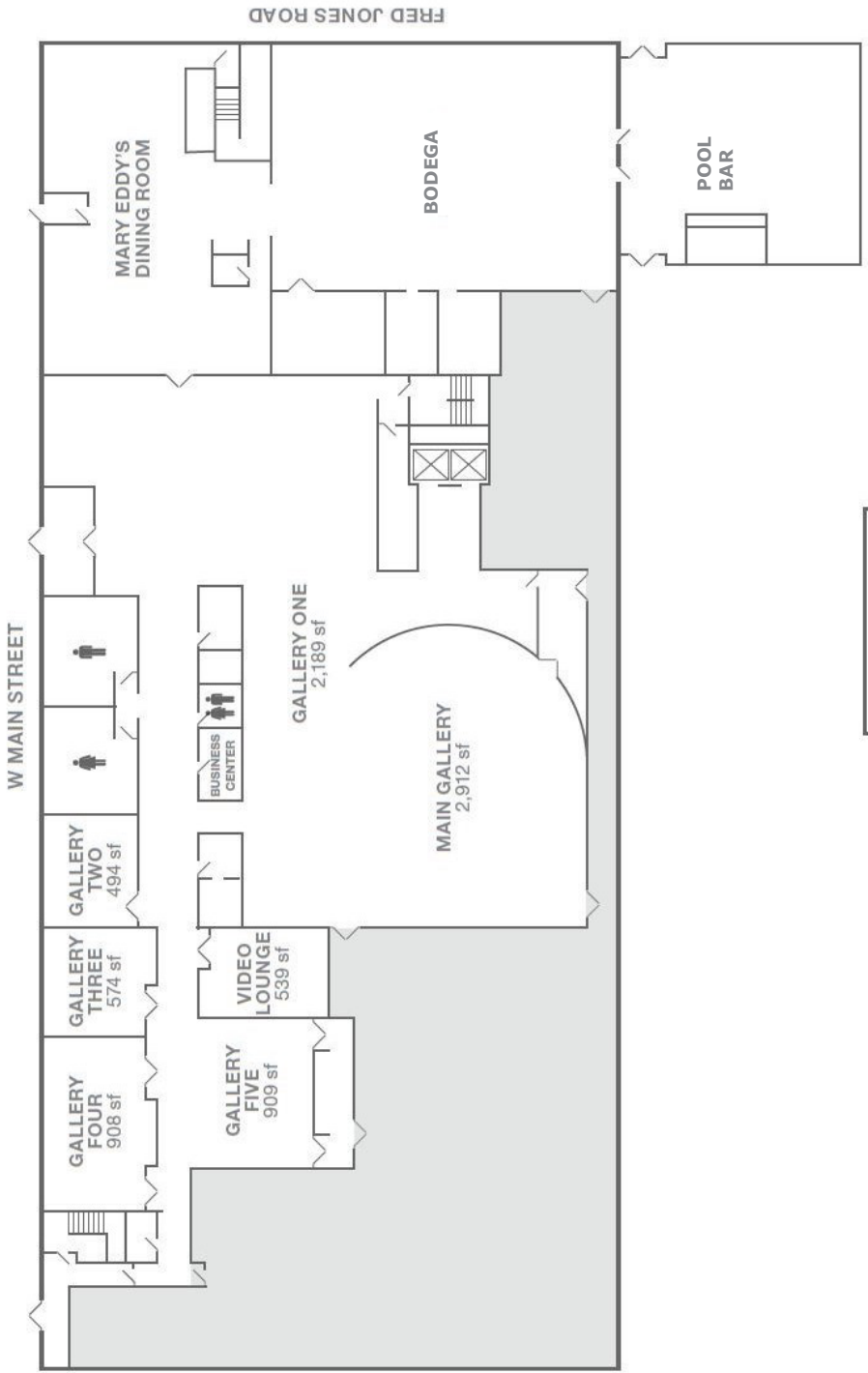
KEYNOTE SPEAKER

CHASE KAHWINHUT EARLES

Mr. Earles is a member of the Caddo Nation and a potter who uses traditional hand building and firing techniques to create art pieces that reflect his heritage while also drawing from pop culture. In Mr. Earles own words: "I also strive to present a new ceramic and sculptural interpretation from my own experiences and as my own artist but as an ambassador to my Caddo tribe and its ancient cultural identity." More information on his work can be found here: <https://www.caddopottery.com/about>



Chase Kahwinhut Earles will be giving a talk on the evolution of his Native art and how it pertains to the greater understanding of Southeast regional and national Native American art and culture. He will show how the previous underpinnings and ideas of archaeology in Native Art are slowly changing to give independence and ownership to the Native people in an area where there is a revival of almost lost cultural knowledge and how that is creating a new greater understanding and relevance of Native art and material.



PRESENTATION SCHEDULE

THURSDAY MORNING, OCTOBER 13, 2022

Session 1, Gallery Two

Symposium: *Student Paper Award Competition*

Organizer: Kacy Hollenback

- | | |
|-------------|--|
| 9:00-9:20 | Caitlin Calvert: <i>Prehistoric Occupation in an Area of the Colorado Piedmont as seen through Survey at Cherokee Ranch</i> |
| 9:20-9:40 | Michael W. Krause: <i>Settling in at the Cross Bar Ranch</i> |
| 9:40-10:00 | Kelsey R. Hoppes: <i>Lost in the Details: Identifying a Multicultural Settlement through Attribute-based Pottery Analysis in Northeastern Nebraska</i> |
| 10:00-10:20 | BREAK |
| 10:20-10:40 | Ariane E. Thomas, Matthew E. Hill, Jr., Chris Widga, Martin H. Welker, Andrew Kitchen: <i>Dogs in the Central Plains: an investigation of phenotypic variability among Pawnee, Dismal River, and Oneota cultures</i> |
| 10:40-11:00 | Arland L. Wallace, Crystal A. Dozier: <i>Experimental Recreation of a Pumpkin (Cucurbita spp.) Leather Mat</i> |
| 11:00-11:20 | Robert J. Madden: <i>Morphological Comparison of Prehistoric Colorado "Gaming Pieces" to Historic Native American Dice</i> |
| 11:20-11:40 | Jesse D. Brown: <i>The Manufacture and Maintenance of Stone Tools in a Middle Caddo Period Structure</i> |

Session 2, Gallery Three

General Session: *Paleoindian and Archaic*

- 9:00-9:20 Matthew E. Hill Jr., Erik Otárola-Castillo: *Were Paleoindians the Only Specialized Hunters? Comparing diet breadth and diversity among Great Plains Hunters*
- 9:20-9:40 Caitlin M. Baker: *Ravenscroft: Ritualism at a Late Paleoindian Bison Kill in the Oklahoma Panhandle*
- 9:40-10:00 Alanis N. Ramos Berrios: *Defining Activities at the Late Paleoindian Bull Creek Site (34BV176), Oklahoma Panhandle*
- 10:00-10:20 BREAK
- 10:20-10:40 Leland C. Bement: *Deep Thoughts from Bull Creek: Contributions of Paleoindian Archaeology to Hunter-Gatherer Studies*
- 10:40-11:00 Brian Andrews, Matthew Cuba, Andrew Boehm, David Meltzer: *Early Archaic Habitation Structures at the Gypsum Overlook Site, New Mexico*

Session 3, Gallery Four

General Session: *Central Plains and Midwest*

- 9:00-9:20 Kenneth L. Kvamme: *Geophysical Results from IMM Sites in Iowa and South Dakota*
- 9:20-9:40 Derick P. Juptner, Matthew E. Hill Jr.: *Dismal River Type Site in Southwestern Nebraska and their Implications for Early Apachean Occupations on the Central Great Plains*
- 9:40-10:00 Mary J. Adair: *Middle Woodland Maize Beer?*
- 10:00-10:20 BREAK
- 10:20-10:40 Jill D. Greer: *Sharp Elbows & Underwater Cat Monsters: Examining Tales and Iconography of Dangerous Beings in Mississippi Valley Siouan Cultures*

10:40-11:00 Steven A. Katz, Addison Kimmel, Elizabeth E. Wilk, Marcus Lewis: *Practical Approaches to the Challenges of Collaborative Archaeology*

THURSDAY AFTERNOON, OCTOBER 13, 2022

Session 4, Gallery Two

General Session: *Northern Plains*

1:40-2:00 Shawn Bubel, Bob Dawe, Kevin McGeough: *Recent Excavations at Head-Smashed-In Buffalo Jump, UNESCO World Heritage Site*

2:00-2:20 Lawrence Loendorf, Karen Steelman: *Radio carbon Dating Four Pictographs in Montana*

2:20-2:40 BREAK

2:40-3:00 Amanda A. Burtt, Larisa R.G. Desantis: *Village dog diets: Investigating the dietary behavior of dogs from the Angel and Mitchell sites with dental microwear texture analysis*

3:00-3:20 Richard A. Krause: *The Culture History Theory of Artifacts: Part 2*

Session 5, Gallery Three

Symposium: *Multi-Method Approaches for Understanding Ancestral Wichita Histories*

Organizer: Sarah Trabert

1:00-1:20 Goodmaster, Christopher, Alexandra Youner: *Recent Investigations at the Jewett Site (34GD81): A Late Prehistoric Plains Village in Grady County, Oklahoma*

1:20-1:40 Richard Drass: *The Little Deer Site and Wichita Plant Cultivation on the Southern Plains*

1:40-2:00 Sheila Bobalik Savage: *Zooarchaeological Remains from the Deer Creek (34KA3) Site, A Southern Plains Wichita Village*

2:00-2:20 Susan Vehik: *Human Remains in Little River Focus Council Circles*

2:20-2:40

BREAK

2:40-3:00

Donald J. Blakeslee: *Quivira: An Ethnohistory*

3:00-3:20

Brandi Bethke, Sarah Trabert, Gary McAdams:
*Using a Multi-Method Approach to Document 19th
and 20th Century Wichita Allotments*

Session 6, Gallery Four

Poster Symposium: *Student Poster Competition*

Organizer: Shawn Bubel

1:20-3:40

Kait M. Carter and Crystal A. Dozier: *Microfossil Analysis of a
Grinding Stone from the Etzanoa Archaeological Site*

Abigail E. Fisher: *Dog diet as a tool to assess forager response to
farmers on the northern Plains: stable isotope analysis data*

Alicia Lawson, Patrick Barchett, Johnathan R. Garcia, Finn Ken-
nison, Audrey Holbeck, Lu Ann A. Wandsnider: *A Missing Link:
Comparative Osteometrics of a Possible Transitional Bison Spe-
cies found in Eastern Nebraska to the Modern American Bison
(Bison bison) and the Ancient Bison (Bison antiquus)*

Caden P. Hooker, Aleah Kuhr, Bryn Sullivan, Kelsy Kreikemeier,
Spencer Little: *Of Rarified Air and Form: A Recently Recorded Ce-
ramic Vessel from Rocky Mountain National Park, Colorado*

Laura A. Johnson, Aidan P. Marler, Lydia S. Stednitz, Makayla T.
Williams, KC Carlson, Douglas B. Bamforth: *Springs and Plains
Village Period Sites: The Hydrogeography of Ponca Creek*

Andrew McDaniel: *Lynch 25BD1: Spatial distribution of lithic arti-
facts at northeastern Nebraska plains village*

Robbyn M.S. McKellop: *Great Bend Aspect Ceramics: A Cerami-
cist's View*

Daria A. Moore, Crystal A. Dozier: *Midden Mound Exploration at
14CO3*

Anikah Norton, Maile Rhea: *Spatial and Temporal Analysis of
Scored Bone Tools to Aid in Categorization and Contextualization*

Chelsea A. Reedy: *Food and Fortitude: A Story of Life Within Presidio San Saba as Told Through Zooarchaeological Analysis*

Ella Schrader, Lauren Dan, Emma Ostwinkle, Kristen Carlson, Doug Bamforth: *Recent Stratigraphic Findings at Site 25BD1*

Rachel M. Thimmig: *Anticipated Futures: Children at Crow-Flies-High Village*

Walton H. Zientek: *New Sources of Smoky Hill jasper in Nebraska*

THURSDAY NIGHT, OCTOBER 13, 2022

Session 7, Oklahoma History Center

Poster Symposium: *From the Ground Up: Student-Led Efforts in Social Activism on the Great Plains*

Organizer: Delaney Cooley, Meghan Dudley, and Horvey Palacios

6:30-8:30pm

Delaney Cooley, Horvey M. Palacios: *Publishing with Intent: an Activist Approach to Magazine Content Development*

Elisif Dorsey, Reagan Ballard: *Accessibility in Digital Spaces: Student-Led Research into Alternative Text Generation*

Meghan J. Dudley, Delaney Cooley, Allison McLeod, Horvey M. Palacios, Bonnie L. Pitblado: *From the Ground Up: Fostering Student Led-Efforts in Activist Archaeology through the Oklahoma Public Archaeology Network (OKPAN)*

Kaylyn Moore, Ryan Spring, Kim Hinson, Kieland Jim: *Co-creating Holistic Lesson Plans for 9th Oklahoma Classrooms*

Kaylyn Moore, Bobi Deere, Reagan Bieligk, Rita Hawzipta: *Voices of the Osage: Oklahoma Public Archaeology Network Internship for High School Students 2022*

Abigail S. Sempebwa: *Education as Activism: Addressing the Minority Absence within the Archaeological Field*

Amber N. Vinson, Elijah C. Whalen: *Community Collaboration in Archaeology: Co-Creating an Indigenous Archaeology Day with the Choctaw Nation*

FRIDAY MORNING, OCTOBER 14, 2022

Session 8, Gallery Two

General Session: *Southern Plains*

- | | |
|-------------|--|
| 9:00-9:20 | Karl W. Kibler: <i>Eolian Landforms Mantling Alluvial Surfaces in Central and Western Oklahoma and Their Archeological Potential</i> |
| 9:20-9:40 | Leland C. Bement, Brandi Bethke, Jennifer M. Haney, Alanis Ramos Berrios, Caitlin Baker: <i>The 2022 Excavation at the Late Holocene Age Golden Eagle Site, Black Mesa, Oklahoma</i> |
| 9:40-10:00 | Christopher Lintz, Paul Katz: <i>Preliminary Comparison of Alibates Chert Quarry Procurement North and South of the Canadian River</i> |
| 10:00-10:20 | BREAK |
| 10:20-10:40 | Britt Bousman: <i>A Reanalysis of Middle Ceramic Settlement and Climate in the Southern Plains</i> |
| 10:40-11:00 | Debra Green, Jennifer M. Haney: <i>Archaeological and Geoarchaeological Investigations along Little Beaver Creek in Kay County, Oklahoma</i> |
| 11:00-11:20 | Scott Hammerstedt, Patrick C. Livingood, Amanda L. Regnier: <i>Using Geophysical Survey to Identify Social Landscapes at Spiro</i> |

Session 9, Gallery Three

General Session: *1800s-Present*

- | | |
|-----------|---|
| 9:00-9:20 | Adam S. Wiewel, Lance Foster, Steven L. De Vore, John R. Bozell: <i>A Geophysical Survey at Nohart, a 19th-century Iowa Tribe Town in Nebraska and Kansas</i> |
|-----------|---|

9:20-9:40	Dave Williams, Judi Gaiashkibos, Jim Peters: <i>Recent Efforts to Relocate the Genoa Indian Industrial School Cemetery</i>
9:40-10:00	John R. Bozell, Carl R. Falk, Robert E. Warren: <i>Animal Bone and Shell from Chinatown District Investigations in Deadwood, South Dakota</i>
10:00-10:20	BREAK
10:20-10:40	Danny Walker: <i>Archaeological Testing of the 1879 Waterwheel at Fort Laramie National Historic Site, Wyoming</i>
10:40-11:00	Amanda L. Regnier: <i>Geophysical and Archaeological Investigations of the Laundress Quarters at Fort Gibson Historic Site</i>
11:00-11:20	Kent J. Buehler: <i>Hollow Victory: The Kirsten Hatfield Case</i>

Session 10, Gallery Four

Poster Symposium: *A Hell of a Gap: Past and Current Research at the Hell Gap Site*

Organizer: Robert A. Barlow

9:00-11:20

Dakota R. Buhmann: *"Colored Perspectives" Preliminary Status of Hell Gap Oral Histories*

Colby Carmin, Elizabeth Lynch, Rob Barlow: *Understanding User experiences in the virtual reality app of the Hell Gap National Historic Landmark, Guernsey, Wyoming*

William J. Carrol, Jacob C. Cropper, Justin Wood: *Evidence of Activity Area at Hell Gap*

Gannon T. Guenther, Clifford White, Marcel Kornfeld, Robert Barlow: *Introduction and General Overview of the 2022 Hell Gap Field Season*

Ken L. Hladek, Molly A. Heron, Gannon T. Guenther, Jacob C. Cropper, Justin Wood, Dakota Buhmann, Scott Wheeler, Colby R. Carmin, Clifford White, Rachael Shimek, Rob Barlow, Marcel Kornfeld: *Experimental Archaeology at the Hell Gap Advanced Field School of 2022: Stone Pit Boiling and Marrow Extraction*

Elizabeth M. Lynch, Robert Barlow, Marcel Kornfeld: *Preserving Hell Gap Archaeology: 3D modeling of projectile points using AR-TEC Space Spider*

Falon A. Norford: *Why Do We Keep Blurry Photos?: An Exploration of Hell Gap Digital Archival Practices*

Clifford L. White, Pierson S. Linde, Lori Rayner, Rachael L. Shimek, Molly Heron, Marcel Kornfeld: *Paleoindian Bone Needles: Expanding Our Understanding of the Past*

FRIDAY AFTERNOON, OCTOBER 14, 2022

Session 11, Gallery Two

General Session: *Ancestral Arikara and Pawnee*

1:20-1:40 KC (Kristen) Carlson, Douglas Bamforth: *Investigating Site Structure and Occupational History At 25BD1, in Lynch NE*

1:40-2:00 Carlton Gover, Douglas Bamforth, Kristen Carlson, Erick Robinson: *The Seeds of Ethnogenesis: An Indigenous Archaeology of Central Great Plains Village Formation*

2:00-2:20 Steven Holen, Roger Echo-Hawk: *A Ceremonial Lodge at the Central Plains Tradition site, 25NC29 in central Nebraska: Some Preliminary Observations Concerning Early Pawnee Ceremonial Development*

2:20-2:40 BREAK

2:40-3:00 Margaret Beck, Brandi L. MacDonald, Jeffrey R. Ferguson, Mary J. Adair: *Red pigment in the Central Plains: A Pawnee case at Kitkahahki Town*

3:00-3:20 Nolan Johnson, Matt Reed, Stacy Stupka:
*When Archeology Meets the Road: Testing
at 25PT1 for an NDOT Bridge Replacement*

Session 12, Gallery Three

Symposium: *Celebrating a Public Archaeologist: Remembering
Fern E. Swenson*

Organizer: Stephen M. Perkins

1:00-1:20 Stephen M. Perkins: *Discussant*

1:20-1:40 Mark D. Mitchell: *Fern E. Swenson's
Contributions to Plains Village Research in
North Dakota*

1:40-2:00 Timothy A. Reed, Meagan G. Schoenfelder:
*A Leader of Archaeology and Historic
Preservation in North Dakota: In
Remembrance of Fern E. Swenson*

2:00-2:20 Brooke M. Morgan: *Viewing Old Collections
with New Eyes: Reexamining Smithsonian
Institution River Basin Surveys Material from
the Heart River Region, North Dakota*

2:20-2:40 BREAK

2:40-3:00 Paul R. Picha: *From Mille Lacs to the
Mandans: Reflections on a Forty-five Year
Friendship with Fern E. Swenson*

3:00-4:00 Rememberances from the Audience (Open)

Session 13, Pool

Student Workshop and Lunch: *So, You Want a Job?: a workshop
for career preparations in archaeology and anthropology*

Organizer: Student Affairs Committee

12:00-1:00 Crystal Dozier: *Discussant*

Open to all currently enrolled students.

Lunch will be provided on a first-come, first-served basis!

SATURDAY MORNING, OCTOBER 15, 2022

Session 14, Gallery Two

Poster Symposium: *Report on 2022 Excavations at Spiro*

Organizer: Patrick Livingood, Amanda Regnier, Scott Hammerstedt

9:00-11:00

Patrick C. Livingood, Amanda L. Regnier, Scott W. Hammerstedt: *Overview of 2022 Excavations at Spiro*

Regan E. Crider, Lillian T. Eades, John E. Hueffed, Scott W. Hammerstedt: *Preliminary Comparison of Ceramics from Two Excavation Blocks at Spiro*

Emilee E. Henson Tiger, Kara N. Johnson, Kim D. Frey, Donald H. Andrews, Jefferey T. Lewis: *Preliminary Lithic Analysis of House 24 and 22 Block 1 at Spiro*

Lanah M. Hinsdale, Gregory Plank, Amanda L. Reignier, Patrick Livingood: *A Preliminary Comparison of Ceramics Between 2022 Excavations and Other Spiro Locations*

Session 15, Gallery Three

General Poster Session: *Human-Animal Interactions*

9:00-11:00

Ryan P. Breslawski: *Geographic Variability in Climate Stress on Middle Holocene Bison*

Meghan J. Dudley, Lauri Travis: *Contextualizing Bighorn Sheep Drives in the Precontact Northern Rocky Mountains of Montana*

Amy M. Gillaspie, Natalie A. Patton: *The Jones-Miller Site Collection: The Next 50 Years*

Kristen M. Rayfield, Erin Keenan Early, Karissa Hughes, Robin Singleton, Sara Williams, Brandi Bethke, Courtney Hofman: *Taxonomic Resolution of Plains Zooarchaeology through ZooMS*

Chance Ward, Brandi Bethke, Sarah Trabert, Emily Lena Jones, William Taylor: *Archaeozoology and the Human-Horse Story in the Northern Plains*

Session 16, Gallery Four

General Poster Session: *Central and Southern Plains*

9:00-11:00

Donald H. Andrews: *A Preliminary Analysis of Quartzite from Site 34CI494*

Nicholas H. Beale, Greg J. Maggard, Mark Latham: *Excavations at the Jumper Creek Site in Central Oklahoma*

Steven L. De Vore, Lance Foster, Adam S. Wiewel, John R. Bozzel: *Search for Great Nemaha Subagency (25RH143), Nohart, Richardson County, Nebraska*

Cameron Ditore, Lila Jones, Eileen Johnson: *Venetian Dreams: Glass Trade Beads from a Historic Site on the Southern High Plains of Texas*

John E. Hueffed: *Preliminary Results of the Ceramic Analysis of School Land I Site (34DL64), Delaware County, Oklahoma*

Haley Rush, John Dockall, Alexander Menaker, Kristin Benson, August Costa, Charles Frederick, Jodi Jacobson, Leslie Bush: *Results from Excavations at 34TU220, Tulsa County, OK*

Session 17, Video Lounge

General Poster Session: *Scientific Methods in Plains Archaeology*

9:00-11:00

Margaret E. Beck: *Red Pigments in the Midcontinent*

Alison Hadley, Alfred Addo-Mensah: *Residue Analysis of Tubular Stone Pipes from South Texas*

Jeremiah M. Perkins: *Analyzation of Contact Period Glass Beads at Deer Creek (34KA3)*

Trista Wilmot: *Creating a Catalog of Archaeological Artifacts in the Collection of the Department of Humanities & Philosophy at the University of Central Oklahoma*

ABSTRACTS

SYMPOSIA

Session 5, Gallery Three

Symposium: *Multi-Method Approaches for Understanding Ancestral Wichita Histories*

Organizer: Sarah Trabert

The Wichita and Affiliated Tribes, while based in Anadarko, Oklahoma today, once lived across a large territory including what is now parts of Kansas, Oklahoma, Texas, New Mexico, and Arkansas. Their history in this territory covers thousands of years and has been studied extensively by anthropologists and historians. This session brings together a sample of researchers who are actively working on ancestral Wichita sites and material culture to present new details on Wichita archaeology, from 700 years ago through to the present. Each presentation will highlight different data sets that contribute to our collective understanding of the Wichita's long-term histories, including site feature analysis, paleoethnobotany, zooarchaeology, mortuary analysis, ethnohistory, landscape archaeology, and ethnographic interviews.

Session 7, Oklahoma History Center

Poster Symposium: *From the Ground Up: Student-Led Efforts in Social Activism on the Great Plains*

Organizer: Delaney Cooley, Meghan Dudley, and Horvey Palacios

Archaeology is in the midst of a decades-long revolution that recognizes the discipline's responsibility and potential to engage in social activism. Increasingly, students are learning to incorporate collaborative and activist approaches to their research designs, capable of addressing contemporary issues of social activism. Student-led projects on the Great Plains have the power to contribute meaningful discussions in a region where collaboration is still growing as a tool for inclusivity in the discipline and to the communities we serve. In this session, we create a space for the next generation of professional archaeologists to highlight their work as activist archaeologists.

Session 10, Gallery Four

Poster Symposium: *A Hell of a Gap: Past and Current Research at the Hell Gap Site*

Organizer: Robert A. Barlow

Since the 1960s, research emphasis at the Hell Gap site has focused on the stratified deposits and cultural chronology. Recent contributions, however, include a variety of anthropological and experimental studies. This symposium combines the result of recent (2022) field and laboratory investigations with the latest effort to digitally archive the archaeological records including creation of 3D models of recovered objects, development of oral histories from the 1960 field crews, an inventory of user experiences for Hell Gap virtual site tours, and comparative experiments to enhance archaeological inferences.

Session 12, Gallery Three

Symposium: *Celebrating a Public Archaeologist: Remembering Fern E. Swenson*

Organizer: Stephen M. Perkins

With the passing of Fern Swenson in April of 2022, the Plains archaeological community lost one of its most capable and consequential members. As North Dakota's chief archaeologist and the director of the Archaeology and Historic Preservation Division, Fern energetically combined her own excellent scholarship with significant public outreach in becoming the leading proponent and steward of North Dakota archaeology over the last thirty years. Fern's tangible accomplishments serve as a model of what a dedicated and talented state archaeologist can achieve: facilitating meaningful collaborative relations between archaeologists and Native descendant communities; mentoring young scholars; preserving state archaeological sites; garnering state and national money to better promote Native heritage and archaeology for the public's benefit. Unassuming and understated as she was, this symposium will honor Fern Swenson's considerable legacy.

Session 14, Gallery Two

Poster Symposium: *Report on 2022 Excavations at Spiro*

Organizer: Patrick Livingood, Amanda Regnier, Scott Hammerstedt

Two areas at Spiro were excavated in summer 2022 by the University of Oklahoma Field School. Although the excavations and lab work are not complete, the preliminary results seem to indicate these two blocks are special purpose structures, likely dating to the Harlan Phase (AD 1050-1200). Student participants in the field school created posters based on the 2022 data. This symposium will collect four posters to discuss the 2022 work, one overview by the Principal Investigators, and three papers primarily authored by the students.

PAPERS AND POSTERS

Adair, Mary J. (University of Kansas). *Middle Woodland Maize Beer?*. Brewing to make an intoxicant is almost universal among groups who cultivated grains and beer made from starchy grains was one of the most widely consumed alcoholic beverages in the ancient world. But in North America, evidence for this practice is limited and often reduced to suggestion. Microbotanical evidence for maize use during the Middle Woodland period of the eastern central Plains identifies the use of this grain centuries before it became a dietary contribution. Diagnostic starch and phytolith grains are identified on grinding tools, absorbed within the ceramic fabric, lodged within ceramic residue, and within dental calculus. Using modern day Peruvian chicha beer practices, along with knowledge of malting, mashing, and fermentation stages of brewing beer, the Middle Woodland data could be interpreted to represent the manufacture and consumption of a fermented drink. As part of a ritual, a fermented drink could have strengthened social ties and political boundaries.

Andrews, Donald H. (University of Oklahoma). *A Preliminary Analysis of Quartzite from Site 34CI494*. This poster presents a preliminary analysis of lithic recovery from site 34CI494, a Dakota Quartzite quarry in the Black Mesa area of the Oklahoma Panhandle. An excavation of a 1x1 test unit adjacent to a large quartzite boulder revealed an area of lithic reduction with an approximate total of 3,500 pieces of flaking debris. Mass analysis was performed on the assemblage, with select individual attributes analyzed as well. Experimental flaking debris were used as a comparative collection. Geological analysis of the stone will also be performed. The goal of this study will be to determine the strategy of resource extraction and activity intensity. The results indicate that the site consists of primarily early-stage reduction with hard percussion tools. It appears the goal was to extract usable tool blanks in the 2 inch size range and larger.

Andrews, Brian (Rogers State University), **Matthew Cuba** (AmaTerra Environmental, Inc.), **Andrew Boehm** (University of Oregon Museum of Natural and Cultural History), **David Meltzer** (Southern Methodist University). *Early Archaic Habitation Structures at the Gypsum Overlook Site, New Mexico*. The Gypsum Overlook site is located on the White Sands Missile Range near Alamogordo, New Mexico, situated on a relict dune ridge on the eastern margin of Paleo-lake Otero. Radiocarbon dates indicate the site is Early Archaic in age. Features at the site include at least five small burn features thought to be hearths and three

larger, superimposed basin shaped features thought to be the remnants of habitation structure floors. In addition to these features, there are also numerous chipped stone tools, and a significant number of ground stone tools (which are some of the earliest in the region). The presence of ground stone tools and habitation structures suggests that the site likely served as a camp for the collection and processing of plant materials growing in the marshy remnants of nearby Paleo-lake Otero.

Baker, Caitlin M. (University of Oklahoma). *Ravenscroft: Ritualism at a Late Paleoindian Bison Kill in the Oklahoma Panhandle*. Ravenscroft is a late Paleoindian arroyo bison kill located by the Beaver River in the Oklahoma Panhandle. In 2019, two stacks of bison skulls were uncovered at the mouth of the arroyo. The majority of the skulls were missing mandibles, with the exception of one. None of the skulls exhibited bashing, suggesting they were not set aside for brain removal. Further complicating interpretations of purpose were the returned radiocarbon dates. While most skulls dated to the middle kill event in the arroyo, the uppermost skull dated to the events in an arroyo less than 10 m away. These skulls span over 200 years of history, implying a much more complex purpose than subsistence or stockpiling. This paper explores the potentially ritualistic aspects of this site and attempts to explain the purpose of the stacked skulls.

Nicholas H. Beale (Oklahoma Department of Transportation), **Greg J. Maggard** (Oklahoma Department of Transportation), **Mark Latham** (Burns & McDonnell). *Excavations at the Jumper Creek Site in Central Oklahoma*. The Jumper Creek site (34SM87) represents the remains of a Late Archaic to Early Woodland camp located on a high terrace near the Canadian River in Seminole County, Oklahoma. Excavations at the site revealed a relatively deeply buried concentration of burned-rock cooking and/or roasting features (n=23) that frequently contained charred hickory nutshell. AMS dates from the site are suggestive of repeated occupations between ca. 4400-2400 cal BP. A relatively large and diverse lithic assemblage that includes a wide variety of projectile point types, other tool forms, and non-local raw materials—including obsidian from sources in Wyoming and Idaho—was also present at the site. Analysis of the features and artifact assemblage from Jumper Creek are providing new insights regarding the mobility and subsistence of Late Archaic and Early Woodland occupations in the Cross Timbers region of Central Oklahoma.

Beck, Margaret E. (University of Iowa). *Red Pigments in the Midcontinent*. Earthen pigments (ochre) appear throughout the Great Plains and Midwest in multiple geological contexts. Here I describe the growing archive of red ochre samples at the University of Iowa, collected for comparison with archaeological paints and ceramic slips. The display includes examples of unprocessed geological samples and processed pigments and paints.

Beck, Margaret (University of Iowa), **Brandi L. MacDonald** (University of Missouri), **Jeffrey R. Ferguson** (University of Missouri), **Mary J. Adair** (University of Kansas). *Red pigment in the Central Plains: A Pawnee case at Kitkahahki Town*. James Murie, early twentieth century ethnographer and member of the Pawnee Nation, once wrote that the “things that are most acceptable to the Pawnee gods are smoke, fat, paint, and flesh” (Murie 1981:466). Here we describe red paint at Kitkahahki Town, a late eighteenth–early nineteenth-century Kitkahahki Pawnee village in north-central Kansas. Using laser ablation inductively coupled plasma mass spectroscopy and Raman spectroscopy, we compare archaeological paint and pigment samples to three pigment materials – pipestone powder, vermilion, and ochre – all documented in the Great Plains after European colonization. We ultimately find no evidence of pipestone powder or vermilion as pigment at Kitkahahki Town and conclude that ochre (some of which may be from the Lower Cretaceous Dakota formation) is the most likely pigment material at the site. Ochre may have been especially significant because of links between this earth pigment and Pawnee sacred geography.

Bement, Leland C. (Oklahoma Archeological Survey), **Brandi Bethke** (Oklahoma Archeological Survey), **Jennifer M. Haney** (Oklahoma Archeological Survey), **Alanis Ramos Berrios** (University of Oklahoma), **Caitlin Baker** (University of Oklahoma) *The 2022 Excavation at the Late Holocene Age Golden Eagle Site, Black Mesa, Oklahoma*. The 2022 excavation at the late Holocene age Golden Eagle site in Cimarron County, OK, concentrated on uncovering a pithouse first detected during the 2021 field season. Excavations also ground-truthed anomalies imaged by gradiometer survey in areas away from the pithouse. A third area of investigation centered on a mud mortared rock wall buried in the Cimarron River terrace along the eastern edge of the site. Recent radiometric and preliminary artifact and paleoethnobotanic results are presented to help build a context for these discoveries that, among other things, refine cultural identities for this area on the fringe of the southern Plains.

Bement, Leland C. (Oklahoma Archeological Survey). *Deep Thoughts from Bull Creek: Contributions of Paleoindian Archaeology to Hunter-Gatherer Studies*. North American Paleoindian studies are often hampered in contributing to broad hunter-gatherer theories because of low site numbers of limited site types, low density of contemporaneous sites and activity areas, and poor preservation of organic remains other than large mammal bones. A single site seldom informs on more than one dominant activity limited to a narrow season of the year. By combining the results of analyses at the multiple winter large-scale bison kills at the Ravenscroft site with the contemporaneous and close proximity winter and summer occupations at the Bull Creek camp, an argument is made for the presence of social structures related to prestige hunting and costly signaling at 10,300 cal BP. This conclusion has implications for interpreting the social setting of large-scale hunting activities of earlier Paleoindian groups, including those of Folsom and Clovis cultures on the Southern Plains where non-large-scale-kill affiliated camps are scarce.

Bethke, Brandi (Oklahoma Archeological Survey), **Sarah Traibert** (University of Oklahoma), **Gary McAdams** (Wichita and Affiliated Tribes). *Using a Multi-Method Approach to Document 19th and 20th Century Wichita Allotments*. The Allotment Period (1887-1934) was a time of devastating change for Native American Tribes in the U.S. as their communally held lands were divided, land was sold to non-natives, and federal policies attempted ethnocide. While the lands may have been divided, these policies were not successful. Communities like the Wichita and Affiliated Tribes found creative ways to resist programs of forced acculturation and convert their divided lands into places where they could continue their cultural practices. We will present the results of our second year of a multi-year collaborative project with the Tribe where we use a variety of methods to fully record Wichita gathering spaces and allotment farmsteads. By combining archival research, community interviews, pedestrian surveys, high-precision mapping, and remote sensing we can document the complexities of these places and challenge traditional assumptions of allotment-era cultural loss and assimilation.

Blakeslee, Donald J. (Wichita State University). *Quivira: An Ethnohistory*. Close analysis of historical documents can provide insights into native cultures in spite of colonial biases and outright fabrications. This presentation reviews early Spanish and French documents for information regarding Quivira. They reveal that people from the Colorado River to Florida knew about Quivira, that it provided bison meat, robes, horns, and rawhide to both

the pueblos of the Southwest and the Mississippian towns of the Southeast, and that the trade that was facilitated in the western half of the continent by a Nahuatl-based lingua franca.

Bousman, Britt. (Texas State University). *A Reanalysis of Middle Ceramic Settlement and Climate in the Southern Plains*. Previously Lintz proposed that the Middle Ceramic (MC, aka Antelope Creek) Phase in the Texas and Oklahoma panhandles began with large village settlement then shifted to smaller homesteads, and this shift was correlated to climatic changes. Following Duffield (1970) he suggested that the climate during the MC began with a wet phase followed by drier conditions. Duffield based this on a shift from hunting bison to deer at Antelope Creek sites in the Canadian River valley in Texas. Lintz recognized that Duffield's climatic reconstruction needed to be confirmed but at that time it was the only climatic sequence available for the MC. The North American Drought Atlas now provides tree-ring reconstructions of Palmer Drought Severity Indices (PDSI) for the Southern Plains. This new climatic record conflicts with Duffield's climatic interpretations. This climatic sequence allows for a reevaluation of the Lintz scenario of Middle Ceramic responses to climate change.

Bozell, John R. (History Nebraska, Retired State Archeologist), **Carl R. Falk** (Paleocultural Research Group), **Robert E. Warren** (Illinois State Museum, Emeritus Curator). *Animal Bone and Shell from Chinatown District Investigations in Deadwood, South Dakota*. The South Dakota Archaeological Research Center conducted excavation during 2001-2003 in the Historic Chinatown District of Deadwood. The project was sponsored by the City of Deadwood under the overall direction of Rose Fosha. The investigation produced over 7000 identifiable animal bones and a smaller, yet more diverse, sample of mostly exotic marine shells. The identified bone assemblage is dominated by the usual suspects from a historic urban setting—domestic swine, cattle, sheep, and poultry—but the sample also includes limited numbers of native (catfish) and non-native fish (salmon, mackerel, cod, and carp), turtle, small mammals (including domestic cat), deer, and pronghorn. The shell sample consists of 81 specimens and nearly 90 percent are marine species (Atlantic and Indo-Pacific) including oysters but also many objects that were likely exotic collectables. While it is not clear if all the material is directly associated with Chinese residents, the sample provides a useful glimpse at early urban subsistence in the Black Hills.

Breslawski, Ryan P. (Southern Methodist University). *Geographic Variability in Climate Stress on Middle Holocene Bison*.

Existing archaeological evidence suggests that the Middle Holocene was a time of subsistence reorganization across the Great Plains. This may have been due in part to declining bison populations, a trend that was likely most severe on the Southern Plains. This poster examines evidence for regional variability in climate stress on Middle Holocene bison populations through an analysis of enamel defects in 193 third molars from 15 sites ranging from West Texas to the Canadian Prairies. The Middle Holocene data are compared against a sample of 296 third molars from eight Early Holocene sites. Incidences of linear enamel hypoplasia are inconsistent with higher stress both on the Southern Plains and during the Middle Holocene. However, other indicators, such as aberrant and excessive wear, are consistent with expectations.

Brown, Jesse D. (Texas State University). *The Manufacture and Maintenance of Stone Tools in a Middle Caddo Period Structure*. The Bois d'arc Lake archaeological project was carried out by AR Consultants in coordination with the Caddo Nation of Oklahoma, the Texas Historical Commission, and the Tulsa district of Army Corps of Engineers to determine the National Register eligibility of Site 41FN244. Funded by the North Texas Municipal Water District, mitigation efforts to test the integrity of the material remains of site 41FN244 identified seven Activity Areas across a terrace overlooking the Bois d'arc Creek. Block excavations of Activity Area 3 identified and recovered cultural materials associated with a potential house structure dating to the Middle Caddo Period (A.D. 1200—1400). The diverse assemblage of flake, bifacial, and groundstone technologies within this domestic space are spatially distributed as an amalgamation of multiple manufacture and maintenance events. My research aims to define the organization of household activities by identifying the habitual workspaces commonly used within the structure area.

Bubel, Shawn (University of Lethbridge), **Bob Dawe** (Royal Alberta Museum), **Kevin McGeough** (University of Lethbridge). *Recent Excavations at Head-Smashed-In Buffalo Jump, UNESCO World Heritage Site*. The University of Lethbridge, in partnership with the Royal Alberta Museum and Head-Smashed-In Buffalo Jump Interpretive Centre, held two archaeological field schools in 2021 and 2022. The research goals of the project were threefold. The first was to re-open parts of the Processing Area that had been previously excavated to gain access to significantly older occupation layers. The second was to test deposits in the Spring Channel Area where Paleoindian points were found out of context decades ago to see if excavations would yield stratigraphically separable materials. The third involved surveying the site, both to

attempt to tie together excavation areas from the past 80 years of research and to determine the extent of site damage due to animal activity. We will report on these research activities and our preliminary results, highlighting the cultural remains we unearthed that span almost 10,000 years of activity at the site.

Buehler, Kent J. (Crime Scene Archaeology Recovery Group). *Hollow Victory: The Kirsten Hatfield Case*. On the night of May 13, 1997, eight-year-old Kirsten Hatfield was abducted from her bedroom never to be seen again. Bloodstains on the windowsill and on an article of her clothing left in the backyard would come into play many years later, leading to the arrest and conviction of her murderer in a rare “no body” case. But despite inspired investigative work by law enforcement and multiple archaeological searches, Kirsten’s remains have never been found. The twenty-plus year timeline of the case is presented including some surprising twists and turns ultimately leading to legal justice coupled with the feeling of a mission unfulfilled.

Buhmann, Dakota R. (University of Wyoming). “*Colored Perspectives*” *Preliminary Status of Hell Gap Oral Histories*. Mary Hedgcock, a Hell Gap Alumna, is quoted, saying “Colored my perspective on life for the rest of my life,” about her time excavating at the Hell Gap site north of Guernsey, Wyoming. Archeological experiences change people and make deep connections that narrators never forgot, even sixty years after their time on the site ended. In an effort to preserve the thoughts and experiences of individuals who excavated at Hell Gap in the 1960s, I have been interviewing the excavators. These oral histories strive to document those who have experienced Hell Gap, making it more than a National Historic Landmark. The voices of people who lived at this location give a new dimension of wonder and discovery that comes with the location. Hell Gap does not just shape our understanding of prehistory; in many cases, it changed the future of individuals who have worked there, coloring perspectives decades later.

Calvert, Caitlin (Metropolitan State University of Denver). *Pre-historic Occupation in an Area of the Colorado Piedmont as seen through Survey at Cherokee Ranch*. Beginning in 2014 Metropolitan State University of Denver has conducted survey and excavation field schools on the property of the Cherokee Ranch and Castle Foundation, near Sedalia, CO, in the Platte River Basin. The field school having surveyed an area of approximate 780 acres, largely prairie and rolling hills along the southern boundary of the property, this paper is intended to analyze the information

gathered from the sites and isolated finds identified and recorded during the surveys. This work has yielded evidence for extensive regular occupation of this area in prehistoric times, with surface sites having lithic evidence dating to the Early Archaic Period up through to the Middle Ceramic Period, and excavations at a rock shelter on the property support this occupation range, further extending it into the Protohistoric Period, giving evidence to nearly continuous use of the area from ca. 7,500 BP onward.

Carlson, KC (Kristen) (Augustana University), **Douglas Bamforth** (University of Colorado Boulder). *Investigating Site Structure And Occupational History At 25BD1, in Lynch Nebraska*. 25BD1 in Lynch Nebraska is an immense 13th and 14th century Plains Village site on Ponca Creek in northeastern Nebraska occupied by ancestors of the modern Pawnee and Arikara nations; representatives of the Pawnee Nation are regular collaborators to the work at the site. Research over the past few years by Augustana University and the University of Colorado Boulder has focused on substantial collections from excavations in 1936 and 1959 and on new fieldwork designed to document the site's condition and refine our understanding of its occupational history. Work in 2022 involved coring to document site stratigraphy, extensive geophysical survey, and a block excavation adjacent to one of the 1936 trenches. Geophysical work significantly expanded our understanding of the density and distribution of possible houses and other features on the site and excavation identified a previously undocumented archaeological level that appears to date close to.

Carmin, Colby (University of Wyoming), **Elizabeth Lynch** (University of Wyoming), **Rob Barlow** (University of Wyoming). *Understanding User experiences in the virtual reality app of the Hell Gap National Historic Landmark, Guernsey, Wyoming*. The Hell Gap VR application creates a user-defined tour of the landscape and excavations at the National Landmark. The primary goal of the project is to promote Wyoming Cultural Heritage by providing educational opportunities for K-12, post-secondary students, and the general public, improving citizen access to the site in the off-season, and enriching scientific research through enhanced visualization. Our VR project asks how we can encourage knowledge of the past or cultural heritage by creating broad access to a site. Our paper analyzes feedback from participants in the VR app at the Wyoming Archaeology Fair (2021 and 2022). Results indicate a wide range of experiences that will help us to refine the full VR museum experience.

Carrol, William J. (University of Wyoming), **Jacob C. Cropper** (University of Wyoming), **Justin Wood** (University of Wyoming). *Evidence of Activity Area at Hell Gap*. The 2022 excavation at Hell Gap Locality I on included the systematic recovery of an antler tine, as well as associated chipped stone tools and debitage. This apparent cluster of chipped stone tools consists of two side scrapers, two end scrapers, at least one of which indicates hafting, and two bifaces. One of the bifaces was recovered in two halves found 20 cm apart. The cluster also contains chert flakes and debitage, suggesting manufacturing of stone tools occurred as well. Our hypothesis is that the artifacts recovered indicate an activity area and that the antler tine may have been used in chipped stone production. Distribution of the debitage and chipped stone tools, wear on the antler tine, experimental chipped stone tool production, and a comparison with antlers found at comparable sites all provide evidence that the cluster of artifacts represents a portion of a living floor, an in situ activity.

Carter, Kait M. (Wichita State University), **Crystal A. Dozier** (Wichita State University). *Microfossil Analysis of a Grinding Stone from the Etzanoa Archaeological Site*. The archaeological site known as Etzanoa (14CO3), also referred to as the Arkansas City Country Club Site, was established by the Ancestral Wichita

from roughly 1450 to 1715 CE along the Walnut River in Southern Kansas. In the summer of 2021, a metate, a type of ground stone tool that was used to process foodstuff, was excavated from the site. To better understand the food processing that transpired among the Ancestral Wichita, samples were taken from the metate and microfossil analysis was conducted on them to determine the types of residues present on the artifact. Microfossil analysis is a useful method for understanding the food processing of ancient societies and is an insightful study in food pathways. This poster presents preliminary results of the study and interpretations.

Cooley, Delaney S. (University of Oklahoma), **Horvey M. Palacios** (University of Oklahoma). *Publishing with Intent: an Activist Approach to Magazine Content Development*. The Oklahoma Public Archaeology Network (OKPAN) publishes the OKPAN Quarterly, an online magazine about history and heritage relevant to the communities living within the state of Oklahoma. Magazines like this are powerful science communication tools that bring research into the spaces of everyday life. As such, the initiative is run exclusively by students with the philosophy that publication outlets must embrace an activist approach to the editorial process and

content development. To achieve this goal, we collaborate with individuals of diverse communities and researchers participating in community-engaged approaches. By centering these stories, we hope to encourage future collaborations and increase the visibility of issues important to marginalized communities amongst public audiences. This poster highlights the magazine's internal organization and strategy for partnership building and content development.

Crider, Regan E. (University of Oklahoma), **Lillian T. Eades** (University of Oklahoma), **John E. Hueffed** (University of Oklahoma), **Scott W. Hammerstedt** (Oklahoma Archeological Survey). *Preliminary Comparison of Ceramics from Two Excavation Blocks at Spiro*. This poster presents the preliminary results of a ceramic analysis conducted by OU Spiro Mounds Field School students during the summer of 2022. Our main goal is to compare the ceramic assemblages found at Block 1 and House 24 to determine chronology of the structures and possible function and use.

De Vore, Steven L. (National Park Service), **Lance Foster** (Iowa Tribe of Kansas and Nebraska), **Adam S. Wiewel** (National Park Service), **John R. Bozzel** (History Nebraska). *Search for Great Nemaha Subagency (25RH143), Nohart, Richardson County, Nebraska*. A result of the treaty of 1854, the Ioway reservation was reduced in size and the Ioway were moved to the area around the Big Nemaha River. The Subagency was moved to the south-east Nebraska-northeast Kansas line and several buildings were constructed beginning in 1858. Archaeological investigations and archival research between 2013 and 2016 by the Kansas Historical Society and the Iowa Tribal Historic Preservation Office staff resulted in the identification of the historic artifact scatter reported by a local collector to the Iowa tribal office. Additional archaeological investigations by the Tribe and History Nebraska archaeologists confirmed the location as the most likely location for the Nohart Townsite. At least four locations within the site boundary contain artifacts and building debris. A companion paper on the geophysical survey of the site is being presented at this conference (Wiewel et al. 2022).

Ditore, Cameron (Museum of Texas Tech University), **Lila Jones** (Museum of Texas Tech University), **Eileen Johnson** (Museum of Texas Tech University). *Venetian Dreams: Glass Trade Beads from a Historic Site on the Southern High Plains of Texas*. Whiskey Flats (41MD50), in the southeastern Southern High Plains (Texas), is a Historic age site within Mustang Draw. The site consists of two areas, one a bison and horse bonebed within

a pond deposit and the other on a terrace that borders the now dry pond. A bison periotic dates the bone bed to the mid-18th century (~1756; 194 ± 20 BP). Glass beads recovered from the terrace indicate a later occupation is likely. Glass beads imported from Europe are common trade items among native groups on the Plains. They generally are sourced based on manufacturing techniques, classification, and decoration. Preliminary analysis indicates two of the glass beads were manufactured in Venice and date to the mid-19th century (1852-1868). These beads represent the extensive and far-reaching trade occurring at the time. Ages for the bonebed and the Venetian glass beads fall within the known Comanche occupation of the Southern High Plains.

Dorsey, Elisif (University of Oklahoma), **Reagan Ballard** (University of North Carolina). *Accessibility in Digital Spaces: Student-Led Research into Alternative Text Generation*. Archaeology has been gradually changing to be more accessible for people with disabilities. As a physically demanding and sensory led discipline, efforts to increase accessibility through the entire research process - from project design to dissemination - have been critical for creating opportunities for those with disabilities to learn about and enter the field. Public archaeology, in particular, hinges on effective communication with its audiences and as such, must commit to creating, maintaining, and promoting accessible programming. This project represents student-led research on enhancing visual accessibility in digital spaces such as online magazines and social media. The authors collaborated with the Oklahoma Public Archaeology Network (OKPAN) to define best practices for creating alternative text for images and organizing content so that it is easily processed by screen readers. This poster highlights those best practices and discusses their implementation in the OKPAN Quarterly, an online magazine.

Drass, Richard (Emeritus, Oklahoma Archeological Survey). *The Little Deer Site and Wichita Plant Cultivation on the Southern Plains*. Little Deer (34CU10) is one of only a few Protohistoric (A.D. 1450-1700) sites identified and investigated in western Oklahoma. This is a permanent camp or village situated on a terrace near the junction of two creeks and close to the Canadian River. The area is a mid-grass prairie near a western extension of the Cross Timbers and tall-grass prairie; a relatively dry setting where cultivation of crops can be difficult. Limited excavations during the late 1990s recovered flotation samples from a large pit at Little Deer providing one of only two plant assemblages from a contact period Wichita site in this part of the Plains. This assemblage reveals that Wichita groups were still growing corn,

beans, and squash in the western prairies at a time when Apache and Wichita groups were acquiring horses and moving toward a more intensive exploitation of bison whose populations may have been increasing. This paper examines the plants recovered from Little Deer, especially the cultigens, and compares the collection to samples from other Protohistoric sites.

Dudley, Meghan (University of Oklahoma), **Delaney Cooley** (University of Oklahoma), **Allison McLeod** (Afendras Archaeology, LLC), **Horvey M. Palacios** (University of Oklahoma), **Bonnie L. Pitblado** (University of Oklahoma) *From the Ground Up: Fostering Student Led-Efforts in Activist Archaeology through the Oklahoma Public Archaeology Network (OKPAN)*. Inspired by the Florida Public Archaeology Network and the Arkansas Archeological Survey, we established the Oklahoma Public Archaeology Network (OKPAN) in 2016 to support public archaeology outreach and education efforts in the state. However, operating under a different set of circumstances from these established models, we quickly learned that OKPAN's singular strength is the centering of student voices as we shift our work toward activist archaeology. Students from high school to university undergraduates to PhD candidates bring their passions to fuel novel activist archaeology efforts, grounded in their own generational and life experiences. In this poster, we introduce the session by sharing our vision for

an activist, student-led OKPAN and the projects that are making this vision a reality.

Dudley, Meghan (University of Oklahoma), **Lauri Travis** (Travis Archaeological Services, LLC). *Contextualizing Bighorn Sheep Drives in the Precontact Northern Rocky Mountains of Montana*. Although bighorn sheep drives and traps are a well-known hunter-gatherer site type found throughout the Rocky Mountains, few have been examined from Montana. To better understand the role these sites played in the precontact periods in the northern Rocky Mountains, we review our current understanding of bighorn sheep drives by 1) summarizing existing literature and information from Montana State Historic Preservation Office (SHPO) site forms for known sites and 2) discussing a new bighorn sheep drive located in the Big Belt Mountains, Central Montana.

Fisher, Abigail E. (Southern Methodist University). *Dog diet as a tool to assess forager response to farmers on the northern Plains: stable isotope analysis data*. This research uses dogs (*Canis familiaris*) as a proxy for assessing aspects of human behavior. Domesticated canids were an important resource for Plains people;

used for traction, food, security, and ritual. Given their ubiquity, as well as their tendency to consume human waste and garbage, dogs can provide information about human diet and lifeways. By combining traditional zooarchaeological, geometric morphometrics, and stable isotope analyses of dog teeth and mandibles from North and South Dakota, this research focuses on Late Woodland indigenous group responses to the introduction of agriculture in North Dakota by reconstructing the use of maize through time using dog diet.

Gillaspie, Amy M. (Denver Museum of Nature & Science), **Natalie A. Patton** (Denver Museum of Nature & Science). *The Jones-Miller Site Collection: The Next 50 Years*. Excavated between 1973-1975, the Jones-Miller site in Eastern Colorado yielded the important recovery of nearly 41,000 Bison bones and just over 200 stone tools. 50 years of research since then has led to a nearly completed, unpublished manuscript on the findings at the site. Now tasked with preserving and sharing the items in this collection, the Denver Museum of Nature and Science is working to organize and catalog the Jones-Miller bone and lithics. This makes the collection more accessible to both the general public and researchers. Here, we discuss the steps taken to maintain intellectual control, preservation of information, and physical preservation of faunal material. We show that during these processes this legacy collection becomes more available for new technological analyses and future zooarchaeological research, adding to the important conversation around both legacy collections and a better understanding of Paleoindian lifeways.

Goodmaster, Christopher (Integrated Environmental Solutions, LLC), **Alexandra Younger** (Integrated Environmental Solutions, LLC). *Recent Investigations at the Jewett Site (34GD81): A Late Prehistoric Plains Village in Grady County, Oklahoma*. The Jewett site (34GD81) is a village site that was occupied from approximately A.D. 1280 to 1400. The site was listed on the NRHP for the potential of the site to contain significant data important to advancing the understanding of Late Prehistoric indigenous cultures in the Southern Great Plains region. An approximately 2.4-acre portion of the site is within recently acquired Oklahoma Department of Transportation (ODOT) right-of-way (ROW). Under contract to the ODOT Cultural Resources Program, Integrated Environmental Solutions, LLC provided systematic mechanical excavation and archaeological monitoring services prior to construction of the roadway expansion project. Through these investigations, 47 prehistoric archaeological features and extensive midden deposits were excavated within ODOT ROW across the site.

The features were confirmed during fieldwork to represent post, hearth, and storage pit features associated with the occupation of the site during the Paoli and/or Washita River phases of the Late Prehistoric Plains Village period.

Gover, Carlton (Indiana University / Pawnee Nation), **Douglas Bamforth** (University of Colorado Boulder), **Kristen Carlson** (Augustana University), **Erick Robinson** (Boise State University). *The Seeds of Ethnogenesis: An Indigenous Archaeology of Central Great Plains Village Formation*. New radiocarbon data from thirteen sites across Nebraska give insight into the spread of maize horticulture and cultural transformations in the Central Plains. Using Bayesian statistical analysis of the radiocarbon library from the Central Plains, we've developed new temporal boundaries for existing cultural chronologies to identify regional connections, population movement, cultural transitions, and ethnogenesis. In conjunction with oral traditions from descendant Central Plains Indigenous communities, this research aims to re-evaluate and redefine the process of neolithization in the Central Plains.

Green, Debra K. (Oklahoma Archeological Survey), **Jennifer M. Haney** (Oklahoma Archeological Survey). *Archaeological and Geoarchaeological Investigations along Little Beaver Creek in Kay County, Oklahoma*. We will summarize the results of the geoarchaeological investigation and National Register of Historic Places (NRHP) Testing of a middle Archaic site in Kay County, Oklahoma. The geoarchaeological investigation focused on the terrace alluvial fills and soils to reconstruct the history of erosion, deposition, and landscape stability in the Little Beaver Creek valley. Radiocarbon dates indicate erosion and sediment transport sometime during the Altithermal (8000-5000 BP), followed by an increase in late Holocene deposition. One late Holocene paleosol (Copan) was detected at two locations. The Copan soil developed during wetter climatic conditions and greater landscape stability, resulting in a higher density of vegetation growth and an increase in sediment storage. These findings concur with alluvial chronologies documented in drainage valleys across other areas of Oklahoma and the Southern Plains. The result of the test excavation at 34KA535 revealed a multi-component occupation spanning 6,000 years.

Greer, Jill D. (Missouri Southern State University). *Sharp Elbows & Underwater Cat Monsters: Examining Tales and Iconography of Dangerous Beings in Mississippi Valley Siouan Cultures*. This paper examines folklore and material culture about dangerous beings among Mississippi Valley Siouan-speaking peoples, with

special focus upon the Chiwere. Parallels are drawn to Ho-Chunk, Dakotan, and Dhegiha, also. Two important creatures are the Sharp Elbows (Two-Faces) and the Underwater Cat Monsters. I describe their physical attributes and special powers, and briefly discuss folktales in which they appear. I present historic ethnographic representations, as well as archeological data with their imagery, from Oneota and Mississippian traditions. Ultimately, I argue the traditional four field approach championed by Franz Boas is necessary for the fullest possible understanding of culture.

Guenther, Gannon T. (University of Wyoming), **Clifford White** (University of Wyoming), **Marcel Kornfeld** (University of Wyoming), **Robert Barlow** (University of Wyoming). *Introduction and General Overview of the 2022 Hell Gap Field Season*. The focus of the 2022 field season at Hell Gap was Locality I, specifically the lowest cultural components at this locality. Much of the excavation exposed and recovered artifacts from a component underlying Folsom, but it is unclear whether this is the Goshen component or possibly a lower Folsom occupation. In the presentation, we first outline the history of the site and the role of the 2022 field season within that history. The presentation displays quantitative documentation of the finds, as well as a brief analysis of selected objects, such as one of the largest ochre nodules discovered at the site. Finally, the poster serves as an introduction to the rest of the Hell Gap session.

Hadley, Alison (Texas A&M International University), **Alfred Addo-Mensah** (Texas A&M International University). *Residue Analysis of Tubular Stone Pipes from South Texas*. South Texas, an area that covers roughly 37,800 square miles and spans 28 counties, is known for its abundance of stone pipes. Many of these pipes are from surface collections by private landowners and lack archaeological context. The few stone pipes with provenience information date from the late Middle Archaic to the Late Prehistoric periods. This research project analyzes the residue found inside tubular stone pipes of known provenience to determine if they were used to smoke tobacco (*Nicotiana* spp). Multiple residue collection techniques are utilized ranging from manual to chemical extraction. The residue samples are tested using gas chromatography-mass spectrometry (GC/MS) to detect the presence of nicotine. This research is on-going, but we have thus far recorded 34 pipes and collected 15 residue samples. Initial results of 5 residue samples have not yielded evidence of nicotine.

Hammerstedt, Scott W. (Oklahoma Archeological Survey), **Patrick C. Livingood** (University of Oklahoma), **Amanda L. Regnier** (Oklahoma Archeological Survey). *Using Geophysical Survey to Identify Social Landscapes at Spiro*. Multisensor geophysical survey and targeted excavations at Spiro have identified a large number of hastily erected buildings that were occupied for only a short time, perhaps as part of a pilgrimage to the site. In previous papers, we noted that these structures were aligned roughly in rows paralleling the orientation of the Craig mound. Here, we present a more complete map of temporary structures to attempt to discern the social processes that may have driven this alignment.

Henson Tiger, Emilee E. (The University of Oklahoma), **Kara N. Johnson** (The University of Oklahoma), **Kim D. Frey** (The University of Oklahoma), **Donald H. Andrews** (The University of Oklahoma), **Jefferey T. Lewis** (The University of Oklahoma). *Preliminary Lithic Analysis of House 24 and 22 Block 1 at Spiro*. This poster will examine the lithics from the 2022 Spiro excavations. The two 2022 blocks will be compared to each other and also to the material from House Mound 5 excavated by Dan Rogers. The focus of the analysis is on the attributes of the points, utilized flakes, and heat-treated debitage from the three locales.

Hill, Matthew E. Jr. (University of Iowa), **Erik Otárola-Castillo** (Purdue University). *Were Paleoindians the Only Specialized Hunters? Comparing diet breadth and diversity among Great Plains Hunters*. For decades archaeologists have described the earliest groups of the Great Plains as specialized big game hunters, who relied heavily or exclusively on large-bodied prey, such as bison and mammoth. While this simplistic model has rightly been criticized recently, there is still many researchers who ignore temporal and spatial variability in the environment or changes social landscape that might influence hunting practices through time. We employ a large dataset of faunal remains from more than 550 Great Plains archaeological sites to refine the accuracy of long-term dietary patterns investigate the broad patterns of specialization and diversification of faunal use among Great Plains indigenous people through the last 15,000. Our findings suggest that even though prehistoric indigenous people of the Great Plains maintained a way of life associated with bison over time, bison was not the sole focus nor the dominant species in their diet.

Hinsdale, Lanah M. (University of Oklahoma), **Gregory Plank** (University of Oklahoma), **Amanda L. Regnier** (University of Oklahoma), **Patrick Livingood** (University of Oklahoma).

A Preliminary Comparison of Ceramics Between 2022 Excavations and Other Spiro Locations. The purpose of this poster is to compare the ceramics from the 2022 excavations with other contexts from Spiro. These contexts include special-purpose buildings, mounds, and temporary structures. Our goal is to test the notion that the excavations of the 2022 structures are special purpose buildings, perhaps even residences of ritual practitioners. Comparisons are hampered and sometimes limited by differential analysis, reporting, and recovery methods from prior work. Utilizing the ceramics found during the excavations of the 2022 structures in comparison to past excavations, our analysis supports the hypothesis that the structures of house blocks of 2022 were special-purpose buildings.

Hladek, Ken L. (University of Wyoming), **Molly A. Heron** (University of Wyoming), **Gannon T. Guenther** (University of Wyoming), **Jacob C. Cropper** (University of Wyoming), **Justin Wood** (University of Wyoming), **Dakota Buhmann** (University of Wyoming), **Scott Wheeler** (University of Wyoming), **Colby R. Carmin** (University of Wyoming), **Clifford White** (University of Wyoming), **Rachael Shimek** (University of Wyoming), **Rob Barlow** (University of Wyoming), **Marcel Kornfeld** (University of Wyoming). *Experimental Archaeology at the Hell Gap Advanced Field School of 2022: Stone Pit Boiling and Marrow Extraction.* Students of the 2022 Hell Gap Advanced Field School experimented with stone boiling and bone marrow extraction methods similar to those used by prehistoric people living throughout the high plains and Rocky Mountains. A stone boiling technique was demonstrated where a cow skin lined an earthen pit to retain water. Rocks were heated in a fire and placed into the earthen pit to heat the water. Students also experimented with using rocks as choppers and rock anvil-style bone-cracking methods to access the calorie-rich bone marrow. These experimental activities help to illustrate the lifeways and body politic of prehistoric hunter-gatherer groups who depended daily upon a depth of knowledge passed down through generations. The demonstration at Hell Gap allowed students to experience firsthand the successes and failures of experimental archaeology as a modern research tool.

Holen, Steven (Center for American Paleolithic Research), **Roger Echo-Hawk** (Writer and Artist). *A Ceremonial Lodge at the Central Plains Tradition site, 25NC29 in central Nebraska: Some Preliminary Observations Concerning Early Pawnee Ceremonial Development.* In 1992, the University of Nebraska State Museum excavated site 25NC29 as part of salvage excavations before

construction of the U.S. Bureau of Reclamation Fullerton Canal Irrigation Project. The site is situated very near two historic Skidi Pawnee townsites, Palmer and Stabaco, in the heart of the Loup River Skidi homeland. One of the three excavated structures was quite unusual in several ways including its very large 14m square size and a double set of exterior wall posts. Several features and artifacts in the structure suggest this represents a ceremonial structure including a catlinite elbow pipe, a clay elbow pipe, a mortar post between the two front center posts, a small secondary hearth surrounded by seven small post hole-like features in the back corner of the structure, and three human skull fragments painted red found in the bottom of a cache pit. The ceremonial nature of the structure is discussed.

Hooker, Caden P. (Center of Mountains and Plains Archaeology), **Aleah Kuhr** (Center of Mountains and Plains Archaeology), **Bryn Sullivan** (Center of Mountains and Plains Archaeology), **Kelsy Kreikemeier** (Center of Mountains and Plains Archaeology), **Spencer Little** (Center of Mountains and Plains Archaeology). *Of Rarified Air and Form: A Recently Recorded Ceramic Vessel from Rocky Mountain National Park, Colorado*. Pre-contact Indigenous ceramics are a rare artifact class within the Southern Rocky Mountains of Colorado, where most sites yield only a few sherds. This poster describes a newly discovered and highly fragmented ceramic vessel in Rocky Mountain National Park, found during a Center for Mountain and Plains Archaeology survey of the headwaters of the North Fork of the St. Vrain River. We offer a preliminary description of the vessel (surface treatment and rim forms), method of discovery, and site setting. We compare this to other ceramic sites from the alpine ecosystem (n=25 in Boulder, Grand, and Larimer Counties), and discuss whether this might have been an accidental pot drop or a votive offering. We examine cultural and temporal contexts of the vessel, which likely dates to the last 500 years and potentially relating to Ute, Eastern Shoshone, or Plains Apache populations.

Hueffed, John E. (University of Oklahoma). *Preliminary Results of the Ceramic Analysis of School Land I Site (34DL64), Delaware County, Oklahoma*. This poster presents the preliminary results of the ceramic analysis of School Land I Site (34DL64), Delaware County, Oklahoma. School Land I is believed to be an Early Caddoan village site that consists of eight buildings around a possible plaza. The final results of the ceramic analysis will be presented in a graduate thesis of a student of the University of Oklahoma.

Johnson, Nolan (History Nebraska), **Matt Reed** (Pawnee Nation THPO), **Stacy Stupka** (Nebraska Department of Transportation). *When Archeology Meets the Road: Testing at 25PT1 for an NDOT Bridge Replacement*. The Nebraska Highway Archeology Program (NHAP) completed an archeological survey for project STP-22-5(119) in January of 2020. There are four known archeological sites in the APE of the project; 25PT1, 25PT17, 25PT18, and 25PT21. Because of the archeological sites in the APE and the proximity of the project to the former Pawnee Indian Reservation nearly all the APE was intensively surveyed. Artifacts were found in three of the previously known sites plus two new locations. No subsurface testing was undertaken at that time. Project activities continued to be refined by NDOT and on 9-2-20 History Nebraska Archeologist Nolan Johnson met with NDOT staff on site to discuss the project. During the discussion it became clear that the replacement of the bridge over the Loup Power Canal, which is in the middle of 25PT1, remained a concern. A testing plan was developed and was implemented on April 19, 2021.

Johnson, Laura A. (Augustana University), **Aidan P. Marler** (University of Colorado Boulder), **Lydia S. Stednitz** (Augustana University), **Makayla T. Williams** (Augustana University), **KC Carlson** (Augustana University), **Douglas B. Bamforth** (University of Colorado Boulder). *Springs and Plains Village Period Sites: The Hydrogeography of Ponca Creek*. A tributary to the Missouri River, Ponca Creek, extends through Nebraska and South Dakota, passing several Plains Village period sites. 25BD1, a site located near Lynch, Nebraska, was occupied 800 years ago. The site, ancestral to modern Pawnee and Arikara, was home to thousands of people for over a hundred years. Several other sites have been excavated upstream that are contemporaneous with 25BD1. In this poster, we investigate available springs and begin predicting unmapped springs by considering the geological features that produce them. We also look to understand how hydrology has changed over time by utilizing PDSI estimations of drought conditions at the time of occupation.

Juptner, Derick P. (University of Iowa), **Matthew E. Hill, Jr.** (University of Iowa). *Dismal River Type Site in Southwestern Nebraska and their Implications for Early Apachean Occupations on the Central Great Plains*. The Dismal River aspect refers to the ancestral Apachean (Ndee) groups that inhabited the central Great Plains between AD 1400-1700. In this paper, we outline the subsistence practices of the Dismal River occupation of the Lovitt site (25CH1) in southwestern Nebraska. The site, which dates to approximately AD 1520-1660, is quite large (75 acres) and

has produced thousands of animal remains. The findings show a pattern of alternating between selective hunting of big game and utilization of local small game dependent on environmental seasonality and opportunity. This paper will also focus on prey choice and diet breadth patterns at the site. Ultimately, we stress the utility of analyzing patterns in faunal remains to better identify Dismal River occupations on the central Great Plains from a perspective that goes beyond ceramic analysis.

Katz, Steven A. (Percheron, LLC), **Addison Kimmel** (University of Iowa), **Elizabeth E. Wilk** (ERM International Inc.), **Marcus Lewis** (Ho Chunk Nation, Department of Education). *Practical Approaches to the Challenges of Collaborative Archaeology*. Archaeologists have an obligation to conduct research that is relevant and responsive to the desires, interests, values, and concerns of Indigenous descendant communities. Current best practices for collaborative, community-based archaeologies emphasize long-term engagement and full collaboration, including the co-production of knowledge and total stakeholder involvement. The present-day structures and demands of archaeology, especially in CRM and graduate student research contexts can serve to make such fully-collaborative work difficult if not impossible. Oftentimes, these difficulties result in a complete abdication of collaboration or even consultation beyond the bare minimum required by law. However, professional archeologists must strive in all instances to work alongside Native communities in respectful, responsive, and mutually beneficial ways even if this work may often fall short of the loftiest ideal.

Kibler, Karl W. (Cross Timbers Geoarchaeological Services). *Eolian Landforms Mantling Alluvial Surfaces in Central and Western Oklahoma and Their Archeological Potential*. Active and stable eolian landforms mantling late Quaternary alluvial surfaces and often greater than one meter thick, are common along the major streams of central and western Oklahoma. Generally assigned a Holocene age in the past, more recent studies have shown that these dune complexes have been cyclically active and stable since the end of the Pleistocene. Thus, cultural materials encapsulated within these landforms potentially span the known archeological record. This potential is all the greater given that intervals of dune stability occurring between periods of eolian sedimentation may be a sign of a more stable landscape overall, one that could foster an environment of reliable and predictable resources favored for human use. This paper presents an overview of the known geochronology for eolian activity and stability, what it means in terms of archeological preservation and potential, and

offers recommendations for future research and exploration at the survey level.

Krause, Richard A. (TVAR). *The Culture History Theory of Artifacts: Part 2*. I delivered the first part of my presentation to the 78th Plains Conference. In it I described an empirical theory as a logically consistent and refutable set of knowledge claims that collectively answered a non-trivial why question. The question I then posed was why would a generation of processualists and today's archaeologists of several different pseudo theoretical persuasions use the basic units and principals of analysis developed by cultural historians? My answer: because the practitioners of culture history created an empirical theory of artifacts by describing an artifact as any intentional human environmental modification and defining an artifact as the locus of the attributes of two or more modes. In my presentation to the 79th Plains Conference I will discuss the use of this definition of artifact to explicate culture history's use of feature, association, component and site.

Krause, Michael W. (University of Oklahoma). *Settling in at the Cross Bar Ranch*. Previous research conducted by Christopher Lintz on Antelope Creek settlement patterning in the southern Great Plains found that those settlements could be typified according to their site function, specific environmental preferences, and architectural styles. This presentation applies more recent spatial statistics and other GIS analyses to assess the validity of this model within an area of the Texas panhandle known as the Cross Bar Ranch. The result of this work suggests that there is a relationship between various sites and their local ecological preferences, as well as plausible associations between sites sharing a close proximity. In particular, environmental elements such as elevation, degree of slope, distance and access to potable water, flora/fauna diversity, soil composition, and topographic setting are compared between Lintz's site typologies of subhomesteads and homesteads.

Kvamme, Kenneth L. (University of Arkansas). *Geophysical Results from IMM Sites in Iowa and South Dakota*. Geophysical surveys of four settlements of the Initial Middle Missouri variant have been conducted by the University of Arkansas over the past two decades. Three of the sites, Double Ditch, Kimball, and Joy Creek Major, are assigned to the Mill Creek culture of northwest Iowa. The fourth site, Sommers, belongs to the western division of the IMM in central South Dakota. The geophysical results, primarily magnetometry, are exceptionally clear in all cases, showing fortification ditches, rectangular houses with central hearths and long

linear entryways generally in common spatial orientations, and such other features as middens, likely storage pits, and burned posts. Findings are compared and contrasted between the sites and against other geophysical, topographic, and aerial data sets.

Lawson, Alicia (University of Nebraska – Lincoln), **Patrick Bar-chett** (University of Nebraska – Lincoln), **Johnathan R. Garcia** (University of Nebraska – Lincoln), **Finn Kennison** (University of Nebraska – Lincoln), **Audrey Holbeck** (University of Nebraska – Lincoln), **Lu Ann A. Wandsnider** (University of Nebraska – Lincoln). *A Missing Link: Comparative Osteometrics of a Possible Transitional Bison Species found in Eastern Nebraska to the Modern American Bison (*Bison bison*) and the Ancient Bison (*Bison antiquus*)*. *Bison antiquus* is an extinct species of bison with living descendants, *Bison bison bison* and *Bison bison athabasca*. The purpose of this paper is to discuss a possible transitional cranial specimen found at the UNL Reller Prairie Biological Station located in Eastern Nebraska. The cranium was found in a secondary context within Salt Creek. There is an assumption that this specimen eroded out of deposits that are 8,000 years old. Utilizing comparative craniometrics and linear discriminant analysis of several *Bison bison* and *Bison antiquus* crania, the authors found a nearly 99% posterior probability between the Reller Prairie cranium and the sample *Bison bison* crania. With a combination of the craniometric and morphological analyses, the authors believe that this specimen is a late transitional species between ancient *Bison antiquus antiquus* and the modern *Bison bison bison*.

Lintz, Christopher (Texas State University) and **Paul Katz** (Texas State University). *Preliminary Comparison of Alibates Chert Quarry Procurement North and South of the Canadian River*. The distribution of the Alibates Member of the Quartermaster Formation along the Canadian River in the Texas panhandle, and the origin, formation, and characteristics of its chert provide background for discussing the chert quarry procurement activities. Most perceptions of Alibates chert quarry extraction are based on impression derive from public access at the Alibates National Monument on the south side of the river. Access to the private land quarries north of the river has been severely restricted until recently. On December 6, 2021, a brief reconnaissance was conducted to some northern quarries along Plum Creek. The differences in quarry characteristics north and south of the Canadian are startling. Early impressions contrast the Plum Creek and National Monument quarry areas in the occurrence of chert bedrock boulder availability, variety of quarry pit types, and their associated debris and contents. The structure of a half-excavated

quarry pit in the Monument area, and recovery of possible digging implements are also presented.

Livingood, Patrick C. (University of Oklahoma), **Amanda L. Regnier** (Oklahoma Archeological Survey), **Scott W. Hammerstedt** (Oklahoma Archeological Survey). *Overview of 2022 Excavations at Spiro*. This poster will provide an overview of the 2022 excavations at Spiro by the University of Oklahoma field school, which involved work at two areas of the site. The poster will discuss the geophysics results that lead to excavating these areas, the preliminary results from the 2022 excavations, our preliminary interpretations that the two areas represent special purpose buildings, and what is known generally about special purpose buildings at Spiro.

Loendorf, Lawrence (Sacred Sites Research, Inc.), **Karen Steelman** (Shumla Plasma Oxidation Laboratory). *Radiocarbon Dating Four Pictographs in Montana*. Four painted rock art figures from two Painted Canyon sites, south of Great Falls, Montana, were successfully dated through Plasma Oxidation Radiocarbon methods. Accuracy of the dates was supported by dates on oxalates that were from layers of the stone, stratigraphically beneath the paint. An age of 1790 ± 50 14C years BP (120-390 cal.AD) for a shield-bearing warrior and 1710 ± 45 14C years BP (240-425 cal. AD) for an archer are exceptionally old for both motifs. The ages are when the bow and arrow was replacing the atlatl. Two other dates on charcoal V-neck anthropomorphs are 1050 ± 100 14C years BP (cal. AD700-1300) and 950 ± 50 14C years BP (cal. AD 990-1220). The ages are the oldest dates for V-neck figures.

Lynch, Elizabeth M. (University of Wyoming), **Robert Barlow** (University of Wyoming), **Marcel Kornfeld** (University of Wyoming). *Preserving Hell Gap Archaeology: 3D modeling of projectile points using ARTEC Space Spider*. Creating 3D models of archaeological materials allows more access to collections for researchers but also creates opportunities for greater public access and expanded discussion about material past. As part of a three-year project to digitize the collections from the Hell Gap National Historic Landmark, we are creating models of the 1960 projectile points excavated at Hell Gap. These points are pivotal for our understanding of Plains/Rocky Mountain prehistory. We use the ARTEC Space Spider to develop models that will be accessible through the UW Digital Collections. Our goal is to create models that are accurate enough for researchers (e.g., analyzing flake scars). However, we hope that educators will be able to use

printed versions of the artifacts in their classrooms. In this poster, we present our challenges, setbacks, and victories as we move the collections into virtual spaces.

Madden, Robert J. (Colorado State University). *Morphological Comparison of Prehistoric Colorado "Gaming Pieces" to Historic Native American Dice*. Artifacts described as "gaming pieces" appear frequently in reports of North American archaeological assemblages, but little consensus exists on what exactly these artifacts are or how they were used by ancient peoples. In an attempt to provide more clarity on this issue, a hypothesis is offered that these artifacts were made and used by ancient peoples as binary lots, i.e. two-sided dice, used for gambling and games of chance. This hypothesis is then tested by comparing a data set of 201 prehistoric "gaming pieces" from 39 archaeological sites in the State of Colorado to a morphological typology of historic Native American dice, derived from Stewart Culin's (1907) *Games of the North American Indians*, a classified and illustrated compendium of historic Native American gaming implements. The results of this comparison are reported and the implications are discussed.

McDaniel, Andrew (University of Colorado). *Lynch 25BD1: Spatial distribution of lithic artifacts at northeastern Nebraska plains village*. My research will look at the stone tool assemblage from the Lynch site in northeastern Nebraska. Farmers ancestral to the modern Pawnee and Arikara lived at Lynch for around a century between AD 1250-1350. Archaeologists have excavated several parts of the site and have identified concentrations of artifacts that are most likely trash pits related to different households. My project will look at whether or not different kinds of tools occur in different frequencies in these concentrations to search for evidence of possible household-level craft specialization.

McKellop, Robbyn M.S. (Mvskoke Nation/Wichita State University). *Great Bend Aspect Ceramics: A Ceramicist's View*. Previous literature on the Great Bend aspect ceramic assemblages has used traditional methods that suggest the ancestral Wichita were sourcing low quality clay and using shell temper for aesthetics. Furthermore, most analyses have focused on the final product rather than how the vessels were made. My research examines the manufacturing process and shows that the inhabitants of the Lower Walnut were using high quality alluvial clay from the Walnut River. Tests have shown that alluvial clay sediments were used in conjunction with shell temper to overcome technical issues in the manufacturing process. This was an adaptive strategy rather than an aesthetic choice. Additionally, recent research has

shown that there is more variation in the assemblages than previously published.

Mitchell, Mark D. (Paleocultural Research Group). *Fern E. Swenson's Contributions to Plains Village Research in North Dakota*. For nearly three decades, Fern Swenson was instrumental in planning and managing numerous Plains Village research projects in North Dakota. When she became Chief Archaeologist for the State Historical Society of North Dakota in 1994, little was known about the many Plains Village settlements located near the confluence of the Heart and Missouri rivers. Archaeologists and historians interested in the region primarily cited a handful of reports written between 1906 and 1960. However, between 1997 and 2021, nearly two dozen research projects occurred on a dozen different Plains Village sites in the region. Fern was the driving force behind a majority of these, which were undertaken cooperatively by a wide variety of universities, nonprofit organizations, and funding institutions. The Plains archaeological community owes a great deal to Fern's tenacity, foresight, and leadership, without which we would know a great deal less than we do today about the region's unparalleled archaeology.

Moore, Kaylyn (University of Oklahoma), **Ryan Spring** (Choctaw Nation), **Kim Hinson** (Choctaw Nation), **Kieland Jim** (Choctaw Nation). *Co-creating Holistic Lesson Plans for 9th Oklahoma Classrooms*. In a state like Oklahoma, home to 39 federally recognized tribal nations, state-level K-12 educational standards and textbooks are slim in Indigenous perspectives. So, let's fix this! When archaeologists collaborate with diverse communities, these partnerships can create more humanized curricula that introduces students to a holistic view of history. This poster will cover an ongoing collaboration with Kaylyn Moore and members of the Choctaw Nation Tribal Historic Preservation Office (THPO) to co-create curricular materials following Oklahoma's Education State Standards. We are applying that approach to create a curriculum for 9th grade Oklahoma history classrooms. The goal of this ongoing collaboration is to create content that gives a holistic view to Choctaw heritage while meeting educator needs and to provide students of all backgrounds with the critical thinking skills anthropology can provide.

Moore, Kaylyn (University of Oklahoma), **Bobi Deere** (University of Oklahoma), **Reagan Bieligm** (Osage Nation), **Rita Hawzipta** (Osage Nation). *Voices of the Osage: Oklahoma Public Archaeology Network Internship for High School Students 2022*. In collaboration with the diverse communities in Oklahoma, the

Oklahoma Public Archaeology Network (OKPAN) runs a summer internship each year for High School students from communities that are underrepresented in archaeology. These internships have the goal of giving “Voices” to the community through education, support, mentorship, and opportunity. The most recent community served is the Wa-Zha-Zhe, or Osage. Osage students heard from Tribal artists, cultural historians, and Historic Preservation employees, as well as archaeologists while learning about archaeology and its relevance today. The eight-week internship culminated in the creation of the Oklahoma Archaeology Month poster. This poster highlights the OKPAN internship program, the Voices of the Osage students, and the process involved.

Moore, Daria A. (Wichita State University), **Crystal A. Dozier** (Wichita State University). *Midden Mound Exploration at 14CO3*. The Arkansas City Country Club (14CO3) site is a part of a cluster of 13 sites located in south-central Kansas that were occupied by the Ancestral Wichita peoples. In “An Introduction to Kansas Archaeology” (1959), Waldo Wedel notes the presence of earthen mounds located along the south-central part of the site. Local property owners contacted Wichita State University in summer 2022 about the possible presence of a mound on their private property, stating they found what they believed to be artifacts, and requested a survey. Due to Wedel’s notes and local oral history suggesting that the location might be a midden mound, a minimally invasive coring strategy was recommended. A four-centimeter diameter, two-meter deep core sample recovered deeply buried charcoal pieces and two lithic flakes. The sedimentary profile appeared to be anthropogenic, and with deeply buried micro-artifacts recovered within the core, the identification of this small midden mound is supported.

Morgan, Brooke M. (Illinois State Museum). *Viewing Old Collections with New Eyes: Reexamining Smithsonian Institution River Basin Surveys Material from the Heart River Region, North Dakota*. The Heart River Region of North Dakota was crucial hunting territory for Mandan peoples living along the Missouri River in the 16th and 17th centuries. This is evidenced by intensively occupied campsites on the north and south banks of the Heart River. Recent analysis of the Beadmaker site (32GT238) led the author and Fern Swenson to reassess extant collections from this area documented during the 1950s Smithsonian Institution River Basin Surveys (SIRBS). This paper presents what was learned by examining these old collections and reflects on the importance of collections-based archaeological research.

Norford, Falon A. (University of Wyoming). *Why Do We Keep Blurry Photos?: An Exploration of Hell Gap Digital Archival Practices*. The Hell Gap Digital Archives, an ongoing project funded by Save America's Treasures, is digitizing slides, negatives, other artifacts and documents collected since the discovery of the site in 1959. This poster discusses the procedures used to digitize the negatives and slides from the excavations in 1960, 2000, and 2010. Some of the images are descriptive, others document life outside the field. We keep every image, even the blurry ones. The goal of the project is to make the complete record of field work accessible by providing as much information as possible about these images and their relation to the physical objects and spaces of Hell Gap. Some argue against keeping such images as they provide little information. However, I argue that these images provide an ethnographic lens of the people who participated in Hell Gap field school. Blurry images provide a glimpse into the human error in every part of documentation.

Norton, Anikah (University of Colorado Boulder), **Maile Rhea** (University of Colorado Boulder). *Spatial and Temporal Analysis of Scored Bone Tools to Aid in Categorization and Contextualization*. Archaeologists have identified a variety of flat bone tools as musical instruments and referred to them as "rasps" including tools found in past and recent excavations at the Lynch site (25BD1). Some of these, like those at Lynch, are notched on their edges; others are scored across their faces. We present information on the variety of these tools and their distribution in time and space. We examine spatial and temporal differences in where these types of tools were discarded as well as how they have been categorized differently by archeologists. We have found very similar tools being labeled very differently, either as rasps, ceramic paddles, calendars, or as miscellaneous recovered objects. This difference in categorization of objects affects how we view them within the related culture, so we seek to provide a starting point for more accurate categorization to obtain a better understanding of indigenous cultures.

Perkins, Jeremiah M. (University of Oklahoma). *Analyzation of Contact Period Glass Beads at Deer Creek (34KA3)*. The Deer Creek site (AD 1730-1785) was excavated in 2016 and 2017. This fortified ancestral Wichita village is located east of Newkirk, Oklahoma, in Kay County. The excavation revealed a significant quantity of artifacts such as Wichita-made ceramics, bison bone, chipped stone tools, European goods, bone tools, and glass beads, to name a few. The focus of this presentation will be primarily on the glass beads that were found. Over the next two years, these

glass beads will be studied in an attempt to refine the chronology of the site, understand their chemical composition and how they were manufactured. The methodology planned to analyze the beads includes non-destructive and minimally invasive techniques, including laser-ablation inductively coupled plasma mass spectrometry (LAICP-MS), which will be utilized to collect chemical composition and manufacturing data. The data produced from this research may serve as a proxy for examining Contact Period trade and distribution networks.

Perkins, Stephen M. (Oklahoma State University). *Discussant: Celebrating a Public Archaeologist: Remember Fern E. Swenson.*

Picha, Paul R. (SHSND Retired). *From Mille Lacs to the Mandans: Reflections on a Forty-five Year Friendship with Fern E. Swenson.* Professional and personal vignettes (1976, 1986, 1996, 2006, 2016, 2021) from a forty-five year friendship are offered in her memory.

Ramos Berrios, Alanis N. (University of Oklahoma). *Defining Activities at the Late Paleoindian Bull Creek Site (34BV176), Oklahoma Panhandle.* The Bull Creek site (34BV176), located along a tributary of the Beaver River in the Oklahoma Panhandle, belongs to a short list of late Paleoindian open-habitation camps. Events at Bull Creek are superimposed on one another, merging the boundary of refuse vs. activity area over the course of at least three occupations. To better understand the activities resulting in the artifactual and feature components of the archaeological record, I relied on the methods of spatial and refit analysis of bone and lithic artifacts; animal protein residue and plant/starch analysis on lithic artifacts; and 3D rendering and experimental butchering. The spatial distribution of the remains from a single bison were plotted and investigated in relationship with a hearth, a lithic hammerstone/anvil couplet, and an isolated bone tool, resulting in the conclusion that site materials identify a distinct focus of activities.

Rayfield, Kristen M. (University of Oklahoma), **Erin Keenan Early** (University of Texas at Austin), **Karissa Hughes** (University of Oklahoma), **Robin Singleton** (University of Oklahoma), **Sara Williams** (University of Oklahoma), **Brandi Bethke** (Oklahoma Archeological Survey), **Courtney Hofman** (University of Oklahoma). *Taxonomic Resolution of Plains Zooarchaeology through ZooMS.* The identification of species from archaeological assemblages is fundamental in exploring human-animal interactions; including animal husbandry practices, diet, and the types

of animal byproducts used for cultural materials. Morphometrics alone has been beneficial in understanding some of these interactions, yet it is limited when presented with species that cannot morphometrically be distinguished by skeletal remains (i.e., sheep and goat), nonspecific bone fragments, or culturally modified materials. Where morphometrics is limited, a minimally destructive, noninvasive, and cost-effective molecular technique – Zooarchaeology by Mass Spectrometry (ZooMS) – can resolve these unanswered questions. ZooMS uses the amino acid sequence of collagen peptides recovered from bones to taxonomically identify unidentifiable fragments. Here we present how ZooMS can be applied to Plains Archaeology by creating reference spectra from 64 identified taxa typically found within the same ecological niche. Our research demonstrates how further taxonomic resolution of faunal assemblages and ecological reconstructions can be incorporated into Plains Archaeology.

Reed, Timothy A. (State Historical Society of North Dakota), **Meagan G. Schoenfelder** (State Historical Society of North Dakota). *A Leader of Archaeology and Historic Preservation in North Dakota: In Remembrance of Fern E. Swenson*. Located eight miles north of Bismarck, North Dakota, Double Ditch Village State Historic Site (32BL8) was inhabited by the Mandan from the late 1400s to 1785 and is recognized as one of the best-preserved earthlodge villages in the Northern Plains. Double Ditch underwent extensive erosion associated with record flooding of the Missouri River in 2011. This paper recognizes the invaluable contributions made by our friend and colleague Fern Swenson, former Deputy State Historic Preservation Officer and Director of Archaeology and Historic Preservation at the State Historical Society of North Dakota, in the fight to address this threat to the preservation of Double Ditch Village. Her work with tribal, state, federal, and community-based preservation partners helped bring the stabilization project to a successful completion in 2017. This overview provides a singular example of the many historic preservation success stories in which Fern contributed to during her long and impactful career.

Reedy, Chelsea A. (Texas State University). *Food and Fortitude: A Story of Life Within Presidio San Saba as Told Through Zooarchaeological Analysis*. Presidio San Saba was the largest military outpost in the Texas region during the mid-eighteenth century. This research project is a continuation of Dr. Fradkin and Dr. Walters,' previous faunal analysis conducted on a portion of the site assemblage. This inquiry will focus on comparing the areas within the interior plaza to provide insight into dietary practices and to

see if socio-economic status use of certain areas can be inferred. This study will incorporate the use of their hunted versus domestic resources, aquatic versus terrestrial animals, element selection, butchery practices, size class, hunting practices and the potential consumptions of horses and bison.

Regnier, Amanda L. (Oklahoma Archeological Survey). *Geophysical and Archaeological Investigations of the Laundress Quarters at Fort Gibson Historic Site, Muskogee County, Oklahoma*. Located at the junction of three rivers in eastern Oklahoma, Fort Gibson, was founded in 1824 as part of a string of forts along what was then the western boundary of the United States. In 2019, under a contract with the National Park Service, the Oklahoma Archeological Survey initiated an archaeological project to conduct geophysical survey and testing of an area identified on historic maps as the location of the 1824 - 1844 Laundress Quarters at Fort Gibson. The results of this geophysical survey and testing, which will be discussed, demonstrate that this area is likely the best preserved portion of the historic site and has high potential to for future excavations.

Rush, Haley (Stantec), **John Dockall** (Stantec), **Alexander Menaker** (Stantec), **Kristin Benson** (Stantec), **August Costa** (Consulting Geoarchaeologist, Houston Texas and Adjunct Lecturer, Rice University), **Charles Frederick** (Consulting Geoarchaeologist, Dublin, Texas, and Research Fellow, Department of Geography and the environment, The University of Texas at Austin), **Jodi Jacobson** (Center for Archaeological Studies, Texas State University), **Leslie Bush** (Macrobotanical Analysis). *Results from Excavations at 34TU220, Tulsa County, OK*. In 2020, data recovery excavations were conducted at the Berryhill Creek Site (34TU220). The site is located at the confluence of Berryhill Creek and the Arkansas River. Archeologists with Cox|McLain now Stantec hand-excavated over 40 cubic meters across the site and project area. Nearly 9,000 artifacts were recovered from three distinct portions of the site. This poster presents the preliminary results of the excavations, geoarcheological, botanical, faunal, ceramic, and lithic analyses. Archeological and geoarcheological investigations indicate that the site was primarily occupied during the Woodland Period, although there is evidence of earlier (Archaic) and later (Plains Village Period) occupations. Consisting of well-preserved archeological contexts across a range of occupational histories in deeply buried settings that have received little attention, the Berryhill Creek Site yields foundational insight that broadens understanding of cultural practices, settlement patterns and the archeological past of the region.

Savage, Sheila Bobalik (Oklahoma Archeological Survey). *Zooarchaeological Remains from the Deer Creek (34KA3) Site, A Southern Plains Wichita Village*. Deer Creek is an early to mid-18-century Wichita village on the right bank of the Arkansas River in north-central Oklahoma. French traders visited this fortified village. Excavations in 2016 and 2017 suggest a mixed economy based on hunting, agriculture, gathering, and fishing. This paper discusses the recovered faunal assemblage. Taxa diversity, seasonality, and the transport and processing of bison and deer carcasses are examined. Other identified species may have been used for food, as well as for hides/furs, tools, ornaments, and ceremonial paraphernalia.

Schrader, Ella (Augustana University), **Lauren Dan** (Augustana University), **Emma Ostwinkle** (Augustana University), **Kristen Carlson** (Augustana University), **Doug Bamforth** (University of Colorado Boulder). *Recent Stratigraphic Findings at Site 25BD1*. Since 2018, research conducted at site 25BD1 in Lynch, Nebraska has uncovered a complex stratigraphic history. Excavations and geophysical analysis across the mile-wide site have enabled a clearer understanding of stratigraphic deposits and plow zones that have impacted the preservation of this site inhabited for roughly 100 years around AD1300. In this poster, we outline the depositional history and discuss the intact archaeological layer discovered during the 2022 field school that likely represents the last occupation of the site, which is not preserved in any other portion of the site that we know of to date. With 26 previous dates across the site, additional dates will help determine if the last occupation was caught in previous dating attempts.

Sempebwa, Abigail S. (Harvard University). *Education as Activism: Addressing the Minority Absence within the Archaeological Field*. Most aspiring academics discover the professional field of archaeology after they have already completed their most formative educational years. Consequently, the field loses valuable time to engage new individuals from various ethnicities, backgrounds, and passions. This poster will share one solution for how the field of anthropology (and others, such as museum studies) can utilize k-12 education as both a method of activism and a platform for initiating real, long-term change in the discipline's makeup. This poster explores an aspirational program, created by Museum Studies student Abigail Sempebwa, for implementing archaeology units in classrooms of the minority-rich Dallas Independent School District (ISD). The program aims to introduce students to the field of archaeology before they start their college studies and increase their exposure to the discipline early. K-12 education is

a vital component to making archaeology accessible to minority communities.

Thimmig, Rachel M. (Brown University). *Anticipated Futures: Children at Crow-Flies-High Village*. The archaeological study of children began in the 1970s but did not become popular until the 1990s. Thus, it is understandable that Missouri River Basin Survey archaeologists did not analyze evidence of children at sites like Crow-Flies-High Village (32MZ1) during their 1950s excavations. The site, occupied between 1884-1893, was the second locale of the Crow-Flies-High band of Hidatsa, Mandan, and Arikara that resisted reservation life for two decades. A multitude of toys indicate the presence of children at this off-reservation site and provide an opportunity to reexamine the collection through an updated theoretical lens of survivance and futurity. Children bridge the generation that grew up without the constraints of the reservation system and those who know no other way of life. Their futures included contemporary mass-produced toys, but also toys of the community's own creation, a testament to the creativity and will of the community to adapt and persist.

Thomas, Ariane E. (University of Iowa), **Matthew E. Hill, Jr.** (University of Iowa), **Chris Widga** (East Tennessee State University), **Martin H. Welker** (University of Arizona), **Andrew Kitchen** (University of Iowa). *Dogs in the Central Plains: an investigation of phenotypic variability among Pawnee, Dismal River, and Oneota cultures*. Dogs have been integral to the daily life of many Indigenous communities of North America, especially among Plains cultures. Plains dogs had complex relationships with humans and occupied multiple roles, including hunter, transport, and even occasionally a food source. Because the Pawnee have a strong human-dog relationship, previous studies have explored the skeletal variation of these dogs to elucidate their roles as haulers and identify how this niche was disrupted by the adoption of the horse. However, few studies have compared the skeletal variation of Pawnee dogs with contemporaneous cultures in the Plains and Midwest, such as the Dismal River and Oneota cultures. This research explores osteological measurements including body mass estimates of dogs from these cultures to identify the level of morphological continuity that exists among these dogs. This research addresses questions about complex cultural dynamics of the human-dog relationship and offers insights into dog management strategies.

Vehik, Susan (Retired). *Human Remains in Little River Focus Council Circles*. Human remains are occasionally present in Little

River focus council circles. They are seldom discussed in detail and are variously interpreted as burials or the victims of conflict. After a brief discussion of where human bone was recovered and where it was not, a group of 18 individuals found in one of the structures will be addressed in more detail. The results indicate that even after the council circle structures/houses burned or collapsed, the council circles retained significance within Little River focus.

Vinson, Amber N. (University of Oklahoma), **Elijah C. Whalen** (University of Oklahoma). *Community Collaboration in Archaeology: Co-Creating an Indigenous Archaeology Day with the Choctaw Nation*. Community archaeology can empower descendant communities to actively construct the narratives that preserve and share their heritage. In a recent collaborative effort, the Oklahoma Public Archaeology Network (OKPAN) and Choctaw Nation Tribal Historic Preservation Office (THPO) organized an Indigenous Archaeology Day to celebrate Oklahoma Archaeology Month this October. The goal of this event is to highlight Choctaw cultural heritage and introduce archaeological methods to the public, particularly K-12 students. The event will occur on October 22nd at the Choctaw Cultural Center in Durant, Oklahoma, and will feature activities such as an Archery and Atlatl demonstration, traditional cooking, and a Growing Hope Garden walkthrough. In this poster, we discuss our approach to public outreach and the strength of collaboration as an approach to heritage outreach and education within descendant communities.

Walker, Danny (University of Wyoming). *Archaeological Testing of the 1879 Waterwheel at Fort Laramie National Historic Site, Wyoming*. Post gardens were common during the military occupation at Fort Laramie National Historic Site, with water sources dependent on the garden location. Archeological excavations at the waterwheel area along the bank of the Laramie River in 2019 resulted in recording the remains of the headgate area as being mostly destroyed following abandonment of the waterwheel by the army after 1879. Photographs taken between 1996 and 2019 show the rock wall in the Laramie River supporting the waterwheel had been functionally destroyed by a series of high-water episodes in 2010 and 2011. Excavations between the headgate and the army garden showed water was run from the headgate along a wood flume for the first 30-35 meters and then a simple ditch took the water to the post garden. Despite these destructive acts by the river, significant data were collected helping to identify how the waterwheel and its headgate were constructed.

Wallace, Arland L. (Wichita State University), **Crystal A. Dozier** (Wichita State University). *Experimental Recreation of a Pumpkin (Cucurbita spp.) Leather Mat*. Experimental production of a pumpkin leather mat was recreated using the ethnohistoric data from the Great Plains. Pawnee accounts indicated that during the harvest season, pumpkins (*Cucurbita* spp.) were cut into 1-1 1/2" strips, dried, and woven into mats and stored in pits. It was very likely this type of storage and food preparation occurred over large geographical areas in the American Great Plains covering extended periods of time, however, the archaeological evidence is limited due to the organic nature of pumpkins. This experiment also produced and used bone and stone tools, roasting techniques, and drying methods indicated by ethnographic reports. Special attention was paid to identify possible residue created during this recreation.

Chance Ward (University of Colorado Boulder), **Brandi Bethke** (Oklahoma Archeological Survey), **Sarah Trabert** (University of Oklahoma), **Emily Lena Jones** (University of New Mexico), **William Taylor** (University of Colorado Boulder). *Archaeozoology and the Human-Horse Story in the Northern Plains*. Despite the importance of horses in many Indigenous cultures across the Great Plains, contemporary narratives regarding the deep history of the human-horse relationship have been drawn largely from European historical records. Here, we explore the potential for archaeozoological data – horse remains from archaeological sites across North and South Dakota – to highlight important aspects of Indigenous relationships with horses in the Northern Plains. 3D scanning and replication offer a promising method for engaging with Indigenous perspectives on the horse in archaeological research, while culturally-informed curatorial practices may be necessary for respectful and ethical treatment of horses in North American museum collections.

White, Clifford L. (University of Wyoming), **Pierson S. Linde** (University of Wyoming) **Lori Rayner** (University of Wyoming), **Rachael L. Shimek** (Office of Wyoming State Archaeologist), **Molly Heron** (University of Wyoming), **Marcel Kornfeld** (University of Wyoming). *Paleoindian Bone Needles: Expanding Our Understanding of the Past*. Since 1966, excavations at Hell Gap Locality I resulted in the recovery of an extensive collection of Paleoindian bone needles. In 2022, one bone needle mapped in situ brought the needle fragment count to 23. In this presentation, we examine the spatial distribution of bone needles and associated artifacts, the temporal relationships between artifacts recovered near Paleoindian bone needles, and consider the pa-

leoenvironmental context at the time the needles were manufactured and deposited. The well-studied chronostratigraphy at Hell Gap and intensive spatial data collection, allows us to place the entire current bone needle inventory into the Folsom cultural complex. With this information, we can begin to examine the environmental context and cultural motives for the manufacturing of bone needles from around 12,610 to 12,170 BP. Knowing the timeframe of Hell Gap needles we can investigate the influence of the Younger Dryas on bone needle production.

Wiewel, Adam S. (National Park Service), **Lance Foster** (Iowa Tribe of Kansas and Nebraska), **Steven L. De Vore** (National Park Service (Retired)), **John R. Bozell** (History Nebraska (Retired)). *A Geophysical Survey at Nohart, a 19th-century Iowa Tribe Town in Nebraska and Kansas*. Nohart was established in the late 1850s after Iowa reservation land was ceded by an 1854 treaty. The tribe settled along the border of the territories of Nebraska and Kansas near the Big Nemaha River. The town, which took the name Nohart after the Iowa chief known as No Heart, served as the Great Nemaha Subagency headquarters and was central to reservation life during the latter half of the 19th century. The settlement was largely forgotten until artifact scatters containing domestic and building debris were discovered in an agricultural field in recent years. Whether subsurface remnants of potential structures remained intact was unknown. In 2022, a multi-instrument geophysical survey was conducted in accessible areas of the field to better understand the condition and extent of archaeological features and help identify historically documented buildings at Nohart. We discuss the results of this investigation, which includes verification of building foundations.

Williams, Dave (History Nebraska State Archeology Office), **Judi Gaishkibos** (Nebraska Commission on Indian Affairs), **Jim Peters** (Samaritan Detection Dogs). *Recent Efforts to Relocate the Genoa Indian Industrial School Cemetery*. The U.S. Federal Indian boarding school system, operating between 1819 and 1969, consisted of 408 schools across the country, including nine in Nebraska. The Genoa Indian Industrial School, open from 1884 until 1934 in Genoa, Nebraska, enrolled thousands of children from 40-plus Indian nations over five decades, many of whom tragically perished while attending the school. Unfortunately, information documenting the total number of student deaths and the precise location of the school's cemetery is scant. Since fall of 2021, the Nebraska State Archeology Office and Nebraska Commission on Indian Affairs have collaborated on efforts to relocate the cemetery and assist with healing and reconciliation for the descendants of the lost children. A combination of archival research,

geophysical survey, and use of human detection dogs has been utilized in attempts to identify the cemetery's location.

Wilmot, Trista (University of Central Oklahoma). *Creating a Catalog of Archaeological Artifacts in the Collection of the Department of Humanities & Philosophy at the University of Central Oklahoma*. The Humanities and Philosophy Department at the University of Central Oklahoma (UCO) houses boxes of archaeological artifacts that have lost their context. These artifacts, known collectively as the "Weber Collection" were the focus of research. The Weber Collection was analyzed, researched, cataloged, and in some cases represented in 3D models made with the Agisoft Metashape program. This project creates an accessible catalog to be utilized in both teaching and research by students and faculty in the Humanities and Philosophy Department at UCO. Members of the department and the UCO community will gain hands-on experience with the artifacts and their 3D models and the catalog will provide them with pertinent, concise information for each of the artifacts. Furthermore, the research toward this catalog will reconstruct the origin of the artifacts where possible so that the originals maybe repatriated while the 3D models are kept in the departmental collection.

Zientek, Walton H. (University of Colorado Boulder). *New Sources of Smoky Hill jasper in Nebraska*. Smoky Hill jasper was widely used for millennia on the Great Plains, and archaeologists have relied on identifying it to reconstruct patterns of mobility and trade. These reconstructions depend on knowing the source area of this material, though, which has traditionally been seen as southwestern Nebraska and northwestern Kansas. The formation that produces Smoky Hill jasper outcrops as far north as central South Dakota, though, and it is present in central and northeastern Nebraska. This poster identifies additional source localities for this material that have important implications for understanding its use.

PLAINS ANTHROPOLOGICAL SOCIETY PRESIDENTS

- 1969 Wedel, Waldo R. – Smithsonian Institution
- 1970 Wedel, Waldo R. – Smithsonian Institution
- 1971 Wedel, Waldo R. – Smithsonian Institution
- 1972 Krause, Richard – University of Missouri
- 1973 Gradwohl, David M. – Iowa State University
- 1974 Frison, George – University of Wyoming
- 1975 Henning, Dale R. – University of Nebraska
- 1976 Hamilton, Henry W. – Missouri Archaeological Society
- 1977 Schneider, Frederick E. – University of North Dakota
- 1978 Wilson, Michael C. – University of Calgary
- 1979 Jantz, Richard L. – University of Tennessee
- 1980 Davis, Leslie – Montana State University
- 1981 Loendorf, Larry – University of North Dakota
- 1982 Parks, Douglas – Mary College
- 1983 Harvey, Amy E. – Stephens College
- 1984 Sims, E. Leigh – Manitoba Museum of Man and Nature
- 1985 Witty, Thomas A., Jr. – Kansas State Historical Society
- 1986 Anderson, Duane – Office of the State Archaeologist of Iowa
- 1987 Vehik, Susan – University of Oklahoma
- 1988 Vehik, Susan – University of Oklahoma
- 1989 Schneider, Mary Jane – University of North Dakota
- 1990 Schneider, Mary Jane – University of North Dakota
- 1991 Hofman, Jack L. – Oklahoma Archeological Survey
- 1992 Hannus, L. Adrien – Augustana College
- 1993 Tiffany, Joseph A. – California State Polytechnic University, Pomona
- 1994 Lintz, Christopher – Mariah Associates
- 1995 Bozell, Robert – Nebraska State Historical Society
- 1996 Toom, Dennis – University of North Dakota
- 1997 Lees, William – Oklahoma Historical Society
- 1998 Reher, Charles – University of Wyoming
- 1999 Brink, Jack – Provincial Museum of Alberta
- 2000 Artz, Joe – Office of the Iowa State Archaeologist
- 2001 Stanley, Lori A. – Luther College
- 2002 Walker, Danny N. – Wyoming State Archaeologist Office
- 2003 Reeves, Brian O. K. – Lifeways Canada, Ltd.
- 2004 Hartwell, William T. – Desert Research Institute
- 2005 Amick, Daniel S. – Loyola University
- 2006 Kornfeld, Marcel – University of Wyoming/Frison Institute
- 2007 Bement, Leland – Oklahoma Archeological Survey
- 2008 Tiffany, Joseph – Mississippi Valley Archaeological Center
- 2009 Peterson, Lynelle – Ethnoscience, Inc.
- 2010 Billeck, William T. – Smithsonian Institution
- 2011 Dawe, Bob – Royal Alberta Museum

2012 Miller, Mark E. – Wyoming State Archaeologist Office
2013 Greer, Mavis – Greer Services Archeological Consulting
2014 Mitchell, Mark D.—Paleocultural Research Group
2015 Bleier, Amy C.—State Historical Society of North Dakota
2016 Hollenback, Kacy—Southern Methodist University
2017 Trabert, Sarah – University of Oklahoma
2018 Sturdevant, Jay – Midwest Archaeological Center
2019 Adair, Mary – University of Kansas
2020 Adair, Mary – University of Kansas
2021 Pool, Kelly – Metcalf Archaeology
2022 Pool, Kelly – Metcalf Archaeology

DISTINGUISHED SERVICE AWARD RECIPIENTS

2021 Mary J. Adair
2020 Lawrence L. “Larry” Loendorf
2019 John (Jack) W. Brink, Raymond J. DeMallie
2018 Christopher Lintz
2017 Susan Vehik
2016 Alice Kehoe
2015 Donna C. Roper
2014 (no award)
2013 Joseph A. Tiffany
2012 F. A. Calabrese
2011 Richard A. Krause
2010 Les Davis
2009 Patricia J. O’Brien
2008 (no award)
2007 Thomas A. Witty, Jr.
2006 Stanley A. Ahler
2005 Dale Henning
2004 Thomas Kehoe
2003 Mary Jane and Fred E. Schneider
2002 Don Wyckoff
2001 James H. and Delores A. Gunnerson
2000 (no award)
1999 Richard G. Forbis
1998 David M. Gradwohl
1997 Larry and Janice Tomsyck
1996 (no award)
1995 George C. Frison
1994 Robert E. Bell
1993 William J. Mayer-Oakes
1992 W. Raymond Wood
1991 Waldo R. Wedel and Mildred Mott Wedel

CONFERENCE LOCATIONS

79th 2022 Oklahoma City, Oklahoma
78th 2021 Boulder, Colorado
77th 2019 Bloomington, Indiana
76th 2018 San Antonio, Texas
75th 2017 Bismarck, North Dakota
74th 2016 Lincoln, Nebraska
73rd 2015 Iowa City, Iowa
72nd 2014 Fayetteville, Arkansas
71st 2013 Loveland, Colorado
70th 2012 Saskatoon, Saskatchewan
69th 2011 Tucson, Arizona
68th 2010 Bismarck, North Dakota
67th 2009 Norman, Oklahoma
66th 2008 Laramie, Wyoming
65th 2007 Rapid City, South Dakota
64th 2006 Topeka, Kansas
63rd 2005 Edmonton, Alberta
62nd 2004 Billings, Montana
61st 2003 Fayetteville, Arkansas
60th 2002 Oklahoma City, Oklahoma
59th 2001 Lincoln, Nebraska
58th 2000 St. Paul, Minnesota (joint with Midwest Archaeological Conference)
57th 1999 Sioux Falls, South Dakota
56th 1998 Bismarck, North Dakota
55th 1997 Boulder, Colorado
54th 1996 Iowa City, Iowa
53rd 1995 Laramie, Wyoming
52nd 1994 Lubbock, Texas
51st 1993 Saskatoon, Saskatchewan
50th 1992 Lincoln, Nebraska
49th 1991 Lawrence, Kansas
48th 1990 Oklahoma City, Oklahoma
47th 1989 Sioux Falls, South Dakota
46th 1988 Wichita, Kansas
45th 1987 Columbia, Missouri
44th 1986 Denver, Colorado
43rd 1985 Iowa City, Iowa
42nd 1984 Lincoln, Nebraska
41st 1983 Rapid City, South Dakota
40th 1982 Calgary, Alberta
39th 1981 Bismarck, North Dakota
38th 1980 Iowa City, Iowa
37th 1979 Kansas City, Missouri

36th 1978 Denver, Colorado
35th 1977 Lincoln, Nebraska
34th 1976 Minneapolis, Minnesota (joint with Midwest
Archaeological Conference)
33rd 1975 Lincoln, Nebraska
32nd 1974 Laramie, Wyoming
31st 1973 Columbia, Missouri
30th 1972 Lincoln, Nebraska
29th 1971 Winnipeg, Manitoba
28th 1970 Tulsa, Oklahoma
27th 1969 Lawrence, Kansas
26th 1968 Lincoln, Nebraska
25th 1967 St. Paul, Minnesota
24th 1966 Lincoln, Nebraska
23rd 1965 Topeka, Kansas
22nd 1964 Lincoln, Nebraska
21st 1963 Taos, New Mexico
20th 1962 Lincoln, Nebraska
19th 1961 Lawton, Oklahoma
18th 1960 Norman, Oklahoma
17th 1959 Lincoln, Nebraska
16th 1958 Lincoln, Nebraska
15th 1957 Lincoln, Nebraska
14th 1956 Lincoln, Nebraska
13th 1955 Lincoln, Nebraska
12th 1954 Lincoln, Nebraska
11th 1953 Lincoln, Nebraska
10th 1952 Lincoln, Nebraska
9th 1951 Lincoln, Nebraska
8th 1950 Lincoln, Nebraska
7th 1949 Lincoln, Nebraska
6th 1948 Lincoln, Nebraska
5th 1947 Lincoln, Nebraska
4th 1940 Norman, Oklahoma
3rd 1936 Mount Vernon, Iowa
2nd 1932 Lincoln, Nebraska
1st 1931 Vermillion, South Dakota

NATIVE AMERICAN STUDENT AWARD WINNERS

2021 Joni Tobacco (Oglala Sioux, Salish Kootenai College)

2020 Maura Fournier (Metis; University of Winnipeg)

2019 Carlton Shield Chief Gover (Pawnee Nation of Oklahoma; University of Colorado)

2018 Justin Roy Lund (Navajo Nation; University of Oklahoma)

2017 Morgan Fluker (Kaw Nation of Oklahoma; Kansas State University); Martin Lopez (Apsaalooke [Crow] of Montana; University of Montana)

2016 Melanie McKay-Cody (Chickamauga Cherokee; University of Oklahoma); Tyrone Peterson (Navajo Nation and the Pascua Yaqui Tribe; University of Iowa)

2015 John Reynolds (Rosebud Sioux Tribe; St. Cloud State University)

2014 Justin Roy Lund (Navajo Nation; University of Oklahoma)

2013 Melanie McKay-Cody (Chickamauga Cherokee; University of Kansas)

2012 Royce Freeman (Mandan, Hidatsa, Arikara Nations; University of Oklahoma)

2011 Michael B. Catches Enemy (Oglala Nation; St. Cloud State University)

2010 Donna Longhorn (Shawnee/Delaware; University of Oklahoma)

2009 Brad Kroupa (Mandan, Hidatsa, and Arikara Nation; University of Indiana)

2008 Wilena Old Person (Blackfoot; University of Montana-Missoula)

2007 Brenda Covington (Colville/Spokane; University of Montana)

2006 Jason Hale (Prairie Band Potawatomi; Washburn)

2005 La Rae Buckskin (Manitoba Métis; University of Idaho, Peterborough, Ontario)

2004 Gloria McCarty (Muskogee; University of Oklahoma); John T. Haj (Delaware; University of Tulsa)

2003 no award given

2002 Julie Bartlett (Oglala Lakota; University of Winnipeg)

2001 Laura Cocker (Manitoba Métis Federation; University of Winnipeg); Jana Vee Cornelius-Baird (Seminole-Creek Tribe of Oklahoma; University of Oklahoma)

2000 Claudette Rocan (Métis; University of Winnipeg); Martin Earring (Minneconjou-Oglala, Cheyenne River Sioux Tribe; University of South Dakota)

1999 Rebecca Amen (Omaha Tribe; University of Nebraska, Lincoln)

1998 Paulette F. Steeves (Cree/Cherokee/Micmac; University of Arkansas); Jacquelin St.Clair (Seminole Nation of Oklahoma; University of Wyoming)

1997 Florence Whitehorse-Taylor (Kiowa of Oklahoma; University of Oklahoma); Alix Reynolds (Manitoba Métis Federation; University of Winnipeg); Shanna Olinger (Yankton Sioux Tribe; Montana State University)

1996 Evelyn Siegfried (Bigstone Cree Band; University of Calgary; James Bird (Eastern Cherokee; University of Oklahoma)

1995 Michelle Fox (Red Lake Chippewa; University of North Dakota)

1994 Dawn Makes Strong Move (Winnebago Tribe of Nebraska; University of South Dakota)

STUDENT PAPER AWARD WINNERS

2021 Rachel Thimmig (Graduate Student Award, Brown University): On- and Off-Reservation Life: A Reexamination of Crow-Flies-High Village. Clifford White (Undergraduate Student, University of Wyoming): Did Water Availability Impact Clovis Settlement Strategies on the Great Plains?

2020 meeting and competition canceled

2019 Evelyn Pickering (Graduate Student Award, University of Arizona) Creation and Creative Recreation: Blackfeet Resilience Capacity on the Northern Plains

2018 Amanda Anne Burt (Graduate Student Award, Indiana University): Unlikely Allies: Modern Wolves and the Diets of Pre-contact Domestic Dogs. Travis Jones (Graduate Student Award, Georgia University): Revisiting Huff Village: Toward Generational Timescales for Plains Villages

2017 Abigail Fisher (Graduate Student Award, Southern Methodist University): When is a Wolf a Dog? Combined Geometric Morphometrics and Stable Isotope Analysis for Differentiating Wild from Domestic Canids on the North American Great Plains

2016 Ryan Breslawski (Graduate Student Award, Southern Methodist University): Seasonal Bison Hunting by Paleoindians on the Northwestern Plains: Revisiting Fetal Prey Remains from Horner II and Casper; Seamus Anderson (Undergraduate Award, Texas Tech University): Death, Divination, an Obligation: Owls in 19th Century Kiowa Culture

2015 Whitney Goodwin (Graduate Student Award, Southern Methodist University): Complementary Techniques for the Estimation of Original Firing Temperatures of Plains Ceramics: Experimental and Archaeological Results, published in *Ethnoarchaeology* 8(2):180-204 (2016).

2014 Adam Wiewel (Graduate Student Award, University of Arkansas): Examining Agricultural Surplus at Huff Village, North Dakota: Combining Archaeological and Geophysical Data

2013 Sarah E. Wolff (Graduate Student Award, University of Arizona): Protecting a National Icon: The First Use of the Antiquities Act of 1906 to Declare Devils Tower National Monument

2012 Elsa Perry (Undergraduate Student Award, University of Lethbridge): Correlating Etching Tool Materials with Petroglyphs at Writing on Stone, published in *Plains Anthropologist* 60(223):72-83 (2015)

2011 William Reitze (Graduate Student Award, University of Arizona): Salvaging a Sandia Site: Reinvestigation of the Lucy Site, Central New Mexico

2010 Travis Hill (Undergraduate Student Award, Colorado State University): Qualifying Comfort: Intentional Design in Unhafted End Scrapers at the Lindenmeier Folsom Site, Northern Colorado; Kacy Hollenback (Graduate Student Award, University of Arizona): Social Memory of Disaster: Exploring Historic Smallpox Epidemics among the Mandan and Hidatsa

2009 Brigid Grund (Undergraduate Student Award, University of Colorado): Understanding the Great Plains Paleoindian Projectile Point Chronology: Radiocarbon Dating and Potential Coequality of Point Types; Maureen Boyle (Graduate Student Award, Indiana University): Beyond Linearity in Western Historical Narratives: The Wild West as Temporal Frontier

2009 Wendi Field Murray (Graduate Student Award, University of Arizona): Feathers, Fasting, and the "Eagle Complex": A Contemporary Analysis of the Eagle as a Cultural Resource in the Northern Plains published in *Plains Anthropologist* 56(218):143-153 (2011)

2008 Jeremy Planteen (Graduate Student Award, University of Wyoming): The Wild West Show: Rethinking the Influence of the Miller's 101 Ranch Wild West Show and Early Film on the Native American Stereotypes; Shana Wolff (Undergraduate Student Award, Laramie County Community College): An Analysis of Plants Traditionally Used by Plains American Indians as Topical Antiseptics for Antimicrobial Effectiveness

2007 Naomi Ollie (Graduate Student Award, Colorado State University): Many Mountains Moving: Tales of Mass-Wasting and Archaeology in the Absaroka Range, Greater Yellowstone Ecosystem (Graduate Student Award); Sarah Trabert (Undergraduate Student Award, Kansas State University): Steed-Kisker Ceramics: Analysis of the Scott Site (14LV1082) Assemblage, published in *Plains Anthropologist* 54(212):289-299 (2009).

2006 Jayme Job (Undergraduate Student Award, Minnesota State University-Moorhead): Sourisford Salamanders: Renewal Iconography of the Devils Lake-Sourisford Ceramic Complex, published in *Plains Anthropologist* 54(209):75-82 (2009); Michael P. Jordan (Graduate Student Award, University of Oklahoma): Religion and Reservation Life: Kiowa Revitalization Movements of the 1880s

2005 Tomasin Playford (Graduate Student Award, University of Manitoba): Establishing Site Seasonality: Importance, Problems and a Potential Solution; Patti Kinnear (Undergraduate Student Award, University of Colorado): Cooperation and Conflict: Examining Alternative Views of Archaeology on the Great Plains, published in *Plains Anthropologist* 53(206):161-177 (2008)

2004 Raven Carper (University of Montana): A Study of the Utility of a 'Symmetry Index' in the Assessment of Biface Production Goals, published in *Lithic Technology* 30(2):127-144 (2005)

2003 Lucy Burris (Colorado State University): Western Harvester Ants: Archaeology's Little Helpers

2002 Jodi Jacobson (University of Tennessee): Identification of Mule Deer (*Odocoileus hemionus*) and White-tail Deer (*Odocoileus virginianus*) Post-cranial Remains as a Means of Determining Human Subsistence Strategies, published in *Plains Anthropologist* 48(187):287-297 (2003)

2001 Charles Egeland (Colorado State University): From Cutmarks to Behavior: The Reliability of Cutmarks for Inferring Processing Intensity, published in *Plains Anthropologist* 48(184):39-51 (2003); Chad Goings (University of Arkansas): A Predictive Model for Lithic Resources in Iowa, published in *Plains Anthropologist* 48(184):53-67 (2003)

2000 Paula Renaud (University of Wyoming): Sticks, Stones, and Cyberwaves: Creating an International Community of Aboriginal Philosophy in the 21st Century

1999 Rhonda S. Fair (University of Oklahoma): Becoming the White Man's Indian: An Examination of Native American Tribal Web Sites, published in *Plains Anthropologist* 45(172):53-67 (2000)

1998 Jesse Ballenger (University of Oklahoma): Late Paleoindian Land Use in the Oklahoma Panhandle: Goff Creek and Nall Playa, published in *Plains Anthropologist* 44(168):189-207 (1999)

1997 Susan Tanner (University of Nebraska): An Analysis of Use-Wear on Nebraska Phase Ceramics

1996 No Award

1995 Bruce Low (University of Saskatchewan): Swan River Chert: Its Geological Occurrence, Geographical Distribution, and Archaeological Collection - A Ubiquitous Pre-Contact Lithic Resource of the Northern Plains/Southern Boreal Forest, published in *Plains Anthropologist* 41(156):165-174 (1996)

1994 No Award

1993 No Award

1992 Elizabeth Miller (University of Nebraska): Evidence for Prehistoric Scalping in Northeastern Nebraska, published in *Plains Anthropologist* 39(148):211-219 (1994)

1991 No Award

1990 Jeffrey A. Huebner (University of Texas-Austin): Late Prehistoric Bison Populations in Central and Southern Texas

1989 Unknown

1988 Unknown

1987 Unknown

1986 Judith Habicht-Mauche (Harvard University): Southwestern-Style Culinary Ceramics on the Southern Plains: A Case Study of Technological Innovation and Cross-Cultural Interaction, published in *Plains Anthropologist* 32(116):175-189 (1987)

STUDENT POSTER AWARD WINNERS

2021 Kelton Meyer (Colorado State University, graduate), Countryside Folsom in the San Luis Valley, Colorado: Revisiting the Reddin Site; Sasha Buckser (University of Colorado at Boulder, graduate), Human-Canid Interactions at Black's Fork, Wyoming; Riley Limbaugh (Colorado State University, undergraduate), The Days After Colorado's Darkest Days: Using Weapons and Ammunition to Date Conflicts and Identify Participants in Battle

2020 meeting canceled, no posters presented

2019 Danielle Soza (University of Arizona, graduate) Soil Chemistry and Stone Ring Sites: Preliminary Results from Four Horns Lake, Montana; Sylvia M. Sandstrom (Minnesota State University-Moorhead, undergraduate) The Boller Site Platter--A Northern Plains Ceramic Anomaly

2018 Paul Buckner, Madeline Kunkel, and Jessica McCaig (Colorado State University); Matthew Colvin (University of Georgia)

2017 Samantha Nadal and Cynthia Strong (Cornell College); Evelyn Pickering (University of Arizona)

2016 Jennifer K. Deats (University of Colorado, Boulder)

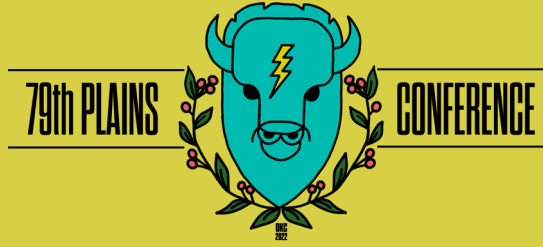
2015 Justin Garnett (University of Missouri, Kansas City)

NOTES

NOTES

NOTES

NOTES



	Gallery Two	Gallery Three	Gallery Four	Video Lounge
Thursday Morning	Student Paper Comp.	Paleo and Archaic	Central Plains and Midwest	Vendors
Thursday Afternoon	Northern Plains	Wichita	Student Poster Comp.	Vendors
Friday Morning	Southern Plains	1800s-Present	A Hell of A Gap Posters	Vendors
Friday Afternoon	Arikara and Pawnee	Fern Swenson Memorial		Vendors
Saturday Morning	Spiro Posters	Human-Animal Posters	Central Plains Posters	Sci Methods Posters