

# **71st Annual Plains Anthropological Conference**



**October 2-6, 2013  
Loveland, Colorado**

**Colorado Archaeological Society  
Annual Meeting**



# Plains Anthropologist

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*Plains Anthropologist*, published by the Plains Anthropological Society is the flagship journal of Great Plains anthropology. The mission of the Society is to promote the study of peoples and cultures of the North American Great Plains.

**Volume 59 (2014), 4 issues per year**

**Editor:** Marcel Kornfeld,  
University of Wyoming, USA



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## ***Midcontinental Journal of Archaeology***

The *Midcontinental Journal of Archaeology* (MCJA) is the journal of the Midwest Archaeological Conference (MAC). It publishes original articles on Eastern Woodlands archaeology of the region between the Appalachian Mountains and the Great Plains, from the Boreal Forests to the Gulf of Mexico, and on closely related subjects.

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# Acknowledgments

**Conference Host:** Center for Mountain and Plains Archaeology,  
Department of Anthropology, Colorado State University

**Conference Organizer:** Jason LaBelle

**Program Organizer:** Christopher Johnston

**Conference Committee:** Suzanne Brant, Hallie Meeker, Ben  
Perlmutter, Kaitlyn Simcox

**Support Services:** Lauren Ankarlo and CSU Conference Services,  
and Diana Brown and the Embassy Suites staff

## **About the 2013 Plains Anthropological Conference Logo:**

This year's Conference logo is modified from a design of the artist Dean Babcock. The print first appeared on the cover of a booklet titled "The Shining Mountains, Colorado," written by Edgar McMechen and published by the Denver Public Library in 1935. Babcock (1888-1969) produced art celebrating the natural world, in particular the environs that would become Rocky Mountain National Park in 1915. He was one of the first rangers for the Park and helped produce some of the first detailed maps of the area. The logo was chosen to convey the enduring draw of the Colorado Front Range – the interplay between the natural and cultural worlds of the plains, foothills, and alpine country.

**A big THANK YOU to all of our volunteers!**

## Conference Financial Supporters

### **Friend of the 71st Plains Anthropological Conference**

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-Wyoming Association of Professional Archaeologists

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& PLAINS ARCHAEOLOGY



Colorado State University



## **Thank You!**



On behalf of the Plains Anthropological Conference planning committee, we'd like to welcome you to Loveland and to beautiful northern Colorado. We hope you enjoy the papers and posters that your colleagues have prepared for this meeting, and that you take the chance to meet a few new friends while catching up with old ones while here in town. With over 200 papers and posters, as well as workshops and other events, we think you'll have a tough time choosing what to attend.

The Conference has drawn a wide audience to Loveland this year. Anthropologists and archaeologists from private, state and federal positions will be in attendance, as well as tribal partners, college students and faculty, and avocational archaeologists from the community. We are fortunate to have the Colorado Archaeological Society hold their Annual Meeting in conjunction with this Plains Conference, and they will be participating in our banquet on Friday night as well. Be sure to buy a few raffle tickets to support the Alice Hamilton student scholarship.

We also encourage you to get out and enjoy the Colorado outdoors, either on our guided tours, on one of the self-guided visits detailed in this program, or instead, while dining on a patio in the Loveland/Fort Collins area. We've included a dining and beer guide in this booklet to help with your planning. While talking about entertainment, be sure to get your boots ready for Thursday night -- we expect to see you on the dance floor for a great show by Halden Wofford and the Hi-Beams!

So let's use the next couple of days to relax, take in lots of papers and posters, and truly celebrate those peoples and cultures of the Great Plains (and Rocky Mountains) -- both past and present.

With Best Wishes,

Jason LaBelle  
Plains Anthropological Conference Organizer  
Associate Professor, Department of Anthropology  
Director, Center for Mountain and Plains Archaeology  
Colorado State University

Christopher Johnston  
Plains Anthropological Conference Program Chair  
Graduate Student  
Center for Mountain and Plains Archaeology  
Colorado State University



As one of the sponsors of the 71<sup>st</sup> Plains Anthropological Conference we welcome you to Loveland, Colorado. This is the fourth Plains Conference to be held in Colorado and we are grateful for the tireless efforts of Dr. Jason LaBelle, Chris Johnston, and other students and staff at Colorado State University, as well as the conference committee members, in organizing the meeting.

The annual meeting of the Colorado Archaeological Society (CAS) coincides with the last day of the conference and I urge you to consider attending some of those presentations as well. Both CAS and the Plains Conference have origins that date to the 1930s and together they have had a tremendous influence on how we do archaeology in Colorado. Although many associate Colorado just with the mountains, over one third of our state is part of the Great Plains, and some of our most striking archaeological sites are in this region.

As we create a future for Colorado, we at the Office of Archaeology and Historic Preservation are constantly mindful of how we also honor the past. Meetings such as the Plains Conference serve as a powerful reminder of what this past can teach us. We look forward to learning a great deal from this gathering, as well as seeing old friends and meeting new colleagues.

Welcome to Colorado!

Richard H. Wilshusen  
State Archaeologist/Deputy State Historic Preservation Officer

Kevin D. Black  
Assistant State Archaeologist

## **General Information**

**Conference Headquarters:** All conference events, except for the guided tours on Wednesday and Sunday, will be held at the John Q. Hammons Conference Center in the Embassy Suites-Loveland Hotel, Spa and Conference Center, located at 4705 Clydesdale Parkway, Loveland, CO. Visit <http://www.embassysuitesloveland.com/>.

**Hotel Information:** Check-in time is 3pm and check-out is at 12pm. Parking at the hotel is free, there is no valet or covered parking spots. The hotel offers guests complimentary cooked to order breakfasts in the morning as well as a complimentary evening reception with light appetizers, alcoholic and non-alcoholic beverages. These are for guests staying at the hotel only. There is an in-house restaurant, as well as a variety of restaurants near the hotel, see the dining guide for all of the options. WiFi access in the hotel is available to all guests for a fee of \$10 per day. Free WiFi is available in the hotel atrium next to the lobby to all conference participants.

**Registration:** The registration and information table is located in the Foyer of the John Q. Hammons conference center at the southeast end of the hotel. Hours of operation: Wednesday, October 2 from 4:00 to 8:00 p.m., Thursday, October 3 from 7:30 a.m. to 4:00 p.m., Friday, October 4 from 7:30 a.m. to 4:00 p.m., and Saturday, October 5 from 7:30 a.m. to 12:00 p.m.

**Sessions:** All symposia, general paper and workshop sessions are in the Aspen Daisy, Elderberry, Goldenglow, Snowberry and Big Thompson A/B rooms.

**Poster Sessions:** Poster sessions are located in the River Birch B room.

**Refreshments:** Coffee, tea, and tasty treats will be available mid-morning and mid-afternoon on Thursday, Friday, and Saturday for your snacking enjoyment.

**Student Paper Award Session:** Students competing for the Plains Anthropological Society Student Paper Award will present their research on Friday, October 4 starting at 1:20 p.m. in the Snowberry Room.

**Vendors and Exhibits:** Vendor space at the conference is in the River Birch A room, which will be open between 8:00 a.m. and 5:00 p.m. on Thursday, October 3 and Friday, October 4, and on Saturday, October 5 from 8:00 a.m. to 3:00 p.m. Come support local artists, archaeological organizations, and book dealers!



**Conference Merchandise:** Conference shirts with short and long sleeves, as well as hats may be purchased at the registration table. Limited quantities will be available on a first come, first served basis.

**Early Bird Party:** The Early Bird Party is in the Mountain Holly Room at the Embassy Suites Hotel on Wednesday, October 2 from 6:45 p.m. to 11:45 p.m. Free appetizers and beer are available while they last. A cash bar is also available.

**Board Meeting:** The board meeting of the Plains Anthropological Society Board of Directors is scheduled for 6:00 p.m. on Wednesday, October 2 in the Snowberry Room. An additional board meeting will immediately follow the Friday business meeting, in the Snowberry Room.

**Business Meeting:** The annual business meeting of the Plains Anthropological Society is scheduled for 5:15 p.m. in the Snowberry Room on Friday, October 4.

**Thursday Reception:** Get your dancing shoes ready for an evening dance party featuring music by Halden Wofford and the Hi-Beams, one of the most popular bands on the Front Range! A mix of honky-tonk, country rock, and western swing, this will be an evening you won't want to miss! The music will kick off at 8pm in the Mountain Holly Room, plus free beer will be available while supplies last. A cash bar will also be available. No food will be served at the concert.

**Friday Night Banquet:** A banquet dinner and keynote address will be held in the Pinyon Pine Room in the Embassy Suites hotel at 7:00 p.m. on Friday, October 4. Happy hour with a cash bar will begin in this room at 6:15 p.m. A few additional banquet tickets may be available during registration – please inquire about availability at that time.

**Banquet Speaker:** This year's banquet speaker is Douglas Bamforth. Doug is a Professor in the Anthropology Department at the University of Colorado-Boulder. He got his BA in 1978 from the University of Pennsylvania and his MA (1981) and PhD (1986) from the University of California at Santa Barbara. He has worked on the Plains in Texas, Colorado, and Nebraska, on sites dating from Clovis through Plains Village times. Although most of his work has been on the Paleoindian period, his current field program focuses on the Ceramic Period occupation of the Pine Ridge area in northwestern Nebraska.

Doug writes that his talk, *Ripples in a Mississippian Sea?*, will discuss the connections between Mississippian societies, especially but not only Cahokia, and the appearance and development of horticultural ways of life on the Plains, especially but not only the Central Plains. This is not a new topic, but he hopes to show that existing perspectives and knowledge lay the groundwork for new ways of thinking about these connections. He will especially grapple with the variability that decades of archaeological research has documented, variability that is hard to make sense of in the taxonomic frameworks we have relied on so heavily for so long. Instead of foci, phases, and complexes that were somehow influenced by their neighbors, he wants to talk about active choices made by local communities and households about how to deal with changes and opportunities offered by nearby complex societies.

## **Pre Conference Tour:**

The field trip on **Wednesday, October 2** is themed “Late Pleistocene-Early Holocene Paleoindian Sites of the Kersey Terrace near Greeley, Colorado”. The Late Pleistocene-Early Holocene age Kersey Terrace of the South Platte River south and east of Greeley has long been known for its important Paleoindian sites, including the well-known Dent site, location of one of only a handful of Clovis mammoth kills. This Plains Conference tour, led by University of Northern Colorado Professor Bob Brunswig, visits the locations of several significant Paleoindian sites, Dent (Clovis), Klein (Clovis), Fox (Clovis), Powars (Folsom), Frazier (Agate Basin), and Jurgens (Cody) and explains their role and context within the South Platte landscape and environment of the Late Ice Age and early Holocene. The bus will depart from the front of the Embassy Suites hotel at 10:30 a.m. and return by the late afternoon. If you did not purchase a box lunch during your registration then you will need to provide your own lunch. Please bring water and plan to wear outdoor clothing and shoes.

Bob Brunswig is Professor Emeritus and Research Fellow at the University of Northern Colorado in Greeley. He received his Ph.D. from the University of Colorado and has conducted field research in the eastern plains and Rocky Mountains of Colorado for more than a quarter century, having authored or co-authored more than 100 books, book chapters, journal articles, and research monographs. He was lead editor with Bonnie Pitblado of the 2007 edited volume, *Frontiers in Colorado Paleoindian Archaeology*, where he detailed his and others’ research on the Dent Mammoth site, one of the stops on our tour. His research projects, which emphasize mountain and plains landscape archaeology, paleoenvironmental reconstruction, and GIS landscape modeling, have mainly taken place on federal lands. Bob is a former president of the Colorado Council of Professional Archaeologists, a University of Northern Colorado Distinguished Scholar, and currently a Fulbright Specialist Scholar. This year he was named a Wzrost Visiting Professor Fellow at Nicolaus

Copernicus University in Torun, Poland, which he will visit in May, 2014, and explore the potential for collaborative American-Central European mountain research projects in the Rockies and western Carpathians.

### **Suggested references for the tour (full list available from Robert Brunswig):**

#### **General:**

Holliday, Vance T.

1987 Geoarchaeology and Late Quaternary Geomorphology of the Middle South Platte River, Northern Colorado. *Geoarchaeology* 2: 317-329.

#### **Dent (5WL269):**

Brunswig, Robert H.

2007 New Interpretations of the Dent Mammoth Site: a Synthesis of Recent Multidisciplinary Evidence. In *Frontiers in Colorado Paleoindian Archaeology: From the Dent Site to the Rocky Mountains*, edited by R.H. Brunswig and B.L. Pitblado, pp. 87-121. University Press of Colorado, Boulder.

#### **Powars (5WL1369):**

Roberts, Frank H.H., Jr.

1937 New Developments in the Problem of the Folsom Complex. *Explorations and Field-Work of the Smithsonian Institution in 1936*, pp. 69-72. Washington, D.C.

#### **Klein Clovis Site, Klein II (5WL1368)**

Zier, Christian J., D.A. Jepson, M. McFaul, and W. Doering

1989 Archaeology and Geomorphology of the Clovis-Age Klein Site near Kersey, Colorado. *Plains Anthropologist* 38(143): 203-210.

#### **Frazier Site (5WL268)**

Lee, Craig M., Lee, J. B., Turnbull, J.

2011 Refining the chronology of the Agate Basin Cultural Complex:

Radiocarbon dating the Frazier Site (5WL268). *Plains Anthropologist* 56(219): 121-141.

#### **Jurgens Site (5WL53)**

Wheat, Joe Ben

1979 The Jurgens Site. *Plains Anthropologist Memoir No. 15*. Lincoln.

### **Post Conference Tour:**

The tour on **Sunday, October 6** is themed “19<sup>th</sup> Century Trading Posts of the South Platte River”. This tour will be led by Cody Newton. The tour group will be visiting the locations of four trading posts (Fort St. Vrain, Jackson, Lupton, and Vasquez) on the South Platte River that operated simultaneously for a brief period during the late 1830s. Cody will be talking about these posts in terms of the larger social, economic, and environmental processes during their operation, as well as the influence of local Plains Indian groups on this trading locus. The bus will leave the Embassy Suites Hotel at 9 a.m. and return to the hotel at

approximately 2 p.m. If you did not purchase a box lunch during your registration then you will need to provide your own lunch. Please bring water and plan to wear outdoor clothing and shoes.

Cody Newton is an archaeologist who has been working in the Great Plains and Rocky Mountains for over 14 years. He has a B.A. in Anthropology from the University of Wyoming, an M.A. in Anthropology from Colorado State University, and is currently a Ph.D. student at the University of Colorado – Boulder. Cody's research focuses on Native American hunter-gatherer groups following the introduction of European-derived goods and technologies; particularly during the eighteenth and early nineteenth centuries when Plains and Rocky Mountain Indian groups largely became equestrian, as well as involved in European-based economic systems. Other research foci include early European exploration and settlement, prehistoric bison-based subsistence and bison evolution, Paleoindian studies, and the historic Plains Indian Wars. His research has appeared *Current Research in the Pleistocene*, *Ethnohistory*, *Great Plains Research*, *Plains Anthropologist*, and *Wyoming Archaeologist*.

### **Suggested references for the tour:**

Hafen, LeRoy

1928 "Fort Jackson and the Early Fur Trade on the South Platte." *The Colorado Magazine* 5: 9-17.

Hafen, LeRoy

1929 "Old Fort Lupton and Its Founder." *The Colorado Magazine*, 6: 220-226.

Hafen, LeRoy

1952 "Fort St. Vrain." *The Colorado Magazine*, 29: 241-255.

Hafen, LeRoy.

1964 "Fort Vasquez." *The Colorado Magazine*, 41: 198-212.

Judge, James

1971 "The Archaeology of Fort Vasquez." *The Colorado Magazine*, 48: 181-203.

Newton, Cody 2012 Native Place, Environment, and the Trade Fort

Concentration on the South Platte River, 1835-1845. *Ethnohistory* 59: 239-260.

### **The Colorado Archaeological Society (CAS) Tour:**

"The Line Shack Draw (5LR110): 7,000+ years of Native American and Euro-American History in the Larimer County Foothills" will also be on **Sunday, October 8** and is open to both Plains and CAS conference attendees. This tour will be led by Michael Troyer, CSU graduate student, and Meegan Flenniken of the Larimer County Department of Natural Resources. The Line Shack Draw site (5LR110) is a multi-component site in northern Larimer County. Initial analysis suggests intermittent aboriginal occupation spanning the last 7000

years, with historic sheepherding and ranching components dating to the early 20<sup>th</sup> century -- all centered around a spring fed draw nestled in the hogbacks. The site was first recorded by CSU in the early 1970s during the Boxelder Water Control Project, and further investigated during the 2006 and 2007 CSU Class II Survey of the Red Mountain Open Space, and the 2009 and 2011 CSU archaeological field schools. Surface inventories and subsurface testing indicate an extensive site with intact, buried components. CSU archaeologists recorded three prehistoric hearth features, 1138 flakes, 57 formal tools, four stone circles, a prehistoric trade bead, two historic cabins, and a variety of historic artifacts from the large site.

The Line Shack tour will begin at the Red Mountain Ranch Open Space parking lot (approximately 1.5 hours from the conference location - directions provided) at 9 am. Carpooling to the parking lot is encouraged. The site is a 1.75 mile one-way, moderate intensity hike, for a total of around 4 miles of hiking including touring the site. The tour will last approximately 3-4 hours. Bring water, snacks, sunscreen, appropriate footwear, and clothing as the weather dictates. Be sure to bring your own lunch, if you like. 30 people maximum, not including tour leaders. Carpooling to the field trip location is requested by both the Conference Organizers as well as Larimer County Department of Natural Resources (managers of the property).

Please sign up for this field trip at the Conference Registration Desk.

Tour leader Michael Troyer is an archaeologist with the Bureau of Land Management, Royal Gorge Field Office, in Cañon City, Colorado, and an anthropology graduate student at Colorado State University. He is presently finalizing his thesis, which is aimed at understanding variation in prehistoric hearth morphology across northern Colorado, and includes three hearths recorded on 5LR110.

### **Suggested references for the tour:**

Thoms, A.V

2009 Rocks of ages: propagation of hot-rock cookery in western North America. *Journal of Archaeological Science* 36(3):573-591.

Wandsnider, LuAnn

1997 The Roasted and the Boiled: Food Composition and Heat Treatment with Special Emphasis on Pit-Hearth Cooking. *Journal of Anthropological Archaeology* 16(1):1-48.

## Halden Wofford and the Hi-Beams

Join us Thursday evening for a night of great music,  
dancing and downright GOOD TIMES!



Halden Wofford and the Hi\*Beams ride out from the cutting edge cowtown of Denver, Colorado. Rootsy and real, neither revivalist nor retro, the Hi-Beams' brand of country music is as boundless and electrifying as America itself. Equal parts Hank Williams and Johnny Depp, front man Halden Wofford pours forth a potent mix of rocked-up honky tonk, western swing, Dylanesque originals and spaghetti western epics. There is no creative limit to the songwriter, illustrator, author, storyteller and singer. But Halden has met his match in the Hi-Beams. Each outrageous tale he spins is met by the whine and wail of the steel guitar, the furious double-neck electric guitar and mandolin, and the relentless thump of the upright bass and drums.

# Colorado Archaeological Society



The Colorado Archaeological Society (CAS) was founded in 1935 by members with interests in the history and prehistory of humans in Colorado. The Chipeta Chapter in Montrose was also established in 1935 and is the oldest continuously active chapter. Subsequently, other groups were chartered in cities throughout Colorado. Now, with a history of more than 78 years, CAS has eleven Chapters throughout Colorado, a membership of over 900, and has developed many programs, research projects, and activities that are open to all Colorado professional, avocational, and student archeologists.

The mission of CAS is focused on the stewardship of archaeological resources in Colorado. This is achieved through public education, research, conservation and enhanced opportunities for responsible participation in archaeology for interested individuals and organizations.

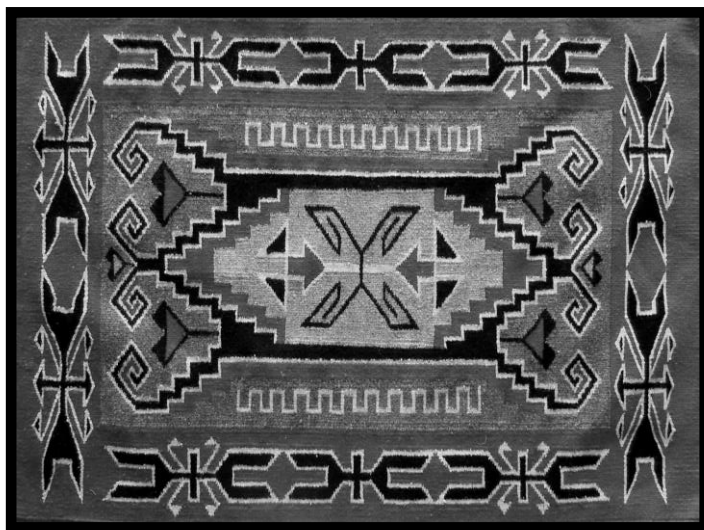
As CAS members became more involved in all phases of archaeology, training programs were developed to meet their needs. Training was originally provided by qualified CAS members and later by the office of the State Archaeologist. This subsequently evolved into the Program for Avocational Archaeological Certification (PAAC), taught by the eminently well-qualified Assistant State Archaeologist Kevin Black. PAAC offers training at each of the CAS Chapters several times a year in classes that cover a wide range of topics.

*Southwestern Lore*, Journal of Colorado Archaeology, has been continuously published on a quarterly basis by the Society since 1935, making it one of the oldest and most respected publications of its type in existence.

## COLORADO ARCHAEOLOGICAL SOCIETY

### 2013 RAFFLE

This raffle is a fund-raiser for the Alice Hamilton Scholarship Fund -- making annual awards to qualifying Colorado archaeology students for assistance in research and travel funds.



This bold, exciting Navajo rug is made in the Teec Nos Pos tradition. Surrounded by a wide border containing a lightning path, it is filled with an exuberant variety of stylized feathers, arrows, diamonds, hooks and more. The harmonious color combination of red, cream, gray and black is often considered a Red Mesa variation. It measures 29" x 40". Our gratitude to Linda Sand (Denver Chapter) for this generous donation! Retail value estimated by Notah Dineh Tradingat \$700-900.

**Raffle ticket prices: \$3 each OR 4 for \$10**

**Tickets can be purchased at the Banquet Reception on Friday evening.**

**Drawing:**

**Noon, OCTOBER 5, 2013**

**Embassy Suites Conference Center in Loveland, CO.**

**Winner need not be present.**



# **Northern Colorado: A Guide for our Guests**

## **Self-Guided Visit to Soapstone Prairie Natural Area Home of the Lindenmeier Folsom Site**

While visiting Northern Colorado, please consider a tour to Soapstone Prairie Natural Area, owned and operated by the City of Fort Collins Natural Areas Program. The property was opened to the public in 2009, and contains miles of on-trail hiking and biking across the short grass steppe and foothills of northern Larimer County.

A self-guided visit to the Lindenmeier site is worth the effort! However, it must be stressed that hiking at Soapstone Prairie is **ON TRAIL ONLY**, so please remember to hike only along the Lindenmeier overlook trail or other trails within the Natural Area. The Lindenmeier overlook trail begins in the north parking lot at Soapstone Prairie and the property is open from dawn to dusk. To get to Soapstone from the Embassy Suites Hotel, travel north on Interstate 25, heading past Fort Collins and the town of Wellington. You will travel approximately 29 miles north on I-25 before taking exit 288 (Buckeye Road) and then heading west to County Road 15. Go north on CR 15 and turn north onto Rawhide Flats Road and continue further north to the entrance station. There are nine miles of gravel road that can be dusty, rough and bumpy. Please respect the neighbors and be safe by observing the speed limit.

October is a beautiful time to visit Soapstone, so please take the time to enjoy this beautifully preserved natural and cultural landscape.

For more information, please visit:  
<http://www.fcgov.com/naturalareas/finder/soapstone>

## **Visit the Kaplan-Hoover Bison Bonebed**

One of the larger late Archaic bison bonebeds on the Great Plains is located just outside Windsor, Colorado, just about a 15 minute drive from the conference hotel. The Kaplan-Hoover site is a Yonkee-age arroyo trap containing the remains of nearly 200 bison, which were heavily scavenged by carnivores. The site was excavated by Professor Emeritus Larry Todd and the Colorado State University Department of Anthropology from 1998-2003. Located in a picturesque subdivision, the site is listed on the National Register of Historic Places and is Colorado Open Land's first archaeological conservation easement.

For more information on the excavations, please consult:

Todd, Lawrence C., David C. Jones, Roberts S. Walker, Paul C. Burnett and Jeffery Eighmy

2001 Late Archaic Bison Hunters in Northern Colorado: 1997-1999 Excavations at the Kaplan-Hoover Bison Bonebed (5LR3953). *Plains Anthropologist* 46:125-147.

**Directions to the Kaplan-Hoover site (from the conference hotel):**

- Take I-25 North
- Take the CO-392 exit, Exit 262, towards Windsor, Colorado. Stay right.
- Turn right on to CR-1/Country Road-13/Country Line Rd.
- Take the 2<sup>nd</sup> right onto Lookout Dr.
- Take the 2<sup>nd</sup> right onto Ridge West Dr.
- Take the 1<sup>st</sup> left onto River West Dr.
- Take the 1<sup>st</sup> left onto Meander Rd.
- Kaplan-Hoover site: 2141 Meander Rd.



**The Kaplan-Hoover site today. Photo courtesy of Kaitlyn Simcox.**

## Dining and Drinking Guide

We have enlisted the help of several graduate students to help you locate some of the best dining and drinking options in the area. We have compiled a list of quick and nearby lunch options during the conference. We hope you take the opportunity to explore some of our recommendations for both beer and food, as no one knows it like the locals do!

### *Quick Lunch Options near the Embassy Suites:*

#### **Arby's**

7601 Westgate Dr,  
Windsor, CO 80538  
2.6 mi N of Embassy Suites

#### **Carl's Jr.**

4140 Clydesdale Pkwy  
Loveland, CO  
0.4 mi S of Embassy Suites

#### **Chick-fil-A**

1545 Rocky Mountain Ave,  
Loveland, CO  
2.4 mi S of Embassy Suites

#### **Chipotle Mexican Grill**

1569 Fall River Dr #105  
Loveland, CO  
2.4 mi S of Embassy Suites

#### **Jimmy John's**

1569 Fall River Dr  
Loveland, CO 80538  
2.4 mi S of Embassy Suites

#### **Noodles & Company**

1550 Fall River Dr  
Loveland, CO 80538  
2.4 mi S of Embassy Suites

#### **Qdoba**

6100 E Crossroads Blvd  
Loveland, CO 80538  
0.5 mi SE of Embassy Suites

#### **Subway**

6140 E Crossroads Blvd  
Loveland, CO 80538  
0.4 mi SE of Embassy Suites

### *Have a Little More Time?*

#### **Bar/Grill**

#### **Bent Fork Grill**

5971 Sky Pond Dr.  
Loveland, CO  
1.7 mi S of Embassy Suites

#### **Bonefish Grill**

4920 Thompson Pkwy  
Johnstown, CO 80538  
2.4 mi S of Embassy Suites

#### **Nordy's BBQ**

4360 St Cloud Dr,  
Loveland, CO  
0.5 mi SE of Embassy Suites

### **Lone Star Steakhouse**

5330 Stone Creek Cir.  
Loveland, CO  
2.3 mi S of Embassy Suites

### **Rock Bottom Restaurant & Brewery**

6025 Sky Pond Dr.  
Loveland, Colorado  
1.6 mi S of Embassy Suites

### **The Boot Grill**

4164 Clydesdale Pkwy  
Loveland, CO 80538  
0.4 mi S of Embassy Suites

### **Asian**

#### **Kobe Sushi**

1569 Fall River Dr  
Unit 169  
Loveland, CO 80538  
2.4 mi SW of Embassy Suites

#### **P.F. Chang's China Bistro**

5915 Sky Pond Dr.  
Loveland, CO 80538  
2.0 mi S of Embassy Suites

### **Café-Style**

#### **Cafe Athens**

5865 Sky Pond Dr,  
Loveland, CO  
1.8 mi S of Embassy Suites

#### **Mimi's Café**

1450 Fall River Dr.  
Loveland, CO  
2.5 mi SW of Embassy Suites

### **Panera Bread**

1550 Fall River Dr,  
Loveland, CO 80538  
2.4 mi S of Embassy Suites

### **Italian**

#### **Biaggi's Ristorante Italiano**

5929 Sky Pond Dr,  
Loveland, CO 80538  
2.1 mi S of Embassy Suites

#### **Old Chicago**

1436 Hahns Peak Dr,  
Loveland, CO 80538  
2.5 mi SW of Embassy Suites

### **Mexican**

#### **On the Border**

6015 Sky Pond Dr,  
Loveland, CO  
1.6 mi S of Embassy Suites

#### **Palomino Mexican Restaurant**

6190 Crossroads Blvd  
Loveland, CO  
0.4 mi SE of Embassy Suites

#### **Pueblo Viejo**

4630 Royal Vista Cir  
Windsor, CO  
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## **A Northern Colorado Dining Experience**

Experience the Old Town charm of both downtown Loveland and Fort Collins. Downtown Loveland is located on 4<sup>th</sup> Street and Highway 287, just a few blocks south of Highway 34. Restaurants, shops and even a few breweries can be found in the quaint blocks of downtown. Old Town Fort Collins is off Mountain Avenue and Highway 287 (aka College Avenue). You'll find plenty of shops, restaurants and breweries in Old Town, and you'll soon discover its charm and character.

### **The Next Door**

222 E 4th St  
Loveland, CO 80537  
(970) 541-3020

Located in downtown Loveland, if you're looking for a nearby sit-down restaurant, The Next Door is an excellent choice. The menu offers a variety of tapas and American cuisine. \$\$\$

### **Okole Maluna**

431 Main St,  
Windsor, CO 80550  
(970) 686-8844

Okole Maluna brings authentic Hawaiian food to Windsor, Colorado. If you're looking for a unique food experience but don't want to drive to Fort Collins make sure to stop by. Make sure to try the calamari. \$\$

### **Restaurant 415**

415 S Mason Ave  
Fort Collins, CO 80521  
(970) 407-0415

Recently opened in downtown Fort Collins, Restaurant 415 offers a variety of locally grown ingredients incorporated into a dish suited to anyone's taste. The menu offers a wide variety of small dishes that can be affordably combined ensuring you will leave full. An inviting atmosphere and kind staff makes the experience worthwhile. The dining area can accommodate large parties; however, no reservations are accepted. \$\$

### **El Monte Grill and Lounge**

1611 S College Ave  
Ste 100  
Fort Collins, CO 80525  
(970) 372-1869

Mexican food with a twist. El Monte's artsy atmosphere and unique menu is worth the drive. Start your dinner off with a treat; make sure to try the queso

fundido. The grill and lounge offer outdoor seating and a full bar. The dining area can accommodate large parties. Reservations are suggested. \$\$\$

### **Bisetti's**

120 S College Ave.  
Fort Collins, CO 80524  
(970) 493-0086

Family owned, Bisetti's restaurant serves homemade pastas and other favorite Italian style dishes. If you're looking for a hole-in-the-wall Italian restaurant, Bisetti's is an excellent dinner option. The dining area can accommodate large parties. Reservations are recommended. \$\$\$

### **Café Vino**

1200 S College Ave  
Fort Collins, CO 80524  
(970) 212-3399

A Fort Collins favorite, located off College Ave, Café Vino has excellent accommodations for large parties and outdoor seating. An assorted menu and full bar ensure a variety of options for any taste. Reservations are recommended. \$\$\$

### **Taverna Greek Grill**

4235 S College Ave  
Fort Collins, CO  
(970) 266-1798

The traditional Greek atmosphere is the main attraction. Flying dishes and dancing waiters makes the dining experience both genuine and amusing. With the best traditional Greek food in the area, Taverna takes the award for the most entertaining restaurant. \$\$\$

### **Austin's American Grill**

2815 E Harmony Rd  
Fort Collins, CO  
(970) 267-6532

With two locations in Fort Collins, Austin's American Grill offers delicious traditional steak house menu items at an affordable price. The closest option is located south of downtown Fort Collins. \$\$\$

## **A Beer Nerds Guide to Northern Colorado Breweries and Beer Bars**

The Colorado Front Range has the well-deserved reputation as the Napa Valley for beer drinkers. While here for the Plains Anthropological Conference we encourage you to sample and enjoy all of the malty, hoppy goodness this region has to offer. This list is by no means an exhaustive. There just isn't space to include all of the excellent breweries and beer bars. But the following is a list of recommended destinations for the visiting beer enthusiast to help put you on the right path to flavor country. With great beer comes great responsibility, so please make sure to enjoy our exciting beer culture safely.

### **Loveland**

#### **Loveland Aleworks**

**118 W 4th St, Loveland, CO 80537**

One of the closest breweries to the conference, Loveland Aleworks is worth the short drive to their brewery and taproom for a constantly rotating selection of American, Belgian, and British style ales. The tripel packs a deceptively smooth punch, or try one of their seasonal selections of single hop ales.

#### **Grimm Brothers Brewhouse**

**623 Denver Ave, Loveland, CO 80537**

Another popular Loveland brewery, Grimm Brothers focuses exclusively on brewing a range of German style ales and lagers. There aren't a lot of breweries in the area that brew an altbier, but the Little Red Cap is an excellent example of the style, or if you prefer darker beers, try the malty Fearless Youth dunkel.

### **Windsor**

#### **High Hops Brewery.**

**6461 Colorado 392, Windsor, CO 80550**

Part garden center, part home-brew supply shop, part hop farm, and part brewery, High Hops is an often-overlooked member of the local brew scene. Located just a short drive up I-25 from the conference hotel, their patio overlooks their own hop farm, and beyond that a commanding view of the Front Range and Longs Peak. Let's face it, this is not the best beer in Northern Colorado (it's still very good!), especially when compared to the stiff competition just up the road, however it very well might be the best place to drink it.

## **Fort Collins**

### **New Belgium Brewing Co.**

**500 Linden Street, Fort Collins, CO 80524**

The elephant in the room, and the darling of the Fort Collins beer scene, New Belgium is kind of a big deal. It is not over-hyped, it's really that good. Fat Tire fresh from the source is delicious, but what really makes it worth the trip is the rotating selection of small batch beers that showcase how creative this brewery really is. Rampant is a top notch IPA, and there's always a couple sour beers on tap if you're into that sort of thing.

### **Odell's Brewing Co.**

**800 E Lincoln Ave, Fort Collins, CO 80524**

Often overlooked for its bigger New Belgian brother, Odell's brews beer that is every bit as tasty and creative. Their core line up of beers are all good but once again it is the constantly rotating selection of small batch beers, many of which you can only taste at the brewery, that makes Odell's stand out. Try the Loose Leaf session ale for something lighter, or Myrcenary imperial IPA or Lugene chocolate milk stout for a bigger, bolder offering.

### **Equinox Brewing**

**133 Remington St, Fort Collins, CO 80524**

Equinox Brewing is a brewery and a tap room, and that's it. They don't bottle their beer so if you want some, and you really do, you have to visit their brewery. Equinox simply makes some of the freshest, best tasting American, British, and German style ales in Fort Collins. The Darth Ryder dunkelweizen is excellent, or if you prefer something lighter and hoppier, the Twu Wuv pale ale is for you. For an added bonus there are always two beers available from the cask, which is highly recommended.

### **The Mayor of Old Town**

**632 S Mason St, Fort Collins, CO 80524**

While not actually a brewery, there is probably no better place in Fort Collins to indulge your inner beer nerd than The Mayor where you can sample any number of their 100 beers on tap. The extensive beer list is organized by style ranging from P.B.R. to imperial stouts. Of note is a very good selection of hard to find Belgian beers.

### **Black Bottle Brewery**

**1611 S College Ave 1605 & 1609, Fort Collins, CO 80525**

A new addition to the Fort Collins brew scene, Black Bottle Brewery combines a local microbrewery tap room, with a respectable beer list that includes a large selection of other breweries offerings as well. But the beers they brew



themselves are very good. Try the Social Insecurity Belgian session ale or the Friar Chuck kolsch. Or, if you have a D.D. try the P.D.A. tripel.

### **Choice City Butcher & Deli**

#### **104 W Olive St, Fort Collins, CO 80524**

Like the Mayor of Old Town, Choice City is not a brewery, but is worth mentioning because their beer list is so good. While the Mayor has them beat for number of beers on tap, Choice City stands out because the beers they do serve are very carefully selected and hard to find. For example, you won't find Russian River's Pliny the Elder at the Mayor, but you have a good chance of getting to taste it here. As well as about 15 other beers you may or may not have ever heard of but definitely need to try.

### **Funkwerks**

#### **1900 E Lincoln Ave, Fort Collins, CO 80524**

Compared with most of the other breweries in Fort Collins, Funkwerks is rather narrow in focus. They don't brew beer with dandelions, nor can you get a face-melting hop assault. Not only do they only brew Belgian style ales but they specialize in Saisons and farmhouse styles. Funkwerks might not be for everyone, but if you have a taste for dry, complex, effervescent brews then this is a great place to explore some different varieties of this style.

### **Boulder**

#### **Avery Brewing Co.**

##### **763 Arapahoe Ave, Boulder, CO 80303**

While a bit further away than the Fort Collins brew scene, Boulder's Avery Brewing Co. should be on every serious beer nerd's radar. This is some of the best beer in Colorado, which in turn makes it some of the best beer in the country. They specialize in American and British style ales, and honestly everything they make is really good. If you like BIG beers try the Salvation, or if you want something a little less extreme, Ellie's Brown Ale is smooth, malty, and dangerously drinkable.

### **Denver**

#### **Great Divide Brewing Co.**

##### **2201 Arapahoe St, Denver, CO 80205**

No list of Northern Colorado beer destinations would be complete without mentioning Great Divide Brewing Co. Their whole line-up is solid and there is certainly going to be something for everyone, but what puts Great Divide on the map is the Yeti imperial stout, and its several oak-aged variants. Not for the faint of heart, Yeti might be the biggest, roastiest, most flavorful beer you've ever tasted. The Denver Pale Ale is their work horse beer if your taste buds need a break.



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# Presentation Schedule

## Thursday Morning, October 3, 2013

### **Session 1, Aspen Daisy and Elderberry Rooms**

Symposium: *Middle Missouri Archaeology: Updates on Current and Ongoing Research Projects in the Dakotas*

Kacy L. Hollenback and Fern E. Swenson, Organizers

Session Chair: Kacy L. Hollenback

- 8:00** Kacy Hollenback: *Introduction*
- 8:10** Richard Anderson: *Paleoindian Archaeology of the Little Missouri Badlands, North Dakota: First Impressions*
- 8:30** Damita Engel, Mike McFaul, Dante Knapp, and Kimball Banks: *A Hole Is More Than The Sum of Its Parts – Recent Investigations in the Knife River Flint Quarry Area*
- 8:50** Rigden Glaab and Calvin Grinnell: *Ma'akě Tě'haŋ MakoŠ' (Earth Always Endures): Preliminary Results from the 2013 Excavations at the Chief Iron Eyes Site (32DU1742) in Western North Dakota*
- 9:10** Jennifer Harty: *Those Are Not All Tipi Rings: Stone Features at a Chippewa Site Along the Little Knife River*
- 9:30** Kade Ferris: *Gunshots and Thunderbirds: Archaeology and Tribal Interpretation and NRHP Evaluation at 32MN946*
- 9:50** **Break**
- 10:00** Timothy Reed, Amy Bleier, and Calvin Grinnell: *Is That a Snake in the Grass? 32DU1807: A Stone-Feature Site in Dunn County, North Dakota*
- 10:20** Ronald C. Schirmer and Dale R. Henning: *“Go East, Young Man!” The Initial Middle Missouri Tradition and Red Wing’s Silvernale Phase*
- 10:40** Dennis Toom and Michael Jackson: *Dating Cattle Oiler: An Initial Middle Missouri Village in Central South Dakota*
- 11:00** Richard A. Krause: *In Defense of Culture History*
- 11:20** Marvin Kay: *Northern Plains Villagers: the Known Unknowns*
- 11:40** W. Raymond Wood: *Discussion*

## Session 2, Goldenglow Room

Symposium: *Hudson-Meng: New Archaeological Investigations of a Classic Paleoindian Bison Kill*

Dennis L. Kuhnel, Organizer

Session Chair: Dennis L. Kuhnel

- 8:00** Dennis Kuhnel: *Interpretive Master Planning at the Hudson-Meng Education and Research Center*
- 8:20** Kathleen Hanson: *An Interpretive Study at Hudson-Meng Education and Research Center*
- 8:40** Jami Campbell: *Homesteading Hudson-Meng*
- 9:00** Kate Kourbatova: *Climate and flora as factors in the occupation history of Hudson-Meng*
- 9:20** Mark Muñiz: *New Observations on the Geochronology and Depositional History of the Hudson-Meng Site*
- 9:40** Diana Barg: *Rethinking Hudson-Meng: A Taphonomic Analysis of the Faunal Assemblage From 25sx115, Sioux County, Nebraska*
- 10:00** **Break**
- 10:20** Mark Muñiz and Diana Barg: *New Observations on the Long-term Use of the Hudson-Meng Site by Cody Complex Peoples*
- 10:40** Robert Tillman: *The Early Archaic Component from the Hudson-Meng Bison Kill Site*
- 11:00** Gregg Felber: *Lithic Sourcing Analysis at Hudson-Meng*
- 11:20** Matthew Douglass: *Local Lithic Source Utilization Patterns in the Oglala National Grasslands, Northwest Nebraska*
- 11:40** Michael Chodoronek and Matthew Douglass: *Photogrammetry as a technique for infield documentation of archaeological features: A case study of pit hearths from the Oglala National Grasslands, Northwestern Nebraska*

## Session 3, Snowberry Room

General Session: *Archaeology on the Central and Southern Plains*

- 8:20** Steven Mack: *Graphite as a Marker of Social Fields on the Park Plateau, northeast New Mexico*
- 8:40** Marjorie Duncan: *Calf Creek Middle Archaic Campsites on the Flint Hills of Kansas and Oklahoma: The Grouse Creek and Kubik Sites*
- 9:00** Veronica Mraz: *Across the Landscape: An Examination of Environmental and Cultural Changes through Analysis of Late Prehistoric Lithic Assemblages from North-Central Oklahoma*
- 9:20** Don Wyckoff and Jim Cox: *Bringing It North: Georgetown Variety Edwards Chert Use in Oklahoma's Redbed Plains*

- 9:40** Kent Buehler and Angela Berg: *Analysis of Human Remains from Stephens County, Oklahoma*
- 10:00 Break**
- 10:20** Donna Roper: *Using Chronometric Hygiene to Revise the Central Plains Tradition Chronology*
- 10:40** Susan Vehik: *Symbolism of the Little River Focus Council Circles*
- 11:00** Robert J. Hoard and Rob Bozell: *The Forrest site (14PA303): A Keith phase site in Central Kansas*
- 11:20** Mary J. Adair, Brendon P. Asher, Alison M. Hadley, and Jack L. Hofman: *Pawnee Archaeology: Recent Investigations of the late Eighteenth century Kansas Monument site, 14RP1*

## **Session 4, Big Thompson A and B Rooms**

Symposium: *COOL THINGS: Meaning in Material Culture*

Linea Sundstrom and Alice B. Kehoe, Organizers

Session Chair: Alice B. Kehoe

- 8:50** Alice Kehoe and Linea Sundstrom: *Session Introduction*
- 9:00** Linea Sundstrom : *James Twiss in Two Worlds: A Lakota Scout's Shirt*
- 9:20** Alice Kehoe: *Chief Bull's Certificates: Signs and Plains Sign Language*
- 9:40** Marsha Fulton and Crystal Alegria: *Sharing Their Stories: Incorporating Oral History into Archaeological Research*
- 10:00** Brian Forman: *Ethnographic Analogs for Menominee Agriculture: The View from Buffalo Bird Woman's Garden*
- 10:20 Break**
- 10:40** Joseph Wilson: *An Athapaskan Cultural Substrate in the Northern Plains?*
- 11:00** Linea Sundstrom: *The Heart of Everything: A 1940s Lakota Map of Black Hills Sacred Sites*
- 11:20** Alice Kehoe and Mary Eggermont-Molenaar: *Bear Child's Life Story, Illustrated*
- 11:40** Sebastian Braun: *A Continuous Industrialization: The Meaning of Oil and Water on the Northern Missouri*

## **Session 5, River Birch B Room**

**Poster Symposium:** *Three Schools for Three Fields: Results of the 2013 Colorado State University Archaeology, Paleontology, and Cultural Field Schools*

Jason M. LaBelle, Organizer

**9:00-11:30**

- A. Halston F.C. Meeker, Jenny Simacek, Katrina Shrawder, Andrew Aldridge, and Zack P. Tamminga: *A Chronological Study of Pottery and Projectile Points from Rollins Pass, Colorado*
- B. Halston F.C. Meeker, Natalie Sanford, Ericson, Gwen Kristy, Jonas Kurronen: *Spatial Analysis of the Round Butte and Bernard Ranch Stone Circle Sites in Northern Larimer County, Colorado*
- C. Kristy Kay Griffin, Tae Naqvi, Jerry Smith, Kate Wright, and B. Travis Wright: *Wright's Wheels: An Archaeological Investigation of a Freight Car Wreck at Devil's Slide, Rollins Pass, Colorado*
- D. Kimberly Nichols, Thomas Bown, Lauren Allen, Samantha Erickson, Jenna Meier-Bilbo, Matthew Nugent: *Inaugural Paleontology Field Course (ANTH 470): 2013 Field Season, Bighorn Basin, Wyoming*
- E. Kimberly Nichols, Thomas Bown, Lauren Allen, Natalia Clark, Michelle Dinkel, Brett Kuyper, and Lucas Weaver: *Early Eocene Primates & Their Closely-Related Allies: 2013 Field Season, Bighorn Basin, Wyoming*
- F. Kimberly Nichols, Thomas Bown, Robyn Borjas, Natalia Clark, Michelle Dinkel, Samantha Erickson, Brett Kuyper, Jenna Meier-Bilbo, Matthew Nugent, and Lucas Weaver: *Early Eocene Primate Paleocommunities: 2013 Field Season, Bighorn Basin, Wyoming*
- G. Ben Quernheim and Michael Brydge: *Pine Ridge Ethnographic Field School*

## **Thursday Afternoon, October 3, 2013**

## **Session 6, Aspen Daisy and Elderberry Rooms**

Symposium (continued from morning session): *Middle Missouri Archaeology: Updates on Current and Ongoing Research Projects in the Dakotas*

Kacy L. Hollenback and Fern E. Swenson, Organizers

Kacy L. Hollenback, Session Chair

**1:00** Jay Sturdevant: *Preliminary Analysis of High Resolution LiDAR Survey at Knife River Indian Villages National Historic Site*

- 1:20** Blair Benson Schneider, Steve De Vore, and Jay Sturdevant: *Geophysical Survey at Knife River Indian Villages National Historic Site: Comparing Forty Years of Magnetic Data*
- 1:40** Rinita Dalan, Jessica Sharp, Rebecca Wallace, Jay Sturdevant, and Steven De Vore: *Cutbank Geophysics: Magnetic Susceptibility Testing at Sakakawea Village*
- 2:00** Adam Wiewel: *Airborne Lidar versus Digital Photogrammetry: A Comparison of Elevation Models of Fort Clark State Historic Site, North Dakota*
- 2:20** Kenneth Kvamme and Adam Wiewel: *Discriminating Between Hearths and Storage Pits in Northern Plains Villages Through Magnetic Methods*
- 2:40** Kacy L. Hollenback, Christopher I. Roos, Fern, and Adam Wiewel: *Soil Chemical Evidence for Domestic Ritual Behavior in a Protohistoric Earthlodge, Fort Clark, North Dakota*
- 3:00** **Break**
- 3:20** Mark D. Mitchell: *Recent Archaeological and Geophysical Investigations at Fort Clark State Historic Site*
- 3:40** Wendi Field Murray and Fern E. Swenson: *Situational Sedentism: Postcontact Arikara Settlement as Social Process in the Middle Missouri, North Dakota*
- 4:00** William Billeck: *Stylistic Variation of Native American Glass Pendants in the Plains*
- 4:20** Paul R. Picha and Carl R. Falk: *"A Toss of the Dice:" Gaming Pieces in Middle Missouri Archaeology*
- 4:40** W. Raymond Wood: *Discussion*

## **Session 7, Goldenglow Room**

Symposium (continued from morning session): *Hudson-Meng: New Archaeological Investigations of a Classic Paleoindian Bison Kill*  
Dennis L. Kuhnel, Organizer and Session Chair

- 1:20** Luke Hittner: *An Analysis of the 21 Alberta Projectile Points at the Hudson-Meng Site*
- 1:40** Larry Agenbroad: *Paleoenvironment, Paleoindians, Paleoprocurement and Paleointerpretations*
- 2:00** *Discussion*
- 2:20** **SESSION END**



## Session 8, Snowberry Room

General Session: *Zooarchaeology, Bison, and Hunting on the Plains*

- 2:40** Lauren O'Shea, Leland Bement, Raul Tito, and Cecil Lewis: *Population Dynamics of southern Plains bison herds*
- 3:00** KC Carlson, Leland Bement, Brian Carter, and Scott Hammerstedt : *Ravenscroft II: Imaging and Geoarchaeology of a late Paleoindian Oklahoma Bison Kill*
- 3:20** Danny Garges and Matthew G. Hill: *Taphonomy of Faunal Remains Recovered from a Missouri River Sandbar*
- 3:40** Ronald Rood: *Zooarchaeological Evidence for Opal Phase Communal Jackrabbit Hunting in Central Wyoming: Faunal Remains from the Dick Myal Housepit Site, 42FR6256*
- 4:00** Kaitlyn Simcox: *A Historical Perspective on the Mapping of Bonebeds and Future Considerations*
- 4:20** Mark Miller and William Scoggin: *The Scoggin Bison Kill (48CR304) Forty Years Later*

## Session 9, Big Thompson A and B Rooms

Workshop: *Integrated Archaeological Sciences Workshop*

Organized by Linda Scott-Cummings

**1:30-4:00**

This workshop, hosted by PaleoResearch Institute, will discuss individual techniques to examine macrofloral, pollen and phytoliths, among other topics, as well as how to integrate those analyses to begin to form a more comprehensive view of past environments and activities. Those interested in participating in this workshop should meet in the Big Thompson A and B Rooms at 1:30, session will include time touring the PaleoResearch Institutes mobile lab in the parking lot, so dress accordingly.

## Session 10, River Birch B Room

Poster Session: *Paleoindian Archaeology*

**1:30-4:00**

- A.** Edward Knell and Matthew E. Hill: *Assessing Variability in Cody Complex Tool Assemblages*
- B.** John Moretti, Eileen Johnson, Stance: *Macy Locality 100 - A Record of Environmental Change from the Latest Pleistocene to Early Holocene along the Southern High Plains of Texas*

- C. Marlis Muschal: *Cody and Folsom Technological Organization in the Southern Plains Environment*
- D. Matthew G. Hill, David Rapson, Thomas Loebel, and Dave May: *Late Paleoindian Bone and Antler Artifacts from the Clary Ranch Sites, Ash Hollow, Nebraska*
- E. Keith SoRelle, Vance T. Holliday, Travis Conley, Eileen Johnson, and Stance Hurst: *Interactions Between Ancient Peoples and Paleoenvironments Along Mustang Draw on the Southern High Plains*
- F. Tom Westfall, Rick Miller, and Grayson Westfall: *Evidence of Clovis occupation in the South Platte River Valley in eastern Colorado*

## **Session 11, Goldenglow Room**

General Session: *Rock Art Research*

- 2:40** Garren Meyer: *Investigations at the Carbone Rock Art Site, Big Horn County, Montana*
- 3:00** Lawrence Loendorf: *Lookout Cave as a Home for the Buffalo*
- 3:20** Michael Bies: *Dinwoody Tradition Rock Art Seriation and Production Techniques*
- 3:40** James Keyser and George Poetschat: *New Rock Art Evidence for Fremont Occupation of Southwestern Wyoming*
- 4:00** Madeline Mackie: *Determining Age and Sex of Hand Spray Artists from Johnson County, Wyoming*

## **Thursday Evening, October 3, 2013**

### **Mountain Holly Room**

**8:00 pm**

Honky Tonk Concert and Dance Party

## **Friday Morning, October 4, 2013**

### **Session 12, Aspen Daisy Room**

General Session: *Archaeology on the Northern Plains*

- 8:00** Larry Grantham: *The Cobb Site: An Examination of the Meaning of Steed-Kisker Ceramics on Nebraska Phase Sites*
- 8:20** Shane Bess: *The Archaeobotany of The Cobb Site*
- 8:40** Brent Kevinsen: *Terminal Transitions: An Analysis of Projectile Points from the Terminal Middle Period on the Northern Plains*

- 9:00** George Holley and Michael Michlovic: *The Camden Style: A Glimpse into Late Prehistoric Mortuary Patterns in the Prairies of Minnesota and South Dakota*
- 9:20** Maria Nieves Zedeño, Jesse Ballenger, Matthew Pailles, Brandi Bethke, Francois Lanoe, and Will Martin: *Hunting And Fishing at the Prairie's Edge: The St. Mary Bridge Site, Mt*
- 9:40** **Break**
- 10:00** Richard Adams, Halston F.C. Meeker and John Laughlin: *Moriah Ranch Archaeology, Albany County, Wyoming*
- 10:20** Kelly Pool: *The Carter Lease Site in Context: Wyoming Basin Evidence for Pre- and Post-Contact Shoshonean Occupations*
- 10:40** Danny Walker: *A Review of Occurrences of Bone Beads and Other Bone Ornaments in The University of Wyoming Archaeological Repository (UWAR)*
- 11:00** Charles Reher, Gregory D. Pierce, and Madeline Mackie: *The Lost Effigy at Spanish Diggings*
- 11:20** Margaret Kennedy and Brian Reeves: *Rocks in a Row: Some Ideas about Rock Alignments in the Northern Plains*
- 11:40** Michael C. Wilson: *Animal Landscapes, Ritual, and Aboriginal Monuments on the Northern Plains*

## **Session 13, Elderberry Room**

General Session: *Anthropology, Ethnography, and Consultation on the Plains*

- 8:20** Kent Buehler: *Forensic Archaeology in Oklahoma: Its History and Current Status*
- 8:40** Brigid Grund: *Households with children tend to be occupied at higher densities ethnographically: Implications for identifying the presence of juveniles in the archaeological record*
- 9:00** Lauren W. Ritterbush: *Kaw Landscapes*
- 9:20** Mark Awakuni-Swetland: *How old stories and new tales can teach a native language*
- 9:40** Alison M. Hadley: *Contemporary Perspectives on Pipes from the Past*
- 10:00** **Break**
- 10:20** Chaz Evans: *Butterflies and Bulldozers: When the Present Determines the Future of the Past*
- 10:40** Kenneth Humphrey: *Archaeological Research as the Basis for an Efficient Cultural Resources Management Program: An Overview of New Investigations on Camp Guernsey, Wyoming*
- 11:00** Christy Smith: *Three Things Everyone Should Know about Tribal Monitoring Projects*
- 11:20** Harriet Richardson Seacat: *Negotiating Middle Ground: An Ethnography of Tribal Consultation Practices in the Plains*

## Session 14, Goldenglow Room

General Session: *Geoarchaeology and Paleoindian Archaeology*

- 8:20** Dave May and Steven Holen: *The Geologic Filter in the Loup River Basin*
- 8:40** William Reitze: *Historical Geoarchaeology: Reassessing the geology and stratigraphy of the Lucy Site, Central New Mexico*
- 9:00** Steven Holen, Kathleen Holen, Michael Fosha, and Brendon Asher: *The Search for Early Humans on the Great Plains: 2013 Field Activities of the Center for American Paleolithic Research*
- 9:20** Ruthann Knudson: *When the West Winds Encouraged the People*
- 9:40** David Meltzer: *Why we call it the 'Clovis' culture and not the 'Dent' culture*
- 10:00** **Break**
- 10:20** Michael Kunz: *Fluted Projectile Points in the Arctic and What They Suggest About the Beginnings of Paleoindian Technology*
- 10:40** Craig Lee, Jennifer B. Lee, and Jocelyn Turnbull: *Refining the Chronology of the Agate Basin Complex: Radiocarbon Dating the Frazier Site, Northeastern Colorado*
- 11:00** Rachael Shimek, Kelsey Knox, Sarah Jacobs, Bridget Weiner, and David Halerin: *Preliminary Results of the 2013 Excavations at the Hell Gap Site*

## Session 15, Snowberry Room

Symposium: *Historical Archaeology on and near the Plains: A Forum on Current and Future Practice*

Bonnie J. Clark and Minette Church, Organizers and Session Chairs

- 8:45** Bonnie Clark and Minette Church: *Introduction*
- 8:50** Laura Scheiber: *Culture Contact Archaeology on the Plains: A Legacy of Marginalization*
- 9:00** Cody Newton: *Bison Robes and Baubles: Developing a Native History of the Fur Trade through Archaeology*
- 9:10** Bonnie Clark: *An Archaeological view of the WWII Homefront*
- 9:20** Minette Church: *Discussion I*
- 9:50** **Break**
- 10:10** Minette Church: *Real Time GIS and Interdisciplinary Landscape Archaeology in Southern Colorado*
- 10:20** Richard Carrillo: *Advances in Historical Archaeology on the Colorado Plains: A Functional Perspective*
- 10:30** Bonnie Clark: *Discussion II*

## Session 16, River Birch B Room

Poster Session: *Technology and Methods in Plains Research*

9:00 – 11:30

- A. Shay Davis: *Stories Ingrained in the Soil: A Preliminary Analysis of Soil Chemical Properties at Two Moon Rockshelter (48BH1827) and BA Cave (48BH1065), Bighorn Mountains, Wyoming*
- B. Steven De Vore and Albert LeBeau: *Geophysical Investigations at North Prairie Sites 32ME104 and 32ME1421 at Knife River Indian Villages National Historic Site, North Dakota*
- C. Janice A. McLean, Shannon R. Ryan, and Alan R. Potter: *Effects of Lithic Source Areas on Archeological Site Density: A Case Study from Northwestern Kansas*
- D. Amanda Renner and Steven L. De Vore: *A GIS Analysis of Historic Trail Networks and Civil War-era Features along the Overland Trail in the Nebraska Panhandle*
- E. Katherine Mayo: *Utilizing Ground-Penetrating Radar at Welcome Home Ranch Rock Shelter*
- F. Katherine Mayo: *The Use of GIS in Archaeology: An accurate catchment-analysis of prehistoric life at Welcome Home Ranch Rock Shelter*
- G. Jammi Ladwig and Linda Scott-Cummings: *Culinary Encounters: Exploring Past Interactions Involving Maize Through Phytolith Morphometrics and Multivariate Statistical Analyses*
- H. Katherine Latham: *Wolf to Dog: Modeling Dog Domestication in the Context of Wolf Behavior*
- I. Benjamin Banks: *Reexamination of Archaeological Prospecting Techniques: Multispectral Imagery Analysis from Army City, Kansas*
- J. Andrew Boehm, Christopher Widga, Alan Wanamaker and Matthew G. Hill: *Using Stable Isotopes to Profile Early to Middle Holocene Bison Behavior on the Great Plains*
- K. Terrance Gibson, Krista Gilliland, and Tim Kinnaird: *Characterizing floodplain aggradation along the North Saskatchewan river using portable optically-stimulated luminescence*
- L. Dani Hoefer and Sarah Baer: *Looking Back, Looking Forward: Public Education and Archaeology – What we need to do now to foster stewardship for cultural heritage for the 21<sup>st</sup> Century*
- M. James Schindling and Minette Church: *Implementing a Geodatabase for Archaeological Site Recording, Data Collection and Information Retrieval*
- N. Greg Kauffman: *Stable Isotope Analysis of a Middle Woodland Population from North Central Kansas*
- O. Devin Pettigrew: *Atlats of the Ozark Bluffs*

## **Session 17, Big Thompson A and B Rooms**

Workshop: *Calling All Students! A Workshop for Fostering Student Interest and Involvement in the Plains Anthropological Society*

Sarah Trabert, Organizer

Session Moderators: Brendon Asher, Kacy Hollenback, William Reitze and Sarah Trabert

**9:30-11:30**

This session, chaired by a panel of students and recent graduates, is an opportunity for recent society members to generate ideas to further participation in the Plains Anthropological Society (PAS). Conference attendees are invited to discuss: (1) future and sustained student membership, (2) ways to attract new members, (3) student participation in conference organization, and (4) what PAS can do to actively engage student members. This session is an excellent opportunity for students to become actively engaged in PAS and for their ideas and concerns to be heard.

## **Friday Afternoon, October 4, 2013**

### **Big Thompson A and B Rooms**

**1:00-2:45**

Hudson-Meng Board meeting, invitation only event.

### **Session 18, Aspen Daisy Room**

General Session: *Methods and Technology in Archaeological Research*

- 1:20** Michael Carlock: *Geophysics and Ethnohistory: A Match Made at the Longest Site*
- 1:40** Robert L. Brooks: *Googling Oklahoma's Bison Kills*
- 2:00** Chris Leatherman: *Digging in the Dirt: Creating an ArcGIS Geodatabase from Non-spatial Data*
- 2:20** David Hughes: *The 19th Century GLO meets GIS*
- 2:40** Lindsay Amundsen-Meyer: *Making Tracks: Modeling Blackfoot Travel Through the Northwestern Plains Landscape*
- 3:00** **Break**
- 3:20** Donald Blakeslee: *Canadians Live in an Alternate Reality*
- 3:40** Tommy Noble and Neffra Matthews: *Photogrammetry above your head: Strategies for getting high resolution data for difficult to reach sites*
- 4:00** Neffra Matthews and Tommy Noble: *Archaeology in the Round: Using photogrammetry to capture complex archaeological subjects*

- 4:20** Linda Scott-Cummings and Donna Roper: *Dating Food Crusts: It's More Than What You Ate for Dinner*

## **Session 19, Elderberry Room**

Symposium: *In with the New and....Out with the Old? New Directions in Dismal River Aspect Research*

Sarah Trabert, Session Organizer and Chair

- 1:20** Sarah Trabert : *The Old and the New: A Summary of the Dismal River Aspect and Current Research Topics*
- 1:40** Steven Baker: *The Baron Lahontan's 1688-89 Ethnographic Observations on the Dismal River and Other Peoples of the Platte River in Nebraska Part 1: The History and Authenticity of the Baron Lahontan's Long River Narrative*
- 2:00** Steven Baker: *The Baron Lahontan's 1688-89 Ethnographic Observations on the Dismal River and Other Peoples of the Platte River in Nebraska Part 2: The Baron Lahontan's Ethnographic Observations on the Essanape/Pawnee and Gnacsitare/Plains Apache*
- 2:20** Michael Page: *A Petrographic Analysis of Dismal River Micaceous Pottery: Products of Southwestern Trade or Local Production?*
- 2:40** **Break**
- 3:00** Mary J. Adair: *Farming on the High Plains: A Model for the Dismal River Aspect*
- 3:20** David Hill: *Technological Variability in Dismal River Ceramics from the Lovitt Site, 25CH1*
- 3:40** Sarah Trabert: *Discussion*

## **Session 20, Goldenglow Room**

Symposium: *Twentieth-First Century Advances in Archaeological and Supporting Studies of the Southern Rocky Mountains and their Eastern Foothills*

Robert Brunswig and Jason M. LaBelle, Organizers

Session Chair: Robert Brunswig

- 1:20** Robert Brunswig: *Session Introduction*
- 1:30** James Doerner, Robert Brunswig, David Diggs: *Reconstructing Cultural and Climatic Change in North Central Colorado's Rocky Mountains: Current Results of University of Northern Colorado Research, 1998-2013*
- 1:50** Andrew Creekmore: *Evaluating the Application of Multiple Archaeological Geophysics Methods to a Game Drive Complex and Associated Features in North Park, Colorado*
- 2:10** Spencer Pelton: *Old Rocks, New Approach: A Regional Scale Analysis of Ground Stone Tools from the Colorado Front Range High Country*

- 2:30** Robert Brunswig: *Eleven Millennia of Highland-Lowland Hunter-Gatherer Transhumance in North Central Colorado's Rocky Mountains*
- 2:50** Jason M. LaBelle and Halston F. C. Meeker: *Benedict's Rock (5BL232): A Scottsbluff Waypoint along the St. Vrain River, Boulder County, Colorado*
- 3:10** **Break**
- 3:30** Ben Perlmutter: *Old site, new eyes: Traditional and contemporary approaches to defining cultural components and site structure at the Kinney Springs site, Larimer County, Colorado*
- 3:50** Christopher M. Johnston: *Jumping with New Data: Recent Investigations of the Roberts Buffalo Jump (5LR100), Larimer County, Colorado*
- 4:10** Kevin P. Gilmore, John W. Ives, and Sean Larmore: *Promontory on the Plains: An Examination of Material Culture Similarities between the Great Basin and Eastern Colorado and the Implications for Apachean Migration*
- 4:30** Sally McBeth: *Pilgrimage and Sacred Sites in the Northern and Central Plains and eastern margins of the Rocky Mountains: An Investigation through the Collection of Personal Narratives of Pilgrims*

## **Session 21, Snowberry Room**

General Session: *Student Paper Award Competition*

Session Chair: Laura L. Scheiber

- 1:20** Allison Parrish: *Homesteading and the Single Woman: A Context and Critical Analysis of the Realization of an American Dream*
- 1:40** Jessica Starks: *Reinterpreting the Past: A Second Look at 48FR1235*
- 2:00** Andrew McElroy: *Gearing Up for the Hunt: A Study of the Lithic Material of Formal and Informal Projectile Points to Understand Aspects of Communal Bison Hunting*
- 2:20** Chelsea-Aurelea Reedy: *Playing Native in the Name of Science: Experimental Spiral Fractures Based on Butchering Analysis at the Bull Creek Site*
- 2:40** Sarah E. Wolff: *Protecting a National Icon: The First Use of the Antiquities Act of 1906 to Declare Devils Tower National Monument*



## Session 22, River Birch B Room

Poster Session: *Contact to Historic Period Research on the Plains*

**1:30-4:00**

- A. Emily Kvamme and David Stahle: *Tree Ring Dating of Sequoyah's Cabin*
- B. Ann L. Magennis, Jason M. LaBelle, and Virginia L. Clifton: *The Red Lion Site: A Contact-Era Burial along the South Platte River, Logan County, Colorado*
- C. Shannon R. Ryan, Janice A. McLean, Alan R. Potter, Carey L. Baxter, Michael L. Hargrave, and Scott M. Hall: *Archeological Evaluation of a Portion of World War I Camp Funston (14RY2169), Fort Riley, Kansas*
- D. Christine Nycz: *Preliminary Results of Archeological Investigations in the Platt Historic District at Chickasaw National Recreation Area, Murray County, Oklahoma*
- E. Jeremy Brunette: *Structural Developments at Chickasaw National Recreation Area*
- F. Richard Drass, Stephen Perkins, Susan Vehik, and Michael Carlock: *2013 Excavations at the Historic Longest Site and Wichita Fortifications on the Southern Plains*
- G. LuAnn Wandsnider, Mark Awakuni-Swetland, Dawn Bringelson, Samantha Corr, Matthew Douglass, Emily Hammer, Bailey Lathrop, Martha McCollough, Daniel Osborne, John Wagner and Lauren Walking: *Introducing Digital Homesteading*
- H. Vincent Warner and Kathryn Drennan Warner: *Differentiating late 19<sup>th</sup> and early 20<sup>th</sup> century sites at Camp Gruber, Muskogee County, Oklahoma: Looking for evidence of Cherokee and Cherokee Freedman occupations*
- I. Marilyn A. Martorano, Angie M. Krall and Mark D. Mitchell: *El Paraje: New Discoveries on the High Potential Old Spanish National Historic Trail Bunker Site (5SH614), Rio Grande National Forest, San Luis Valley, Colorado*

## Session 23, Snowberry Room

General Session: *Ceramic Era Research*

- 3:20** Mike Quigg: *Plains Village Ceramic Assemblage from the Long View site, 41RB112, in the Texas Panhandle*
- 3:40** Jody Clauter: *The Problems and Potentials of Using Older Collections: A Preliminary Assessment of the Elk Mountain (48CR301) Ceramics*
- 4:00** Rachael Shimek: *Pottery and Projectiles: A Woodland-Besant Association at the Hell Gap Site*

## **Big Thompson A and B Rooms**

**3:00-5:00**

Colorado Archaeological Society Board Meeting, invitation only event.

## **Friday Evening, October 4, 2013**

### **Snowberry Room**

**5:15-6:15**

Plains Anthropological Society Business meeting, open to all PAS members. We encourage everyone to attend and participate and learn more about the Society and the Plains Anthropologist Journal!

### **Pinyon Pine Room**

**6:15 Happy hour reception with cash bar**

**7:00 Banquet dinner, with keynote address to follow**

## **Saturday Morning, October 5, 2013**

### **Session 24, Aspen Daisy**

Symposium: *Public Education and Archaeology Stewardship*

Sarah Baer, Dani Hoefer and Bonnie Gibson, Organizers

Session Chair: Sarah Baer

**9:30** Bonnie Gibson: *Public Education and Archaeology Stewardship Symposium Introduction*

**9:45** Sarah Baer: *Archeology in the Classroom – An Introduction to Project Archaeology's Investigating Shelter*

**10:00** Rebecca Simon: *Project Archaeology Lesson Example: The Tools of Archaeology*

**10:25 Break**

**10:35** Mark Sanders: *Project Archaeology Lesson Example: Investigating Shelter*

**11:00** Rebecca Simon: *From the Mountains to the Plains: Integrating Archaeological Data into Elementary Education*

**11:15** Dani Hoefer: *Archaeology Education and the Colorado Council for Professional Archaeologists- Past, Present and Future*

### **Session 25, Goldenglow Room**

General Session: *Historical Archaeology*

**9:00** Richard T. Burnette: *The Significance of Masculinity on the Industrial Frontier: A Gendered Perspective on the Colorado Gold Rush*

- 9:20** Michelle Stokely: *Daughter of the Dawn Postcards: Silent Cinema Goes Postal*
- 9:40** Chris Leatherman: *Ten Years in the Making: The Chinese Burner Reconstructed Mt. Moriah Cemetery, Deadwood, SD*
- 10:00** Robert J. Hoard: *Rock Fences in Kansas and Missouri*
- 10:20** **Break**
- 10:40** Stance Hurst, Dallas C. Ward, Eileen Johnson, and Doug Cunningham: *Organization of Ranching Activities Along the Eastern Southern High Plains Boundary*
- 11:00** Dallas C. Ward, Stance Hurst, Eileen Johnson and Doug Cunningham: *Ranching Activities on the Llano Estacado: Insights from Macy Locality 16 a Late 19th Century Cowboy Camp*
- 11:20** Timothy Weston: *Historic Trail Sites in Kansas: Preliminary Findings and Research Potential*

## **Session 26, Snowberry Room**

Session: *Archaeology of Colorado*

- 9:00** Thomas Huffman and Frank Lee Earley: *Caddoan archaeology in southeastern Colorado: lodges, bison and maize at the Wallace and Hobson sites*
- 9:20** Cody M. Anderson, K. Talle Hogrefe, Michael McFaul and Travis R. Bugg: *Mitigative Excavation of Five Prehistoric Archaeological Sites in Southeastern Colorado*
- 9:40** Carl Conner: *Archaeological Investigations at the McClane Rockshelter, 5GF741*
- 10:00** Michael Berry: *The Colorado Radiocarbon Database*
- 10:20** Curtis Martin and Holly Shelton: *The Tea House Wickiup's Coat of Many Colors: Innovative Field Techniques and Methodologies Implemented for Recordation of 5LR12900 and a brief overview of the Colorado Wickiup Project*

## **Session 27, River Birch B Room**

Poster Session: *Northern Plains and Colorado Archaeology*

**9:00-11:30**

- A.** Ashley Arnold: *Zooarchaeology of the Bennett Bend Site Faunal Remains*
- B.** Kevin Gilmore and Michelle Slaughter: *Push and Pull on the Plains: Measuring Human Response to Environmental and Economic Factors in Eastern Colorado Using U.S. Post Offices as an Annually Resolved Population Proxy*

- C. Nora Greiman, Ronald Goble, Tiffany Napier, Matthew Douglass, and LuAnn Wandsnider: *An Investigation of Human Exploitation of the Nebraska Sand Hills in Response to Large-Scale Climate Change during the peri-Medieval Climatic Anomaly: Preliminary Results and Project Status*
- D. Matthew Neff: *Abrader Technology at Three Late Prehistoric (Oneota) in Central Iowa*
- E. Connor Johnen, Halston F.C. Meeker, Debra A. McCarthy, William Restrepo and Andrew D. Richards: *From Hell Gap to Metal Points: Discerning Activity Areas from 10,000 years of Mixed Surface Deposits at the Duck Creek Site*
- F. Halston F.C. Meeker, Halston F.C. Debra A. McCarthy, Connor Johnen, Andrew D. Richards, and Spencer Pelton: *A Ridge Line Communal Hunting Site at the Moriah Ranch, Albany County, Wyoming*
- G. Katherine Peake: *Breakage and Discard of Ceramic Vessels in a Late Prehistoric (Oneota) Village*
- H. Lawrence Todd, Paul Burnett, and Kyle Wright: *Another Hardluck Story: Post-Fire Montane Archaeology in NW Wyoming*
- I. Meghan Forney, Lawrence Todd, and Kaitlyn Simcox: *Multi-scalar chipped stone analysis in the Shoshone National Forest, NW Wyoming: Feature, site, drainage, region*
- J. Laura Scheiber, Amanda Burt, Samuel Haskell, Illya Moskvina, J. Ryan Kennedy, and Lawrence Todd: *Post-Fire Inventories and Hunter-Gatherer Use Intensity as Exemplified at the Caldwell Creek Site (48FR7091), Fremont County, Wyoming*
- K. Laura Scheiber, Lindsey Simmons, Emma Wells, and Lawrence Todd: *New Evidence for Intermountain Ware Ceramics in High-Altitude Wilderness Areas of Northwestern Wyoming*
- L. Cole Wandler, William Harding, and John Kennedy: *Plains Woodland on the Little Missouri: Excavations at 32DU1535 in Dunn County, North Dakota*
- M. Anne M. Wolley Vawser, Albert LeBeau, and Timothy Schilling: *Evaluating the spatial distribution of lithic tools and features at the Sanson Site, a multicomponent bison jump in the Black Hills of South Dakota*
- N. Aaron Whittenburg and Michael Neeley: *Using lithic variability and functional contexts as clues to the diversity of on-site behaviors at the Beaucoup site in northeastern Montana*
- O. Emily G. Williams and Jack L. Hofman: *A Method for Assessing Confidence in Lithic Material Type Designation, A Case Study of Artifacts from the Nebraska Folsom Database*
- P. Ryan Byerly and Cody Newton: *Late Holocene Bison Diet in the Great Divide Basin: Insight from Espy-Cornwell (48CR4001)*

- Q.** Kevin Black, Robert Cronk, and Anne Winslow: *Dust in the Wind: Settlement Trends in the Pawnee Buttes Area, Colorado*

## **Session 28, Snowberry Room**

Session: *Papers for the Annual Meeting of the Colorado Archaeological Society (CAS)*

Session Chair: Lynda Seyfert

- 10:55** Lynda Seyfert: *Welcoming Address*  
**11:00** Jack Warner: *CAS Prehistoric Archaeology of Ken-Caryl Ranch 1973-1998*  
**11:20** Bill Hammond and Diane Rhodes: *Small Ovale to Triangular Bifaces as Markers for the Early Ceramic Period*  
**11:40** Heidi Short, Edie Deweese and Robert Brunswig: *Update on the finds from the Alonzo Allen Cabin Site 2013*  
**12:00** **RAFFLE DRAWING (Alice Hamilton Scholarship Fundraiser)**

## **Saturday Afternoon, October 5, 2013**

## **Session 29, Snowberry Room**

Session: (continued from morning session) *Papers for the Annual Meeting of the Colorado Archaeological Society (CAS)*

Session Chair: Lynda Seyfert

- 1:30** Kevin Black: *PAAC Training in the Pawnee Buttes Area: 2<sup>nd</sup> Season Update*  
**1:50** Patricia Lacey: *Volunteer Activities in the Four Corners Area*  
**2:10** Jacob Sedig: *The Ceramics of Woodrow Ruin*  
**2:30** Robert Dundas: *Archaeological Border Wars*  
**2:50** Sam Roberts: *A Preliminary Report on 2013 Excavations of Medicinal Trail: A Maya site, Belize, Central America*  
**3:10** David Dove: *An Update on Champagne Spring Ruins*  
**3:30** **Break**  
**3:40** CAS Silent Auction Results (Alice Hamilton Scholarship Fundraiser)  
**3:50** CAS General Meeting

## **Symposia Abstracts**

### **Middle Missouri Archaeology: Updates on Current and Ongoing Research Projects in the Dakotas**

*Organized by Kacy L. Hollenback and Fern Swenson*

#### **Symposium Session #1, 6**

*Discussant: W. Raymond Wood*

In the past, research themes that have united Middle Missouri archaeology have been tied to chronology, subsistence, trade/exchange, cultural affiliation, and culture history. Current and ongoing research in the Middle Missouri and adjacent regions of the Dakotas builds on these foundations and expands in new directions. This session brings together researchers with a wide range of interests to discuss current and ongoing research projects. The session goal is to provide a venue for the sharing of current data, information, and ideas about the area and enable dialog between those with interests in the region.

### **Hudson-Meng: New Archaeological Investigations of a Classic Paleoindian Bison Kill**

*Organized by Dennis L. Kuhnel*

#### **Symposium Session #2, 7**

The Alberta complex Hudson-Meng site in western Nebraska has been the focus of archaeological research since the early 1970s. Beginning in the 1990s, the United States Forest Service developed a multimillion-dollar research and visitor facility at the site, the Hudson-Meng Education and Research Center (HMERC). Heritage interpretation has been a central part of HMERC since its creation. Over the last forty or more years, archaeological interpretations of the Hudson-Meng site have varied. Current archaeological interpretation of Hudson-Meng is that the site is the result of a complex set of cultural and non-cultural processes. Additionally, academic interest in the surrounding archaeological landscape on the Oglala National Grassland has grown in leaps and bounds over the years. The focus of this 2013 Plains Conference symposium is to provide a glimpse into current and ongoing research projects at the HMERC.

**COOL THINGS: Meaning in Material Culture**  
*Organized by Linea Sundstrom and Alice B. Kehoe*  
**Symposium Session #4**

Plains Indian material culture is about much more than technology, diet, and chronology. This session explores how objects, including landscape features, encode cultural identity and promote cultural continuity, as well as defining the role of the individual in the upheaval of contact and conquest. Understanding the use of pictures and symbols in this unspoken cultural dialog allows the researcher to form a more complete picture of the past cultures under study.

**Historical Archaeology on and near the Plains: A Forum on Current and Future Practice**  
*Organized by Bonnie J. Clark and Minette Church*  
**Symposium Session #15**

Historical Archaeology on the Plains comes from many wellsprings, whether the direct historical approach, the River Basin Surveys, or investigation of historic parks. Current practitioners are likewise diverse, employing historical archaeology for a variety of purposes and from a range of disciplinary backgrounds. Although one of its strengths, this diversity can also constrain discussion. In this forum we have gathered together practitioners from a range of professional backgrounds to discuss materials that date from the earliest historic sites in the region to archaeology aided by living memory. Each panelist will briefly present highlights of the historical archaeology being done on and near the Plains and their vision for the future of the practice. The session will be divided equally into presentations and guided discussion. It is our hope that conversation will move from the expertise of our presenters to that represented in the audience.

**In With the New and....Out With the Old? New Directions in Dismal River Aspect Research**  
*Organized by Sarah Trabert*  
**Symposium Session #19**

The Dismal River aspect is a Protohistoric archaeologically-defined group of Native Americans who lived on the central and high Plains of Nebraska, Kansas, Colorado, and Wyoming. Previous research has focused on pinpointing the cultural affiliation of these people and in better defining and explaining the variation found in their site structure, landscape use, and ceramic technology. The rather ephemeral nature of Dismal River aspect sites has frustrated many

previous researchers and has limited the types of questions and interpretations asked and answered for this group. Building on this previous work, this session explores how current research projects are expanding the types of questions asked and the methods used to better understand this group. Papers in this session explore how ethnohistorical documents, ceramic characterization studies, and new theoretical frameworks can provide valuable information on identity, intraregional interactions, social hybridity, and technology during the Protohistoric Period.

## **Twentieth-First Century Advances in Archaeological and Supporting Studies of the Southern Rocky Mountains and their Eastern Foothills**

*Organized by Robert Brunswig and Jason M. LaBelle*

### **Symposium Session #20**

Solid foundations of archaeological knowledge of the southern Rocky Mountains and their east-fronting foothills were built in the late 20<sup>th</sup> Century by an ever-expanding cohort of academic, cultural resource management, and government archaeologists. Early in the second decade of the 21<sup>st</sup> Century, those advances are rapidly accelerating with the accumulation of new archaeological field and laboratory research projects and, perhaps most significantly, with parallel studies in ancient climate and ecological change, absolute dating, geomorphic and geochemical analysis, and maturing applications of Global Positioning System and Geographic Information System technologies. This session explores a broad cross-section of research programs which illustrate emerging new knowledge and methods of past native societies in Rocky Mountains, focusing on montane and foothills regions and ecozones in northern Colorado and southern Wyoming.

## **Public Education and Archaeology Stewardship**

*Organized by Sarah Baer, Dani Hoefer and Bonnie Gibson*

### **Symposium Session #24**

Professional archaeologists have long recognized the benefit of teaching the public about archaeology and in learning about the past. As professionals we have the responsibility to foster cultural heritage stewardship, historic preservation, and education in our communities and state. In 2014, the Common Core State Standards will be implemented into school curriculum. This change in school curriculum provides a unique opportunity for professional archaeologists to provide outreach to our state educators. Programs such as Project Archaeology link lessons to the Common Core State Standards



providing a useful tool for educators and skills to help students learn content in many subject areas including science, math, technology, social studies and language arts. This symposium will discuss how archaeologists can help educators with the Common Core Standards, specifically looking at examples from Project Archaeology, and discuss the ongoing and future work needed to facilitate archaeology education in our own communities.

## **Three Schools for Three Fields: Results of the 2013 Colorado State University Archaeology, Paleontology, and Cultural Field Schools**

*Organized by Jason M. LaBelle*

### **Poster Session # 1**

During the summer of 2013 Colorado State University's Department of Anthropology offered three field schools in the sub-disciplines of anthropology, all working within the Great Plains region (or arguably, just a little beyond). The archaeology field school investigated primarily prehistoric Native American forager sites (but also several historic sites) located in the short grass plains, foothills, and alpine regions of the northern Colorado Front Range. The inaugural paleontology field school focused on the early Eocene primate and mammalian fauna of the Bighorn Basin of northern Wyoming. The cultural anthropology field school continued working with the Lakota people of the Pine Ridge Reservation of southern South Dakota. This poster symposium highlights the work CSU undergraduate and graduate students completed during this past summer, focusing on their on-going analysis of field data. The posters demonstrate the great importance of experiential learning in student training, something increasingly difficult to fund during the modern economic times of academic education in the United States.

## **Workshops**

### **Integrated Archaeological Sciences Workshop**

*Organized by Linda Scott-Cummings, PaleoResearch Institute*

#### **Session #9**

Scientific applications to archaeology run the gamut from building a picture of the landscape to examining individual artifacts. Traditionally, macrofloral, pollen, phytolith, and starch analyses have provided evidence of subsistence activities, while tools have been analyzed either using microscopic techniques (pollen, phytoliths, starch) or chemical techniques (protein residue and organic

residue – FTIR). pXRF technology is used on artifacts and sediments to address resource sourcing, ceramic construction, and pigments. Personnel from PaleoResearch Institute will discuss not only individual techniques, but also integration of analyses to create a more complete record of past environments and past activities. We will bring our Bruker pXRF Tracer and portable FTIR unit for demonstration and discussion. Use of these analytical techniques has broadened our ability to address questions concerning human activities and taphonomy. Powerpoint presentations will be interspersed with interactive question/answer periods. Our mobile lab will be available in the parking lot for touring.

## **Calling All Students! A Workshop for Fostering Student Interest and Involvement in the Plains Anthropological Society**

*Organized by Sarah Trabert*

### **Session #19**

Session Moderators: Brendon Asher, Kacy Hollenback, William Reitze and Sarah Trabert

This session, chaired by a panel of students and recent graduates, is an opportunity for recent society members to generate ideas to further participation in the Plains Anthropological Society (PAS). Conference attendees are invited to discuss: (1) future and sustained student membership, (2) ways to attract new members, (3) student participation in conference organization, and (4) what PAS can do to actively engage student members. Ultimately, this dialog will measure student interest in participation in the society and whether or not students would like more input into the society's decisions and conference organization. This session is an excellent opportunity for students to become actively engaged in PAS and for their ideas and concerns to be heard. Results of this session will be shared with PAS board members. Engagement is one of the first steps towards professionalization, so students come out and be heard!

## Paper & Poster Abstracts

**Adair, Mary J.** (University of Kansas)

**Symposium 19:** *Farming on the High Plains: A Model for the Dismal River Aspect*

Hunter-gatherer, hunter-farmer, mobile horticulturalist, and trader for agricultural crops are terms that have been used to describe the subsistence strategies and the importance of agricultural foods to the Dismal River aspect people. The various interpretations largely reflect land use differences among the three Dismal River variants, as well as the Puebloan influence documented from the Scott County sites. Focusing on the Eastern Dismal River groups of western and central Kansas and Nebraska, this paper evaluates the evidence for agriculture and explores the relationship between certain environmental factors and the placement of habitation sites. Included are a comparison of maize morphological characteristics among Dismal River, Great Bend and Itskari sites and the importance of playas and natural springs to dry farming.

**Adair, Mary J.** (University of Kansas), **Brendon P. Asher** (University of Kansas), **Alison M. Hadley** (University of Kansas), and **Jack L. Hofman** (University of Kansas)

**Session 3:** *Pawnee Archaeology: Recent Investigations of the late Eighteenth century Kansas Monument site, 14RP1*

The Kansas Monument site (14RP1) is the location of a late eighteenth century occupation of the Kitkahahki Pawnee. Occupied, perhaps intermittently, for about 30 years, the site is identified today by numerous lodge and pit depressions, the remains of a fortification wall, and a variety of artifacts reflecting both indigenous manufacture and European introduced products. Beginning in 2008, and continuing to the present, a collaborative archaeological team reviewed previous excavations and initiated new investigations to explore the chronology of the site, the subsistence strategies, trade and interaction, and Pawnee social structure as reflected in the artifact assemblage and within the remains of a single lodge. This paper focuses on lodge construction, size, and features; the distribution of various artifacts; and the processes of lodge collapse.

**Adams, Richard** (University of Wyoming), **Halston F.C. Meeker** (Colorado State University), and **John Laughlin** (Wyoming State Historic Preservation Office)

**Session 12:** *Moriah Ranch Archaeology, Albany County, Wyoming*

The State of Wyoming recently acquired a 22 square mile parcel known as the Moriah Ranch in the Laramie Range. The ranch, located where the Rocky Mountains meet the Northwestern Plains, was archaeologically unknown until a 2013 Wyoming Cultural Trust Fund grant allowed students, volunteers, and professional archaeologists to spend ten days sampling the ranch's cultural

resources. Crews found prehistoric sites in every one of the ranch's 22 sections. Significant surface artifacts range in age from Hell Gap projectile points to Historic metal arrowheads. Our project featured collaboration among Office of State Lands and Investments, the State Historic Preservation Office, and the University of Wyoming's George C. Frison Institute. We conducted public outreach, began training future generations of Wyoming archaeologists, and demonstrated the educational potential of the Moriah Ranch. Our results will help State of Wyoming land managers to make informed decisions about this important parcel of as public land.

**Agenbroad, Larry** (Mammoth Site of Hot Springs, SD)

**Symposium 7:** *Paleoenvironment, Paleoindians, Paleoprocurement and Paleointerpretations*

Looking at the research and interpretations generated at the Hudson-Meng Bison Kill (25SX115) over the past 42 years provides some testable hypotheses with regard to prior interpretations. Methods that were unavailable during earlier research periods can still be applied to the results, with similar, expanded, or alternative conclusions.

**Aldridge, Andrew** (see **Meeker, Halston F.C.**)

**Alegria, Crystal** (see **Fulton, Marsha**)

**Allen, Lauren** (see **Nichols, Kimberly**)

**Allen, Lauren** (see **Nichols, Kimberly**)

**Amundsen-Meyer, Lindsay** (University of Calgary)

**Session 18:** *Making Tracks: Modeling Blackfoot Travel Through the Northwestern Plains Landscape*

The Old North Trail, paralleling the foothills in southern Alberta and central Montana, was the primary north to south route through Blackfoot country. Although its approximate location is known from the ethnographic record, the exact placement of the Old North Trail through southern Alberta is not well understood. Here, two models for the Trail's location will be presented, one based on analysis of historical and archaeological evidence and the second on least cost path analysis undertaken in a geographic information system. The two models are compared to determine if human groups traveling through the region were choosing the most efficient route of travel. Where the models differ, viewshed analysis is used to understand which important landscape features, both ecological and ideological, were visible and accessible from each trail. Through this analysis, suggestions about why human groups may have been choosing a less efficient route across the landscape are made.

**Anderson, Cody M.** (Centennial Archaeology, Inc.), **K. Talle Hogrefe** (Centennial Archaeology, Inc.) **Michael McFaul** (LaRamie Soils Service) and **Travis R. Bugg** (Centennial Archaeology, Inc.)

**Session 26:** *Mitigative Excavation of Five Prehistoric Archaeological Sites in Southeastern Colorado*

Centennial Archaeology, Inc. conducted block excavation of five prehistoric sites discovered during construction monitoring of the Colorado Interstate Gas (CIG) Raton 2010 Expansion Project in southeastern Colorado. Three of the sites occur along the Apishapa River in Las Animas County, while two are located near the Arkansas River in Pueblo County. Previous test excavations of these sites revealed prehistoric cultural remains and radiocarbon dates from feature fill indicative of occupation during all major periods from Early Archaic to Protohistoric. This presentation presents final block excavation data from the sites, which exhibit deeply buried archaeological materials, and in some cases multiple components at a single locality.

**Anderson, Richard** (Southern Methodist University)

**Symposium 1:** *Paleoindian Archaeology of the Little Missouri Badlands, North Dakota: First Impressions*

In the spring of 2013, the Dakota Prairie Grasslands, State Historical Society of North Dakota, and Southern Methodist University established a multi-year archaeological and paleoenvironmental research collaboration centered on the Little Missouri National Grasslands (LMNG). Our first year of study included archival research, analysis of curated assemblages, and field investigations. Both archival and collection-based analyses confirmed a middle and late Paleoindian presence in the LMNG. However, these datasets spoke little to the survival of intact Paleoindian-age archaeological deposits in the region. To address this issue, surface survey and limited subsurface testing were used to assess the nature and condition of previously reported Paleoindian sites and isolated find spots in the LMNG. Here, I present (1) first impressions of the Paleoindian record, (2) a discussion of the preservation potential observed during field work, and (3) a consideration of how this dataset relates to the broader Paleoindian record of North Dakota.

**Arnold, Ashley** (Iowa State University)

**Poster Session 27:** *Zooarchaeology of the Bennett Bend Site Faunal Remains*  
Comprehensive, taphonomically-oriented research on food remains discarded by Archaic(?) foragers who occupied the Bennett Bend site in the central Des Moines River Valley offers information on their diet and subsistence practices. The archaeofauna includes over 700 specimens, including white-tailed deer, bison, beaver, and turtle. Evidence of human butchery modification consists of several stone tool cutmarks and fractures associated with marrow extraction, and offer insight on Archaic(?) foraging patterns in the region.

**Asher, Brendon** (see **Adair, Mary J.**)

**Asher, Brendon** (see **Holen, Steven**)

**Awakuni-Swetland, Mark** (University of Nebraska-Lincoln)

**Session 13:** *How old stories and new tales can teach a native language*

Communities of indigenous people worldwide find their heritage languages in the terminal stages of extinction. Many are struggling to revitalize their languages using a variety of strategies that target a range of ages and learning outcomes. Since its inception in 2000, the University of Nebraska-Lincoln Omaha language class has used 19<sup>th</sup> century hero stories along with modern topic creative writing exercises to teach and reinforce Omaha language and culture concepts. Described here are two examples of this approach – *I<sup>n</sup>de No<sup>n</sup>ba Nuzhi<sup>n</sup>ga No<sup>n</sup>beda* (Two Faces and The Twin Brothers), and *Mo<sup>n</sup>shti<sup>n</sup>ge Tu T<sup>n</sup>emo<sup>n</sup>thi<sup>n</sup> t<sup>n</sup>he* (The Zombie Blue Rabbit). A sketch of the processes that resulted in multi-media products is provided. A brief analysis of the student-centered learning outcomes, language community reactions, and implications for future Omaha language curriculum development are offered.

**Awakuni-Swetland, Mark** (see **Wandsnider, LuAnn**)

**Baer, Sarah** (SWCA Environmental Consultants and Project Archaeology)

**Symposium 24:** *Archeology in the Classroom – An Introduction to Project Archaeology's Investigating Shelter*

Project Archaeology is a comprehensive education program designed to teach students about past and present cultures, how archaeology helps us learn about those cultures, and why stewardship for archaeology is everyone's responsibility. The *Investigating Shelter* unit teaches through the enduring understandings model and allows hands on activities and lessons to guide the main concepts. Project Archaeology is uniquely suited to facilitate learning of the Common Core State Standards by providing the skills to help students learn content in many subject areas including science, math, technology, social studies, and language arts. Both archaeologists and educators can participate in this process and benefit by teaching the next generation the concept of stewardship and the importance of learning about the past.

**Baer, Sarah** (see **Hoefer, Dani**)

**Baker, Steven** (Centuries Research, Inc.)

**Symposium 19:** *The Baron Lahontan's 1688-89 Ethnographic Observations on the Dismal River and Other Peoples of the Platte River in Nebraska Part I: The History and Authenticity of the Baron Lahontan's Long River Narrative*

In his 1705 book, *New Voyages to North America*, the Baron Lahontan claimed to have earlier traveled by canoe from Michilimackinac down the Mississippi to

the Missouri and up what he called the Long River. His account has long been considered to be wholly apocryphal. At the 2006 Plains Conference in Topeka, Kansas this author and Raymond Wood presented evidence which solidly confirmed the veracity of unusual ethnographic information contained in the baron's account and demonstrated that the long-lasting doubts raised by his original anthropologically barren Victorian critics were no longer valid. Wood and this author believe that the baron either ended up on the Platte River in western Nebraska or had obtained extremely good information regarding its geography and the Native Americans living along it. In this paper the history of the baron's account and the controversy surrounding it are summarized. Despite past criticisms the baron's narrative appears to this author to be a first-person accounting of first European contact with the Pawnee and those Plains Apache to whom archaeologists have long attributed the archaeological remains of the Dismal River aspect.

**Baker, Steven** (Centuries Research, Inc.)

**Symposium 19:** *The Baron Lahontan's 1688-89 Ethnographic Observations on the Dismal River and Other Peoples of the Platte River in Nebraska Part 2: The Baron Lahontan's Ethnographic Observations on the Essanape/Pawnee and Gnacsitare/Plains Apache*

In his book of 1705 the Baron Lahontan claimed to have commanded a party of discovery that entered the Missouri River on November 3, 1688 after canoeing down the Mississippi. Under the protection of the calumet the party passed through the land of the populous Ekoros, seemingly the Osage or Otoe-Missouri, Indians in Missouri. Far up the Missouri the party ultimately entered the Platte River and the territories of the Pawnee who the baron referred to as Essanapes. These populous peoples lived in great oven-shaped earthen lodges along the Platte. Much further up river the party encountered peoples referred to as Gnacsitares. They had been so hard pressed by peoples from much further west that they had moved their villages to islands in the Platte. They spoke a language that was unintelligible to all the baron's interpreters and did not recognize the calumet. These people are believed to have been the Plains Apache who are generally believed to have been responsible for the archaeological remains of the Dismal River aspect. Lahontan's extracted journal entries read as first descriptions of the Pawnee and Plains Apache and true accounts of their first contacts with Europeans. They speak to the presence of dynamic, robust, and complex polities, in some cases highly reminiscent of Mississippian ones, which had been little affected by either direct French or Spanish presence. This paper reports on the baron's observations that he claimed to have made.

**Ballanger, Jesse** (see Zedeño, Maria Nieves)

**Banks, Benjamin** (Atwell, LLC)

**Poster Session 16:** *Reexamination of Archaeological Prospecting Techniques: Multispectral Imagery Analysis from Army City, Kansas*

Recent advances in multispectral satellite and aerial imagery are helping to promote aerial imagery analysis in North America. Aerial imagery analysis has become more effective for detecting buried archaeological features and more cost effective with increased multispectral bands and higher resolution imagery. A site in north eastern Kansas was explored using multispectral aerial and satellite imagery allowing buried features to be mapped. Crop marks not easily distinguishable in visual spectrum imagery were detected and enhanced through the use of multispectral imagery. Unsupervised computer classification aided in interpretation of archaeological feature locations, and supervised classifications incorporating limited amounts of geophysical data provided a more detailed understanding of the site. Aerial imagery analysis has proven to be useful to a wide range of archaeologists, reducing both man hours and expense needed for archaeological site delineation and mapping. This technology may be especially useful for cultural resources management and compliance archaeology.

**Banks, Kimball** (see **Engel, Damita**)

**Barg, Diana** (Metcalf Archaeological Consultants, Inc.)

**Symposium 2:** *Rethinking Hudson-Meng: A Taphonomic Analysis of the Faunal Assemblage From 25sx115, Sioux County, Nebraska*

Hudson-Meng (25SX115), located in the Oglala National Grassland, Sioux County, Nebraska, is a multi-component Cody complex site that was used for bison procurement between 10,500 and 11,250 years ago. The site was excavated in the 1970s and 1990s, leading to many interpretations of the site's origin and use by Cody complex peoples. Excavations between 2006 and 2012 led to additional evidence and new interpretations regarding multiple episodes of site use. The faunal assemblage recovered from the most recent excavations was used for zooarchaeological and taphonomic studies. Taphonomic characteristics, statistical analyses, and comparative studies were used to investigate the nature of the deposits and determine the faunal composition of the site. Both natural and cultural taphonomic characteristics were identified in this study which, along with additional evidence of site use, confirms Hudson-Meng as a multi-component cultural site.

**Barg, Diana** (see **Muñiz, Mark**)

**Baxter, Carey L.** (see **Ryan, Shannon R.**)

**Bement, Leland** (see **Carlson, KC**)

**Bement, Leland** (see **O'Shea, Lauren**)



**Berg, Angela** (see **Buehler, Kent**)

**Berry, Michael** (Dominguez Archaeological Research Group)

**Session 26:** *The Colorado Radiocarbon Database*

Dominguez Archaeological Research Group has developed a comprehensive database of radiocarbon dates for Colorado under grants from the State Historic Fund. Over 3000 dates from 900+ sites have been entered into a Microsoft Access database and distributed as a Windows desktop application called RCGraph. In the current phase of the project we are redesigning the desktop program as a web application and translating the Access database to MySQL. The web page will allow researchers to query by site attributes and subareas as well as download data and update the database with new sites and dates. Once in place, we intend to expand the regional scope beyond Colorado to adjacent states.

**Bess, Shane** (Missouri State University)

**Session 12:** *The Archaeobotany of The Cobb Site*

The Cobb site (23AN56) is a Nebraska phase habitation site in northwest Missouri that was excavated in 1984. Flotation samples were collected from 13 documented features. They provide a wealth of archaeobotanical data for a region and time for which there is a dearth of such flotation-recovered information. This paper presents archaeobotanical findings from the site with a focus on the diversity of plant foods exploited by the site's inhabitants. The implications of these findings for the food-production and plant-foraging strategies of Nebraska phase peoples are explored.

**Bethke, Brandi** (see **Zedeño, Maria Nieves**)

**Bies, Michael** (O W Heritage Research L.C.)

**Session 11:** *Dinwoody Tradition Rock Art Seriation and Production Techniques*

This paper is an expansion of a poster presented in 2010 at the 68th Annual Plains Anthropological Conference in Bismarck. Many researchers believe the Dinwoody Tradition is restricted to pecked images and have labeled styles within the tradition in a manner that restricts the style to a specific production technique. The proposed seriation is based on image patterns rather than production techniques to accommodate the variations found in the field. Petroglyphs have been identified that were produced using abrasion or incising as well as pecking. Pictographs have also been identified at a number of sites. Many sites have images that are a combination of several production techniques. This presentation will provide examples of each with additional information regarding the distribution of the tradition within the Wind/Bighorn River drainage.

**Billeck, William** (Smithsonian Institution)

**Symposium 6:** *Stylistic Variation of Native American Glass Pendants in the Plains*

Glass pendants made by from crushed and remelted glass beads by Native Americans are shown to vary stylistically over time in the Plains. Pendants are found in archaeological contexts in the seventeenth through the nineteenth century and continue to be made today by one Plains tribe. There is limited variation in pendant styles between Plains tribes. Pendants are found in the Dakotas, but are also found in Colorado, Wyoming, Iowa, and Kansas in the Plains, as well as in the Southeast, Midwest, and Northeast regions of the United States.

**Black, Kevin** (History Colorado, Office of the State Archaeologist)

**Session 29:** *PAAC Training in the Pawnee Buttes Area: 2<sup>nd</sup> Season Update*

PAAC training in the Pawnee Buttes area of northeastern Colorado resumed in May 2013, with the participation of 23 volunteers representing six CAS chapters. This project involves a sampling strategy of archaeological inventory on dispersed parcels of state-owned trust lands. Our second season of survey focused on three separate parcels stretching from just north of the Pawnee Buttes to the South Pawnee Creek drainage 23 km south of the Buttes. There are now data available for 41 sites and 42 isolates with survey coverage at nearly 800 acres. This summary on the results of the 2013 inventory will review some of the trends evident in the types and locations of sites recorded in the three parcels, along with prospects for further work in parcels farther west where toolstones are available in gravel deposits. One project goal is to evaluate a predictive model of site location developed at Colorado State University.

**Black, Kevin** (History Colorado, Office of the State Archaeologist), **Robert Cronk** (History Colorado, Office of the State Archaeologist), and **Anne Winslow** (History Colorado, Office of the State Archaeologist)

**Poster Session 27:** *Dust in the Wind: Settlement Trends in the Pawnee Buttes Area, Colorado*

A sample inventory in Weld County, Colorado is being conducted to evaluate a predictive model of tipi ring locations, establish potential site impacts from increasing oil-and-gas development, and train volunteers in archaeological survey methods. Work in three parcels has documented 40 sites, mostly prehistoric in age. Previous research shows that site density is higher along drainages, where topographic diversity is greater, and in areas farther west where toolstones occur in secondary gravel deposits. Densities decline closer to the Pawnee Buttes, possibly because these prominent landforms at times were considered sacred spaces. Long-term use of Flattop Butte chalcedony at the primary procurement area 52 km east of the buttes also skews site distributions on an east-west axis. Our results lend support to these settlement trends,

including the discovery of a possible ritual feature on a hilltop 5.5 km southwest of the Buttes. Thirty-four volunteers have assisted the project thus far.

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

**Session 18:** *Canadians Live in an Alternate Reality*

This paper reports some results of the application of an analytical technique called stacked outlines to projectile points from the Great Plains. Stacked outlines simultaneously summarize both the modal forms and range of variation within chipped stone tool types. They are an efficient way to make distinctions between similar point types, to assess whether proposed variants within a type are actually distinct, and to note the differences in the definitions of a single type used by various archaeologists. Application of the technique to point types from all across the Plains reveals an enormous difference in the nature of the point sequences found in Alberta and Kansas. Those differences in turn help to explain why Canadian archaeologists frequently name variations within types and sometimes use point series instead of sequences of types whereas archaeologists in Kansas tend to do neither.

**Bleier, Amy** (see **Reed, Timothy**)

**Boehm, Andrew** (Southern Methodist University), **Christopher Widga** (Illinois State Museum), **Alan Wanamaker** (Iowa State University), and **Matthew G. Hill** (Iowa State University)

**Poster Session 16:** *Using Stable Isotopes to Profile Early to Middle Holocene Bison Behavior on the Great Plains*

On the Great Plains, human hunters preyed on bison for thousands of years. Understanding the nature of these interactions requires detailed information on both of them. Despite extensive research on the human predators, questions remain about bison as prey. Inferences about prehistoric bison behavior often relies heavily on historic observations. Given dramatic changes bison morphology during the past 15,000 years, bison behavior likely also changed in anthropologically significant ways. Stable isotopes extracted from bison molars from 12 sites are used to track changes in bison mobility patterns over a period from 13,000 BP to 6,000 B.P. Results indicate that over this period (1) bison exhibited limited dietary change despite significant climate changes, and (2) bison movements were geographically restricted. Bison were a predictable resource in the face of climate change.

**Borjas, Robyn** (see **Nichols, Kimberly**)

**Bown, Thomas** (see **Nichols, Kimberly**)

**Bown, Thomas** (see **Nichols, Kimberly**)

**Bown, Thomas** (see **Nichols, Kimberly**)

**Bozell, Rob** (see **Hoard, Robert J.**)

**Braun, Sebastian** (University of North Dakota)

**Symposium 4:** *A Continuous Industrialization: The Meaning of Oil and Water on the Northern Missouri*

Material items can indicate and sometimes exert great cross-cultural influences. They do not have to be solid, though. On the contemporary Upper Missouri, the struggles for cultural identity, sustainability, and sovereignty are today influenced by oil and water. These things and their consequences dominate the lives of communities. There is great continuity in this struggle, as globalization and extraction have brought great riches and catastrophic consequences to the indigenous peoples of the region for centuries. There is also great meaning in these things, as they have become symbols of many things, most of them immaterial, and most of them non-indigenous. This paper explores these meanings of things - their symbolic values - and their impacts on people and communities.

**Bringelson, Dawn** (see **Wandsnider, LuAnn**)

**Brooks, Robert L.** (University of Oklahoma)

**Session 18:** *Googling Oklahoma's Bison Kills*

Google Earth is a commonly used map reference tool for archaeologists. However, its capabilities to be more than a mapping tool have been largely ignored. This paper explores use of Google Earth as an inexpensive alternative to ARCGIS. A model dataset using Oklahoma bison kills was developed using Google Earth's dynamic mapping capabilities. Methods for incorporating archaeological data into Google Earth are described as well as the management and research potential.

**Brunette, Jeremy** (University of Nebraska-Lincoln)

**Poster Session 22:** *Structural Developments at Chickasaw National Recreation Area*

The Platt Historic District in Chickasaw National Recreation Area (Murray County, Oklahoma) presents a landscape of natural mineral and fresh-water springs which create an inviting place for people to settle, develop, and enjoy. From resort town known for its medicinal mineral springs, to rustic National Park, and further development by the CCC, the area has experienced a number of iterations. The many facets of the historic town will be explored as one aspect of a joint project between the University of Nebraska-Lincoln, the Midwest Archeological Center, and Chickasaw National Recreation Area,. This poster will highlight the research design for the archival and historic map

analysis that will be used to discover locations of historic features and structures that span the post-contact era of the park.

**Brunswig, Robert** (University of Northern Colorado)

**Symposium 20:** *Eleven Millennia of Highland-Lowland Hunter-Gatherer Transhumance in North Central Colorado's Rocky Mountains*

Fifteen years of archaeological research in North Central Colorado's Rocky Mountains by the University of Northern Colorado has fully established an eleven millennia long record of seasonal hunter-gatherer transhumance from cool season (fall-winter-early spring) residence of interior mountain valleys to warm season (late spring-summer-early fall) exploitation of upper montane and alpine ecozones. Both cool and warm season segments of seasonal rounds involved construction and subsequent re-use/remodeling of simple to complex game drive systems in both highland mountain and lowland valley locales along more tactically focused, opportunistic game hunting at natural ambush localities. Both game drive and opportunistic hunting strategies were associated with well-planned logistical support system involving base camps, staging camps, and game processing areas. Artifact and feature analysis at both highland and lowland sites show initiation of high altitude opportunistic hunting activities by Clovis times, ca. 11,200 bp, and establishment of game drive systems no later than the Cody Complex Period, ca. 9,500 bp. Artifact and feature analyses also document parallel exploitation and processing of local plant resources at both high and lower elevation sites.

**Brunswig, Robert** (see **Doerner, James**)

**Brunswig, Robert** (see **Short, Heidi**)

**Brydge, Michael** (see **Quernheim, Ben**)

**Buehler, Kent** (Oklahoma Archaeological Survey, University of Oklahoma)

**Session 13:** *Forensic Archaeology in Oklahoma: Its History and Current Status*

In October of 1970, Dr. Clyde Snow supervised three University of Oklahoma anthropology graduate students in the excavation of a burned farmhouse rumored to have been the disposal site of two homicide victims. Human remains were recovered exhibiting evidence of death from gunshot wounds. Dr. Snow believes this was the first use of trained archaeologists in a forensic setting in the United States. With Dr Snow's encouragement, the Oklahoma Archeological Survey began providing law enforcement with training in forensic archaeology in the late 1970s making it one of the very earliest such programs in the United States. In 2009, the Survey formed the Crime Scene Archaeology Recovery Group (CSARG) which not only continues to provide training, but assists Oklahoma law enforcement with the actual recovery of human remains in forensic settings as well as serving as forensic consultants. CSARG has proven

to be an outstanding example of inter-agency cooperation and community outreach.

**Buehler, Kent** (Oklahoma Archaeological Survey, University of Oklahoma) and **Angela Berg** (Office of the Chief Medical Examiner, State of Oklahoma)

**Session 3:** *Analysis of Human Remains from Stephens County, Oklahoma*

In January of this year, human remains were recovered from a creek bank in south central Oklahoma. The remains were those of an adult male buried in an extended, supine position. No grave goods accompanied the burial and no other cultural materials were observed in the creek bank or on the ground surface above. Consequently, there was little to suggest the burial's age. With permission from the Wichita tribe, the authors conducted a skeletal analysis in order to develop a biological profile of the individual. Results of the analysis, including the finding of numerous pathological conditions, are presented. Radiocarbon dating results are pending as this is written.

**Bugg, Travis R.** (see **Anderson, Cody M.**)

**Burnett, Paul** (see **Todd, Lawrence**)

**Burnette, Richard T.** (Colorado State University)

**Session 25:** *The Significance of Masculinity on the Industrial Frontier: A Gendered Perspective on the Colorado Gold Rush*

The changing definitions of manhood and masculinity in the latter-half of nineteenth century America would result in a precipitous rise in bachelorhood and the national promotion of the self-made man. Perceived as a viable outlet for this ideological florescence, tens of thousands of unskilled, working-class males ventured to southern Rocky Mountain mining camps in a zealous pursuit of easy wealth and personal self-achievement. Potentially representing the last chapter of masculine dominion in western American history, the institutional structures adopted in Colorado mining districts were highly reflective of the masculine ideologies flourishing unchecked in these mercurial sub-regions. Due to pervasive male paradigms in western historical literature, the import of masculinity(s) in a western mining context has been overlooked or ignored by social scientists. A resolution to this conundrum might be found in the contemporary discourse on masculinity, offering a pragmatic and effective theoretical orientation from which to examine western mining societies.

**Burt, Amanda** (see **Scheiber, Laura**)

**Byerly, Ryan** (Far Western Anthropological Research Group, Inc.) and **Cody Newton** (University of Colorado-Boulder)

**Poster Session 27: *Late Holocene Bison Diet in the Great Divide Basin: Insight from Espy-Cornwell (48CR4001)***

Various paleoenvironmental data point to a brief period of cool, wet conditions in western Wyoming prior to the onset of the Medieval Warm Period. We present intra-tooth carbon and oxygen isotope data gathered from the youngest post-weaning-aged individual from the lower component of the Espy-Cornwell site (48CR4001), an early 8<sup>th</sup> century bison kill-butcher, to elaborate on foraging conditions in the Great Divide Basin during this period. These data will hopefully serve to enhance the ever growing contribution of bison studies to understanding Holocene climate and its influence on hunter-gatherer settlement-subsistence adaptations.

**Campbell, Jami** (Hudson-Meng Education and Research Center)

**Symposium 2: *Homesteading Hudson-Meng***

Archaeological investigations have been taking place at the Hudson-Meng Bison Kill site since the early 1970s. New investigations at the site have revealed more recent land use. The area was also the site of historical homesteading.

Homesteading, the process by which the government gave or sold federal land cheaply to early farmers who agreed to improve the land, has a long history in the Northwestern region of Nebraska, the area of the site. This new find broadens the importance and impact for this site, on a particularly meaningful level for the local people of the area some of whom are descendants of homesteaders from this site. Using archaeological remains, land records, and oral histories, the story of these homesteaders is slowly coming to life.

**Carlock, Michael** (University of Arkansas)

**Session 18: *Geophysics and Ethnohistory: A Match Made at the Longest Site***

The purpose of this research is to exemplify a multidirectional approach to an archaeological interpretation of an 18<sup>th</sup> century fortified Wichita village located on the Red River bordering Oklahoma and Texas. A battle that occurred at the Longest site (34JF1) in 1759 between Spanish colonials and a confederation of Plains Native Americans led to several primary documents describing the fortification, surrounding village, and its inhabitants. Investigation of Longest presents a remarkable opportunity to combine extensive ethnohistorical research, geophysics, and traditional excavation techniques in order to garner a more complete understanding of this important archaeological site. What remains is a richer understanding of Longest, in that bits of history left behind but shrouded in different media and context are drawn out independently, analyzed in light of each other, and interwoven to create a story much closer to the truth than any one method could have accomplished alone.

**Carlock, Michael** (see **Drass, Richard**)

**Carlson, KC** (Oklahoma Archaeological Survey), **Leland Bement** (Oklahoma Archaeological Survey), **Brian Carter** (Oklahoma Archaeological Survey), and **Scott Hammerstedt** (Oklahoma Archaeological Survey)

**Session 8:** *Ravenscroft II: Imaging and Geoarchaeology of a late Paleoindian Oklahoma Bison Kill*

At the close of the 2009 excavation of the late Paleoindian-age Ravenscroft arroyo bison kill in the Oklahoma panhandle, gophers unearthed bone fragments in a nearby area. The identification of this second, adjacent, arroyo headcut raised significant questions about the possibility that two arroyos simultaneously were employed in the trapping of bison. This site aids in understanding late Paleoindian hunting organization and raises new questions concerning available manpower and logistics in large game hunting. Investigations during the summer of 2013 included gradiometer and resistivity imaging of the area, followed by augering, and then excavation of 12 square meters. We present the geoarchaeological results of the 2013 investigation of the Ravenscroft II arroyo. Geophysics played a significant part in our understanding of site layout and site formation processes.

**Carrillo, Richard F.** (Cuartelejo HP Associates Inc.)

**Symposium 15:** *Advances in Historical Archaeology on the Colorado Plains: A Functional Perspective*

Since the early 1980s when historical archaeology began to make an appearance in Colorado, the discipline has gained considerable acceptance and practitioners of historical archaeology are becoming more numerous. Utilizing both processual and post-processual approaches various projects have focused on the concept of ethnicity as a major field of historical archaeological study in the state. One recommended approach entails the development of a system that can assist practitioners to understand the artifacts, not only in regards to researching selective artifacts for chronological purposes, but also to utilize the entire artifact inventory to systematically categorize artifacts functionally, and to identify patterns that relate to cultural systems in meaningful ways. It represents an essential, initial stage that allows the entirety of the material products of a past cultural system, as represented within an historical archaeological context, to be systematically observed to reveal critical insights of the behavior responsible for its production and utilization.

**Carter, Brian** (see **Carlson, KC**)



**Chodoronek, Michael** (University of Nebraska-Lincoln) and **Matthew Douglass** (University of Nebraska-Lincoln)

**Symposium 2:** *Photogrammetry as a technique for infield documentation of archaeological features: A case study of pit hearths from the Oglala National Grasslands, Northwestern Nebraska*

The discovery and documentation of archaeological features represents an important yet challenging aspect of pedestrian survey in Great Plains contexts. The information potential of these remains is great, but little is done at the point of initial discovery. Instead, most often researchers rely on infield documentation. Decisions about future work, monitoring and relocation are then made at a later date. Here we report on a pilot study to use low-cost, off-the-shelf, photogrammetry for the documentation of pit hearth features in contexts throughout the Oglala National Grasslands. The ease of use, rapid data acquisition, and cost effectiveness of this technique demonstrate its promise as an important tool for archaeological survey. The fine resolution models created for individual features can supplement infield measurements and provide a baseline for assessing rates of degradation. Large scale landscape models of features with reference to broader landscape elements can serve as an important tool for relocation.

**Church, Minette** (University of Colorado-Colorado Springs), **James Schindling** (University of Colorado-Colorado Springs), **Kari Pittman** (University of Colorado-Colorado Springs)

**Symposium 15:** *Real Time GIS and Interdisciplinary Landscape Archaeology in Southern Colorado*

Reflecting on the sad passing of Dr. Keith Basso, it seems a good time to revisit the anthropological archaeology of landscapes and the human stories embedded in the spaces we research. Clark and Scheiber in their edited volume opened the door to an integrated approach to the recent and deeper pasts; since then, opportunities to collaborate across our research terrains have been growing. UCCS students Jim Schindling and Kari Pittman, have been using GIS as a tool to map various projects, which is not new. However, Jim has made that database potentially interactive between different researchers and projects in real time. I foresee a time when we can map genealogies, geographic meanderings of individual life histories, Kari's rock art styles, and other primary information beyond simple site geography and artifact data, in a way that will allow us to communicate between projects as an integral part of the research process.

**Church, Minette** (see **Schindling, James**)

**Clark, Bonnie** (University of Denver)

**Symposium 15:** *An Archaeological view of the WWII Homefront*

Although within a period of both extensive documentation and living memory, archaeology still has much to reveal about the American homefront during

World War II. A region with many federally-related facilities, the Plains hold valuable resources regarding the American response to the war. This paper presents as an example the archaeology of sites where civilians and enemy combatants were confined during WWII. Recent studies reveal both administrative intent, as well as a variety of often surprising strategies pursued by prisoners. Research on such sites only reaches its full potential through programs of collaborative research with survivors and other community members.

**Clark, Natalia** (see **Nichols, Kimberly**)

**Clark, Natalia** (see **Nichols, Kimberly**)

**Clauter, Jody** (Wyoming Department of State Parks and Cultural Resources)

**Session 23:** *The Problems and Potentials of Using Older Collections: A Preliminary Assessment of the Elk Mountain (48CR301) Ceramics*

A primary goal of an archaeological repository is the care and preservation of artifacts and site assemblages so they are available to future researchers for re-analysis or investigation with new methods or techniques. Achieving this goal often depends on the state of the collection when first accessioned and the presence and condition of the associated records. Most modern day accessions are accompanied by comprehensive records, but older collections often lack critical provenience information. Regardless, collections lacking detailed provenience data have the potential to provide research opportunities that could contribute to our understanding of the prehistory of a site and the surrounding region. A preliminary assessment of the ceramics and associated records from the Elk Mountain (48CR301) site, excavated during the 1960s and 1970s, illustrates these difficulties and possibilities.

**Clifton, Virginia L.** (see **Magennis, Ann L.**)

**Conley, Travis** (see **SoRelle, Keith**)

**Conner, Carl** (Dominguez Anthropological Research Group)

**Session 26:** *Archaeological Investigations at the McClane Rockshelter, 5GF741*

Excavation of the rockshelter encountered cultural deposits ranging in age from about 4200 to 300 years ago, primarily in four cultural levels. McKean Complex is represented in the two lowest stratigraphic units, which contained three occupation levels dating between ca. 4200-3000 BP. Those levels exhibited characteristics of house pit structures found in open sites by the arrangement of thermal and storage features within the rockshelter. Winter occupation is suspected for these three earliest habitations, which were likely facilitated by the construction of a pole or brush wall around the perimeter of the

overhang ledge. Later use of the shelter was apparently limited to short-term camping, probably during seasonal migrations typical of the Archaic Lifeway.

**Corr, Samantha** (see **Wandsnider, LuAnn**)

**Cox, Jim** (see **Wyckoff, Don**)

**Creekmore, Andrew** (University of Northern Colorado)

**Symposium 20:** *Evaluating the Application of Multiple Archaeological Geophysics Methods to a Game Drive Complex and Associated Features in North Park, Colorado*

This paper presents preliminary results from geophysics surveys conducted at 5JA321, a high ridge-line site in North Park Valley, Colorado. This site contains numerous stone-built architectural features more frequently associated with high-altitude game drives, including blinds, drive walls, circular and rectilinear walls, and sacred features. Surface artifacts associated with these features date from the Late Paleoindian Period to the Historic Period. The purpose of this research is to determine if archaeogeophysics can contribute to a better understanding of features at sites such as 5JA321. This paper reviews results from magnetometry, resistance, conductivity, and ground-penetrating radar surveys that took place in August 2013. Preliminary results indicate that these methods corroborate the apparent location and trajectory of ephemeral walls, and confirm expectations that these features do not have significant sub-surface expression. In addition, these results reveal important information about the geology of the ridge-line itself along with clues about factors relating to the location of 5JA321 and local associated sites.

**Cronk, Robert** (see **Black, Kevin**)

**Cunningham, Doug** (see **Hurst, Stance**)

**Cunningham, Doug** (see **Ward, Dallas C.**)

**Dalan, Rinita** (Minnesota State University-Moorhead), **Jessica Sharp** (Minnesota State University-Moorhead), **Rebecca Wallace** (Minnesota State University-Moorhead), **Jay Sturdevant** (National Park Service, Midwest Archeological Center), and **Steven De Vore** (National Park Service, Midwest Archeological Center)

**Symposium 6:** *Cutbank Geophysics: Magnetic Susceptibility Testing at Sakakawea Village*

In July 2012, magnetic susceptibility investigations were conducted along the Sakakawea Village (32ME11) cut bank at Knife River Indian Villages National Historic site (KNRI) in central North Dakota. This extensive exposure provided a superb opportunity to correlate magnetic susceptibility measurements of a

variety of subsurface features with profile observations and surface geophysical surveys, recorded both in 2012 and in the 1970s. Field and laboratory measurements of susceptibility were collected from the cut bank at six areas within the village and an off-site location. Results were excellent, discriminating natural and cultural soils, different feature types (e.g., midden areas, houses, and thermal features), and a possible buried soil. Results suggest that surface and down-hole susceptibility surveys could be profitably employed to explore interior areas of this and other KNRI sites, mapping vertical and horizontal site limits, activity areas, features, and perhaps even earlier occupations.

**Davis, Shay** (University of Wyoming)

**Poster Session 16:** *Stories Ingrained in the Soil: A Preliminary Analysis of Soil Chemical Properties at Two Moon Rockshelter (48BH1827) and BA Cave (48BH1065), Bighorn Mountains, Wyoming*

Restoration and reclamation practices are normally associated with drastically disturbed lands such as oil and gas well pads, open pit mines, access roads, and pipelines. In contrast, less attention is paid to the cumulative impacts of relatively small-scale disturbances over a landscape. One such disturbance is archaeological excavation. The hastened recovery of ecosystem processes in archaeologically disturbed areas may result in negative impacts to archaeological site stability, preservation, and overall ecological health. This study will take an initial look at a number of soil properties in relation to two archaeologically disturbed areas, BA Cave (48BH1065) and Two Moon (48BH1827). Both are rockshelters on the western slope of the Bighorn Mountains of Wyoming. Basic environmental data from field observations will be compared with results of PLFA (phospholipid fatty acid analysis), pH and electrical conductivity tests, and other variables from soil samples, and recommendations for further research will be addressed.

**De Vore, Steven** (National Park Service, Midwest Archeological Center) and **Albert LeBeau** (National Park Service)

**Poster Session 16:** *Geophysical Investigations at North Prairie Sites 32ME104 and 32ME1421 at Knife River Indian Villages National Historic Site, North Dakota*

Geophysical investigations were undertaken at two sites on the North Prairie at the Knife River Indian Villages National Historic Site in North Dakota. Site 32ME104 contained three mounds associated with the Stanton Mound Group. Site 32ME1421 contained a depression identified as a potential eagle trapping pit. Geophysical techniques included magnetics, ground penetrating radar, resistance, and conductivity. The investigations were part of the archaeological investigations of the North Prairie in order to identify the nature and extent of the mounds and archaeological resources on the Kreiger Tract. The results indicated the presence of the three mounds to varying degrees, as well as the eagle trapping pit at the two sites. Future investigations should incorporate

magnetic susceptibility to help further discern the shape of the mounds and eagle trapping pit.

**De Vore, Steven** (see **Dalan, Rinita**)

**De Vore, Steven** (see **Renner, Amanda**)

**De Vore, Steven** (see **Schneider, Blair**)

**Deweese, Eddie** (see **Short, Heidi**)

**Diggs, David** (see **Doerner, James**)

**Dinkel, Michelle** (see **Nichols, Kimberly**)

**Dinkel, Michelle** (see **Nichols, Kimberly**)

**Doerner, James** (University of Northern Colorado), **Robert Brunswig** (University of Northern Colorado), and **David Diggs** (University of Northern Colorado)

**Symposium 20:** *Reconstructing Cultural and Climatic Change in North Central Colorado's Rocky Mountains: Current Results of University of Northern Colorado Research, 1998-2013*

University of Northern Colorado researchers have conducted archaeological and paleoenvironmental field studies in Rocky Mountain National Park and the adjacent interior basin valley of North Park since 1998. More than five hundred archaeological sites, representing the full range of human habitation from the Late Pleistocene to historic times, have been documented and many excavated in Rocky Mountain National Park and the nearby North Park Valley. Over fifteen years, fifteen localities, from sagebrush steppe to alpine tundra, have been sampled and dated for paleoclimate and paleoecology reconstruction. In addition, data from other researcher's projects, including new ice patch studies, strongly complement the university's own research program. This paper describes current results of UNC efforts to integrate eleven millennia of cultural and climatic data through Geographic Information System (GIS) modeling and reconstruct past climates and ecosystem as essential interpretive background for reconstructing southern Rocky Mountain patterns of human social and technological adaptations through time and space.

**Douglass, Matthew** (University of Nebraska-Lincoln) and **Sam Lin** (University of Pennsylvania)

**Symposium 2:** *Local Lithic Source Utilization Patterns in the Oglala National Grasslands, Northwest Nebraska*

The University of Nebraska Archaeological Field School has employed a landscape approach to the documentation and analysis of chipped stone artifact distributions within the Oglala National Grasslands in far Northwest Nebraska. Here we present the results of an analysis of the use of local source materials in varied landscape contexts including a prominent cobble exposure known as Pete Smith Hill. Special emphasis was placed on evaluating the preferential selection and transport of lithic products throughout these contexts through the examination of core reduction intensity, flake production techniques, and the quantification of cortex proportion.

**Douglass, Matthew** (see **Chodoronek, Michael**)

**Douglass, Matthew** (see **Greiman, Nora**)

**Douglass, Matthew** (see **Wandsnider, LuAnn**)

**Dove, David** (Colorado Archaeological Society)

**Session 29:** *An Update on Champagne Spring Ruins*

Champagne Spring Ruins is located 7 miles south of Dove Creek Colorado. During the sparsely populated early Pueblo II period (A.D. 900-1025), it was one of the largest villages in the Northern San Juan Region. It contains over 250 surface rooms and 50 pit structures and kivas including a great kiva and a 6+ m oversized pit structure. From 2003 through the present, test excavations have been conducted on the North and South Hill sites and a complete remote sensing study using 4 different methods has been completed. During the summers of 2011-2013, members from the Colorado Archaeological Society and the Verde Valley Archaeological Center have participated in this work, contributing over 3500 hours to the project. This brief overview will describe some of the work and provide an update to the presentation given at the last annual CAS meeting.

**Drass, Richard** (Oklahoma Archaeological Survey), **Stephen Perkins** (Oklahoma State University), **Susan Vehik** (University of Oklahoma), and **Michael Carlock** (University of Arkansas)

**Poster Session 22:** *2013 Excavations at the Historic Longest Site and Wichita Fortifications on the Southern Plains*

Excavations at the 18<sup>th</sup>-19<sup>th</sup>-century Taovaya village (Longest, 34JF1) provide insights into Wichita fort construction on the southern Plains. Spanish forces attacked this village on the Red River in 1759, and French, English, and American traders visited the Taovayas regularly until around 1811. Visitors described the village layout including our first historical insights on fort

construction. Excavations at Longest in the 1960s provided initial evidence on the fortification, but most work focused on other aspects of the site. May 2013 excavations were undertaken to specifically test fort features including those mentioned in historic records plus information from magnetic surveys. The excavations documented a moat-like ditch around the fort and “subterranean apartments” that visitors described within the fort. A large post mold may represent part of the stockade. Interior pits and a second ditch were also identified. Daily activities probably occurred outside the palisade as few artifacts were found with interior features.

**Duncan, Marjorie** (Oklahoma Archaeological Survey)

**Session 3:** *Calf Creek Middle Archaic Campsites on the Flint Hills of Kansas and Oklahoma: The Grouse Creek and Kubik Sites*

Groups of hunter-gatherers known today by archaeologists as Calf Creek foragers lived on the southern Plains about 5500 years ago. This paper discusses two Calf Creek sites on the western edge of the Flint Hills: the Grouse Creek site in south-central Kansas and the Kubik site in north-central Oklahoma. Grouse Creek is a surface find with over 300 Calf Creek-style points indicating variation in the amount of heat treatment and reduction strategies but without subsistence remains. In contrast, the deeply buried Kubik site has few tools but is the best-dated Calf Creek campsite in Oklahoma. The few lithics and faunal remains at Kubik provide additional context to the unique surface collection from Grouse Creek.

**Dundas, Robert** (Colorado Archaeological Society)

**Session 29:** *Archaeological Border Wars*

Bob Dundas has spent the last thirty years exploring the borderlands that divide the United States and Mexico. While working with archaeologists and land managers of the Cabeza Prieta National Wildlife Refuge, Organ Pipe National Monument, and the Barry M. Goldwater Range he has witnessed the changes to the landscape during this time period. The international fence and homeland security have funneled more immigrants and drug cartels into the remote sections of the borderlands. In an area that has one of the highest concentrations of cultural remains the damage being rendered is remarkable. Thousands of archaeological sites have yet to be formally recorded and surveyed and with the dramatic increase of human and vehicular activity many are being destroyed and are at risk! The archaeologists, site stewards, park rangers, and federal employees charged with protecting these fragile areas are also being subjected to great risk. In his presentation “Archaeological Border Wars” he will take you on a journey to this land of extremes. The presentation is a first-hand account of the issues facing all who strive to protect the antiquities of the Sonoran Desert and live with the realities of present day conflicts along our border with Mexico in southwestern Arizona.

**Earley, Frank Lee** (see **Huffman, Thomas**)

**Eggermont-Molenaar, Mary** (see **Kehoe, Alice**)

**Engel, Damita** (Metcalf Archaeological Consultants, Inc.), **Michael McFaul** (LaRamie Soils), **Dante Knapp** (LaRamie Soils), and **Kimball Banks** (Metcalf Archaeological Consultants, Inc.)

**Symposium 1: *A Hole Is More Than The Sum of Its Parts – Recent Investigations in the Knife River Flint Quarry Area***

Over the past several years Metcalf Archaeological Consultants, Inc. has been involved in projects within the Knife River Flint Quarry area. These activities have expanded our understanding of the nature and composition of the quarry area. A new quarry has been identified, a predictive model of KRF natural deposits and site locational/spatial distribution has been developed and is being updated, the Lynch Knife River Flint Quarry is now a National Historic Landmark, and deep testing has expanded our understanding of the geoarchaeology here. This presentation summarizes these projects.

**Erickson, Samantha** (see **Nichols, Kimberly**)

**Erickson, Samantha** (see **Nichols, Kimberly**)

**Ericson, Jessica** (see **Meeker, Halston F.C.**)

**Evans, Chaz** (The Archaeological Conservancy)

**Session 13: *Butterflies and Bulldozers: When the Present Determines the Future of the Past***

Paragonah is the name of the newest archaeological preserve The Archaeological Conservancy has acquired in Utah, but that's only part of a unique story of conservation, preservation, scholarship, and a *new* approach to mitigation. In 2011 there was a permit violation involving the Utah Transit Authority and the Army Corps of Engineers. While working on the FrontRunner Project, Utah's premium commuter rail system, construction crews working under the Utah Transit Authority (UTA), inadvertently impacted a Fremont archaeological site and a wetland, on land that was held in easement by Utah Open Lands. The Butterfly effect from the fines imposed by the Army Corps of Engineers for this permit violation has resulted in a number of positive outcomes for The Office of Public Archaeology at BYU, Southern Utah University, the Paiute, The Archaeological Conservancy, and the future of Conservation Archaeology.

**Falk, Carl R.** (see **Picha, Paul R.**)



**Felber, Gregg** (St. Cloud State University)

**Symposium 2:** *Lithic Sourcing Analysis at Hudson-Meng*

The purpose of this paper is demonstrate the methodology I will be using to examine differentiation of lithic debitage from different levels of the excavation at Hudson-Meng The debitage analyzed will be selected from units in the area commonly referred to as the enclosure trench. The debitage will be analyzed for differences in type and differences in overall mass of the identified types.

Comparisons will be made with known local sources to determine if the debitage came from local or distant source. Analysis methodology will include color, translucency, material identification and fluorescence. The analysis will focus on any change over time based on dates associated with various levels.

**Ferris, Kade** (Cardno ENTRIX)

**Symposium 1:** *Gunshots and Thunderbirds: Archaeology and Tribal Interpretation and NRHP Evaluation at 32MN946*

In June of 2013, Cardno ENTRIX worked collaboratively with representatives from the Turtle Mountain Band of Chippewa and Three Affiliated Tribes Tribal Historic Preservation Officer (THPOs) to provide tribal interpretation and National Register of Historic Places (NRHP) evaluation of a stone feature site in Mountrail County, North Dakota. By combining standard archaeological methods, survey grade GPS mapping, interpretation of historical treaty records, and traditional tribal knowledge, the Tribal/Cardno ENTRIX team was able to promote new directions in combining traditional archaeological methods, high-tech GPS, and indigenous wisdom to improve the outcome of cultural resource management in the northern Great Plains.

**Forman, Brian** (College of Menominee Nation)

**Symposium 4:** *Ethnographic Analogs for Menominee Agriculture: The View from Buffalo Bird Woman's Garden*

The College of Menominee Nation's recent excavations of raised agricultural fields on the Menominee Reservation in Northeastern Wisconsin, made possible by the United States Department of Agriculture's (USDA) National Institute of Food and Agriculture (NIFA), have produced an abundance of data concerning the form and function of these fields. Data from this research, analyzed and processed by the University of Wisconsin-Madison, University of Wisconsin-Milwaukee and the Smithsonian Institution, provides evidence that Menominee people were in fact, not "reluctant gardeners" as described in early ethnographic and ethnohistorical accounts, but rather active in sustainably farming to provide for a large and sedentary population. Gilbert L. Wilson's 1917 work, *Buffalo Bird Woman's Garden*, provides an, "Indian woman's interpretation of economics, the thoughts she gave her fields; the philosophy of her labors," thereby shedding light on the way in which ancestral Menominee practiced agriculture in Northeastern Wisconsin.

**Forney, Meghan** (Montana State University), **Lawrence Todd**, and **Kaitlyn Simcox** (Colorado State University)

**Poster Session 27:** *Multi-scalar chipped stone analysis in the Shoshone National Forest, NW Wyoming: Feature, site, drainage, region*

While the Norton Point Forest Fire of 2011 that swept through Shoshone National Forest was destructive, it was a boon for archaeology, as it cleared acres of forest floor, exposing hundreds of new sites for study. As a result of extensive surveys in the region and on-site lithic analysis of over 100,000 pieces, we are starting to put together a picture of how this high-altitude landscape was used in the past. By beginning on a small scale, describing a single dense lithic cluster on site 48FR7064, then moving to the larger description of the site, followed by a comparison of 48FR7064 and other sites in the Wiggins Fork drainage, and finally to others in the Absaroka Mountain region as a whole, we demonstrate the remarkable opportunity presented by fire, allowing us to begin to assemble unique, multi-scalar datasets to facilitate an understanding of how people thrived in high altitude settings.

**Fosha, Michael** (see **Holen, Steven**)

**Fulton, Marsha** (The Extreme History Project) and **Crystal Alegria** (The Extreme History Project)

**Symposium 4:** *Sharing Their Stories: Incorporating Oral History into Archaeological Research*

**Symposium :**

Incorporating oral histories of descendant communities into archaeological research not only provides needed detail to the story but also offers new directions for research; gives voice to those often abandoned by history; creates opportunities to bond communities and returns lost identity to people facing historical denial. The Extreme History Project has been researching the site of Fort Parker, the first Crow Agency in Montana. They have found recording oral histories of tribal members a valuable tool for understanding the past and an important legacy for the present tribal community. They will share their experiences and revelations as they negotiate this important, and often daunting, work to show how a community's identity is wrapped up in its history.

**Garges, Danny** (Iowa State University) and **Matthew G. Hill** (Iowa State University)

**Session 8:** *Taphonomy of Faunal Remains Recovered from a Missouri River Sandbar*

Consequences of catastrophic flooding of the Missouri River in 2011 offer an opportunity to examine site formation processes and vertebrate taphonomy in alluvial contexts. Between late spring and late fall 2012, a local farmer systematically collected faunal remains from a large sandbar that formed during

the flood; the bar has since disappeared. The collection totals about 1,500 specimens, mostly bison, but white-tailed deer, canid, bear, and bird remains are also present. More generally, it is comprised largely of skeletal elements that are not especially prone to transport by fluvial processes, for example, long bones and large tarsals. The deposit is thus interpreted as a lag accumulation in which heavier, less transportable elements settled at the site location. The temporal resolution of the collection is not clear. Most of the specimens are degreased and dry, suggesting they are relatively older than several “greasy” specimens that represent relatively recent deaths.

**Gibson, Bonnie** (Cultural Resource Analysts, Inc.)

**Symposium 24:** *Public Education and Archaeology Stewardship Symposium Introduction*

In recent years the public education landscape has changed dramatically. Teachers are required to align curriculum with new standards and tests in order to meet wide ranging goals. Most of the new curriculum is now aligned with and using the Common Core Standards to meet these needs. *Project Archaeology: Investigating Shelter* is a curriculum that aligns with Common Core while exploring multiple disciplines with the same curriculum. This development gives archaeologists a unique opportunity to provide educators with substantive assistance to meet their needs while promoting archaeological and historical stewardship. Participation in Project Archaeology training will help archaeologists to better understand the demands educators face. Project Archaeology provides teachers with challenging, meaningful curriculum for learners in which students utilize content area skills and knowledge in an authentic setting and meet rigorous new standards. It gives archaeologists the opportunity to directly contribute to their communities by mentoring teachers and students and by modeling stewardship of cultural resources.

**Gibson, Terrance** (Western Heritage), **Krista Gilliland** (Western Heritage), and **Tim Kinnaird** (Scottish Universities Environmental Research Centre)

**Poster Session 16:** *Characterizing floodplain aggradation along the North Saskatchewan river using portable optically-stimulated luminescence*

Alluvial terraces are areas that are of high archaeological potential, as they are preferred locations for human settlement while undergoing periodic influxes of sediment, contributing to site preservation, but also to erosion and artifact redistribution. This poster presents results of an exploratory study that characterizes fluctuations in floodplain activity on the lowest terrace along the North Saskatchewan river at Edmonton, Alberta, Canada. Previous research places terrace formation at 8000 years before present and artifacts within the flood sediments indicate occasional precontact occupation of the area, and historic-era activities as well. Using portable optically-stimulated luminescence measurements anchored by the known date of a Mazama eruption exhibited in the stratigraphy, we consider rate of floodplain accretion, duration of standstill

phases, and the identification of erosive phases. This work underscores the relationship between human occupation and low-energy floodplain dynamics and addresses broader issues related to the application of luminescence methods to date archaeological sites in these contexts.

**Gilliland, Krista** (see **Gibson, Terrance**)

**Gilmore, Kevin** (ERO Resources Corporation), **John Ives** (University of Alberta), and **Sean Larmore** (ERO Resources Corporation)

**Symposium 20:** *Promontory on the Plains: An Examination of Material Culture Similarities between the Great Basin and Eastern Colorado and the Implications for Apachean Migration*

New suites of AMS dates on diagnostic perishable artifacts from the Promontory Caves in Utah and Promontory-like material from Franktown Cave in Colorado provide evidence that both sites were occupied by Promontory Phase people by A.D. 1200. The nearly identical timing of the onset of Promontory Phase occupation for sites 700 km apart, coupled with moccasin styles and other artifacts indicative of Subarctic roots, both favor a Dene identity for proto-Apachean speakers using both Intermontane and Plains margin migration routes. Some stable isotope values for bison hide at both loci imply that southern bison were occasionally exploited, suggesting the southward movement of ancestral Apacheans may have been linked to southward expansion of bison populations during the Late Prehistoric. Although they are not conclusive, other similarities between Promontory Phase sites and those of the western (A.D. 1300-1650) and eastern Dismal River (ca. A.D. 1600-1750) expressions also hint of an Apachean connection.

**Gilmore, Kevin** (ERO Resources Corporation) and **Michelle Slaughter** (Avalon Archaeology)

**Poster Session 27:** *Push and Pull on the Plains: Measuring Human Response to Environmental and Economic Factors in Eastern Colorado Using U.S. Post Offices as an Annually Resolved Population Proxy*

U.S. Census data are limited to decadal-scale resolution, insufficient for the examination of subdecadal population response to environmental and economic push and pull factors. During the late 19th and 20th centuries, U.S. Post Offices apparently opened and closed based on threshold levels of local population and, therefore, provide a robust, annually resolved proxy for historical population. The correlation between the number of post offices and census population for Las Animas County, Colorado between 1870 and 1990 is powerful ( $R=0.931$ ) and highly significant ( $p<0.0001$ ). Using this proxy, we observe that population responded rapidly to episodes of environmental change and economic events with in-migration, out-migration, and possibly internal migration. The agriculturally-based rural population of a state-level, market-based society fluctuated in response to the changing environment, which has important

implications for the examination of prehistoric populations on the plains, as climate and economy are more strongly linked in less technologically complex, egalitarian societies.

**Glaab, Rigden** (URS Corporation) and **Calvin Grinnell** (Mandan-Hidatsa-Arikara Nation)

**Symposium 1:** *Ma'akě Tě'haŋ Makoš' (Earth Always Endures): Preliminary Results from the 2013 Excavations at the Chief Iron Eyes Site (32DU1742) in Western North Dakota*

The Chief Iron Eyes Site (32DU1742) is a large Besant-Sonota age bison processing encampment located in western North Dakota above the Little Missouri River on the Mandan, Hidatsa, and Arikara Nation. This presentation will highlight the preliminary results of the 2013 summer excavations, which have accumulated over 30,000 artifacts and the documentation of approximately 40 features. The site has been radiocarbon dated between 1920 +/- 30 BP and 1850 +/- 30 BP. The discussion will focus on comparing this assemblage to other localities of a similar time frame along the middle region of the Missouri River. The debate regarding the differences between Besant and Sonota artifacts will also be addressed in light of this new archaeological assemblage. It will be argued conventional distinctions in artifact types reflect adaptive changes in regional subsistence strategies based on environmental variation. Ethnographic interpretations of site 32DU1742 will be emphasized throughout the discussion.

**Goble, Ronald** (see **Greiman, Nora**)

**Grantham, Larry** (Gauss Archaeology LLC)

**Session 12:** *The Cobb Site: An Examination of the Meaning of Steed-Kisker Ceramics on Nebraska Phase Sites*

The Cobb Site, 23AN56, was the first professionally excavated Nebraska Phase site in northwestern Missouri. The site was excavated 30 years ago, but the materials remained unanalyzed and unreported since that time. The site is uniquely positioned to examine the relationship of Steed-Kisker and Nebraska Phases. There are significant differences between the materials recovered and Nebraska Phase sites further north. The differences between the vessels from Steed-Kisker sites and those recovered from this Nebraska Phase site allow us to speculate on the meaning of these vessels. It is suggested that these decorated Steed-Kisker vessels are part of a ritual that outlives the Steed-Kisker Phase and continues on long after that.

**Greiman, Nora** (University of Nebraska-Lincoln), **Ronald Goble** (University of Nebraska-Lincoln), **Tiffany Napier** (University of Nebraska-Lincoln), **Matthew Douglass** (University of Nebraska-Lincoln), and **LuAnn Wandsnider** (University of Nebraska-Lincoln)

**Poster Session 27:** *An Investigation of Human Exploitation of the Nebraska Sand Hills in Response to Large-Scale Climate Change during the peri-Medieval Climatic Anomaly: Preliminary Results and Project Status*

Warming and drying conditions associated with the Medieval Climatic Anomaly (MCA) affected the Great Plains from approximately AD 900-1300. Evidence suggests that these conditions were not as severe in the Nebraska Sand Hills as in neighboring areas, perhaps leading to unique patterns of exploitation by humans not seen during earlier or later cultural periods. Our study aims to characterize human exploitation of the Sand Hills during the peri-MCA through a program of optically stimulated luminescence (OSL) dating of both site-based sediments and ceramic sherds. Sediment samples were collected from known Woodland, Central Plains Tradition, and Dismal River archaeological sites in the Sand Hills. Ceramic sherds are derived from site collections maintained by the Nebraska State Historical Society. Here, we discuss the effectiveness of OSL dating for ceramic specimens from the region, in addition to utilizing chronological information to build our knowledge of past use of the Sand Hills.

**Griffin, Kristy Kay** (Colorado State University), **Tae Naqvi** (Colorado State University), **Jerry Smith** (University of Washington), **Kate Wright** (Corona Station Photography), and **B. Travis Wright** (Corona Station Photography)

**Poster Symposium 5:** *Wright's Wheels: An Archaeological Investigation of a Freight Car Wreck at Devil's Slide, Rollins Pass, Colorado*

During the summer of 2013, the Colorado State University Archaeology Field School, with the assistance of Kate and Travis Wright, recorded the remains of a recently discovered freight car wreck down slope from the Devil's Slide Twin Trestles in western Boulder County, Colorado. The wreck is found along the thirty-mile "Hill Route" section of the Denver, Northwestern, and Pacific Railway (reformed as the Denver and Salt Lake Railroad in 1913 and as the Denver and Salt Lake Railway in 1926). Striving to connect Denver, CO with Salt Lake City, UT, construction began on this railway in 1903. During construction, the Hill Route functioned as a temporary track over the Continental Divide at Rollins Pass from 1904 to 1928 prior to the completion of the Moffat Tunnel. Since railroad accidents not associated with casualties typically were not formally recorded by the Interstate Commerce Commission during this period, an archaeological analysis of this site provides a deeper understanding of both the forensics and the historical context associated with this wreck.

**Grinnell, Calvin** (see Glaab, Rigden)

**Grinnell, Calvin** (see **Reed, Timothy**)

**Grund, Brigid** (University of Wyoming)

**Session 13:** *Households with children tend to be occupied at higher densities ethnographically: Implications for identifying the presence of juveniles in the archaeological record*

Current middle range theory provides a poor basis for differentiating between households with and without children at prehistoric archaeological sites. This would allow the identification of loci of learning and cultural transmission, potentially explain differences in subsistence patterns between households, and/or provide demographic information. This study compiles and analyzes published ethnographic data pertaining to five hunter-gatherer and agriculturalist groups: the Copper Eskimos, Klamath, Garo, Kapauku, and !Kung. It also incorporates summer 2013 field data collected among the Mongolian Dukha, nomadic reindeer (*Rangifer tarandus*) pastoralists living in a temperate climate similar to the High Plains and Rockies. I compare people per square meter living in adult-only households to households with children; the latter are occupied at significantly higher densities in all cases with reliable data. Furthermore, significant, positive correlations between household density and percentage of children per household are ubiquitous within representative datasets. Ongoing research attempting to estimate household density from the archaeological record is presented.

**Hadley, Alison M.** (University of Kansas)

**Session 13:** *Contemporary Perspectives on Pipes from the Past*

Previous research on stone pipes from the Plains has examined their raw materials, the process of manufacturing, significance in trade and inter-tribal interaction, and ritualistic use. Interpretations of archaeological pipes are derived from analyses, ethnographic analogies, and experimentation. This research employed various methods to interpret stone pipes from multiple protohistoric and historic archaeological sites. Ethnographic interviews were conducted in order to gain Native American interpretations on how the pipes were made, used, and what they represented. The results of these interviews are compared to the interpretations made from the archaeological analyses.

**Hadley, Alison M.** (see **Adair, Mary J.**)

**Hall, Scott M.** (see **Ryan, Shannon R.**)

**Halperin, David** (see **Shimek, Rachael**)

**Hammerl, Emily** (see **Wandsnider, LuAnn**)

**Hammerstedt, Scott** (See **Carlson, KC**)

**Hammond, Bill** (Colorado Archaeological Society-Denver Chapter) and **Diane Rhodes** (Colorado Archaeological Society-Denver Chapter)

**Session 28:** *Small Ovate to Triangular Bifaces As Markers for the Early Ceramic Period*

Several multicomponent archaeological sites in the ecotone between the Colorado Front Range and the Great Plains have yielded small, un-notched triangular to ovoid bifaces, primarily from Early Ceramic strata. From pictures in site reports of other, similar sites, they appear to be widely present as a specific tool type. There is some confusion between these artifacts and projectile point blanks and/or small un-notched Middle Ceramic points. At Swallow Site (5JF321), a multicomponent sheltered camp in the Hogback Valley just west of Denver, we have identified fifty-eight of these specimens. Here we describe their form, pattern of flaking, use wear, and distribution in the site. We demonstrate that they have the same stratigraphic distribution as Early Ceramic corner-notched projectile points and cord-marked pottery. We demonstrate that small, un-notched triangular to ovoid bifaces are a definable tool type and a strong marker for the Early Ceramic Period in this region.

**Hanson, Kathleen** (Hudson-Meng Education and Research Center)

**Symposium 2:** *An Interpretive Study at Hudson-Meng Education and Research Center*

Archaeologists provide a crucial role in the knowledge of the human species and preservation of human history. Important to this preservation of knowledge and cultural history is interpretation of archaeological sites and outreach to the general public. This paper will analyze interpretive techniques and outreach programs in order to identify the most successful ways to inspire the public. It is in public support that archaeology will grow as a field and be seen as a needed field.

**Harding, William** (see **Wandler, Cole**)

**Hargrave, Michael L.** (see **Ryan, Shannon R.**)

**Harty, Jennifer** (Cardno ENTRIX) and **Kade Ferris** (Cardno ENTRIX)

**Symposium 1:** *Those Are Not All Tipi Rings: Stone Features at a Chippewa Site Along the Little Knife River*

In June 2013, Cardno ENTRIX, along with representatives of the Turtle Mountain Band of Chippewa and the Three Affiliated Tribes performed a site revisit and Traditional Cultural Property (TCP) recordation project at site 32MN946. The site had been impacted by construction of an oil and gas trespass well, and the project was conducted as part of the Bureau of Land Management's (BLM) tribal consultation requirement under Section 106. Through the course of the project, three distinct areas of the site were identified – habitation, sweat lodge, and ceremonial. Additionally, through historic and



ethnographic research, a cultural affiliation was able to be established. This paper will present the overall results of the fieldwork as well as cultural affiliation, rough time-line, and discrete site areas. Particular emphasis is placed on the habitation and sweat lodge portions of the site.

**Haskell, Samuel** (see **Scheiber, Laura**)

**Henning, Dale** (see **Schirmer, Ronald**)

**Hill, David** (Metropolitan State University of Denver)

**Symposium 19:** *Technological Variability in Dismal River Ceramics from the Lovitt Site, 25CH1*

Ceramics from sites related to the Dismal River archaeological culture have been understudied in terms of their material variability. The present study focuses on ceramics recovered primarily from 25CH1, the Lovitt site located in southwestern Nebraska. Petrographic analysis was conducted on twenty-one sherds from this site selected for differences in their surface appearance and differences in the appearance of their ceramic pastes. Variation in the paste of the pottery from 25CH1 likely results from vessels from multiple sources.

**Hill, Matthew E.** (see **Knell, Edward**)

**Hill, Matthew G.** (Iowa State University), **David Rapson** (University of Wyoming), **Thomas Loebel**, and **Dave May** (University of Northern Iowa)

**Poster Session 10:** *Late Paleoindian Bone and Antler Artifacts from the Clary Ranch Sites, Ash Hollow, Nebraska*

Fine-grained, early Holocene alluvium in Ash Hollow encases multiple, exquisitely preserved Late Paleoindian components. Two deeply buried sites, located within 2 km, reveal rare examples of formal artifacts made on bone and antler. The Clary Ranch site, a bison kill-butcher locality, includes an awl made from a pronghorn metapodial and a grooved-and-snapped canid distal humerus. The O.V. Clary site, a residential occupation, includes 14 bird bone beads, 2 needles, an awl, and an antler billet. The combined evidence offers insight on Paleoindian domestic activities including sewing, adornment, and organic fabricators.

**Hill, Matthew G.** (see **Boehm, Andrew**)

**Hill, Matthew G.** (see **Garges, Danny**)

**Hittner, Luke** (Hudson-Meng Education and Research Center, USFS)

**Symposium 7:** *An Analysis of the 21 Alberta Projectile Points at the Hudson-Meng Site*

This paper is designed to provide an overview of the Alberta projectile point component at Hudson-Meng (25SX115). The Alberta component is the oldest diagnostic component of Hudson-Meng, as well as the oldest component of the Cody cultural complex in the Great Plains archaeological region. Analytical comparisons were performed between the 19 Alberta points found in Dr. Larry Agenbroad's excavations (1971-1978) and the two additional projectile points found in Dr. Lawrence Todd and Dr. David Rapson's excavations (1991-1997). The comparison study looks at macroscopic raw material identification, flaking patterns, and the metric data of the projectile points. This study aims to combine the Alberta components from both decades of research and conduct new analysis on the oldest diagnostic artifacts at the Hudson-Meng site.

**Hoard, Robert J.** (Kansas Historical Society) and **Rob Bozell** (Nebraska State Historical Society)

**Session 3:** *The Forrest site (14PA303): A Keith phase site in Central Kansas*

The Forrest site, 14PA303, is an Early Ceramic (or Plains Woodland) Keith phase site in central Kansas excavated by local amateur Earl Monger and his wife Iris, other amateurs, and professional archaeologists. It is one of few Keith phase sites to be excavated, and while Monger kept records, he never published a report. This paper presents the results of the analysis of the site and reviews it in the context of the few other excavated Keith phase sites. Finally, we raise questions about the nature of the Keith phase, including the origins and nature of the earliest High Plains pottery, the presence of pottery but an apparent lack of horticulture, and the general technological stability and homogeneity across its range.

**Hoard, Robert J.** (Kansas Historical Society)

**Session 25:** *Rock Fences in Kansas and Missouri*

Dry-laid limestone rock fences are locally common in western Missouri and eastern Kansas. These fences take more time and skill to erect than wooden fences, but last much longer. This presentation explores the origins and evolution of dry-laid rock fences in Kansas and Missouri, including fence laws that encouraged their construction, information on the resources and skills needed to build them, their known distribution, and the ethnic identities of those building the fences.

**Hoefler, Dani** (Cultural Resource Analysts, Inc. and Project Archaeology)

**Symposium 24:** *Archaeology Education and the Colorado Council for Professional Archaeologists- Past, Present and Future*

Project Archaeology is first and foremost an educational program designed to teach the value of our rich cultural heritage and to foster stewardship and

conservation of cultural resources. It has been taught as an elective in grades three through twelve and individual lessons have been used to support and enrich existing curriculum. In Colorado, workshops have been used to prepare students and teachers to participate in archaeological projects in their communities. *Project Archaeology: Investigating Shelter* is a comprehensive program primarily for upper elementary and middle school teachers and students. It provides a proven, pedagogically sound curriculum that supports newly implemented state standards. A goal of the CCPA education committee is to conduct a Project Archaeology workshop for CCPA members and teachers, creating a statewide network of educators and archaeologists which can help teachers attain their standards and to meet the outreach and education goals of CCPA and Project Archaeology.

**Hoefer, Dani** (Cultural Resource Analysts, Inc. and Project Archaeology) and **Sarah Baer** (SWCA Environmental Consultants and Project Archaeology)

**Poster Session 16:** *Looking Back, Looking Forward: Public Education and Archaeology – What we need to do now to foster stewardship for cultural heritage for the 21<sup>st</sup> Century*

The importance of public education as a part of American archaeology is not a new idea. The Antiquities Act recognizes that public education and accessibility of archaeological information are significant parts of archaeological investigations. As professionals we have the responsibility to foster cultural heritage stewardship and education in our communities and state. With the national movement to implement Common Core State Standards (CCCS) in school districts across the country, pressure has increased on educators to meet state standards in multiple content areas. Although Project Archaeology is well poised to assist educators with implementation of CCCS, it is even more vital for archaeologists to look at how we can offer tools to help educators meet standards by integrating archaeology into existing curriculum. This poster presentation will illustrate what has been done in the past in public education, what we hope for in the future, and what we can do in the present to attain our goals.

**Hofman, Jack L.** (see **Adair, Mary J.**)

**Hofman, Jack L.** (see **Williams, Emily G.**)

**Hogrefe, K. Talle** (see **Anderson, Cody M.**)

**Holen, Kathleen** (see **Holen, Steven**)

**Holen, Steven** (Center for American Paleolithic Research), **Kathleen Holen** (Center for American Paleolithic Research), **Michael Fosha** (South Dakota Archaeological Research Center), and **Brendon Asher** (Center for American Paleolithic Research)

**Session 14:** *The Search for Early Humans on the Great Plains: 2013 Field Activities of the Center for American Paleolithic Research*

Field activities carried out by the Center for American Paleolithic Research began during the spring and summer of 2013. In this presentation we summarize the results. Excavations at two sites in South Dakota were conducted in conjunction with the South Dakota Archaeological Research Center. We continued test excavations at the Debbie Schulz Mammoth Site on the edge of the Black Hills and began test excavations at a multi-component Paleoindian site on the Little White River. Test excavations in southern Colorado were carried out in conjunction with Adams State College. Survey work was completed in southeastern Colorado and on Bureau of Reclamation property in Kansas. Bone breakage experiments that produced bone notches on cow limb bone were conducted in collaboration with the University of Wyoming.

**Holen, Steven** (see May, Dave)

**Hollenback, Kacy** (Southern Methodist University), **Christopher Roos** (Southern Methodist University), **Fern Swenson** (State Historical Society of North Dakota), and **Adam Wiewel** (University of Arkansas)

**Symposium 6:** *Soil Chemical Evidence for Domestic Ritual Behavior in a Protohistoric Earthlodge, Fort Clark, North Dakota*

Traditional archaeological approaches to ritual and religion often rely on analyses of artifacts or symbols. Ritualized behavior, however, can leave detectable patterns in soils and sediments encountered in archaeological deposits. Here we employ geoarchaeological data to identify and map chemical traces of domestic behavior from a floor within a protohistoric earthlodge at the native village (32ME2) at the Fort Clark Trading Post State Historic Site in central North Dakota. Ethnographic, ethnohistoric, and geophysical data are used to evaluate alternative hypotheses of the patterned chemical traces. Based on these combined lines of evidence we infer the presence of a shrine with chemical signatures distinctly unique from storage, food processing, and other domestic activities. Our approach offers an alternative method for the study of past ritual that is less invasive and costly than conventional excavation-based strategies.

**Holley, George** (Minnesota State University-Moorhead) and **Michael Michlovic** (Minnesota State University-Moorhead)

**Session 12:** *The Camden Style: A Glimpse into Late Prehistoric Mortuary Patterns in the Prairies of Minnesota and South Dakota*

The Camden style is here defined as a new ceramic style found on mortuary jars spread across southern Minnesota and central South Dakota. Three elements comprise the Camden Style: a thumb-pinched shoulder, an incised chevron or oblique diagonal pattern (both interpreted as possible Thunder-bird motifs), and slots or holes placed on the neck. The four known vessels of the Camden style are not exact duplicates but are instead an example of synecdoche, whereby the decorative complex defining the style may appear incompletely in individual expressions. All vessels are shell tempered and presumed to date from the period of AD 1250-1350. Excluding the eastern most Rushford Mound in Fillmore County, Minnesota near the Mississippi River, the remaining vessels are found in mixed Oneota/Plains contexts.

**Holliday, Vance T.** (see **SoRelle, Keith**)

**Huffman, Thomas** (University of Witwatersrand) and **Frank Lee Earley** (Arapahoe Community College, Littleton, CO, ret.)

**Session 26:** *Caddoan archaeology in southeastern Colorado: lodges, bison and maize at the Wallace and Hobson sites*

The Wallace and Hobson sites are 12<sup>th</sup> - 13<sup>th</sup> century settlements of rectangular lodges, situated on bluffs near Pueblo, Colorado. Commonly attributed to the Apishapa phase, they are actually Upper Republican, and were therefore most likely Northern Caddoan. ‘Ritual refuse’ physically connects the Wallace hamlet with a rock art site below the bluff. This refuse shows that the ideology of the domestic economy emphasized bison hunting and maize farming, and was associated with doctors and priests. Since the people were most likely Northern Caddoan, we use Pawnee ethnography to identify a hierarchy of interrelated principles that influenced the organization of space and spatial distribution of artifacts, including the rock art chamber. With a cautious application, it is possible to identify cultural principles that transcend history. These principles are sufficiently general that they most likely applied to many Northern Caddoan speakers and therefore to other archaeological units.

**Hughes, David** (Wichita State University)

**Session 18:** *The 19th Century GLO meets GIS*

Historic maps have proven their usefulness for analyzing archeological landscapes. Application of modern technologies to map analysis can provide greater accuracy than mechanical redrafting at a significant time savings. When the original maps are registered correctly and relevant data abstracted, the results can then be displayed on portable GPS enabled devices, allowing maximum accuracy of feature identification and location within the limits of accuracy of

the original maps. Examples of this process using the mid-19th century GLO maps from within the Walnut River Basin of Kansas scanned by the Kansas Society of Land Surveyors and the Kansas Historical Society illustrate the efficacy of the system for identifying the location of features from the most accurate plots available. A field test of the system is planned for the summer of 2014.

**Humphrey, Kenneth** (Wyoming Army National Guard)

**Session 13:** *Archaeological Research as the Basis for an Efficient Cultural Resources Management Program: An Overview of New Investigations on Camp Guernsey, Wyoming*

Prior to 2012, the Wyoming Army National Guard (WYARNG) avoided impacts to all 1,260 archaeological sites on Camp Guernsey, WY as the primary means of fulfilling their stewardship obligations under Section 106 of the National Historic Preservation Act (NHPA). The avoidance preservation strategy was no longer viable after new training facilities were proposed as a part of Camp Guernsey's designation as a Regional Collective Training Center. It is now the goal of WYARNG's cultural resources program to give Camp Guernsey a variety of options to avoid, minimize, and mitigate the adverse effects to archaeological sites from new construction. Archaeological research is now being used as the primary means to develop a comprehensive plan to achieve the public's preservation goals and WYARNG's compliance responsibilities. This paper explores the investments WYARNG has made into research and how this program will be used to efficiently and effectively treat archaeological sites through the Section 106 process.

**Hurst, Stance** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), **Dallas C. Ward** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), **Eileen Johnson** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), and **Doug Cunningham** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark)

**Session 25:** *Organization of Ranching Activities Along the Eastern Southern High Plains Boundary*

The removal of the Comanches to Oklahoma and final slaughter of bison opened up grasslands and new opportunities for cattle ranchers along the Southern High Plains of Texas. Open range ranching that started in the late 1870s was transformed quickly into a more structured system governed by fenced boundaries and differential access to water and grass across the landscape. Investigations of the historic archaeological record near Post, Texas has uncovered an extensive record of Euroamerican ranch land-use strategies that date from the 1870s through the 1950s. The record includes multipurpose dugout and camp sites as well as limited activity sites associated with corrals and fence maintenance activities. The development and organization of

ranching land-use strategies is explored through an analysis of site activities and the spatial

**Hurst, Stance** (see **Moretti, John**)

**Hurst, Stance** (see **SoRelle, Keith**)

**Hurst, Stance** (see **Ward, Dallas C.**)

**Ives, John** (see **Gilmore, Kevin**)

**Jackson, Michael** (see **Toom, Dennis**)

**Jacobs, Sarah** (see **Shimek, Rachael**)

**Johnen, Connor** (Colorado State University), **Halston F.C. Meeker** (Colorado State University), **Debra A. McCarthy** (Colorado State University), **William Restrepo** (Colorado State University) and **Andrew D. Richards** (Colorado State University)

**Poster Session 27:** *From Hell Gap to Metal Points: Discerning Activity Areas from 10,000 years of Mixed Surface Deposits at the Duck Creek Site*  
The Moriah Ranch, a 13,000 acre rangeland, is located in northern Albany County, Wyoming. The ranch is characterized by moderate altitude sage steppe punctuated with bedrock ridges and Holocene terraces. During a ten-day survey in August of 2013, professional archaeologists, students, and avocational archaeologists recorded approximately 50 sites. Our focus is the Duck Creek Site, which contains chronologically diagnostic projectile points ranging from Hell Gap to a metal arrowhead. The Duck Creek site is located on a strath terrace at the edge of small, semi-permanent stream bearing the same name. The site is a surface scatter of chipped stone debitage, stone tools, and two stone circles. Although we did not shovel test, we suspect that the site does not have stratified subsurface deposits. Spatial analysis of debitage and tools may possibly identify different workshops created during different occupations.

**Johnen, Connor** (see **Meeker, Halston F.C.**)

**Johnson, Eileen** (see **Hurst, Stance**)

**Johnson, Eileen** (see **Moretti, John**)

**Johnson, Eileen** (see **SoRelle, Keith**)

**Johnson, Eileen** (see **Ward, Dallas C.**)

**Johnston, Christopher M.** (Center for Mountain and Plains Archaeology, Colorado State University)

**Symposium 20:** *Jumping with New Data: Recent Investigations of the Roberts Buffalo Jump (5LR100), Larimer County, Colorado*

Communal bison kills formed the foundation of archaeological investigations on the Northwestern Plains for some 50 years. In 1969 and 1970, the CSU Archaeological Field School initiated investigations at one of the first buffalo jumps systematically excavated, the Roberts Buffalo Jump, which also is one of the southern-most known Late Prehistoric jumps on the Plains. Over the intervening forty years as more bonebeds were documented, excavated and analyzed, methods and interpretations of these sites have changed. With these changes comes an important obligation to re-visit old collections and apply new techniques to extant collections. This paper presents updated information on the Roberts Buffalo Jump, including recent field investigations, GIS research, site-structure analysis, and the first ever radiometric dates for the site. These data aid in comparing jump kills, in an effort to better understand larger patterns in communal bison hunting.

**Kauffman, Greg** (University of Kansas)

**Poster Session 16:** *Stable Isotope Analysis of a Middle Woodland Population from North Central Kansas*

This study sought to examine the paleodiet and temporality of a Middle Woodland group from five sites in north central Kansas. This goal was accomplished by submitting 21 samples for stable isotope ratios analysis (SIRA) and 12 samples for bone collagen AMS radiocarbon dating. Results of AMS radiocarbon dating indicated a temporal range of cal. 349 B.C. to A.D. 376. Results of SIRA indicated mixed dietary patterns. Through visual assessment and statistical analyses, it was determined that their dietary patterns formed two clusters. Results were interpreted in terms of flora and fauna from the archaeological record of nearby contemporaneous sites. Other causal factors for stable isotope distribution were taken into account, including paleopathology, sex and age, time, social stratification, and multiple group usage. Based on the evidence available, it was determined that stable isotope ratio distribution was caused by limited nutritional stress, and a varied consumption of fauna and flora.

**Kay, Marvin** (University of Arkansas)

**Symposium 1:** *Middle Missouri Archaeology: Updates on Current and Ongoing Research Projects in the Dakotas*

Our rich heritage of Plains village archaeology need not, nor can it be repeated. Instead we are truly at a crossroad. We now must address interrelated puzzles about: ethnic identity and cohesion before and after Euro-American contact; change in the agricultural system, its built landscape, food storage and preparation strategies; and sourcing raw materials of clay, shell and stone. But do so from a vantage point that regards Native Americans as an integral part of



the solution, invests in non-destructive field methods, and capitalizes on out-of-ground collections.

**Kehoe, Alice** (University of Wisconsin-Milwaukee)

**Symposium 4:** *Chief Bull's Certificates: Signs and Plains Sign Language*

On July 13, 1934, Blackfeet (Amskapi Pikuni) interpreter Richard Sanderville, whose Blackfoot name was Chief Bull, demonstrated Plains Sign Language on the Mall in Washington. One onlooker was Lucy Kramer Cohen, wife and anthropology collaborator of Indian New Deal attorney Felix Cohen. Sanderville presented Kramer with a parchment certificate picturing “the Blue Smoke of Friendship.” He made similar certificates for others. Sanderville, described by John Ewers as an intellectual, worked to promote Blackfeet culture in its twentieth-century world. In 2012, on the Blackfeet Reservation where Sanderville worked, linguist Jeff Davis and anthropologist Ruthann Knudson convened a Plains Sign Language conference, commemorating one there in 1930 with what were thought to be the last signers of the language. The 2012 conference demonstrated Plains Sign is still alive, and its study illuminating to linguists and ethnographers.

**Kehoe, Alice** (University of Wisconsin-Milwaukee) and **Mary Eggermont-Molenaar** (Independent Scholar)

**Symposium 4:** *Bear Child's Life Story, Illustrated*

In 1911, the Dutch linguist C. C. Uhlenbeck recorded, in Blackfoot, the life story of a Pikuni, Bear Child. The text and translation are published in Eggermont-Molenaar's 2005 book, *Montana 1911: A Professor and His Wife Among the Blackfeet*. Bear Child illustrated his life story with pictographs on a wooden bowl, now in the National Museum of Ethnology, Leiden, Netherlands. We show the bowl and how it recounts this Pikuni man's life.

**Kennedy, J. Ryan** (see **Scheiber, Laura**)

**Kennedy, John** (see **Wandler, Cole**)

**Kennedy, Margaret** (University of Saskatchewan) and **Brian Reeves** (Lifeways of Canada Ltd.)

**Session 12:** *Rocks in a Row: Some Ideas about Rock Alignments in the Northern Plains*

Drive lines are a well-recognized form of linear-curvilinear rock alignment in plains archaeology even if their often complex spatial structure and organization is not always well understood. Even more enigmatic are rock lines that do not correspond to the expected logic of drive lines in their landscape orientation or scale. We present examples of the latter type of rock alignments from ceremonial sites in the northern plains of west-central Saskatchewan and east-central Alberta and discuss possible explanations for their presence and use.

These rock lines range in form from widely spaced cairn and or single stone alignments, to tightly spaced/continuous rock borders, all of which may or may not incorporate glacial erratics. They may enclose or partially enclose hills/buttes and knobs, run transversely to and/or longitudinally along ridges, buttes, conical hills and through intervening swales, and may associate with stream/river valleys, enclosed lake basins and springs. Stone structures, such as plain and platform ceremonial circles, stacked, heaped, beehive, hollow and platform cairns, vision quests, medicine circles and effigies may associate and sometimes are attached to the alignment. They may be isolates or align with others and be parts of larger landscape scale ceremonial complex patterns. Most are of some antiquity perhaps up to 2000 years in age, and many were likely associated with Algonquin-speaking ancestors of the historic groups who co-occupied this region – the Haaninin (Gros Ventre) and Nitsitapii (Blackfoot).

**Keynsen, Brent** (Ecofor Consulting Ltd.)

**Session 12:** *Terminal Transitions: An Analysis of Projectile Points from the Terminal Middle Period on the Northern Plains*

The Terminal Middle/Archaic Period (3000 to 2000 B.P.) and the Transitional Late Period (2000 B.P. to 1500 B.P.) contain a number of diverse projectile point styles possibly belonging to several cultural complexes. The point styles associated with these complexes have been separated on largely visual or subjective bases. In order to attempt to clarify this, twelve projectile point assemblages, belonging to the Besant, Sonota, Sandy Creek, Pelican Lake, Outlook, or Bracken cultural complexes, from nine previously excavated sites on the Saskatchewan and Alberta Plains were studied. These assemblages were subjected to geometric morphometric and discriminate function analysis to determine similarities, as well as metric testing to determine if the point styles were more consistent with arrow or dart projectiles. As a result of this testing, a reduction in point styles is recommended and a pattern suggesting a link between game size and hunting methods was observed.

**Keyser, James** (Indigenous Cultures Preservation Society) and **George Poetschat** (Oregon Archaeological Society)

**Session 11:** *New Rock Art Evidence for Fremont Occupation of Southwestern Wyoming*

Although Fremont occupation of southwestern Wyoming has long been proposed, the evidence up until now has been a few scattered sites with Uinta Grey Ware potsherds. Fremont rock art has been rumored to exist in the area south and west of Rock Springs, but the only images so far published have not been particularly convincing. However, recent rock art research in the area has resulted in the identification and recording of seven sites containing more than a dozen Classic Vernal Style Fremont anthropomorphs and about the same number of solidly pecked San Rafael Style anthropomorphs demonstrating a strong Uinta Fremont use of southwestern Wyoming at least for ritual purposes.

**Kinnaird, Tim** (see **Gibson, Terrance**)

**Knapp, Dante** (see **Engel, Damita**)

**Knell, Edward** (California State University, Fullerton) and **Matthew E. Hill** (University of Iowa)

**Poster Session 10: *Assessing Variability in Cody Complex Tool Assemblages***

Archaeologists are acutely aware that the types of tools found at sites vary considerably across time and space. For example, some assemblages are dominated by projectile points and others mostly have retouched flakes. Why this variability occurs at the site-level is sometimes clear and other times it is not. More interesting though, is how and why tool assemblages vary at the regional-scale. In this poster we present results of a pattern recognition-based study that evaluates how late Paleoindian Cody complex tool assemblages from 34 sites and components of sites in the Northern and Northwestern Great Plains varied by site type, season of site occupation and environmental zone (i.e., plains grasslands, foothills-mountains, alluvial valleys), and the effects these had on tool assemblage composition. Through this study we gain important insights regarding the causes of tool type variation and, ultimately, how Cody complex hunter-gatherers organized their lithic technology and land-use strategies.

**Knox, Kelsey** (see **Shimek, Rachael**)

**Knudson, Ruthann** (Knudson Associates)

**Session 12: *When the West Winds Encouraged the People***

In Montana archaeologists have traditionally used Plains-related Paleoindian type names to categorize Late Pleistocene-Early Holocene points. When people settled the North American continent via the Pacific Alaskan/British Columbia/Washington coast, they first populated the interior through the Columbia Plateau and northern Great Basin. The westerlies that blew across these relatively dry lands blew toward cooler, more biotically rich and well-watered uplands—where there also were cryptocrystalline lithic resources other than obsidian and basalt. People probably followed these westerlies, and when they reached montane country just went through it to see what lay ahead. The Western Stemmed tradition that developed in the Plateau and Basin seems to have been carried east, probably developing some design modifications with distance and age. Montana archaeologists need to re-look at their collections and evaluate western influences (e.g., on Goshen, Agate Basin, Hell Gap), recognizing the rarity of Clovis adventurers into the northland.

**Kourbatova, Kate** (University of Washington, Hudson-Meng PIT volunteer)

**Symposium 2:** *Climate and flora as factors in the occupation history of Hudson-Meng*

This literature review compares and synthesizes studies that have explored paleoenvironmental conditions and the paleofauna of the Hudson-Meng Bison Bonebed site near Crawford, Nebraska. It further looks to other studies of the paleoenvironment done in the surrounding area for possible directions for future research at the site. The author also uses modern ecosystems with similar climatic conditions to the paleoenvironment at Hudson-Meng around 10,000 years ago and during a later drought period, in order to create an approximation of the plant communities that might have been found at Hudson-Meng during those time periods. Finally, the author explores the possibility of using ethnobotanical data in order to examine the role of plants as one more factor that made Hudson-Meng a site that people have come back to through the ages.

**Krall, Angie M.** (see **Martorano, Marilyn A.**)

**Krause, Richard** (Tennessee Valley Archaeological Research)

**Symposium 1:** *In Defense of Culture History*

Culture History has been criticized by those espousing empirical science and those claiming covenant with humanistic forms of enquiry. At their core both have different and incompatible views of theory. For the empiricist, theory is about refutable claims to our understanding of regularities in human behavior. For the humanist, theory is the part of their discipline that deals with its principles and methods for identifying and describing significant human achievements. Explanation is the aim of the empiricist; explication is the goal of the humanist. It is my contention that culture history's classificatory and sequencing concepts are central to both. To illustrate this point, humanistically-derived historical and domestic hearth focused concepts of community and kinship are used together with empirically generated ethnographic and settlement pattern data to explicate key Arikara social, political and economic developments from the fourteenth through nineteenth centuries.

**Kristy, Gwen** (see **Meeker, Halston F.C.**)

**Kuhnel, Dennis** (Nebraska National Forests and Grasslands)

**Symposium 2:** *Interpretive Master Planning at the Hudson-Meng Education and Research Center*

My goal is to talk about the Hudson-Meng Education and Research Center (HMERC) archaeological interpretation program, 2012-2013. During this period at HMERC the interpretive goals and public meaning of archaeological heritage interpretation have been forefront issues. Different archaeological interpretive techniques have been implemented and proposed, successfully and unsuccessfully. This history will inform a larger discussion about an ongoing

project to design and develop an Interpretive Master Plan specific to the site. The future development of an Interpretive Master Plan at HMERC will involve numerous archaeological interpretive choices and decisions. Which archaeological stories to tell? Whom to tell them too? Finally, how best to tell these archaeological stories? The stated goal of an HMERC Interpretive Master Plan will be to provide visitors with the best opportunities to establish meaningful emotional and intellectual connections with the archaeology of the site.

**Kunz, Michael** (University of Alaska-Fairbanks)

**Session 14:** *Fluted Projectile Points in the Arctic and What They Suggest About the Beginnings of Paleoindian Technology*

It is widely accepted that the Western Hemisphere was populated by people moving out of Western Beringia (Siberia) across the Land Bridge and into unglaciated Eastern Beringia (Alaska) during Terminal Pleistocene times; then southward across the rest of the Americas. The last four decades of research in Alaska have shown that resident populations were in place there that are contemporary with or older than Clovis. Several of the lithic assemblages associated with these earliest Eastern Beringian cultures are extremely similar to those of the classic High Plains Paleoindian cultures. Does this circumstance indicate an Arctic origin for this distinctive technology? If so, how did this technology move out of the Arctic? Radiocarbon dates associated with Arctic fluted projectile points along with technological attributes add new perspectives to this discussion.

**Kurronen, Jonas** (see **Meeker, Halston F.C.**)

**Kuyper, Brett** (see **Nichols, Kimberly**)

**Kuyper, Brett** (see **Nichols, Kimberly**)

**Kvamme, Emily** (University of Arkansas) and **David Stahle** (University of Arkansas)

**Poster Session 22:** *Tree Ring Dating of Sequoyah's Cabin*

Sequoyah's Cabin is a small single pen log structure preserved on its original site near Sallisaw, Oklahoma. The structure is believed to have been built by Chief Sequoyah in 1829, the famed creator of the Cherokee alphabet. The cabin is a National Historic and Literary Landmark. The hewn wall logs were cut from native oak trees and were cored by the University of Arkansas Tree-Ring Laboratory to determine the date of construction. Ten cutting dates indicate that the in situ wall logs were cut in 1848 and 1849. Chief Sequoyah died in 1843. Therefore, he could not have constructed or occupied this particular cabin. Preliminary historical analysis indicates that Chief Sequoyah's wife, Sally Guess, and descendants lived on the property until 1855. The tree-ring cutting

dates and rustic construction techniques suggest that Sequoyah's Cabin was built by his immediate family in late 1849 or soon after.

**Kvamme, Kenneth** (University of Arkansas) and **Adam Wiewel** (University of Arkansas)

**Symposium 6:** *Discriminating Between Hearths and Storage Pits in Northern Plains Villages Through Magnetic Methods*

Magnetometry anomalies are generally of two types, thermoremanent and induced. The former arise by intense burning, while the latter result from materials of high magnetic susceptibility. Thermoremanent and induced anomalies look much the same to a magnetometer. On the Northern Plains distinguishing hearths (thermoremanent) from storage pits (induced) is critical to interpretation. A common approach merely classifies all anomalies central to houses as hearths, but this misses non-central hearths. Another recognizes that hearth anomalies statistically are greater in magnitude than storage pit anomalies, although their distributions overlap greatly. In this paper we employ a magnetometer to measure total magnetization, and then perform a follow-up survey with a MS meter to measure only the induced magnetic component. Based on their correlation, we regress the magnetometry on MS data and utilize the residuals to more clearly point to thermoremanent anomalies. Examples are taken from Fort Clark and Double Ditch in North Dakota.

**LaBelle, Jason M.** (Center for Mountain and Plains Archaeology, Colorado State University) and **Halston F.C. Meeker** (Center for Mountain and Plains Archaeology, Colorado State University)

**Symposium 20:** *Benedict's Rock (5BL232): A Scottsbluff Waypoint along the St. Vrain River, Boulder County, Colorado*

The Benedict's Rock site is a small lithic scatter located on a high terrace of the St. Vrain River in western Boulder County, Colorado. The site contains a Scottsbluff projectile point base, a few flake tools, and several hundred pressure thinning and resharpening flakes. It appears to be a single component based on the uniformity of the flake forms and raw materials as well as the limited horizontal distribution of cultural material. As such, the site serves as an example of the day-to-day activities of perhaps a few Paleoindian individuals -- a site type woefully underrepresented in the literature. Since 2010, CSU students excavated 30 m<sup>2</sup> of the site, as well as digging 24 shovel tests and a geological trench. Excavations revealed abundant charcoal and burned lithics, both thought more indicative of forest fires rather than human behavior. In this presentation, the authors describe their work at the site and reconstruct the site structure, using both natural and cultural formation processes.

**LaBelle, Jason M.** (see Magennis, Ann L.)

**Lacey, Patricia** (Colorado Archaeological Society-Hisatsinom Chapter)

**Session 29: *Volunteer Activities in the Four Corners Area***

This presentation will provide an overview of activities that members of the Hisatsinom Chapter have been involved in this past year. Volunteers have worked at Crow Canyon Archaeological Center (in the lab and in technical functions), participated in excavations and field schools at both Champagne Springs and Mitchell Springs in the Cortez area, support the 2,500 acre McAfee (private property) surface survey north of Cortez (to date, 1143 acres (48%) have been surveyed and many new BMIII through PII sites have been found and recorded), performed surface survey activities at the site of the proposed new Cortez High School, are involved with finding and documentation of wild potatoes in and around pueblos located in the general Montezuma County vicinity, and provide support as site stewards in various locations around the Four Corners area.

**Ladwig, Jammi** (PaleoResearch Institute) and **Linda Scott-Cummings** (PaleoResearch Institute)

**Poster Session 16: *Culinary Encounters: Exploring Past Interactions Involving Maize Through Phytolith Morphometrics and Multivariate Statistical Analyses***

Foodways represent one of the most important and stable aspects of group identity. Preferences for particular types or varieties of food are engrained at a young age and remain particularly resistant to change. Therefore, the ownership of seeds is crucial and questions related to the transportation and utilization of specific varieties of maize are central to reconstructing peoples' past interactions. This poster presents the methodology behind the use of morphometric data gathered on phytoliths obtained from maize cobs and non-maize items in order to determine what maize varieties may be represented in the microfossil record from archaeological sites. A thorough explanation of the multivariate statistical analyses employed in the interpretation of the high volume of data produced by the morphometric measures obtained from the maize phytoliths is crucial to the understanding of the techniques employed, and is central to this discussion.

**Lanoe, Francois** (see **Zedeño, Maria Nieves**)

**Larmore, Sean** (see **Gilmore, Kevin**)

**Latham, Katherine** (University of Nebraska-Lincoln)

**Poster Session 16: *Wolf to Dog: Modeling Dog Domestication in the Context of Wolf Behavior***

Archaeological and genetic evidence indicate that the dog was domesticated from the Gray Wolf (*Canis lupus*) 45,000-15,000 years ago in the Old World. Dogs accompanied humans into the New World where they played an important role in most Paleo-indian groups. Humans and wolves were living in close

proximity and hunting similar prey for thousands of years prior to domestication. Several theories have been put forward to explain how some wolves began living with humans, but few adequately address why this major adaptive shift occurred. Many theories of dog domestication suggest that the domestic relationship was initiated by humans, but the possibility that wolves initiated domestication is increasingly being explored. My research explores ecological elements present in late Pleistocene Eurasia which could have caused some wolves to leave their packs and settle with humans. Furthermore, I present a model of possible pathways to dog domestication based upon Gray Wolf behavior.

**Lathrop, Bailey** (see Wandsnider, LuAnn)

**Laughlin, John** (see Adams, Richard)

**Leatherman, Chris**

**Session 18:** *Digging in the Dirt: Creating an ArcGIS Geodatabase from Non-spatial Data*

From the summer of 2001 through 2004 archaeologists excavated the historic Chinatown site in downtown Deadwood, SD. Over the course of three years lab technicians cataloged the findings in four Access databases. Unfortunately, the final data product was littered with structural problems that made analysis difficult. To address this issue I built a GIS database of the Deadwood site. This presentation is a narrative of how the Deadwood archaeological geodatabase was built. It begins with an overview of the original Access databases. Then the tools and methods used to ingest the databases into an ArcGIS environment are covered. Next, the structure of the geodatabase is reviewed. Then the some of the abilities of the new geodatabase are presented. Finally, the potential future of this new product is discussed.

**Leatherman, Chris**

**Session 25:** *Ten Years in the Making: The Chinese Burner Reconstructed Mt. Moriah Cemetery, Deadwood, SD*

In 2003 I was hired by the City of Deadwood, SD, a National Historic Landmark, to excavate the Chinese Burner in Mt. Moriah cemetery. Historically the Chinese utilized the structure for funerals and ancestor ceremonies. Weeks of excavation revealed architectural remains of the original structure, hundreds of glass fragments, ceramics, and other artifacts associated with Chinese mortuary rituals. In 2012 the Deadwood Historic Preservation Commission approved funding for the construction of a replica of the Burner. This presentation discusses the reconstruction in terms of the archaeology, construction, and subsequent dedication ceremony. The artifacts discovered during both excavations will be compared and contrasted. Cultural elements of



the dedication ceremony will be discussed. And surprise discoveries from the second excavation will be revealed.

**LeBeau, Albert** (see **De Vore, Steven**)

**LeBeau, Albert** (see **Vawser, Anne M. Wolley**)

**Lee, Craig** (Metcalf Archaeological Consultants, Inc. and Institute of Arctic and Alpine Research), **Jennifer B. Lee** (Metcalf Archaeological Consultants, Inc.), and **Jocelyn Turnbull** (GNS Rafter Radiocarbon)

**Session 14:** *Refining the Chronology of the Agate Basin Complex: Radiocarbon Dating the Frazier Site, Northeastern Colorado*

The Frazier site (5WL268) is a single component bison kill and processing site representative of the Paleoindian Agate Basin complex in northeastern Colorado. The traditionally established age range for the Agate Basin complex, uncalibrated 10,500–10,000 years B.P., was defined in the 1960s and 1970s, primarily as a result of investigations at two multicomponent sites in Wyoming: the Agate Basin type site and the Hell Gap site. Examination of six AMS 14C radiocarbon dates recently obtained on bison bone (amino acids) and charcoal collected during the original investigations suggest the Frazier site dates between 10,200 and 10,100 14C B.P. The dates suggest the Frazier site fits within the established age range and may be up to 200 radiocarbon years (ca. 400 calendar years) younger than the Agate Basin component at the Beacon Island site in North Dakota, which radiometrically dates to ca. 10,300 14C B.P.

**Lee, Jennifer B.** (see **Lee, Craig**)

**Lewis, Cecil** (see **O'Shea, Lauren**)

**Loebel, Thomas** (see **Hill, Matthew G.**)

**Loendorf, Lawrence** (Sacred Sites Research, Inc.)

**Session 11:** *Lookout Cave as a Home for the Buffalo*

Lookout Cave in the Little Rocky Mountains of Montana contains nearly 150 rock paintings. Many of these are paint smears and stripes that were purposefully applied to the walls. There are also rectangular body and v-neck anthropomorphs and a few quadrupeds including a red outline buffalo. The cave was used for seeking visions from the animal spirits that were thought by Algonkian and Siouan-speaking groups to have homes in the underworld. Most of the artifacts appear to be offerings to these underground animal spirits. The paintings are part of the ritual activity.

**Mack, Steven** (Southwest Archaeological Consultants, Inc.)

**Session 3:** *Graphite as a Marker of Social Fields on the Park Plateau, northeast New Mexico*

Ornaments and esoterics of graphite are common to post-Archaic, prehispanic occupations on the Park Plateau of northeast New Mexico. As a unique raw material of limited geologic occurrence, graphite and the artifacts manufactured from it have the potential to inform on intra- and inter-regional exchange networks and other sociocultural phenomena. In this paper I review the geologic source of the graphite; describe the artifacts and their probable functions; and assess the time-space distribution of the artifacts on the Park Plateau and surrounding regions. Based on the available evidence, I propose that the areal distribution of graphite artifacts delimits a social field, essentially a network of individuals and communities, that persisted on the Park Plateau for more than 600 years, from circa A.D. 600 to 1275. I also review some of the culture-historical implications of this enduring web of social and economic relations, focusing on the formulation of time-space units across the Park Plateau.

**Mackie, Madeline** (University of Wyoming)

**Session 11:** *Determining Age and Sex of Hand Spray Artists from Johnson County, Wyoming*

Using a series of hand sprays located near Kaycee, Wyoming, artists' age and sex were determined based on hand measurements and morphology. Rock art panels were recorded through the use of stereo photography and three-dimensional models were created using Agisoft Photoscan Pro. Hand sprays were digitally measured and compared to a collection of experimentally derived hand sprays of known age and sex. This study sheds light on the demographics of the prehistoric artists of Wyoming rock art.

**Mackie, Madeline** (see **Reher, Charles**)

**Magennis, Ann L.** (Colorado State University), **Jason M. LaBelle** (Center for Mountain and Plains Archaeology, Colorado State University), and **Virginia L. Clifton** (Colorado State University)

**Poster Session 22:** *The Red Lion Site: A Contact-Era Burial along the South Platte River, Logan County, Colorado*

The Red Lion burial was discovered in 1985 during farming activities along a low terrace of the South Platte River in northeastern Logan County, Colorado. Elizabeth Ann Morris led the excavation of the remains and interpreted the site as a secondary interment based upon the disarticulated nature of the remains, incompleteness of the skeleton, and traces of red ochre on several of the bones themselves. The skeletal remains are those of a young adult male, aged 18-22. The individual is relatively large (about 5' 9" tall) and very robust, indicating that he engaged in rigorous physical activity. Associated with the burial were several deer elements and a marine shell pendant. The pendant, made of

abalone shell presumably from the Pacific Coast, contains patterned geometric designs on the nacre and was once suspended by metal tacks, two of which were recovered during excavation. This poster documents the Red Lion excavation, details of the individual's identity, as well as the abalone pendant.

**Martin, Curtis** (Dominquez Archaeological Research Group) and **Holly Shelton** (Dominquez Archaeological Research Group)

**Session 26:** *The Tea House Wickiup's Coat of Many Colors: Innovative Field Techniques and Methodologies Implemented for Recordation of 5LR12900 and a brief overview of the Colorado Wickiup Project*

During the 2012 State Historical Fund Archaeological Assessment of the Tea House Wickiup (5LR12900) in Rocky Mountain National Park, the Dominquez Archaeological Research Group team developed a series of innovative field techniques that resulted in an apparently unprecedented level of pole-by-pole documentation of a standing wickiup. Additionally, the project hosted Ute tribal consultants from the Uintah and Ouray Reservations for the purpose of gaining Native insights and management recommendations. A brief over view of the CWP will also be presented.

**Martin, Will** (see **Zedeño, Maria Nieves**)

**Martorano, Marilyn A.** (RMC Consultants, Inc.), **Angie M. Krall** (Rio Grande National Forest, San Luis Valley Public Lands Center), and **Mark D. Mitchell** (Paleocultural Research Group)

**Poster Session 22:** *El Paraje: New Discoveries on the High Potential Old Spanish National Historic Trail Bunker Site (5SH614), Rio Grande National Forest, San Luis Valley, Colorado*

The Bunker Site (5SH614) is a high potential Old Spanish National Historic Trail (OSNHT) camp (*paraje*) site in the San Luis Valley, Colorado. The site is located within the corridor of the East Fork of the North Branch of the Trail. Fieldwork in 2012 included test-excavations, metal detecting, and unique dendrochronological sampling. Artifacts such as a part of a miquelet lock (Spanish flintlock), a gun buttplate from an early musket, gun flints, musket balls, Spanish and Mexican-style bit fragments, *coscojos* (jingles from a Spanish/Mexican style bit), and leaf-shaped early Spanish Colonial-style metal points suggest ties to the OSNHT era (1829-1848). Several trail traces were identified within the site, and numerous culturally modified piñon trees (delimbed, notched and peeled) were recorded and several were dated through dendrochronological analysis to the OSNHT era. Collaboration across academic, agency and avocational circles has yielded compelling data to potentially tie the site to the OSNHT.

**Matthews, Neffra** (Bureau of Land Management) and **Tommy Noble** (Bureau of Land Management)

**Session 18:** *Archaeology in the Round: Using photogrammetry to capture complex archaeological subjects*

Modern methods, techniques, and software advancements have made it possible to create three-dimensional models of subjects that in the recent past would have been very difficult and time consuming. Documentation of very complex subjects such as Ancestral Puebloan masonry structures and ceramic vessels, aboriginal wickiups, and historical wooden and adobe structures can be photographed in the round. Once processed, the resulting three-dimensional data set provides a very dense and accurate reproduction of the original subject. In addition to the x,y,z data, the r,g,b color value of the subject is captured for each point. With planning, both the internal and external space may be captured and integrated into a single three-dimensional model. Once captured, the resulting data may be used to answer a variety of questions including structure dimensions, condition of mortar or chinking, dimensional variability of masonry material, and effects over time.

**Matthews, Neffra** (see **Noble, Tommy**)

**May, Dave** (University of Northern Iowa) and **Steven Holen** (Center for American Paleolithic Research)

**Session 14:** *The Geologic Filter in the Loup River Basin*

We present the alluvial chronology for the Loup River Basin and address preservation of Paleoindian sites. No alluvium has been dated between 14,000-10,300 RCYBP, precluding discovery of early Paleoindian sites. The earliest Holocene alluvial soil is the Coopers Canyon Gley with basal ages of 10,300 to 10,100 RCYBP. No sites have been found in this soil. Rapid aggradation occurred between 10,000 and 9450 RCYBP; one archaeological component has been recorded in this alluvium. Incision is inferred between 9,450 and 9200 RCYBP. Valley-bottoms were stable from 9250 to 9100 BP and rapidly aggraded after 9100 RCYBP. This stable soil surface and the overlying laminated alluvium yielded one Cody site and one Frederick site. Floodplains stabilized again 8400-8200 RCYBP. This period of stability preserved late Paleoindian components at multiple-component sites (Moffet Creek, McKenzie) in alluvial/colluvial fans. While erosion accounts for the sparse Paleoindian site finds, the lack of visibility is also important.

**May, Dave** (see **Hill, Matthew G.**)

**Mayo, Katherine** (University of Denver)

**Poster Session 16:** *The Use of GIS in Archaeology: An accurate catchment-analysis of prehistoric life at Welcome Home Ranch Rock Shelter*

Welcome Home Ranch (5EL715) is one of many prehistoric sites located in the Palmer Divide region of Colorado. With Evidence of Late Archaic and Early Ceramic cultural material, this site has the potential to give insight into prehistoric peoples' relationship with the larger landscape. Archaeologically, site catchment analysis can produce valuable information regarding prehistoric subsistence strategies and social organization. Using ArcGIS to more accurately map a site catchment, we are able to move beyond the informal concentric circles and Thiessen Polygons of the past.

**Mayo, Katherine** (University of Denver)

**Poster Session 16:** *Utilizing Ground-Penetrating Radar at Welcome Home Ranch Rock Shelter*

Geophysical techniques, like that of ground-penetrating radar (GPR), are a less-destructive tool for archaeologists practicing standard excavation. GPR can potentially reveal archaeological and geological features without any damage or destruction to the site. Welcome Home Ranch is a Prehistoric rock shelter with evidence of large sandstone roof spall—difficult to break through during excavation, but potentially covering archaeological remains. In order to explore the larger area both within and outside the rock shelter, I chose to utilise ground-penetrating radar. Not only is this a sustainable way for archaeologists to investigate potential sites, but it can provide information on a large scale more readily than can extensive excavation. Consequently these methods are faster and less expensive than traditional excavation.

**McBeth, Sally** (University of Northern Colorado)

**Symposium 20:** *Pilgrimage and Sacred Sites in the Northern and Central Plains and eastern margins of the Rocky Mountains: An Investigation through the Collection of Personal Narratives of Pilgrims*

The purpose of this presentation is to examine the ways that humans understand manifestations of the sacred in landscape and place. I have visited and interviewed Native and non-Native visitors to Bear Butte (SD), the Wounded Knee Massacre Site (SD), the Sand Creek Massacre Site (CO), Devil's Tower (WY), and the Bighorn Medicine Wheel (WY). This presentation investigates the little understood connections between humans and sacred landscape by talking to visitors at selected sites, identifying patterns in their responses, and photographing sites. Problems with this type of research are many and include 21<sup>st</sup> century understandings of religion as well as making sense of the blurred genres of tourism, travel, and pilgrimage. The focus of this research project is to personalize the topic by asking pilgrims and visitors to selected sacred sites what has brought them to this place—an investigation of the emotional and personal narratives of the human connection to sacred places.

**McCarthy, Debra A.** (see **Johnen, Connor**)

**McCarthy, Debra A.** (see **Meeker, Halston F.C.**)

**McCullough, Martha** (see **Wandsnider, LuAnn**)

**McElroy, Andrew** (University of Montana)

**Session 21:** *Gearing Up for the Hunt: A Study of the Lithic Material of Formal and Informal Projectile Points to Understand Aspects of Communal Bison Hunting*

Research on communal bison hunting has focused on observing evidence of certain organizational patterns, strategies, and hunting behaviors to improve our comprehension of Great Plains hunter gathers. Through different types of lithic artifacts and their use life, archaeologists have a better understanding in various aspects of hunter gather strategies and lifestyle in the plains. This paper looks at one Late Plains Archaic communal bison site (24BH3078) and one type of lithic artifact from this site, projectile points, and tires to identify correlation between lithic materials and how formal or informal the points are constructed. Through this analysis the paper tries to decipher patterns in procurement, hunting organization, group interaction, mobility, and other behavioral patterns associated with communal bison hunting and hunter gather in general.

**McFaul, Michael** (see **Anderson, Cody M.**)

**McFaul, Michael** (see **Engel, Damita**)

**McLean, Janice A.** (R. Christopher Goodwin and Associates, Inc.), **Shannon R. Ryan** (R. Christopher Goodwin and Associates, Inc.), and **Alan R. Potter** (R. Christopher Goodwin and Associates, Inc.)

**Poster Session 16:** *Effects of Lithic Source Areas on Archeological Site Density: A Case Study from Northwestern Kansas*

In 2006, R. Christopher Goodwin & Associates, Inc. completed 252.3 miles of cultural resources inventory of the 257.2-mile Kansas segment of the Overland Pass Pipeline Project. The project area consisted of a 300-ft. wide linear corridor that traverses 12 counties in northwestern Kansas. Forty archeological sites were identified along the mainline route, an average of one archeological site per 6.3 miles. Of the 40 sites, 32 had prehistoric components, yielding an average of one prehistoric site per 7.9 miles. In reality, prehistoric sites clustered in the vicinity of Smoky Hill silicified chalk outcrops in Gove, Sheridan, and Trego counties. Archeological inventory of linear corridors provides an otherwise rare opportunity to define the geographic extent of dispersed lithic procurement areas.

**McLean, Janice A.** (see **Ryan, Shannon R.**)

**Meeker, Halston F.C.** (Colorado State University), **Debra A. McCarthy** (Colorado State University), **Connor Johnen** (Colorado State University), **Andrew D. Richards** (Colorado State University), and **Spencer Pelton** (University of Wyoming)

**Poster Session 27:** *A Ridge Line Communal Hunting Site at the Moriah Ranch, Albany County, Wyoming*

Preliminary results from the 2013 field season at the Moriah Ranch, in Albany County, Wyoming, show a multitude of significant surface archaeological sites. The 22 square mile property, recently acquired by the State of Wyoming contains campsites, lithic scatters, rock shelters, and buried sites, to name a few. The communal hunting site (48AB2735), is approximately 300 m long located along a ridge top north of Pinto Rock. The site was first discovered last September and recorded during the 2013 field season. On a downwind slope, east of the ridge, is a large lithic scatter and stone circle site that is likely associated with the communal hunting site. Together, the sites contain 4 hunting blinds, 6 stone circles, and one wall segment. Spatial distribution of the lithic material as well as the orientation of the hunting blinds suggest a possible camp and kill area separated by the ridge.

**Meeker, Halston F.C.** (Center for Mountain and Plains Archaeology, Colorado State University), **Natalie Sanford** (Colorado State University), **Jessica Ericson** (Colorado State University), **Gwen Kristy** (Colorado State University), **Jonas Kurronen** (Colorado State University)

**Poster Symposium 5:** *Spatial Analysis of the Round Butte and Bernard Ranch Stone Circle Sites in Northern Larimer County, Colorado*

The 2013 Colorado State University Archaeological Field School researched two stone circle sites just south of Soapstone Prairie Natural Area in northern Larimer County, Colorado. The two sites are known as Round Butte (5LR11839) and Bernard Ranch (5LR213), located approximately 5.6 km from each other. Survey teams documented 18 stone circles at Round Butte and 8 rings at Bernard Ranch. The features were recorded using both total station and hand drawn mapping techniques. Despite the proximity of the two sites, the stone circles differ in diameter, stone size, and camp orientation, perhaps suggesting different temporal associations. In this poster, patterns in the organization of the rings are compared between the two sites to illustrate differences in site layout.

**Meeker, Halston F.C.** (Center for Mountain and Plains Archaeology, Colorado State University), **Jenny Simacek** (Colorado State University), **Katrina Shrawder** (Colorado State University), **Andrew Aldridge** (Colorado State University), and **Zack P. Tamminga** (Colorado State University)

**Poster Symposium 5:** *A Chronological Study of Pottery and Projectile Points from Rollins Pass, Colorado*

The 2013 Colorado State University archaeology field school revisited the game drives and campsites of Rollins Pass recorded in the early 1970s by Byron Olson under the direction of James Benedict. Located in the alpine tundra east of Winter Park in Boulder County, Rollins Pass is one of the most complex high altitude game drive systems in North America. Using pedestrian survey techniques, the students resurveyed many previously recorded sites as well as located new ones. The alpine tundra sites include camps, lithic scatters, and isolated hunting blinds, as well as the massive game drive systems. In this poster, a chronology is constructed for the project area using temporally diagnostic artifacts (projectile points, pottery), utilizing tools recorded during previous field seasons (2010-2012) as well as the past summer's field school.

**Meeker, Halston F.C.** (see **Adams, Richard**)

**Meeker, Halston F.C.** (see **Johnen, Connor**)

**Meeker, Halston F.C.** (see **LaBelle, Jason**)

**Meier-Bilbo, Jenna** (see **Nichols, Kimberly**)

**Meier-Bilbo, Jenna** (see **Nichols, Kimberly**)

**Meltzer, David** (Southern Methodist University)

**Session 14:** *Why we call it the 'Clovis' culture and not the 'Dent' culture*

Two sites with mammoth remains and so-called 'Generalized Folsoms' were discovered in 1932 and excavated in 1933. At one the work was overseen by Jesse Figgins, the Director of the Colorado Museum of Natural History, under whose supervision the Folsom site was excavated in 1926-1927 – a find that brought to an end decades of controversy over whether people had arrived in America in Pleistocene times. In charge at the other was Edgar Howard, a largely unknown graduate student at the University of Pennsylvania. Yet it was Howard's work that made Clovis the exemplar of this archaeological culture and time, not Figgins' investigations at Dent. It's been suggested that had Figgins named those 'Generalized Folsoms' Dent points "we might today be talking about the Dent culture." However, the historical details are more complicated. Exploring them reveals much about the emergence of Paleoindian archaeology in the 1930s and the sea change wrought by Folsom – a change that, ironically, Figgins missed.



**Meyer, Garren** (GCM Services, Inc. and Montana Tech)

**Session 11:** *Investigations at the Carbone Rock Art Site, Big Horn County, Montana*

The Carbone Site (24BH404) is a prominent rock art site located on the Spring Creek Mine in Big Horn County, Montana. The possibility of damage from blast-related seismic activity led to cooperative mitigation efforts by GCM Services, Cloud Peak Energy, and professor Tim Urbaniak of MSU-Billings. The fieldwork included tracing, laser mapping and 3D photography, with digitalization and analysis ongoing. The rock art includes over 100 petroglyphs of prehistoric age, including numerous depictions of shield-bearing warriors, grizzly bears, bear paws and other bear-related imagery, weaponry, and a wealth of enigmatic abstract depictions. Several large and elaborate Ceremonial Tradition shield warriors display bear-related imagery including shield heraldry, squared ears, clawed feet and "crying eyes". A number of enigmatic petroglyphs, of a weathered, oxidized appearance and located on high and exposed rock faces, suggest the possibility of landform changes and a relatively great age for some of the art. Additional clues to relative chronology are provided by superimposed elements and differential oxidation.

**Michlovic, Michael** (see **Holley, George**)

**Miller, Mark** (Office of Wyoming State Archaeologist) and **William Scoggin** (Wyoming Archaeological Society)

**Session 8:** *The Scoggin Bison Kill (48CR304) Forty Years Later*

The Scoggin Bison Kill (48CR304) was discovered by William E. Scoggin in 1971 in northern Carbon County Wyoming, and it became the subject of John Lobdell's Master's Thesis in Anthropology at the University of Wyoming in 1973. Research demonstrated the presence of a corral pound, processing area with associated features, and two McKean Complex projectile point types - the McKean Lanceolate and the side-notched Mallory. Several students, faculty, and visiting scholars have analyzed various aspects of this discovery in the past forty years, including lithic manufacturing technology, seasonality, and isotope signatures in the faunal assemblage. This paper summarizes the history of these investigations, what we have learned about the site, its relevance to McKean Complex studies, and the unique nature of its occurrence in the archaeological record of the Northwestern Plains/Intermountain Basin study area.

**Miller, Rick** (see **Westfall, Tom**)

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

**Symposium 6:** *Recent Archaeological and Geophysical Investigations at Fort Clark State Historic Site*

In the early 1830s, a succession of writers and artists visited Fort Clark, making it one of the most well-known trading posts on the Missouri. However, the post these visitors illustrated and described was not the first one built on the site. In 1824, James Kipp established a trading house within or close to the adjacent Mandan town. The location of this first Fort Clark has never been determined, but recently acquired geophysical data suggest one possibility, a large rectangular building located just inside the settlement's fortification ditch. To test that hypothesis, Paleocultural Research Group and the State Historical Society of North Dakota conducted targeted test excavations in 2012. Guided by multiple geophysical datasets, the team exposed portions of the structure's walls in four small excavation blocks. Stratigraphic data, combined with diagnostic artifact data, demonstrate that the structure was built in the late 1840s or 1850s.

**Mitchell, Mark D.** ( see **Martorano, Marilyn A.**)

**Moretti, John** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), **Eileen Johnson** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), and **Stance Hurst** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark)

**Poster Session 10:** *Macy Locality 100 - A Record of Environmental Change from the Latest Pleistocene to Early Holocene along the Southern High Plains of Texas*

Geoarcheological investigations at Macy Locality 100, located on the southeastern edge of the Southern High Plains of Texas, have documented a sequence of alluvial deposits formed in an ancient low-order stream from 12,190-10,730 RCYBP. The sequence of alluvial packages demonstrates a transition from a higher energy stream system to a slowly aggrading low energy system. This stratigraphic record is comparable to other sequences documented in draws across the Southern High Plains. Abundant faunal remains include taxa underrepresented regionally, such as the extinct box turtle *Terrapene carolina putnami*, excellent examples of others commonly known, including a partial skeleton of the western camel *Camelops hesternus*, as well as the first record for the region of the jumping-mouse *Zapus*. Results of research at Macy Locality 100 provide important insights into the latest Pleistocene to Younger Dryas environmental transition on the Southern

**Moskvin, Illya** (see **Scheiber, Laura**)

**Mraz, Veronica** (University of Tulsa)

**Session 3:** *Across the Landscape: An Examination of Environmental and Cultural Changes through Analysis of Late Prehistoric Lithic Assemblages from North-Central Oklahoma*

The area of north-central Oklahoma is an under studied part of the Southern Plains, especially during the Plains Woodland and Plains Village periods. A model proposed for the mobility and settlement practices of the prehistoric groups of the area was evaluated through analyses of lithic assemblages from four sites. The sites were selected from adjacent, but contrastive biomes thought to have been occupied by groups that followed a seasonal round in which grassland and woodland resources were exploited through an embedded procurement strategy during peaks in resource availability. Three lithic attributes were chosen as proxies in evaluating the mobility and procurement practices of people in the study area. The results from the analysis suggest that Late Prehistoric groups in north-central Oklahoma were living in temporary, seasonal sites relying on an imbedded rather than logistical procurement strategy. This was a time-transgressive pattern present during both Plains Woodland and Plains Village periods.

**Muñiz, Mark** (St. Cloud State University)

**Symposium 2:** *New Observations on the Geochronology and Depositional History of the Hudson-Meng Site*

Excavations at the Hudson-Meng site since 2005 have explored places outside of the main concentration of bison bone, discovering several new occupation areas and cultural components. Results of 27 new radiocarbon dates combined with diagnostic artifacts and stratigraphic analysis have identified at least five stacked Paleoindian components associated with a Brady paleosol equivalent ranging from 10,000-9200 <sup>14</sup>C yrs B.P. These results confirm that Paleoindians visited the site prior to the Alberta bison kill that occurred around 9875 <sup>14</sup>C yrs B.P. and that Cody complex people returned to the site to hunt bison over the following centuries. These events resulted in a massive bison bonebed that is comprised of multiple, superimposed kill and butchery events.

**Muñiz, Mark** (St. Cloud State University) and **Diana Barg** (Metcalf Archaeological Consultants, Inc.)

**Symposium 2:** *New Observations on the Long-term Use of the Hudson-Meng Site by Cody Complex Peoples*

The geomorphology of the Hudson-Meng site indicates a relatively stable, slightly aggrading landscape during the earliest Holocene between 10,000-9200 <sup>14</sup>C yrs B.P. The hunting and butchering of bison at the site over this span indicates long-term continuity in how the place was used by Cody complex people. Although the sample of living floors is limited, changes in the types of lithic and bone artifacts recovered so far indicate that the space was used somewhat differently over time. Cultural patterns in the faunal remains suggest

changes in how extensively animals were butchered during each of the major occupations and taphonomic data suggest correlations with larger scale paleoenvironmental changes that may have impacted the Paleoindian use of the site.

**Murray, Wendi Field** (State Historical Society of North Dakota) and **Fern E. Swenson** (State Historical Society of North Dakota)

**Symposium 6:** *Situational Sedentism: Postcontact Arikara Settlement as Social Process in the Middle Missouri, North Dakota*

Arikara settlement and mobility patterns changed dramatically in the eighteenth and nineteenth centuries. To confront demographic, economic, and political instability arising from the introduction of Old World epidemic diseases, the Arikara devised a flexible settlement pattern that alternated between nomadism, occupation of composite villages, and coresidence with neighboring tribes. Drawing from recent theoretical approaches to settlement and community aggregation, we resituate well known Arikara settlement events during the post-contact period (AD 1650-1886) in agency-driven processes of social integration and independent identity maintenance. The seeming ambivalence of the Arikara with regard to settlement decisions during this period, which we characterize as “situational sedentism,” embodied dialectical cooperation and conflict with neighboring groups. We argue for a conceptual approach to settlement that emphasizes the social dimension of moving across and occupying landscapes, and acknowledges the historical contingencies that enable or constrain settlement decision making.

**Muschal, Marlis** (University of Iowa)

**Poster Session 10:** *Cody and Folsom Technological Organization in the Southern Plains Environment*

This poster will present an ongoing project concerning the relationship between lithic technological organization and the environment. Using published data from over twenty Cody and Folsom sites and components, I will test hypotheses on tool manufacture, use, and curation in order to explore how the technological organization of Cody and Folsom groups changed or persisted based on environmental setting. This project seeks to clarify the relationship between Paleoindian land-use strategies and paleoenvironments as evidenced by technological organization.

**Napier, Tiffany** (see **Greiman, Nora**)

**Naqvi, Tae** (see **Griffin, Kristy Kay**)

**Neeley, Michael** (see **Whittenburg, Aaron**)

**Neff, Matthew** (Iowa State University)

**Poster Session 27:** *Abrader Technology at Three Late Prehistoric (Oneota) in Central Iowa*

Analysis of 287 dulling, polishing, and shaping tools recovered from the Howard Goodhue, Cribbs' Crib, and Clarkson sites offer insight on the organization of abrading technology among Late Prehistoric forager-farmers in central Iowa. Most are made on locally available fine- and coarse-grained sand stone. Two general types are represented: irregular and bar-shaped. Groove number, location, and shape provide the basis functional inferences. Irregular abraders typically show grooving on multiple faces and a range of groove shapes, suggesting these tools were used for multiple tasks, for example, shaping needles and awls. Bar-shaped abraders show less variation in these attributes, suggesting use in a limited range of tasks, for example, straightening arrow shafts.

**Newton, Cody** (University of Colorado-Boulder)

**Symposium 15:** *Bison Robes and Baubles: Developing a Native History of the Fur Trade through Archaeology*

In the early nineteenth century, the advent of the fur trade in the western Great Plains and adjacent Rocky Mountains provided European-derived trade goods in larger and more consistent quantities than previously known. As the economic dynamics changed, so too did the social interrelationships between Plains and Rocky Mountain Indian groups. Archaeological study of early to mid-nineteenth century hunter-gatherer camps along with Euroamerican trade posts demonstrate the adaptive and resilient nature of extant Native American societies who, in turn, influenced and/or dictated the success or failure of Euroamerican economic endeavors during this time. Only by utilizing methodologies and models specific to this area and historic period can the archaeological record of this era be more fully understood. Historic archaeological research aided by historiography and ethnography is essential in the development of robust Native histories.

**Newton, Cody** (see **Byerly, Ryan**)

**Nichols, Kimberly** (Colorado State University), **Thomas Bown** (Colorado State University), **Lauren Allen** (Colorado State University), **Samantha Erickson** (Colorado State University), **Jenna Meier-Bilbo** (Colorado State University), and **Matthew Nugent** (Colorado State University)

**Poster Symposium 5:** *Inaugural Paleontology Field Course (ANTH 470): 2013 Field Season, Bighorn Basin, Wyoming*

After laboratory training in paleontology field collection methods, stratigraphy, paleosol identification, contour maps, and fossil identification, ten CSU undergraduate students traveled with their instructor and field coordinator to the early Eocene badlands of the Bighorn Basin in Wyoming to prospect for fossil

primates and other vertebrates in the Willwood Formation. The students established thirteen new fossil-bearing localities (CSU 1 - CSU 13) and collected over 500 vertebrate fossils, including approximately 60 specimens of primates and their plesiadapiform allies. Upon return from the field, students were instructed in fossil accessioning methods and preparation techniques and produced professional-grade written field reports on various aspects of the collection. Working in cooperation with the Denver Museum of Nature & Science, the fossils and data obtained on this and future expeditions will be utilized for CSU undergraduate research projects concerning the origins and adaptations of the earliest representatives of our Order (Primates).

**Nichols, Kimberly** (Colorado State University), **Thomas Bown** (Colorado State University), **Lauren Allen** (Colorado State University), **Natalia Clark** (Colorado State University), **Michelle Dinkel** (Colorado State University), **Brett Kuyper** (Colorado State University), and **Lucas Weaver** (Colorado State University)

**Poster Symposium 5: *Early Eocene Primates & Their Closely-Related Allies: 2013 Field Season, Bighorn Basin, Wyoming***

Primates today are represented by prosimians, monkeys, apes, and humans. Biomolecular data indicate that primates first appear in the Late Cretaceous; however, the oldest fossil primates occur in the early Eocene. Ten CSU undergraduate students traveled with their instructor and field coordinator to the spectacular badlands of the Bighorn Basin in northwest Wyoming to prospect for some of the oldest-known fossil primates in the early Eocene Willwood Formation. The students collected approximately 60 specimens of extinct primates (*Cantius* and *Copelemur* in the Superfamily Adapoidea; *Teilhardina* and *Tetoniuss* in the Superfamily Omomyoidea) and their closest allies in the Order Plesiadapiformes (*Phenacolemus*, *Microsyops*). Some researchers include plesiadapiforms in the Order Primates and, true primates or not, they occur with true primates in nearly every Willwood locality and paleoenvironment. Using dental data, we compare the dietary adaptations in early Eocene primates and plesiadapiforms in order to determine if their dietary niches were alike.

**Nichols, Kimberly** (Colorado State University), **Thomas Bown** (Colorado State University), **Robyn Borjas** (Colorado State University), **Natalia Clark** (Colorado State University), **Michelle Dinkel** (Colorado State University), **Samantha Erickson**, (Colorado State University), **Brett Kuyper** (Colorado State University), **Jenna Meier-Bilbo** (Colorado State University), **Matthew Nugent** (Colorado State University), and **Lucas Weaver** (Colorado State University)

**Poster Symposium 5: *Early Eocene Primate Paleocommunities: 2013 Field Season, Bighorn Basin, Wyoming***

Ten CSU undergraduate students traveled with their instructor and field coordinator to the early Eocene badlands of the Bighorn Basin in northwest

Wyoming to collect fossil primates in the Willwood Formation. In addition to primates (*Cantius* and *Copelemur* in the Superfamily Adapoidea; *Teilhardina* and *Tetoni* in the Superfamily Omomyoidea) and their close allies in the Order Plesiadapiformes (*Phenacolemur*, *Microsyops*), the students recovered over 400 specimens of other early Eocene fossil vertebrates that represent groups ancestral to modern mammals (e.g., the orders Perissodactyla, Artiodactyla, Carnivora, Rodentia, Polyprotodonta, Macroscelidida, Lipotyphla), as well as extinct mammal lineages (Condylarthra, Creodonta, Tillodontia, Pantodonta, Lepticta, Apatotheria, Mesonychia, Palaeonodonta, Taeniodonta). Remains of fossil reptiles (lizards, turtles, crocodilians) and trace fossils of invertebrates were also recovered. Fossil, paleosol, and stratigraphic data reveal the environmental complexity of early Eocene fossil communities in which North American primates evolved.

**Noble, Tommy** (Bureau of Land Management) and **Neffra Matthews** (Bureau of Land Management)

**Session 18:** *Photogrammetry above your head: Strategies for getting high resolution data for difficult to reach sites*

Photogrammetry is an accurate, economic, and effective method for capturing three-dimensional data on subjects ranging from rock art panels to ceramic vessels. While the new breed of digital cameras and computational software make photogrammetric processing available to a wider range of researchers, the dictates of properly taken, overlapping stereo photographs still apply. For many subjects, acquiring photographs from the needed locations can be a challenge due to their position on high cliff walls, next to streams, under overhangs, or other precarious perches. To properly capture these subjects takes ingenuity and includes using a monopod and remote trigger or even using a robotic camera mount such as a GigaPan®. While a panorama taken from a single location will not produce the geometry necessary to derive three-dimensional data, a series of gigapans taken to mimic proper stereoscopic overlap can produce stunning results.

**Noble, Tommy** (see **Matthews, Neffra**)

**Nugent, Matthew** (see **Nichols, Kimberly**)

**Nugent, Matthew** (see **Nichols, Kimberly**)

**Nycz, Christine** (National Park Service, Midwest Archeological Center)

**Poster Session 22:** *Preliminary Results of Archeological Investigations in the Platt Historic District at Chickasaw National Recreation Area, Murray County, Oklahoma*

The Platt Historic District, originally known as Sulphur Springs Reservation, was established in 1902 when the Chickasaw and Choctaw Nations sold the land

to the federal government. In 1976, this area was combined with the Arbuckle Recreation Area to form present-day Chickasaw National Recreation Area in Murray County, Oklahoma. This area features freshwater and mineral springs that have been utilized during historic and pre-contact periods. Very few archeological investigations have been conducted within the Platt Historic District. Through the cooperation of the Midwest Archeological Center, Chickasaw National Recreation Area and the University of Nebraska – Lincoln, a two-year archeological inventory project has been developed to gain an understanding of the cultural resources in the Platt Historic District. This poster reports on fieldwork conducted in August 2013, including the discovery of a late 19<sup>th</sup>/early 20<sup>th</sup> century historic site, and plans for future work in 2014.

**Osborne, Daniel** (see **Wandsnider, LuAnn**)

**O'Shea, Lauren** (University of Oklahoma), **Leland Bement** (University of Oklahoma), **Raul Tito** (University of Oklahoma), and **Cecil Lewis** (University of Oklahoma)

**Session 8:** *Population Dynamics of southern Plains bison herds*

Bison were an important resource to southern Plains people and a heavily represented artifact across the Lower 48. Analyses of ancient mitochondrial DNA (mtDNA) extracted from bison bone samples dating between 9,000 to 190ya is used to interpret part of the biological history of bison from Oklahoma. The research discussed in this paper is an attempt to decipher, using ancient mtDNA, how human predation can affect the population dynamics of bison herds by comparing the nucleotide and haplotype diversity of prehistoric bison to that of modern herds. With data from several bison individuals from different prehistoric kill sites, interpretations of the general health of herds will also be discussed. Further, this paper explains how future use of prehistoric bison mtDNA, as a record of the biological past, can enrich our knowledge of prehistoric southern Plains people and support or refute existing theories and models regarding the predation and exploitation of bison.

**Page, Michael** (Office of the Wyoming State Archaeologist) and **Charles Reher** (University of Wyoming)

**Symposium 19:** *A Petrographic Analysis of Dismal River Micaceous Pottery: Products of Southwestern Trade or Local Production?*

**Abstract** (Maximum 150 words): Micaceous pottery recovered from Dismal River sites on the High Plains is often interpreted as Southwestern trade ware. However, micaceous minerals are common in alluvial sediments of the western High Plains. Moreover, Woodland and Central Plains tradition pottery recovered from the region frequently contains micaceous minerals in abundance with no evidence of Southwestern trade or influence. These facts call into question the blanket assignment of all micaceous pottery to Southwestern trade ware. In order to assess the provenance of micaceous pottery a sample of 19 sherds, six



of which are micaceous, from six sites in western Nebraska and southeastern Wyoming were thin-sectioned and analyzed using standard petrographic techniques. The mineral composition of the pottery was then compared to 13 sediment samples, also analyzed with standard petrographic techniques, from Wyoming, Nebraska and Colorado. Results show that all of the pottery tested was manufactured using locally available materials.

**Pailes, Matthew** (see **Zedeño, Maria Nieves**)

**Parrish, Allison** (University of Colorado-Denver)

**Session 21:** *Homesteading and the Single Woman: A Context and Critical Analysis of the Realization of an American Dream*

This study comprises a critical analysis of how historical, cultural, political, and economic events and processes of the nineteenth century merged in such a way as to result in the establishment of the opportunity for single women to homestead independently in places like Colorado. Political economy, with a focus on the Marxist capitalism of the Industrial era, is important in analyzing the structures underlying national and regional patterns, as well as concepts of class and gender. This critical analysis encompasses an exploration of the history of dominant women's issues of the era, including Welter's (1966) concept of the "cult of domesticity and true womanhood," as well as the history of the American West and that of Colorado specifically, including homesteading and related land laws. An examination of the rise of materialism and consumerism within the capitalist economic structure of the industrialized Victorian era United States is also incorporated.

**Peake, Katherine** (Iowa State University)

**Poster Session 27:** *Breakage and Discard of Ceramic Vessels in a Late Prehistoric (Oneota) Village*

The ceramic assemblage from the Howard Goodhue site in central Iowa offers clues on the organization of village space, maintenance activities, and trash disposal patterns. It totals 33,000 specimens, representing several dozen different vessels, that were recovered from the occupational surface and subterranean trash pits. The smaller size of surface fragments is attributed to recurrent trampling by villagers, while those recovered from pits are larger due to protection from trampling. The distribution of trash pits coupled with the size of surface fragments offers insight on village traffic patterns.

**Pelton, Spencer** (University of Wyoming)

**Symposium 20:** *Old Rocks, New Approach: A Regional Scale Analysis of Ground Stone Tools from the Colorado Front Range High Country*

Over 40 years of research in the high altitudes of the Indian Peaks (Colorado Front Range) has amassed an assemblage of thousands of artifacts, many of

which are ground stone tools. Though they have been noted and discussed on an assemblage level, ground stone tools from the region have yet to be studied in a synthetic manner, and have thus far contributed little towards building regional models of land use and mobility. This paper summarizes the results of a recent Master's thesis that employs new methods of morphological and geospatial analyses to characterize the technology and landscape-level presence of ground stone tools in the high altitudes of the Colorado Front Range. The case is made that ground stone tools, when studied in aggregate and with a technological approach, can be invaluable towards building regional-scale models of mobility and land use.

**Pelton, Spencer** (see **Meeker, Halston F.C.**)

**Perkins, Stephen** (see **Drass, Richard**)

**Perlmutter, Ben** (Center for Mountain and Plains Archaeology, Colorado State University)

**Symposium 20:** *Old site, new eyes: Traditional and contemporary approaches to defining cultural components and site structure at the Kinney Springs site, Larimer County, Colorado*

In many ways, methods of defining site chronology have changed very little over the past several decades. This paper applies a rather traditional approach to the definition of cultural components at the Kinney Springs site (5LR144) in Larimer County, Colorado, which was excavated 30 years ago yet remains unanalyzed. While the site contains components from the Archaic period through the Late Prehistoric, this paper will focus on defining the Early Ceramic component of the site. I use diagnostic artifacts, frequency data, and 14C dates to explore issues of site structure, technological organization, and regional land use patterns represented at Kinney Springs.

**Pettigrew, Devin** (University of Arkansas)

**Poster Session 16:** *Atlats of the Ozark Bluffs*

During a recent analysis of artifacts excavated from Ozark bluffs during the early 20th century, an atlatl fragment was rediscovered which mimics the Basketmaker type from the North American Southwest. Similarities in stylistic attributes tie it most closely with atlats of the Trans-Pecos. Variations on this form were previously known to be widespread; represented in artifacts from Mexico and the Great Basin. Until now, however, the farthest East an atlatl of this type had been discovered was on the extreme western end of Oklahoma's panhandle. Another form, best represented in the cross-peg atlatl from Alred shelter in the Ozarks, is also represented in rock art and artifacts from the Trans-Pecos, southeastern New Mexico, and northeastern Mexico. Both forms were in use by the Aztecs and other Mesoamerican groups at the time of contact. These

findings add to the data suggesting prehistoric cultural affiliations between the Ozarks and the Southwest.

**Picha, Paul R.** (State Historical Society of North Dakota) and **Carl R. Falk** (Paleocultural Research Group)

**Symposium 6:** *"Toss of the Dice:" Gaming Pieces in Middle Missouri Archaeology*

Gaming pieces and gambling practices have figured prominently in discourse and debates within economic anthropology and in describing exchange systems in North American archaeology (DeBoer 2001). A review of Mandan, Hidatsa, and Arikara ethnography and history confirms the importance of gambling behavior for nineteenth century Plains Villager exchange systems. The Middle Missouri archaeological record provides the opportunity to examine the material correlates of gaming practices from the perspective of the *longue durée*.

Examples drawn from museum collections and archaeological assemblages from Plains Village tradition sites are contextualized in the illustrated presentation.

**Pierce, Gregory D.** (see **Reher, Charles**)

**Pittman, Kari** (see **Church, Minette**)

**Poetschat, George** (see **Keyser, James**)

**Pool, Kelly** (Metcalf Archaeological Consultants, Inc.)

**Session 12:** *The Carter Lease Site in Context: Wyoming Basin Evidence for Pre- and Post-Contact Shoshonean Occupations*

The Carter Lease site (48LN2041) in the Green River Basin was excavated in 2010 by Metcalf Archaeological Consultants, Inc. for the Ruby Pipeline Project. Data recovery results indicate at least 14 antelope were processed at this location following a mass kill or several closely spaced kills. Associated artifacts are those typically identified as Shoshonean, including tri-notched points, Shoshone knives, and Intermountain Ware ceramics. The six radiocarbon assays (160-80 RCYBP) place the site in post-contact times, but, as is often the case in this region, no European goods were recovered during excavation or metal detector survey. Indirect evidence of introduced material is present, however, with at least one probable metal cutmark on bone. These results are discussed within the larger context of other Wyoming Basin Shoshonean sites that have been associated with the pre-contact Late Prehistoric Firehole Phase or the post-contact Protohistoric and Historic Periods of the seventeenth to nineteenth centuries.

**Potter, Alan R.** (see **McLean, Janice A.**)

**Potter, Alan R.** (see **Ryan, Shannon R.**)

**Quernheim, Ben** (Colorado State University) and **Michael Brydge** (Colorado State University)

**Poster Symposium 5: Pine Ridge Ethnographic Field School**

During the 6 week Ethnographic Field School, participatory methods are employed and skills are honed through experiential learning. The objective of the Ethnographic Field School is to engage in collaborative research projects for the purpose of meaningful, local action while gaining an awareness and appreciation for other ways of 'knowing, being, and doing'. Continual applied interactions and longitudinal research over the past several decades have cultivated reciprocal, working relationships between CSU cultural anthropologists and Lakota community members. These relationships have resulted in meaningful processes and outcomes in local reservation communities. Throughout the field school, techniques are engaged which enhance professional skills in the realms of community development and anthropological investigation for CSU students, volunteers, and Lakota residents alike. Recent projects and programs in particular have involved: Lakota ethnobotanical research and multigenerational transfer of indigenous knowledge; ethnopsychiatry; family initiated tourism development; eco-dome architecture; sustainable livelihoods; and youth oriented community beautification.

**Quigg, Mike** (TRC Environmental Consultants)

**Session 23: Plains Village Ceramic Assemblage from the Long View site, 41RB112, in the Texas Panhandle**

Excavations at two spatially discrete Plains Village/Middle Ceramic period components (A and C) at the Long View site (41RB112) in the Texas panhandle have yielded sizable ceramic assemblages. Single Component C assemblage that dates to between 530 and 700 B.P. (cal A.D. 1280 to 1437) contained at least seven vessels. The assemblage exhibits minor diversities in vessels finishes, additives, with a range of shapes and thicknesses. At least three thick-walled, cord-marked vessels are present. Summaries of vessel descriptions and technical analyses (instrumental neutron activation, petrographic, and starch grain) are presented to highlight the assemblage, and regional implications.

**Rapson, David** (see **Hill, Matthew G.**)

**Reed, Timothy** (State Historical Society of North Dakota), **Amy Bleier** (State Historical Society of North Dakota), and **Calvin Grinnell** (Mandan-Hidatsa-Arikara Nation)

**Symposium 1: Is that a snake in the grass? 32DU1807: A stone-feature site in Dunn County, North Dakota**

32DU1807 is a stone feature site located in the Knife River Flint Quarry study area in Dunn County, North Dakota. Constructed of glacial cobbles, the largest stone feature superficially resembles a snake effigy, but also may be a symbolic

barrier of protection for Mandan-Hidatsa-Arikara (MHA) Nation residents living on the Fort Berthold Indian Reservation. The State Historical Society of North Dakota mapped the site in 2007 and continues to collaborate with an MHA Nation Tribal Historian to enhance our understanding of the site. The feature is compared to other linear stone arrangements recorded in North Dakota and South Dakota, and the concept of a symbolic barrier is explored.

**Reedy, Chelsea-Aurelea** (University of Oklahoma)

**Session 21:** *Playing Native in the Name of Science: Experimental Spiral Fractures Based on Butchering Analysis at the Bull Creek Site*

Bull Creek is a 9,000 year old campsite in the Oklahoma panhandle affiliated with the late Paleoindian Plainview culture. Excavations uncovered bison bones with strong indication of human manipulation. This investigation is based on the argument that experimental butchering can provide evidence that the manipulation of the bison bones at the Bull Creek site was the result of human activity and not animal trampling. An archaeological experiment was set up which focused on creating “green bone” spiral fractures seen on the Bull Creek specimens. The experiment successfully replicated the butchering patterns observed at Bull Creek providing insight into the butchering process and indicating the observed fractures were not the result of animal trampling.

**Reeves, Brian** (see **Kennedy, Margaret**)

**Reher, Charles** (University of Wyoming), **Gregory D. Pierce** (University of Wyoming), and **Madeline Mackie** (University of Wyoming)

**Session 12:** *The Lost Effigy at Spanish Diggings*

The eastern Wyoming “Spanish Diggings” quartzite quarry complexes are among the largest and most impressive in North America. Two early accounts (1898, 1907) briefly mentioned a large human-form rock alignment near to the quarries. This occurrence was cited in previous publications by the presenter and searched for on several occasions, but the “lost effigy at Spanish Diggings” remained elusive and received little attention otherwise. A recent more systematic survey using the few hints in those old accounts (“an east facing slope”) ... found it. The alignment is narrow and basic but 25 m. long with ca. 400 stones, and it is a large human effigy. After a brief overview of Spanish Diggings the results of still ongoing recording methods are reported (including constructing a large portable frame to take 35+ overlapping vertical photographs). A few final comments will compare this effigy to the more numerous and better known anthropomorphic alignments on the northernmost Plains.

**Reher, Charles** (see **Page, Michael**)

**Reitze, William** (University of Arizona)

**Session 14:** *Historical Geoarchaeology: Reassessing the geology and stratigraphy of the Lucy Site, Central New Mexico*

The nature of the pre-Clovis claims based on the Lucy Site (LA4974) have been debated since its discovery in 1954. Materials recovered at Lucy originally corroborated the antiquity of Sandia and contributed to interpretations of the early settlement of North America. Issues soon arose with the legitimacy of the Sandia concept and thus brought the validity of Lucy into question. This paper will provide a reinterpretation of the geology and stratigraphy of the Lucy Site. Using original excavation profiles and geological maps this study attempts to reconstruct the site stratigraphy and put the artifact assemblages into context. This will allow a better assessment of the validity of the pre-Clovis claims and a more complete understanding of the relationship of the Sandia material to later Paleoindian assemblages.

**Renner, Amanda** (National Park Service, Midwest Archeological Center) and **Steven L. De Vore** (National Park Service, Midwest Archeological Center)

**Poster Session 16:** *A GIS Analysis of Historic Trail Networks and Civil War-era Features along the Overland Trail in the Nebraska Panhandle*

Archeologists with the Midwest Archeological Center partnered with University of Nebraska-Lincoln in the summer of 2013 to locate, document, and map extant trail ruts and Civil War-era features associated with two Overland trail sites: Mud Springs Station and Rush Creek Battle site. A preliminary terrain analysis of LiDAR elevation data revealed extant trail ruts at the crossing of Rush Creek near the battle site. This discovery, along with knowledge gained from previous archeological investigations at both sites, guided geophysical investigations conducted in August. The resulting geophysical data sets, as well as historic maps and photos, were incorporated in the GIS for analysis. Results provide new insights into the cultural landscape of the North Platte River valley in the 1860s.

**Restrepo, William** (see **Johnen, Connor**)

**Restrepo, William** (see **Meeker, Halston F.C.**)

**Rhodes, Diane** (see **Hammond, Bill**)

**Richards, Andrew D.** (see **Johnen, Connor**)

**Richards, Andrew D.** (see **Meeker, Halston F.C.**)

**Richardson Seacat, Harriet** (HDR EOC, Inc.)

**Session 13:** *Negotiating Middle Ground: An Ethnography of Tribal Consultation Practices in the Plains*

Since the passing of numerous legal authorities in the 1970s, federal agencies have been legally obligated to consult with Native American tribes on undertakings that may have tribal implications. However, agencies have much leeway in their application of these authorities and, thus, have greatly varying consultation practices. For this reason, the character that consultation takes in any one agency is influenced by the agency's "culture of management" as well as their cultural sensitivities. Additionally, the tribal consultation process is fettered by America's colonial history and its own colonizing effects on participants. While some agencies in the Plains provide exemplary models of collaborative consultation practices, including the Wyoming Army Reserve National Guard and the NDDOT (consulting locally for the FHWA), some others are just beginning their consultation programs. In both maturing and new consultation programs, anthropologists working as cultural brokers can help negotiate the middle ground sought by the process.

**Ritterbush, Lauren W.** (Kansas State University)

**Session 13:** *Kaw Landscapes*

Public awareness of Kansa (or Kaw) Indian history has been stimulated over the past decade by a series of developments, especially within Kansas, the historic homeland of the Kaw. Through coincidence of overlapping interests, an interdisciplinary working group has formed with the goal of producing a website that will make public information on the Kansa language, historic and modern landscape and water resources, and archaeology, ethnohistory, and history of the Kansa and their ancestors. Initial focus has been on the Kansas River drainage, home of the Kaw during the first half of the nineteenth century. The addition of later Kansa landscapes (villages and allotments) along the upper Neosho drainage, as well as in northern Oklahoma are also being explored.

**Roberts, Sam** (Western State Colorado University)

**Session 29:** *A Preliminary Report on 2013 Excavations of Medicinal Trail: A Maya site, Belize, Central America*

During the summer of 2013, I participated in an archaeological field school in Belize, Central America, offered by Western State Colorado University.

Working with Dr. David Hyde at a local Maya site in the Rio Bravo Conservation Area of northwest Belize, we spent three and a half weeks excavating at Group B, a small household site of Medicinal Trail. Myself and the other students had the opportunity to learn basic field techniques such as setting up excavation units, excavating and screening for artifacts, and much more. The field school was a tremendous opportunity to not only travel to an exotic location, but also to receive valuable experience working at an active archaeological site. This paper will present an overview of the project setting

and then a discussion of the preliminary results of some of the summer's excavations.

**Rood, Ronald** (Cultural Resource Analysts, Inc.)

**Session 8:** *Zooarchaeological Evidence for Opal Phase Communal Jackrabbit Hunting in Central Wyoming: Faunal Remains from the Dick Myal Housepit Site, 42FR6256*

Archaeological site 48FR6256, also known as the Dick Myal Housepit site is located in southeastern Fremont County, Wyoming. During monitoring for the Devon CO2 pipeline, a prehistoric Opal Phase housepit was discovered in 2009 and subsequent data recovery excavations were completed in 2012 by Cardno ENTRIX. Significantly, excavations at the Dick Myal Housepit site produced more than 11,000 pieces of faunal material and most of the assemblage can be attributed to jackrabbits or jackrabbit size mammals. The nature of the faunal assemblage indicates jackrabbits were procured and processed during a single event; likely a communal rabbit drive.

**Roos, Christopher** (see **Hollenback, Kacy**)

**Roper, Donna C.** (Kansas State University)

**Session 3:** *Using Chronometric Hygiene to Revise the Central Plains Tradition Chronology*

The radiometric dataset for the Central Plains tradition has accumulated over about six decades and currently includes 270 age determinations from commonly assigned to the Steed-Kisker, Smoky Hill, and Upper Republican phases. A systematic chronometric hygiene protocol is applied to the dataset. It results in using 95 age determinations from 43 individual contexts for revising the Central Plains tradition chronology and constructing a timeline for this lifeway/socio-political system. Expectably, the time of the Central Plains tradition is shortened and its appearance is moved somewhat later in time than is traditionally quoted. It appears earliest in two widely separated but particularly rich riverine areas in the mid-1100s, and expands through much of the study area over a period of a century to a century-and-a-half. Only some contraction is apparent during that time. The timeline has gaps, and efforts are underway to fill at least some of them.

**Roper, Donna** (see **Scott-Cummings, Linda**)



**Ryan, Shannon R.** (R. Christopher Goodwin & Associates, Inc.), **Janice A. McLean** (R. Christopher Goodwin & Associates, Inc.), **Alan R. Potter** (R. Christopher Goodwin & Associates, Inc.), **Carey L. Baxter** (U.S. Army Corps of Engineers), **Michael L. Hargrave** (U.S. Army Corps of Engineers), and **Scott M. Hall** (U.S. Army Corps of Engineers)

**Poster Session 22:** *Archeological Evaluation of a Portion of World War I Camp Funston (14RY2169), Fort Riley, Kansas*

Camp Funston (14RY2169), Fort Riley, Kansas was a National Army Cantonment, a temporary military camp constructed to train draftees during World War I. Construction of the camp commenced in July 1917, and it was dismantled in the early 1920s. In June 2010, R. Christopher Goodwin & Associates, Inc. assessed the National Register eligibility of a portion of Camp Funston. This poster summarizes the results of the archival, geophysical, and archeological studies. The area investigated was the location of barracks and ancillary structures; this area of the camp was never rebuilt after it was dismantled, and today is a hay meadow. Archival research and geophysical survey were conducted prior to archeological fieldwork; the results of those studies guided the archeological fieldwork.

**Ryan, Shannon R.** (see **McLean, Janice A.**)

**Sanders, Mark** (SWCA Environmental Consultants)

**Symposium 24:** *Project Archaeology Lesson Example: Investigating Shelter*  
What is culture? What is archaeology? Who is responsible for stewardship? This presentation demonstrates portions of three lessons from Project Archaeology's *Investigating Shelter*. Lesson 3 teaches students about the concept of culture and how our lives are shaped by our individual cultures. Lesson 8 allows students to become the archaeologist by investigating a real archaeological site and learning about the culture of the people that lived there. Finally, Lesson 9 discussed the concept of responsibility for archaeological stewardship and the ethical and legal issues of archaeology. This presentation demonstrates the three lessons as if the audience was the fourth grade class and helps students learn to understand and respect people's cultures, how we can foster stewardship, and how we can protect our cultural heritage.

**Sanford, Natalie** (see **Meeker, Halston F.C.**)

**Scheiber, Laura** (Indiana University)

**Symposium 15:** *Culture Contact Archaeology on the Plains: A Legacy of Marginalization*

The study of the social and material effects of European colonization on indigenous inhabitants has been a regular topic of archaeological discourse in the United States for the last twenty years, with strong publication records in the Southeast, Southwest, and California. In his 1995 *American Antiquity* article,

Kent Lightfoot convincingly redefined the relationship between prehistoric and historic archaeology, which a generation of scholars embraced. Archaeology of the contact period on the Plains and Rocky Mountains remains in a liminal state, however, without fully acknowledging connections to contemporary historic archaeology, the rich Plains Indians ethnographic record, or the legacy of the direct historic approach. The term protohistoric is likewise commonly applied to this time period without problematizing its use in eighteenth and nineteenth century contexts. In this forum, I will discuss my research exploring historic-period campsites of the mountains and the Plains, vis-à-vis wider continental and contemporary issues in North American archaeology.

**Scheiber, Laura** (Indiana University), **Amanda Burt** (Indiana University), **Samuel Haskell** (Indiana University), **Ilya Moskvina** (Indiana University), **J. Ryan Kennedy** (Indiana University), and **Lawrence Todd** (Greybull River Sustainable Landscape Ecology)

**Poster Session 27: *Post-Fire Inventories and Hunter-Gatherer Use Intensity as Exemplified at the Caldwell Creek Site (48FR7091), Fremont County, Wyoming***  
Interpreting the use of mountainous regions by prehistoric and historic hunter-gatherers has been hampered through the years by difficult access, excessive ground vegetation, and wilderness restrictions. With the advent of forest fires that burn thousands of acres and expose hundreds of archaeological sites every summer, our knowledge of campsite structure and extent has grown rapidly. We now know that remote campsites often contain tens of thousands of artifacts that represent a greater commitment to mountain resources and places than previously considered. New recording methodologies have been employed to properly document these sites. In this paper, we describe recent efforts to inventory the Caldwell Creek site, which was exposed by the Norton Point fire in 2011. In addition to an overwhelming number of lithics, the fire also revealed numerous diagnostic Mountain Shoshone artifacts, including ceramics, side-notched and un-notched projectile points, and a wide variety of Shoshone knives and bifaces.

**Scheiber, Laura** (Indiana University), **Lindsey Simmons** (Indiana University), **Emma Wells** (Indiana University), and **Lawrence Todd** (Greybull River Sustainable Landscape Ecology)

**Poster Session 27: *New Evidence for Intermountain Ware Ceramics in High-Altitude Wilderness Areas of Northwestern Wyoming***  
Intermountain Ware ceramics have been identified from the Rocky Mountains in Wyoming, Montana, Utah, and Idaho since the 1950s. These flat-bottomed and flowerpot shaped vessels often date to the late pre-contact though early contact era, between the 1600s and 1800s. Archaeologists have often attributed them to Mountain Shoshone dwellers, sometimes referred to as Sheep Eaters. For decades, these pottery sherds were thought to represent rare examples of food preparation practices in higher altitudes. Recent investigations following forest

fires in northwestern Wyoming have revealed numerous additional campsites that demonstrate that late period occupation of the mountains was neither intermittent nor sparse. In this paper we review the evidence for Intermountain Ware ceramics from recent post-fire inventory projects, focusing on reconstruction of at least three vessels that were uncovered during a 2013 Indiana University archaeological field school in the Caldwell Basin, Fremont County, Wyoming.

**Schilling, Timothy** (see **Vawser, Anne M. Wolley**)

**Schindling, James** (University of Colorado-Colorado Springs) and **Minette Church** (University of Colorado-Colorado Springs)

**Poster Session 16:** *Implementing a Geodatabase for Archaeological Site Recording, Data Collection and Information Retrieval*

Archaeological research is inherently place based. Artifacts are collected and catalogued in the context of a site and sites are intimately tied to their surrounding environments. Additionally, the spatial relationship between neighboring sites and accessibility to resources provides a great deal of valuable information regarding the lives and experiences of peoples of the past. It is therefore natural for archaeologists to use location based references when discussing their research and the work of others. By extension it seems natural to use a spatially organized structure for the storage and retrieval of archaeological information. The Anthropology Department at the University of Colorado at Colorado Springs has developed a geodatabase infrastructure for this purpose. The environment supports the development of interactive maps for use in mobile data collection, site modeling, and publicizing the work of the department. It further provides a foundation to standardize future research projects.

**Schindling, James** (see **Church, Minette**)

**Schirmer, Ronald** (Minnesota State University-Mankato) and **Dale Henning** (Smithsonian Institution and Illinois State Museum)

**Symposium 1:** *“Go East, Young Man!” The Initial Middle Missouri Tradition and Red Wing’s Silvernale Phase*

Interpretations of the Silvernale Phase (ca. A.D. 1100 – 1250) in Red Wing, Minnesota, have long focussed on the cultural influences of Mississippian contemporaries to the south and east. Yet the available data consistently evince far greater western influence than widely known. Plains influence in Silvernale components has been identified for decades but has been unilaterally dismissed by some who cling tenaciously to a purely-Mississippian-derived Silvernale phase. When directly examined, the data suggest a pattern of positive interaction with groups to the west, including Initial Middle Missouri villagers, with possibly far greater effect than that of Mississippian contemporaries to the

south. The evidence for this pattern of interaction, both presences and some important absences, is presented and discussed

**Schneider, Blair** (University of Kansas), **Steven De Vore** (National Park Service, Midwest Archeological Center), and **Jay Sturdevant** (National Park Service, Midwest Archeological Center)

**Symposium 6:** *Geophysical Surveys at the Knife River Indian Villages National Historic Site: Comparing Forty Years of Magnetic Data*

The Knife River Indian Villages National Historic Site, located near Stanton, North Dakota, is the ancestral home of the Hidatsa people. Magnetic surveys were pioneered at this park by Dr. John Weymouth beginning in the late 1970s and early 1980s. More recently, magnetic surveys were completed by the National Park Service's Midwest Archeological Center in July of 2012 over much of the same area studied by Weymouth. In this paper, we re-evaluate Weymouth's data with Geoplot, a software which was used to process the 2012 data. Two sites within the park are the focus of study here: Lower Hidatsa (32ME10) and Sakakawea (32ME11) Villages. The higher density data from the present survey revealed archaeological features not detected in the older survey, but the results are comparable and can be used to evaluate changes that have occurred to the sites over the past forty years.

**Scoggin, William** (see **Miller, Mark**)

**Scott-Cummings, Linda** (PaleoResearch Institute) and **Donna Roper** (Kansas State University)

**Session 18:** *Dating Food Crusts: It's More Than What You Ate for Dinner*

Building chronologies relies on obtaining the best dates possible. For AMS radiocarbon dating, that means selecting the most appropriate, short-lived item that represents occupation. Early attempts to date corn were thwarted by not understanding differing carbon pathways. Once adjustments were made to account for this (C<sub>3</sub>, C<sub>4</sub>, and CAM), corn became the "gold standard" for radiocarbon dates, along with all other things "annual" – nutshell, seeds, etc. If dates on individual food items are good, why are dates from food crusts sometimes/frequently "too old"? Experimental work combined with the existing record of dates on food crusts from ceramics has yielded dates absolutely concurrent with dates on corn or other annuals at some sites, while at others the food crust dates are older than those on charcoal. Our updated experimentation focuses on identification of contents of food crusts and removal of the offending compounds prior to radiocarbon dating to achieve better dating.

**Scott-Cummings, Linda** (see **Ladwig, Jammi**)

**Sedig, Jacob** (University of Colorado-Boulder)

**Session 29:** *The Ceramics of Woodrow Ruin*

The Mimbres region of southwest New Mexico is famous for its ceramics, particularly the famous picture bowls made between AD 1000-1130. From 2012-2013 excavation was conducted at Woodrow Ruin, a large, multicomponent site on the upper Gila of the Mimbres region. This presentation focuses on the ceramics from Woodrow Ruin. Analysis of artifacts from the site is ongoing, but it is already clear that data from the Woodrow ceramics will greatly improve archaeological understanding of pottery production and exchange in the Mimbres region. This presentation will discuss the Neutron Activation Analysis project currently being conducted with Woodrow ceramics, along with preliminary data from typing and analysis of the ceramics, which several CAS members have assisted with since Spring 2012.

**Sharp, Jessica** (see **Dalan, Rinita**)

**Shelton, Holly** (see **Martin, Curtis**)

**Shimek, Rachael** (University of Wyoming)

**Session 23:** *Pottery and Projectiles: A Woodland-Besant Association at the Hell Gap Site*

The Hell Gap site is best known for establishing the Plains Paleoindian cultural sequence, but later prehistoric deposits are also present throughout the valley. Of particular interest are materials from an area of Holocene-age sediments undergoing erosion known as the Well Section. Periodic salvage collection of exposed artifacts has resulted in the recovery of cord-marked pottery, a Besant point, and hundreds of pieces of chipped stone, ground stone, and faunal remains. The presence of Woodland-style cord-marked pottery and a side-notched Besant dart point at Hell Gap expands the sample of sites in the Plains-Mountain interface with this association. Others include Butler-Rissler, Grayrocks, and High-Butte. These sites provide evidence that pottery was in use on the Plains before the introduction of the bow and arrow. This paper describes the materials collected from the Well Section and puts this Late Archaic component at Hell Gap into a larger regional context.

**Shimek, Rachael** (University of Wyoming), **Kelsey Knox** (University of Colorado-Denver), **Sarah Jacobs** (St. Cloud State University), **Bridget Weiner** (University of Wyoming), and **David Halerin** (Grinnell College)

**Session 14:** *Preliminary Results of the 2013 Excavations at the Hell Gap Site*

Hell Gap is a stratified Paleoindian campsite located in southeastern Wyoming; the site has been under investigation since its discovery in 1959 and is best known for its role in the establishment of Plains Paleoindian chronology. Research continues to focus on geological and cultural stratigraphy at Locality I, as well as site formation processes. This paper describes the 2013 field project,

the excavation methods and excavation extent, and the artifacts recovered. This season the majority of recovered artifacts consist of chipped stone, fauna, and ochre. Notable among these are a partially refitted core and a well-preserved deer tooth row that provides evidence of seasonality of death. Additionally, given the larger sample of vertical and horizontal exposure now available, the overall site patterning is described and discussed.

**Short, Heidi** (IPACS, University of Northern Colorado) **Edie Deweese** (Allenspark Historic Society) and **Robert Brunswig** (University of Northern Colorado)

**Session 28:** *Update on the finds from the Alonzo Allen Cabin Site 2013*

Brief overview of the Alonzo Allen Cabins site excavations done in 2012 and what was recently discovered during the 2013 excavations. Also a brief hypothesis of what it may mean in the overall picture of the life of Alonzo Allen and Allenspark.

**Shrawder, Katrina** (see **Meeker, Halston F.C.**)

**Simcox, Kaitlyn** (Center for Mountain and Plains Archaeology, Colorado State University)

**Session 8:** *A Historical Perspective on the Mapping of Bonebeds and Future Considerations*

The development of techniques for ‘mapping’ bonebeds stemmed from the need to document cultural artifacts within these complex sites. Gradually archaeologists began to realize the importance of bone to the archaeological record. Although excavation techniques advanced and the understanding of formation processes greatly increased since the early 20<sup>th</sup> century, the display of spatial data within bonebeds has not. The application of ArcGIS to mapping bonebeds goes beyond the assemblage level by assisting in the identification of specific relationships amongst the spatial data of the bone, lithic artifacts, carnivores, taphonomic processes, and finally the people. Starting with the earliest excavated bonebeds on the Great Plains, I will discuss the historic interpretation of bonebeds, how the role of taphonomy has changed these views, and finally how archaeologists view these static assemblages across time and space.

**Simcox, Kaitlyn** (see **Forney, Meghan**)

**Simmons, Lindsey** (see **Scheiber, Laura**)

**Simon, Rebecca** (Metcalf Archaeological Consultants, Inc. and Colorado State University)

**Symposium 24:** *From the Mountains to the Plains: Integrating Archaeological Data into Elementary Education*

The “Vanoli Project” at Colorado State University is a cooperative effort between Dr. Mary Van Buren and Steven Baker to analyze and rehabilitate a collection from a nineteenth century red-light district in Ouray, Colorado (5OR30). Data from this site was integrated into elementary school lesson plans that teach social studies, math, and language arts using the materials of Project Archaeology as a model and following the educational strategy of Place Based Education. The lessons plans satisfy the recently implemented Colorado Department of Education standards for fourth grade, but also relate to the Common Core of State Standards. Collaboration between educators and archaeologists has made this project a possibility. This paper describes how the Vanoli site materials can be used as a prototype for other regions throughout Colorado, suggesting data sets from the Plains that provide meaningful contexts for learning and instill archaeological appreciation in students throughout the state.

**Simon, Rebecca** (Metcalf Archaeological Consultants, Inc. and Colorado State University)

**Symposium 24:** *Project Archaeology Lesson Example: The Tools of Archaeology*

Project Archaeology’s primary training piece, *Investigating Shelter*, breaks down into nine lessons defining archaeology, demonstrating the “tools” for conducting research, providing data from a real site that students investigate, and finally addressing the ethical and legal issues of archaeology. This presentation demonstrates two lessons from the “tools” portion of the unit, “Lesson 4: Observation, Inference, and Evidence” and “Lesson 5: Classification.” Lesson 4 teaches students that archaeologists use observation and inference to form meaningful questions then use data to answer those questions. Lesson 5 teaches students that archaeologists use classification of artifacts to answer questions about the past. This presentation demonstrates the two lessons as if the audience was a fourth grade class and explains how students learn important tools in archaeology as well as general research.

**Slaughter, Michelle** (see **Gilmore, Kevin**)

**Smith, Christy** (HDR, Inc.)

**Session 13:** *Three Things Everyone Should Know about Tribal Monitoring Projects*

This presentation examines tribal monitoring projects and how they influence relationships between Native Americans and archaeologists. Views and experiences by tribal monitors, Tribal Historic Preservation Officers, and non-

native archaeologists about tribal monitoring projects were gathered during various projects in the Plains region. Although views and experiences may differ, they contribute to understand how tribal monitoring projects influence the ever changing relationship dynamics between Native Americans and archaeologists. Ultimately, there are “things” everyone should know about tribal monitoring project including the opportunities and challenges that are associated. The challenges presented are not meant to question established tribal monitoring protocol by itself, rather they are examined in retrospect of the history of relations between Native Americans and archaeologists.

**Smith, Jerry** (see **Griffin, Kristy Kay**)

**SoRelle, Keith** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), **Vance T. Holliday** (University of Arizona), **Travis Conley** (Texas Tech University), **Eileen Johnson** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark), and **Stance Hurst** (Museum of Texas Tech University and Lubbock Lake National Historic Landmark)

**Poster Session 10:** *Interactions Between Ancient Peoples and*

*Paleoenvironments Along Mustang Draw on the Southern High Plains*

Mustang Pond within the valley of Mustang Draw in Martin County, Texas had a consistent source of spring fed water that has led to continuous occupation on the landscape throughout the Holocene. Archaeological investigations within the valley and adjacent northern rim uncovered multiple occupations that span the last 10,000 years. To date, trenching within the draw along with coring and documentation of soil exposures on the rim has established a stratigraphic sequence that spans most of the Holocene. A landscape approach is used to explore changes in the environment and how these changes impacted the frequency and length of past occupations. Results of research indicate fluctuations between periods of landscape stability and erosion and deposition had an important impact on the intensity of past occupations.

**Stahle, David** (see **Kvamme, Emily**)

**Starks, Jessica** (University of Wyoming)

**Session 21:** *Reinterpreting the Past: A Second Look at 48FR1235*

A great deal of archaeological work rests in what is known as the “gray literature,” that is information about an excavated site that was not published. After excavation, site reports are turned into the state offices and collected artifacts go to repositories housed within state facilities, universities, or museums. Such is the case with site 48FR1235, a quartzite lithic procurement location on the southern tip of the Wind River Basin. Originally investigated by the Wyoming Recreation Commission in 1981, 48FR1235 site report proposed two functional localities a lithic procurement area and a workshop/habitation area. Through use of statistical analysis on the assemblage, I found no significant differences exist between the two locations. This work showcases the



importance of reinterpreting an old excavation through technological updates and detailed analysis of the assemblage in hopes to move it out of the “gray literature” and into a more widely accessible realm.

**Stokely, Michelle** (Indiana University Northwest)

**Session 25:** *Daughter of the Dawn Postcards: Silent Cinema Goes Postal*

In 1920, movie makers used an all-Native American cast to tell a romantic action adventure story, loosely based on a “Comanche legend.” The story was filmed in Southwestern Oklahoma and featured members of the Kiowa and Comanche tribes. The six reel film premiered in Los Angeles, but little else is known about its showings or reception. In time, events would be forgotten and the silent movie was presumed lost. Meanwhile, local merchants printed and sold postcards featuring images of the actors and the film’s tribal encampments near Craterville. Postcard collectors acquired these images, while others mailed them to family and friends. None of these cards were specifically identified as being connected to the film. Gradually, aspects of the film have become known; still photos were discovered, as well as the original script. A single copy of the film was found in 2004 and later acquired by the Oklahoma Historical Society. This paper explores how a small number of unmarked postcards may help archivists bring this film to public attention, nearly one hundred years after its creation.

**Sturdevant, Jay** (National Park Service, Midwest Archeological Center)

**Symposium 6:** *A Preliminary Analysis of High Resolution LiDAR Survey at Knife River Indian Villages National Historic Site*

Archeological landscapes provide information about past cultural practices using spatial scales that reveal community structures and patterning. Advances in Light Detection and Ranging (LiDAR) technologies are creating new opportunities to explore archeological landscapes in ways not possible even just a decade ago. Using airborne platforms, LiDAR can effectively capture the micro-topographic details of northern Great Plains villages and produce three-dimensional data sets of entire cultural landscapes and environmental settings. This paper presents a preliminary analysis of the high resolution LiDAR dataset collected in 2012 at Knife River Indian Villages NHS. The airborne survey covers 5,300 acres with 6 points per meter resolution. These millions of data points were used to create a high resolution Digital Elevation Model (DEM) that offers new perspectives and questions about Hidatsa archeological landscapes and cultural practices such as village layouts, fortifications, earthen mounds, and trail systems.

**Sturdevant, Jay** (see **Dalan, Rinita**)

**Sturdevant, Jay** (see **Schneider, Blair**)

**Sundstrom, Linea** (Day Star Research)

**Symposium 4:** *James Twiss in Two Worlds: A Lakota Scout's Shirt*

A buckskin shirt in the collections of the Days of '76 Museum in Deadwood, South Dakota, provides a remarkable expression of the intersection of Lakota and Euro-American values in the life of an Indian scout during the waning days of US military action against native forces. Made of native materials, but with the tailored structure of Euro-American attire, the shirt's intricate beadwork presents a carefully balanced mixture of images of American soldiers and Indian warriors. The shirt was made for James Twiss, a scout to General George Crook in 1876 and the son of a white Indian agent and a Lakota mother.

**Sundstrom, Linea** (Day Star Research)

**Symposium 4:** *The Heart of Everything: A 1940s Lakota Map of Black Hills Sacred Sites*

A hand-drawn 1940s Lakota map of the Black Hills uses pictographic conventions to map major historic and sacred sites in the Black Hills of South Dakota and Wyoming. Although somewhat similar to the earlier Amos Bad Heart Bull map, this one includes a slightly different set of landmarks, including Harney Peak, Devils Tower, Bear Butte, Inyan Kara Mountain, the Needles, the Racetrack, Reynold's Prairie, and Old Woman's Butte. This map expands our understanding of Lakota beliefs about the Black Hills and provides additional evidence that such beliefs are of long standing, not just an invention of the Red Power movement of the 1970s.

**Swenson, Fern E.** (see **Murray, Wendi Field**)

**Swenson, Fern E.** (see **Hollenback, Kacy**)

**Tamminga, Zack P.** (see **Meeker, Halston F.C.**)

**Tillman, Robert** (St. Cloud State University)

**Symposium 2:** *The Early Archaic Component from the Hudson-Meng Bison Kill Site*

The Southeast Block of the Hudson-Meng Bison Kill Site contains an Early Archaic component. This paper discusses the current research on the material from the Early Archaic component. The study aims to look at and describe the how the deposits relate to the landscape stability and instability, in addition to placing the component into the context of the site and region. The paper looks at the lithic artifacts consisting of flaked stone, at least one core, and fire cracked rock, and the geological data. As most of the other research on the site has been about the Paleoindian materials, this research on the Early Archaic component can potentially offer new insight on how the area was used over time, in addition to contributing to the small amount of information about the Early Archaic on the High Plains.

**Tito, Raul** (see **O'Shea, Lauren**)

**Todd, Lawrence, Paul Burnett** (SWCA Environmental Consultants), and **Kyle Wright** (USDA Shoshone National Forest)

**Poster Session 27:** *Another Hardluck Story: Post-Fire Montane Archaeology in NW Wyoming*

Since 2006, when the Little Venus Fire burned through the center of a mountain setting in northwestern Wyoming where we had been conducting intensive non-collection surface survey, the interplay between burning forests and discovery and documentation of spectacular high county archaeology has been the norm rather than a unique experience. Two seasons fieldwork following the 2011 Norton Point fire are summarized and research plans for post-fire study of the Hardluck fire, which burned along the upper Shoshone River drainage in 2013, are described. In addition to basic archaeological discovery, our post-fire work has four goals: 1) refine predictive modeling to enhance survey efficiency; 2) develop methods to better record and monitor fire impacts; 3) record materials under immediate threat of looting and other unnecessary damage; and 4) work with Forest management to encourage greater integration of cultural heritage into fire management and rehabilitation programs.

**Todd, Lawrence** (see **Forney, Meghan**)

**Todd, Lawrence** (see **Scheiber, Laura**)

**Todd, Lawrence** (see **Scheiber, Laura**)

**Toom, Dennis** (University of North Dakota) and **Michael Jackson** (University of North Dakota)

**Symposium 1:** *Dating Cattle Oiler: An Initial Middle Missouri Village in Central South Dakota*

Cattle Oiler (39ST224) is a key earthlodge village site of the Initial Middle Missouri variant. Extensive excavations conducted at the site by the Smithsonian Institution, River Basin Surveys, produced a large and significant study collection. Additionally, radiocarbon dating indicated that Cattle Oiler was one of the older Initial Middle Missouri villages, dating to ca. A.D. 1030. Recently, the reliability of the SIRBS radiocarbon dates was questioned, and one new date was run, yielding a much later date of ca. A.D. 1290. This apparent temporal shift piqued the interest of the senior author, who just happened to have an undated carbon sample pertaining to this very component. Assay of this sample, consisting of carbon residue removed from Forman ware sherds, produced a date of ca. A.D. 1090, placing the Cattle Oiler village back in the early part of the Initial Middle Missouri time frame (ca. A.D. 1000-1300), where it rightly belongs.

**Trabert, Sarah** (University of Iowa)

**Symposium 19:** *The Old and the New: A Summary of the Dismal River Aspect and Current Research Topics*

Although not always recognized, the Dismal River aspect and the sites these people left behind on the plains of Kansas, Nebraska, Colorado, and Wyoming lay at important demographic, social, and economic crossroads. An examination of this group can lend important insights in larger discussions regarding Protohistoric population movement, social identity, and interregional exchange. Previous researchers, however, have not always agreed on this group's cultural affiliations and much of the literature is dominated by discussions of connecting them to a historically known tribe, how their sites should be identified, and how their pottery differs from surrounding groups. This paper briefly defines the Dismal River aspect and summarizes the topics that have dominated previous research. This summary is then followed by a discussion of the current direction that Dismal River aspect research is taking and what questions may be addressed using more recent methodological and theoretical developments.

**Trabert, Sarah** (University of Iowa)

**Symposium 19:** *Discussion Moderator*

This period will be used to discuss the papers presented in this session and other current research projects on the Dismal River aspect. The principal goal is to provide an opportunity for all interested researchers to discuss issues or questions they may have had regarding the research presented today and to decide what new questions and methodology should guide future research and collaboration. All interested persons are welcome to attend and participate.

**Turnbull, Jocelyn** (see **Lee, Craig**)

**Vawser, Anne M. Wolley** (National Park Service, Midwest Archeological Center), **Albert LeBeau** (National Park Service, Effigy Mounds National Monument), and **Timothy Schilling** (National Park Service, Midwest Archeological Center)

**Poster Session 27:** *Evaluating the spatial distribution of lithic tools and features at the Sanson Site, a multicomponent bison jump in the Black Hills of South Dakota*

The Sanson site is a late prehistoric, multicomponent site in Wind Cave National Park in the Black Hills of South Dakota. Evaluation and testing of the site in the fall of 2012 indicated a variety of activities happened there, including habitation, communal hunting in the form of a bison jump, food processing, lithic reduction, and ceremonial activities. Analysis of the tools recovered and their spatial distribution allow us to identify how activities were distributed over the landscape at the site. Additionally, the location of features such as rock cairns, stone circles, and drive lines help interpret the activities that took place at the site. Some of these activity areas overlap indicating that the use and occupation

of the site changed somewhat over time until use of the area discontinued completely sometime after the late proto-historic period.

**Vehik, Susan** (University of Oklahoma)

**Session 3:** *Symbolism of the Little River Focus Council Circles*

Over the years many different explanations have been created for the Little River Focus council circles in central Kansas. Some of these are quite fanciful, including Celtic Israelite temples. Most often though they are seen as religious centers, residences of elites who dabbled in religion, forts, men's lodges, and solstice monitors. Almost none, however, have addressed their symbolism. A survey of Caddoan ethnography provided possible symbolic meanings for council circle shape and for each of the structures in the council circle. Material manifestations for possible symbolic meanings of the structures were investigated. The council circle houses appear to be associated with different aspects of the sun and moon.

**Vehik, Susan** (see **Drass, Richard**)

**Wagner, John** (see **Wandsnider, LuAnn**)

**Walker, Danny** (Wyoming Department of State Parks and Cultural Resources)

**Session 12:** *A Review of Occurrences of Bone Beads and Other Bone Ornaments in The University of Wyoming Archaeological Repository (UWAR)*

The UWAR electronic database suggests bead and ornament material from a minimum of 46 individual site locations have been curated at the repository over the years. A total count of these items cannot be made because over half the repository material remains un-inventoried, but at least 300 beads and bead manufacturing debris are represented. Many accessions actually include several specimens under a single catalog/accession number. Additional material is located in the Western Wyoming College archaeological repository, private collections, and various collections of burial grave goods at the University of Wyoming Human Remains Repository (UW-HRR). For instance, over 600 bone and lignite beads were recovered from just two prehistoric burials. A final count may well include over 2500-3000 specimens in the UWAR and UW-HRR). Those items stored at UWAR will be reviewed by artifact type (bead, pendent, debris, other), material type (bone, shell, rock), and species of origin (mammal or bird). This study also illustrates again the value of archaeological collections placed in a permanent research oriented repository.

**Walking, Lauren** (see **Wandsnider, LuAnn**)

**Wallace, Rebecca** (see **Dalan, Rinita**)

**Wanamaker, Alan** (see **Boehm, Andrew**)

**Wandler, Cole** (SWCA Environmental Consultants), **William Harding** (SWCA Environmental Consultants), and **John Kennedy** (SWCA Environmental Consultants)

**Poster Session 27: *Plains Woodland on the Little Missouri: Excavations at 32DU1535 in Dunn County, North Dakota***

In Spring 2012, SWCA Environmental Consultants conducted data recovery at 32DU1535 in order to mitigate adverse effects from surrounding oil and gas development in western North Dakota. 32DU1535, an Avonlea-associated campsite, produced abundant lithic, faunal, and ceramic remains, in addition to a hearth feature. This poster presents the results of excavations at 32DU1535. As an ephemeral site on the periphery of the Knife River flint source area, 32DU1535 suggests opportunistic and informal use of locally-available materials during seasonal rounds, as well as extensive marrow extraction from bison long bone elements. A preserved knapping locality suggests hearth-centered used of space, while site “cleaning” appears absent. Plains Woodland occupations have been recorded - but not extensively excavated - in western North Dakota, and 32DU1535 provides an opportunity to examine typical settlement patterns and reduction strategies along the Little Missouri River during this period.

**Wandsnider, LuAnn** (University of Nebraska-Lincoln), **Mark Awakuni-Swetland** (University of Nebraska-Lincoln), **Dawn Bringelson** (National Park Service, Midwest Archeological Center), **Samantha Corr** (University of Nebraska-Lincoln), **Matthew Douglass** (University of Nebraska-Lincoln), **Emily Hammerl** (University of Nebraska-Lincoln), **Bailey Lathrop** (University of Nebraska-Lincoln), **Martha McCollough** (University of Nebraska-Lincoln), **Daniel Osborne** (University of Nebraska-Lincoln), **John Wagner** (University of Nebraska-Lincoln), and **Lauren Walking** (University of Nebraska-Lincoln)

**Poster Session 22: *Introducing Digital Homesteading***

How did drought affect homesteaders and their progeny? Did homesteaders use the built environment to signal ethnic identity or family status? How did female members of homesteading families maintain or negotiate access to resources? University of Nebraska and associated researchers report on initial efforts to address these and related questions from a multi-disciplinary—archaeological, demographic, historical, oral history--approach to homesteading in Custer County, Nebraska, capitalizing on and adding to extant digital data sources. We review our research questions and offer a preliminary assessment of data sources.

**Wandsnider, LuAnn** (see **Greiman, Nora**)

**Ward, Dallas C.** (Museum of Texas Tech University and Lubbock Lake Historic Landmark), **Stance Hurst** (Museum of Texas Tech University and Lubbock Lake Historic Landmark) **Eileen Johnson** (Museum of Texas Tech University and Lubbock Lake Historic Landmark), and **Doug Cunningham** (Museum of Texas Tech University and Lubbock Lake Historic Landmark)

**Session 25:** *Ranching Activities on the Llano Estacado: Insights from Macy Locality 16 a Late 19th Century Cowboy Camp*

The eastern escarpment edge of the Llano Estacado was settled relatively late in comparison to the remainder of the United States and cattle ranches were some of the first Euroamerican settlements within the region. Cattle ranching played a major role in modern economic and social development on the plains. Survey and excavation at Macy Locality 16, a late 19th century cowboy camp near Post, Texas, revealed an assemblage of wagon hardware, fencing material, domestic goods, and a large sampling of cartridges. Results of analysis were used to examine activities, function, and the role the camp played in the technological organization of ranching activities. In addition, GIS elements were utilized to organize visually the dispersal of the assemblage on the landscape. The research provided important insights into cowboy life and the ranching industry during the early cattle ranching period in western Texas.

**Ward, Dallas C.** (see **Hurst, Stance**)

**Warner, Jack** (Colorado Archaeological Society- Denver Chapter)

**Session 28:** *CAS Prehistoric Archaeology of Ken-Caryl Ranch 1973-1998*

Long before the first modern homes were built in the modern community of Ken-Caryl Ranch, in the southwestern corner of the Denver metro area, families of early Americans selected this place to live. In fact, people have lived repeatedly in this beautiful area for at least the last 8,000 years. How do we know this is true? We are very fortunate, because before home development occupied the land, the developers called in teams of archaeologists to study and dig valuable archaeological sites on the Ken-Caryl Ranch. Lead by the Denver Chapter of the Colorado Archaeological Society, excavations were conducted from 1973-1998. They worked 7 major sites and uncovered many ancient artifacts. Evidence of occupation by these early Americans is found from as far back as the Paleo-Indian Folsom culture dated at over 8,000 years ago, thru the early, middle, and late Archaic cultures before 1,850 years ago. The more recent Early Ceramic and Woodland cultures occupied Ken-Caryl until the coming of the modern settlers in historic times. This talk will review the major Ken-Caryl prehistoric archaeological sites excavated by CAS.

**Warner, Kathryn Drennan** (see **Warner, Vincent**)

**Warner, Vincent** (AMEC Environment and Infrastructure, Inc.) and **Kathryn Drennan Warner** (AMEC Environment and Infrastructure, Inc.)

**Poster Session 22:** *Differentiating late 19<sup>th</sup> and early 20<sup>th</sup> century sites at Camp Gruber, Muskogee County, Oklahoma: Looking for evidence of Cherokee and Cherokee Freedman occupations*

This poster will present examples of archival material, site settings, and artifact assemblages for historic sites located within Camp Gruber, Muskogee County, Oklahoma. The sites are located on land allotted to Cherokee and Cherokee Freedman in the early 1900s. Research questions about domestic economy and the built environment were developed to potentially identify the artifacts associated with these sites as being related to the allottees or subsequent purchasers. Domestic economy encompasses the means employed by the household to achieve its goals and may be inspired by religious beliefs, values, and ethnicity. Differences between Euro-American, African-American and Native American farmsteads could not be noted in the archaeological record. However, the diagnostic artifacts could be tied to specific families, based on the archival research. Domestic dwellings in this area were built of both log and frame with the size and overall configuration varied along with the type, size, and number of outbuildings.

**Weaver, Lucas** (see **Nichols, Kimberly**)

**Weaver, Lucas** (see **Nichols, Kimberly**)

**Weiner, Bridget** (see **Shimek, Rachael**)

**Wells, Emma** (see **Scheiber, Laura**)

**Westfall, Tom** (Loveland Archaeological Society), **Rick Miller** (Loveland Archaeological Society), and **Grayson Westfall** (Loveland Archaeological Society)

**Poster Session 10:** *Evidence of Clovis occupation in the South Platte River Valley in eastern Colorado*

The South Platte River Valley in eastern Colorado has experienced human occupation since at least Clovis times. A number of Clovis sites, including the Dent Site, the Fox Site, and the Drake Cache Site have been discovered in the South Platte drainage area. This poster will feature artifacts from each of these sites and will give a brief description of the site. Each time the South Platte River floods, numerous Clovis artifacts are recovered in the river gravels, along with the fossilized bones of giant sloth, camel, mammoth and others. As evidenced by the stone projectile points that have been recovered in the South Platte River Valley, Clovis people used a variety of widely scattered lithic sources from which to knap their points and tools. Although artifacts recovered from the river gravels lack “archaeological context” they are important in terms of the archaeological record as they show evidence of lithic migration.



**Westfall, Grayson** (see **Westfall, Tom**)

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

**Session 25:** *Historic Trail Sites in Kansas: Preliminary Findings and Research Potential*

The Kansas Historical Society is currently involved in a project with the National Park Service to nominate Santa Fe and Oregon/California Trail sites to the National Register of Historic Places. Numerous sites on both trail systems have been visited and documented. Some exhibited clear surface features, such as prominent ruts, while others had been greatly diminished through modern disturbance. Potential for additional research, including archeological investigations, will be discussed.

**Whittenburg, Aaron** (Center for Mountain and Plains Archaeology, Colorado State University), and **Michael Neeley** (Montana State University)

**Poster Session 27:** *Using lithic variability and functional contexts as clues to the diversity of on-site behaviors at the Beaucoup site in northeastern Montana*

Lithic materials at archaeological sites can be highly variable and reflect a wide range of functional activities. These variations are due in part to the availability of lithic resources, patterns of residential mobility, and the types of activities undertaken. As a result, we might expect to see assemblage composition reflecting the manufacture, use, and discard of materials in ways that are indicative of expedient or curated technologies. Test excavations at the Beaucoup Site (24PH188/189) in 2010 and 2012 yielded 976 pieces of chipped stone from four different archaeological contexts. Overall, the assemblage is comprised of a diverse range of raw material types from these different contexts associated with bison hunting and processing. However, when examined from an intrasite perspective, a pattern of on-site use indicative of a combination of curated and expedient technologies emerges. This paper examines the variability in raw material types and functional contexts as a means of understanding the diversity of on-site behavioral activities.

**Widga, Christopher** (see **Boehm, Andrew**)

**Wiewel, Adam** (University of Arkansas)

**Symposium 6:** *Airborne Lidar versus Digital Photogrammetry: A Comparison of Elevation Models of Fort Clark State Historic Site, North Dakota*

Since its advent, airborne lidar has become increasingly popular within archaeology for the purposes of identifying, documenting, and interpreting sites and landscapes. In fact, high resolution lidar data may reveal small and low relief features, even those located within heavily vegetated environments that otherwise often go undocumented through conventional means of survey. Despite the widely acknowledged utility of this remote sensing innovation, lidar has certain limitations, including issues of data availability, spatial resolution,

and its relatively high cost. Several recent advances may make digital photogrammetry a suitable alternative for the production of accurate and high resolution elevation models. These advances include the development of low-cost photogrammetry software, high resolution compact digital cameras, and a wide range of aerial platforms. As illustrated by recent findings from Fort Clark using lidar, digital photographs, and historic aerial imagery, this paper explores the benefits and shortcomings of each approach.

**Wiewel, Adam** (see **Hollenback, Kacy**)

**Wiewel, Adam** (see **Kvamme, Kenneth**)

**Williams, Emily G.** (University of Kansas) and **Jack L. Hofman** (University of Kansas)

**Poster Session 27:** *A Method for Assessing Confidence in Lithic Material Type Designation, A Case Study of Artifacts from the Nebraska Folsom Database*

A method is employed for assessing the level of confidence in the designation of lithic material type of artifacts. This “confidence code analysis” is applied to the Nebraska Folsom database. Broader impact of “confidence code analysis” will reach beyond the study of Folsom material distribution patterns. This methodology can apply to the use, identification, and provenience of lithic material and artifact typology in archaeological studies. Here, a complete “confidence code analysis” is performed for all lithic material types in the Nebraska Folsom database. Statistical tests are used to determine whether the distribution of artifacts with low confidence scores differ significantly from those with high confidence scores for designation. The usefulness of this analytical tool to aid in a broader study of Folsom land use will be assessed.

**Wilson, Joseph** (University of New Haven)

**Session 4:** *An Athapaskan Cultural Substrate in the Northern Plains?*

Several lines of evidence suggest Algonquian and Siouan cultures of the Northern Plains included populations of Athapaskan speakers during late pre-contact and early post-contact periods. This has implications for routes and durations of Athapaskan migrations. The case for distinctively Athapaskan contribution to these societies will be assessed. Y-chromosome haplogroup C3b (common in the northern Plains) has a likely Athapaskan source. Regional ceramic technologies include particular molding techniques also found in western interior Alaska, and specific folklore motifs about humans sculpted out of clay and stone is shared by Alaskan Athapaskans and Plains Algonkians. Siouan and Algonkian words for “copper/knife” are possible Athapaskan loanwords. Distinct similarity exists between Apachean and Siouan sinew backed bows. The Northern Plains are a zone of intermediacy between Northern and Southern Athapaskans.

**Wilson, Michael C.** (Douglas College)

**Session 12:** *Animal Landscapes, Ritual, and Aboriginal Monuments on the Northern Plains*

Indigenous Northwestern Plains groups constructed cultural landscapes containing monumental structures of stone, bone, antler, sod, and/or wood. The more ephemeral structures are gone but many persist in cultural memory and historical documents. Stone medicine wheels are among the more durable structures but many of them have also been lost or modified. Collectively, these monuments in diverse media did not import meaning to place: they extended the established meanings of their places. Many expressed a circle-and-axis motif linking them to the cosmos and their use helped to maintain or re-establish cosmic harmony as, for example, after communal hunting. Their distribution and character reflected not only the locally available structural materials that were part of the meanings of their places, but also acknowledged the animal landscapes of which they were a part: medicine wheels and bone piles in a buffalo landscape and antler piles in an elk landscape, both reflected in ritual.

**Winslow, Anne** (see **Black, Kevin**)

**Wolff, Sarah E.** (University of Arizona)

**Session 21:** *Protecting a National Icon: The First Use of the Antiquities Act of 1906 to Declare Devils Tower National Monument*

Devils Tower, Wyoming, was the first national monument declared through the presidential use of the Antiquities Act of 1906. This proclamation is unusual because the Antiquities Act was designed for the protection of archaeological remains, and no archaeological resources of great prominence are found at Devils Tower. Historical records relating to the declaration suggest that the decision was based on President Theodore Roosevelt's personal interests, and greatly influenced by prominent Wyomingites including former Governor Warren A. Richards at the General Land Office who drew up the list of proposed proclamations for national monuments.

**Wood, W. Raymond** (University of Missouri-Columbia)

**Symposium 1:** *Discussant*

**Wood, W. Raymond** (University of Missouri-Columbia)

**Symposium 6:** *Discussant*

**Wright, B. Travis** (see **Griffin, Kristy Kay**)

**Wright, Kate** (see **Griffin, Kristy Kay**)

**Wright, Kyle** (see **Todd, Lawrence**)

**Wyckoff, Don** (Sam Noble Museum, University of Oklahoma) and **Jim Cox** (Oklahoma Anthropological Society)

**Session 3: *Bringing It North: Georgetown Variety Edwards Chert Use in Oklahoma's Redbed Plains***

Although the Edwards Plateau of Central Texas contains many varieties of knappable chert, the blue to blue-gray material found from Austin north to Georgetown, Texas, is rather distinctive and was preferred by a range of prehistoric societies. Notably, numerous artifacts and some caches of this material are found scattered across the Rolling Redbed Plains of central and western Oklahoma. The earliest artifacts are Clovis, two points and several flake tools being found at the Domebo Clovis site, dated 11,100 rcybp in Caddo County. Small arrowpoints and occasional scrapers of Edwards Georgetown variety flint are known for protohistoric sites believed affiliated with 17<sup>th</sup> to 18<sup>th</sup> century Wichita sites. We have compiled information on cultural diagnostics made from this rather distinctive material to preliminarily assess the principal users of it in a region largely without bedrock knappable stone. Such knowledge may be useful in identifying the cultural affiliation of certain caches found in the region.

**Zedeño, Maria Nieves** (University of Arizona), **Jesse Ballenger** (Statistical Research, Inc.), **Matthew Pailles** (University of Arizona), **Brandi Bethke** (University of Arizona), **Francois Lanoe** (University of Arizona), and **Will Martin** (University of Arizona)

**Session 12: *Hunting And Fishing at the Prairie's Edge: The St. Mary Bridge Site, Mt***

The St. Mary Bridge Site (24GL203) is regarded as the most significant archaeological locality in Glacier National Park and one of the few multi-component base camps known to occur near passes along the northern Rocky Mountains. Unfortunately, recent changes in the St. Mary River flow have destroyed a portion of the site and continue to pose a threat to its integrity. We report the results of this summer's collaborative field research, which aimed at expanding existing knowledge about the site's occupational history as well as systematically assessing bank geomorphology. The rich and complex archaeological record, combined with a 5,000 year use history that culminated in the Allotment Era, merits the formulation of substantive hypotheses about the site's place in Plains-Rockies prehistory and a multi-year program of excavation and analysis.

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2012	Saskatoon, SK	1971	Winnipeg, MB
2011	Tucson, AZ	1970	Tulsa, OK
2010	Bismarck, ND	1969	Lawrence, KS
2009	Norman, OK	1968	Lincoln, NE
2008	Laramie, WY	1967	St. Paul, MN
2007	Rapid City, SD	1966	Lincoln, NE
2006	Topeka, KS	1965	Topeka, KS
2005	Edmonton, AB	1964	Lincoln, NE
2004	Billings, MT	1963	Ft. Burgwin, NM
2003	Fayetteville, AR	1962	Lincoln, NE
2002	Oklahoma City, OK	1961	Lawton, OK
2001	Lincoln, NE	1960	Norman, OK
2000	St. Paul, MN	1959	Lincoln, NE
1999	Sioux Falls, SD	1958	Lincoln, NE
1998	Bismarck, ND	1957	Lincoln, NE
1997	Boulder, CO	1956	Lincoln, NE
1996	Iowa City, IA	1955	Lincoln, NE
1995	Laramie, WY	1954	Lincoln, NE
1994	Lubbock, TX	1953	Lincoln, NE
1993	Saskatoon, SK	1952	Lincoln, NE
1992	Lincoln, NE	1951	Lincoln, NE
1991	Lawrence, KS	1950	Lincoln, NE
1990	Norman, OK	1949	Lincoln, NE
1989	Sioux Falls, SD	1948	Lincoln, NE
1988	Wichita, KS	1947	Lincoln, NE
1987	Columbia, MO	1940	Norman, OK
1986	Denver, CO	1936	Mt. Vernon, IA
1985	Iowa City, IA	1932	Lincoln, NE
1984	Lincoln, NE	1931	Vermillion, SD
1983	Rapid City, SD		
1982	Calgary, AB		
1981	Bismarck, ND		
1980	Iowa City, IA		
1979	Kansas City, MO		
1978	Denver, CO		
1977	Lincoln, NE		
1976	Minneapolis, MN		
1975	Lincoln, NE		
1974	Laramie, WY		
1973	Columbia, MO		
1972	Lincoln, NE		



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2012	Mark Miller, Wyoming State Archaeologist's Office
2011	Bob Dawe, Archaeology and Ethnology, Royal Alberta Museum
2010	William Billeck, Smithsonian Institution
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2008	Joseph Tiffany, Mississippi Valley Archaeological Center
2007	Leland Bement, Oklahoma Archaeological Survey
2006	Marcel Kornfeld, University of Wyoming/Frison Institute
2005	Daniel Amick, Loyola University
2004	William Hartwell, Desert Research Institute
2003	Brian Reeves, Lifeways Canada, Ltd.
2002	Danny Walker, Wyoming State Archaeologist Office
2001	Lori Stanley, Luther College
2000	Joe Artz, Office of the Iowa State Archaeologist
1999	Jack Brink, Provincial Museum of Alberta
1998	Charles Reher, University of Wyoming
1997	William Lees, Oklahoma Historical Society
1996	Dennis Toom, University of North Dakota
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1994	Christopher Lintz, Mariah Associates
1993	Joseph Tiffany, California State Polytechnic University, Pomona
1992	Adrien Hannus, Augustana College
1991	Jack Hofman, Oklahoma Archaeological Survey
1990	Mary Jane Schneider, University of North Dakota
1989	Mary Jane Schneider, University of North Dakota
1988	Susan Vehik, University of Oklahoma
1987	Susan Vehik, University of Oklahoma
1986	Duane Anderson, University of Iowa
1985	Thomas Witty, Kansas State Historical Society
1984	Leigh Sims, Manitoba Museum of Man and Nature
1983	Amy Harvey, Stephens College
1982	Douglas Parks, Mary College
1981	Larry Loendorf, University of North Dakota
1980	Leslie Davis, Montana State University
1979	Richard Jantz, University of Tennessee
1978	Michael Wilson, University of Calgary
1977	Fred Schneider, University of North Dakota
1976	Henry Hamilton, Missouri Archaeological Society
1975	Dale Henning, University of Nebraska
1974	George Frison, University of Wyoming
1973	David Gradwohl, Iowa State University

1972	Richard Krause, University of Missouri
1971	Waldo Wedel, Smithsonian Institution
1970	Waldo Wedel, Smithsonian Institution
1969	Waldo Wedel, Smithsonian Institution

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2012	F.A. Calabrese
2011	Richard A. Krause
2010	Leslie B. Davis
2009	Patricia O'Brien
2007	Thomas Witty
2006	Stanley Ahler
2005	Dale Henning
2004	Thomas Kehoe
2003	Mary Jane Schneider and Frederick Schneider
2002	Don Wyckoff
2001	James Gunnerson and Delores Gunnerson
2000	no award given
1999	Richard Forbis
1998	David Gradwohl
1997	Larry Tomsyck and Janice Tomsyck
1995	George Frison
1994	Robert Bell
1993	William Mayer-Oakes
1992	Raymond Wood
1991	Waldo Wedel and Mildred Mott Wedel

## **Native American Scholarship Recipients**

2012	Royce Freeman, Mandan, Hidatsa, Arikara Nations, University of Oklahoma
2011	Michael B. Catches Enemy, Oglala Nation, St. Cloud State University
2010	Donna Longhorn, Delaware, University of Oklahoma
2009	Brad Kroupa, Mandan, Hidatsa, Arikara Nations, University of Indiana
2008	Wilena Old Person, Yakama/Blackfeet, University of Montana
2007	Brenda Covington, Colville/Spokane, University of Montana
2006	Jason Hale, Prairie Band Potawatomi, Washburn
2005	La Rae Buckskin, Shoshone-Bannock, University of Idaho
2004	Gloria McCarty, Muscogee Creek, University of Oklahoma
2002	Julie Bartlett, Oglala Lakota, University of Winnipeg
2001	Laura Cocker, Manitoba Métis Federation, University of Winnipeg Jana Vee Cornelius-Baird, Seminole/Creek, University of Oklahoma
2000	Claudette Rocan, Métis, University of Winnipeg

- Martin Earring, Minneconju-Oglala, Cheyenne River Sioux, University of South Dakota
- 1999 Rebecca Amen, Omaha Tribe, University of Nebraska—Lincoln
- 1998 Paulette Steeves, Cree/Cherokee/Micmac, University of Arkansas
- Jacquelin St. Clair, Seminole Nation of Oklahoma, U of Wyoming
- 1997 Florence Whitehorse-Taylor, Kiowa Tribe of Oklahoma, University of Oklahoma
- Alix Reynolds, Manitoba Métis Federation, University of Winnipeg
- Shanna Olinger, Yankton Sioux Tribe, Montana State University
- 1996 Evelyn Siegfried, Big Cree Band, University of Calgary
- 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 Recipients**

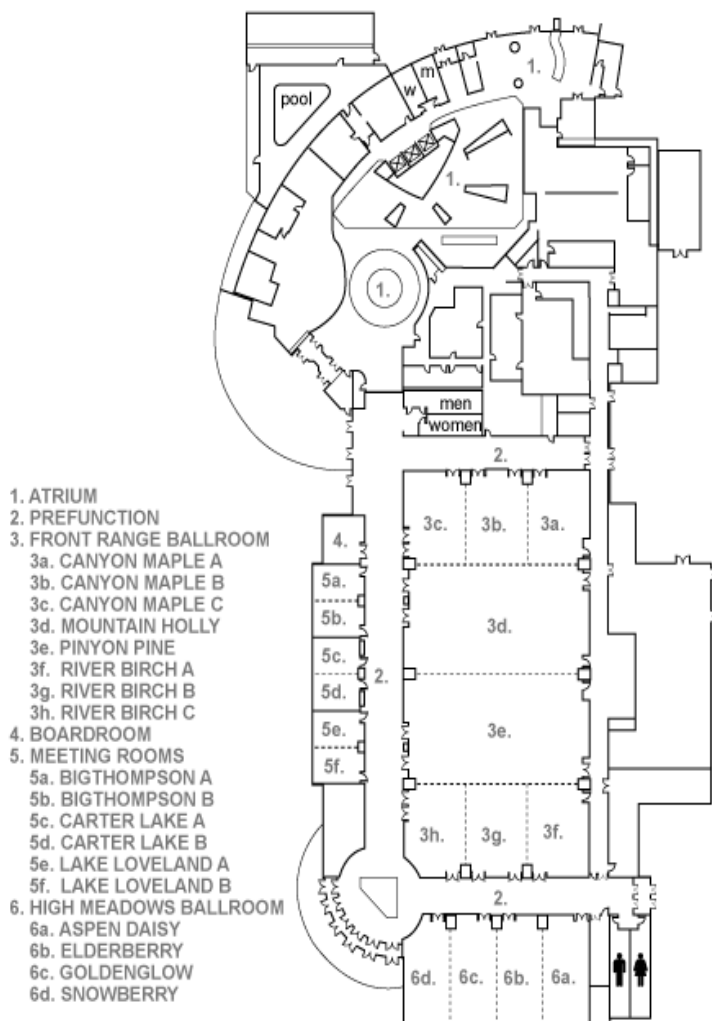
- 2012 Elsa Perry, University of Lethbridge
- 2011 William Reitze, University of Arizona
- 2010 Kacy Hollenback, University of Arizona
- Travis Hill, Colorado State University
- 2009 Maureen Boyle, Indiana University
- Wendi Field Murray, University of Arizona
- Brigid Grund, University of Colorado
- 2008 Jeremy Planteen, University of Wyoming
- Shana Wolff, Laramie County Community College
- 2007 Naomi Ollie, Colorado State University
- Sarah Trabert, Kansas State University
- 2006 Michael Jordan, University of Oklahoma
- Jayne Job, Minnesota State University—Moorhead
- 2005 Patti Kinnear, University of Colorado
- Tomasin Playford, University of Manitoba
- 2004 Raven Carper, University of Montana
- 2003 Lucy Burris, Colorado State University
- 2002 Jodi Jacobson, University of Tennessee
- 2001 Charles Egeland, Colorado State University
- Chad Goings, University of Arkansas
- 2000 Paula Renaud, University of Wyoming
- 1999 Rhonda Fair, University of Oklahoma
- 1998 Jesse Ballenger, University of Oklahoma
- 1997 Susan Tanner, University of Nebraska
- 1995 Bruce Low, University of Saskatchewan
- 1992 Elizabeth Miller, University of Nebraska
- 1990 Jeffrey Huebner, University of Texas-Austin
- 1986 Judith Habicht-Mauche, Harvard University

## Notes

## Notes

## Notes

## EMBASSY SUITES LOVELAND - MAIN LEVEL



	Aspen Daisy	Elderberry	Goldenglow	Snowberry	Big Thompson A and B	River Birch B (posters)
Thursday AM	1 Middle Missouri Archaeology		2 Hudson-Meng	3 Southern Plains	4 COOL THINGS	5 CSU Field Schools
Thursday PM	6 Middle Missouri Archaeology		7 Hudson-Meng	8 Zooarch and Hunting	9 Integrated Archaeological Sciences (workshop)	10 Paleoindian
			11 Rock Art			
Friday AM	12 Northern Plains	13 Anthropology ethnography, consultation	14 Paleoindian	15 Historic on and Near the Plains	17 Students of PAS (workshop)	16 Technology and Methods
Friday PM	18 Methods and Technology	19 Dismal River	20 Advances in Southern Rocky Mountain Research	21 Student Papers	HM Board Meeting (1-2:45) PRIVATE EVENT	22 Contact to Historic
				23 Ceramic Era	CAS Board Meeting (3-5pm) PRIVATE EVENT	
Saturday AM	24 Public Education and Archaeology		25 Historical Archaeology	26 Archaeology of Colorado		27 Northern Plains
				28 Colorado Arch. Society (CAS)		
Saturday PM				29 CAS		



