Cover art is a freehand sketch by LCL of the interior of a Mimbres Bowl curated at the New Mexico State Museum, Las Cruces, NM

Interior of a Mimbres Bowl curated at the New Mexico State Museum, Las Cruces, NM
18th Biennial Mogollon Archaeology Conference

October 9-11, 2014

Hosted By The

Department of Anthropology
New Mexico State University
October 9, 2014

Thursday Evening

(New Mexico State University Museum)

Kent Hall
Corner of Solano and University Ave

Opening Reception
and
Conference Registration

5:00 - 7:00 PM

Hosted by the

(New Mexico State University Museum)
October 10, 2014

Corbett Center Auditorium
New Mexico State University

Friday Morning Sessions

8:00  Refreshments and Registration

9:00  Opening Remarks:
     - Lonnie C. Ludeman, Conference Chair

     Welcome:
     - Professor Rani Alexander
     - Anthropology Department Head

Session 1: Ceramics and Obsidian

9:15  C. Dean Wilson,  Implications Relation to Early Ceramics and Connections in the Northern Jornada Region

9:30  Lori Barkwill-Love,  A Whole Lot of Brown and a Sprinkling of Red: Winn Canyon Revisited

9:45  Tammy Stone,  Mogollon Corrugated Pottery: a view from Point of Pines

10:00 Sean G. Dolan and Alison K. Livesay,  Obsidian Sourcing and Ceramic Iconography Beyond the Mimbres Valley: Results from Six Field Seasons of the Southern Mimbres Archaeological Project

10:15  BREAK

10:30 John Taylor-Montoya, Courtney Blair, Laura Welles, Peter Cropley, and Neal Ackerly,  Obsidian Sourcing in the Tularosa Basin

10:45 Holly McKee,  Identifying Temporal Changes in the Utilization of Prehistoric Fieldhouses at Point of Pines, Arizona
**Session 2: Reflection**

11:00  **Stephen E. Nash and Michele L. Koons**, *The Martin Sites Relocation Project: Results and Prospects*

11:15  **Michele L. Koons and Stephen E. Nash**, *Preliminary Results of AMS Radiocarbon Dating of Sandals from Tularosa Cave*

11:30  **J. Jefferson Reid**, *Erik K. Reed Remembered*

12:00  LUNCH BREAK

**Friday Afternoon Sessions**

**Session 3: Mimbres Archaeology**

1:30  **Jakob Sedig**, *The Artifacts of Woodrow Ruin*

1:45  **Kendall McGowan**, *The Use of Musculoskeletal Stress Markers in Identifying Habitual Activity Patterns at the NAN Ranch Ruin*

2:00  **Darrell Creel, Michael Cannon, Jack Broughton, and Christopher Francis**, *The Significance of Birds at Old Town and Other Mimbres Sites*

2:15  **Barbara Roth**, *Pipes, Palettes, and Projectile Points: Kiva Rituals at the Harris Site, Southwestern New Mexico*

2:30  **Aaron R. Woods and Barbara Roth**, *Cores and Context: Evaluating the Location, Quality, and Abundance of Chipped Stone Cores from the Harris Site*

2:45  **Danielle Romero and Ashley Lauzon**, *The Art of Feasting: Style and Identity in a Ritual Area at the Harris Site*

3:00  BREAK

3:15  **Christopher Turnbow and Richard Huelster**, *In Search of the Seventh Parrot: A Tale of Looting, Archaeology, and a Missing Bird in the Upper Forks of the Gila, Southwestern New Mexico*
Ritual today is everywhere in Southwestern archaeology. This is quite a change from the mid-20th century, when ritual was a residual category and a bit of a joke: if an artifact had no obvious practical function, it was ritual. Today, we make astonishingly detailed claims about ancient cosmologies, ideologies, and iconographies; and we assign prime-mover status to those ethereal realms. I review what and how we know and don’t know about ritual and religion in the ancient Southwest, and why it might or might not matter.
October 11, 2014

Saturday Morning Sessions

8:00  Refreshments and Registration

Session 5: Jornada Mogollon

9:00  Myles R. Miller,  Mountains, Caves, and the Antiquity of Jornada-Mimbres Iconography

9:15  Kristin Corl,  A Case Study in Burning in the Jornada Mogollon at Cottonwood Spring

9:30  J. Dylan Clark,  Life Stone, Death Stone: Animate Power and Representation in Natural Material of the Mogollon Culture Region

9:45  Harold Baillie, Gregory Clifford, Neal Ackerly, R. Christopher Goodwin, Thea Stehlik-Barry,  Mimbres in the Jornada: Mimbres Influence in the Jornada

10:00  BREAK

Session 6: Casas Grandes Area

10:15  Kyle D. Waller,  Archaeological and Biological Correlates of Post-Marital Residence at Paquime, Chihuahua, Mexico

10:30  Carlos Cruz Guzman,  Ramos Polychrome: Hierophanies of the Religious System of the Casas Grandes Culture

10:45  Todd L. VanPool, Gordon F.M. Rakita, Christine S. VanPool, Francisco M. Zuñiga Lopez, Jessica Bolt, Teresa Jones, Kristen Fuld, and Travis J. Royall,  Resource Specialization in the Late Archaic Occupation of Chihuahua, Mexico

11:00  Andrew Krug and Kyle D. Waller,  Seashells by the Seashore: A Geochemical Analysis of the Casas Grandes Shell Exchange Network

11:15  Elizabeth M. McCarthy,  Human-Environmental Interactions at the 76 Draw Site, New Mexico
11:30  Brenton Eric Willhite,  *Stone Tool Production in the Medio Periphery: Analysis of Debitage from the 76 Draw Site (LA 156980)*

11:45  Selection of Site for the 19th Mogollon Archaeology Conference

12:00  LUNCH BREAK

Saturday Afternoon Sessions

**Session 7: Social Groups**

1:30  Stephanie M. Whittlesey,  *Migration Revisited: The Safford Basin in Cultural Context*

1:45  David L. Lewandowski,  *Shifting North: Social Network Analysis and the Pithouse-to-Pueblo Transition in the Mogollon Highlands*

2:00  Silvia Ivet Nava Maldonado, Carlos Cruz Guzman and Elisa Villalpando Canchola,  *Social Identity, Cultural Affiliation and Exchange in Trincheras Culture*

2:15  Kathryn Baustian,  *A Bioarchaeological Approach to a More Comprehensive Interpretation of Mimbres Community Social Structure*

2:30  BREAK

**Session 8: WSMR Area Archaeology**

2:45  Judy Berryman,  *Prehistoric and Historic use of the Malpais*

3:00  James Hill,  *Investigation of a Paleoindian Landscape within White Sands Missile Range*

3:15  Neal Ackerly, R. Christopher Goodwin, John Taylor-Montoya, Courtney Blair, Brandon Gonia, Gregory Clifford, and Harold Baillie,  *Prehistoric Settlement Patterns in the Tularosa Basin*

3:45 Joan E. Price Jaguar, *Shrines and Associated Glyphs at Three Rivers Petroglyph Site*
Implications Relation to Early Ceramics and Connections in the Northern Jornada Region
C. Dean Wilson
Center for New Mexico Archaeology

Ceramics data resulting from our analysis of assemblages from four sites that appear to have been occupied during the late ninth and tenth century is discussed. These include that from three sites in the foothills of Chupadero Mesa in the Northern Jornada Mogollon region and another near Tijeras Canyon east of Albuquerque. The most common pottery at all these sites is an early form of Jornada Brown that developed out of Alma Plain. Other pottery noted at the sites in the Northern Jornada region include Cibola white ware types, a trace of early Mimbres white ware, and a locally produced decorated ware that appears to be transitional between Mogollon Red-on-brown and Three Rivers Red-on-terracotta. Pottery from a partially excavated Pithouse near Tijeras Canyon, exhibited a combination of pottery that was both similar (Jornada Brown Wares and Cibola White Wares) and different (Middle and Northern Rio Grande Gray Wares) from contemporaneous sites to the south in the Northern Jornada region. Evidence from these and other contemporaneous ceramic sites may provide clues concerning the timing, origin, and connections between different Tanoan-speaking groups who historically occupied areas of the Northern Jornada region and long stretches of the Rio Grande Valley.

A Whole Lot of Brown and a Sprinkling of Red: Winn Canyon Revisited
Lori Barkwill-Love
University of Texas at San Antonio

Winn Canyon is an Early Pithouse period site in the Upper Gila area. The site is located on a mesa top in the Cliff Valley and was occupied from approximately AD 300-500. Winn Canyon is characterized by circular pithouse structures, an abundance of undecorated brownware and a small percentage of red-slipped ceramics. In 1972 six of the 15 identified pithouse depressions were excavated by James E. Fitting. The excavation included four residential structures, one possible storage structure, and a communal structure. This paper provides an overview of the current state of the collection from the 1972 excavation. In addition, this paper provides the
ABSTRACTS

preliminary findings of an initial analysis on the ceramics and directions for future research for Winn Canyon.

9:45 a.m.
Mogollon Corrugated Pottery: a view from Point of Pines
Tammy Stone
University of Colorado Denver

Corrugated ceramics recovered in the Mogollon Highlands are often assumed to be utilitarian, used predominately for storage and cooking. However, examination of use ware (carbon deposits on the exterior and scrapping on the interiors), vessel forms (bowls versus ollas) and elaborate decoration (indenting, incising, painting, smudging, tight coiling) suggest they are much more and served a variety of roles and possessed an aesthetic of design rivaling painted wares elsewhere in the Southwest. This paper presents preliminary results of an analysis of whole corrugated vessels from Point of Pines and Turkey Creek Pueblo to explore this issue.

10:00 a.m.
Obsidian Sourcing and Ceramic Iconography Beyond the Mimbres Valley: Results from Six Field Seasons of the Southern Mimbres Archaeological Project
Sean G. Dolan and Alison K. Livesay
University of Oklahoma

The purpose of the Southern Mimbres Archaeological Project (SMAP) is to record sites in New Mexico on BLM land that augment the archaeological data within this underrepresented southern part of the Mimbres region. Our survey data allow for an evaluation of site relationships to each other at a regional scale within the larger Mogollon cultural area, in particular, connections to the more intensively studied Mimbres Valley and to external areas throughout the North American Southwest and northwest Mexico. Can we observe differences in material culture and settlement patterns as we move beyond the Mimbres Valley? More precisely, can we examine resource procurement strategies using obsidian XRF data and stylistic differences on painted pottery to assess the degree of interaction and affiliation of people at these sites with other groups in the Mimbres Valley proper from A.D. 550-1450? Our preliminary results suggest there are distinctive variations in obsidian source use and ceramic iconography south and southwest of the Mimbres Valley, most notably during the Classic Mimbres period in the Pyramid and Cedar Mountains, and other small ranges. We discuss these differences and elaborate on the significance of the results and put it into the larger context of Mogollon archaeology.

10:15 BREAK
10:30 a.m.

**Obsidian Sourcing in the Tularosa Basin**

*John Taylor-Montoya¹, Courtney Blair¹, Laura Welles¹, Peter Cropley¹, and Neal Ackerly²*

¹R. Christopher Goodwin & Assoc., Inc  ²Dos Rios Consultants

Obsidian artifacts have played an important role throughout the Southwest US, yet sourcing information from the Jornada Mogollon remains relatively limited. This paper presents the results of X-ray fluorescence (XRF) on obsidian artifacts located during the 2009 White Sands Missile Range project. The information derived from this study and presented in this paper will discuss procurement of obsidian material in the Jornada Mogollon and broader patterns of prehistoric interaction throughout the Southwest.

10:45 a.m.

**Identifying Temporal Changes in the Utilization of Prehistoric Fieldhouses at Point of Pines, Arizona**

*Holly McKee*

University of Colorado Denver

Sites with architecture associated with agricultural intensification are often overlooked when analyzing land-use patterns due to the low frequency of datable and identifiable artifacts recovered from these sites, as well as their small sizes. However, under the traditional classification, fieldhouses can be identified as one to two room structures. The distribution of these sites can be analyzed through space and time using Geographic Information Systems and Sciences. Using archived data, this paper presents the preliminary results of fieldhouses identified on survey in the Point of Pines Region, Arizona. Specifically, the location of the first known occupation phase (based on ceramics) is analyzed relative to their proximity to other sites, and the cultural and environmental implications of their changing utilization during the Reserve through Point of Pines phases.

---

**Session 2: Reflection**

11:00 a.m.

**The Martin Sites Re-Location Project: Results and Prospects**

*Stephen E. Nash and Michele L. Koons*

Denver Museum of Nature & Science

Between 1939 and 1955, Paul Sidney Martin and John Rinaldo of the Field Museum excavated or tested more than 30 archaeological sites in the Pine...
ABSTRACTS

Lawn/Reserve region of New Mexico. Researchers from the Denver Museum of Nature & Science, the United States Forest Service, and elsewhere have since 2010 been working to re-locate and record those sites, many of which were never properly registered with state and federal authorities. This paper shares results of that research and outlines possibilities for future research, including large collaborative projects that take advantage of collections at the Field Museum as well as new analytical techniques (i.e. ground-penetrating radar, drones, etc.) and fieldwork opportunities.

11:15 a.m.
**Preliminary Results of AMS Radiocarbon Dating of Sandals from Tularosa Cave**  
*Michele L. Koons and Stephen E. Nash*  
Denver Museum of Nature & Science

Archaeologists Paul Sidney Martin and John Beach Rinaldo of the Field Museum in Chicago excavated Tularosa Cave in 1950. The site report they published two years later remains a classic product of the culture history paradigm then prevalent in Americanist archaeology. Although the ceramic seriation presented in their report confirmed the relative chronology they developed previously through excavation of regional open-air sites, archaeologists have long assumed that the Tularosa Cave deposits are so disturbed as to be analytically usable only with extreme caution. This paper presents the results of a Bayesian analysis of more than a dozen new AMS radiocarbon dates on sandals from each excavation level in the Tularosa Cave sequence. The analysis is designed to test the stratigraphic integrity of the site with an eye toward larger projects focusing on the remarkably preserved but grossly under-utilized collections curated at the Field Museum.

11:30 a.m.
**Erik K. Reed Remembered**  
*J. Jefferson Reid*  
Professor Emeritus, University of Arizona

Erik Kellerman Reed has not received sufficient recognition for providing the framework of concepts and contrasts that extended Mogollon past A.D. 1000 and into the Pueblo period. Reed’s delineation of Mogollon Pueblo is discussed along with biographical facts that highlight him as one of the remarkable pioneers of Southwest archaeology.

12:00 -1:30 p.m.  LUNCH BREAK
The Artifacts of Woodrow Ruin
Jakob Sedig
University of Colorado, Boulder

This paper presents results from the preliminary analysis of over 50,000 artifacts collected over two seasons of excavation at Woodrow Ruin. Woodrow Ruin is a large, multi-component Mimbres site located on the upper Gila. Research at the site has helped to define the Mimbres Transitional period. Along with providing insight into the daily lives of the ancient inhabitants of Woodrow Ruin, analyses of artifacts is helping to delineate similarities and differences between the occupations of the Mimbres and upper Gila River valleys. In this paper I focus on the ceramics, lithics, and ecofacts excavated from six structures at Woodrow Ruin. In particular, I examine ceramic design elements and neutron activation analysis, chipped stone tool use and variation, and faunal and botanical use through time.

The Use of Musculoskeletal Stress Markers in Identifying Habitual Activity Patterns at the NAN Ranch Ruin
Kendall McGowan
New Mexico State Historic Preservation Division

This research examined the utility of Musculoskeletal Stress Markers (MSM) in highlighting differences in type, intensity, and repetition of labor between individuals and groups. Musculoskeletal Stress Markers are the areas of muscle attachment on bone that increase in robusticity and stress indicators concurrently with mechanical demands on bone. Individuals who inhabited the NAN Ranch Ruin in southwestern New Mexico between A.D. 650 and A.D. 1140 were examined to determine if MSM methodology is able to show patterns and effects of gendered division of labor. It can be determined through several lines of archaeological evidence that gender differentiation existed in the Mimbres culture; MSM research can provide a skeletal line of evidence to show not only that a division of labor existed, but which repetitive activities or motions can be associated with a particular gender. The results of the study determined that MSM studies can reveal habitual activity patterns, provided that all biasing factors such as age, sex, and body mass are accounted for. Females from the NAN Ranch Ruin were shown to generally have more robust muscle attachments, particularly those that indicate they were habitually engaged in activities involving extension and flexion of their arm.
2:00 p.m.
The Significance of Birds at Old Town and Other Mimbres Sites
Darrell Creel\textsuperscript{1}, Michael Cannon\textsuperscript{2}, Jack Broughton\textsuperscript{3}, and Christopher Francis\textsuperscript{3}
\textsuperscript{1}University of Texas at Austin, \textsuperscript{2}SWCA, Salt Lake City, \textsuperscript{3}University of Utah

Bird bones are relatively common at the Old Town site on the lower Mimbres River, particularly in late Classic period contexts. Numerous taxa are represented, and many of these are represented by wing bones. While some birds were likely acquired for food, most are believed to have been acquired for their feathers which were probably used for ritual purposes.

2:15 p.m.
Pipes, Palettes, and Projectile Points: Kiva Rituals at the Harris Site, Southwestern New Mexico
Barbara Roth
University of Nevada, Las Vegas

Recent excavations of a late Three Circle phase (Late Pithouse period) kiva and associated plaza at the Harris Site in the Mimbres Valley of New Mexico have provided insights into the role of certain artifacts in kiva rituals. Coupled with data from Haury's excavations of a large kiva dating slightly earlier in the Three Circle phase, it is clear that pipes, palettes, and projectile points were important components of kiva ceremonies and kiva retirement rituals. In this paper, I present data on the distribution and characteristics of these artifact types at Harris, and discuss the implications that their location and association has for understanding their role in activities that took place in the kivas and plazas.

2:30 p.m.
Cores and Context: Evaluating the Location, Quality, and Abundance of Chipped Stone Cores from the Harris Site
Aaron R. Woods and Barbara Roth
University of Nevada, Las Vegas

This paper presents the results of an analysis of cores recovered from extramural storage pits, pithouse floor assemblages, and a recently excavated late Three Circle phase communal structure (Pithouse 55) at the Harris Site in the Mimbres River Valley. The goal of this research is to determine if a consistent pattern in lithic reduction technology and raw material use occurs across the Harris Site and to note differences and similarities between public, private, and ritual caches of tool stone materials. Additionally, we explore the potential impact of public, private, and ritual storage on emergent corporate groups during the Late Pithouse Period (AD 550-1000)
in an on-going effort to better understand the economic and cultural developments of the Mimbres Mogollon.

2:45 p.m. 
**The Art of Feasting: Style and Identity in a Ritual Area at the Harris Site**
_Danielle Romero and Ashley Lauzon_
University of Nevada, Las Vegas

Ritual performances and those who participated in these events are a growing area of interest. Artifacts recovered from ritual areas can inform on activities that took place in and around these areas. During the 2013 excavations at the Harris Site, a ritual feasting pit was excavated to the south of the entryway of a large communal structure, which indicates that these two features may have been related in some manner. This pit feature yielded a number of artifacts including groundstone, palettes, stone tools, and numerous ritually smashed corrugated and decorated vessels. Analysis has focused on the quality of manufacture and stylistic execution on tools and ceramics and the manner in which these artifacts were used. Residue analysis was conducted on several sherds from the various reconstructable vessels to determine their function, as visible use-wear was highly variable. The palettes and reconstructed vessels were also compared to other palettes and vessels from other areas of the site to potentially link this feature with specific households or corporate groups. Data recovered from these artifacts provided important information on questions related to the role of these artifacts in ritual performance and the identity of those individuals who made and used these objects.

3:00 p.m. BREAK

3:15 p.m. 
**In Search of the Seventh Parrot: A Tale of Looting, Archaeology, and a Missing Bird in the Upper Forks of the Gila, Southwestern New Mexico**
_Christopher Turnbow¹ and Richard Huelster²_
¹New Mexico Gas Company, ²High Desert Field Guides

Our story of the seventh parrot began in 2000 when looters damaged five Classic Mimbres sites on Gila National Forest property in the Upper Forks of the Gila River. Following their arrest and conviction, site stabilization and research on the damaged areas were undertaken through a joint agreement between the Forest and the Museum of New Mexico’s Laboratory of Anthropology in 2002. This paper presents the highlights of the ARPA case; the research investigation, including an interesting INAA study, in this little known portion of the Mimbres homeland; and whether we ever found that bird.
Myths can be notoriously contagious. They march or hopscotch across continents and float across oceans. This reluctance to stay at home has made myth the center of unending battles over the significance of long-distance similarities. This paper examines the recent Gilman-Thompson-Wyckoff comparison of Mimbres iconography and the Mayan creation story as rendered in the Popol Vuh and the attendant argument for Mimbres-Huastec Mayan interaction. A framework is developed for evaluating the strength and specificity of archaeological arguments for far-flung similarities in mythic features and whether such similarities reflect synchronic interaction across great distance, diachronic persistence from a common source, or convergence based upon a species-specific fascination for twins, snakes, incest, stingy gods, and bright feathers.

More than 700 vessels from the Swarts ruin have been analyzed by neutron activation analysis. Many Mimbres area production locales are represented, but only about one-fourth of the vessels were locally made. Pottery production apparently began at Swarts soon after its establishment in the AD 800s and continued through the Classic period, with most pottery imported from sources up the Mimbres River. The intrasite distribution is discussed in terms of production areas represented and the location of households with relationships to certain other pottery producing villages.

**Session 4: Hill Top Sites**

**Initial Investigations at the Round Mountain Cerro de Trincheras Site in Eastern Arizona**

*John R. Roney¹, Robert J. Hard², and Mary Whisenhunt³*

¹Colinas Cultural Resources, ²University of Texas-San Antonio, ³University of Texas-San Antonio

As part of ongoing research concerning the spread and adoption of maize agriculture we mapped and conducted test excavations at Round Mountain, a cerro de trincheras site overlooking the floodplain of the Upper Gila River in
eastern Arizona. The Round Mountain site is characterized by rock rings and approximately two kilometers of constructed walls and terraces and is comparable to similar Early Agricultural period (ca. 2200 B.C.-A.D. 100) cerros de trincheras found in northwestern Chihuahua and southern Arizona. Test excavations in two terraces and surface collections revealed artifacts consistent with the Cienega phase (800 B.C.-A.D. 100) of the Early Agriculture period. The site’s extensive ground stone assemblage included approximately 60 complete and fragmentary metates, 15 complete manos, two stone pipes, and a fragment of a basalt tray. The Round Mountain cerro de trincheras site documents the pattern of early cerros de trincheras sites to yet another major river valley and substantially extends the early distribution of this site type.

4:15 p.m.

Excavation of an Oval Hilltop Enclosure Site near Globe, East-Central Arizona

John M. D. Hooper
WestLand Resources, Inc.

From December, 2011 through February, 2012, WestLand Resources undertook excavations at AZ V:9:616(ASM) near Globe, Arizona. This non-residential site consists of a single, large feature which is clearly not associated with ordinary domestic functions. Following the excavations, we concluded that this feature is best classified as an oval hilltop enclosure, a poorly understood category of features that are found occasionally throughout central Arizona. The feature was probably used either as an observation post and signaling location or for ritual or ceremonial purposes, or for some combination of these functions. This project marks, so far as we can determine, the first complete excavation of this type of feature. The results of the excavations and our preliminary conclusions are presented here.

Double Eagle Restaurant, Mesilla Plaza

6:00 p.m.  No Host Cash Bar  6:30 p.m.  Banquet

7:15 p.m  Invited Lecture

“Ritual and Religion in the Ancient Southwest”

Stephen H. Lekson
Curator of Archaeology & Professor of Anthropology
University of Colorado Museum of Natural History
Saturday, October 11, 2014

Session 5: Jornada Mogollon

9:00 a.m.
Mountains, Caves, and the Antiquity of Jornada-Mimbres Iconography
Myles R. Miller
Geo-Marine, Inc.

Radiocarbon dating of tablitas, pahos, and other portable objects from caves in the Jornada and Mimbres regions establishes that Jornada iconography and cosmology can be traced at least six centuries to a millennium earlier than the accepted A.D. 1000 to 1200 inception date for the Jornada rock art style. The newfound antiquity of certain primary icons, together with insights into the meanings of rock art and ceramic iconography, establish that ritual use of caves and mountains had considerable time depth in the Jornada and Mimbres regions. Caves and mountains had several interrelated metaphorical and symbolic meanings among prehistoric and contemporary societies in the Southwest and Mesoamerica, including as portals to the underworld and for emergence of ancestors, spirits, and water, lightning, clouds, and rain, and are related to origin myths central to puebloan cosmologies. Equally significant is that beliefs involving caves and mountains are manifested far beyond the geographic confines of these locations through the widespread occurrence of fossils, crystals, and speleothem in ritual contexts. Jornada and Mimbres concepts of caves, mountains, and emergence were part of a cosmological and conceptual world of much greater antiquity, and one that had structural relationships to broader pan-Southwestern and Mesoamerican belief systems.

9:15 a.m.
A Case Study in Burning in the Jornada Mogollon at Cottonwood Spring
Kristin Corl
New Mexico State University

What is the significance of room burning within El Paso Phase (A.D. 1300-1450) Mogollon pueblos of Southwest New Mexico? Are these events the results of violence, ritual abandonment of rooms, accidental fires or other processes? I explore these questions through a case study of Cottonwood Spring Pueblo (LA 175) one of the largest villages in the region. We have identified at least two temporally distinct burning events at the site, as well as evidence of burning in all but two of the rooms exposed during excavation for 2012-2014. This pueblo straddles a cultural boundary between the Jornada and Mimbres branches of the Mogollon indicating that
this is an important area in understanding ritual practices of the region. To contextualize Cottonwood’s burning we will compare it to other pueblos in the region considering their sizes, locations, ceramic assemblages, dates of occupation and numbers of burning episodes.

9:30 a.m.
**Life Stone, Death Stone: Animate Power andRepresentation in Natural Material of the Mogollon Culture Region**
*J. Dylan Clark*
New Mexico State University

A central feature of greater Pueblo religious practice is the conception of animacy and power inherent in the natural world. As such, ritual activity and beliefs often focus on communication with natural phenomena and their spiritual counterparts. In the prehistoric society of the Mogollon culture, the conception of the power and animacy of raw tool-stone material caused certain types of technically preferential materials to be chosen due to color attributes rather than simply physically functional reasons. Specifically, the black color of obsidian, combined with the material’s extreme sharpness, allowed the raw stone to communicate a message of spiritual potency; black is associated with death and black stone allowed for superior killing ability beyond the physical dimension. This was accomplished due to obsidian’s ability to transfer and store life energy (and an animate hunger for that energy). This is not to imply that the Mogollon people were unaware of the technical reasons to choose obsidian, only that these attributes allowed for a communication of supernatural agency by the stone. I will illustrate this animacy using examples and data from El Paso phase sites of the Jornada Mogollon region and existing ethnographic sources.

9:45 a.m.
**Mimbres in the Jornada: Mimbres Influence in the Jornada**
*Harold Baillie¹, Gregory Clifford¹, Neal Ackerly², R. Christopher Goodwin¹, Thea Stehlik-Barry¹*
¹R. Christopher Goodwin & Assoc., Inc. ²Dos Rios Consultants

This paper will explore the connections, influence, and interaction between the Mimbres Mogollon and the Jornada Mogollon. Through the analysis of ceramic artifacts at sites located within the southern portions of the Tularosa Basin, the paper will explore periods of heightened interaction with the Mimbres Mogollon, and areas of possible clustering. This study will bring into focus community level patterning in the archaeological record, through the analysis of cultural material, from large long term occupation sites to small short term sites.

10:00 a.m. BREAK
Session 6: Casas Grandes Area

10:15 a.m.
Archaeological and Biological Correlates of Post-Marital Residence at Paquime, Chihuahua, Mexico
Kyle D. Waller
University of Missouri, Columbia

Post-marital residence plays an important role in human social organization by providing a culturally defined system for integrating outside members. Integration of outside members is central to the creation of regional exchange and defense networks, as well as the promotion and maintenance of regional stability. While not a central focus of discussion, Charles DiPeso used the ratio of female to male skeletons to suggest that Paquime was organized patrilocally. This stands in contrast to archaeological and ethnographic research in the North American Southwest, which generally suggests matrilocal or neolocal residence patterns. This paper aims to contribute to discussions of Casas Grandes social organization by formally investigating post-marital residence at the ritual and political center of Paquime. Three lines of archaeological and biological evidence are used to infer post-marital residence: 1.) Size of house-floor living area, 2.) Sex ratios, and 3.) Within-sex phenotypic variation. Analyses of house-floor living area suggests patrilocal residence, while biological variation suggests matrilocal residence. The lack of clear results may be a combination of difficulty in inferring room function at Paquime, non-random extra-regional gene flow, and participation in exclusive ritual exchange networks.

10:30 a.m.
Ramos Polychrome: Hierophanies of the Religious System of the Casas Grandes Culture
Carlos Cruz Guzman
INAH-Sonora

Traditionally, the ceramic type Ramos Polychrome has been categorized with a prestigious, trade and elite agencies, but there are no proposals on how people interact with these objects in everyday life. This work suggests that the meaning of the decoration and the shapes of these polychrome vessels are a hierophany. This could explain why in Paquime they are found in different archaeological contexts: ritual, mortuary and domestic. The Ramos polychrome vessels are a complex hierophany that carrying messages from the superstructure of the Casas Grandes Culture satisfying simultaneously quotidian, emotional and cognitive aspects. The attempt to understand the social significance of this ceramic type through a term originated by the History of Religions, perhaps can contribute a little to the
explanatory proposals that have been used on this pottery; typical of the area of Casas Grandes.

10:45 a.m.
**Resource Specialization in the Late Archaic Occupation of Chihuahua, Mexico**
*Todd L. VanPool, Gordon F.M. Rakita, Christine S. VanPool, Francisco M. Zuñiga Lopez, Jessica Bolt, Teresa Jones, Kristen Fuld, and Travis J. Royall*
University of Missouri, Columbia

Cerro del Diablo, a rock art site with over 200 bedrock mortars, was recorded in 2006 as part of an international project exploring the archaeology of Chihuahua, Mexico. Rock art from the site indicates that the bedrock mortars and most of the rock art dates to the Late Archaic occupations of the Casas Grandes region, although some rock art and 8 projectile points from the Medio period are present as well. The region’s Late Archaic period occupation is typified by a greater reliance on agriculture than is typical of other areas in the Chihuahuan desert. Based on the rock art and the morphology of the 200 bedrock mortars, we propose that Cerro del Diablo reflects intensive mesquite processing, and indicates that Late Archaic peoples employed subsistence strategies focused on the intensive use of a limited number of highly productive resources in a limited resource range. Agriculture would have been readily compatible with this type of “specialized” subsistence pattern, which in turn may explain why agriculture was pursued so intensively at an early date in the area. We further suggest that the focus on “abundant” resources can help explain why the intensity of the reliance on agriculture shifted through time.

11:00 a.m.
**Seashells by the Seashore: A Geochemical Analysis of the Casas Grandes Shell Exchange Network**
*Andrew Krug and Kyle D. Waller*
University of Missouri, Columbia

Previous studies by Ronna Bradley of shell exchange in the Greater Southwest have supported archaeological interpretations of competing exchange networks in which the Hohokam, Sinagua, and Anasazi acquired shell from the Gulf of California, while the Casas Grandes, Mimbres, and Western Puebloan groups acquired shell from West Mexico. However, these studies have recently been challenged in two distinct ways. First, the statistical analyses were only able to demonstrate the similarity between archaeological assemblages, which does not conclusively demonstrate the presence of an exchange network focused on Casas Grandes. Secondly, geochemical analyses from Western Puebloan sites have demonstrated that
ABSTRACTS

shell came from the Gulf of California. To further investigate shell exchange, this study re-analyzes Bradley’s geochemical database using statistical methods more appropriate for sourcing analyses. The results support Bradley’s interpretation of the importance of Casas Grandes in regional shell exchange networks, but its relationship as a source for other shell in the Southwest is not nearly as supported. Further geochemical analyses of potential shell sources are required to tease apart these potential exchange relationships.

11:15 a.m.
**Human-Environmental Interactions at the 76 Draw Site, New Mexico**
_Elizabeth M. McCarthy_
University of Missouri, Columbia

The 76 Draw site is considered a borderlands site between the Casas Grandes and the Jornada-Mogollon cultures. Located in southwestern New Mexico, the site consists of several occupations spanning 1250-1400 AD. Faunal material recovered from the site was analyzed to estimate previous environmental and ecological conditions as well as human environmental interactions. Taphonomic characteristics, such as burning and butchery marks, were analyzed to determine if humans had an influence on the site accumulation. Once anthropogenic factors were identified, several indices were calculated to estimate the prehistoric environmental conditions, which were relatively similar to the modern day. Possible hunting practices were examined based the Human Behavioral Ecology paradigm and the abundance of large and small bodied mammals identified in the assemblage. Based on the data, the 76 Draw inhabitants were primarily utilizing their local environment for small mammal resources, such as jackrabbits and cottontails, but the data does not strongly indicate that people were “schlepping” larger mammals, such as deer, into the site.

11:30 a.m.
**Stone Tool Production in the Medio Periphery: Analysis of Debitage from the 76 Draw Site (LA 156980)**
_Brenton Eric Willhite_
University of Missouri, Columbia

Thousands of flaked stone artifacts have been recovered from the 76 Draw Site in Luna County, New Mexico. These artifacts were analyzed with regard to formal attributes (including presence or absence of a single interior surface, cortex, platform morphology, and margin morphology), in conjunction with mass analysis techniques. These data suggest that the inhabitants of 76 Draw reduced locally available material through generalized core reduction with hard-hammer percussors. Additionally, fine-grained materials are reduced more intensively than coarser grained
ABSTRACTS

materials. Raw material choice and artifact morphology across the site is also documented.

11:45 a.m. Site for the 19th Biennial Mogollon Archaeology Conference
12:00 a.m. – 1:30p.m. LUNCH BREAK

Session 7: Social Groups

1:30p.m.
Migration Revisited: The Safford Basin in Cultural Context
Stephanie M. Whittlesey
Independent Researcher

Situated at the intersection of the Gila, San Francisco, and San Simon Rivers, the Safford Basin was a pivotal node in the nexus of commerce, population movement, and settlement in eastern Arizona, west-central New Mexico, and southeastern Arizona. Yet despite evidence for populations of multiple ethnic identities and cultural affiliations in the basin, archaeologists have persisted in viewing the region as predominantly Hohokam. A Mogollon presence, when it is recognized at all, has been attributed to migration. This paper questions that idea based on recent research in the Safford Basin. I argue that the earliest ceramic-period population was inherently Mogollon, that ties were maintained throughout prehistory with Mogollon groups in southeastern Arizona, the Point of Pines area, the Mimbres River valley, and the Pine Lawn–Reserve area. I maintain that the Hohokam, not the Mogollon, was the immigrant group. In time, interactions and coresidence among all of these groups forged a unique cultural expression that might be called Desert Mogollon.

1:45 p.m.
Shifting North: Social Network Analysis and the Pithouse-to-Pueblo Transition in the Mogollon Highlands
David L. Lewandowski
Northern Arizona University

This paper uses Social Network Analysis (SNA) to examine the changes in the social networks of the Mogollon Highlands that accompanied the transition from pithouse to pueblo architecture. My research follows and tests the models set forth by previous SNA studies in the Southwest by using decorated ceramic wares to build ties between sites, creating the social networks. To explore the relationship between social and geographical spaces within the region, the social networks can be represented spatially in GIS: I examine the social networks that existed between AD 700-1150 using 50-year intervals to observe social changes during the pithouse-to-pueblo transition that occurred around AD 1000 and to explore the relationship of the Mogollon Highlands to the Mimbres and Cibola regions.
2:00 p.m.

**Social Identity, Cultural Affiliation and Exchange in Trincheras Culture**

*Silvia Ivet Nava Maldonado, Carlos Cruz Guzman and Elisa Villalpando Canchola*

INAH-Sonora

In the funerary contexts of the sites Loma de las Cremaciones and Los Crematorios in the nuclear area of the Trincheras Culture were recovered objects of the local filiation and other cultural areas: Casas Grandes and Salado. They were placed as burial offerings and at least one foreign vessel was used as a funerary urn. Such findings were reported only in the excavation of a site in Atil, Sonora in the 1970s where Salado and Casas Grandes vessels associated with cremations were also found. This article considers the cultural implications of social identity, cultural affiliation and exchange between neighboring groups evidenced by the presence of foreign materials.

2:15 p.m.

**A Bioarchaeological Approach to a More Comprehensive Interpretation of Mimbres Community Social Structure**

*Kathryn Baustian*

University of Nevada, Las Vegas

This paper presents the results of a comprehensive bioarchaeological assessment of Mimbres health, activity, and the use of interpersonal violence using data from a sample of 250 human burials from 17 Late Pithouse and pueblo sites in the Mimbres region. This analysis of all available Mimbres human burials has provided data not yet synthesized for the region as a whole, as to date, most published and unpublished data have concentrated on singular Mimbres communities and have not addressed the regional population over the temporal span. The findings presented here demonstrate broader patterns for interpretation of community experiences. The sample of burials reveals relatively good health, low rates of interpersonal conflict, and sufficient diets. With regard to questions of Mimbres community violence, the data indicate that stress was mitigated via other means throughout occupation. Rather than turn to violence, Mimbres people perhaps used existing social mechanisms that would prevent and resolve conflicts. Mortuary data indicate a fairly egalitarian social structure, yet a few individuals stand out as being significant community members and this pattern holds throughout the region and through time.

2:30  BREAK
Session 8: WSMR Area Archaeology

2:45 p.m.

**Prehistoric and Historic use of the Malpais**

*Judy Berryman*

HDR and NMSU

The word “Malpais” in Spanish translates to “badland” and is described as an area that is unusable for habitation. Geologically, a Malpais is a landform characterized by eroded rocks of volcanic origin in an arid environment—again an unlikely area for habitation or use. This paper explores the historic and prehistoric use of the Malpais documented for White Sands Missile Range. The cultural resource survey within the Otero Maneuver Area clearly documented an extensive use of the Malpais that included bedrock milling features, prehistoric house rings, prehistoric artifact scatters, hunting blinds, and historic shelters used during the lambing season. Although the Malpais represents the remnants of a lava flow, because of the combination of rocky outcrops and collapsed catchment basins (trapping both find windborne silt and water), the area would have provided an excellent environment for almost all plants resources. The large openings between the lava fissures provided ample areas for occupation, gathering of wild plants and/or maintenance of planted crops. The basaltic outcrops provided surfaces for milling, construction materials for rock walls and temporary shelters. Bedrock features documented during the survey include individual milling stations with well defined mortars, rock alignments, possible room structures (rock alignments), rock cairns with unknown functions and multiple rock shelters or rock overhangs that would have provided temporary shelter during. Many of the rock alignments may have provided shelter from both the wind and sun during milling as they are placed along the exterior of the bedrock features. The temporal use of the area range from Jornada Mogollon to the Historic Period. There is no evidence that the basaltic flow and outcrops were used during the Archaic Period (5000BC-AD 200).

3:00 p.m.

**Investigation of a Paleoindian Landscape within White Sands Missile Range**

*James Hill*

*HDR*

Between November 30, 2012 and November 20, 2013 HDR Engineering undertook a cultural resource inventory of roughly 110,000 acres within the Sierra, Otero and Thurgood maneuver areas inside of White Sands Missile Range (WSMR). The archaeological investigations yielded a total of 575 sites and 2,441 isolated occurrences (IO) over the course of three separate investigations within each individual area. Of the total number of sites and isolates recorded, 11 sites were determined to contain a Paleoindian
component with an additional 16 IO’s. This paper briefly summarizes the Paleoindian occurrences within the surveyed area and expounds on possible settlement and land use patterns occurring within the sampled area of the missile range. The three areas investigated exhibited three distinctly different geographic settings, both modern and prehistorically and therefore provided an adequate baseline based on environmental variability. Future testing and more in-depth analysis will likely expand upon the initial results of this Paleoindian study.

Prehistoric Settlement Patterns in the Tularosa Basin
Neal Ackerly, R. Christopher Goodwin, John Taylor-Montoya, Courtney Blair, Brandon Gonia, Gregory Clifford, and Harold Baillie

In 2009, the White Sands Missile Range contracted R. Christopher Goodwin & Assoc., Inc. to conduct extensive survey throughout the Jornada Mogollon. To date approximately 100,000 acres of WSMR has been surveyed, 1,000 archaeological sites documented, and 70,000+ isolated occurrences recorded. Work at the White Sands Missile Range has resulted in a large quantity of data associated with the prehistoric occupation of the Tularosa basin. This paper will focus on the patterns derived from those data for the ceramic period (Jornada Mogollon) and the implications of those patterns for land use patterns and human adaptations across space and over time.

No One Here Gets Out Alive: Line-of-Sight Communication and Regional Defense in the Prehistoric Rio Abajo, New Mexico
Ward Beers

The Rio Abajo region of central New Mexico has for centuries been a natural route for trade and the exchange of ideas along the Rio Grande. The natural corridor for travel has also historically been a route for advancing and retreating armies, notably during the Pueblo Revolt of 1680 and during the American Civil War. It can be reasoned that the area benefitted and suffered from similar trade prehistorically. Using Marshall and Walt's 1984 study as a guide in this study, over forty prehistoric sites were visited to verify their locations. GIS viewshed analysis of fourteen Late Elmendorf phase sites (A.D. 1100-1300) and twenty-nine Glaze A sites (A.D. 1315-1425) in the area indicates that while partially a byproduct of the natural geography of the area, line-of-sight communication between the pueblos of each phase may have been a concern. The defensive positioning of some sites in the area indicates that warfare may have been a concern in both
periods, and the strategic locations of "citadels" during both periods may point toward a planned regional defense by the prehistoric inhabitants of the region spanning both time periods.

3:45 p.m.  
**Jaguar Shrines and Associated Glyphs at Three Rivers Petroglyph Site**  
*Joan E. Price*  
Jornada Research Institute

Identified by Dr. Kay Sutherland (Spirits From the South, EPAS, 1996), and others, two different Jaguar glyphs, a Mesoamerican image associated with star priest practices and traditions, can be found on numerous stones among over 20,000 glyphs at Three Rivers Petroglyph Site. One large well made classic feline image is depicted on the southeast face of a massive four sided stone located roughly in the center of the 1½ mile long ridge of stones. Associated glyphs included astronomical motifs, a very early directional mask, and an important well-made geometric glyph. A second unusual shaped stone, located very near the beginning of the public trail, features the same image on a much smaller scale facing south and also features a mask, circle motifs and a geometric glyph. A third site, high on an associated hill, displays a well-made jaguar claw, astronomical symbols and an important geometric glyph. An eleven wind spiral on a hill on the opposite side of the ridge features three jaguar images. The possibility that these sites with clusters of associated glyphs may have served as shrine sites will be discussed.
CONFERENCE HOST

Department of Anthropology
New Mexico State University

SPECIAL THANKS TO

NMSU Museum Director
Dr. Monte McCrossin

Archaeology Graduate Student Organization

Conference Services Event Coordinator

Flavours Catering by Sodexo

CONFERENCE HOTELS

Sleep Inn
Comfort Suites
Hilton Garden Inn
EXHIBITORS

School for Advanced Research Press

SAR

SUPPORTERS

School for Advanced Research Press

Beta Analytic Inc.
NOTES
NOTES
Cover art is a freehand sketch by LCL of the interior of a Mimbres Bowl curated at the New Mexico State Museum, Las Cruces, NM