

Utah Professional Archaeological Council

Annual Meeting

Winter 2009

February 27 – 28, 2009

Salt Lake City Public Library

Conference Room, 4th Floor

210 East 400 South

Salt Lake City, Utah

Schedule of Events

Friday, February 27, 2009

9:00 – 12:00 Research Presentations

1:00 – 4:00 UPAC Business Meeting

Saturday, February 28, 2009

9:00 – 12:00 Research Presentations

Program Schedule

Research Presentations

Friday, February 27

- 9:00 William Eckerle and John C. Ravesloot (Western GeoArch Research and William Self Associates, Inc.), *Off-Site Geoarchaeological Investigations of the Old River Bed and Distal Sevier River Alluvial Plain, Millard County, Utah for the UNEV Pipeline: 2008-2009.*
- 9:15 Rachelle Green (University of Utah), *Excavation Update for site 42Em2861 in Range Creek, Utah.*
- 9:30 Jamie Clark (University of Utah), *Excavation Update for site 42Em2861 in Range Creek, Utah.*
- 9:45 Ronald J. Rood and Derinna V. Kopp (Antiquities Section), *Archaic Human Remains from Utah: New Discoveries.*
- 10:00 Derinna V. Kopp (Antiquities Section), *The Tommy Turf Site (42Ka6030): A Basketmaker II Mass Grave.*
- 10:15 BREAK
- 10:30 Rand A. Greubel (Alpine Archaeological Consultants, Inc.), *Highlights of the Ruby Pipeline Survey, Northern Utah.*
- 10:45 Rigden A. Glaab (Washington State University, Pullman), *Understanding Social Resiliency: The 2008 Season of the Tavaputs Archaeological Research Project.*
- 11:00 Corinne Springer (Utah Museum of Natural History, Range Creek Field Station), *Smoke Signals.*
- 11:15 Heidi Roberts (HRA Inc., Conservation Archaeology), *Barbie Turns Fifty This Year. Are You Ready?*
- 11:30 Ellen "Bat" Smith (SWCA), *Wood, Brick and Metal; Eureka Utah's History as Seen Through its Architecture.*

UPAC Business Meeting
Friday, February 27

- I. Welcome – Kelly Beck, President
- II. Approval of Winter 2008 Minutes – Scott Whitesides, Secretary
- III. Treasurer’s Report & Discussion of Expenditures – Marty Thomas, Treasurer
- IV. Nominations for: Vice President - Governmental Affairs & Research, Secretary, and Newsletter Editor – Andy Yentsch, Vice President, Membership & Ethics
- V. Website Report – Rachel Quist, Webmaster
- VI. Newsletter Report – Kenny Wintch, Newsletter Editor
- VII. Utah Archaeology Report, David Yoder & Chris Watkins, Editors
- VIII. UPAC – BLM Consulting Party Report – Betsy Skinner, Vice President, Government Affairs & Research
- IX. Public Outreach and Utah Prehistory Week – Ron Rood, Curriculum Director
- X. Linear Sites Guidelines: Application Update – Jon Baxter, Bighorn Archaeology & Peter Ainsworth, BLM – SLFO
- XI. State Agency Announcements
- XII. Federal Agency Announcements
- XIII. Special Presentation: UMNH Collections Closure – Michelle Knoll, Utah Museum of Natural History
- XIV. Special Presentation: Preservation Action – Matt Seddon, Preservation Action
- XV. Awards – Kelly Beck, President & Andy Yentsch, Vice President, Membership & Ethics
- XVI. Adjournment

Research Presentations
Saturday, February 28

- 9:00 R. Kelly Beck (Public Lands Policy Coordination Office and University of Utah), *Obsidian Field Processing and Transport in Utah's Mineral Mountains.*
- 9:15 Brian R. McKee (William Self Associates, Tucson, Arizona), *Preliminary Results of the UNEV Pipeline Project XRF Obsidian Sourcing Study.*
- 9:30 Mark B. Estes (University of Nevada, Reno), *Paleoindian Obsidian Conveyance Zones and Movement in the Great Basin.*
- 9:45 Suzanne Eskenazi (HRA Inc., Conservation Archaeology), *Cactus Processing in the St. George Basin, Washington County, Utah.*
- 10:00 Leticia A. Neal (University of Nevada, Reno), *Legacies on the Landscape: Material Culture and Rock art at Indian Creek, Utah.*
- 10:15 BREAK
- 10:30 Christopher Morgan (Utah State University), *Climate Change, Uncertainty, and Mobility: Numic Expansion in Central California.*
- 10:45 Mark Bodily (Dept. of Anthropology, BYU), *Shifts in Human Occupation at North Creek Shelter (42GA5863): An Analysis of Chipped Stone Artifacts.*
- 11:00 Brad Newbold (Dept. of Anthropology, BYU), *Home Sweet Home or Happy Hunting Ground? Insights into Fremont settlement in Utah Valley through faunal analysis.*
- 11:15 Scott Ure (Dept. of Anthropology, BYU), *The Seamons Mound Burial: A Fremont Burial on the Shores of Utah Lake.*
- 11:30 Jonathan Till (Abajo Archaeology), *It's About Time: Excavation and Research at 42Ws325, a Virgin Anasazi Hamlet.*
- 11:45 Josh Trammell and Chris Parker (University of Utah), *Exploring Geophyte Use in the Northern Great Basin and its Archaeological Consequences.*

Paper Abstracts

R. Kelly Beck (Public Lands Policy Coordination Office and University of Utah), *Obsidian Field Processing and Transport in Utah's Mineral Mountains*.

In his introduction to the text *Prehistoric Quarries and Lithic Production*, Jonathon Ericson (1984:2) describes toolstone procurement sites as exhibiting a, “shattered, overlapping, sometimes shallow, nondiagnostic, undatable, unattractive, redundant, and at times voluminous material record.” Still, understanding the decisions and tradeoffs encountered during procurement is central to understanding lithic technological systems. Archaeological inventory of the area surrounding the Bailey Ridge obsidian sources of Utah's Mineral Mountains in response to the Milford Flat Fire afforded an opportunity to explore one such toolstone procurement environment. In this paper, I use the field processing model from Human Behavioral Ecology to explore the effect of expected transport distance on the level of investment in toolstone processing in three different transport contexts. Obsidian debitage assemblages from direct procurement, indirect procurement, and transported obsidian sites are described that are consistent with expectations derived from the model suggesting that investment in reduction is predictably affected by toolstone transport distance.

Mark Bodily (Dept. of Anthropology, BYU), *Shifts in Human Occupation at North Creek Shelter (42GA5863): An Analysis of Chipped Stone Artifacts*.

Interest in early human activity in the arid west has been of extreme interest for many researchers over the last century. However, relatively little is known about Paleoarchaic occupants of the Colorado Plateau and Great Basin because stratified Paleoarchaic sites in these regions are rare. Linked with the climatic Late Pleistocene/Early Holocene transition, the Paleoarchaic to Early Archaic transition has also captured interest in the central Great Basin with recent data coming out of Bonneville Estates Rockshelter—a site containing Paleoarchaic and Early Archaic components in eastern Nevada. These new data provides a model for testing changes in residential mobility through the lithic assemblage at a new Paleoarchaic site on the Northern Colorado Plateau. Recently excavated, North Creek Shelter (42GA5863) is the only Paleoarchaic site on the Colorado Plateau. Located in south-central Utah, this site was occupied during both the Paleoarchaic (~10,000-9,000 rcybp) and Early Archaic (~9,000-8,000 rcybp) time periods. Differences in residential mobility between these time periods will be evaluated using Ted Goebel's (2007) model from Bonneville Estates Rockshelter. Based upon Bonneville Estates Rockshelter's lithic assemblage, Goebel claims that the Paleoarchaic occupants exhibited higher levels of residential mobility than subsequent Early Archaic occupants. A similar tendency is expected for the Paleoarchaic occupants of North Creek Shelter.

Jamie Clark (University of Utah), *Excavation Update for site 42Em2861 in Range Creek, Utah.*

42Em2861 is a large Fremont residential site in Range Creek Canyon, in eastern Utah. In 2007, the site was test excavated by the University of Utah field school. A 1 x 2 m test unit was designed to investigate a midden area north of several surface rock alignments. Excavation revealed a clay floor and vertical support post beneath the midden deposits. In 2008 the test trench was re-opened in order to determine the relationship between the vertical support post and the surrounding stratigraphy, as the edge of the feature was not discovered in 2007. Excavation was aided by Oregon Public Broadcasting and Time Team America, who contributed specialists, laborers, and a geophysical survey of the project area. This past summer's findings will be summarized and discussed.

William Eckerle and John C. Ravesloot (Western GeoArch Research and William Self Associates, Inc.), *Off-Site Geoarchaeological Investigations of the Old River Bed and Distal Sevier River Alluvial Plain, Millard County, Utah for the UNEV Pipeline: 2008-2009.*

During the spring of 2008, Western GeoArch Research and William Self Associates, Inc., conducted off-site geoarchaeological trenching along the West Wide Reroute during the Class III Inventory for the UNEV Pipeline. The primary objective of the geoarchaeological studies was to investigate the potential of late Pleistocene and early Holocene alluvial deposits in the Old River Bed channel and Sevier River to contain Paleo-Indian or Paleo-Archaic sites. Multiple locations consisting of aeolian sediments overlying early to late Holocene Sevier River alluvium were identified for trenching, in large part using Oviatt's (1989) geology map. Preliminary radiocarbon dating results suggest the oldest dates present from 0 to 1.22mbs are 4240 BP. Older dates in excess of 8000 BP are reported by Oviatt (1989) but are from contexts below the depth of the UNEV geoarchaeological investigations.

Suzanne Eskenazi (HRA Inc., Conservation Archaeology), *Cactus Processing in the St. George Basin, Washington County, Utah.*

In 2008, HRA conducted Phase I data recovery at five sites in Utah's School and Institutional Trust Land Administration South Block project area located near Bloomington, Utah. One of the sites, 42Ws4832, contains six thermal features, which were visible on the surface only as fire-cracked rock scatters. The site is situated in an area containing few resources except cactus. HRA hypothesized that cactus species were the likely subsistence focus of the site's prehistoric occupants. The pollen record suggests that cholla, prickly pear, grass seeds, and Chenopods were processed in the features. Radiocarbon samples returned dates of 990 +/-15 BP and 1175 +/-15 BP. This paper reviews the findings of Phase I data recovery and outlines plans for a second and final phase of investigation.

Mark B. Estes (University of Nevada, Reno), *Paleoindian Obsidian Conveyance Zones and Movement in the Great Basin.*

Obsidian artifacts from 12 Paleoindian sites were submitted for x-ray fluorescence analysis to identify their geologic origin and the sequential order in which they were visited by prehistoric occupants of the Great Basin. This paper builds on the data provided in Jones et al. (2003) by calculating proportions of obsidian tools and debitage by source and identifying different obsidian conveyance zones and possible movement patterns in the Great Basin for Western Fluted and Western Stemmed Tradition groups. Results show that Western Fluted and Western Stemmed Tradition groups used different obsidian sources and moved around the Great Basin in different ways.

Rigden A. Glaab (Washington State University, Pullman), *Understanding Social Resiliency: The 2008 Season of the Tavaputs Archaeological Research Project.*

This paper will employ concepts of Resilience Theory developed by C.S. Holling to address cultural transformations across the West Tavaputs Plateau during the Late Pleistocene and Holocene periods (10000 B.P.-1400 B.P.). Resilience Theory has found positive traction in anthropological studies to explain social adaptations in the context of significant environmental transformations. Archaeological data obtained during the 2008 field season will be employed in this discussion to develop a heuristic model of change that emphasizes the malleable character of human behavior. Preliminary results indicate a strong presence of early hunter and gatherer cultures on the West Tavaputs Plateau that are concurrent with other regions across the American West.

Rachelle Green (University of Utah), *Excavation Update for site 42Em2861 in Range Creek, Utah.*

42Em2861 is a large Fremont residential site in Range Creek Canyon, in eastern Utah. In 2008, the University of Utah field school conducted test excavations on two features at this site, a midden and a circular rock alignment. This presentation is concerned only with the results on the circular rock alignment. This feature is primarily composed of wall fall, likely the remains of a multi-coursed structure approximately 6 m in diameter. It is situated on the edge of a ridge that overlooks the valley floor, and thus would have been highly visible in its original state. The excavation had two goals: 1) to determine the construction and function of the feature, 2) to record the provenience of the feature within the area of the test trench and attempt to understand the nature of its collapse. The methods employed to accomplish these goals, and their results, will be summarized and discussed.

Rand A. Greubel (Alpine Archaeological Consultants, Inc.), *Highlights of the Ruby Pipeline Survey, Northern Utah.*

During the spring, summer, and fall of 2009, Alpine Archaeological Consultants, Inc. conducted a cultural resource inventory of the Ruby Pipeline in Rich, Cache, and Box Elder Counties, Utah. This paper will present a general summary of the survey as well as touching briefly on some of the more interesting results. The highlights include a sourcing study on obsidian artifacts recovered from sites in the West Desert and north of the Great Salt Lake, the documentation of wagon roads and aqueducts associated with the first transcontinental railroad, and the discovery of an Archaic burial in a rockshelter near Woodruff, Utah.

Derinna V. Kopp (Antiquities Section), *The Tommy Turf Site (42Ka6030): A Basketmaker II Mass Grave.*

This Basket Maker II mass grave was accidentally unearthed at the Tommy Turf Farm in Kanab UT in 2004. The burial was a single-episode event and contained the remains of ten individuals: six adult males, two adult females, one child, and one late-term to new born infant. The individuals exhibited no evidence of perimortem trauma, but several individuals had healed antemortem trauma. Only one individual exhibited signs of chronic infection. The results of the final analysis of the mass grave will be presented and placed in context with other documented Basket Maker II burial from the area.

Brian R. McKee (William Self Associates, Tucson, Arizona), *Preliminary Results of the UNEV Pipeline Project XRF Obsidian Sourcing Study.*

Mobility and exchange patterns of Great Basin peoples were highly variable; obsidian artifact distribution can provide important information to study those patterns. During the UNEV pipeline project William Self Associates, Inc. used X-ray fluorescence to source approximately 1000 obsidian specimens from numerous archaeological localities including 91 sites and 11 isolates. Obsidian was identified from seven known geological sources (Black Rock Area, Wild Horse Canyon, Topaz Mountain, Panaca Summit/Modena, Malad, Black Mountain, and Pumice Hole Mine), but only four of them were represented by more than a dozen pieces. In general, artifacts were manufactured from nearby obsidian sources. Source-to-site distances were found to vary significantly between artifact types. Projectile points were far more likely than bifaces, unifaces, cores, or debitage to be made of obsidian from distant sources, indicating that these artifacts were curated and transported between sites.

Christopher Morgan (Utah State University), *Climate Change, Uncertainty, and Mobility: Numic Expansion in Central California.*

The expansion of the Numa into California's Sierra Nevada occurred during a major climatic shift to Little Ice Age conditions around 600 BP. This resulted in substantial variability in resource productivity and distribution, increasing uncertainty for forager decision-makers. The Numic-speaking Mono enlisted a multifaceted set of risk-averse behaviors like dispersed caching and a mix of logistical and residential mobility to adapt to these circumstances. This behavioral flexibility effectively averaged variable resource depressions in both time and space, ultimately facilitating their migration west by giving them a competitive economic edge over other groups in the area.

Leticia A. Neal (University of Nevada, Reno), *Legacies on the Landscape: Material Culture and Rock art at Indian Creek, Utah.*

The archaeological materials located in Indian Creek and surrounding areas of southeastern Utah indicate a preponderate cultural affiliation with Mesa Verde Anasazi. There is also a light signature for the Kayenta branch Anasazi and a very low signature for Fremont affiliation. In contrast to these patterns (i.e., ceramic assemblages and architecture), there is a high frequency of Fremont-like rock art. Indian Creek is south of the Fremont heartland and provides a unique opportunity to examine the nature of interactions across cultural boundaries.

Brad Newbold (Dept. of Anthropology, BYU), *Home Sweet Home or Happy Hunting Ground? Insights into Fremont settlement in Utah Valley through faunal analysis.*

Kaÿs Cabin (42UT813) is an upland Fremont site located near Goshen, Utah. First recorded in 1991 and excavated during the 1996, 2000, and 2002 field seasons, the site yielded an immense quantity of well-preserved faunal skeletal remains. Analysis of this assemblage has fostered some intriguing questions regarding Fremont settlement patterns in Utah Valley and the possible hierarchical relation of upland sites to lowland villages during the Fremont period.

Heidi Roberts (HRA Inc., Conservation Archaeology), *Barbie Turns Fifty This Year. Are You Ready?*

On March 9, 2009 the first Barbie dolls will be artifacts. Do you know how to identify the oldest Barbie? Can you tell if that Barbie head, located several meters away from that leg, is from the same Barbie or from a different Barbie? This paper will help you answer these questions and prepare you for that inevitable day when Barbie must be recorded.

Ronald J. Rood and Derinna V. Kopp (Antiquities Section), *Archaic Human Remains from Utah: New Discoveries.*

For just over 10 years, the Utah Antiquities Section has been the primary state agency involved with the recovery, analysis and care of human remains found on private and state lands in Utah. Most of these sets of human remains were found by members of the general public during housing construction or found by people hunting, hiking or otherwise enjoying the outdoors. Within this assemblage of just over 100 sets of human remains, several (n=7) have been dated to the Archaic time period. Today, we will present information on these Archaic human remains.

Ellen "Bat" Smith (SWCA), *Wood, Brick and Metal; Eureka Utah's History as Seen Through its Architecture.*

Wood, Brick and Metal; Eureka Utah's History as Seen Through its Architecture takes the audience through the history of one of Utah's most prosperous mining towns from its development to its current sleepy small town status. Richard Francaviglia has conducted an in-depth study of mining communities across the country. Mr. Francaviglia's recognition of social stratification and how the hierarchy is represented by architecture is beautifully illustrated in the homes Eureka, Utah. In addition the residential architecture of Eureka City wonderfully parallels the economics of the Tintic Mining District history published by Phillip Notarianni in 1982. Wood, Brick and Metal includes a review of some of the town's important people and the affect of the railroad and market forces on the development of the town. The presentation illustrates the information available through historic architectural studies and how the built environment reflects and informs us of the past.

Corinne Springer (Utah Museum of Natural History, Range Creek Field Station), *Smoke Signals.*

Native American use of members of the genus *Nicotiana* (tobacco) is well documented. Tobacco was used ceremonially, medicinally, and secularly by smoking, chewing, drinking or applying directly to the skin. Twenty-four Great Basin groups used fire to encourage the growth of this important plant. But the fire/tobacco link goes beyond lighting up a pipe or cigarette for *Nicotiana attenuata* (coyote tobacco) whose seeds will not germinate they receive a "smoke signal" via water percolated through charcoal and ash of recent fires.

Although coyote tobacco had not been found growing in Range Creek Canyon there was archaeological evidence suggesting that it had at one time. In 2007 a lightning ignited wildfire burned 120 acres of the sagebrush choked canyon floor. This presentation will report the results of 2008 field investigations documenting the presence, distribution, and robusticity of tobacco emerging from dormant seed banks following the fire.

Jonathan Till (Abajo Archaeology), *It's About Time: Excavation and Research at 42Ws325, a Virgin Anasazi Hamlet.*

This presentation reports the excavation and analysis results for 42Ws325, a Virgin Anasazi habitation with at least two components. We discuss the components and how they are distinguished by architecture and artifact assemblages, and consider how patterns in subsistence data reflects subsistence strategy for these components.

Josh Trammell and Chris Parker (University of Utah), *Exploring Geophyte Use in the Northern Great Basin and its Archaeological Consequences.*

Our understanding of the prehistory of Surprise Valley has been predominantly shaped by archaeological data recovered from three lowland occupation sites, “King’s Dog,” “Menlo Baths,” and “the Rodriguez Site” (O’Connell 1975). The excavation of these sites has enhanced our understanding of the temporal and spatial variability in human behavior and its material consequences at the Western terminus of the physiographic Great Basin. Recent research examining the economic importance of the edible geophyte taxon *Perideridia* has led to an expanded exploration in upland areas for archaeological signatures of human activity related to the exploitation of this resource. Here, we present initial findings from this research and highlight the utility of employing data from ethnographic, ecological, and actualistic studies to better understand patterns of human settlement and subsistence.

Scott Ure (Dept. of Anthropology, BYU), *The Seamons Mound Burial: A Fremont Burial on the Shores of Utah Lake.*

Seamons Mound (42UT271) is located in Utah Valley, just east of Utah Lake, in the curving neck of Little Dry Creek on the Provo River delta. The mound is among hundreds of Fremont sites dotting the area and was excavated in 1968 and 1969 by Brigham Young University. This paper examines human remains found during the excavations at Seamons Mound that date to the zenith of Fremont culture. The remains exhibit intriguing physiological and pathological characteristics, including possible head trauma and a debilitating handicap. Recent stable isotope analyses offer additional perspectives into the diet and lifeways of the Fremont people living along the shores of Utah Lake.