

**2009 Abstracts
Cody, Wyoming**

Bies, Michael T. (Worland Field Office, Bureau of Land Management) and Danny N. Walker (Wyoming State Archaeologist's Office)

LEGEND ROCK: Things Are Different Here!

This paper will summarize the results of the 2008 Legend Rock Pit Project. This was a cooperative project involving the BLM, OWSA, and the Wyoming Archaeological Society and was the result of the efforts of the Legend Rock Advisory Group to improve the protection and visitor interpretation at Legend Rock. The goal of the project was to record the rock art on BLM and private land at Legend Rock. The results have increased the complexity of interpreting the Legend Rock Petroglyph Site (48HO4). The findings will also be compared to other sites in the Wind/Bighorn River valleys. The importance of this sort of cooperative effort for future work at other sites will be presented.

Bradshaw, Kayla (University of Wyoming)

Two Moon Shelter: The Folsom Component

Two Moon (48BH1827), a rock shelter in the Bighorn Mountains of north central Wyoming has been under excavation for the past fifteen years and has yielded three Paleoindian components (Folsom, Mountain Foothill and Pryor Stemmed), as well as an overlying Archaic occupation. This presentation focuses on the earliest component, the Folsom occupation, which pre-dates 10,060 +/- 60 RCYBP based on a radiocarbon assay. Excavations have yielded the following artifact classes; bone, chipped stone, gastropod, ground stone, ocher, and rock. This presentation discusses the spatial distribution of chipped stone and rock within the Folsom component. Evidence of cultural behavior is inferred from the analysis and will be discussed.

Clingerman, Gina (University of Wyoming)

The Future of Public Archaeology in Wyoming

There is a continued need for public outreach concerning Wyoming archaeology. Various avenues are outlined to bring archaeology to the public's attention through creative learning environments and personal exposure to archaeological sites and data. A review of various programs that can garner the public's interest concerning Wyoming archaeology is presented, followed by a discussion on ways archaeologists can educate and involve public schools in archaeological studies. I will also present how I plan on reaching the public in my own community after I leave the University of Wyoming to further their knowledge and appreciation of archaeological resources in an attempt to raise awareness and establish working relationships between the general public and professional archaeologists.

Cole, Sally (Rock Art Researcher)

Interior Line Style--Related Petroglyphs and Rock Paintings of Northwest Colorado and Northeast Utah

Anthropomorphic imagery of the Green and Yampa river drainages in northern Utah and Colorado has stylistic attributes of Wyoming Interior Line Style and Archaic-based styles of the Colorado Plateau. The subject expressions appear rooted in hunter-gatherer traditions of both mountains and desert and may signify a south-north or vice versa exchange of ideas and peoples

over time. Chronological overlaps and continuities with Basketmaker II and Fremont imagery on the plateau are also suggested.

Collins, Michael B. (Texas Archeological Research Laboratory)

Clovis Art and Archaeology at the Gault Site, Texas

An unusually large and complex Clovis component at the Gault Site in Central Texas has yielded an array of stone tools, copious debris from stone tool manufacture and maintenance, bones of diverse animals, and engraved plaquettes. From this evidence it is clear that the Clovis inhabitants of the region were generalized foragers who repeatedly occupied the site over several centuries. Clovis folk were not the first peoples in the Americas, nor were they the first foragers in Central Texas--there is an earlier component in one area of the site containing cultural materials of a different technology. BANQUET TALK

Collins, Michael B. (Texas Archeological Research Laboratory), D. Clark Werneke (Texas Archeological Research Laboratory), and James Advoasio (Mercyhurst Archaeological Institute)

Documenting and Interpreting the Engraved Stones from the Gault Site, Texas More than 100 stones with incised lines have been recovered from the multi-component Gault Site in Central Texas. Most of these are organized engravings on small limestone pebbles, but 1 in 3 appear on the soft cortex of pieces of chert. Geometric designs prevail and almost all were executed with very fine, delicate lines--so fine, in fact, that they are easily overlooked by anyone not consciously examining stones for them. Gault was mercilessly plundered for over 80 years, leaving deposits younger than about 8,500 years almost totally disturbed. Older deposits that date between 8,500 and at least 14,000 BP are almost entirely intact. Engraved stones have been recovered and documented from intact deposits of pre-Clovis, Clovis, Folsom, Wilson, Late Paleoindian, and Early Archaic ages. Many more are from disturbed deposits containing a mix of Early, Middle, and Late Archaic as well as Late Prehistoric ages; these were overlooked by the relic-hunters who dug them up. Similar objects of portable art are found around the World and cover a long time span, probably 70,000 years. Interestingly, in the Paleolithic of Europe and Africa early stone engraving is found on the cortex of chert nodules that were subsequently reduced as cores. At Gault, the earliest engravings are on small, cortical chert flakes knapped from engraved cores or on the cores themselves.

Driver, Ragan A. (University of Wyoming)

An Analysis of Human Trampling of Bone in Different Depositional Environments

Taphonomic studies have been a significant part of the analysis of archaeological sites for quite some time. Given what is known about carnivore modification of bone as well as trampling of lithic material, one may ask if the repeated trampling of bone by humans may produce similar modifications. While previous studies have in fact described the physical and spatial modification of trampling, not much has been observed concerning the differences in markings and modifications of faunal material trampled in different depositional environments. Therefore, cranial bones were crushed, scattered, and trampled in three different depositional environments in order to determine if a difference in soil composition would affect modifications to bone.

Eakin, Daniel H. (Wyoming State Archaeologist's Office)

2008 Investigations along the Nez Perce Trail, Yellowstone National Park

2008 marked the first year of a three-year project to identify and investigate sites formed during the Nez Perce War of 1877 along portions of the Nez Perce National Historic Trail within Yellowstone National Park. Three study areas were investigated including the Helena Party Attack Site, areas around Highland Hot Springs/west edge of Hayden Valley and areas along the east boundary of Yellowstone Park near the headwaters of the Lamar River. Fifteen sites were documented, three of which may relate to the events of 1877.

Francis, Julie (Wyoming Department of Transportation)

Legend Rock: Its Place Within "Dinwoody" Rock Art

The Legend Rock Site has played a pivotal role for research concerning the Interior-lined style or, as more broadly defined the Dinwoody tradition, for over one-half century. This paper takes an historical perspective into rock art research at Legend Rock and related sites and examines classification schemes used to study formal and spatial variation of interior-lined figures across the Intermountain West. It is argued that Legend Rock forms the foundation of the Dinwoody "tradition" specific to western Wyoming and that this tradition reflects the easternmost expression of the evolution of Numic shamanistic systems across the Intermountain West.

Greer, Mavis and John Greer (Greer Consulting)

Horses: Late Aboriginal Use of the Legend Rock Site

Horses abound in the rock art of Wyoming, which makes their paucity at the large Legend Rock site intriguing. The limited presence of horse petroglyphs, their limited stylistic variation, and non-association with most panel compositions indicate that horses are late additions to overall site use, placed here by a different cultural or social group. Although horses are not integrated into other scenes, their presence shows function of Legend Rock was not uniform through time, although horses, like the other figures, confirm that all aspects of the site have ties to other rock art sites in the Big Horn Basin.

Johnson, Kele (University of Wyoming)

The Daughters of Maka: The Changing Roles of Lakota Women in Society from Pre-European Contact to Post-Colonization

The roles of Native American women in society altered irrevocably from the pre-contact period to the post-contact period. In my paper, I will focus on the changing of women's roles in Lakota society within this time frame by addressing three social aspects within Lakota society. These aspects consist of spiritual, gendered division of labor, and material culture. Focusing on these three areas of Lakota society has the potential to contribute significant information regarding the cultural changes that occurred within Lakota society and the impact these changes had on the Lakota woman's role within her community.

Ketron, Caroline V. (University of Wyoming)

Colonization and Clovis Exotics

Researchers have long suggested Clovis projectile points made on exotic lithic raw materials represent people moving great distances. Specifically, individual cases of long distance transport have been cited as evidence of large foraging ranges. Some of these models have suggested the distribution of exotic Clovis artifacts indicates directional patterns of movement, posited to be the result of a rapid initial colonization of the Americas. This paper presents preliminary findings

based on a continent-wide sample of Clovis lithic artifacts. Spatial relationships among raw material sources and lithic artifact distributions are analyzed at large scale to assess rapid colonization models.

Keyser, James D. (Oregon Archaeological Society)

No Water Rock Art: Crow and Shoshone Petroglyphs in the Southern Bighorn Basin
Carved on a sandstone hogback ridge in the driest part of the southern Bighorn Basin is a remarkable rock art record attesting to the spiritual use of this area by both Shoshone and Crow people for more than 500 years. The earliest image is a Shoshone water ghost "pa:unha in their language" that represents the use of this place by a Late Prehistoric period shaman. The next artists to use the site were women, carving their images to petition the spirit world for power that would enable them to fulfill their culturally sanctioned roles as producers of life and providers for the family. Shoshone women probably used the site, but the imagery clearly indicates that it was a special place to women of the Crow tribe, which had recently immigrated into the area after splitting from their Hidatsa relatives. Eventually Crow use became dominant at the site, and warriors recognized it as a place to record their brave deeds accomplished in the intertribal wars that characterized the region's Historic Period.

Lahren, Larry (Anthro Research)

Assume Nothing: Recent Experiments in the Procurement of Bison with the Bow and Arrow and Atlatl

Recent experiments in the procurement of bison and elk with aboriginal bows and the atlatl illustrate some of the problems associated with the effectiveness of these weapons in real life hunting situations. Based on the current experiments, it appears that it cannot be assumed that projectile point metrics (size) determine the difference between bow and arrow and atlatl projectile points. Other conclusions about projectile point breakage, penetration, and hunting methods and techniques to "make the shot" are presented.

Laubser, Jannie (Stratum Unlimited)

Graffiti Removal and Re-integration at Legend Rock: A Comparative Perspective
Graffiti removal and re-integration should ideally not proceed automatically, bearing in mind that graffiti has to be assessed first in terms of the associated site's significance values (spiritual, recreational, and research), physical conservation conditions, and management background. The amount, extent, and techniques of removal are also contingent on context and history of site use. In the same way that archaeologists talk about pictograph or petroglyph traditions, conservators can usefully look at the tradition of graffiti at particular sites. Consultation with stakeholders is of critical importance, not only to understand the occurrence of graffiti at a site, but also to decide on the best ways to remove and re-integrate graffiti as well as the most suitable and effective site management strategies to minimize future application of graffiti.

Loendorf, Larry (retired archaeologist)

Shields and Shield-bearing Warriors: What we thought we knew, but did not!
Shields and shield-bearing warriors are a commonly recognized rock art motif in Montana and Wyoming. At some sites they constitute more than half the images while at others they are represented by a single image or two. Legend Rock is an example of a site where there are only one or two of the figures. Shield-bearing warriors have been classified by the techniques used to manufacture them and their age. One variety, the Castle Gardens style, is distinctly made with a

combination of smoothing, incising and painting. Based on radiocarbon ages of tools used to make them, Castle Garden style figures were believed to be among the oldest in the region. Recent research at the Valley of the Shields site in Montana suggests that the figures may be more recent than previously believed.

Matthews, Neffra and Tom Noble (Resource Technology Section, National Operations Center, Bureau of Land Management, Denver)

An Overview of Close-range Photogrammetric Documentation at the Legend Rock Archeological site, WY

Close-range photogrammetric documentation was first tested at Legend Rock in August of 2006. Based on the excellent results of that test a plan was developed and approved by the Legend Rock Interdisciplinary Team to photograph the entire cliff face as well as all of the individual panels present at the site. In the spring of 2007 imaging of the cliff and high resolution real-time kinematics GPS coordinate collection took place. Later that year, during an archeological survey of the site, panels along the State managed portion of the site were imaged by Dr. Danny Walker. In June of 2008 the remainder of the rockart panels were photographed during a Passport in Time (PIT) project sponsored by the Bureau of Land Management. The PIT provided a 2 week opportunity for volunteers to learn and participate in rock art documentation techniques, including close-range photogrammetry. Now, at the end of 3 years the entire cliff face has been imaged and virtual models, with a 2 cm image resolution, for portions of the site have been created. In addition, all of the known panels on the entire 3/4 mile long cliff have been photographed, many to a 0.5 mm image resolution. From this work, selected panels have been processed into virtual 3d visualizations and integrated into the over all cliff face model. An overview of these accomplishments, as well as technological advancements and challenges will be presented.

Sundstrom, Linea (affiliation)

Grandmother's Album: What Rock Art Can Tell Us about Ancient Plainswomen

Rock art from the northern Plains provides a window into indigenous women's lives from the Early Archaic period through the early contact era. Viewed through the prism of other archaeological data and historic accounts of Plains Indian life-ways, these pictures show that women were active participants in hunting and religious activities, as well as providing their societies with children. Many religious beliefs centered on female spirit-beings such as Double-Woman, Old Woman Who Never Dies, and Water Ghost Woman.

Surovell, Todd (University of Wyoming), Danny N. Walker (Wyoming State Archaeologist's Office) and Mark E. Miller (Wyoming State Archaeologist's Office)

An Incised Mammoth Tusk from the Bighorn Basin, Wyoming and Clovis Occupations in the Basin

In 2008, an incised mammoth tusk fragment was donated to the University of Wyoming Archaeological Repository after being found several years before in the southern Bighorn Basin. Initial site analysis suggests the location could date to the terminal Pleistocene, thus Clovis in age. Three AMS samples have been submitted for dating of the terrace from which the tusk eroded. If the site is Clovis age, it would be the second Clovis site with mammoth from the Bighorn Basin, only 24 miles south of the Colby site near Worland. George Frison's contribution to Clovis studies includes five of the six excavated Clovis/Goshen sites in Wyoming.

Thibodeau, Todd (Wyoming State Parks and Historic Sites)

Administrative History of Legend Rock State Archaeological Site

The Legend Rock State Archaeological Site was established by the State of Wyoming in 1973. This 30 acre site has some of the most significant petroglyphs in the region. Due to its importance numerous groups and individuals have provided input on management of this site. This talk will focus on the administrative history of Legend Rock; specifically, developing partnerships, how decisions are rendered, what have been done and proposed developments for the future.

Tratebas, Alice (Bureau of Land Management Newcastle Field Office)

Old Animal Traditions

Early Hunting rock art as defined by David Gebhard focused on herds of small solid pecked animals. The style definition does not fit the oldest Legend Rock animals, which are outline pecked and differ in other attributes as well. Early Hunting petroglyphs that meet the Gebhard definition occur at scattered sites in western Wyoming and in the Black Hills. Statistical analysis confirms that Early Hunting petroglyphs and the oldest Legend Rock animals belong to two different rock art traditions. The fact that both traditions began more than 10,000 years ago suggests that regional cultural divisions were already present at the end of the Pleistocene.

Vlcek, David T. (Pinedale Field Office, Bureau of Land Management)

Past and Present Perspectives in the Puuc Region, Southern Yucatan

The Puuc region of southern Yucatan was first explored archaeologically by John Lloyd Stevens and Frederick Catherwood in the 1840's. German, British and American archaeologists worked "in the Puuc" during the subsequent 140 years. In the 1970's, the author conducted archaeological reconnaissance in the Puuc for the Archaeological Atlas of Yucatan Project and returned to this area in 2008-09 for more formal and structured inventory. This presentation introduces the Puuc through the eyes of Stevens and Catherwood in the 1840's and presents goals and accomplishments of the twenty-first century project.

Walker, Danny N. (Wyoming State Archaeologist's Office)

Archaeological Excavations at Legend Rock State Archaeological Site, Wyoming, 1988-2007
Legend Rock State Petroglyph Site has been known to the professional community, apparently since 1876 when a rock art site was described by an Army survey that appears to be Legend Rock. Dozens of researchers have recorded and published on the rock art since then. Real archaeological studies began in 1983 with a pedestrian survey over the State Park acreage, followed by excavations in 1988 and 2007. These excavations have revealed extensive terrace deposits in front of the cliff face containing small scale cultural occupations of several undetermined time periods, with dated occupations centering between 1000 and 2000 yrs BP. These terrace deposits continue to hold extensive evidence of the cultural occupations at Legend Rock and may eventually answer questions about the age of the rock art itself.

Whitley, David S. (W&S Consultants, Tehachapi, CA)

The Coso Connection

Stylistic similarities between the Dinwoody, WY, and Coso Range, CA, petroglyphs have been noted for decades. Ethnographic analyses combined with recent fieldwork in the Cosos amplify our understanding of this stylistic relationship. These show that shamans traveled from wide

distances to conduct vision quests in the Cosos, including at least from NE Utah. The motifs they created, as we have recently discovered, included not just the typical Coso boat-shaped sheep and patterned body anthropomorphs, but also bison-headed humans, thunderbirds and other images more typical of the northern Plains, if not the Bighorn Basin. The implication is that these "regional styles" were in fact "international" phenomena, reflecting wide-ranging beliefs and practices rather than just local cultures.