

**2001 Abstracts
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Byers, David (see Kelly, Robert) Clarke, Barbara (see Gardner, Dudley) Cooper, Christopher C. (University of Wyoming)

A STUDY OF THE MORPHOLOGICAL CHANGES IN TIGER CHERT RESULTING FROM HEAT TREATMENT

Few experiments have been conducted on heat treated stone, and those that have primarily focused on change within the crystalline structure of the stone. The following heat treatment experiment focused on the knapability of heated stone. The experiment was conducted on Green River Formation tiger chert during the 2000 excavations at Pine Spring site in southwest Wyoming. Tiger chert nodules were gathered from near the site, cut into uniform slabs, heated, and knapped using a mechanical apparatus. The uniform slab size and mechanical knapper were used to theoretically control for all knapping variables excluding heated vs. non heated material. The results of the experiment suggest that heat treated stone does knap more easily than non heated samples.

Eckerle, William (see Kelly, Robert)

Eckles, David (State Archaeologist's Office)

THE BLACKS FORK HORSE: AN EARLY HISTORIC PERIOD HORSE SKELETON FROM SOUTHWESTERN WYOMING The skeletal remains of a single modern horse, *Equus caballus*, were uncovered during construction monitoring for a WYDOT project along the Blacks Fork River near the Utah border. A nearly complete horse skeleton was found along with three purposefully placed coyote (*Canis latrans*) skulls in an apparent burial situation. The horse bones contained deep cut marks from metal tools. Radiocarbon dating indicated a very early age, around 1650 AD. Analysis indicated that this was the kind of horse brought to the New World by Spanish immigrants. How the horse came to rest in Southwestern Wyoming at such an early date, and why, are questions explored in this paper.

Greer, John (see Greer, Mavis)

Greer, Mavis and John Greer (Greer Consulting)

HORSES IN NATRONA COUNTY ROCK ART

Armored horses are rarely recorded in Northern Plains rock art. The presence of the horse dates figures in this area after 1730, but the origin of armor is less certain. The Arminto Petroglyph site (48NA991) in central Wyoming, with at least two armored horses, adds information on figure style distribution, variations in armor portrayal, and other associated accoutrements, such as bridle decoration. Although armor and other accessories are generally assumed to have been based on Spanish design, personal armor such as shields was common on the Northern Plains prior to arrival of the horse, and horse protection may have been an outgrowth of that practice.

Husted, Wilfred M. (retired)

ARCHAEOLOGY IN THE ROCKY MOUNTAIN REGION: SOME OBSERVATIONS AND CONCERNS

The initial announcement for the First Rocky Mountain Anthropology Conference held in 1993 stated that the Rocky Mountains have, by and large, been considered culturally marginal to

adjacent areas including the Great Plains and Great Basin. From a Middle Rocky Mountain perspective, little has changed. Archaeologists' failure to distinguish between mountains and plains, a resulting logical error and a preoccupation with the Northwestern Plains are cited as continuing impediments to recognition of the role and importance of the Rocky Mountains in western American prehistory.

Gardner, Dudley, Martin Lammers, and Barbara Clarke (Western Wyoming College)

THE ASPEN SECTION CAMP: ANALYSIS OF A SMALL CHINESE COMMUNITY

The Aspen Section camp was occupied from roughly 1868 to 1906. In the 1880's about half of the site's inhabitants were Chinese. This paper will present the results of our excavations in 2000 and provide a brief analysis of how this camp compares to other Chinese settlements in southwestern Wyoming.

Goldstein, Paul (see Kelly, Robert)

Graves, Adam C. (University of Wyoming)

THE YEAR 2000 STUDIES AT AGATE BASIN, WYOMING: FAUNAL ANALYSIS

Several trenches were dug during the 2000 field season to evaluate the overall stratigraphic sequence of the Agate Basin site. When a north-south trench exposed the profile section located on the western edge of Locality 2, what appears to be an extension of the previously excavated bison bone beds was discovered. This unearthing yielded 169 complete and fragmented bison bones. All of the bones were recovered by hand out of the backdirt from the trench. Although no in situ artifacts were recovered from the trench (TR 2000-3), the remains found along with the recorded profile indicate that undisturbed Paleoindian-age deposits exist at Locality 2 of the Agate Basin site. The amount of information gathered from the TR 2000-3 assemblage analyses indicates that future examinations of Locality 2 could enhance even further our understanding of human adaptations and site formation processes at the Agate Basin site.

Lammers, Martin (see Gardner, Dudley)

Laughlin, John P. (University of Wyoming)

A USE-WEAR ANALYSIS OF THE RIVER BEND SITE END SCRAPERS

The River Bend site (48NA202) was uncovered in 1977 during initial housing development construction on the west edge of Casper, Wyoming. Subsequent excavation by Casper College, volunteers from the WAS, and staff from the Wyoming State Archaeologist's Office led to a determination of Protohistoric Period age and probable Shoshone affiliation. Analysis was conducted on 77 end scrapers from the site to determine type of use-wear present, and possible activities that produced the wear. Comparisons were made to data from Cantwell (1979) relating bit width and weight to function. The assemblage showed only light use-wear and most end scrapers had recently been resharpened thus removing any evidence that would indicate what materials the assemblage had been used on. Analysis shifted to describing the observed use-wear and documenting the physical attributes of each end scraper. It is possible the observed retouching and wear is the result of a retooling event as a "gearing up" process immediately before abandonment of the site at the beginning of a seasonal round, probably starting around April (McKee 1988).

Laughlin, John P. (see Kelly, Robert)

Huter, Pamela (University of Wyoming)

ANALYSIS OF NON-LOCAL LITHIC RESOURCES FROM THE HELEN LOOKINGBILL SITE, 48FR308

The Lookingbill site, located in the Absaroka Mountains of western Wyoming is a significant archaeological locality. Paleoindian and Early Plains Archaic materials are the dominant components, but all time periods are represented. While analysis has been conducted on most of the materials at the site, the debitage and artifacts of non-local material have not been studied independently. In this paper, I review the materials found to be exotic in origin and their location of origin. Analysis of non-local materials leads to questions of mobility and/or trade associated with the activities at the site. Additional investigations into the distribution of non-local lithic resources through Paleoindian, Early Plains Archaic, and Post early Plains Archaic cultural periods is assessed.

Kelly, Robert, David Byers, William Eckerle, Paul Goldstein, John Laughlin, James Mead, Meegan Sanderson, Sage Wall (University of Wyoming)

A PRELIMINARY REPORT ON THE 2000 EXCAVATIONS AT THE PINE SPRING SITE: IS THERE A DISCERNIBLE EARLY HOLOCENE OCCUPATION? The Pine Spring site in SW Wyoming was excavated in 1964 by Floyd Sharrock. He argued that there were 3 distinct occupations at the site, the earliest, Occupation 1, dating to nearly 10,000 BP. But the open-air, spring-side site has high potential for bioturbation; thus, excavations in 2000 were aimed at determining whether Sharrock's stratigraphy is correct. On-going studies of artifact density, inclination, refitting, burning and trample damage, coupled with studies of the stratigraphy, microstratigraphy, snails, carbonates, and radiocarbon dates, as well as a reanalysis of the fauna Sharrock recovered from the alleged Occupation 1 have been undertaken to determine if the stratigraphy conforms to Sharrock's and if it is possible to separate artifacts assigned to his Occupation 1 from the later two occupations.

Mead, James (see Kelly, Robert)

Sanderson, Meegan (see Kelly, Robert)

Schneider, Edward (TRC Mariah Associates Inc.)

LATE PREHISTORIC BISON PROCUREMENT IN THE BEAR LODGE MOUNTAINS OF WYOMING

In 1996 and 1997, TRC Mariah Associates conducted excavations at Site 48CK1410, located along State Highway 24 in the Bear Lodge Mountains of Wyoming. The cultural remains appear to derive from a single occupation focused on the procurement of bison and an associated processing area dating to 180 +/- 50 years B.P. Over 5,500 faunal specimens were recovered with nearly 80% of these remains identified as bison. Based on the presence of four astragali, a minimum of four bison, killed in the fall of the year, seem to be represented in the assemblage. Site 48CK1410 has a low percentage of locally available quartzites along with large amounts of nonvitreous clinker from the Powder River Basin as well as some Knife River flint. The component represented at Site 48CK1410 occurs within the temporal range of repeated bison procurement at the Vore site, located approximately 25 km to the southeast. Additionally, similar mobility patterns are apparent at Vore and Site 48CK1410.

Surovell, Todd A. and Nicole M. Waguespack (Department of Anthropology, University of Arizona)

BARGER GULCH LOCALITY B: A FOLSOM SITE IN MIDDLE PARK, COLORADO

Locality B of the Barger Gulch site in Middle Park, Colorado contains a shallowly buried, high density Folsom component. Three seasons of surface collection, testing, and excavation by the University of Wyoming have yielded a large Folsom assemblage from 16 m² excavation units. This paper will discuss preliminary results of excavation and analysis of these materials. Although the site was initially believed to represent primarily a workshop locality associated with quarrying of locally available Troublesome Formation chert, multiple lines of evidence suggest that a broad range of activities occurred at the site and that the Folsom occupation should instead be characterized as a campsite.

Peter Hobson (University of Wyoming)

ETHNOIDENTITY, ETHNOHISTORY, ETHNOGENESIS: CULTURAL IDENTIFICATION OF EARLY CONTACT SITES IN THE POWDER RIVER BASIN

In order to establish a workable system to contact ethnic groups associated with public land sites (especially sacred sites) in the Powder River Basin, the three disciplines of Archaeology, Ethnohistory, and Ethnology need to be addressed. While the cultural change and cultural mixture in the region during the early Contact period through the end of the Indian Wars makes positive identification difficult, these three approaches can work together to make the task less problematic.