2011 WAS Abstracts
Sheridan, Wyoming

Adams, Richards (Wyoming State Archaeologist’s Office) and Larry Mathews (Fremont County Chapter, WAS)

**DATING THE MATHEWS SOAPSTONE BOWL: A WAF, WAS, AND OWSA COLLABORATION**

**POSTER PAPER**

In 2010, professional and avocational archaeologists teamed up to radiocarbon date a soapstone bowl recently discovered at site 48SW17902. The date was made possible by the Wyoming Archaeological Foundation. The bowl was found at what appears to be a single component, Late Prehistoric habitation site with artifacts and features consistent with occupation by Shoshone Indians. A thick layer of charcoal-appearing residue coated some of the bowl fragments. The residue adhering to one of these fragments was dated to 160+/- BP (Beta 282441), a date which intercepts the calibrated radiocarbon curve several times between 1670 and 1800AD. This is only the third directly dated soapstone bowl in Wyoming. We propose to test the site this summer.

Stephanie L. Bartlett and Mandy M. Klein (Current Archaeological Research, Inc.)

**PREHISTORY OF THE JONAH FIELD**

**POSTER PAPER**

Fifteen years of archaeological research conducted in the Jonah Field area in Sublette County, Wyoming are summarized. Approximately 3500 archaeological sites have been recorded producing almost 450 radiocarbon dates and nearly 275 diagnostic projectile points. These sites and their data can be used to discuss the approximately 9000 years of human occupation in the area.

Stephanie L. Bartlett and Mandy M. Klein, (Current Archaeological Research, Inc.)

**EARLY ARCHAIC OCCUPATIONS OF THE JONAH FIELD**

**POSTER PAPER**

The poster summarizes the Early Archaic Period sites found in the Jonah Field in Sublette County, Wyoming over the past 15 years. From the evidence, the Jonah Field appears to have been an actively exploited region throughout the entire Early Archaic Period. These sites include many of the best preserved and earliest used living structures in the Upper Green River Basin. The chronologically oldest known human burial from Wyoming was recovered from one of these Early Archaic sites in the Jonah Field.

Berg-Mattson, Noah (University of Wyoming), Mark Clementz (University of Wyoming), Judson Finley (University of Memphis), Crystal Friese (University of Wyoming), Paul Haslehorst (University of Wyoming), Jonathan Hoffman (University of Wyoming), Marcel Kornfeld (University of Wyoming), Mary Lou Larson (University of Wyoming), Houston Martin (University of Wyoming), Tom Minckley (University of Wyoming), and David Reid (University of Wyoming)

**LAST CANYON - LOST CANYON**

Last Canyon, although almost lost to researchers due to looting, has been found to abound with a wealth of information on past peoples and environments of southern Montana and northern Wyoming and by extension to contain data on wider issues of global paleoclimate. First recorded in the 1970s, the inconspicuous shelter at the southwestern edge of the Pryor Mountains contains a record of the past extending back as much as 40,000 years. Investigations in the last several years have revealed a low intensity human occupation over the past several thousand years or more, preceded by at least 36,000 years of occupation by
various animal species that left behind bones and dung within sediment encasing other forms of paleoenvironmental data. In this presentation we report some preliminary results of our studies.

Black, Jennifer (University of Wyoming)

2010 ARCHAEOLOGICAL TESTING AT FORT SANDERS, WYOMING

Fort Sanders has recently seen pedestrian and geophysical surveying. Following this, a series of initial excavation units were opened. These included both test units over the site of the former Officer of the Guard’s House as well as cores taken in areas identified as anomalies during the geophysical survey. The methods behind the excavation and the process used to select the spots for testing will be presented along with the artifacts and materials recovered from the test units.

Brow, Gale (Central Wyoming College)

48FR6761 PROBABLE 1862 SEMINOE TRAIL GRAVE AND ADJACENT SITES

During the 2010 CWC field school, students read an Oregon-California Trails Association newsletter telling the story of two men killed by Indians on the Seminole Cutoff in 1862. They were buried above Alkali Creek by 11th Ohio Volunteer Cavalry soldiers and the grave remarked upon in several emigrant journals. One account told of a loyal dog who refused to abandon his master’s grave and apparently starved to death there. The crew decided to try to find the grave. In the process, they also recorded a number of prehistoric cairns and a vision quest circle in the vicinity.

Borges, Rachel (Central Wyoming College)

48FR6772 & 48FR6773: THE 1870S-1880S QUARTER CIRCLE 71 RANCH HEADQUARTERS COMPLEXES

The Quarter Circle 71 was founded by a wealthy Nebraska cattleman during the 1870s, then acquired by a Scottish consortium whose manager was President of the Wyoming Stock Growers Association during the range wars. Located just downstream from the Three Crossings, the original headquarters complex of barns, corrals, and cabins was built on the north side of the river. In the early 1880s, new buildings were erected on the south side. Surface evidence at these two sites suggests markedly different “levels of settlement” that does not agree with written accounts. In addition, there is considerable evidence of illegal fencing predating the small homesteaders’ fences which so enraged the cattle barons and were used as partial justification for their assaults on the small ranchers.

Cannon, Kenneth P. and Molly Boeka Cannon (USU Archeological Services, Utah State University)

LOOKING FOR A LONG-TERM RECORD IN THE GREATER YELLOWSTONE ECOSYSTEM: SOME THOUGHTS ABOUT THE STINKING SPRINGS ROCKSHELTER, TETON COUNTY, WYOMING

POSTER PAPER

In southern Teton County, Wyoming, we have located a large rockshelter at the mouth of Hoback Canyon that presents a unique opportunity to recover a long-term mammalian record documenting Quaternary paleoecological change. Hand augering in 2006 revealed evidence of intact, dateable strata likely to yield a robust mammalian faunal record. A radiocarbon age of 4210 ± 50 yrs BP was obtained from charcoal at a depth of 90 cm below surface, suggesting a record extending at least to the mid-Holocene. In 2010, the Utah State University Field School conducted limited controlled excavations in two 1m² units. Excavations produced additional evidence of stratified deposits to a depth of 1.9 m. Remains recovered include lithic debitage, hearth features, faunal remains, and a possible large
mammal processing area. Two specimens, one on Pinus charcoal from a depth of 1.9 m and a portion of a bighorn sheep mandible from 1.0 m, have been submitted for radiocarbon assay.

Copp-LaRocque, Claren (University of Wyoming)

**WAS THE SINKS CANYON LADY FREMONT?**

This paper will analyze the artifacts found with the human skeleton uncovered in Sinks Canyon during the summer of 2010 at site 48FR6810. Over 300 beads of various types were recovered from the grave, most of them a type often associated with the Fremont culture of the Great Basin. I will discuss the beads, their similarities to other sites, and possible sources or trade routes.

Elder, Bill (Central Wyoming College)

**48FR6762 – 6765: THE SODA LAKES STONE CIRCLES**

This series of sites contains small to very large stone circles on the leeward side of a large granite outcropping in the Sweetwater Rocks near Three Crossings on the Oregon Trail. Slab-lined hearths, obsidian flakes, and projectile points from the Late Archaic and Late Prehistoric periods were observed. In addition, a large quartz crystal (not from this area) set vertically in the ground was found at one site. Segments of original 1862 transcontinental telegraph wire were also recorded within this site complex which is located several miles from the telegraph route.

Hahn, Ardeth (Buffalo Field Office, BLM)

**MIDDLE FORK SITE RECORDING I, BLM BUFFALO FIELD OFFICE’S 2010 PASSPORT IN TIME (PIT) PROJECT POSTER PAPER**

Eight volunteers from five states came to Outlaw Campground to participate in the Buffalo Field Office’s first Passport in Time (PIT) project, July 11 through July 16, 2010. Volunteers contributed 320 hours to updating previously recorded sites, recording new sites, and surveying for rock art in the Middle Fork Recreation Area. Four days were spent at the Middle Fork Recreation Area on the south side of Middle Fork Canyon, and one day was spent recording on Buffalo Creek, in the southern portion of the field office. By the end of the week, this incredibly hard working group of volunteers had updated or revisited seven sites, identified and recorded two new sites, and surveyed approximately two miles of sandstone exposures for rock art. This important work will allow the BLM to determine eligibility for the National Register of Historic Places (NRHP) and establish a management plan for the important resources of this area.

Hovendick, Billy (Central Wyoming College)

**48FR2717: A POSSIBLE US ARMY CIVIL WAR-ERA “FORWARD OPERATING BASE” (FOB) NEAR SOUTH PASS**

Long-known locally as “The Chimneys,” this site consists of several stone fireplaces, foundations, and an artificially excavated spring in the foothills of the Wind River Mountains near South Pass. The site appears to have consisted of a barracks and at least two other buildings. It contained at least one Army cot before the site was first looted in the 1950s. CWC Project Directors speculate that it functioned as an outpost to house US Army wood-cutters and stock-tenders for the garrisons stationed at Burnt Ranch and/or Pacific Springs to guard the Oregon Trail during the 1860s. The author will compare this site to USMC FOBs he occupied under some similar circumstances in Afghanistan.

Jensen-Ryan, Danielle (University of Wyoming)

**NEW TECHNOLOGIES, OLD STORIES: THE CULTURAL AND ENVIRONMENTAL IMPACTS OF URANIUM EXTRACTION ACTIVITIES IN RURAL WYOMING**
Freshly coined the “uranium renaissance” by market analysts, the new decade uniquely positions Wyoming as a place ripe for prospecting, exploration, and uranium mining, both using traditional methods and the newer in-situ recovery technique. As the “uranium renaissance” commences, recalling the impacts of past uranium mining becomes important so future companies protect local communities and the environment. This paper discusses Jeffrey City, Wyoming, a place once home to 4,000 uranium workers who turned a simple ranching homestead into a full-blown, vibrant mining culture. The Gas Hills Uranium Mining District of eastern Fremont County, Wyoming is also discussed because it embodies evidence of past circulation and movement, as though the place had been devoured quickly and then spat out, with a midden of antique garbage left behind.

LaBelle, Jason (Colorado State University) -- BANQUET SPEAKER
LINDENMEIER AND ITS MANY NEIGHBORS: TOWARDS AN UNDERSTANDING OF THE PREHISTORIC USE OF THE NORTHERN COLORADO FOOTHILLS
The presentation will review the Center for Mountain and Plains Archaeology’s on-going survey and testing projects on the Belvoir, Red Mountain, and Soapstone Prairie Open Spaces, owned and managed respectively by the City of Cheyenne, Larimer County (Colorado), and City of Fort Collins. Since 2006, volunteers and archaeologists from Colorado State University have recorded nearly 300 sites and isolated finds on these properties, ranging in age from Folsom to the historic era. They have also begun testing many of these sites, including stone circle villages, open camp sites, and plant processing locales. The results of this work will be outlined in the presentation, including discussion and comparison between the lithic technology and spatial characteristics of the Lindenmeier Folsom site and several Plains Woodland camp sites.

McFaul, Michael (Laramie Soil Services, Inc.)
GEOARCHAEOLOGICAL INVESTIGATIONS IN NORTHEAST WYOMING AND SOUTHEAST MONTANA: IMPLICATIONS REGARDING THE ACCURACY OF 1) LEOPOLD AND MILLER (1954) LANDSCAPE MODEL AND 2) NRCS BASED GIS GEOARCHAEOLOGICAL MODELING
POSTER PAPER
Positions of radiocarbon-dated materials show the highest elevation terrace Kaycee terrace dates >43,500 BP and contains a ~10,000 BP polygenetic paleosol, the intermediate elevation Moorcroft terrace dates >5800 BP to <2940 BP, and the lowest elevation Lightning terrace dates >810 BP to <360 BP. The >5800 BP age for the Moorcroft and >810 BP is older than previously thought. A newly recognized forth landform is also present; an alluvial fan that began to accumulate along valley margins after 4550 BP and continued through 820 BP. The Kaycee terrace is both a strath and a fill terrace whose alluvial fills are not as ubiquitous as Leopold and Miller (1954) imply. Thus, the Kaycee terrace’s potential to yield buried cultural materials cannot be judged solely by its aerial extent. NRCS mapping failed to recognize the three terraces of Leopold and Miller or shallow buried paleosols on either the Kaycee or Moorcroft terraces.

Munson, Gene (GCM Services, Inc.)
PIT DWELLINGS IN THE EASTERN POWDER RIVER BASIN
Three sites with pits that contain Middle Plains Archaic Period hearths and artifacts have been excavated in a four by six mile area in southern Campbell County. Whether the pits were dug by hand or represent utilization of natural depressions for house pits is open to debate. Regardless, there was a desire for partial subterranean dwellings around 4000 years ago in the eastern Powder River Basin.
Ostahowski, Brian (University of Wyoming)

**THE PREHISTORY OF RICE CAVE: SALVAGING INSIGHT THROUGH AN ANALYSIS OF FAUNAL REMAINS**

Rice Cave (48WA363) is situated within the western foothills of Bighorn Mountains on the periphery of the well known Medicine Lodge Creek site. Upon finding the cave’s opening, local rancher Gary Rice discovered the cave had been heavily disturbed by looters. As peripheral sites such as rockshelters and caves were excavated to enhance the data at Medicine Lodge Creek, Rice Cave was excavated in August 1976 to salvage prehistoric remains. An analysis of the recovered faunal remains conducted in 2010 indicate that considerable insight can be gained about how prehistoric peoples used Rice Cave and what resources were available for them throughout the Paleoindian, Archaic and Late Prehistoric periods.

Pierce, Greg (University of Wyoming)

**THE 21ST CENTURY STATUS OF WYOMING’S 19TH CENTURY TRADING POSTS**

There were 29 trading posts operating in Wyoming between 1832 and 1865. The early trading posts were integrally involved in the initial exploration of the region and in establishment of social and economic ties with local native tribes during the fur trade years. Later trading posts provide for the initial settlement of the West in providing necessary goods and services to passing emigrants. Through the 1850s into the 1860s, the trading posts were involved in Native American unrest serving as the provider of arms, location of treaty negotiations, and the focus of native depredations. These sites have the potential to yield valuable information relating to the earliest exploration and settlement of Wyoming because of his involvement in these historically important events. Unfortunately, of these 29 posts, only 12 have seen serious archaeological investigations. Every investigation has yielded data providing information on early trading activity in the state, and in some cases excavations have aided in post reconstruction and site interpretation. The remaining 17 posts have seen no work, and many are threatened by agricultural, mineral, and urban development. This presentation will discuss the sites and their significance, look at the types of investigations conducted and information gained. The talk will end with a discussion on options for future work for maximizing data recovery and preservation of these threatened sites.

Reynolds, Crystal (Central Wyoming College)

**48FR1270: PACIFIC SPRINGS STATION**

Pacific Springs was the first water Oregon Trail emigrants encountered on the Pacific side of the Continental Divide and the site was a major landmark on the Oregon-California Trail. Countless draft animals perished in the dangerous bogs. In 1853, famous Mormon “Avenging Angel,” “Wild Bill” Hickman, opened the first trading post here -- in a tent. The first substantial station was probably erected in 1859 to house traders and stage line personnel, then Pony Express employees, the transcontinental telegraph, a US Army garrison, and others. The site continued to function as a way station and trading post until 1917, since which time it has been used as a summer cow camp. The site contains standing structures, numerous foundations and depressions, a vast trash scatter, remnants of a causeway across the bog, and other evidence of human activity.

Sitters, Julian Andrew (University of Wyoming)

**THE MUDDY CREEK ARCHAEOLOGICAL COMPLEX**

The Muddy Creek Archaeological Complex is a Late Plains Archaic bison kill, processing, and residential area composed of three sites (48CR324, 48CR325, and 48CR1737) located along Muddy Creek in the northern foothills of the Shirley Mountains, Carbon County, Wyoming. The complex reflects the presence of a sophisticated bison hunting economy and, with the presence
of diagnostic projectile points, identifies the site as belonging to the Besant Cultural Complex. The abundance of diagnostic Besant projectile points and two radiocarbon samples date the complex to ~1720 + 110 B.P. The Besant culture is prevalent on the Northern Plains extending from southern Canada south into Wyoming and adjacent states. The Muddy Creek Archaeological Complex is one of the southernmost Besant sites currently known to exist, but more importantly, the complex exhibits all identifying features of the Besant Cultural Complex, which include a bison drive lane, bison pound, religious feature associated with the bison pounding operations, and a habitation area consisting of numerous tipi rings. I will review the Besant culture and the association of Besant with the Muddy Creek Archaeological Complex to provide support for the significance of the complex at a statewide and national level.

Squarcia, Cynthia M. (University of Wyoming)

WHAT WAS GOING ON AT THE FORT LARAMIE 1866 INFANTRY BARRACKS IN 1890?
Archaeological investigations at the Fort Laramie 1866-1890 Two-Company Barracks in 2009 and 2010 ended with more questions than answers, chief being what was happening inside the barracks in 1890 as the fort was being decommissioned. The adobe structure lost its roof and floor in 1893 and by 1898, the adobe clay began sealing the archaeological record. Artifacts dating from throughout the 24 year occupation of the building were recovered, but most appear to have been lying on the floor when the structure was abandoned, including over 50 shoes and boots recovered from only 10 square meters. The variety of recovered artifacts suggests the structure was used as more than a barracks when occupied by the last soldiers stationed at Fort Laramie.

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

NEW DEAL AND RIVER BASIN SURVEY ARCHAEOLOGY AT FORT LARAMIE NATIONAL HISTORIC SITE
POSTER PAPER
Fort Laramie National Monument was established in 1938. That same year, the first archaeological investigations began before restoration of the building started by a CCC group from Camp Guernsey, Wyoming. Since then, River Basin Surveys, National Park Service, University of Wyoming and Wyoming State Archaeologist’s Office have continued the work. The early projects (CCC and RBS) will be presented, with a short review of the future at Fort Laramie.

Wheeler, Joe (University of Wyoming)

FORT SANDERS: “ALL THE RICH...LANDS ALONG THE CREEK”
Fort Sanders (1866-1882), just south of present day Laramie, Wyoming was established as an Indian fighting post during the First Sioux Wars. The guard house was listed on the National Register of Historic Places in 1980. But other than a 1995 contract to monitor a water line installation, no archaeology had been conducted on the constructed portion of the post. Years of pot hunting and commercial development led most Laramie residents to believe little of interest remained of the site. Beginning in the fall of 2009 and continuing until November of 2011, archival, GIS, and geophysical research, followed by initial excavations, determined much more of this historic site remains than had been previously thought. This presentation provides a brief history of the site and the results of recent archaeological research.
David Wolfe and Mike Frankus, (Current Archaeological Research, Inc.)

SOURCING RESULTS FOR 408 OBSIDIAN ARTIFACTS FROM SOUTHWESTERN WYOMING

POSTER PAPER
The poster summarizes analyses of 408 sourced obsidian artifacts from Southwest Wyoming, primarily from the Jonah Field. Patterns have emerged indicating different source preferences during the prehistoric period. Trade pattern shifts are apparent in the data through time. Possible implications for changing cultural groups using or trading into the area are presented.