2005 Abstracts
Rawlins, Wyoming

Adams, Richard (Wyoming State Archaeologist's Office)
ACROSS THE GREAT DIVIDE: THE TRANS-CONTINENTAL DIVIDE ARCHAEOLOGICAL TRANSECT
Thanks to the legs (and lungs) of Wyoming Archaeological Society volunteers, a better picture of aboriginal use of the Wind River mountains is emerging. With support from the Bridger-Teton and Shoshone National Forests, WAS volunteers and I completed an archaeological survey transect across the Continental Divide from the Green River to the Wind River last summer. Images from that trip and others illustrate prehistoric use of the mountains every bit as intense as use of the basins. Of particular interest are soapstone quarries at elevations in excess of 11,000 feet above sea level. Distributions of chronologically diagnostic artifacts provide information on the nature and timing of high altitude use. Prehistoric people were spending months at a time at high altitudes, yet Wyoming archaeologists are just starting to conduct systematic work in mountainous wilderness areas.

Anderson, Derek T., Mary Prasciunas, Marcel Kornfeld, Norbert Wasilik, Crystal R. Meyer, George C. Frison (University of Wyoming), and C. Vance Haynes, Jr. (University of Arizona)
RETURN TO AGATE BASIN
Since publication of the Agate Basin monograph over 20 years ago, the University of Wyoming has spent two field seasons reinvestigating, testing, and surveying additional areas of the Moss Agate Arroyo. Year 2000 fieldwork focused on obtaining stratigraphic and paleoenvironmental data from Area 3 (the Brewster Site), testing at Area 5 and backhoe trenching between Areas 2 and 3. Investigations in 2004 focused on test excavations at Area 9 (Sheaman Site), recovering bone from the 1940's backdirt at Area 1, auger testing at Area 6 to clarify site geomorphology, and re-exposing bone beds discovered in the Area 2/3 trench. It is apparent significant Paleoindian archaeological deposits remain in Moss Agate Arroyo. This paper presents preliminary results of the recent investigations.

Craig R. Arnold
A MODEL OF CLOVIS AND FOLSOM MOBILITY AND SUBSISTENCE STRATEGIES BASED ON SETTLEMENT PATTERNS AND FAUNAL UTILIZATION
Many archaeologists still conceive High Plains Paleoindians as relying upon a subsistence strategy based exclusively on big game hunting. Through examining small Clovis and Folsom kill/camp/processing sites, this paper presents a Paleoindian model proposing residential mobility combined with logistical collector type subsistence strategies relying upon a wider diet breadth. By exploring faunal assemblages, carcass utilization, and storage strategies, inferences may be proposed regarding Paleoindian behaviors that take into consideration seasonality, environmental conditions, dietary requirements and resource availability. An assessment of advantages and risks inherent in food storage strategies becomes apparent by incorporating an experimental archaeological meat drying study and ethnographic studies. Both sources demonstrate the feasibility, quickness, and viability of air-dried food caches in Paleoindian mobility and subsistence strategies.

Bach, Daniel R., (High Plains Macrobotanical Services, Laramie, Wyoming)
MACROFLORAL AND LIMITED GEOMORPHOLOGICAL ANALYSIS OF 750 PREHISTORIC HEARTHS FROM SOUTHWESTERN WYOMING
This paper will provide a summary of data from analysis of 750 prehistoric hearths from southwestern Wyoming. Macrofloral topics will include quantifying and qualifying charcoal preservation, how charcoal degrades with time, and analysis of subsistence remains, both faunal and floral. Geomorphological analysis will include interpreting soil texture of fill from 300+ hearths, analyzing soil particle size and hearth shape, examining why recording soluble iron content might be important and importance of retaining a small amount of feature fill for future analysis. Other topics discussed include root and insect disturbances and sampling strategies for hearths, the pros and cons of bulk sampling versus fine grain sampling.

Becker, Rory J. (University of Wyoming)
THE ARCHAEOLOGY OF INSANITY: A LOOK AT THE ARCHAEOLOGICAL POTENTIAL OF A 19TH CENTURY INSITUTION
The Colony Farm Orchard and Asylum Lake properties, currently owned by Western Michigan University in Kalamazoo, were once parts of the Kalamazoo State Mental Hospital's working farm known as the Colony Farm. The State Mental Hospital in Kalamazoo was the first of its kind in the State of Michigan and their successful operations on the Colony Farm was an early effort to use work activities as a therapeutic treatment. This paper details results of historical background research into the operation and identifies the archaeological potential of this property that resulted from progressive views of late 19th century health reform.

Beers James D. (University of Wyoming)
AN ARCHAEOLOGICAL ﷺPEARMINTﷺ: REFRESHING USEWEAR EXPERIMENTAL FOUNDATIONS FOR A USEWEAR EXPERIMENT, PRESENTING THE GOOD AND BAD BREATH OF THE RESULTS, AND EXPLORING SOME POSSIBLE APPLICATIONS
The history of comparative analogy in stone tool usewear analysis spans nearly 170 years, but essential and scientifically sound comparative utilization experiments are a relatively young and often underemployed method in usewear study. Only after the mid-1960s has it been widely agreed an experimental approach is the "only relatively secure manner" from which hypotheses regarding stone tool utilization can be tested. Considering the underlying reasons of the agreed need for experiments and following criticisms and suggestions by researchers, the process and results of present utilization experiment are examined for successes, failures, and improvements. Lastly, after comparing experimental results with Clovis informal tools from the Gault site, Texas, possible applications are explored for developing potential hypotheses and questions regarding general Clovis behavior.

Boles, Dulce (University of Wyoming)
PRELIMINARY REPORT ON AN ELECTRICAL CONDUCTIVITY, MAGNETIC SUSCEPTIBILITY AND GROUND PENETRATING RADAR SURVEY OF THE FORT LARAMIE, WY CEMETERIES
Since 2002, the University of Wyoming has been conducting a geophysical archaeological survey of Fort Laramie National Historic Site. An area of concentration for this study has been the two cemeteries, in use from 1834-1867 and 1867-extant. The 2004 field season study of these cemeteries centered on an electrical conductivity and magnetic susceptibility (EM38B) survey, with data collected at quarter meter intervals, and a ground-penetrating radar (GPR) survey.

Preliminary analyses of the data suggest this survey technique is highly effective in identification of grave shafts in studies of historic cemeteries. Preliminary ground truthing and other excavation data show the distinctive anomalies identified with both instruments can be correlated and identified asgrave shafts.

Drucker J.D. (Sam) RPA or David Vlcek (Bureau of Land Management, Pinedale)
WARDELL REVISITED OR BONES AND WATER DON&#65533;T MIX
During summer and fall of 2004, two erosional episodes caused by flash floods were recorded at the Wardell Buffalo Trap (48SU301). A field inspection noted flooded colluvial soils and deposited tabular sandstone bedrock slabs across the site area over a 200x150 meter area. Severe downcutting of the drainage channel below the Wardell Kill Area protective fence exposed several zones of bison bone, including scapulae, vertebrate, rib bones and two crania. This area has been downcut at least two feet during this flooding episode in 2004. The BLM has received funding to begin a stabilization project and will present the proposed project methodology and effects of 2004 flood episodes.

Greer, Mavis and John Greer (Greer Consulting, Casper)
CONSERVING WYOMING ROCK ART THROUGH RECORDING
Recording is the best means of conserving rock art information, and methods must be adjusted by site or project. The kind of recording depends on site characteristics, available personnel, time, and budget as well as research design. Recording methodology and results should not be standardized for all sites and projects because development, utilization, and testing of new recording and analysis methods leads to continual innovation in rock art research. Resulting information from all levels of recording and all site visits should be filed with the SHPO in a timely manner. This is crucial for preservation of research and management information forming a complete database of field and laboratory observations, history of site visits, monitoring of changing contents and conditions, and published and available articles, reports, papers, personal notes, and photographs.

Kornfeld, Marcel (University of Wyoming)
EVERY SITE AN ISOLATE, EVERY ISOLATE A SITE! AND WHAT IS ARCHAEOLOGICALLY SIGNIFICANT?
For over a century, western North American and Rocky Mountain prehistory was built on megasites, the isolated occurrences of densely packed archaeological remains. Such sites come in a variety of forms; the most familiar ones being bison bone beds, stone circles, rock images, and hearths. In other world regions, similar sites dominated the writing of prehistory. This has led to a myopic view of prehistoric inhabitants and has left much of prehistory unwritten, unknown, and unknowable with traditional archaeological methods. A more holistic approach began approximately 30 years ago, when, for a variety of reasons, many archaeologists simultaneously realized the archeological record is more complex. I discuss some changes in doing and thinking archeology outside of megasites.

Meyer, Crystal (University of Wyoming)
PALEOINDIAN FAUNAL STUDIES: THE IMPORTANCE OF EXCAVATIONS AT THE AGATE BASIN SITE AREA 1
Bison remains from the Agate Basin Component at Area I of the Agate Basin Site have the potential to provide a wealth of information about Paleoindian subsistence. While this specific

assemblage is found in a backdirt context, lack of provenience does not hinder application of several zooarchaeological analyses to the collection. This preliminary study draws from a series of methodologies that can be applied to such data, regardless of the lack of specimen provenience information. Future excavations should provide an adequate sample by which a better understanding of the Agate Basin Area 1 bonebed can be achieved.

Victoria Rose (University of Wyoming)
SUBTERRANEAN FEATURES, THE WYOMING HOUSEPITS, AND MOBILITY PATTERNS: PIT OVENS OR STORAGE PITS?
One aspect of research on Wyoming prehistoric housepits is the issue of residential mobility, subsistence strategies, and storage. Presence or absence of storage is seen as an indicator of mobility and subsistence strategies. Possible storage pits have been identified in Wyoming housepit sites, however, not all researchers agree such pit features were used for storage. An alternative explanation is the pit features functioned primarily as pit ovens. This paper considers evidence available to differentiate archaeologically described pits into food storage pits and pit ovens.

Schroeder, Bryon (University of Wyoming)
TEMPORAL ANALYSIS OF "DEFENSIVE" SITES IN WYOMING
The objective of this research is to define the term "defensive" as it applies to archaeological sites in Wyoming and to determine associations between time period and sites designated as "defensive." Data on previously recorded sites located in topographic situations suggestive of defensive measures (butte tops, hilltops, upper scarp woodlands, and other areas providing a vantage point or are largely inaccessible) are included in the sample. Other sites included are those determined to be defendable with the aid of structural components and features (walls, dry moats, or palisades). If dates of Wyoming's defensive sites correlate with known periods of conflict in the American Southwest and Great Plains regions, large scale models for cultural characteristics that precede, or are associated with, pre-contact warfare can be developed.
Wasilik, Norbert (University of Wyoming)

EARLY PALEOINDIANS IN THE ROCKY MOUNTAINS: A 10,400 YEAR OLD CULTURAL COMPONENT FROM THE HELEN LOOKINGBILL SITE (48FR308), WYOMING
Helen Lookingbill is a multicomponent site located in the Washakie Range of the Absaroka Mountains in northwestern Wyoming. The earliest occupation period at the site was dated to approximately 10,400 years ago and is mostly represented by two thousand core and biface reduction flakes recovered from a 2 by 2 meter unit. No chronologically diagnostic artifacts have been identified in situ in these units, however, several Haskett or Hell Gap projectile points were recovered from the same geologic stratum elsewhere on the site. Currently the chipped stone material is being analyzed to increase understanding of site integrity, activity structures, production processes, and the cultural affiliation of this component. Research approach and preliminary analysis results will be presented.

Wedel, Dale L., Mark E. Miller and Danny N. Walker (Wyoming State Archaeologist's Office)
AN OVERVIEW OF THE HISTORY AND ARCHAEOLOGY OF FORT FRED STEELE STATE HISTORIC SITE, CARBON COUNTY, WYOMING

Fort Fred Steele State Historic Site is located in Carbon County, Wyoming, where the Union Pacific Railroad crosses the North Platte River. The military fort was initially established in June 1868 to provide protection for the Union Pacific Railroad construction across south-central Wyoming. Besides military activities, Fort Steele played a vital role in the history of transportation and communication, livestock and timber industries, and regional economic development in Wyoming. Beginning in 1979, the Office of the Wyoming State Archaeologist has conducted archaeological investigations at this important Wyoming historic site. This paper presents a brief overview of the history of the site and a summary of 25 years of archaeological investigations.