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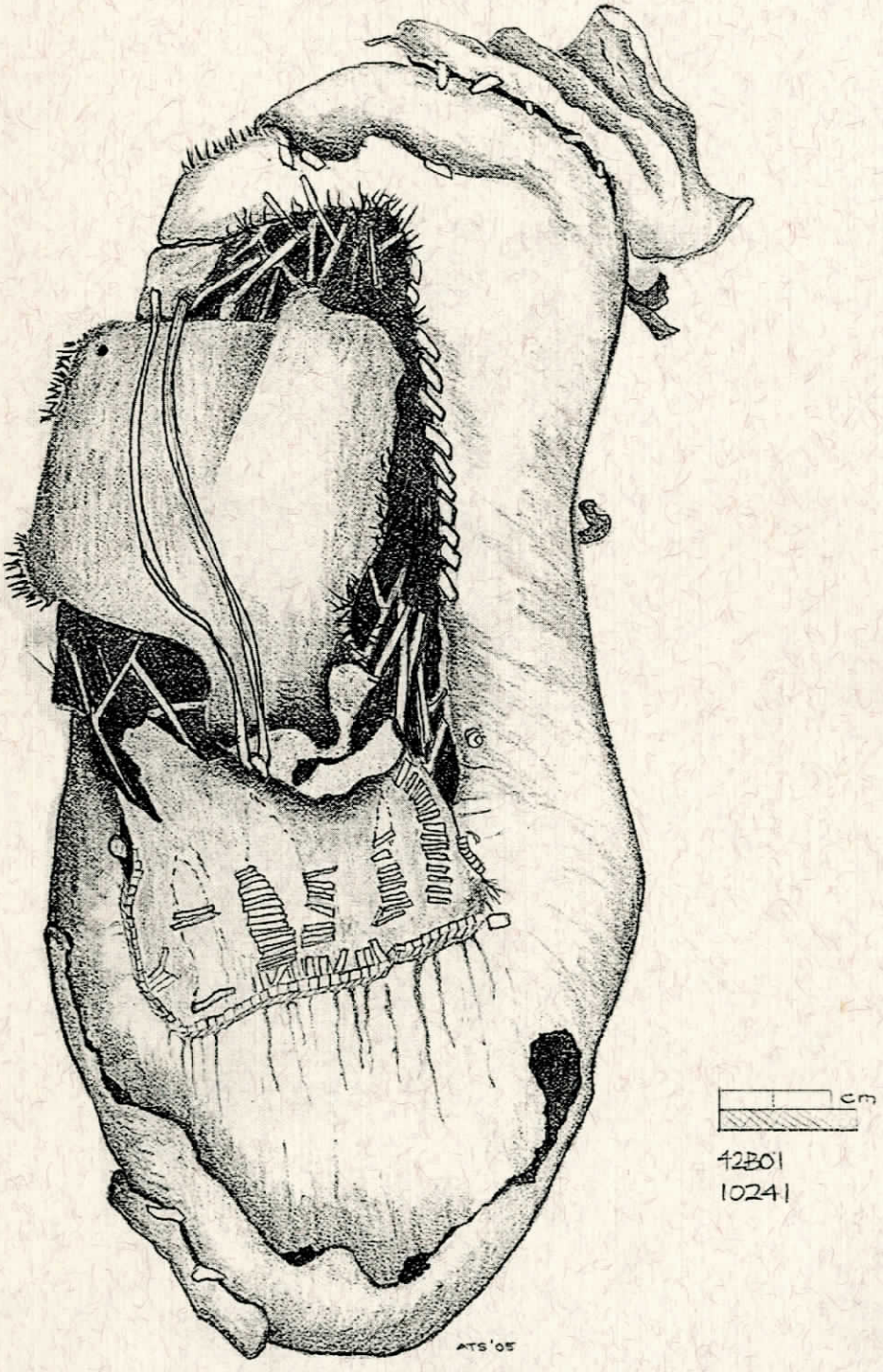
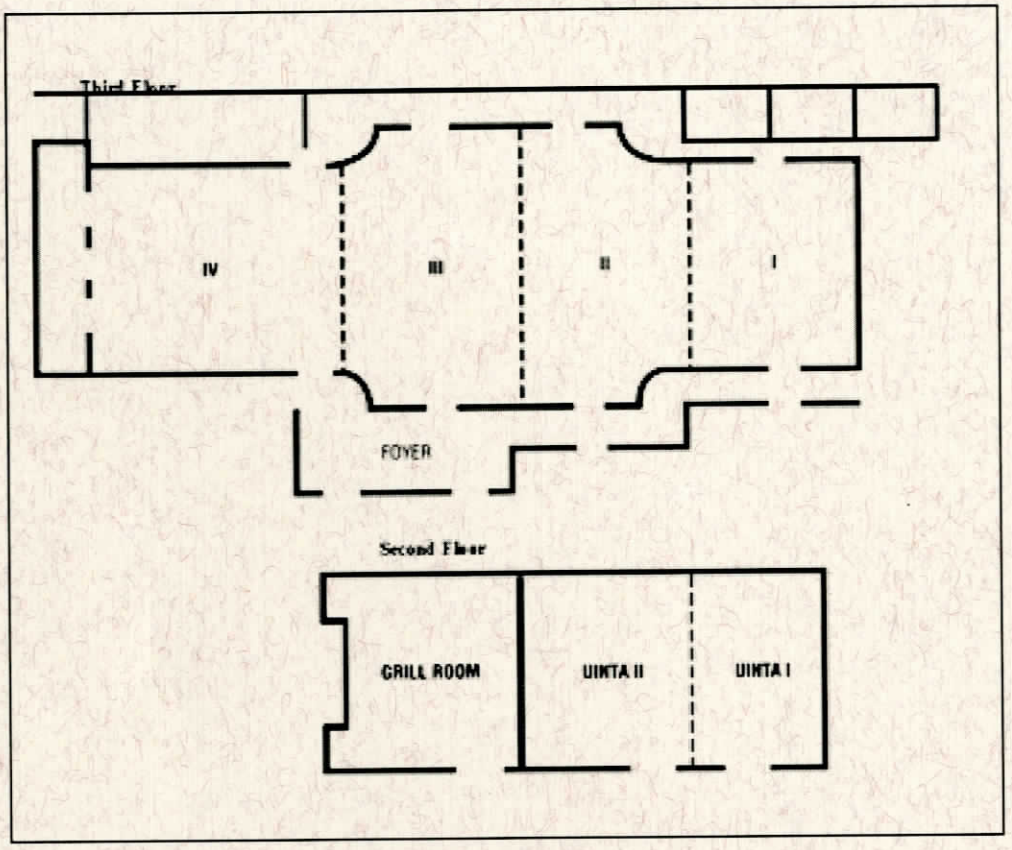
7th Biennial
Rocky Mountain Anthropological Conference

September 15 - 17, 2005
Park City, Utah

Program and Abstracts



Park City Marriott Floor Plan



All of the sessions and symposia will be off the Foyer in Ballrooms I, II, III, IV or in a combination of rooms.

The Thursday evening social, the Friday evening party, and the Saturday evening banquet will be held in the outdoor tent off the lobby.

The bar and restaurant are on the main floor off the lobby.

Registration and vendors are located in the Foyer.

7th Biennial
Rocky Mountain Anthropological Conference

September 15 - 17, 2005
Park City, Utah

Conference Organizers

Craig Smith, *TRC Mariah Associates, Salt Lake City, Utah*
Bonnie Pitblado, *Utah State University, Logan, Utah*
Lynn Harrell, *Kemmerer Wyoming Resource Area, BLM, Kemmerer, Wyoming*
Ronald J. Rood, *Antiquities Section, Utah Division of State History, Salt Lake City, Utah*

Special Assistant to the Organizers

Scott McKern, *Current Archaeological Research*

Sponsors

TRC Mariah Associates, Salt Lake City
Utah State University Department of Anthropology & Museum of Anthropology, Logan
Bureau of Land Management, Kemmerer
Utah Division of State History, Salt Lake City

Cover Art

Anne Sager, Utah Museum of Natural History
Moccasin from 42BO1, Cave 1, Promontory Point

Conference Venue

Park City Marriott Hotel, *Park City, Utah*

Volunteers

Many thanks to anthropology student volunteers from Utah State University and the University of Northern Colorado, who helped run the show!

7th Biennial
Rocky Mountain Anthropological Conference

The 7th RMAC organizers gratefully acknowledge the following donors to our cause:

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Vendors

Center for Mountain Archeology
University Press of Colorado
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RMAC Locations & Years

1st	Jackson Hole, WY	1993
2nd	Steamboat Springs, CO	1995
3rd	Bozeman, MT	1997
4th	Glenwood Springs, CO	1999
5th	Waterton Lakes, Alberta	2001
6th	Estes Park, CO	2003
7th	Park City, UT	2005

SUMMARY SCHEDULE

THURSDAY EVENING

Registration: 5:00 – 9:00 BALLROOM FOYER

Reception: **Welcome Social and Cash Bar**
7:00 – 10:00 TENT

FRIDAY MORNING

Registration: 7:00 – 12:00 BALLROOM FOYER

Plenary: 8:00 – 12:00 BALLROOM III AND IV COMBINED
Plenary Chair: **Thomas Carr**

FRIDAY LUNCH

Plenary Lunch: 12:00 – 1:30 TENT (Free to registered conference attendees)

FRIDAY AFTERNOON

Registration: 12:00 – 5:00 BALLROOM FOYER

Workshop: **Lichenometry for Archaeologists: A Short Course**
1:45 – 3:15 BALLROOM IV
Organizer: **James Benedict**

Forum: **Understanding Climate to Understand Culture**
3:15 – 5:15 BALLROOM IV
Organizers: **Linda Scott Cummings** and **R. A. Varney**

Symposium 1: **Historic Archaeology & Ethnohistory in the Rocky Mountains**
1:45 – 4:45 BALLROOM III
Organizer: **Jenni Prince Mahoney**

FRIDAY EVENING

Party: **Live Music Featuring "The Lab Dogs and Friends" and Cash Bar**
7:00 – 11:00 p.m. (Music at 8:00) TENT

SATURDAY MORNING

Registration: 7:30 – 12:00 BALLROOM FOYER

SATURDAY MORNING, cont.

Symposium 2: **So High, So Early: Advances in Rocky Mountain Paleoindian Archaeology**
8:00 – 12:00 GRAND BALLROOM IV
Organizers: **Bonnie Pitblado** and **Robert H. Brunswig**

Symposium 3: **Innovative Approaches To Upper Elevation Research: Examples From The Uinta Mountains**
8:00-12:00 GRAND BALLROOM II
Organizer: **Byron Loosle**

General Session 1: **Anthropology and Archaeology of the Mountains**
GRAND BALLROOM III
Session Chair: **Elizabeth Burghard**

General Poster Session 1: 8:00 – 12:00 GRAND BALLROOM 1

SATURDAY AFTERNOON

Registration: 12:00 – 5:00 BALLROOM FOYER

Symposium 4: **Geoarchaeological and Paleoenvironmental Investigations in the Rocky Mountain Region**
1:00 – 6:00 GRAND BALLROOM IV
Organizers: **William Eckerle** and **John Albanese**

Symposium 5: **Geographic, Chronological and Cultural Transitions in the Archaeology of Western Wyoming**
1:00 – 4:00 GRAND BALLROOM II
Organizer: **David Vlcek**

General Session 2: **Fremont Archaeology and Such**
1:00 – 4:00 GRAND BALLROOM III
Session Chair: **Ronald J. Rood**

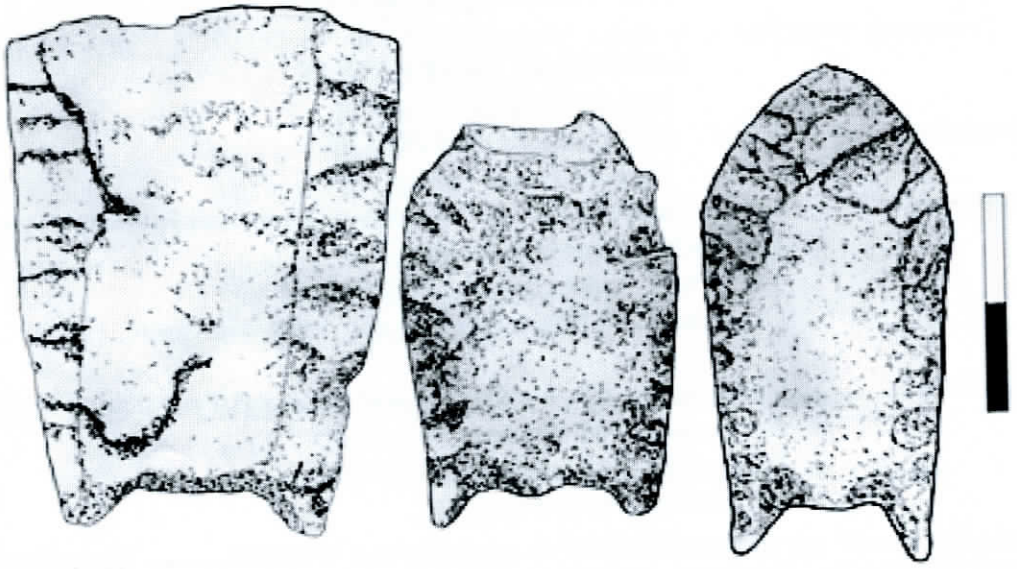
Poster Symposium 1: **Recent Archaeological Investigations in the Gunnison Basin, Colorado**
1:00 – 5:00 GRAND BALLROOM I
Organizer: **Brian Andrews**

General Poster Session 2: 1:00 – 5:00 GRAND BALLROOM I

SATURDAY EVENING

Business Meeting: **Rocky Mountain Conference Business Meeting**
5:30 – 6:30 GRAND BALLROOM 1

Banquet: **WESTERN HOE-DOWN BARBEQUE**
7:00 TENT
KEYNOTE SPEAKER: **Dr. Mark Aldenderfer, University of Arizona:** "Prehistoric Hunter-Gatherers of the Andes and Himalayas"



Folsom Points from the Mountaineer Site, Gunnison, Colorado

FRIDAY MORNING

PLENARY SESSION

Rocky Mountain Anthropology Continues to Look Up
Plenary Organizers: **Lynn Harrell, Bonnie Pitblado, Ron Rood & Craig Smith**
Plenary Chair: **Thomas Carr**

The first Rocky Mountain Anthropological Conference convened in Jackson Hole in September 1993. The abstract for the plenary session for that ground-breaking meeting began: "In the past decade, there has been a dramatic increase in research focused on high altitude occupations in the mountains of western North America." Now as we embark upon our seventh biennial Rocky Mountain Anthropological Conference, that statement is perhaps even more true than it was in 1993. This year's plenary session will feature speakers whose recent work has advanced the field of Rocky Mountain anthropology beyond where it stood at our inaugural conference, or has been advanced by those conducting research in the Rockies. As in the first plenary session, contributors will "reflect on their past work, review its implication, and suggest directions for future research" that will make the *next* dozen years of high altitude work as fruitful as the last.

8:00 – 12:00 BALLROOM III AND IV COMBINED

8:00 – 8:20 Carr, Thomas
From Mountain Men to Mountain Women: The History of Paleoindian/Archaic Archaeology in the Rocky Mountains

8:20 – 8:40 Varney, R.A. and **Linda Scott Cummings**
Rocky Mountain Skies: Climate Models for the Cordillera

8:40 – 9:00 Reeves, Brian O.K.
Mistakis (The Rocky Mountains) Considered

9:00 –9:20 Husted, Wilfred M.
There He Goes Again: Continuing Impediments to the Interpretation and Understanding of Rocky Mountain Prehistory

9:20 – 9:40 Cannon, Kenneth P.
Archeology in the Greater Yellowstone Ecosystem: The Role of the Midwest Archaeological Center

9:40 – 10:00 Kornfeld, Marcel
Caves, Rockshelters, and Prehistory in the Rocky Mountains

10:00 – 10:20 BREAK

10:20 – 10:40 Larson, Mary Lou
The Many Dimensions of GIS, GPS, and Remote Sensing in Rocky Mountain Archaeology

10:40 – 11:00 Loosle, Byron
Mosquitoes, Lightning, Hail and Brookies – 14 years of Archaeological Research in the Uinta Mountains of Northeastern Utah

11:00 – 11:20 Janetski, Joel C.
Resource Intensification in the Eastern Great Basin: Archaeological Research at Fish Lake, Utah

11:20 – 11:40 Metcalf, Michael
A Retrospective of Tumbling Time in the Rocky Mountains: Are We Missing Something Here?

11:40 – 12:00 Jodry, Pegi
Recent Research in the Northern Rio Grande Valley

Plenary Lunch 12:00 - 1:30 (Free To Registered Conference Attendees) TENT

FRIDAY AFTERNOON

Workshop: **Lichenometry for Archaeologists: A Short Course**
1:45 – 3:15 BALLROOM IV
Organizer: **James Benedict**

Lichenometry (a dating method based on the growth of crustose lichens) can provide close minimum ages for prehistoric rock structures at high altitude in the Rocky Mountains. In this introductory course I discuss (a) the history of the method, (b) the choice of appropriate species, (c) identification techniques, (d) the ecology of the most useful group, the yellow rhizocarpons, (e) growth-rate determination, and (f) archeological applications. Lichenometry will be most successful on non-calcareous substrata in exposed, winter-snowfree environments above treeline. Here (a) crustose lichens grow very slowly, reaching ages in excess of 7500 years, (b) there are no wildfires to reset the lichenometric clock, (c) fast-growing foliose lichens do not compete aggressively, and (d) snowkill is not an important factor. Lichenometric methods can be used to date structures as old as the Middle Holocene in such environments. A close correlation between human population declines and lichen-snowkill episodes in the Indian Peaks Wilderness Area suggests that lichenometry can also provide useful paleo-environmental information.

Forum: Understanding Climate to Understand Culture

3:15 – 5:15 BALLROOM IV

Organizers/Moderators: **Linda Scott Cummings** and **R. A. Varney**

This forum builds on the archaeoclimatic model presentation from the Plenary Session and provides an opportunity for open discussion of climatic conditions and culture. We will run the archaeoclimatic model animation repeatedly for the benefit of our discussion. Bring your open mind and come prepared to discuss, with a room full of people, what was happening in and around the Rocky Mountains throughout the entire period of human occupation. Where and at what times are conditions modeled to have been favorable? Where unfavorable? How do the models contribute to our understanding of population movement and peopling of various areas? What new interpretations come to mind using this tool? How are animals and the plant communities affected? Instead of having formal presenters, this forum is designed to generate a dialog concerning cultures of the Rocky Mountains. We have invited various people to come prepared to discuss their research areas not as presenters or formal discussants, but rather as participants. We invite you all to a creative, working session, not a series of presentations.

Symposium 1: Historic Archaeology & Ethnohistory in the Rocky Mountains

1:45 – 4:45 BALLROOM III

Organizer: Jenni Prince Mahoney

1:45 – 2:05 **Merritt, Christopher W.,** and **Timothy James Scarlett**
An Update from the Utah Pottery Project: Excavations at Frederick Petersen's Salt Lake City Pottery and Expanding our Understanding of Consumption.

2:05 – 2:25 Mullins, Daniel C.
Linear Historic Sites and the National Register: An Overview and Proposed Methodology

2:25 – 2:45 Vlcek, Dave,
The Lander Trail, Then and Now

2:45 – 3:05 Larson, Thomas K. and **Dori Penny**
Remote Sensing Techniques Utilized on Historic Trail Studies in Western Wyoming

3:05 – 3:25 Bassett, Everett
Mine-related Resources in the Park City Mining District

3:25 – 3:45 Baxter, Jon and **Dale Gourley**
Excavations of a Pioneer Cemetery at Coalville, Utah

3:45 – 4:05 Brunswig, Robert H.
Modeling Native American Sacred-Mundane Landscapes: Hypothetical Frames of Reference from Ethnoarcheological Studies in North Central Colorado's Rocky Mountains

4:05 – 4:25 Merriman, Chris, Caroline Gabe and **Bonnie Pitblado**
The Historic Component of the Capitol City Moraine Site (5HN510)

4:25 – 4:45 Baker, Steven G.
Ethnographic Evidence for a Di-Hybrid Origin of Aboriginal Inhabitants of the Western U.S.: A Missive to Modern Anthropology from 17th and 18th Century Spanish and French Observers

FRIDAY EVENING

ROCKY MOUNTAIN ANTHROPOLOGICAL CONFERENCE PARTY

Featuring
THE LAB DOGS AND FRIENDS
7:00 – 11:00 (Music at 8:00) Cash Bar TENT

SATURDAY MORNING

Symposium 2: So High, So Early: Advances in Rocky Mountain Paleoindian Archaeology
8:00 – 12:00 GRAND BALLROOM IV
Organizers: **Bonnie Pitblado** and **Robert H. Brunswig**

8:00 – 8:20 Cummings, Linda Scott, and **R.A. Varney**
Pollen and Climate: Comparison of Stratigraphic Pollen Records and Archaeoclimatic Models

8:20 – 8:40 Doerner, James and **Robert H. Brunswig**
Late Pleistocene-Early Holocene Paleoclimate and Archaeology of a High Altitude Mountain Pass in Rocky Mountain National Park, Colorado

8:40 – 9:00 Pitblado, Bonnie L. and **Carol M. Dehler**
Sourcing Paleoindian Quartzite from the Chance Gulch Site, Gunnison Basin, Colorado

9:00 – 9:20 Andrews, Brian
Hunter-Gatherer Adaptation in Mountainous Terrain: The Mountaineer Site and Folsom Archaeology in the Upper Gunnison Basin, Colorado

9:20 – 9:40 Prasciunas, Mary M.
Results of Archaeological Testing at the Black Dumps Site (5CF1573), Chaffee County, Colorado

9:40 – 10:00 DellaSalla, Joanne
The Paleoindian Occupations of South Park, Colorado

10:00 – 10:20 Waguespack, Nicole, Todd Surovell and **John Laughlin**
The Organization and Use of Hearth Space at a Folsom Residential Site, Barger Gulch Locality B, Middle Park, Colorado

10:20 – 10:40 Craven, Cynthia D. and **William Eckerle**
The Battle Spring Draw Paleoindian Site, Sweetwater County, Wyoming

10:40 – 11:00 Wasilik, Norbert
Early Paleoindians in the Rocky Mountains: A 10,400 Year Old Cultural Component from the Helen Lookingbill Site (48FR308), Wyoming

11:00 – 11:20 Vivian, Brian C.
Identifying a Cody Component at the Malin Fishing Hole Site (24YE353) in Yellowstone National Park

11:20 – 11:40 Reeves, Brian O.K. and **Ann Johnson**
Osprey Beach and Paleo-Indian Adaptations

11:40 – 12:00 Frison, George C.
Discussant

Symposium 3: Innovative Approaches To Upper Elevation Research: Examples From The Uinta Mountains

8:00-12:00 GRAND BALLROOM II
Organizer: **Byron Loosle**

8:00 – 8:20 Gardner, Dudley A. and **Gabrielle Elliott**
Recent Analysis of Fremont Granaries in Northwest Colorado

8:20 – 8:40 Palmer, Jamie
Analyzing Steatite Vessels

8:40 – 9:00 Knoll, Michelle K.
A Quantitative Analysis Comparing the Efficacy of a Manual Flotation Technique against Laboratory Processing: A Case Study from an Isolated, High Elevation Site in Utah.

9:00 – 9:20 Goff, Sheila
Caching Strategies

9:20 – 9:40 Storm, Brian
Grayware Ceramics in Northeastern Utah

9:40 – 10:00 Murphy, Melissa
GIS Site Analysis of Dry Fork Drainage

10:00 – 10:20 BREAK

10:20 – 10:40 Loosle, Byron
Fremont Nationalism – Cult of the Hunter

10:40 – 11:00 Johnson, Clay
Shell House

11:00 – 11:20 Naylor, Laird
Historic Archeology on the North Slope: Innovation in Tie Hack Research

11:20 – 11:40 Stertz, D. Andrew
A Look Along the Uinta Mountains' Carter Road

11:40 – 12:00 Estes, Mark Bradley
Obsidian Analysis & Interpretation from Northeastern Utah

General Session 1: Anthropology and Archaeology of the Mountains

GRAND BALLROOM III
Session Chair: **Elizabeth Burghard**

8:00 – 8:20 Silverman, Shari Maria
Travel and Cultural Change in the Northwestern Rocky Mountains

8:20 – 8:40 Hadden, Johanna Elena
Stewardship and Rocky Mountain Archaeology: Interdisciplinary Connections in Montana's Public Schools

8:40 – 9:00 Rolland-Francis, Raphaelle
Patient Walk Toward an Ideal Territory? Navajos and Canyon de Chelly National Monument

9:00 – 9:20 Burghard, Elizabeth
Up Close and Personal: Intra-Site Spatial Distribution of Dinwoody Tradition Rock Art Imagery at Site 48FR311

9:20 – 9:40 Stiger, Mark
The Folsom Residential Structure at Mountaineer: Technology, Spatial Organization, and Formation Processes through Refitting

9:40 – 10:00 Black, Kevin
Archaeological Survey at Pike's Stockade in the San Luis Hills, Conejos County, Colorado

10:00 – 10:20 BREAK

10:20 – 10:40 Gilmore, Kevin P. and **Sean Larmore**
What's Lovitt Got to Do with It? Southern Athapaskan Migration as Viewed from the Eastern Slope of Colorado.

10:40 – 11:00 Smith, Craig S. and **Cynthia D. Craven**
Late Mid-Holocene Bison Exploitation in the Wyoming Basin: A View from the Graham Ranch Site

11:00 - 11:20 Kiahtipes, Chris, Todd Grim, and **Bonnie Pitblado**
From Paleoindians to Miners: Test Excavations at High Altitude Site 5HN510

11:20 – 11:40 Liebert, Thaddeus and **David Hunter**
What Can Be Done? Archaeological Issues of the 21st Century

General Poster Session 1: GRAND BALLROOM 1
8:00 – 12:00

Grieve, Tanya and **Clayton F. Marler**
Projecting Lake Terreton Shorelines through Pleistocene-Holocene Environmental and Archaeological Research on the Idaho National Laboratory

Bryson, Reid A.
The Holocene History of Cordilleran Rivers

Poetschat, George, and **James D. Keyser**
Biographic Rock Art Sites Near LaBarge, Wyoming

Merrell, Carolynne
URGENT! Locating Cambium Peeled Lodgepole Pine in the Rocky Mountains

Profaizer, Landon, Buck Benson, and **Steven R. Simms**
Field Archaeology and Utah State University

Simms, Steven R., Buck Benson, and **Landon Profaizer**
Excavations at Two Wickiup Sites: Dugway Proving Ground and West Tavaputs Plateau

Scoggan, Tara and **Shana Dooley**
Trade Routes of Lithic Material in the Uinta Mountains

Eckerle, William and **David A. Byers**
Constructing Paleoclimatic Frames of Reference Using Thornthwaite's Moisture Index

SATURDAY AFTERNOON

Symposium 4: Geoarchaeological and Paleoenvironmental Investigations in the Rocky Mountain Region

1:00 – 6:00 – GRAND BALLROOM IV
Organizers: **William Eckerle** and **John Albanese**

1:00 – 1:20 Bryson, Robert U. and **Michael T. Coe**
A Contribution to the Study of the Bonneville Basin, Utah: Modeled Lake Levels Since 14,000 B.P.

1:20 – 1:40 Cannon, Molly Boeka
Spatial Analysis of Cultural and Natural Distributions of Artifacts at the Lawrence Site, Jackson Lake, Wyoming: Investigating Inundated Deposits

1:40 – 2:00 Donohue, James and **John Albanese**
The Geoarchaeology of the Sewright Site (39FA1603): A Multicomponent Paleoindian Occupation on the Southeastern Flank of the Black Hills, South Dakota

2:00 – 2:20 Eakin, Daniel H. and **William Eckerle**
Holocene Alluvial Chronology of the North Fork of the Shoshone River Valley, Northwestern Wyoming.

2:20 – 2:40 Finley, Judson B., and **George C. Frison**
Holocene Stratigraphy and Site Formation Processes of the Medicine Lodge Creek Site, Wyoming

2:40 – 3:00 Goodman-Elgar, Melissa, Richard Periman, Charles French, and **Julie Miller**
Geoarchaeological Approaches to Assessing Fire and Human Impacts on New Mexico Landscapes

3:00 – 3:20 Hill, Christopher L.
Archaeological Geology in the Northern Rocky Mountains and Great Plains: Allerod-Younger Dryas Stratigraphy and Geomorphology

3:20 – 3:40 Humacher Cunningham, Sonia
Pinon Pine and People: GIS Modeling of High Altitude Adaptations to Changing Environments

3:40 – 4:00 McFaul, Michael
Eastern Slope Geomorphic Models (Alluvial): Their Geoarchaeological Meaning

4:00 – 4:20 Miller, James C.
Evidence for Mid-Holocene Climatic Amelioration in Rocky Mountain Basins and Western Plains Areas

4:20 – 4:40 Plastino, Tony
A Geomorphic History of the Jonah Gas Field, Sublette County, Wyoming.

4:40 – 5:00 Roll, Tom E., Michael P. Neeley, Robert J. Speakman, and **Michael D. Glascock**
Characterization of Montana Chert by LA-ICP-MS

5:00 – 5:20 Surovell, Todd A., Nicole M. Waguespack, James H. Mayer, and **J. Michael Daniels**
Shallow Site Archaeology: Formation processes at Barger Gulch, Locality B

5:20 – 5:40 Bryson, Reid A
Abrupt Climatic Changes and Events in the Cordilleran Holocene and Possible Cultural Implications

Symposium 5: Geographic, Chronological and Cultural Transitions in the Archaeology of Western Wyoming

1:00 – 4:00 – GRAND BALLROOM II
Organizer: **David Vlcek**

1:00 – 1:20 Adams, Richard
Late Prehistoric and Protohistoric Archaeology in the Greater Yellowstone Ecosystem

1:20 – 1:40 Bach, Daniel R.
Macrofloral and Limited Geomorphological Analysis of 750 Prehistoric Hearths from Southwestern Wyoming

1:40 – 2:00 Vlcek, David and **Merry Gamper**
From the Great Divide to the Green River: Archaic Transitions in the Upper Green River Basin

2:00 – 2:20 Larson, Don R.
The Bird Canyon Site, 48SU390: Riparian Zone Resource Utilization in the Upper Green River Basin

2:20 – 2:40 BREAK

2:40 – 3:00 Plastino, Tony and **Bill Current**
A Transitional Soils Map Unit Yields a Record of Lithic Procurement: Site 48SU2230, Sublette County, Wyoming.

3:00 – 3:20 Miner, Therese L.
The Wolf Tooth Site in Southwest Wyoming: Cool Stuff in a Sand Dune

3:20 – 3:40 Current, Bill
The Galiun Site: Late Prehistoric Antelope Procurement/Processing Site (48SU1156), Sublette County, Wyoming.

3:40 – 4:00 Tanner, Russel L. and **Rick L. Weathermon**
The Ultimate Transition: Suffering and Death in the Red Desert, circa 3,500 to 1,000 B.P.

4:00 – 4:20 Drucker, J.D. (Sam) and **David Vlcek**
Wardell Revisited or Bones and Water Don't Mix

4:20 – 4:40 Nelson, Mark
Stud Horse Butte Housepit Site

General Session 2: Fremont Archaeology and Such

1:00 – 4:00 GRAND BALLROOM III
Session Chair: **Ronald J. Rood**

1:00 – 1:20 Batson, Shane
Paleoenvironmental Reconstruction and the Uinta Basin: An Intense Study of the Fremont Through their Environment.

1:20 – 1:40 Barlow, K. Renee
The Granaries of Range Creek: Implications for Fremont Strategies of Storage, Land Use and Mobility, and Social Organization.

1:40 – 2:00 Hadden, Glade
A Fremont Site from Southern Montana.

2:00 – 2:20 Yoder, David
Storage and Mobility Among the Fremont: Changing Forms Through Time

2:20 – 2:40 BREAK

2:40 – 3:00 Leavitt, Alissa
Zea Mays and the Uinta Fremont

3:00 – 3:20 Jardine, Cady
Parowan Valley Archaeological Project: A Preliminary Report

3:20 – 3:40 Watkins, Christopher N.
Parowan Pottery and Fremont Complexity: Late Formative Ceramic Production and Exchange

3:40 – 4:00 Williamson, Andrew M. and **Heather M. Weymouth**
Archaeological Investigations in the High Uintas Wilderness Region, Duchesne County, Utah

4:00 – 4:20 Muller, Jenn L., Matthew J. Landt, and **Donna Turnipseed**
Downcutting, Erosion and Old Survey Data: A Cautionary Tale of Two Site Inventories

Poster Symposium 1: Recent Archaeological Investigations in the Gunnison Basin, Colorado

1:00 – 5:00 GRAND BALLROOM I
Organizer: **Brian Andrews**

Andrews, Brian
The Mountaineer Folsom Site

Andrews, Brian
The Flat Top Folsom Site

Cooper, Judith R.
Intrasite Spatial Analysis at 5GN149, a Surface Lithic Scatter in the Gunnison Basin

Dukeman, Casey
The Lanning Site (5GN151): Spatial and Organizational Considerations of a High Altitude Folsom Lithic Scatter

Stiger, Mark
The Mountaineer Folsom Structure

Stiger, Mark
The Archaic Occupation of the Upper Gunnison Basin

General Poster Session 2: GRAND BALLROOM I

1:00 – 5:00

Cannon, Kenneth P., and Molly Boeka Cannon
Recent Investigations at the Goetz Site, Jackson Hole, Wyoming

Grieve, Tanya, and **Clayton F. Marler**
Projecting Lake Terreton Shorelines through Pleistocene-Holocene Environmental and Archaeological Research on the Idaho National Laboratory

Hartley, Ralph J. and **Anne M. Wolley Vawser**
The Spatial Configuration of Human Modifications to the Landscape of Hunt and Sheep Mountains, Wyoming

ROCKY MOUNTAIN CONFERENCE BUSINESS MEETING – 5:30 – 6:30 PM
GRAND BALLROOM 1

WHO WILL HOST THE 2007 MEETING?!

SATURDAY EVENING

BANQUET
WESTERN HOE-DOWN BARBEQUE
7:00 TENT

KEYNOTE SPEAKER: **Dr. Mark Aldenderfer, University of Arizona**

"Prehistoric Hunter-Gatherers of the Andes and Himalayas"

ABSTRACTS

Adams, Richard, *Office of the Wyoming State Archaeologist*
Late Prehistoric and Protohistoric Archaeology in the Greater Yellowstone Ecosystem
SYMPOSIUM 5

Mineral extraction drives the acquisition of archaeological knowledge on federal land in Wyoming's arid basins, but mountainous wilderness areas that are exempt from development remain relatively unknown archaeologically. By collaborating with private and public partners, the Office of the Wyoming State Archaeologist has recorded more than 100 sites in the mountains of the greater Yellowstone ecosystem. Archaeological surveys in the Wind River and Absaroka Mountains indicate prehistoric use as intense as in the basins. Recent forest fires have exposed a significant Late Prehistoric presence occuring at high altitudes (>10,000 feet) consisting of wickiups, diagnostic chipped stone and soapstone artifacts made by the indigenous mountain Shoshone who spent months at a time in the mountains.

Albanese, John – See Donohue, James, SYMPOSIUM 4

Andrews, Brian, *Department of Anthropology, Southern Methodist University*
Hunter-Gatherer Adaptation in Mountainous Terrain: The Mountaineer Site and Folsom Archaeology in the Upper Gunnison Basin, Colorado
SYMPOSIUM 2

Fieldwork conducted over the last five years has demonstrated a rich Folsom archaeological record in the Gunnison Basin of Colorado. Numerous small locales and isolated finds are now known, though research has focused on three large Folsom sites: Mountaineer (5GN2477), Lanning (5GN151), and Flat Top (5GN3850). Data from these sites is used to evaluate several models of montane hunter-gatherer land use strategies. Technological organization, intra-site spatial patterning, and patterns in regional site locations during the Folsom period resemble patterns characteristic of later mountain-adapted hunter-gatherer groups. Folsom adaptation in the Basin appears to be characterized by reduced residential mobility, with an increased reliance on large, centrally located, semi-permanent, serially occupied camps provisioned by a system of special-purpose logistic sites. This pattern is similar to the central-place foraging systems seen during the Archaic in the Gunnison Basin and other mountainous areas of the world and suggests significant variability in Folsom behavioral patterns in different ecological settings of western North America.

Andrews, Brian, *Department of Anthropology, Southern Methodist University*
The Mountaineer Folsom Site
POSTER SYMPOSIUM 1

The Mountaineer site (5GN2477) is a large, multi-component Folsom site situated on the top of a flat mesa, offering a commanding view of the surrounding valley of the Gunnison River. There are numerous localities located across the approximately 450,000

m^2 of the mesa top, though excavations at the site have so far focused on four spatially discrete artifact clusters areas. Analysis of assemblage content, technological organization, and spatial patterning within each of these areas indicates that the site was used repeatedly, though not necessarily for the same activities each time. Evidence indicates at least two types of occupations took place at Mountaineer – one characterized as a short-term overlook/hunting camp, and the other as a relatively long term residential occupation.

Andrews, Brian, *Department of Anthropology, Southern Methodist University*
The Flat Top Folsom Site
POSTER SYMPOSIUM 1

Surface collections and initial test excavations were undertaken during the summer of 2005 at the Flat Top site, a large lithic scatter located in the Upper Gunnison Basin. A number of diagnostic Folsom artifacts were recovered. Preliminary analysis suggests a variety of activities took place on site, and future investigations at the site will undoubtedly yield valuable information concerning Folsom adaptation in the Gunnison Basin.

Bach, Daniel R., *High Plains Macrobotanical Services*
Macrofloral and Limited Geomorphological Analysis of 750 Prehistoric Hearths from Southwestern Wyoming
SYMPOSIUM 5

A summary of results obtained from the analysis of 750 prehistoric hearths from southwestern Wyoming is provided. Macrobotanical topics include quantifying and qualifying charcoal preservation, why charcoal degrades with time, reconstructing paleoenvironments based on charcoal data, and the analysis of subsistence remains – both faunal and floral. Geomorphological topics include soil texture analysis of the fill from 300+ hearths, analyzing soil particle size and shape of the fill, why recording soluble iron content might be important, and the importance of retaining a small amount of feature fill for future analysis. Other topics include whether roots and insects affect preservation and finally, different sampling strategies for hearths will be examined – the pros and cons of bulk sampling versus fine grain sampling.

Baker, Steven G., *Centuries Research, Inc.*
Ethnographic Evidence for a Di-Hybrid Origin of Aboriginal Inhabitants of the Western U.S.: A Missive to Modern Anthropology from 17th and 18th Century Spanish and French Observers
SYMPOSIUM 1

In 1951 physical anthropologist Joseph Birdsell noted contrasting racial elements (Amurian and Mongolian) among living American Indians. The Spirit Cave Mummy and Keniwick Man lend support to Birdsell's view of di-hybrid origins. Ancient Spanish and French accounts differentiated between physical types of some Indian populations of the western U.S. The accounts traced here were long considered "Myths of the Indies" but

are actually capable ethnographic accounts linking distinctive living and long deceased populations.

Barlow, K. Renee, *Utah Museum of Natural History*
The Granaries of Range Creek: Implications for Fremont Strategies of Storage, Land Use and Mobility, and Social Organization
GENERAL SESSION 2

The approximately 300 sites documented in the Range Creek drainage include numerous pithouse villages and rock art galleries, and more than 100 storage features. Some storage structures are hidden under ledges, but most are associated with groups of granaries on ledges or wooden platforms on cliff faces. Many of the largest storage facilities (and several habitation sites) are situated high above the canyon floor, up to 1400 ft above permanent water and arable land. A formal model is presented and the implications of these patterns for understanding Fremont strategies of storage, land use/mobility, and overall social organization are discussed.

Bassett, Everett, *Transcon Infrastructure*
Mine-related Resources in the Park City Mining District
SYMPOSIUM 1

Park City, Utah is characterized by its extensive mining legacy, which dates to the early 1860s. Through an ongoing program funded by Utah's Abandoned Mine Reclamation Program over 1200 mine openings have been identified and recorded in the district. This research has demonstrated that Park City's mining landscapes are defined by a number of factors unique to the region and affected by its relative isolation. These include local geology and environmental conditions, the traditional practices of ethnic miner communities, and its organically derived mining law. This presentation uses repeat photography to illustrate the types of mining and mine-related buildings and structures that defined the early district and the condition of these remnants today. Discussion of how individual resources and landscapes are researched, delineated, recorded, and evaluated for NRHP-eligibility is provided.

Batson, Shane, *Ashley National Forest*
Paleoenvironmental Reconstruction and the Uinta Basin: An Intense Study of the Fremont Through Their Environment
GENERAL SESSION 2

The value of paleoenvironmental reconstruction is rising and becoming a recognized field of integration between ecology and archaeology. By utilizing paleoenvironmental reconstruction techniques, with an emphasis on the vegetation matter, I will examine what the environmental conditions were like in the Uinta Basin and Mountain region during the Fremont occupations. By examining the environmental conditions hopefully I can reveal a certain amount of environmental context, which may have influenced decisions the Fremont would have made to survive in the harsh terrain of the Unitas. Certain aspects of Fremont culture will be addressed through my research on

paleoenvironmental reconstruction such as: seasonal migration, drought, and survival techniques. This paper hopes to continue what the University of Colorado at Boulder has done on paleoenvironmental reconstruction of the Uinta Basin and Mountain region

Baxter, Jon and **Dale Gourley,** *Bighorn Archaeological Consultants, LLC*
Excavations of a Pioneer Cemetery at Coalville,Utah
SYMPOSIUM 1

Between 17 and 20 December 2004, archaeologists Jon R. Baxter and Dale R. Gourley, of Bighorn Archaeological Consultants, LLC (Bighorn), conducted recovery excavations on two historic burials located within a construction site for the expansion of the North Summit Middle School. Kenton Wall, of Big-D Construction, initiated the project when he called to relate that his company had encountered some remains while excavating footing trenches for an expansion to the school in Coalville, Utah. Given the heavy disturbance to the area, the finding of such remains is quite remarkable. The remains included those of an infant, approximately 6 months old at the time of death, gender undetermined, and an adult woman probably in her mid to late twenties.

Benedict, James B., *Center for Mountain Archeology, Ward, Colorado*
Lichenometry for Archaeologists: A Short Course
WORKSHOP

Lichenometry (a dating method based on the growth of crustose lichens) can provide close minimum ages for prehistoric rock structures at high altitude in the Rocky Mountains. In this introductory course I discuss (a) the history of the method, (b) the choice of appropriate species, (c) identification techniques, (d) the ecology of the most useful group, the yellow rhizocarpons, (e) growth-rate determination, and (f) archeological applications. Lichenometry will be most successful on non-calcareous substrata in exposed, winter-snowfree environments above treeline. Here (a) crustose lichens grow very slowly, reaching ages in excess of 7500 years, (b) there are no wildfires to reset the lichenometric clock, (c) fast-growing foliose lichens do not compete aggressively, and (d) snowkill is not an important factor. Lichenometric methods can be used to date structures as old as the Middle Holocene in such environments. A close correlation between human population declines and lichen-snowkill episodes in the Indian Peaks Wilderness Area suggests that lichenometry can also provide useful paleoenvironmental information.

Benson, Buck, - See Profaizer, Landon, GENERAL POSTER SESSION 1
Benson, Buck, - See Simms, Steven R., GENERAL POSTER SESSION 1

Black, Kevin, *Colorado Assistant State Archaeologist, Colorado Historical Society*
Archaeological Survey at Pike's Stockade in the San Luis Hills, Conejos County, Colorado
GENERAL SESSION 1

A 980 acre inventory around Pike's Stockade in Conejos County, Colorado is on-going as a training project for volunteers in Colorado's avocational certification program. Local terrain encompasses a hill called Sierro del Ojito and surrounding slopes, along the Conejos River at elevations of 2,295–2,490 m. The parcel preserves the probable location of Zebulon Pike's encampment of February 1807, but fieldwork avoided the river bottomlands where Pike's Stockade has been reconstructed. Instead, survey focused on uplands where more ancient camps and lithic scatters are commonplace. This paper provides an overview of the surveyed landscape, emphasizing trends in lithic material use, chronology, and settlement patterns.

Brunswig, Robert H., *Department of Anthropology, University of Northern Colorado*
Modeling Native American Sacred-Mundane Landscapes: Hypothetical Frames of Reference from Ethnoarcheological Studies in North Central Colorado's Rocky Mountains
SYMPOSIUM 1

It is well known historically documented Native American cultures seldom differentiated the physical and spiritual worlds in their lives. Recent archeological and ethnographic research by the author in Rocky Mountain National Park, its surrounding region, and sites of late Ice-Age Europe collectively support the conclusion that pre-contact and immediately post-contact Native American peoples conceived of their mountain home landscapes as a seamless whole of a complex system of sacred places, nodes and conduits of spirit power, and the more mundane world of natural features, animals and plants. Results of that research were assembled in a provisional, hypothetical framework designed to search for, and model, spiritually-rich Native American cultural landscapes in Colorado's Southern Rockies.

Brunswig, Robert H. – See Doerner, James, SYMPOSIUM 2

Bryson, Reid A. *Climate, People, and Environment Program, Center for Climatic Research, University of Wisconsin – Madison*
Abrupt Climatic Changes and Events in the Cordilleran Holocene and Possible Cultural Implications
SYMPOSIUM 4

Accumulating evidence has shown that the older concept of gradual climatic change is completely wrong. It is now clear from detailed stratigraphic records, that climate does change significantly and rapidly, often within decades.. This plus the instrumental record indicates clearly that the mean and variance of climate series can change suddenly. Examples both from field data and models will illustrate some of the causes and consequences for the human environment.

Bryson, Reid A. *Climate, People, and Environment Program Center for Climatic Research, University of Wisconsin – Madison*
The Holocene History of Cordilleran Rivers
GENERAL POSTER SESSION 1

River valleys are preferred habitats, in most cases, for game and for people, especially in montane regions. The aquatic as well as terrestrial resources plus fresh water are particularly important. However river valleys may also pose special hazards in flash floods, freshets, and changes in hydraulic regime.. Some of these hazards will be discussed along with illustrations drawn from history and from models.

Bryson, Robert U., *National Park Service* and **Michael T. Coe** *University of Wisconsin-Madison*
A Contribution to the Study of the Bonneville Basin, Utah: Modeled Lake Levels Since 14,000 B.P.
SYMPOSIUM 4

For archaeologists concerned with understanding the physical record of prehistoric peoples in northern Utah, data regarding former levels of the major lakes in this region are critical. Although it is widely accepted that the levels of the lakes in the Bonneville Basin responded directly to climatic changes, the precise nature of the contributing climatic variability has remained unclear. Toward that end, a series of macrophysical paleoclimatic models was produced which provided input into a retrodictive model of past levels of Lake Bonneville-Great Salt Lake. The results of this exercise provide estimates of former lake levels at 200 year intervals.

Burghard, Elizabeth, *Bureau of Land Management*
Up Close and Personal: Intra-Site Spatial Distribution of Dinwoody Tradition Rock Art Imagery at Site 48FR311
GENERAL SESSION 1

Studies of the spatial distribution of Dinwoody Tradition rock art have suggested a link between rock art imagery and location within the Big Horn and Wind River Basins. This research and study of 300 images demonstrates a pattern in the distribution of bird-like and anthropomorphic images within a single locality. Applications for this type of study include interpretation of site activities, testing current hypotheses about the function, association and distribution of rock art, definition of prehistoric cultural landscapes, and identification of sacred spaces within the surrounding landscape.

Byers, David A. – See Eckerle, William, GENERAL POSTER SESSION 1

Cannon, Kenneth P., *Midwest Archeological Center*
Archeology in the Greater Yellowstone Ecosystem: The Role of the Midwest Archaeological Center
PLENARY

The Midwest Archeological Center has been involved in the investigation of archeological sites in the Greater Yellowstone Ecosystem for over three decades. The work has involved a range of projects, from small inventories to large-scale data recovery, within the context of cultural resource management in Grand Teton and Yellowstone National Parks, as well as on other public and private lands in the region.

Other problem-oriented projects have also been conducted. In this paper I will present a history of this work and the significant findings of the research, as well as a discussion of future research directions.

Cannon, Molly Boeka
Spatial Analysis of Cultural and Natural Distributions of Artifacts at the Lawrence Site, Jackson Lake, Wyoming: Investigating Inundated Deposits
SYMPOSIUM 4

The Lawrence Site (48TE509) is a prehistoric archaeological site inundated by Jackson Lake for much of the year. The Lawrence site provides an opportunity to explore the effects of inundation on archaeological surface deposits. The data collected in 1987 by the Midwest Archeological Center is used to investigate both cultural and natural distributions of artifacts. The effects of inundation on archaeological deposits are assessed through size sorting analyses and the identification of discernable activity areas within the site. It is determined that inundation has minimally affected the archaeological deposits at the Lawrence site.

Cannon, Kenneth P. and **Molly Boeka Cannon**, *National Park Service, Midwest Archeological Center*
Recent Investigations at the Goetz Site, Jackson Hole, Wyoming
GENERAL POSTER SESSION 2

In 1971 the University of Wyoming excavated what was reported as a bison kill site on the National Elk Refuge, Jackson Hole, Wyoming. A minimum age of the kill was placed at 500 years. Reanalysis of the kill indicates that it dates to ca. 800 years ago. More recent investigations have revealed that the bison kill was only one component of a more complicated site history that may extend back 10,000 years. Re-investigation of the site over the past four field seasons have been sponsored by the Earthwatch Institute, the US Fish and Wildlife Service, and the Midwest Archeological Center.

Cannon, Molly Boeka - See Cannon, Kenneth P. – GENERAL POSTER SESSION 2

Carr, Thomas, *Colorado Historical Society*
From Mountain Men to Mountain Women: The History of Mountain Archaeology in the American West
PLENARY

The occupation of the mountain areas of the American West by ancient aboriginal peoples was traditionally described by archaeologists and anthropologists as short term and sporadic. Breaking away from this perception, beginning as early as the late 1960s, archaeologists such as Wilfred Husted, Earl Swanson, George Frison, James Benedict, and others suggested alternative interpretations for the ancient occupation of the mountains. These scholars suggest an adaptive settlement pattern for the Rocky Mountains that manifests itself as a distinct set of cultural traits that can be identified by distinctive stone tool types, subsistence practices, and site types. Although there are differing ideas among archaeologists concerning the exact nature of this occupation, the

common idea that defines this tradition is that mountain areas were occupied in some intensive fashion that was different from the adjacent Plains, Basin, and Plateau regions during the late Paleoindian to early Archaic transition. Continuing this research orientation into the 1980s, 90s, and 21st century are a younger generation of scholars including Kevin Black, Mark Baumler, Marcel Kornfeld, Mark Stiger, Bonnie Pitblado, and others. The collective outcome of this research demonstrates that the mountainous regions of North America were one of the more long-term occupation environments for ancient peoples. This paper is a historical overview of Mountain Archaeology research from geographic and personal research perspectives.

Coe, Michael T. - See Bryson, Robert U., SYMPOSIUM 4

Cooper, Judith R., *Department of Anthropology, Southern Methodist University*
Intrasite Spatial Analysis at 5GN149, a Surface Lithic Scatter in the Gunnison Basin
POSTER SYMPOSIUM 1

A large surface lithic scatter (5GN149) is reported from a topographic highpoint overlooking the Gunnison River. While no datable materials have been recovered, 5GN149 appears to contain multiple components, possibly spanning the Paleoindian to Late Prehistoric. Occupants probably carried out limited subsistence activities at the site, though its function may have varied over time, serving as a raw material quarry, lithic workshop, or hunting stand. Various methods, including lithic analysis, refitting, and GIS spatial analysis, were used to interpret patterning within the palimpsest. The site can provide important information on prehistoric land use patterns in the Gunnison Basin.

Craven, Cynthia D., *TRC Mariah* and **William Eckerle,** *Western GeoArch Research*
The Battle Spring Draw Paleoindian Site, Sweetwater County, Wyoming
SYMPOSIUM 2

The Battle Spring Draw Paleoindian Site (48SW13156) is located northwest of the Chain of Lakes Flat, in the Great Divide Basin, southwestern Wyoming. Excavated in 2003, the site consists of multiple occupations estimated to date between 9,430 ± 40 and 8,150 ± 40 years BP. Two Pryor Stemmed projectile points, one probable Eden midsection/tip fragment and an unclassified Foothills-Mountain Paleoindian point were recovered in association with twelve features and 1000+ faunal specimens, 98% of which were identified as very small mammal. The apparent lack of reliance on medium- to large-sized mammals and the preponderance of processing of very small mammals at the site appear to provide early evidence of changing foraging strategies in response to increased aridity in the Great Divide Basin of southwestern Wyoming.

Craven, Cynthia D. - See Smith, Craig S., GENERAL SESSION 1

Cummings, Linda Scott, and **R.A. Varney,** *Paleo Research Institute*

Pollen and Climate: Comparison of Stratigraphic Pollen Records and Archaeoclimatic Models
SYMPOSIUM 2

How much can we learn about the past environment from either stratigraphic pollen analysis or archaeoclimatic moeling? One provides proxy data concerning plants that lived in the area, and the other provides a model of probable climatic conditions. How can comparison of these two tools yield more information about the environment in which people lived? What new interpretations are available when interpreting pollen records if we have an archaeoclimatic model to consult? These questions are explored for several stratigraphic pollen records from the Rocky Mountain region that come from sites with Paleoindian components or have sediments of that age.

Cummings, Linda Scott - See Varney, R.A., PLENARY

Current, Bill, *Current Archaeological Research*
The Galiun Site: Late Prehistoric Antelope Procurement/Processing Site (48SU1156), Sublette County, Wyoming
SYMPOSIUM 5

The Galiun Site is a transitional late prehistoric/protohistoric site exhibiting extensive pronghorn processing in the central Green River Basin of southwestern Wyoming (Site 48SU1156). Evidence suggests occupational structures and other camp related activities. Site 48SU1156 is situated on a western terrace of Dry Sandy Creek at an elevation of ca. 7000 ft. While no evidence of trade goods have been located, radiometric data indicated site occupation at about 1790 A.D. Investigations continue, but it is hypothesized that the pronghorn were probably procured in a natural trap area provided by the deeply incised Dry Sandy Creek. Few sites of this age have been identified or investigated in this region. Site assemblage consists of structures, extensive burned and unburned faunal remains (pronghorn), extensive lithics debris (including cores, all stages of reduction and heat-alter manufacture), many late prehistoric projectile points (Rose Springs, Cottonwood, Tri-notched and Desert Side-notch styles), shaft abraders, ceramics and thermally-altered rock.

Current, Bill – See Plastino, Tony, SYMPOSIUM 5

Daniels, J. Michael - See Surovell, Todd A., SYMPOSIUM 4

Dehler, Carol M. - See Pitblado, Bonnie L., SYMPOSIUM 2

DellaSalla, Joanne, *Department of Anthropology, University of Denver*
The Paleoindian Occupations of South Park, Colorado
SYMPOSIUM 2

Paleoindian artifacts have been noted in South Park, Colorado for decades. As a result, artifact collecting has had an enormous impact on the archaeological record in this

region. This paper presents the results from a recent effort to salvage information from private artifact collections. In order to begin to make sense of the Paleoindian occupations of South Park, over 100 Paleoindian diagnostic artifacts were documented. Paleoindian projectile points were examined spatially, temporally and morphologically across the South Park basin. Analyses of these artifacts offer insight into early hunter-gatherer use of the South Park landscape and its available resources.

Doerner, James *Department of Geography* and **Robert H. Brunswig,** *Department of Anthropology, University of Northern Colorado*
Late Pleistocene-Early Holocene Paleoclimate and Archaeology of a High Altitude Mountain Pass in Rocky Mountain National Park, Colorado
SYMPOSIUM 2

La Poudre Pass lies on the continental divide along the northwest boundary of Rocky Mountain National Park and the Arapaho National Park. University of Northern Colorado field investigations in archeology and paleoclimate from 2000 to 2002 documented a large prehistoric lithic scatter site with Clovis and much later, Early Ceramic components northeast of the pass. The site was situated on a glacial kame hummock associated with terminal moraine deposits of the passes' most recent Pinedale glaciation. Coring of well-developed peaty fen deposits in an adjacent kettle depression provided a detailed AMS radiocarbon-dated record of late glacial and post-glacial climate change from ~9710 b.p., showing evidence of rapid, significant initial Holocene climate warming at the end of the of Younger Dryas glacial episode. Presence of the Clovis point and other supporting climate evidence suggests effective deglaciation of the pass prior to ~11,300 b.p.

Donohue, James and **John Albanese**
The Geoarchaeology of the Sewright Site (39FA1603): A Multicomponent Paleoindian Occupation on the Southeastern Flank of the Black Hills, South Dakota
SYMPOSIUM 4

The Sewright site (39FA1603) was discovered in the T-1 and T-2 terrace fills of Elm Creek, an intermittent tributary of the Cheyenne River in Fall River County, South Dakota. Elm Creek drains a segment of the Black Hills' southeastern Hogback Ridge. The site is situated on the plains some 1400 m southeast of the Hogback. The alluvium in both the T-1 and T-2 terraces contain multiple paleosols and cultural components. The temporal affiliations of the near surface T-1 and near surface T-2 components have yet to be determined, but appear to date to the Plains Village/Late Prehistoric, or possibly Late Archaic periods.

Areas of the T-2 surface have been truncated by flood-related erosion episodes complicating the soil stratigraphy at the site. The T-2 fill entombs at least three Paleoindian cultural components. Two of these are in the 2Akb2 and 2Akb1 horizons and date from 8530+/- 120 B.P. to 7920 +/- 80 B.P.. The bottom of the 2Akb2 or top of the 2Bwkb horizon yielded a projectile point base that is remarkably similar to points recovered from the Jim Pitts Goshen hunting camp that dates to 10,200 B.P. A rich component in the 2Bwkb horizon predates 8530 B.P. and yielded a spurred scraper, large

edge-modified flakes, large quantities of debitage, and processed bison bone. A charcoal sample (possibly intrusive) from the bottom of 2Bwkb yielded an AMS date of 10,970 +/- 80 B.P. A fourth Paleoindian component may be in and below the 3Akb horizon at a depth in excess of 3-m b.s. This component dates prior to 10,320 +/- 70 B.P.

Dooley, Shana - See Scoggan, Tara , GENERAL POSTER SESSION 1

Drucker, J.D. (Sam) and **David Vlcek,** *BLM Pinedale Field Office*
Wardell Revisited or Bones and Water Don't Mix
SYMPOSIUM 5

During the summer and fall of 2004, two erosional episodes caused by flash flood type damage was noted at the Wardell Buffalo Trap (48SU301). A BLM inspection noted flooded colluvial soils and deposited tabular sandstone bedrock slabs about the site area over a 200x150 meter area. Severe downcutting of the drainage channel below the Wardell kill area 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 the aforementioned time period. The BLM has received funding to begin a stabilization project and would like to discuss the methods which will be involved in the project as well as the affects, as seen in the field, of the flood episodes of 2004.

Dukeman, Casey, *Department of Natural and Environmental Sciences, Western State College*
The Lanning Site (5GN151): Spatial and Organizational Considerations of a High Altitude Folsom Lithic Scatter
POSTER SYMPOSIUM 1

Named for amateur archaeologist Bill Lanning (who initially recorded the site) 5GN151 is a high altitude Folsom lithic scatter located near the Sapinero Mesa divide, in Gunnison County, Colorado. Spatial Distribution and technological organization of Lanning's lithic assemblage suggest its primary use as a short-term processing area. This is especially evident in the extremely disproportionate number of utilized flakes and scrapers to all other tool classes. In addition, 5GN151 has two quarried outcrops of lithic raw materials (one chert and one quartzite) that seem to have been selectively utilized for certain tool classes or tool systems. Further investigation of the 5GN151 could yield valuable information concerning Paleoindian life-ways in the Gunnison Basin.

Eakin, Daniel H., *Office of the Wyoming State Archaeologist* and **William Eckerle,** *Western GeoArch Research*
Holocene Alluvial Chronology of the North Fork of the Shoshone River Valley, Northwestern Wyoming
SYMPOSIUM 4

Archaeological investigations along the upper North Fork of the Shoshone River document seven major landform associations including Pleistocene (2) and Holocene (2)

terraces a late Pleistocene/Holocene alluvial fan, a late Pinedale channel, and the modern flood plain. A landform chronology using radiocarbon dates and diagnostic artifacts recovered from archaeological sites provides a record of open-air occupation dating back to about 9000 B.P. Late Pleistocene terraces are interpreted as braided outwash channel deposits whereas Holocene terraces appear to have formed through self-limiting overbank deposition. Data suggest pre-Cody Complex occupations are not preserved within the HT2 terrace and that terrace height may have reached a critical threshold for overbank events around 2000 B.P. Paleoindian sites in alluvial fans and on the PT1 may have a better chance of preservation due to their position above the main river channel.

Eckerle, William, *Western GeoArch Research* and **David A. Byers,** *Department of Anthropology, University of Utah*
Constructing Paleoclimatic Frames of Reference Using Thornthwaite's Moisture Index
GENERAL POSTER SESSION 1

Geoarchaeology has traditionally operated as an empirical science. Paleoenvironmental modeling has a role in hypothesis formulation for organizing and analyzing proxy data. Archaeoclimate models produce station-specific predictions of past rainfall and temperature. Calculation of Thornthwaite's moisture index from these predictions allows the classification of paleoclimate within a standard climate classification that tracks effective precipitation. Comparison of moisture index trends with dune chronology and artiodactyl/lagomorphs index values indicate that trends exhibited in the archaeoclimatic model parallel trends in the proxy data.

Eckerle, William – See Craven, Cynthia D., SYMPOSIUM 2
Eckerle, William – See Eakin, Daniel H., SYMPOSIUM 4

Elliot, Gabrielle - See Gardner, Dudley, SYMPOSIUM 3

Estes, Mark Bradley, *Ashley National Forest*
Obsidian Analysis & Interpretation from Northeastern Utah
SYMPOSIUM 3

The Uinta Mountains, located in the northeastern corner of Utah, have no local obsidian source. Yet this material is found among debitage assemblages from excavated sites in this area. This papers aim is to take this data and interpret what this means about past cultures on the Ashley National Forest. Do any discernible patterns emerge? Were certain obsidian sources preferred over others and does the archaeological record show this? Can single flakes be tied to specific prehistoric cultures just based on provenance?

Finley, Judson B., *Department of Anthropology, Washington State University* and **George C. Frison,** *Department of Anthropology, University of Wyoming*
Holocene Stratigraphy and Site Formation Processes of the Medicine Lodge Creek Site, Wyoming
SYMPOSIUM 4

The Medicine Lodge Creek site is instrumental for defining Late Paleoindian Foothills-Mountain occupations in the Middle Rocky Mountains. 1970s excavations recovered 27 levels dating between 9700-8000 BP. Although the general geological context was apparent, details of the depositional history remained largely unknown until recently. Proximity to a perennial stream subjected the rockshelter to episodic, low-energy, overbank flooding and periodic channel shifts creating inset Paleoindian levels separated by considerable lengths of time. Overbank sedimentation and occasional channel shifts continued into the Late Holocene when sediments transported from above the rockshelter formed the distinct, fan-like deposit currently present at the cliff base.

French, Charles – See Goodman-Elgar, Melissa, SYMPOSIUM 4

Frison, George C. – See Finley, Judson B., SYMPOSIUM 4
Frison, George C. – See "Discussant," SYMPOSIUM 2

Gabe, Caroline – See Merriman, Chris, SYMPOSIUM 1

Gamper, Merry – See Vlcek, David, SYMPOSIUM 5

Gardner, Dudley A. and **Gabrielle Elliott,** *Western Wyoming Community College*
Recent Analysis of Fremont Granaries in Northwest Colorado
SYMPOSIUM 3

Fremont granaries constructed in northwest Colorado dating between 700AD and AD1100 possess distinct morphological characteristics that indicate some may have been used to store seeds, while others were used to store grain. Analysis of the nature and type of corn cobs found inside these granaries provides us with unique insights into the existing climactic conditions such as annual precipitation as well as some of the attributes of the corn grown in this relatively cool dry higher elevation. This paper will summarize the results of research undertaken over the last six years.

Gilmore, Kevin P. and Larmore,. Sean, *University of Denver*
What's Lovitt Got to Do with It? Southern Athapaskan Migration as viewed from the Eastern Slope of Colorado
GENERAL SESSION 1

Eureka Ridge (5TL3296) is a proto-Apachean site situated in the mountains of Colorado at 8880 ft. Cultural materials include small side- and un-notched projectile points, 450 sherds representing 7-10 vessels and a post-mold configuration from a small habitation structure. AMS dated sherds define two occupations between AD 1410 and 1650. This places Eureka Ridge within an emergent pattern of higher-elevation sites that confirm a 15th century (or earlier) Athapaskan presence in Colorado. Advantageous cultural adaptations and paleoenvironmental conditions facilitated proto-Apachean entry into the area via the mountains/plains margin, and low regional population density allowed this entry to be relatively uncontested.

Glasscock, Michael D. – See Roll, Tom E., SYMPOSIUM 4

Goodman-Elgar, Melissa, *Department of Anthropology, Washington State University,* **Richard Periman,** *USDA Forest Service, Rocky Mountain Research Station,* **Charles French,** *Department Archaeology, University of Cambridge,* and **Julie Miller,** *Department of Archaeology, University of Cambridge*
Geoarchaeological Approaches to Assessing Fire and Human Impacts on New Mexico Landscapes
SYMPOSIUM 4

This project uses thin section analysis in conjunction with other palaeoenvironmental techniques to address issues of fire frequency and human impact on landscapes across the Rocky Mountains. Here we address New Mexico case studies: the Rio Tapia, Sevilleta National Wildlife Reserve and Cibola National Forest Magdalena District. Each area has been surveyed for fire scars and anthropogenic features along arroyo walls. Well-preserved palaeosols were found in a discontinuous mosaic in all three regions from which parallel block and bulk samples were collected. Preliminary analysis of thin sections from the Rio Tapia and Sevilleta are compared in this discussion.

Grieve, Tanya, *Sagebrush Consultants L.L.C* and **Clayton F. Marler,** *Idaho National Laboratory*
Projecting Lake Terreton Shorelines Through Pleistocene-Holocene Environmental and Archaeological Research on the Idaho National Laboratory
GENERAL POSTER SESSION 2

Lake Terreton was originally conceptualized as a shallow lake covering hundreds of square kilometers, including approximately 233 km2 of the Idaho National Laboratory (INL) during the Pleistocene-Holocene transition (ca. 13,000-7,500 years ago). It was believed that the Terreton shoreline was at an elevation of 1463 m (Butler 1968:6; Nace et al. 1972:15, 16), though research conducted near Mud Lake suggests that lake levels may have been lower (Gianniny, Gary L., et al., 2002). Modeling a Lake Terreton coverage based on research at Mud Lake suggest resource rich but geographically variable and discontinuous marshlands. Typologically dated archaeological artifacts support this interpretation and may illustrate the recession of these marshlands through time.

Goff, Sheila, *University of Colorado*
Caching Strategies
SYMPOSIUM 3

Caching is a strategy employed by some prehistoric people occupying northeastern Utah and northwestern Colorado. Caches recovered in this area contain objects that may be utilitarian, evidence of trade and interaction with people from other areas as well as potentially ceremonial materials. Revisiting cached materials from the Uinta Basin and Yampa Canyon, that are curated in museums or described in older literature as well as in new research helps provide a better understanding of this behavior.
Gourley, Dale – See Baxter, John, SYMPOSIUM 1

Grim, Todd – See Kiahtipes, Chris, GENERAL SESSION 1

Hadden, Glade, *Bureau of Land Management, Montana*
A Fremont Site from Southern Montana.
GENERAL SESSION 2

Recent excavations in the Northern Big Horn Basin of South-central Montana discovered the presence of a site containing many features associated with the more southerly Fremont behavioral complex. A wet masonry slab-lined hearth, Rose Spring style projectile points, ceramics similar to San Rafael greyware, and a date of ca. 750 AD all lend themselves to a Fremont interpretation. This paper examines some of the implications of this find and explores other evidence of a Fremont-like presence in Northern Wyoming and Southern Montana.

Hadden, Johanna Elena, *Montana State University*
Stewardship and Rocky Mountain Archaeology: Interdisciplinary Connections in Montana's Public Schools
GENERAL SESSION 1

The *No Child Left Behind Act* (NCLB) has had a tremendous impact on the way educators teach the social sciences. Since its passage, the applied curriculum has increasingly become more specific. The situation forces teachers to narrowly focus on four areas that NCLB identifies as critical: history, economics, geography, civics. Glaringly absent in this list are anthropology and archaeology. Yet, these disciplines provide avenues through which study in all subject areas can be enriched, and cultural resource protection is encouraged. This paper reports on a cooperative university-government program designed to enhance the teaching of anthropology and archaeology in Montana's schools.

Hartley, Ralph J. and **Anne M. Wolley Vawser,** *National Park Service – Midwest Archeological Center*
The Spatial Configuration of Human Modifications to the Landscape of Hunt and Sheep Mountains, Wyoming
GENERAL POSTER SESSION 2

The cultural topography of Hunt and Sheep mountains in the northern Bighorn National Forest, Wyoming as reflected in cumulative material features permits examination of socially constructed space. Exploratory procedures using categorical data and visualization focused on assessment of variation in clusters of stone circles, the placement of rock structures and alignments by vision seekers, and the placement of cairns. The spatial relations between these human modifications to the landscape and physiographic features at 2800 – 3100 meters foster questions about the variation and intensity of past activities on Sheep Mountain vs. Hunt Mountain.

Hill, Christopher L., *Department of Anthropology, Boise State University*

Archaeological Geology in the Northern Rocky Mountains and Great Plains: Allerod-Younger Dryas Stratigraphy and Geomorphology
SYMPOSIUM 4

Stratigraphic sequences in the Upper Missouri Basin coeval with the Allerod and Younger Dryas are present in the northern Rocky Mountains and the adjacent Great Plains. Within or near the Rockies, radiocarbon dated strata associated with these intervals are found at Sheep Rock Springs, the Elkhorn Mountains, MacHaffie, Blacktail Cave, and Sun River. Further to the east, dated sequences are present along the Marias River, the South Fork of Deer Creek, and at OTL Ridge. The Late Pleistocene deposits from these localities contain information on environmental contexts contemporaneous with human groups linked to Clovis and Folsom artifacts and extinct fauna.

Hunter, David – See Liebert, Thaddeus, GENERAL SESSION 1

Husted, Wilfred M., *Billings, Montana*
There He Goes Again: Continuing Impediments to the Interpretation and Understanding of Rocky Mountain Prehistory
PLENARY

Having been retired and "out of the loop" for nearly 20 years, I am not Fully informed concerning research conducted in the Rocky Mountains during the past two decades. The other participants in this plenary session are admirably equipped to review the accomplishments made and the progress achieved in Rocky Mountain archaeological research since our first gathering in Jackson in 1993. Although I may be accused of beating a dead horse by some, I will discuss beliefs and views that continue to distort and confuse the interpretation and understanding of Rocky Mountain archaeology. These issues cloud the importance and significance of the Rocky Mountains in western American prehistory and misdirect attention to adjacent areas, particularly the northwestern Great Plains. The ghost of Desert Culture still haunts some quarters. Specific examples illustrating my concerns will be provided. Hopefully, my presentation will engender some discussion during the luncheon following this plenary session.

Hutmacher Cunningham, Sonia, *SWCA Inc. Environmental Consultants*
Pinon Pine and People: GIS Modeling of High Altitude Adaptations to Changing Environments
SYMPOSIUM 4

GIS has become one of the most popular analytical tools for archaeologists. Unfortunately, GIS data are often plotted onto digital landscapes without taking the next two logical steps: prediction and interpretation. In 2000, a simple GIS *retrodictive* model was completed for the Upper Gunnison Basin, Colorado. This model was constructed using soil chemistry, topographic features such as slope angle and aspect, and edaphic factors for pinon pine to retrodict an extinct pinon forest onto the landscape. Combined with data from local archaeological technical reports, general, and specific, research questions regarding prehistoric settlement and land-use were addressed. The results were astounding.

Janetski, Joel C., *Department of Anthropology, Brigham Young University*
Resource Intensification in the Eastern Great Basin: Archaeological Research at Fish Lake, Utah
PLENARY

Increased use of high altitude resources in the late Holocene has been well documented in the western (White Mountains) and central (Mt Jefferson) Great Basin. This trend has been explained in various ways (Bettinger 1982; Thomas 1994; Grayson 1994), but the pattern seems to be one of increasing resource intensification during the late Holocene (see also Elston 1986, Broughton, various; Janetski 1997). The pattern is complicated in the eastern Great Basin by the introduction of domesticated crops, although the adoption of farming is interpreted by some as evidence of intensification (Barlow 2004, Coltrain and Leavitt 2002). Archaeological research in the Fish Lake Basin of central Utah found evidence of increased use of smaller resources over the past 200 years suggesting the pattern of late Holocene intensification is wide spread. Fremont farmer/forager data from Fish Lake suggest the intensification trajectory continued during that period as well (however, see Knoll 2005).

Jardine, Cady, *Department of Anthropology, Brigham Young University*
Parowan Valley Archaeological Project: A Preliminary Report
GENERAL SESSION 2

The University of California at Los Angeles (UCLA) Field School conducted excavations and research in the Parowan Valley, Utah, between 1954-1964. Analysis and a comprehensive report were never completed at UCLA. Brigham Young University (BYU) obtained UCLA's artifact collection and field notes to report the data and provide a synthesis in a final report. Excavations took place at three major sites, Paragonah, Parowan, and Summit (Evan's Mound). Artifact analysis will commence in the fall of 2005. In this paper I will present a preliminary report on these important Fremont sites.

Jodry, Pegi, *Smithsonian Institution*
Recent Research in the Northern Rio Grande Valley
PLENARY

This paper summarizes recent Smithsonian investigations in the Northern Rio Grande. Acquisition of the 97,000 acre Baca Ranch by federal agencies in 2004 initiated professional research on these properties. In February 2005, I analyzed 320 Paleoindian and early Archaic artifacts collected by professional and avocational archeologists, 175 projectile points and Cody knives were submitted for XRF analysis (115 Paleoindian, 52 Archaic, 8 Late Prehistoric). XRF results indicate long-term north-south movement of foragers (beginning in Folsom times) between the San Luis Valley and the Jemez Mountains, northern New Mexico. A pilot study by Los Alamos National Lab, the Smithsonian, and the University of California, Berkeley sourced two of three basalt artifacts from the San Luis Valley to San Antonio Mountain and Cerros del Rios, the remainder are unknown. All obsidian artifacts, except a single Great Basin stemmed

point, also originated in northern New Mexico. This Great Basin Stemmed point is made of obsidian from south central Oregon, another is made of local material from San Antonio Mountain. Technological analysis indicates a significant presence of Western Dalton, in addition to abundant Folsom, Cody, and Foothill Mountain. I documented 25 Clovis points to date compared with >660 Folsom points. The geographic distribution and archeological visibility of Paleoindian and Archaic materials is discussed in relation to landscape evolution and climate change. During July 2005, we begin to GPS map Paleoindian site locations discovered by local ranchers during the past fifty years on the Baca property. Highlights of this work will be included, along with new AMS radiocarbon ages for camel bone, a Folsom-age hearth and bison bone, three Archaic house pits, and an early Archaic midden with fish bones.

Johnson, Ann – See Reeves, Brian O.K., SYMPOSIUM 2

Johnson, Clay, *Ashley National Forest*
Shell House
SYMPOSIUM 3

Fremont sites above 6500 feet elevation on the Uinta Mountains north slope appear to be short-term fall campsites resulting from logistic forays by lowlands farmers, rather than forager residential sites. Hypothetically, the north-slope uplands sites were utilized by Fremont people who resided and grew maize along the Green River lowlands between the Wyoming border and Browns Park. In 2004, Ashley National Forest excavated a Fremont feature at 6200 feet elevation near Little Hole on the Green River. The feature, which was eroding out of a cutbank, was in an area that had burned over in the Mustang Fire of 2002. The excavation yielded information supporting the uplands logistic foray/lowlands residential hypothesis, and additionally, revealed some of the ways that wildfire and post-fire erosion can affect an archaeological site.

Kiahtipes, Chris, Todd Grim and **Bonnie Pitblado,** *Department of Sociology, Social Work and Anthropology, Utah State University*
From Paleoindians to Miners: Test Excavations at High Altitude Site 5HN510
GENERAL SESSION 1

In 1996, BLM archaeologists recorded a possible Clovis projectile point and historic rubble mound at 5HN510, located at 2999 meters elevation just north of the abandoned mining town of Capitol City, Colorado. In June 2005, Utah State University personnel test-excavated the site to evaluate the integrity of buried deposits. This paper discusses the site's geological context and sub-surface evidence for prehistoric and historic occupations. It concludes with the assessment that prehistoric components at the site—including a late prehistoric one represented by small arrow tips—have been irretrievably compromised by historic occupation of the site during Capitol City's heyday.

Keyser, James D. - See Poetschat, George, GENERAL POSTER SESSION 1
Kornfeld, Marcel *George C. Frison Institute, University of Wyoming*
Caves, Rockshelters, and Prehistory in the Rocky Mountains

PLENARY

From excavations at Dinwoody Cave until today, caves and rockshelters have played critical roles in prehistory and interpretations of prehistory of the Rocky Mountains. The vast amount of data gathered from these types of archeological deposits have been used to construct culture-chronological schemes for the region and have been particularly useful in defining mid-Paleoindian and later mountain/foothill groups or adaptations. Perishable material from some sites have added a great deal to our understanding of resource use (procurement, manufacture, etc.) not available from other archeological sites. A recent restudy of many of the shelters and the recovered artifacts in combination with studies of recently discovered sites is beginning to add significant additional information about these sites and prehistory. It is likely that shelters should be synthesized in their own right, before being incorporated into the larger schemes of prehistory. In this presentation, I first summarize past studies of caves and rockshelters, followed by a discussion of several ongoing investigations as well as a preliminary synthesis of variation in the characteristics and uses of shelters in the Middle Rocky Mountains.

Knoll, Michelle K., *PIII Associates*
A Quantitative Analysis Comparing the Efficacy of a Manual Flotation Technique Against Laboratory Processing: A Case Study from an Isolated, High Elevation Site in Utah.
SYMPOSIUM 3

In order to determine if hand processing of soil samples is a viable option for archaeologists working at hard-to-access localities, a flotation study was carried out at a site that is only accessible by foot or pack animal. A total of 67 one-gallon bags were processed either manually on site, by machine at a local university, or in a laboratory by professional paleoethnobotanists. The botanical remains were then quantified by number and size of specimens recovered from each technique. The results may be of interest to archaeologists who seek to include botanical remains as part of their artifact assemblage, but who lack the ability to transport heavy materials to an appropriate facility.

Landt, Matthew J. - See Muller, Jenn L., GENERAL SESSION 2

Larmore, Sean – See Gilmore, Kevin P., GENERAL SESSION 1

Larson, Don R., *Western Archaeological Services*
The Bird Canyon Site, 48SU390: Riparian Zone Resource Utilization in the Upper Green River Basin
SYMPOSIUM 5

The Bird Canyon site (48SU390) will be examined in detail to develop an index of utilized riparian and riverine resources. This will then be compared to other sites found in riparian zones in the upper Green River Basin in order to examine the development of the use of these richly diverse biological zones over time. Specialized riparian and

riverine resource utilization in the upper Green River Basin of Wyoming does not appear to become a significant part of the archaeological record until the Late Prehistoric period. Sites that demonstrate specific utilization of riverine and riparian resources include Bird Canyon (48SU390), Mayfly (48SW6926), Hugh (48SW6454) and others. Ethnographic accounts of the use of these resources by Native Americans in the 19th and early 20th Centuries, and archaeological assemblages at sites such as these, contrast with findings at older sites such as 48SU5084 (New Fork Housepit). The New Fork Housepit is an Early Archaic housepit site recently found and excavated near the New Fork River, where preliminary data indicates there is little evidence that these resources were being specifically targeted or exploited. This examination of the development of strategies that include the utilization of riverine and riparian resources has the potential to contribute significantly to the study of settlement patterns in the upper Green River Basin in the Archaic and Late Prehistoric periods.

Larson, Mary Lou, *Department of Anthropology, University of Wyoming*
The Many Dimensions of GIS, GPS, and Remote Sensing in Rocky Mountain Archaeology
PLENARY

My paper discusses on-going Geographic Information Systems (GIS) research in the Rocky Mountains and will include three examples. The first example considers the GIS that is being used to understand shelter formation, use, and chronology for rock shelters in the Bighorn Mountains of north central Wyoming. My second example discusses the investigation of landscape formation, cultural chronology, and human occupation of the Wyoming Basin through the use of GIS, satellite imagery and other remote sensing techniques to develop automated detection of ancient sand dunes. The use of GIS and remote sensing techniques at the Hell Gap site, Wyoming provides the third example of landscape reconstruction at the individual site level. Geographic Information Systems present a very different ways of looking at prehistoric human occupation and promise many new discoveries along the way.

Larson, Thomas K. and **Dori M. Penny,** *LTA, Inc.*
Remote Sensing Techniques Utilized on Historic Trail Studies in Western Wyoming
SYMPOSIUM 1

During the summer of 2003, cultural resource inventories were carried out along segments of the Sublette and Lander Trails in western Wyoming. Part of the work specified involved experimentation with remote sensing techniques to evaluate and better interpret trail related artifacts and features. On the Sublette Trail, ground penetrating radar (GPR) was used in an attempt to identify and map graves. For the two segments of the Lander Trail investigated, metal detector surveys were carried out along the trace. This paper discusses the results, examines the advantages and pitfalls of both techniques, and suggests future avenues of remote sensing research as it applies to historic trails investigation.

Laughlin, John - See Waguespack, Nicole, SYMPOSIUM 2

Leavitt, Alissa, *Ashley National Forest*
Zea Mays and the Uinta Fremont
GENERAL SESSION 2

This paper will re-examine the Uinta Fremont and their use of corn in light of recent discoveries on the Ashley National Forest and surrounding areas of the Uinta Mountains. The information from the investigated sites help elucidate and better evaluate the temporal and geographic extent of maize in the Uinta Mountains. As the cultivation of maize is often analogous with the Uinta Fremont in this region, this paper will also discuss how recent data is improving our understanding of the amount of time the Uinta Fremont were present in the area.

Liebert, Thaddeus and **David Hunter,** *Heritage Program, USFS*
What Can Be Done? Archaeological Issues of the 21st Century
GENERAL SESSION 1

ARPA and NAGPRA have drastically changed the landscape of Anthropology within the last twenty-five years. Archaeology in particular has had to deal with the issues these Acts have raised. Do these statutes allow for the exchange of open dialogue between parties, or has bureaucratic red tape polarized us even further? Can archaeologists and Native peoples work together to come to some kind of understanding, concerning the study of human remains, artifacts and sites? What can be done to achieve mutual respect, or has the European idea of ownership and control of the land forever tainted the relationship between native peoples and archaeologists? We as archaeologists must respect the spiritual and cultural needs of the people living today if we can ever hope to study the lifeways of their ancestors.

Loosle, Byron, *Ashley National Forest*
Mosquitoes, Lightning, Hail and Brookies – Fourteen Years of Archaeological Research in the Uinta Mountains of Northeastern Utah
PLENARY

In spite of fourteen years of giardia outbreaks, pulverized tents, and a multitude of minor injuries, archaeological research in the Uinta Mountains continues. Initial surveys in the Uinta Mountains focused around lake margins. Although there are theoretical reasons for this practice, rumors still persist this afforded the archaeologists the best fishing opportunities. Strategies have been modified over the years, however, "Directed Wanderings" still constitute an important field methodology. Graduate students have introduced a variety of new field techniques, theoretical constructs and research objectives into Uinta Mountain research. Hunting blinds, large bifaces, and brush structures are just some of the surprises encountered over the years. While some research questions have been resolved, many new ones have been encountered.

Loosle, Byron, *Ashley National Forest*

Fremont Nationalism – Cult of the Hunter
SYMPOSIUM 3

Talbot and Richens have argued the apparent sudden rise of agriculture in the Uinta Basin resulted from the migration of a small group of Basketmakers. However, the presence of atlatl dart points at upper elevation hunting camps suggests the continuity of local populations. Although the overall transition may have been peaceful, perhaps there was an underlying ethnic tension. Big game hunting depicted in rock art and the continuation of ancient hunting technology may represent a hunting cult that sought to maintain a distinct identity from the cultural tradition of the migrant farmers.

Marler, Clayton F. – See Grieve, Tanya, GENERAL POSTER SESSION 2

Mayer, James H. - See Surovell, Todd A., SYMPOSIUM 4

McFaul, Michael, *Laramie Soils Service, Inc.*
Eastern Slope Geomorphic Models (Alluvial): Their Geoarchaeological Meaning
SYMPOSIUM 4

Geomorphic models are tools to identify and evaluate the potential of terrains to yield specific cultural components. Late Quaternary alluvial surfaces and sediments were recognized in 1800s. Pioneering geoarchaeology at used terraces to date Lindenmeir. The Broadway, pre-Piney Creek, Piney Creek and Post Piney Creek alluvial fills were defined in 1950s and 60s. Research in the 1970's, 80s and 90s refined the age of the Kersey, Kuner and Hardin terraces. Results: Broadway-Kersey Alluvium (>10,600 BP), Kuner strath (ca. < 10,600 BP above strath), pre-Piney Creek Alluvium (>9,640 to ca. 4,200 BP), Piney Creek Alluvium and Harden fill (ca. >4600 – 1200 BP), Post Piney-Creek (<1,200 BP).

Merrell, Carolynne, *Archaeographics*
URGENT! Locating Cambium Peeled Lodgepole Pine in the Rocky Mountains
GENERAL POSTER SESSION 1

Time is running out to identify and record stands of culturally peeled lodgepole pine that once marked prehistoric trails through the Northern Rocky Mountains. Recently 693 peeled lodgepole were recorded along the Lolo Trail of the Clearwater National Forest. Identification and dating procedures established during this study can be applied to find and record other stands of live and dead culturally peeled lodgepole while they are still in evidence. In the next 50 years or less these culturally peeled lodgepole pine will disappear from the landscape and potential information they provide about past trails through the mountains will be lost.

Merriman, Chris, *Department of Sociology, Social Work and Anthropology, Utah State University,* **Caroline Gabe,** *Uncompahgre National Forest,* and **Bonnie Pitblado,** *Department of Sociology, Social Work and Anthropology, Utah State University*

The Historic Component of the Capitol City Moraine Site (5HN510)
SYMPOSIUM 1

The Capitol City Moraine Site (5HN510) is a multi-component site on a lateral moraine about 150 meters north of the abandoned mining town of Capitol City, Colorado. In 1996, BLM personnel recorded a Paleoindian spear point and historic rubble mound at the site. In June 2005, Utah State University archaeologists test-excavated the site, which yielded no evidence for *in situ* Paleoindian deposits, but a rich historic assemblage that includes a collapsed chimney, hard-packed floor, and household remains consistent with a homestead. This paper interprets the historic component at 5HN510 and its relationship to the turn-of-the-century mining community of Capitol City.

Merritt, Christopher W. and **Timothy James Scarlett,,** *Michigan Technological University*
An Update from the Utah Pottery Project: Excavations at Frederick Petersen's Salt Lake City Pottery and Expanding our Understanding of Consumption.
SYMPOSIUM 1

During the summer of 2005, archaeologists from Michigan Technological University continued on-going studies of Utah's nineteenth century pottery makers. Volunteers helped conduct Phase II excavations at the site of Frederick Petersen's pottery manufactory in Salt Lake City's Second Ward at 643 South Third East (c. 1860-1894). Results from this field excavation are being compared with the existing Neutron Activation Analysis (INAA) database. The current INAA database, generated with kiln wasters from production sites, are now being compared for the first time against sample sherds from existing archaeological collections throughout the Mormon Domain.

Metcalf, Michael, *Metcalf Archaeological Consultants*
A Retrospective of Tumbling Time in the Rocky Mountains: Are We Missing Something Here?
PLENARY

Geoarchaeological work in the southern Wyoming Basin and the Southern Rocky Mountains in the last decade has shown that in many areas, large chunks of the archaeological record are missing. Sediment sequences in the region are rife with disconformities and periods of stability that have collapsed some parts of the archaeological sequence and stripped away other parts. A detailed examination of this phenomenon at a series of sites in northwestern Colorado and southern Wyoming suggests that "sediment events" are cyclical in nature and linked to global climate change. Details of the sediment record and the changing nature of human adaptations through the Holocene are examined. Recent ice core evidence for sudden changes in paleoclimate are reflected in the sediment sequence and in the archaeological record.

Miller, James C., *Department of Geology, University of Wyoming*
Evidence for Mid-Holocene Climatic Amelioration in Rocky Mountain Basins and Western Plains Areas

SYMPOSIUM 4

Separate lines of evidence indicate a temperature controlled climatic amelioration beginning about 6500 RCYBP in the Rocky Mountains and bordering areas. Drainages incised former alluvial plains, dunes cease migration, phytogenic eolian deposits develop, lake levels raise, glaciers advance, and frost heaving occurs. Syndiagenetic weathering of deposits produced secondary minerals indicating permanent water storage (or frequent cycles of rewetting and drying in thin deposits). Pollen/phytoliths in phytogenic eolian deposits indicate cooler/moister conditions during the interval. The archeological record reflects the transition from late Paleoindian and the first scattered remnants of Early Archaic settlements to repeated occupations and some small village settlements.

Miller, Julie – See Goodman-Elgar, Melissa, SYMPOSIUM 4

Miner, Therese L., *Current Archaeological Research Inc.*
The Wolf Tooth Site in Southwest Wyoming: Cool Stuff in a Sand Dune
SYMPOSIUM 5

During the late summer and fall of 2002, Current Archaeological Research, Inc. performed data recovery excavations at Site 48SU3986 (The Wolf Tooth Site) in the Upper Green River Basin of southwest Wyoming. The site is situated in a crescent shaped sand dune and appears to be a single-episode occupation that involved subsistence animal processing activities ca. 1100 years ago. The excavation covered an area of charcoal-stained midden material associated with a hearth-like feature and a roasting pit feature. A fair quantity and variety of Late Prehistoric Period material culture was documented, definitive of the full technological transition from the Archaic Period. The investigations yielded considerable amounts of FCR and mostly highly fragmented and deteriorated faunal remains including bison, pronghorn, rabbits, and the site namesake canid. Also recovered were several siltstone tablets, ocher or "paintstone" material, diagnostic projectile points, several other flaked stone tools and almost 4,000 pieces of debitage from various local toolstone sources.

Muller, Jenn L., Matthew J. Landt, and **Donna Turnipseed,** *Bureau of Land Management, Moab, Utah*
Downcutting, Erosion and Old Survey Data: A Cautionary Tale of Two Site Inventories
GENERAL SESSION 2

Archaeologists have long been aware of the impacts of erosion on sites, particularly in actively downcutting environs like Southern Utah. In 2004, 160 sites of varying sizes and artifact densities located in Lisbon Valley, San Juan County, Utah were relocated and inventoried. The quantification of erosion damage to sites recorded only nine years prior produced profoundly disturbing results. These results strongly counter indicate the use of previous survey surface inventory data to make resource management decisions or even to determine the current eligibility of sites.

Mullins, Daniel C., *Logan Simpson Design Inc.*

Linear Historic Sites and the National Register: An Overview and Proposed Methodology
SYMPOSIUM 1

Determining the significance of extensive linear sites—such as canals—has often proven problematical. In many instances, difficulties in determining the significance of canals can be attributed to a lack of understanding of the historical context associated with the canal. Other factors related to the physical nature and design of canals can make recording and managing historic canals challenging. Small ditches also routinely diverge from main canals to agricultural areas. Taken in total, the various parts form a complex irrigation network of interconnected canals, ditches, and water control features. Finally, because of their linear nature, canals are often upgraded along one or more sections while other segments retain their original historic condition. These factors can make determining the overall integrity of a canal a complex task. An overview of the current state of linear site archaeology is provided, and a method for dealing with these complex site types is offered here through an examination of canal sites in the City of Orem, Utah.

Murphy, Melissa, *Ashley National Forest*
GIS Site Analysis of Dry Fork Drainage
SYMPOSIUM 3

This paper will utilize GIS analysis to examine and distinguish potential differences among sites located within the Dry Fork drainage. The primary objective is to determine prominent differences among sites and how they relate to land use patterns across time by particular groups at lower and higher elevations through the study of existing documentation. Results achieved from this analysis may be used regarding additional drainages with comparable environmental surroundings.

Naylor, Laird, *BLM Salt Lake City*
Historic Archeology on the North Slope: Innovation in Tie Hack Research
SYMPOSIUM 3

The Uinta North Slope has long been known for its abundance of tie hack sites, principally log cabins. These have attracted the attention of casual researchers, forest managers, and the public, but little information has made it into archeological databases. Losses resulting from decomposition, fires, and vandalism are evident, but the extent of the problem is not well understood. Prompted by fire losses, volunteer projects to recover information from these sites gained steam and have produced better data. Repeat photography, where available, documents that considerable deterioration has taken place. Comparison with sites that burned 20 years ago has resulted in a finding that historically burned structures at other sites are surprisingly common. Unusual site and feature types are also becoming apparent. These projects have also provided insight into data gaps that have not yet been explored.
Neeley, Michael P. - See Roll, Tom E., SYMPOSIUM 4

Nelson, Mark, *TRC Mariah Associates, Inc.*
Stud Horse Butte Housepit Site

SYMPOSIUM 5

Excavation of a housepit at the Stud Horse Butte Housepit site (Site 48SU3835) was conducted approximately 35 miles south of Pinedale, Wyoming. The housepit is one of five that have been excavated (and fully documented) from San Arcacio series sediments along the Sand Draw floodplain in the Stud Horse Butte region of the Jonah II natural gas field. Charcoal samples recovered from two of 26 postholes surrounding the housepit produced radiocarbon dates of 8,240 ± 40 and 8,100 ± 50 years B.P. and charcoal from two of six internal hearths produced dates of 5,600 ± 70 and 6,380 ± 50 years B.P. The housepit exhibits morphological and artifactual characteristics that are similar to numerous other housepits excavated in the immediate vicinity, but has several characteristics that differ markedly from housepits dating to the mid-Holocene excavated in the Wyoming and Big Horn Basins.

Palmer, Jamie, *Ashley National Forest*
Analyzing Steatite Vessels
SYMPOSIUM 3

Steatite vessel fragments have been found in over 100 locations in the Rocky Mountain region. Including the new and exciting find at Flaming Gorge, however, only two pieces have been directly dated. While C14 remains the constant in dating techniques, what exactly is missed by not testing for other things such as lipids and macrofossils? Applying new testing methods will help better understand the prehistoric use of steatite vessels, where they were sourced, and the migration routes of those who used them.

Pitblado, Bonnie L., *Department of Sociology, Social Work, and Anthropology* and
Carol M. Dehler, *Department of Geology, Utah State University*
Sourcing Paleoindian Quartzite from the Chance Gulch Site, Gunnison Basin, Colorado
SYMPOSIUM 2

As is the case at many Rocky Mountain Paleoindian sites, quartzites dominate the late Paleoindian chipped stone assemblage from the Chance Gulch site (Gunnison Basin, Colorado). Quartzites are notoriously difficult to assign to a geological source, yet critical information about the settlement strategies of the prehistoric people who used them could be obtained should archaeologists overcome sourcing challenges. We report a preliminary attempt to evaluate four techniques for their potential to source 8,000 year-old chipped stone from Chance Gulch: petrographic analysis; x-ray fluorescence; inductively coupled plasma mass spectrometry; and cathodoluminescence. Using each method, we compare Chance Gulch chipped stone to samples from natural Gunnison Basin quartzite deposits in an effort to match cultural samples to their point of origin on the landscape.

Pitblado, Bonnie – See Kiahtipes, Chris, GENERAL SESSION 1
Pitblado, Bonnie – See Merriman, Chris, SYMPOSIUM 1

Periman, Richard - See Goodman-Elgar, Melissa, SYMPOSIUM 4

Penny, Dori M. – See Larson, Thomas K., SYMPOSIUM 1

Plastino, Tony, *Current Archaeological Research*
A Geomorphic History of the Jonah Gas Field, Sublette County, Wyoming.
SYMPOSIUM 4

Natural gas-driven construction in the upper Green River Basin of southwestern Wyoming has led to small-scale archaeological investigations in (and radiocarbon age determinations for) over one hundred prehistoric sites. This paper describes how pedological and chronological information salvaged from such sites can be used to build a composite depositional chronostratigraphy for the Late Neoglacial in the Sand Draw drainage basin. The proposed timeline includes a stable interval, from about 1100-2450 yr. BP, bracketed by two eras of aggradation (dune mobilization) dating to after 1000-1100 yr. BP and from about 2450-3700 yr. BP. Further data, in the form of stable terraces exhibiting Bt horizon development and other stable-surface indicators, suggest a long period of stasis extending from 3700-7000 yr. BP. Additional evidence from a limited number of older sites indicates that the Early Holocene (7000-8000 yr. BP) could have been characterized by landscape and landform instability.

Plastino, Tony, and **Bill Current**, *Current Archaeological Research*
A Transitional Soils Map Unit Yields A Record of Lithic Procurement: Site 48SU2230, Sublette County, Wyoming
SYMPOSIUM 5

Rapid development in the upper Green River Basin of southwestern Wyoming forced emergency salvage excavations in a large lithic procurement locale (Site 48SU2230). Evidence from Site 48SU2230 supports an archaeological sensitivity model constructed by Eckerle and Taddie in 1997, since it is located in an area considered to be "highly sensitive". Site 48SU2230 is situated on a low ridge above Sand Draw--within a soil association that includes the San Arcacio Variant soil. Transitional between the San Arcacio-Saguache soil association (found on stable Holocene-age terraces) and upland Ouard-Fraddle soils, the San Arcacio Variant soils map unit is relatively unknown archaeologically. A small number of small-scale salvage excavations have been accomplished within this fairly extensive surface soil type, but few have encountered substantial amounts of lithic debris. At Site 48SU2230 lithic procurement occurred on deflated surfaces adjacent to and within the site boundary. The lithic resource consists of cobbles of quartzite and pebbles of brown chert. Preliminary analysis indicates these material types were used differently by the site occupants. The site also yielded areas of fire-blackened soil associated with a buried surface. Fire-cracked or fire-broken rock, spent cores, core fragments and quantities of lithic debris were recovered from this buried stratum. Analysis of both flaked lithics and soil grain-size characteristics at Site 48SU2230 suggests that only a few areas of the San Arcacio Variant soil have escaped the action of erosive forces sufficiently to contain significant amounts of buried cultural material such as is reported here.

Poetschat, George, *Oregon Archaeological Society* and **James D. Keyser,** *USDA Forest Service*
Biographic Rock Art Sites near LaBarge, Wyoming (Poster)
GENERAL POSTER SESSION 1

Four LaBarge Wyoming rock art sites have spectacular Biographic rock art. Gateway shows very early Biographic period stick figure shield bearing warriors with long spears predating the introduction of the horse into this area. South Piney has some of the earliest Indian carvings of boat shaped horses. Names Hill has carvings of tepees, guns, naturalistic horses, and humans interspersed with historic Oregon Trail Registry names and dates. The most recent late Biographic images are horses and riders, humans with detailed faces, clothing and headgear, and even an early railroad train which are found at LaBarge Bluffs.

Prasciunas, Mary M., *Department of Anthropology, University of Wyoming*
Results of Archaeological Testing at the Black Dumps Site (5CF1573), Chaffee County, Colorado
SYMPOSIUM 2

The Black Dumps site is located in the mountains of the San Isabel National Forest of Chaffee County, Colorado, at an elevation of about 9700 feet. The site lies on a ridgetop directly above several perennial springs. Two Clovis projectile point bases and one possible Clovis midsection fragment, all heavily patinated and impact fractured, were discovered on the surface of the site. A Folsom fragment, possibly manufactured from Troublesome chert, was also discovered on the site's surface. This paper discusses these early Paleoindian surface finds as well as the results of subsurface testing focused in the spring area, which failed to discover intact Clovis-age deposits.

Profaizer, Landon, Buck Benson, and **Steven R. Simms,** *Department of Sociology, Social Work and Anthropology, Utah State University*
Field Archaeology and Utah State University
GENERAL POSTER SESSION 1

Since 1989 Utah State University has conducted field archaeology projects in the Basin, Plateau, and Rocky Mountain regions to provide *undergraduate* training and experience in archaeology, cultural resource management and the land management professions.

Profaizer, Landon - See Simms, Steven R., GENERAL POSTER SESSION 1

Reeves, Brian O.K., *Department of Archaeology, University of Calgary*
Mistakis (The Rocky Mountains) Considered
PLENARY

The Rocky Mountains, particularly the reserved areas, are still considered by many North Americans to be the last vestiges of the American Wilderness, in which Native Americans had little or no presence before they acquired horses and guns. These tribes

are often depicted as invaders from the east (e.g. Blackfeet, Arapaho) either driving other presumed indigenous tribes (e.g., the so called "Plains" Shoshone, Salish, and Kutenai) into the mountains or displacing these and other unknown indigenous mountain tribes from the lands or occupying a vacant mountain landscape. These historical interpretations are based in part on18th century explorers' and trappers' observations. These observations detailed who they saw and where in the mountains. Often times it appeared to these earlier explorers that the mountains were vacant lands (for example the Yellowstone Plateau or the Alpine of Glacier National Park). Were they vacant or not? The archaeological record tells us that the Rockies were occupied more or less continually for the last 10,000 years. However, environmental, social/cultural, and population changes which began 1,000 years ago or so which culminated in the Little Ice Age and the early Post-Columbian pandemics throughout the Rockies and adjacent Western Plains may provide some answers as to the vacant landscapes and as to which tribes Lewis and Clark and others did or did not see in the mountainous west.

Reeves, Brian O.K., *Department of Archaeology, University of Calgary* and **Ann Johnson**, *National Park Service, Yellowstone National Park*
Osprey Beach and Paleo-Indian Adaptations
SYMPOSIUM 2

The Osprey Beach site is a multi-component, high altitude, stratified campsite on Yellowstone Lake, in Yellowstone National Park containing a major Cody Complex component. Osprey Beach is interesting for at least the following: the dominance of obsidian in the lithic assemblage, the number of shaft and awl abraders, its presence within the Rocky Mountains, and for subsistence information derived from blood residue analysis. A seasonal round model is developed through data derived from the obsidian sourcing of tools. A popular model suggests there were different Paleoindian groups in the intermountain basins-plains and in the adjacent foothills-intermountain areas. The former was a bison economy and the latter was diversified with species other than bison. Our seasonal round and subsistence data suggest these may be the same people with economic differences better framed as seasonal subsistence orientation than subsistence dichotomy.

Rolland-Francis, Raphaelle, *Ecole des Hautes Etudes en Sciences Sociales, Paris (France)*
Patient Walk Toward an Ideal Territory? Navajos and Canyon de Chelly National Monument
GENERAL SESSION 1

This Powerpoint presentation deals with the exception of Canyon de Chelly National Monument established in 1931 within the Navajo Reservation and where residents were allowed to reside (in other parks, Native tribes were systematically removed). The National Park Service was supposed to preserve the Ancestral Puebloan landscape without interfering with the Navajo way of life, but it is not until recently that residents have been truly integrated in the management and in the interpretation of the place. The

axis is to understand the impact of the different perceptions of landscape on traditional use, preservation, and tourism

Roll, Tom E., *Department of Sociology and Anthropology, Montana State University,* **Michael P. Neeley,** *Department of Sociology and Anthropology, Montana State University,* **Robert J. Speakman,** *Archaeometry Laboratory, Research Reactor Center, University of Missouri-Columbia* and **Michael D. Glascock,** *Archaeometry Laboratory, Research Reactor Center, University of Missouri-Columbia*
Characterization of Montana Chert by LA-ICP-MS
SYMPOSIUM 4

This discussion addresses the distribution of lithic resources throughout Montana, but emphasizes chert and its identification. Evaluation of the potential for laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) to identify chert from a particular quarry, locality, geologic formation, and/or physiographic region represents an important element of the work. Despite the ability to detect a wide range of trace elements at extremely low levels, the analyses produced somewhat equivocal results. Of the eight Montana quarries sampled, five yielded essentially indistinguishable elemental composition. Three sampled quarries, produced signatures different from each other and from the other quarries sampled.

Scarlett, Timothy James - See Merritt, Christopher W., SYMPOSIUM 1

Scoggan, Tara and **Shana Dooley**, *Ashley National Forest*
Trade Routes of Lithic Material in the Uinta Mountains
GENERAL POSTER SESSION 1

The Uinta Mountains of northeastern Utah presented a formidable barrier to human movement but in spite of this, lithic material from northern areas was transported throughout the Uintas, into the Uinta Basin, and beyond. Although the Sheep Creek quartzite and Tiger chert quarries are relatively close to each other, the materials may have been moved along different routes. This poster will attempt to reconstruct trade routes of various toolstones and their pathways to sites in the Uinta Basin.

Silverman, Shari Maria, *Montgomery Archaeological Consultants*
Travel and Cultural Change in the Northwestern Rocky Mountains
GENERAL SESSION 1

Northwestern Rocky Mountain cultural changes both influenced and were affected by travel. Residents canoed, hiked, and snowshoed before the horse's arrival in the 1700s (Teit 1930:359-360). Its advent changed Plateau bands' cultures (Haines 1938:435-436) by altering routes, thus accessibility, to different peoples. European-Americans traversed the mountains from 1805. Explorers and trappers used Indian transportation modes. Later, settlers drove wagons and automobiles (Strong and Strong 1995; Hill 2000), prompting route alterations. Political and mining activities generated additional roads

(Freeman 1954; Lewis 1991). People now canoe, hike, and snowshoe primarily for recreation.

Simms, Steven R., Buck Benson, and **Landon Profaizer,** *Department of Sociology, Social Work, and Anthropology, Utah State University*
Excavations at Two Wickiup Sites: Dugway Proving Ground and West Tavaputs Plateau
GENERAL POSTER SESSION 1

We report investigation at two wickiup sites. One is on the West Tavaputs Plateau northeast of Price, Utah. It contains two wickiups marked by structural remnants. The other site is on the Dugway Proving Ground in northwestern Utah. It contains no apparent structural remains, but excavation located two wickiups. These sites suggest the various guises of "wickiup sites." Excavation of these kinds of sites improves our methods for locating lightly built housing when it is not immediately evident. It also aids the interpretation of sites that upon initial inspection may only appear to be "diffuse lithic scatters."

Simms, Steven R, - See Profaizer, Landon, GENERAL POSTER SESSION 1

Smith, Craig S. and **Cynthia D. Craven,** *TRC Mariah*
Late Mid-Holocene Bison Exploitation in the Wyoming Basin: A View from the Graham Ranch Site
GENERAL SESSION 1

Excavated hunter-gatherer campsites in the Wyoming Basin dating to the late mid-Holocene (4800-3800 years ago) typically contain evidence for subsistence strategies based on a broad range of resources that especially focused on small mammals and usually lacked larger animals such as bison. The Graham Ranch site located near the Sweetwater River in the northern Wyoming Basin provides a rare opportunity to learn more concerning bison utilization during this time period. Excavations of one of the site components dating to 4410-4310 years ago yielded over 3000 bone specimens, of which over 90% were identified as bison or bison-sized, associated with a large stained area, a rock-filled basin, and five possible post holes. The site appears to have served as a location where at least one bison was intensively processed. Comparisons with other excavated sites dating to this period indicate that bison was rare on the landscape and was limited to only the most productive patches such as along the Sweetwater River where they were hunted when encountered.

Speakman, Robert J. - See Roll, Tom E., SYMPOSIUM 4

Stertz, D. Andrew, *Ashley National Forest*
A Look along the Uinta Mountains' Carter Road
SYMPOSIUM 3

Vernal, in northeastern Utah, is always living in the past, but this is not a new phenomenon: as the frontier was vanishing and outposts were being dismantled – Fort

Thornburgh was established. The Carter Road began as a military supply road from the Oregon Trail route in Southwestern Wyoming, over the Uinta Mountains, down into the Uinta Basin. The establishment of Fort Thornburgh was to assist American settlers against aggressive native attacks. The Carter road occupied a small length of time, less than three years. In most places it is overgrown, trail markers are few and far between. It winds up hills, through marshes, and disappears in some spots. Yet, despite having existed for a short time, the Carter Road has a tremendous amount a material culture, comparable in quantity to larger trails like the Santa Fe, California, Oregon, and Mormon Trails. This paper plans to discuss the reasons why the Carter road is so visible archaeologically.

Storm, Brian, *Ashley National Forest*
Grayware Ceramics in Northeastern Utah
SYMPOSIUM 3

Uinta Grayware is generally associated with the Fremont of northeastern Utah and is typically identified by its limestone temper. Recent studies have shown some variation in the tempers used by these prehistoric farmers and foragers. Recent petrographic analyses from high elevation sites have raised questions concerning interaction, mobility and migration.

Surovell, Todd A., Nicole M. Waguespack, *Department of Anthropology, University of Wyoming,* **James H. Mayer**, *Department of Geosciences, University of Arizona*, and **J. Michael Daniels,** *Department of Geography, University of Wyoming*
Shallow Site Archaeology: Formation Processes at Barger Gulch, Locality B
SYMPOSIUM 4

Shallowly buried archaeological sites are particularly susceptible to surface and subsurface disturbance processes. Buried only 10 - 50 cm beneath the ground surface for 10,500 ^{14}C yr, the Folsom component at Barger Gulch Locality B (Middle Park, Colorado) exhibits many signs of post depositional disturbance. Because cultural deposition often operates on a short time scale relative to geologic deposition, vertical artifact distributions can be used to clarify questions of site formation. Using the relationships between artifact distributions, stratigraphy, and radiocarbon dating, we are able to reconstruct a series of events that have impacted the site.

Surovell, Todd A. - See Waguespack, Nicole, SYMPOSIUM 2

Stiger, Mark, *Department of Natural and Environmental Sciences, Western State College*
The Mountaineer Folsom Structure
POSTER SYMPOSIUM 1

Excavations at the Mountaineer site uncovered the well-preserved remains of a Folsom structure and outside use areas. Several details of the construction can be interpreted, and numerous activities that took place in and around the structure can be discerned. Studies

of lithic raw-material use, reduction strategies, and tool morphology indicate that several different activities were undertaken during a single occupation. Spatial analysis of the remains provides a sequence of activities during the occupation span.

Stiger, Mark, *Department of Natural and Environmental Sciences, Western State College*
The Archaic Occupation of the Upper Gunnison Basin
POSTER SYMPOSIUM 1

The Upper Gunnison Basin has one of the best documented Archaic sequences in Colorado. Numerous excavations over the last 30 years have shown prehistoric occupation of this mountain valley fluctuating in intensity over the last 8,000 years in correlation with environmental changes. From this time period, excavated residential structures offer the opportunity to study changing assemblages from culturally defined comparable units. That is, units of assemblage comparisons are artifacts from areas defined by prehistoric activities, not from arbitrary geological units or square excavation units. These comparisons show stability in some dimensions and changes in others.

Stiger, Mark, *Department of Natural and Environmental Sciences, Western State College*
The Folsom Residential Structure at Mountaineer: Technology, Spatial Organization, and Formation Processes through Refitting
GENERAL SESSION 1

The Folsom component of the Mountaineer site near Gunnison, Colorado, has provided the well-preserved remains of a residential structure and associated artifacts and debris. Various recovered materials are differentially distributed relative to the structure and other cultural features on site. These distributions, coupled with refitting of artifacts and debris illustrate different cultural and natural formation processes, and different spatial organization of activities and lithic technologies by the inhabitants. Furthermore, refitting artifacts can provide a fine-grained relative sequence of some of the actions at the site. This sequence demonstrates different lithic technology and spatial organization within the occupational history of the structure.

Tanner, Russel L., *Bureau of Land Management, Rock Springs* and **Rick Weathermon,** *University of Wyoming, Department of Anthropology*
The Ultimate Transition: Suffering and Death in the Red Desert, circa 3,500 to 1,000 B.P.
SYMPOSIUM 5

Issues of suffering and eventual death are discussed using assemblages of two skeletal human remains discovered in recent years in the Red Desert region of Wyoming. The case studies: Deer Butte Man and Red Desert Woman are the remains of advanced aged individuals exhibiting remarkable pathologies evident of both natural disease and injury resulting from human conflict. Cultural implications evident from these remains are discussed.

Turnipseed, Donna – See Muller, Jenn L., GENERAL SESSION 2

Varney, R.A. and **Linda Scott Cummings,** *Paleo Research Institute*
Rocky Mountain Skies: Climate Models for the Cordillera
PLENARY

Given the latitudinal and elevational range of the Rocky Mountains, they are arguably one of the most climatologically diverse regions in the Northern Hemisphere. This complex climate mosaic permits a wealth of plant resource procurement zones within a very limited area. Shifts in climate affect mountains by compressing, expanding, or changing the elevation of occurrence of these plant life-zones, but on the human landscape, the zones within a broader area are relatively stable. Throughout the latest Pleistocene and Holocene, as the climate shifts affected the adjacent Plains and Great Basin, sometimes making survival there difficult, the comparatively rich mountains would have been an attractive alternative. This study synthesizes archaeoclimate models of the Rocky Mountains and nearby lowlands into a diachronic animation for the past 14,000 radiocarbon years. Particular attention is given to periods of significant climate changes indicated by the models and the potential impact of those changes on the regional plant and human communities.

Varney, R. A. – See Cummings, Linda Scott, SYMPOSIUM 2

Vivian, Brian C., *Lifeways of Canada, Calgary*
Identifying a Cody Component at the Malin Fishing Hole Site (24YE353) in Yellowstone National Park
SYMPOSIUM 2

In August of 2004 archeologists returned to 24YE353 (Malin Fishing Hole Site) to undertake a data recovery program at a location that could potentially reveal much about early human occupations in Yellowstone National Park. Excavation of 24 square meters revealed a complex stratigraphic profile *ca.* 2 m in depth, and four separate cultural components. Two complete Cody knives and a tip of a third knife, along with an assortment of lithic debitage and well mineralized bone fragments characterize the oldest component, and associated radiocarbon dates of 9510 +/-50, 9530 +/-50 and 9670 +/-50 from this same level help fix this as one of the oldest Cody Components documented. This presentation will report on the excavations carried out at the Malin Fishing Hole Site and detail the finds recovered from there.

Vlcek, Dave, *BLM Pinedale Field Office*
The Lander Trail, Then and Now
SYMPOSIUM 1

In 1857, Frederick W. Lander began work on a "practicable" Emigrant route through Western Wyoming. Alternately called the Lander Trail, the Lander Road or the Lander Cutoff, this nineteenth century emigrant trail is the northernmost of a series of Oregon/California trails in western Wyoming. In 2003, BLM Pinedale funded the first

intensive inventory of portions the Lander Trail, incorporating a metal detector survey and intensive ground inventory of existing Trail resources. This paper presents BLM 's ongoing Lander Trail inventory, evaluation and public education efforts.

Vlcek, David and **Merry Gamper,** *BLM Pinedale Field Office*
From the Great Divide to the Green River: Archaic Transitions in the Upper Green River Basin
SYMPOSIUM 5

Archaic-aged sites from the seventh, sixth and fifth millennia BP are abundant in the upper Green River basin and span the Great Divide and Green River (Opal) phases. While Jonah Housepits such as expressed at 48SU4479, the C. David Love Site are known to archaeologists working in this area, many other Early and Middle Archaic sites are hidden in the gray literature. This paper presents data from select Archaic sites in the upper Green and attempts to use modern GIS mapping techniques and soils layers to glean settlement pattern data for the Archaic. Portions of our study area truly seem to form an ideal "Archaic laboratory".

Vlcek, David – See Drucker, J.D., SYMPOSIUM 5

Waguespack, Nicole, Todd Surovell, and **John Laughlin,** *Department of Anthropology, University of Wyoming*
The Organization and Use of Hearth Space at a Folsom Residential Site, Barger Gulch Locality B, Middle Park, Colorado
SYMPOSIUM 2

Ethnoarchaeological and ethnographic observations of hunter-gatherer camps have established that hearths frequently serve as focal activity loci. Prehistorically, this pattern is evident in the form of hearth-centered activity areas evidenced by high density clusters of artifacts and bone in association with hearth features. Yet with few exceptions, hearths and other residential features are uncommon from Folsom contexts. Detailed spatial analysis and artifact refitting of the Barger Gulch, Locality B, lithic assemblage reveals insight into the spatial organization of behaviors associated with a hearth and possible structure. Analyses of artifact density, size distribution, and type in conjunction with artifact refits provides evidence that a diverse array of technological activities were performed throughout the duration of site occupation in preferred locations adjacent to site features.

Waguespack, Nicole - See Surovell, Todd A., SYMPOSIUM 4

Wasilik, Norbert, *Department of Anthropology, University of Wyoming*
Early Paleoindians in the Rocky Mountains: A 10,400 Year Old Cultural Component from the Helen Lookingbill Site (48FR308), Wyoming
SYMPOSIUM 2

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 about 10,400 years ago and is represented primarily by two thousand core and biface reduction flakes recovered from a 2 X 2 meter unit. No temporally sensitive artifacts have been identified *in situ*, however, several Haskett or Hell Gap projectile points have been recovered from a secondary context. The chipped stone material is being analyzed to increase our understanding of the integrity of the cultural component, locate possible activity structures, study production processes, and understand the cultural affiliation of the people who left the assemblage behind. The research approach and preliminary results of the analysis will be discussed in detail.

Watkins, Christopher N., *Arizona State University School of Human Evolution and Social Change*
Parowan Pottery and Fremont Complexity: Late Formative Ceramic Production and Exchange
GENERAL SESSION 2

Researchers have long suspected that the Parowan Valley was a major production center for Snake Valley pottery. I test this hypothesis through a distributional analysis and chemical assay of Snake Valley Black-on-gray pottery from the Parowan Valley (Paragonah, Parowan, and Evans Mound), the Salt Lake Valley (South Temple) , the Sevier Valley (Mukwitch Village), and Baker Village. Existing research is synthesized with the new data resulting in a model of Fremont ceramic production and exchange during the Late Formative period.

Weathermon, Rick L. - See Tanner, Russel L., SYMPOSIUM 5

Weymouth, Heather M. – **See Williamson, Andrew M.**, GENERAL SESSION 2

Williamson, Andrew M. and **Heather M. Weymouth,** *Sagebrush Consultants L.L.C*
Archaeological Investigations in the High Uintas Wilderness Region, Duchesne County, Utah
GENERAL SESSION 2

During the 2000 and 2001 field seasons, Sagebrush Consultants archaeologists inventoried 13 prehistoric sites and 22 isolated finds in association with a series of glacial lakes in the High Uintas Wilderness Region of Duchesne County, Utah. The assemblages represented at these sites suggest extended utilization of high altitude resource areas that ranges between the Paleo-Indian and Late Archaic time periods (ca. 8000-500 B.P.). This paper summarizes the results of these findings, and discusses them within the context of prehistoric use of alpine resource areas in the Intermountain region.
Wolley Vawser, Anne M. – **See Hartley, Ralph J.**, GENERAL POSTER SESSION 2

Yoder, David, *University of Nevada, Las Vegas*
Storage and Mobility Among the Fremont: Changing Forms Through Time

GENERAL SESSION 2

The agriculturalist/hunter-gatherers known as the Fremont used differing storage strategies through time and across space during their 1350 year time span. Lisa Young (1996) posits that with an increase in sedentism in a population there should be a coeval increase in above ground on-site storage and a decrease in bell-shaped storage pits and off-site granaries. To test this model I have created a storage database which contains information pertaining to storage facilities, as well as temporal and geographic associations for the Fremont area. Aside from testing Young's model, the storage database allows for the analysis of temporal and spatial patterning of storage techniques in the Fremont culture.