LARSON

Fourth Biennial Rocky Mountain Anthropological Conference

Rocky Mountain culture area
(Map from Willey 1966)

And

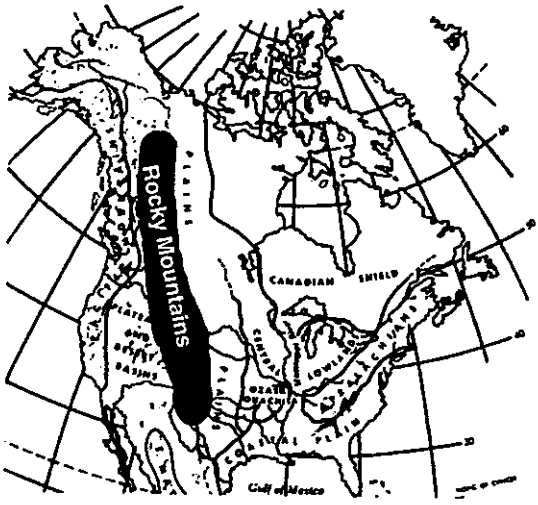
Colorado Archaeological Society Annual Meeting

Glenwood Springs, CO
September 30 - October 2, 1999

Fourth Biennial Rocky Mountain Anthropological Conference
and
Colorado Archaeological Society Annual Meeting

Theme: The Rocky Mountain Culture Area

Organizer:
Marcel Kornfeld
Organizing Committee:
Mary Lou Larson, Rhoda O. Lewis,
Mike Metcalf and Brian Vivian



Rocky Mountain culture area
(Map from Willey 1966)

HOST:
University of Wyoming
Department of Anthropology and
George C. Frison Institute of Archaeology and Anthropology

Glenwood Springs, CO
September 30 - October 2, 19999

Table of Contents

Acknowledgements	Page 2
General Information	Page 3
Summary Schedule	Page 5
A Note About Sessions & Papers	Page 7
Program	Page 8
Symposia Abstracts and Contributed Papers Sessions	Page 21
Abstracts	Page 25
Map	Page 59
Meeting Plan	Page 60
Notes	Page 62

Acknowledgements

The Rocky Mountain Conference in Glenwood Springs would not have been possible if not for the generous contributions of several individuals and organizations. We are grateful for the support of:

- Alpine Archaeological Consultants, Montrose, CO
- Colorado Archaeological Society
- Colorado Council of Professional Archaeologists
- Colorado Historical Society, State Historical Fund
- George C. Frison Institute of Archaeology & Anthropology, University of Wyoming
- James Brechtel, Ft. Collins, CO
- Larson-Tibesar Associates, Laramie, WY
- Mariah Associates, Inc., Laramie, WY
- Metcalf Archaeological Consultants, Eagle, CO
- Powderhorn Research, Durango, CO
- Seyhan T. Dwelis, Colorado Springs, CO
- Wyoming Association of Professional Archaeologists

The conference would not have happened without the able help of Barb Barnes, Pam Brekken, Margie Reis and Shannon Madura from UW Conferences and Institutes. University of Wyoming Anthropology graduate students, Craig Lee, Brian Andrews, Beth Burghard, David Byers, Casey Dukeman, Rhonda Letts and Robyn Watkins provided on site support. Craig Lee helped with the early web site set-up.

Finally, we wish to acknowledge the Hotel Colorado for their facilities and hospitality.

General Information

Conference Accommodations and Headquarters
The Hotel Colorado, Glenwood Springs, Colorado will serve as **Conference Headquarters.**

Registration
Registration is required for attendance and participation at the Rocky Mountain Conference. On-site registration is $65, $45 for Colorado Archaeological Society and students. Registration will be in the hotel lobby at the following times:

Thursday 7 - 9 p.m.
Friday 8 a.m. - 5 p.m.
Saturday 8 a.m. - 5 p.m.

Early Bird Party
The Early Bird Party will be held in the Devereux Room, Thursday, September 30, beginning at 7:00 p.m. There will be free beer and wine and a cash bar.

Board Meeting
The CAS Board of Directors will meet Friday, October 1, 1999 at 5:00 p.m. in the Rooseveltt Room.

Other Organization and Committee Meetings
RMAC Business Meeting - Friday, October 1, 1999
Colorado Room, 5:00 - 6:00 p.m.
CAS Business Meeting - Saturday, October 2, 1999
Colorado Room, 5:00 - 6:00 p.m.

Books and Exhibits
Book and other vendors will be displaying in The Gallery Room during the conference.

Silent Auction
Colorado Archaeological Society silent auction will be held Saturday. Items will be displayed in the Taft Room all day, the results will be announced at the Social hour from 6 - 7 p.m. in the Colorado Room.

Poster Papers
Contributed poster papers will be exhibited in The Gallery Room on Friday, October 1 from 1:00 - 5:00 p.m. & Saturday all day.

Conference Banquet
The Conference banquet will be Saturday, October 2 in the Devereux Room. The social hour with cash bar and results of the CAS silent auction starts at 6:00 p.m. and dinner will be served at 7:00 p.m. Our dinner entertainment is Jack Gladstone, Blackfoot Indian singer, songwriter, and storyteller. The cost of the banquet is $30 per person and reservations must be made by 8:00 a.m. on Friday, October 1, 1999

Conference Souvenirs
T-shirts will be available for $10 on a first come first serve basis at the registration desk. Orders for the t-shirts may be placed after that.

Symposia and Session Chairs
Please maintain the established schedule in fairness to persons planning to attend specific presentations: pause for the period allotted in the program if a scheduled speaker fails to appear. Note that all the papers are scheduled for 20 minutes. Use the alarm clocks which are provided with instructions in each room to keep participants on time. It is a good idea to set them for three minutes short of the time for the next paper. This allows for a two-minute warning to the speaker and one minute to announce the next speaker.

Summary Schedule
All Events Held at Hotel Colorado

Thursday-Sept 30, 1999

7:00- 9:00 pm	Registration (in the lobby)
7:00 p.m. - late	Early Bird Party (Devereux Room)

Friday-October 1, 1999

8:10	Conference Opening Remarks: Clifford Duncan
8:20 -12:00	*Plenary Session*: The Rocky Mountain Culture Area Colorado Room
1:00 - 5:00	Rock Art of the Rockies Colorado Room (1:00 - 4:40)
	Rocky Mountain Features and Stone Houses Devereux Room (1:00 - 4:00)
	Sites of the Rocky Mountains Devereux Room (4:00 - 5:00)
	Mountains and Plains: Islands, Interaction, and Migration Teddy Roosevelt Room (1:00 - 3:20)
	Jackson Hole and Surrounding Areas Teddy Roosevelt Room (3:40 - 5:00)
	Paleoindians, Euroamericans, and Site Formation The Gallery
4:30-6:30	CAS Board Meeting Roosevelt Room (5:00 - 6:00)
	RMAC Business Meeting Colorado Room (5:00 - 6:00)
7:30-9:30	Public Forum: What's Happening in Archaeology?: Education, Regional, and Historical Archaeology Colorado Room

Saturday-October 2, 1999

8:00 -12:00	Environment and Change in the Northern Rockies Colorado Room (8:00 - 9:20)
	Pronghorn Perspectives Colorado Room (9:40 - 12:00)
	Skeletal Biology of the Rocky Mountains Teddy Roosevelt Room (8:00- 11:40)
	Historic Archaeology Devereux Room (9:40 - 10:00)
	Looking at the Middle Range Devereux Room (10:00 - 12:00)
	Posters The Gallery
1:00 - 4:30	Pronghorn Perspectives (continued) Colorado Room (1:00 - 4:20)
	Paleoindian and Archaic of the Rocky Mountains Teddy Roosevelt Room (1:00 - 4:40)
	Who You Are in the Rocky Mountains: Ethnogenesis and Identity Devereux Room (1:00 - 2:20)
	Plants as Archaeological Evidence in the Rocky Mountains Devereux Room (2:40 - 4:20)
	Posters The Gallery
5:00 -6:00	CAS Business Meeting Roosevelt Room
6:00 - 7:00	Social Hour, CAS silent auction results Devereux Room
7:00 - 10:00	Social Hour & Banquet, CAS awards Devereux Room

A Note About Sessions and Papers

Symposia:
A group of presentations organized around a theme and submitted by an organizer or organizers as a package. The Plenary Session was solicited by the conference organizers, while others were submitted by their organizer(s).

Contributed Papers/Posters:
Contributed paper and poster presentations were grouped, where possible, around specific topics or groups of topics.

PROGRAM

Friday, October 1, 1999
Friday Morning

Conference Opening Remarks

8:10 Duncan, Clifford

Session 1: Plenary Session
THE ROCKY MOUNTAIN CULTURE AREA

Organizers and Moderators:
Marcel Kornfeld, Michael Metcalf, and Mary Lou Larson
Room: Colorado

8:20 Kornfeld, Marcel **Introduction: The Rocky Mountain Culture Area**

8:30 Gill, George W. **Rocky Mountain Populations through Prehistory**

9:00 Reeves, B.O.K. **Is there a Northern Rocky Mountain Archaeological Culture Area: A View from the Mistakis (the Backbone)?**

9:30 Frison, George C. **Similarities and Dissimilarities between Foothill/Mountain and Plains Groups**

10:00 **BREAK**

10:30 Davis, Leslie B. **A Middle Rocky Mountain Homeland for the Paleoindian Alder Complex Foragers?**

11:00 Walker, Deward **Alpine Environments in the Columbia Plateau of the Rocky Mountain Cultural Provina**

11:30 Goss, James A. **Rocky Mountain High Culture: Look, the Utes Aren't Marginal Any More**

Friday Afternoon

Session 2: Symposium
ROCK ART OF THE ROCKIES

Organizers and Chairs:
Julie E. Francis and Larry Loendorf

Room: Colorado

1:00 Billo, Evelyn and Robert Mark **Wind River Petroglyph GIS Project**

1:20 Bies, Michael T. **The Sheep Site Sheep**

1:40 Francis, Julie **Rock Art at the Hulett South Slide, Crook County, Wyoming**

2:00 Greer, Mavis and John Greer **Two Rock Art Sites in the Powder River Basin**

2:20 Loendorf, Lawrence L. **Painting Tobacco**

2:40 Main, Steven **Central High Plains and Laramie Basin Rock Art**

3:00 **BREAK**

3:20 Merrell, Carolynne L. **Bear Presence in Rock Art from the Northern Rocky Mountains**

3:40 Moreschini, Gary J. **Range View 5FN721, The Archaeology, the Rock Art, the Astronomy: Site Review, Recent Data and Observations for 1997 and 1998**

4:00 Poetschat, George, James D. Keyser, and Phillip Cash Cash **Biographic Rock Art: Expansion of a Plains Tradition into the Rocky Mountains and Columbia Plateau**

4:20 Tratebas, Alice **Using Rock Art to Trace Prehistoric Migrations**

Friday Afternoon

Session 3: Contributed Papers
ROCKY MOUNTAIN FEATURES AND STONE HOUSES

Chair: Mary Lou Larson
Room: Devereux

1:00 Andrews, Brian and Paul Joy **The Form, Function, and Use of Digging Sticks: An Example from the Henn Site**

1:20 Johnson, Clay **Dutch John: 7,000 Years of Environmental Stability?**

1:40 Pugh, Daniel C. **Slab-lined Basins and Site Reuse by Hunter-Gatherers in the Dutch John Area of Northeastern Utah**

2:00 Letts, Rhonda **Storage and Mobility in Southwestern Wyoming**

2:20 McDonald, Kae **Saving it For A Rainy Day: Prehistoric Caching and Curation in Northwestern Colorado**

2:40 Atkinson, Scott A. and Byron Loosle **High Altitude Fremont Brush Structures at the Allen Creek Village Site, 42Da791**

3:00 Shields, Wm. Lane **Basin Houses in Colorado and Wyoming: Delineation of a Culture Area**

3:20 Stiger, Mark **Stone Houses, Grinding Stones, and Colorado High Country Archaeology**

3:40 ~~Hauck, F. Richard **The DustDevil Gorge Medicine Wheel**~~

Shields paper 198 houses 68 sites?
double room houses, superimposed
domed free standing with LL up

Friday Afternoon

Session 4: Contributed Papers
SITES OF THE ROCKY MOUNTAINS

Chair: Mary Lou Larson
Room: Devereux

4:00 Pool, Kelly **Data Recovery at the Red Army Rockshelter (5RT345), Routt County, Colorado**

4:20 Loosle, Byron **McConkie Ranch (42Un2550)**

4:40 ~~**Hauck, F. Richard Excavation of Crazy Bird Shelter**~~
Cancelled

metate at 4000 bp w/ ochre on it
mckean level at 4800 bp
diversity of species
Early Archaic pit structure
3 occupations
1) 7300 bp
2) 5440 bp human burial
3) slab lined hearth 5000 or 80

Friday Afternoon

Session 5: Contributed Papers
MOUNTAINS AND PLAINS: ISLANDS, INTERACTION, AND MIGRATION

Chair: Mike Metcalf
Room: Teddy Roosevelt

1:00 Byers, David, John W. Fisher, Jr. , and Walt Allen **Archaeological Investigations in the Bridger Mountains, Montana**

1:20 Burgess, Cher and Dave McKee **Island in the Plains: An Overview of Occupation and Research in the Black Hills of South Dakota and Wyoming**

1:40 Black, Kevin **Archaeological Resources in the Trinchera Cave Area, Southeastern Colorado**

2:00 Charles, Mona C. **Basketmaker II as an In Situ Development in the San Juan Mountains, Southwest Colorado**

2:20 Adams, Jeffrey, Carole Graham, Anne McKibbin, Kelly Pool, and John Scott **A Pipeline Runs Through It: A Comparison of Prehistoric Site Distribution in the Denver, Great Divide, Laramie, Powder River, and Wind River Basins, Wyoming**

2:40 Torres, John A. **Athabaskan Migration Revisited...Again: A View of Lithic Technology from the Southern Rocky Mountains**

3:00 Husted, Wil **Numu Origins: A Rocky Mountain Perspective**

Friday Afternoon

Session 6: Contributed Papers
JACKSON HOLE AND SURROUNDING AREAS

Chair: Danny N.Walker
Room: Teddy Roosevelt

3:40 Eckerle, William P. **Geoarchaeology of Southwestern Jackson Hole, Teton County, Wyoming**

4:00 Dickerson, Ken **Technological Organization of an Upland Lithic Production System in West Central Idaho**

Bill Eckerle, EEI, Marissa Tadda, JV Pastor+.

4:20 ~~Cannon, Kenneth P., Dawn R. Bringelson, and Richard E. Hughes **Prehistoric Settlement in Southern Jackson Hole**~~

KJ Thompson

4:40 Cannon, Kenneth P. **Bison in Jackson Hole: A View from the Goetz Site (48TE455)**

Session 7: Contributed Posters
PALEOINDIANS, EUROAMERICANS, AND SITE FORMATION

Room: The Gallery

Kornfeld, Marcel **First Peoples of the Rockies: The Clovis Evidence**

Sanderson, Meegan **Effects of Trampling on Lithic Raw Material**

McDonald, Kae **Historic Archaeology Sites in the Glenwood Springs Area**

Friday Evening
FORUM: WHAT'S HAPPENING IN ARCHAEOLOGY?: EDUCATION, REGIONAL AND HISTORICAL ARCHAEOLOGY

Organizers and Chairs: Mary Jo Kruas and Gary J. Moreschini Room: Colorado

Williams, Pat and Eileen Tannich-Gose **The Evolution of a Successful Educational Program**

CAS-Pikes Peak Chapter, Colorado Historical Society -Historic Preservation office, and US Forest Service Joint Project **Vogel Canyon: A Renewed Spirit**

Collins, Susan M. **State of Colorado Archaeology at the Millennium**

Walker, Danny N. **Looting of Archaeological Sites**

Saturday, October 2, 1999
Saturday Morning

Session 8: Symposium
ENVIRONMENT AND CHANGE IN THE NORTHERN ROCKIES – Rhonda

Organizer and Chair: Brian Vivian
Room: Colorado

8:00 Vivian, Brian C. **Populations and Paradigms on the Periphery**

8:20 Oetelaar, Gerald A. **You Are Where You Live? Cultural Perceptions and Uses of Landscapes by First Nations Occupying the Rocky Mountains, Northwestern Plains, and Boreal Forests of Alberta**

8:40 Gillespie, Jason D. **Paleoindians, Ice-free Corridors, and the Peopling of Alberta: New Archaeological and Geological Evidence for the First Peoples of Alberta**

9:00 Walde, Dale **DhPs-4: A Pelican Lake Occupation in the Canadian Rockies**

Saturday Morning

Rhonda

Session 9: Symposium
PRONGHORN PERSPECTIVES

Organizers: Jana V. Pastor, Kevin W. Thompson, and Russ Tanner
Chair: Jana V. Pastor
Room: Colorado

9:40 Lubinski, Patrick **Introduction to Pronghorn Perspectives**

10:00 Fisher, Jack and George C. Frison **Site Structure at Boar's Tusk, Wyoming**

10:20 Hill, Matthew G., George C. Frison, and Danny Walker **Folsom Pronghorn Utilization at Agate Basin, Wyoming**

10:40 Frison, George C. **The Eden-Farson Site - 48SW304 - Pronghorn Procurement in the Green River Basin, Wyoming**

11:00 Lippincott, Kerry **Late Prehistoric Pronghorn Procurement in the Western Plains**

11:20 Smith, Craig and Lance McNees **Pronghorn and Bison Procurement During the Uinta Phase in Southwest Wyoming: A Case Study From Site 48SW270**

11:40 Lubinski, Patrick **Pronghorn Hunting and "The Numic Spread"**

(Session 9 continues in afternoon)

Saturday Morning

Session 10: Symposium
SKELETAL BIOLOGY OF THE ROCKY MOUNTAIN REGION

Organizers and Chairs: George W. Gill and Lillian J. Stuart
Room: Teddy Roosevelt

8:00 Owsley, Douglas **Human Skeletal Remains From the Anzick Site (24PA506), Park County, Montana**

8:20 Gill, George W. **Northwestern Plains Archaic Skeletons and Their Relationship to Paleoamerican Remains**

8:40 Stuart, Jaime **Metric Analysis of Northwestern Plains Amerindian Skeletal Remains**

9:00 Jepson, Dan **Two Woodland Burials From the Lena Gulch Site (5JF1780), Jefferson County, Colorado**

9:20 Baker, Steven G. **The Sky Aerie Charnel Site (5RB104): Evidence for Episodic Fremont Cannibalism or Other Perimortem Manipulation of the Dead**

9:40 Schillaci, Michael A. **A Possible Case of Coccidioidomycosis from a Twelfth-Century Habitation Site within the Taos Valley of Northern New Mexico**

10:00 **BREAK**

10:20 Phillips, Rennie **Six Chinese Burials in Southwestern Wyoming**

10:40 Pickering, Robert B. **Carnivore Damage to Ancient and Modern Human Remains**

11:00 Schilling, Amy L. **Computed Tomography Images as a Source for Facial Tissue Thickness Measurements**

11:20 Pickering, Robert B. **Mummies, Museums, and Medical Technology**

Saturday Morning

Session 11: Contributed Papers
HISTORIC ARCHAEOLOGY

Chair: Cher Burgess
Room: Devereux

9:40 Gardner, Dudley and Kevin Thompson **Chinese Households in the Northern Rockies**

Session 12: Contributed Papers
LOOKING AT THE MIDDLE RANGE

Chair: Cher Burgess
Room: Devereux

10:00 Merrell, Carolynne L. **Identification and Recordation of Culturally Peeled Lodgepole Pine Along the Lolo Trail**

10:20 Kvamme, Kenneth L. and Jo Ann Kvamme **Distributional Archaeology of Hunter-gatherer Activities on a Colorado Plateau Ridgetop (Mesa County, CO)**

10:40 Bjornstad, Erik and Wade Broadhead **How Now Brown Cow: A Controlled Study of Site Formation Process**

11:00 Dukeman, Casey **Spatial Considerations and Implications of Contemporary Hunting Camps: The Lost Canyon Project**

11:20 Greubel, Rand A. **Spatial Organization of Activities at Two Ute Sites in the Southern Rocky Mountains.**

11:40 Schilling, Amy L. **United Nations International Criminal Tribunal for the Former Yugoslavia**

Saturday Afternoon

Session 9: Symposium
PRONGHORN PERSPECTIVES

(CONTINUED FROM SATURDAY A.M.)

Organizers: Jana V. Pastor, Kevin W. Thompson, and Russ Tanner
Chair: Jana V. Pastor
Room: Colorado

1:00 Miller, Mark E. and Paul Sanders **The Trapers Point Site (48SU1006): Early Archaic Adaptation and Pronghorn Procurement in the Upper Green River Basin, Wyoming**

1:20 Saysette, Janice **Body Mass in Late Pleistocene/Early Holocene *Antilocapra***

1:40 Walker, Danny **Pleistocene and Holocene Records of *Antilocapra Americana:* A Review of the FAUNMAP Data**

2:00 Arkush, Brook **Assessing The Frequency of Late Prehistoric and Protohistoric Pronghorn Drives in the Great Basin: A View from Northeastern Nevada**

2:20 Tanner, Russ **Pronghorn in the Rocky Mountains, Like Poetry in Motion: An Ethnohistory of *Antilocapra Americana* and its Role in the Lives of Western Pioneers and Indigenous People**

2:40 **BREAK**

3:00 **Discussants** Metcalf, Francis, Madsen, Duncan

Saturday Afternoon

Session 13: Contributed Papers
PALEOINDIAN AND ARCHAIC OF THE ROCKY MOUNTAINS

Chair: Rhonda Owen Lewis
Room: Teddy Roosevelt

1:00 Husted, Wil **Plains or Mountains: There Is a Difference**

1:20 Waitkus, Brian R. **The China Wall Site (48AB1)**

1:40 McFaul, Michael, Brian R. Waitkus, Dan Wolf, Amy H. Holmes, Christopher T. Hall, and Richard G. Reider **China Wall (48AB1) Late Paleoindian-Prehistoric Environments**

2:00 Johnson, David E., Kevin W. Thompson, Jana V. Pastor, and William P. Eckerle **The Blue Point Site (48SW5734): Preliminary Results of Investigations into the Paleoindian-Archaic Transition in Southwest Wyoming**

2:20 Richings-Germain, Sam **The Jerry Craig Site**

2:40 Pitblado, Bonnie L. **The Extent of Human Occupation of the Southern Rocky Mountains: 10,000 - 7,500 B. P.**

3:00 **BREAK**

3:20 MacMillan, Vincent **Paleoindian Biological Affinities: A Contemporary and Historical Assessment**

3:40 Baker, Steven G. **Reviewing the Evidence for Early Holocene Occupations at the Nancy Ellen Site (5RB2728), Rio Blanco County, Colorado**

4:00 Husted, Wil **A Western (Indigene) Archaic Tradition: Some Musings**

4:20 Morris, Elizabeth Ann and Michael D. Metcalf **Retrospective on High Altitude Archaeological Surveys in Northern Colorado**

Saturday Afternoon

Session 14: Contributed Papers
WHO YOU ARE IN THE ROCKY MOUNTAINS: ETHNOGENESIS AND IDENTITY

Chair: Gregory Campbell
Room: Devereux

1:00 Campbell, Gregory **The Lemhi Shoshone: Ethnogenesis and Sociological Transformations of a Tribal-Nation**

1:20 Dean, Patricia A. and Clayton F. Marler **Bridging Spirituality and the Archaeological Record in Southeast Idaho**

1:40 Risch, Barbara **Crazy Horse: Images of an American Legend**

2:00 Snyder, Robert **Ethnicity and Chinese Cuisine: Temporal Perception and Negotiation in Fort Collins, Colorado**

2:20 Sucec - Cultural area approach to identity

Session 15: Contributed Papers
PLANTS AS ARCHAEOLOGICAL EVIDENCE IN THE ROCKY MOUNTAINS

Chair: Kathryn Puseman
Room: Devereux

2:40 Watkins, Robyn **Plant Utilization and the Uinta Mountains**

3:00 Puseman, Kathryn **What Were They Doing With All That Cactus?**

3:20 Hadden, Glade V. **Behold, The Lowly Pigweed: Experimental Field Processing and Post Processing Return Rates for Cheno/Ams**

3:40 Scott-Cummings, Linda **Starch Granules as Indicators of Subsistence**

4:00 Bennett, Julia **The Southern Ute Ethnobotany Project**

Symposia Abstracts and Contributed Paper Sessions

Plenary: The Rocky Mountain Culture Area
Session 1

Organizers and moderators:
M. Kornfeld, M.L. Larson, and M. Metcalf

The Rocky Mountains are culturally, ethnographically, linguistically, ecologically, and adaptively unique. Rocky Mountain cultures, the peoples in the area from Mexico to the Yukon and from Nevada to Kansas in the south and central British Columbia to Saskatchewan in the north, have been uniquely influenced by the Rocky Mountains. The prehistoric and historic development of the Rocky Mountain cultures and their "contribution to" and "effects on" surrounding regions are the topics of this conference. We invite all anthropological papers on this region.

Rock Art of the Rockies
Session 2
Organizers and Chairs: Julie Francis and Larry Loendorf

Contributed Papers: Rocky Mountain Features and Stone Houses
Session 3
Chair: Mary Lou Larson

Contributed Papers: Sites of the Rocky Mountains
Session 4
Chair: Mary Lou Larson

Contributed Papers: Mountains and Plains:
Islands, Interaction and Migration
Session 5
Chair: Mike Metcalf

Contributed Papers: Jackson Hole and Surrounding Areas
Session 6
Chair: Danny N. Walker

Contributed Posters: Paeloindians, Euroamericans, and Site Formation
Session 7

Environment and Change in the Northern Rockies
Session 8
Organizer and Chair: Brian Vivian

Pronghorn Perspectives
Session 9
Organizers: Jana V. Pastor, Kevin W. Thompson, and Russ Tanner
Chair: Jana V. Pastor

The American pronghorn, *Antilocapra americana*, is the quintessential prairie animal. They are a tenacious species, thriving where others fail. The focus of this symposium is to examine their genesis, biology, and behavior and the inter-relationships shared for over 10,000 years with the human inhabitants of the Rocky Mountain region of North America. The focus of this symposium is to examine pronghorn behavior, habitat, and procurement in the Intermountain West. Behaviors of modern pronghorn, including seasonal migration, adaptations, and population densities will be discussed. Archaeological data, much of it derived from sites on public lands managed by the United States Bureau of Land Management, will be used to provide time depth to the use of pronghorn in the region.

Skeletal Biology of the Rocky Mountain Region
Session 10
Organizers and Chairs: George W. Gill and Lillian J. Stuart

A total of nine papers presented by eight presenters (10 contributors) are planned for the skeletal biology session. Three papers deal with either regional taphonomic concerns or new research techniques, and are grouped into a single "methods" category. The remaining six papers discuss the results of analysis of skeletal remains from Rocky Mountain areas from northern New Mexico to Montana and from Paleoindian times to the Historic period. They are to all be grouped together and arranged temporally from the oldest sites to the most recent.

Contributed Papers: Historic Archaeology
Session 11
Chair: Cher Burgess

Contributed Papers: Looking at the Middle Range
Session 12
Chair: Cher Burgess

Contributed Papers: Paleoindian and Archaic of the Rocky Mountains
Session 13
Chair: Rhonda Owen Lewis

Contributed Papers: Who You Are in the Rocky Mountains: Ethnogenesis and Identity
Session 14
Chair: Gregory Campbell

Contributed Papers: Plants as Archaeological Evidence in the Rocky Mountains
Session 15
Chair: Kathryn Puseman

Abstracts

Allen, Walt (see Byers)

Arkush, Brooke S. (Weber State University, Ogden, UT) [S #9]
Assessing the Frequency of Late Prehistoric and Protohistoric Pronghorn Drives in the Great Basin: A View from Northeastern Nevada

In his 1938 "Basin-Plateau Aboriginal Sociopolitical Groups," Julian Steward implied that successful communal pronghorn hunts typically resulted in significant reductions among local antelope populations and that a number of years were required to restore the herds before group hunts were once again feasible. It seems that Steward based this implication on one or two post-contact pronghorn drives in relatively marginal environmental settings that were not representative of pre-contact populations in more optimal locales, such as true grassland biomes that had not been overgrazed by Euroamerican livestock (especially domestic sheep). This paper presents archaeological, historical, and ethnographic data which suggest that during late prehistoric and protohistoric times, many parts of the Great Basin supported relatively large pronghorn herds that would have allowed various Numic groups to practice annual and biennial drives without decimating local pronghorn populations.

Adams, Jeffrey, Carole Graham, Anne McKibbin, Kelly Pool, and John Scott (Metcalf Archaeological Consultants, Inc., Eagle, CO) [S #5]
A Pipeline Runs Through It: A Comparison of Prehistoric Site Distribution in the Denver, Great Divide, Laramie, Powder River, and Wind River Basins, Wyoming

In 1998, Metcalf Archaeological Consultants conducted four Class III surveys for pipeline projects in central, south-central, and southeast Wyoming. They include 26 miles through the Red Desert region of the Great Divide Basin, 102 miles from the Great Divide Basin to the Wind River Basin, 100 miles from the Laramie Basin into the Powder River Basin, and 150 miles from the Denver Basin to the Powder River Basin. This paper compares the distribution of prehistoric sites, broken out by type and age, along the different routes, emphasizing topographical and environmental factors. Unique sites, features, and artifacts will be highlighted.

Andrews, Brian and Paul Joy (University of Wyoming, Laramie) [S #3]
The Form, Function, and Use of Digging Sticks: An Example from the Henn Site

Digging sticks play an essential role in many cultures. In addition to their vital role in subsistence activities, digging sticks are the focus of ritual and the subject of myth for many groups. This paper describes the materials commonly used for the construction of digging sticks in the Northern Great Plains. Based on various ethnographic studies, the different forms, functions,

and meanings of digging sticks are also examined. A hearth feature from the Henn site, with preserved digging stick impressions, is examined to further explain both the shape and method of use of digging sticks by the inhabitants of the site. The method used to preserve the Henn hearth feature is also explained.

Atkinson, Scott A. and Byron Loosle (Ashley National Forest, UT) [S #3]
High Altitude Fremont Brush Structures at the Allen Creek Village Site, 42Da791

The Allen Creek Village Site (42Da791) is a high altitude Fremont village site lying above 6800 feet on the north slope of the Uinta Mountains in extreme northeastern Utah. The site contains over 20 recognizable Fremont-era structural depressions. The site was tested by Forest Service Passport In Time participants in 1997. Two shallow pit houses and four brush structures were excavated. Data from these structures will be used to discuss Fremont economic strategy which focused on plant resources. The data also provide an opportunity to review the design and role of Fremont brush structures.

Baker, Steven G. (Centuries Research, Inc., Montrose, CO) [S #13]
Reviewing the Evidence for Early Holocene Occupations at the Nancy Ellen Site (5RB2728), Rio Blanco County, Colorado

The Nancy Ellen Site (5RB2728) was found by the author in 1985 during pipeline trenching in the deep alluviums of Coal Oil Basin near Rangely in Rio Blanco County, Colorado. It has produced a series of ephemeral fire-cracked rock features which contained no directly associated artifacts but which all dated approximately 10,000 B.P. These are among the earliest archaeological features to date discovered in northwestern Colorado. The early features are overlain by an Archaic surface lithic scatter which itself may also be early. Since 1986 the site has received no further attentions. The site was determined to be ineligible for the National Register by the BLM and SHPO and has been accorded no protection from oil field development since 1985. The goals of this presentation are to review the evidence for the early Holocene occupation, give the site some of the attention it deserves among the rarely documented early Holocene occupations of Colorado and call for its protection and further evaluation.

Baker, Steven G. (Centuries Research, Inc., Montrose, CO) [S #10]
The Sky Aerie Charnel Site (5RB104): Evidence for Episodic Fremont Cannibalism or Other Perimortem Manipulation of the Dead

This paper discusses data from Sky Aerie Promontory (5RB104) (ca. A.D. 900-1500), a Fremont charnel site near Rangely in Rio Blanco, County, Colorado. The disarticulated remains of at least nine people are associated with hearths and corn in the fill of a house there. The project physical anthropologists disagree on the issue of perimortem damage and cannibalism. They

agree that the perimortem manipulation of the individuals does not fit documented patterns of cannibalism. At the least, Sky Aerie remains an enigma. At the most, there may be sufficient evidence to suggest that cannibalism was episodically practiced there over several centuries. This may well have been along the lines of Christy Turner's view of religious meals of "man corn."

Bennett, Julia (Fort Lewis College, Durango, CO.) [S #15]
The Southern Ute Ethnobotany Project.

The Southern Ute Ethnobotany Project was initiated to help to stem the loss of Ute plant knowledge. Goals of the project include helping the Southern Ute in their efforts to record, preserve, and practice their plant knowledge, to encourage Southern Ute students to consider anthropology as a major field of study, to involve Southern Ute High school students in oral history collection, promote the Fort Lewis College anthropology department's regional outreach potential with local Native communities, and to develop a Southern Ute based ethnobotany curriculum incorporating CD-ROM and video technology. These goals and the project status will be discussed.

Bies, Michael (Bureau of Land Management, Worland, WY) [S #2]
The Sheep Site Sheep

Bighorn Sheep are perhaps the most common zoomorph rock art element found in the Big Horn Basin. The Sheep Site contains an excellent set of Bighorn Sheep pictographs. The Bighorn Sheep portrayed here will be discussed in relation to each other and to Bighorn Sheep found at other rock art sites in the Big Horn Basin.

Billo, Evelyn and Robert Mark (Rupestrain Cyberservices, Flagstaff, AZ) [S #2]
Wind River Petroglyph GIS Project

A precision GPS combined with topographic map, digital orthophotographic, 35-mm slide photography, scanners, rock art recording forms, and computers running database and GIS software, are being used together to create a permanent record of the petroglyph resource. CDs of the data and maps will be available as an educational tool at the Dubois Museum, the Wyoming State Archives, and the Wind River Reservation. Results from this project serve as a baseline for future research or conservation. Fremont County Historical Society and landowners supported the work of professional archaeologists and enthusiastic volunteers.

Bjornstad, Erik (Western State College, Gunnison, CO) and Wade Broadhead (Bureau of Land Management, Gunnison, CO) [S #12]
How Now Brown Cow: A Controlled Study of Site Formation Process

The Bureau of Land Management, Gunnison Resource Area, in cooperation with Western State College of Colorado is conducting an archaeological experiment using a laser transit to measure the displacement of artifacts from moderate cattle grazing in a high mountain setting. The experiment consists of creating a site of 200 lithic artifacts split between a fenced enclosure, and a moderately grazed pasture. So far, the experiment has monitored and measured one season of moderate cattle grazing on the lithic scatter. Artifacts were relocated and their position recorded with the transit without disturbing their position. Monitoring and mapping of the site will continue for at least 1 year.

Black, Kevin (Colorado Office of Archaeology and Historic Preservation, Denver, CO) [S #5]
Archaeological Resources in the Trinchera Cave Area, Southeastern Colorado

Inventory of land surrounding Trinchera Cave was finished in August 1999. This survey trained volunteers in the Program for Avocational Archaeological Certification, yielding settlement information on the Trinchera Creek canyon system in which Trinchera Cave is situated. This paper summarizes survey results, which indicates post-A.D. 1000 use of the locality was heaviest. Diagnostic tools are common, as are other lithics. Many are made from non-local obsidians and Alibates chert. Along with abundant local lithics and non-micaceous ceramics, the survey showed that local hunter-gathers' territorial range focused on Southern Plains resources with little obvious use of nearby Sangre de Cristo Mountains.

Bringelson, Don R. (see Cannon)

Broadhead, Wade (see Bjornstad)

Burgess, Cher and Dave McKee (Black Hills National Forest, Custer, SD) [S #5]
Island in the Plains: An Overview of Occupation and Research in the Black Hills of South Dakota and Wyoming

The Black Hills are the easternmost extension of the Rocky Mountains, a dome straddling the Wyoming/South Dakota border. The Hills are biologically diverse, including vegetative complexes such as Rocky Mountain Coniferous Forest, Northern Coniferous Forest Complex, Grassland Complex and Deciduous Forest Complex. Just as the plant communities are diverse, so is the archaeology. Prehistoric sites in the Black Hills range in age from Hell Gap to Late Prehistoric. Site locations vary from semi-arid foothills to timbered mountain valleys. Evidence of historic occupations begin with

the placer mine sites of the mid-1870's and range through the CCC camps of the 30's and mining exploration and timber camps of the post WWII years. The annual "Island in the Plains" conference has allowed archaeologists to share their discoveries and questions about the Black Hills, yet many questions remain. Early time periods are not well represented in the Hills, although they are known from surrounding areas by finds such as the Crook County Cache, Mill Iron, Agate Basin, Lange-Ferguson and others. Large areas of historical development took place in the area without written record, leaving only archaeology to tell the story. The Black Hills are therefore a "land of opportunity" for archaeologists of varied interests.

Byers, David, (University of Wyoming, Laramie) John W. Fisher, Jr. (Montana State University, Bozeman) and Walt Allen (U.S. Forest Service, Bozeman, MT) [S #5]

Archaeological Investigations in the Bridger Mountains, Montana

Archaeologists from Montana State University and the U. S. Forest Service conducted an archaeological survey in 1997 of a limited portion of the higher elevation areas of the Bridger Mountains, in southwestern Montana. This reconnaissance identified some 20 prehistoric archaeological sites in various physiographic settings. Diagnostic projectile points document human presence in the Bridger Mountains from the Paleoindian to the Late Prehistoric Periods, with the Middle Prehistoric Period (Plains Archaic Period) most strongly represented. A range of lithic types occur in the recovered stone tool assemblages. Geochemical analysis of obsidian specimens by x-ray fluorescence indicates obsidian sources at Obsidian Cliff, Wyoming, Bear Gulch, Idaho, and Big Southern Butte, Idaho. The Bridger Mountains consists of a relatively small (40 km long), island-like mountain range that has well defined borders, and is bounded by adjacent broad valleys. Several vegetation zones occur in the Bridger Range, and long-term research by wildlife biologists presents high-resolution information on the ecology and behavior of resident mule deer populations. These characteristics make the Bridger Range an attractive laboratory for testing hypotheses about prehistoric human subsistence and settlement.

Campbell, Gregory (University of Montana, Missoula) [S #14]

The Lemhi Shoshone: Ethnogenesis and Sociological Transformations of a Tribal-Nation

Previous researchers examining tribal ethnographic data assume that language, culture, and physical type are homogeneous and co-terminal. Tribal societies, especially in Native North America, rarely were homogeneous. Nor did indigenous societies simultaneously diverge—biologically, linguistically, and culturally— through time. Rather societies emerge and recreate themselves in history through a series of transformative episodes, during which peoples, cultures, and languages of diverse origins join together to create,

one Northern Shoshone society, the Lemhi, as a tribal-nation. This presentation uses ethnogenetic theory to interpret Lemhi Shoshone political history to comprehend the sociological dynamics and the perpetuation of the Lemhi Shoshone through time that enabled them to establish themselves as an unique sociological and political entity.

Cannon, Kenneth P. (National Park Service, Lincoln, NE), Dawn R. Bringelson (National Park Service, Lincoln, NE) and Richard E. Hughes (Geochemical Research Laboratory) [S #6]
Prehistoric Settlement in Southern Jackson Hole

Data recovery excavations were conducted at three sites along Fish Creek in southern Jackson Hole, Wyoming during the summer and fall of 1998. Of particular interest is the Crescent H Ranch site (48TE1079) which yielded evidence for the reduction of locally procured obsidian over the course of the Holocene. We will discuss the implications of these results in relation to models of prehistoric settlement in Jackson Hole. We will present data on the lithic reduction sequence and the obsidian geochemistry.

Cannon, Kenneth P. (National Park Service, Lincoln, NE) [S #6]
Bison in Jackson Hole: A View from the Goetz Site (48TE455)

Salvage excavation of the Goetz site (48TE455) occurred in 1972 by Dr. George Frison in response to dragline operations to increase spring flow in a portion of the National Elk Refuge in Jackson, Wyoming. Charlie Love originally reported the results in his master's thesis entitled *An Archeological Survey of the Jackson Hole Region, Wyoming.* The details of the results of the excavations were not presented, yet various interpretations of the site have been put forth in the archeological literature over the intervening years. This paper will discuss the results of a reanalysis of the bison bone in light of previous interpretations.

Cash, Phillip Cash (see Poetschat)

Charles, Mona C. (Fort Lewis College, Durango, CO) [S #5]
Basketmaker II as an in situ Development in the San Juan Mountains, Southwest Colorado

Information published as a result of the excavation of Basketmaker II sites at Talus Village and the Falls Creek Shelters in the 1940s notably altered the perception of Archaic habitation in the mountains of southwest Colorado. These sites produced substantive evidence of Basketmaker II village life. Saucer-shaped pit structures, replete with intramural features, along with copious amounts of burned corn suggest that by the time of Christ the local residents were at least minimally committed to a sedentary lifestyle. Ethnic and regional origins of the Basketmakers have long been a source of debate. In this paper new data from site 5LP4991, the Darkmold Site, is presented that espouses the position that the Basketmaker II population of southwest Colorado developed from an *in situ* Archaic, mountain-adapted population.

Collins, Susan M. (Colorado Historical Society, Denver) [Forum]
State of Colorado Archaeology at the Millennium
(No Abstract)

Colorado Archaeological Society - Pikes Peak, Colorado Historical Society - Historical Preservation Office, and US Forest Service [Forum]
Vogel Canyon: A Renewed Spirit (Video)
(No Abstract)

Davis, Leslie (Museum of the Rockies/Montana State University, Bozeman) [S #1]
A Middle Rocky Mountain Homeland for the Paleoindian Alder Complex Foragers?

The archaeological validity of the proposed Rocky Mountain Culture Area construct is evaluated via an examination of archaeological "facts" and interpretations associated with the Paleoindian Alder Complex. The stratified Barton Gulch (24MA171) open-air occupation site located within the Middle Rocky Mountains of southwestern Montana is the type site. This primary case study offers a best-case example to test, first, the regional archaeological validity of the RMCU construct and, second, to consider this usefulness in facilitating culture history and processual explanatory research. The downside of overgeneralization and oversimplification, merely to facilitate inter-areal comparisons, is a key issue.

Dean, Patricia A. (Idaho State University, Pocatello) and Clayton F. Marler (Idaho National Engineering and Environmental) [S #14]
Bridging Spirituality and the Archaeological Record in Southeast Idaho

Mid-range theories provide scant guidance when interpreting the beliefs and symbolism associated with the archaeological record yet tribal nations continue to implore us to incorporate the spirituality of cultural remains in our interpretations. In this paper, we describe certain archaeological remains from selected sites in southeast Idaho. We then interpret the spiritual importance of these remains based on written documents, ethnographic data, and oral traditions of the Shoshone and Bannock in this region. Finally, we evaluate the success of this approach as an argument to bridge the gulf that separates archaeology and tribal nations.

Dickerson, Ken (Renewable Technologies, Inc., Butte, MT) [S #6]
Technological Organization of an Upland Lithic Production System in West Central Idaho

The uplands of the Joseph Plains lie between the Snake and Salmon River canyons in west central Idaho. Recent investigations at seven lithic quarry sites on the Plains revealed that fine-grained basaltic-andesite was utilized extensively by the prehistoric occupants of the area as raw material for flaked tool production. Artifacts from a nearby upland campsite have been chemi-

cally sourced to these quarries suggesting that the sites represent constituent units of a single lithic production system. This system is a reflection of a series of past human behavioral events, tempered by a range of external forces. Thus, analysis of the static cultural remains identified at the Joseph Plains sites affords a glimpse at the dynamic cultural and environmental variables which ultimately influenced decisions concerning lithic resource utilization in this area of the northern Rocky Mountains.

Dukeman, Casey (University of Wyoming, Laramie) [S #12]
Spatial Considerations and Implications of Contemporary Hunting Camps: The Lost Canyon Project

Many archaeologists and ethnographers have shown that considerable information about the lifeways of prehistoric peoples can be inferred through ethnoarchaeological research. This is especially true in terms of spatial analysis. Despite the emphasis placed by ethnoarchaeologists on variables or patterns suggesting how humans organize their space, little attention has been paid to contemporary spatial organization in similar modern contexts. One such area is modern hunting camps. Through comparison of contemporary camps, with spatial relationships of hunters still existing in the world, valid suggestions can be made concerning how prehistoric peoples organized themselves, spatially.

Duncan, Clifford Discussant **[S #9]**

Eckerle, William P. (Western GeoArch Research, Salt Lake City, UT) [S #6]
Geoarchaeology of Southwestern Jackson Hole, Teton County, Wyoming

Geoarchaeological investigations were undertaken as part of the NPS-Midwest Archeological Center's Fall Creek Road Project in 1998. The investigations were concentrated at three sites situated on the Teton Fault, south of Wilson, Wyoming. Data from these sites (48TE1077, 48TE1079, and 48TE1374) clarify post-glacial history of Jackson Hole and the adjacent Teton Range. Site geoarchaeological data also helps to interpret the occupational history, site formation/destruction processes, and culturally significant paleoenvironmental changes.

Eckerle, William P. (see Johnson)

Fisher, John W., Jr. (Montana State University, Bozeman) and George C. Frison (University of Wyoming, Laramie) [S #9]
Site Structure at Boar's Tusk, Wyoming.

The Boar's Tusk site, located in southwestern Wyoming, is a Late Prehistoric Period manifestation. The eleven features discovered at the site encompass an area of some 2,800 square meters. Five features were excavated, and yielded animal bones, artifacts, charcoal, and heat-altered rocks. Bones of pronghorn antelope dominate the faunal assemblage. Analysis of

site structure, which includes site size, distance between features, layout or arrangement of the features, and feature composition, provides insights into such important questions as site type, site function, and duration of occupation. These analyses are guided by insights emanating from ethnoarchaeological studies of site structure among present-day part-time hunter-gatherers, and from ethnohistoric and ethnographic information.

Fisher, John W., Jr. (see Byers)

Francis, Julie E. (Wyoming Department of Transportation, Cheyenne, WY) and Linda Olson (Minot State University, ND) [S #2]
Rock Art at the Hulett South Slide, Crook County, Wyoming

48CK1544 is a small rock art site containing a variety of unusual incised imagery in extreme northeastern Wyoming. Originally recorded by Steve Aaberg in 1996, the site was reinvestigated by Loendorf and Associates and WYDOT in 1999 as a result of a landslide adjacent to Wyoming State Highway 24. This paper presents preliminary results of the 1999 documentation efforts and discusses current research regarding the nature and cultural affiliation of the imagery.

Francis, Julie E. Discussant **[S #9]**

Frison, George C. (University of Wyoming, Laramie) [S #9]
The Eden-Farson Site - 48SW304 Pronghorn Procurement in the Green River Basin, Wyoming

Partial remains of over 200 pronghorns were recovered during excavation of 12 lodges in a site believed to be of Proto-Historic or Late Prehistoric age located in the Upper Green River Basin in western Wyoming. Dental evidence indicates the animals were taken during a short period of time in the fall suggestive of some sort of communal procurement. Taphonomic analysis reveals evidence of butchering and processing. Pronghorn behavior reveals many possibilities for this kind of subsistence strategy. Artifacts strongly suggest a pre-horse Shoshonean affiliation.

Frison, George C. (University of Wyoming, Laramie) [S #1]
Similarities and Dissimilarities Between Foothill-Mountain and Plains Paleoindian Groups

The Hell Gap site in southeast Wyoming and the Medicine Lodge Creek site in northern Wyoming have produced respectively the most complete stratigraphic sequences of Plains and Foothill-Mountain Paleoindian occupations. The most reliable diagnostics separating the two are projectile points although the tool assemblages are in many ways similar. Different ecological conditions reflect different subsistence strategies but both groups were apparently familiar with lithic resources in both mountains and plains.

Frison, George C. (see Fisher)

Frison, George C. (see Hill)

Gardner, Dudley and Kevin Thompson (Western Wyoming Community College, Rock Springs, WY) [S #11]
Chinese Households in the Northern Rockies

This presentation examines individual households from the perspective of how Chinese miners and merchants arranged themselves in households in Wyoming, Montana, Alberta, and British Columbia. The primary focus will be on the material culture found in excavations of Chinese homes in Evanston and Rock Springs, Wyoming, but the comparison will extend into southwest Canada and western Montana where similar patterns of household arrangements are evident. As the result of analyzing the archaeological signature and the distinct remains in each household, some tentative conclusions are forwarded regarding how Chinese immigrants ordered their private space in the interior western United States and southwest Canada.

Graham, Carole (see Adams)

Gill, George W. (University of Wyoming, Laramie) [S #1]
Rocky Mountain Populations Through Prehistory

Within the Rocky Mountain region of Wyoming, western Montana, the western edge of Nebraska and northern Colorado there now exists an aboriginal human skeletal sample of a few hundred individuals. These constitute at least two relatively distinct populations that temporally span over 5000 years. During that time dramatic biological changes occur with regard to disease, injury, dental pathology and even craniofacial morphology. One hypothesis is that a complex feedback mechanism has occurred over much of this time period between changing weapon technology and subsistence and several biological manifestations such as dentition, craniofacial proportion and bodily size.

Gill, George W. (University of Wyoming, Laramie) [S #10]
Northwestern Plains Archaic Skeletons and Their Relationship to Paleoamerican Remains

In recent years a number of Northwestern Plains skeletons from the Plains Archaic have been examined at the University of Wyoming. Especially those from eastern Wyoming and western Nebraska reveal a constellation of skeletal traits quite distinct from those of the Late Prehistoric Period of the same region. Some specimens lack almost totally the traits common to the "Mongoloid craniofacial trait complex" which characterize the later populations. Important femur traits also align more closely with Caucasoids than with Mongoloid populations. Overall the pattern emerging seems to place the Archaic skeletons of the region closer to certain western Paleoamerican specimens. A number of possible implications exist in these data regarding population migrations and replacement as well as evolutionary selective forces.

Gillespie, Jason D. (University of Calgary, Alberta, Canada) [S # 8]
Paleoindians, Ice-free Corridors, and the Peopling of Alberta: New Archaeological and Geological Evidence for the First Peoples of Alberta.

Recent archaeological and geological findings in Alberta have altered our understanding of Paleoindian lifeways and chronologies for this part of North America. New geological interpretations suggest that there was no glacial maximum "Ice-Free Corridor" and therefore the timing of migration through Alberta (and possibly the Americas) at the end of the Pleistocene must be reconsidered. Furthermore, recent archaeological evidence is pushing human occupation in Alberta back into the Pleistocene/Holocene transition. The reconciliation of this geological and archaeological evidence is needed if we are to set the stage for Paleoindian studies in Alberta and possibly the entire continent.

Goss, James A. (Texas Tech University, Lubbock) [S #1]
Rocky Mountain High Culture: Look, the Utes Aren't Marginal Anymore!!

Are the mountains "centers" or "margins"? It all depends on from where you view the world. The Ute Indians of the Central Rockies of Colorado and Utah contend that they are Mountain Hunters and always have been. They have always viewed their mountain adaptation as the best possible adaptation and have always judged the adaptations of other people from their mountain vantage point. The Utes and the Utaztekan relatives all have ties to their sacred mountains, and their common ancestors have probably had a homeland in the Intermountain West since the end of the Pleistocene. The Mountain Adaptation is probably the most persistent post-Pleistocene adaptation. It should be treated as a cultural focus, not as a "Marginal" phenomenon. The Utes and their ancestors, with their persistent adaptation to the mountains, have undoubtedly had significant effects on the cultural developments of the more ephemeral adaptations of the adjacent Great Basin and Plains. Let's start talking about ROCKY MOUNTAIN HIGH CULTURE.

Greer, John (see Greer)

Greer, Mavis and John Greer (Greer Services, Casper, WY) [S #2]
Two Rock Art Sites in the Powder River Basin

Rock art sites occur infrequently in the Power River Basin of Wyoming and Montana, and their content suggests no uniformity of style, culture, function, or age. The Norfolk Petroglyph site at the northern end of the Basin in Wyoming is characterized by large incised figures, some of which closely resemble those of the western Wyoming Dinwoody style and the California Coso Range style. The southern Pinnacle site is dominated by shields similar to those of Castle Gardens in west-central Wyoming. Ties of both sites are more toward the western Rocky Mountain sites than toward each other.

Greubel, Rand A. (Alpine Archaeological Consultants, Inc.) [S #12]
Spatial Organization of Activities at Two Ute Sites in the Southern Rocky Mountains.

Despite abundant research into hunter-gatherer site structure over the last two decades, few Ute habitation sites in the Rocky Mountain region have been investigated with the goal of elucidating the spatial patterning of everyday activities on a relatively large scale. Recently, however, two early Historic habitation sites in western Colorado attributed to the eastern Ute, have been subjected to large block excavation, illuminating many aspects of the spatial organization of subsistence and manufacturing tasks on such sites. The patterning revealed by these excavations yields insights into the Ute lifeway in this region during the earliest period of European contact.

Hadden, Glade V. (Bureau of Land Management, CO) [S #15]
Behold, The Lowly Pigweed: Experimental Field Processing and Post Processing Return Rates for Cheno/Ams

The place of small seed resources in the diets of prehistoric foragers is one of contention. Although ubiquitous in the archaeological record as well as in ethnographic accounts of post-contact native people, archaeologists and ethnologists have frequently argued that small seeds would either be present in a forager's diet due to their abundance and predictability, or absent from the diet due to the high relative costs involved in harvesting and processing the seeds. Thus, they would only be part of the subsistence round when higher ranked food items were unavailable. Seeds from the numerous species of *Chenopodium* (Goosefoot) and *Amaranthus* (Pigweed), collectively known as Cheno/Ams have been particularly problematic in this regard, taking center stage as a requisite foodstuff, proto-domesticate and horticultural staple, or else being dismissed as a famine food, aberration or accident. Few studies of Cheno/Ams have focused on their economic potential, fewer have attempted to quantify that potential. This study seeks to highlight the problem of Cheno/Ams in the archaeological record and to provide some testable baseline data concerning the costs and benefits associated with utilizing Cheno/Ams as a food resource.

Hall, Christopher T. (see McFaul)

Hauck, F. Richard, (Archeological Research Institute) [S # 3]
The DustDevil Gorge Medicine Wheel

The recently discovered DustDevil Gorge Medicine Wheel of northwestern Colorado is a system of aligned surface rocks within two concentric circles linked by four spokes roughly oriented to the cardinal directions; a single stone comprises the radial center. The wheel was evidently used to calculate lunar and solar calendars through counts of these aligned stone se-

quences. Both calendars were apparently initiated through the use of daily and cyclical counts of stones beginning the day following the winter solstice sunset—new moon convergence into DustDevil Gorge between 219 B.C. and 105 A.D. The numerical system relies solely on numbers 1 through 9 and lacks zero.

Hauck, F. Richard, (Archeological-Environmental Research Corporation) [S # 4]
Excavation of Crazy Bird Shelter

AERC s recent excavation of this large rock shelter at the 8360 foot elevation on Utah's Wasatch Plateau has documented a variety of Paleoindian, Archaic, Formative, and Shoshonean occupations. Pollen, faunal, and macrofloral studies indicate the site was a frequently used base camp where minimal butchering occurred but a variety of more exotic subsistence activities transpired including intensive Cheno/Am processing (Shoshonean), the importation of *Zea mays* from lower elevations (Fremont), and the use of wild potato (*Solanum*) based on starch recovered from grinding implements (Late Archaic and Fremont). Daub fragments suggest an artificial shelter may have been constructed within this alcove.

Hill, Matthew Glenn (University of Wisconsin, Madison), George C. Frison (University of Wyoming, Laramie), and Danny N. Walker (Office of the Wyoming State Archaeologist, Laramie) [S # 9]
Folsom Pronghorn Utilization at Agate Basin, Wyoming

There are remarkably little data concerning the use of animals other than bison at Great Plains Paleoindian sites. The main Folsom camp (10,690 $\pm$ 70 B.P.) at the Agate Basin site, east-central, Wyoming, contains a diverse fauna, including the bones of at least five pronghorn (*Antilocapra americana*) and eight bison. Articulation of the faunal and material assemblages suggest an extended winter occupation from which Folsom hunters procured these animals near the site. Gross disparities in size between the species may explain differences in skeletal part abundance and carcass utilization patterns. Pronghorn appear to have been transported as essentially complete carcasses, and their fragmentary, burned and butchered remains are found around hearth-centered activity areas. In contrast, the bison assemblage consists largely of complete, meaty upper limb bones with limited evidence of butchery and processing for marrow. Ultimately, the data aid in the development and refinement of models of Paleoindian settlement-subsistence dynamics.

Holmes, Amy H. (see McFaul)

Hughes, Richard E. (see Cannon)

Hunt, David (see Owsley)

Husted, Wil (Billings, MT) [S # 5]
Numu Origins: A Rocky Mountain Perspective

Widely accepted hypotheses place the homeland of Utaztekan in the Great Basin. A spread of Numic people into their historically identified territories within the last thousand years or so also enjoys general acceptance. Neither hypothesis is supported by the archaeological evidence. There is an archaeological continuum in the Middle and Northern Rocky Mountains from the foothill-mountain Paleoindian to the Historic Period. It is hypothesized that the Middle and Northern Rocky Mountains are the Aztec-Tanoan homeland and that the Utaztekans including the Numu spread into the Great Basin from this center beginning about 5000 radiocarbon years ago.

Husted, Wil (Billings, MT) [S #13]
A Western (Indigene) Archaic Tradition: Some Musings

Middle and Northern Rocky Mountain and Northwestern Plains archaeology is discussed and interpreted in terms of Plains Archaic from about 8000 RCYBP to the Late Prehistoric Period. However, much of the evidence, and nearly all of that for the Early Plains Archaic, comes from Rocky Mountain foothill, mountain, and basin sites. Evidence for an Early Plains Archaic is extremely scarce on the central Western and Northwestern Plains while Middle Holocene-age sites are numerous in the Middle and Northern Rocky Mountain provinces. The Archaic is a Rocky Mountain phenomenon that began with the Middle and Northern Rocky Mountain Paleoindian. Some musings on a Western Archaic Tradition are offered.

Husted, Wil (Billings, MT) [S # 13]
Plains or Mountains: There Is a Difference

Many archaeologists fail to make the distinction between mountains and plains when interpreting and discussing the archaeology of the Northwestern Plains. Mountains, foothills, and intermountain basins are frequently included in the Western, Northwestern, and Northern Plains. Archaeological sites situated in these environments are attributed to occupation of the Plains. This blurring of topographic differences and data has ascribed a Middle Holocene occupation to the Northwestern Plains that is not supported by the evidence. An overwhelming majority of Middle Holocene archaeological sites are located in the foothills, mountains, and intermountain basins of the Middle and Northern Rocky Mountains. The Early Plains Archaic is actually a foothill-mountain-intermountain basin phenomenon.

Jepson, Dan (Colorado Department of Transportation, Denver CO) [S #10]
Two Woodland Burials From the Lena Gulch Site (5JF1780), Jefferson County, Colorado

In 1998, construction personnel excavating for a highway project near Golden, Colorado, exposed the skeletal remains of two aboriginal adults.

A large and diverse artifact assemblage accompanied the burials, including chipped stone and bone tools, cord marked ceramics, grinding implements, stone disk and tubular bone beads, shell pendants, and a probable ornamental object comprised of rabbit incisors. Ceramic and projectile point morphology, coupled with radiocarbon assays obtained from charcoal, place the individuals in the Middle Plains Woodland period. Artifact styles and materials suggest influences from both the plains and mountains culture areas. Skeletal pathologies are minimal, but mandibular molars from both individuals exhibit an identical and highly unusual wear pattern evidently undocumented elsewhere in the region.

Johnson, Clay (Ashley National Forest, UT) [S #3]
Dutch John: 7,000 Years of Environmental Stability?

On gentle pinyon-juniper covered slopes at Dutch John in northeastern Utah, numerous archaeological features with radiocarbon midpoint dates ranging from 7120 B.P. to 600 B.P. lie buried just a few centimeters below the surface. Apparent stability of this ground surface and plant community over several thousand years has implications for prehistoric human use of the area.

Johnson, David E., Kevin W. Thompson, Jana V. Pastor (Western Wyoming College, Rock Springs, WY) and William P. Eckerle (Western GeoArch Research, Salt Lake City, UT) [S # 13]
The Blue Point Site (48SW5734): Preliminary Results of Investigations into the Paleoindian-Archaic Transition in Southwest Wyoming

Excavations at the Blue Point site in southwest Wyoming documented the presence of a series of Early Archaic components dating between 6200-8300 RCYBP. Below the Early Archaic components, at least one Paleoindian component was encountered which contained large stemmed projectiles reminiscent of the Alberta/Cody type identified at the Horner site. The site setting, on a ridge between two ephemeral playas within an extensive dunefield, would have provided the prehistoric occupants access to a number of diverse ecological zones. Sedimentary evidence indicates slope wash events alternating with eolian deposition and intermittent soil Bt horizon formation dominated the latest Pleistocene/earliest Holocene with a shift to massive eolian sand aggradation occurring around 9000 B.P. and continuing until after 6000 B.P. This evidence suggests a more mesic terminal Pleistocene gave way to a progressively drier early and middle Holocene. Ongoing research focuses on increasing the archaeological sample from the Paleoindian levels, documenting the hydrological and palynological records of the playas, micro-stratigraphic analyses of the sedimentary/soils record, and modeling changing human-ecological relationships at the site.

Joy, Paul (see Andrews)

Keyser, James D. (see Poetschat)

Kornfeld, Marcel (George C. Frison Institute of Archaeology and Anthropology, University of Wyoming, Laramie) [S#7]
First Peoples of the Rockies: The Clovis Evidence

The Rocky Mountains traditionally form the cultural divide between the Plains on one side and the Southwest, Great Basin, or Plateau on the other. Yet, as this and previous Rocky Mountain Conferences have shown, many cultural manifestations, including Clovis occur on both sides as well as in the mountains themselves. The Clovis occurrences in the Rocky Mountains and vicinity provide evidence of the first occupants of this culture area and their lifeways.

Kornfeld, Marcel (George C. Frison Institute of Archaeology and Anthropology, University of Wyoming, Laramie) [S#1]
Introduction: The Rocky Mountain Culture Area

(No abstract)

Kvamme, Jo Ann (see Kvamme)

Kvamme, Kenneth L. (University of Arkansas, Fayetteville) and Jo Ann Kvamme (Arkansas Archeological Survey, Fayetteville) [S #12]
Distributional Archaeology of Hunter-gatherer Activities on a Colorado Plateau Ridgetop (Mesa County, CO)

The Sieber Canyon Archaeological Project was conceived as a means to examine the spatial structure and distribution of hunter-gatherer activity sites over a broad region through the mapping of surface artifacts in an arid landscape with good exposure. The remote area in question exhibits an unusual density of surface artifacts. To date, approximately 27,000 have been mapped in a six hectare area. Survey by magnetometry illuminates other aspects of site organization by revealing the loci of buried hearths. GIS facilitated analyses help to illustrate multiple spatial distributions associated with various activities. Insights are gained particularly about the structure of flaking stations.

Lahren, Larry (see Owsley)

Letts, Rhonda (University of Wyoming, Laramie) [S #3]
Storage and Mobility in Southwestern Wyoming

Hunter-gather groups have used storage as part of their subsistence system for thousands of years. Storage pits, caches, and other methods of storing food are often found in the archaeological record. This paper, using both ethnographic and archaeological evidence, will consider the conditions under which people store food and how this may affect their mobility. To illustrate the relationship between environmental conditions and storage, this paper will give an archaeological example from the Wyoming Basin to answer questions about mobility patterns during the Early Archaic.

Lippincott, Kerry (Casper, WY) [S # 9]
Late Prehistoric Pronghorn Procurement on the Western Plains

Excavations at 39FA23 were conducted by the Smithsonian Institution from 1948 through 1949 and by the South Dakota Archaeological Research Center in 1985 as part of mitigation efforts at the Bureau of Reclamation's Angostura Reservoir in western South Dakota. Site 39FA23 is identified as a multi-occupation hunting camp based on five superimposed layers of features, artifacts, faunal, and floral remains. The features are represented by middens and unprepared, unlined hearths; artifacts included ceramics, projectile points, thick and thin bifaces, end scrapers, drills, shaft abraders, grinding slabs, bone awls and knives, and bone and shell ornaments. Faunal remains from both the SI and SDARC excavations reflected a predominance of pronghorn over bison but freshwater mussel shells were also recovered too. Floral remains included a plum pit, goosefoot, pigweed, prairie cordgrass, sunflower, and grape seeds. Four radiocarbon dates - A.D. 1170 $\pm$ 90, 1279$\pm$46, 1285$\pm$39 and 1352$\pm$44 (corrected) were obtained from the site. The site may be interpreted as a hunting camp for local residents, for Middle Missouri area influenced nomads, or for seasonal transhumants from Missouri River earthlodge villages.

Loendorf, Lawrence L. (Larry) (New Mexico State University, Las Cruces) [S # 2]
Painting Tobacco

In their search for a place to live, the Crow Indians wandered near the Bighorn Mountains of Montana and Wyoming. No Vitals, one of their leaders, was on a fast at the crest of the mountains at a place the Crow call the Extended Mountain. During the fast he looked down and saw the stars beckoning to him, but when he reached them they had changed to tobacco seeds. No Vitals recognized this as a sign that the Crow should plant the seeds and live in this place forever. In caves along the slopes of the mountains where No Vitals fasted, there are painted replicas of stars, tobacco seeds, and plants. These paintings are replicated in the beadwork and painted designs found on Crow Tobacco Society moccasins, pipe bags, and costumes.

Loosle, Byron (Ashley National Forest, UT) [S #4]
McConkie Ranch (42Un2550)

Uinta Fremont sites have generally been characterized as small hamlets of three to five structures with limited cultural deposition. In 1998, a large village site at McConkie Ranch on Dry Fork, north of Vernal, Utah, was tested. This 40 acre site has numerous structural depressions and unusual bedrock features. Considerable cultural deposition was encountered at the site, yielding extensive faunal remains and evidence of an elaborate bead industry. A preliminary report will present results of the excavation.

Loosle, Byron (see Atkinson)

Lubinski, Patrick M. (Western Wyoming College, Rock Springs) [S #9]
Introduction, Pronghorn Perspectives

Commonly called "antelope" in North America, biologists normally prefer to call this animal the pronghorn (*Antilocapra americana*). Pronghorn are animals of the open plains and have adapted to this condition with excellent eyesight, extraordinary speed, and a well-developed ability to broad jump. They were a significant food resource for native peoples across western North America, where they were hunted by a variety of methods, including communal drives of herds into corrals. This paper will provide an introduction to the animal and patterns of pronghorn hunting by humans in history and prehistory.

Lubinski, Patrick M. (Western Wyoming College, Rock Springs) [S #9]
Pronghorn Hunting and the "Numic Spread"

The Bettinger-Baumhoff model for the Numic Spread explains the purported migration in part by arguing that Numic peoples out-competed pre-Numic peoples by using a more intensive system of subsistence. The model emphasizes the importance of intensive plant exploitation, but shifts in hunting patterns, like the adoption of cooperative mass-capture techniques over single hunter techniques, would be consistent with the model. Zooarchaeological data from southwest Wyoming suggest an intensification of pronghorn hunting, including an increase in mass kills, at about the time expected for the Numic Spread. At the same time, many purported "Numic markers" appear at regional sites. Although identification of ethnicity is problematic in archaeology, there is a change in the region that appears to fit well with the Bettinger-Baumhoff Numic Spread concept.

MacMillan, Vincent (University of Wyoming, Laramie) [S #13]
Paleoindian Biological Affinities: A Contemporary and Historical Assessment

Recently, American archaeology has been the subject of a great deal of attention within the popular and news media as a result of the debate over the Paleoindian remains from Kennewick, Washington and Spirit Cave, Nevada. The putatively non-Mongoloid skeletal features exhibited by these individuals has heightened an already intense debate over repatriation and tribal affiliation stemming from the Native American Graves Protection and Repatriation Act. In many ways this archaeological discussion has been taken out of context and sensationalized as high drama by the popular media. This context must be restored to fully understand the questions raised and implications of a non-Mongoloid affiliation of the original inhabitants of the New World. The first section of this presentation is an attempt to outline the origins of this debate. The skeletal samples and the results of their analyses are widely scattered throughout the literature and a comprehensive review is thus deemed necessary for subsequent work to continue in a cohesive manner. This outline thus summarizes the content and state of the specific samples and

methodological trends that have been used in recent assessments of Paleoindian biological affinities. The various researchers' results are also reiterated. The final section will present other methodological possibilities from the field of forensic anthropology that may potentially help define the biological relationship between Paleoindians and their contemporaries in other geographical regions.

Madsen, Dave Discussant **[S #9]**

Main, Steven (Colorado State University, Ft. Collins) [S #2]
Central High Plains and Laramie Basin Rock Art

Sandwiched between extensive and well known rock art regions to the north and south, the sparse rock art of the Colorado Front Range and Laramie Basin has remained largely undiscovered or overlooked. Exclusively on private property, these hard-to-access sites have been infrequently reported and rarely recorded. This preliminary survey points out the variety of styles and broad range of subjects depicted in sites scattered between the South Platte and Laramie rivers. Further analysis of these sites will expand our knowledge of the area's prehistory.

Mark, Robert (see Billo)

Marlar, Clayton F. (see Dean)

McDonald, Kae (Metcalf Archaeological Consultants, Inc., Eagle, CO) [S #10]
Historic Archaeology Sites in the Glenwood Springs Area

Glenwood Springs was founded in 1882 as the vision of one man to create a world class spa centered on the hot springs and vapor caves situated near the confluence of the Roaring Fork and Colorado Rivers. As the city grew, the economic base widened, and included mineral extraction, agriculture, and recreation. The construction of the railroads increased accessibility, and promoted the area as a recreational haven. Glenwood Springs' early founders provided many modern conveniences during the early growth of the town. These features remain visible on the landscape and many are National Register-eligible. This poster paper highlights these sites.

McDonald, Kae (Metcalf Archaeological Consultants, Inc., Eagle, CO) [S #3]
Saving it for a Rainy Day: Prehistoric Caching and Curation in Northwestern Colorado

Mitigation of the Colorado Interstate Gas Uinta Basin Lateral resulted in the excavation or testing of numerous sites in northwestern Colorado, an area which heretofore had been relatively unexplored in terms of excavated Archaic sites. This paper discusses caching and curation behaviors as they relate to the exposed living spaces of selected sites along the Uinta

McFaul, Michael (LaRamie Soils Service, Laramie, WY), Brian R. Waitkus (Office of the Wyoming State Archeologist, Laramie), Dan Wolf (Office of the Wyoming State Archaeologist, Laramie), Amy H. Holmes (LaRamie Soils Service, Laramie, WY), Christopher T. Hall (Washington State University, Pullman), and Richard G. Reider (University of Wyoming, Laramie) [S #13]

China Wall (48AB1) Late Paleoindian-Prehistoric Environments

Six prehistoric occupations are present at 48AB1. Paleoindian, Early Archaic, and Late Prehistoric occupations are stratified. Seven depositional units mantle Precambrian bedrock. These include: Pleistocene-early Holocene channel gravels, early Holocene slack water deposit (>8400 B.P.), early Holocene fan alluvium and paleo-Entisol (>8400 B.P.), early Holocene alluvium with multiple paleo-Fluvents (>7400-7000B.P.), mid-Holocene overbank sediments with a strong paleo-Argiaquoll (7000-5800 B.P.), middle-late Holocene alluvium and paleo-Argiaquoll (5800-4500 B.P.), late Holocene overbank deposit and modern Calciaquoll (4500-1380 B.P.). Pedogenic properties (gleying, mottling, concretions, O.M.) indicate a wet pedogenic conditions (8400-5860 B.P.). Late Prehistoric and Middle Archaic occupations are associated with dark paleosols.

McKee, Dave (see Burgess)

McKibbin, Anne (see Adams)

Merrell, Carolynne L. (Archaeographics, Hamilton, MT) [S #2]

Bear Presence in Rock Art from the Northern Rocky Mountains

Ethnographic studies and tribal oral traditions richly describe the interrelationship between bear and human for the cultures who inhabited the Rocky Mountains. Motifs from rock art sites in Idaho and Western Montana reinforce this relationship. Pictographs and petroglyphs show the bear in a variety of models including natural portrayals, stylized abstract images, bear symbols and shamanic representations. Computer digital enhancement technology has been useful for illuminating several obscure bear motifs. This work has contributed significantly to the graphic data base that substantiates the significance of the bear for the Rocky Mountain culture area.

Merrell, Carolynne L. (Archaeographics, Hamilton, MT) [S # 12]

Identification and Recordation of Culturally Peeled Lodgepole Pine Along the Lolo Trail

A recent study by the Clearwater National Forest has identified over a thousand culturally peeled lodgepole pine along the historic Lolo Trail. Recording methods included scar dating and GPS mapping. A data base was created and standard profiles were identified for lodgepole cultural scar characteristics. Literature suggests that peeling lodgepole was practiced in other areas throughout the Rocky Mountains. With the natural demise of the peeled

lodgepole over the next twenty five years it is essential to locate and record these living artifacts while they can still provide valuable information on cultural land use patterns for the Rocky Mountains.

Metcalf, Michael D. Discussant **[S #9]**

Miller, Mark E. and Paul H. Sanders (Office of Wyoming State Archaeologist, Laramie) [S #9]
The Trappers Point Site (48SU1006): Early Archaic Adaptations and Pronghorn Procurement in the Upper Green River Basin, Wyoming

The Trappers Point site is a stratified, Early Archaic manifestation near Pinedale, Wyoming containing three intact cultural components ranging in age from 7880-4690 radiocarbon years ago. Pronghorn remains indicate a spring season of use for the middle of the three occupations. Comparisons of skeletal morphology and behavior between prehistoric and modern pronghorn populations has generated provocative observations, and prompted more critical comparisons with paleoenvironmental evidence. The site provides the best evidence for Early Archaic, prehistoric pronghorn procurement in the entire area. Over half of the site has been left in place for future research.

Moreschini, Gary J. (Pueblo Archaeological and Historical Society, Pueblo, CO) [S #2]
Range View 5FN721, The Archaeology, the Rock Art, the Astronomy. Site Review, Recent Data, and Observations for 1997 and 1998

An ongoing project of the Pueblo Archaeological and Historical Society (P.A.H.S.) since March, 1996, Range View is a prehistoric, multi-component site located west of Pueblo, Colorado on the north bank of the Arkansas River. Activities have included surface recording of artifacts and features of at least fourteen habitat sites and probable associated rock art. Notable rock art data collected include the recording of a large modified base stone and portable flaked pointer stone. The pointer stone casts a shadow onto the petroglyphs on the cliff face to form possible alignments which may correspond with dates on and around the winter solstice, equinoxes, and summer solstice. Additional data collected suggests an associated horizon calendar visible from the panel at sunset. The glyph also has potential for recording some of the lunar cycles. Additionally, data demonstrates that some of the spalled out areas within the glyph may have been culturally made to help record the sun's position at sunset. Data along with a review of design models and methods used will be presented.

Morris, Elizabeth Ann (Colorado State University), and Michael D. Metcalf (Metcalf Archaeological Consultants) [S #13]
Retrospective on High Altitude Archaeological Surveys in Northern Colorado

Two groups of lithic sites near the upper forest border in Larimer, Clear Creek, and Summit counties, Northern Colorado are compared. Most

sites are in the headwaters of the Platte River. Temporal placement of occupation includes Paleo-Indian through Historic Present. Radiocarbon dates from three tested sites confirms typological dating by projectile points. Functional assignment based on quantitative and qualitative artifactual occurrence included base camps, kill and butchering sites, and lithic scatters. Identified materials indicated affiliations to the west and north. Frequent re-collection over a 25 year period usefully expanded site numbers, collections, and interpretive potential.

Oetelaar, Gerald A. (University of Calgary, Alberta,Canada) [S #8]
You Are Where You Live? Cultural Perceptions and Uses of Landscapes by First Nations Occupying the Rocky Mountains, Northwestern Plains, and Boreal Forests of Alberta

Human groups humanize an environment by mapping themselves onto the landscape using their knowledge of specific landforms and waterways, resources including minerals, plants, and animals, and human settlements. Once established, this human imprint transforms the natural landscape into a cultural landscape and establishes a pattern of land use which can persist for generations, if not millennia. The objective of this paper is to examine and compare Native perceptions and uses of landscapes using historic maps, established travel and trade routes, and ethnographic data on settlement locations for groups occupying the Rocky Mountains, Northwestern Plains, and Boreal Forest of Alberta. The data indicate that members of First Nations appear to have viewed the Rocky Mountains as a different landscape, particularly in relation to the nearby Plains.

Olson, Linda (see Francis)

Owsley, Douglas (Smithsonian Institution, Washington, D.C.), David Hunt, (Smithsonian Institution, Washington, D.C.), and Larry Lahren (Livingston, MT) [S #10]
Human Skeletal Remains from the Anzick Site (24PA506), Park County Montana

The Anzick archaeological site in Montana, known since 1968, has been recognized since 1974 as Clovis age because of the lithic material recovered. Now it is possible to assert that some of the recovered skeletal material is also Clovis age. This site contained more than 100 stone and non-human bone artifacts in association with the partial skeletal remains of a young child. All were covered with red ochre. The partial cranium of a second youth, not stained red, was also recovered. Recently, radiocarbon dating of these two crania produced two separate ages, 2000 years apart. Forensic examination of the remains, done in 1999, has determined their ages at death. This site, an important addition to New World prehistory, represents not only the largest single assemblage of Clovis artifacts but also the only known Clovis skeletal remains.

Pastor, Jana V. (see Johnson)

Phillips, Rennie (University of Wyoming, Laramie) [S #10]
Six Chinese Burials in Southern Wyoming

In 1982 six human skeletons surfaced at a construction site in southwest Wyoming. Following legal procedure, the Wyoming State Crime Lab was notified so that the skeletal remains could be excavated and handled properly. Although the six individuals were initially treated as a forensic case, it was soon realized that they were all Chinese males who died in the late nineteenth century. This paper discusses who these men were and why they are important by combining physical anthropology with cultural anthropology, archaeology, and history. This multidisciplinary approach provides a more comprehensive portrayal of their origins and life-ways even long after death.

Pickering, Robert B. (Denver Museum of Natural History, CO) [S #10]
Mummies, Museums, and Medical Technology

Mummies are major attractions in museums around the world. They fascinate or repulse, conjure up images of ancient greatness or serve as symbols of myth. In decades past, revealing the stories mummies tell often required an autopsy which resulted in the destruction of the mummy. By using modern medical imaging techniques, primarily CT scan(Computed Axial Tomography), it is possible to view the mummy in a non-invasive, non-intrusive manner. This paper reviews various medical imaging, discusses the results of those studies, and demonstrates how the information gained can be transformed into a video documentary for public presentation.

Pickering, Robert B. (Denver Museum of Natural History, CO) [S #10]
Carnivore Damage to Ancient and Modern Human Remains

In the Rocky Mountain region, the recovery of recent human remains for forensic purposes often is made more difficult by scavengers and other animals that alter the remains at various stages of decomposition. Whether large animals, such as bears, wolves or puma, bird scavengers such as crows and magpies, or rodents that gnaw on the bones, each species leaves characteristic signs on the remains that help identify the type of animal. Proper identification of animal damage can provide clues useful in determining time since death. This paper presents examples of different kinds of animal intervention from Colorado cases.

Pitblado, Bonnie L. (University of Arizona, Tuscon) [S #13]
The Extent of Human Occupation of the Southern Rocky Mountains: 10,000-7,500 B.P.

Although more and more Paleoindian sites in the Rocky Mountains have been the subject of archaeological investigations, we have yet to develop a coherent vision (or visions) of how the mountain environment was incorporated into Paleoindian settlement systems in the American west. This

research addresses a single issue pertinent to the development of such a vision: whether the southern Rockies, circa 10,000-7,500 B.P., were occupied year-round or seasonally. Six-hundred non-fluted projectile points from the Rocky Mountains, Great Plains, Colorado Plateau, and Great Basin of Colorado and Utah were compared along three axes of potential variability: morphology and typology; raw material use; and production technology. With each regional comparison, the goal was to assess whether specimens from Rocky Mountain contexts appear to represent a unique trajectory of adaptation, or whether, instead, they share various features in common with projectile points from adjacent lowlands, indicating an affiliation with one region or another. It is ultimately concluded, based on convergence of the three lines of evidence, that the southern Rockies were occupied year-round during the late Paleoindian period. Specifically, Rocky Mountain projectile points are of a unique morphology and type; are made of raw materials derived exclusively from the mountains themselves; and exhibit technological characteristics that are different from those in other regions and apparently responsive to the structure of the Rocky Mountain environment.

Poetschat, George (Oregon Archaeological Society), James D. Keyser (U.S. Forest Service, Portland, OR) and Phillip Cash Cash (University of Arizona, Tuscon) [S #2]
Biographic Rock Art: Expansion of a Plains Tradition into the Rocky Mountains and Columbia Plateau

Biographic Tradition Art has a widespread distribution on the North American Plains, including numerous rock art sites. Research has shown that the rock art aspect extends onto the Colorado Plateau and into the American Southwest, but until recently there was no definite evidence that this art had been painted as part of the Northern Rocky Mountain and Columbia Plateau rock art. Recent work at a rock art site in central Oregon and subsequent research have demonstrated that Historic period Rocky Mountain and Columbia Plateau tribesmen were fully conversant with this art form and drew it in rock art and other media.

Pool, Kelly (Metcalf Archaeological Consultants, Inc., Eagle, CO) [S #4]
Data Recovery at the Red Army Rockshelter (5RT345), Routt County, Colorado

Excavations in the Red Army Rockshelter near Steamboat Springs, Colorado, produced diagnostic artifacts and seven radiocarbon dates ranging from 7300 ± 80 B.P. to 1080 ± 50 B.P., demonstrating continuous use from the Early Archaic through the Protohistoric. The rockshelter is named for the lines of red shield-figures on the back wall. An Early Archaic pit house excavated into the floor, an Early Archaic human burial, a Middle Archaic pithouse, a Late Archaic activity area with a stone pipe/tube and red ochre-stained artifacts, and evidence of Late Prehistoric or Protohistoric trade based on New Mexico and Idaho obsidians and glass beads were found.

Pool, Kelly (see Adams)

Pugh, Daniel C (Ashley National Forest, UT/University of Michigan, Ann Arbor) [S #3]
Slab-lined Basins and Site Reuse by Hunter-Gatherers in the Dutch John Area of Northeastern Utah

Highly mobile hunter-gatherer groups are not typically associated with significant environmental modification or long-term facilities. Recently, Smith and McNees postulated slab-lined basin features are evidence for site and facility reuse for hundreds of years by groups in southern Wyoming. These basins are unique in that they are lined with stone slabs, generally devoid of artifacts and associated with short-term, use-specific sites and it has been suggested that their durable and visible construction acted as sign posts to other groups indicating particularly rich resource areas. Investigations in the Dutch John area of the Ashley National Forest in northeastern Utah have added 15 slab-lined basins to the database. The models put forth by Smith and McNees are tested with additional data including starch residue analysis.

Puseman, Kathryn (PaleoResearch Labs, Golden, CO) [S #15]
What Were They Doing With All That Cactus?

Macrofloral analysis of soil samples resulting from excavations at sites 48FR3245, 48FR3244, 48FR3092, 48FR3243, 48FR3091, and 48FR3242 in the Wind River Basin of central Wyoming yielded high recovery of charred Cactaceae (cactus family) remains. These sites were part of the Beaver Creek Pipeline project in the High Plains/Mountains interface area. This project included a detailed ethnobotanic study involving macrofloral, pollen, and protein residue analysis. Feature fill was floated and examined in its entirety. Charred Cactacaea remains included cactus epidermis, glochids, areoles, and spines. The presence of charred prickly pear fruit, seed, and embryo fragments in features from the same time periods and sites suggest that the cactus remains most likely represent prickly pear cactus. Was prickly pear cactus an important element of the diet, or were the occupants merely discarding cactus in the features? Experiments involving modern cactus pads were performed to determine if processing pads for consumption would leave a signature similar to that in the archaeological record.

Reeves, Brian (University of Calgary, Alberta, Canada) [S #1]
Is There a Northern Rocky Mountain Archaeological Culture Area? A View from Mistakis (The Backbone)?

Archaeological research in Mistakis (today's Waterton and Glacier National Parks) over the last 30 years has identified a long and significant archaeological record dating back ca. 10,000 years associated with a seasonally structured resource harvesting and occupancy in the valley floors and alpine life zones providing an excellent data base for rationally evaluating the concept of a northern Rocky Mountain Archaeological Culture Area. Review

of the regional sequence, particularly that of the last 5000 years for which the largest regional sample exists, suggests that the culture/environmental area while a useful organizing concept is of limited utility as a explanatory mechanism. The only time during the last 3000 years this region of the Northern Rockies appears to be archaeologically somewhat coherent - primarily along the eastern slopes - is during the Pelican Lake Regional Technological Phase ca. 3000 - 1600 years B.P. a time of maximum Native seasonal occupancy and resource harvesting in the Northern Rockies in which a number of new hunting, fishing and plant processing techniques were introduced to the east slopes. Trade and exchange in lithics intensifies and many new quarries are developed. The introduction of the bow and arrow and its impact on Western plains/foothills bison driving as represented in the Avonlea Regional Technological Phase throughout the region resulted in major changes throughout the eastern slopes (in contrast to most western slope valleys in which the older patterns generally persisted) as most local east slope groups increasingly reoriented towards the plains in summer and the major western plains/foothills fall bison drives. They eventually abandoned ca. 800 years ago most summer/fall resource harvesting and settlement locales in the east slope valleys and alpine. Sections of the Eastern Slopes became part of the Northwestern Plains Culture Area. Areas west of the divide in the Columbia River Basin became firmly linked to Columbian Plateau archaeological cultures while those on Middle-Upper Kootenia Columbia Lakes continued their old "Rocky Mountain" lifestyle of seasonally moving from the western to eastern slopes in winter to hunt bison. Northern movement of Fremont and later Shoshonian peoples into the headwaters of the Missouri and Clark Fork combined with early pre-contact Post-Columbian epidemics ca. 600 - 300 years ago resulted in further regional cultural shifts in the Northern Rockies. Application of a "cultural area" concept therefore can obscure significant regional variation within the archaeological record within the Northern Rockies over the last 1600 years.

Reider, Richard G. (see McFaul)

Richings-Germain, Sam (University of Wyoming, Laramie) [S #13]
The Jerry Craig Site

As a result of 1999 test excavations at the Jerry Craig site, a more extensive description of the bison bone bed and associated chipped stone is possible. However, in order to examine the plausibility of a single kill event having occurred at the Jerry Craig site, a comparative review of archaeological materials from relevant Mountain and Plains Cody-aged sites is necessary. Therefore, to improve our understanding of Paleoindian occupations in the Rocky Mountains further evaluation of the Jerry Craig site is provided.

Risch, Barbara (New Mexico Highlands University, Las Vegas) [S # 14]
Crazy Horse: Images of an American Legend

Over the last century, Crazy Horse, perhaps as much as any other figure, has become symbolic of Plains Indian culture, and of the western Indian. Ironically, there is very little visual representation of him that is accessible. Though several photographs have been purported by their owners to be images of Crazy Horse, it is generally held among historians and other scholars that *the* Crazy Horse never allowed his photo to be taken. Fortunately, his image has been preserved in pictographic texts of the Sioux. This study examines Lakota pictographic representations of Crazy Horse, maintained as cultural knowledge in winter counts and ledger art, with two aims. First, to identify the visual features of the compositions which are employed to signify Crazy Horse. And secondly, to describe how these and other thematic elements of the composition lend themselves to a narrative theme, a theme which shapes the figure of Crazy Horse for the culture of the Sioux, and contributed to a wider contemporary image of the Plains Indian.

Sanderson, Meegan (University of Wyoming, Laramie) [S #7]
Effects of Trampling on Lithic Raw Material

This paper documents the results of a controlled trampling experiment on three kinds of lithic raw material chert, basalt, and obsidian. This experiment was conducted to determine if material type has an effect on the amount of damage caused by trampling. Abrasion and flaking were present on all material types, but the chert sample had the most damage followed by the basalt, and lastly the obsidian.

Sanders, Paul H. (see Miller)

Saysette, Janice (Colorado State University, Ft. Collins) [S # 9]
Body Mass in Late Pleistocene/Early Holocene Antilocapra

Mammalian body mass is related to a number of physiological and ecological variables. Because of this relationship, the reconstruction of accurate mass estimates in either extinct species or in species which may have experienced post-Pleistocene dwarfing is of special interest. Of necessity, the development of predictive least squares regression equations used to estimate prehistoric body mass must begin with modern specimens. Using a sample of modern pecoran artiodactyls, measurements were taken on long bone, tarsal, and carpal articular surfaces. Articulations were then modeled on various geometric shapes which most closely resembled the shape of each surface. The equations were then used to estimate body mass in a sample of late Pleistocene/early Holocene *Antilocapra.* Results indicate that body mass within this genus has not changed since the late Pleistocene, contrary to the situation seen in other taxa surviving since the Pleistocene. Similarly, attempts to separate males from females within *Antilocapra* were unsuccessful. Sexual di-

morphism within *Antilocapra* is only 10-15%. In genera with more pronounced sexual dimorphism, such as *Bison*, it is possible to separate male from female individuals, with some overlap expected from astragalus measurements of sub-adult males. Herd composition in catastrophic events would be of interest, but is not possible in pecoran species exhibiting only mild sexual dimorphism.

Schillaci, Michael A. (University of New Mexico, Albuquerque) [S # 10]
A Possible Case of Coccidioidomycosis from a Twelfth-Century Habitation Site within the Taos Valley of Northern New Mexico

A 30-35 year old male recovered during an archaeological excavation of a twelfth-century habitation site near Taos, New Mexico exhibits well-demarcated and locally diffuse lytic lesions across much of its axial skeleton consistent with a systematic mycotic infection. A differential diagnosis based on the physical appearance of these lesions, their distribution on the skeleton, and the geographical location of this burial all suggest Coccidioides immitis as the most likely source of this infection. The presence of this pathological condition in the Taos Valley may indicate the endemic area for coccidioidomycosis extended to the Northeast prehistorically.

Schilling, Amy L. (University of Colorado) [S #10]
Computed Tomography Images as a Source for Facial Tissue Thickness Measurements

Using data from the Visible Human Male (VHM) the validity of facial tissue thickness measurements obtained from CT images is tested. The x and y coordinates for each landmark were taken at the bone surface and at the surface of the skin, as perpendicular to the bone as could be determined visually, on both the anatomic and CT images. These two sets of measurements were compared and the degree of similarity between them measured. The results of the measurements were consistent, with a few exceptions. Several problems associated with this collection method may be partially responsible for the discrepancies.

Schilling, Amy L. (University of Colorado) [S #12]
United Nations International Criminal Tribunal for the Former Yugoslavia

The United Nations Security Council established the United Nations International Criminal Tribunal for the former Yugoslavia (UNICTY) in 1993 with the authority to indict those responsible for crimes against humanity. The UNICTY 1998 field season yielded 1800 body bags from eight mass burials in Bosnia. The age, sex and stature were estimated (when possible) for all of the remains. Pathologies, individuating anomalies and, in particular, any signs of trauma were identified and noted. A surprising amount of the pathology observed, including antemortem trauma, was reminiscent of cases typically seen only in the arena of paleopathology.

Scott, John (see Adams)

Scott-Cummings, Linda (PaleoResearch Labs, Golden, CO) [S #15]
Starch Granules as Indicators of Subsistence

Evidence in the archaeobotanic record for subsistence usually is limited to recovery of macrofloral remains and pollen. New evidence of starch granules expands our understanding of subsistence of people living in the Rocky Mountains to include native wild potato (Solanum). Recovery of starch granules in pollen samples or charred remains recovered from two Fremont or Formative and a single Late Archaic provenience documents the use of this resource.

Shields, Wm. Lane (University of Iowa, Iowa City) [S #3]
Basin Houses in Colorado and Wyoming: Delineation of a Culture Area

A database of hunter-gatherer house occupations primarily in Colorado and Wyoming was examined for stylistic patterns, spatial distributions and temporal placement. A type of structure, termed a basin house, is defined and a core area corresponding to the Wyoming Basin physiographic province is identified. These structures, hypothesized to be a type of free-standing wickiup, are documented to occur from about 7500 through 550 B.P. There are no significant gaps in the temporal distribution. The average size of the houses does not unidirectionally change through time but size increasingly varies. Informal hypotheses concerning fabrication and possible superstructure appearance are proffered.

Smith, Craig S. and Lance M. McNees (TRC Mariah Associates Inc., Laramie, WY) [S #9]
Pronghorn and Bison Procurement During the Uinta Phase in Southwest Wyoming: A Case Study from Site 48SW270

The dramatic bone beds occasionally uncovered in southwest Wyoming are often used to characterize pronghorn procurement during prehistoric times. These pronghorn bone beds are generally rare and many may even represent a number of kill events. More typically, the prehistoric foragers probably pursued and killed single pronghorn on an encounter basis, often interchangeably with bison. The recovered remains from Site 48SW270 dating to the Uinta phase exemplify these procurement practices. The foragers at Site 48SW270 intensively butchered a total of at least two, probably three bison, and at least two pronghorn in the late fall and early spring during repeated visits to the site. The butchering took place in an area adjacent to the habitation structure. It appears that the foragers brought the entire animals back to the site for butchering suggesting that the kills occurred relatively near the residential camp. The residential camp also served as a location for a number of other subsisentce and domestic activities.

Snyder, Robert (University of Calgary, Alberta, Canada) [S # 14]
Ethnicity and Chinese Cuisine: Temporal Perception and Negotiation in Fort Collins, Colorado.

Local expressions of ethnicity reflect negotiated supply networks and changing modes of distribution that are the basis for defining "authenticity" in Chinese cuisine. The availability of Chinese food over time demonstrates how the flow of goods maintains ethnicity, while conversely ethnicity channels the flow of goods. Changing perceptions are apparent in the wholesaler's ability to provide specialized ingredients over time. Concurrently, the temporal experiences of restaurateurs, wholesalers, and consumers are contested as new forms of food emerge and Chinese cuisine is re-interpreted. A process emerges, demonstrating the fluid nature of Chinese food types in relation to time and space.

Stiger, Mark (Western State College, Gunnison, CO) [S #3]
Stone Houses, Grinding Stones, and Colorado High Country Archaeology

A series of stone houses has been excavated at the Tenderfoot Site near Gunnison, Colorado. Associated assemblages of flaked and ground stone tools show similarities over thousands of years in the many activities that took place in the houses. However, the organization of activities does show some changes over the last 8000 years. Specifically, food processing (probably plant food), hafted tool use, and tool manufacture and repair are represented in all the houses. The way each activity is organized within the houses and within other activities changes through time.

Stuart, Jaime (University of Wyoming, Laramie) [S #10]
Metric Analysis of Northwestern Plains Amerindian Skeletal Remains

Visual and metric analyses suggest that there are notable cranial and post-cranial differences between the Wyoming Basin and High Plains Amerindian skeletal remains representing the Northwestern Plains. It is tentatively hypothesized that the morphological differences among the specimens stem from the occupation of differing environments and their separate geographical origins. The purpose of this paper is two-fold: 1) to provide a basic physical description of the Northwestern Plains Amerindian skeletal sample, and 2) to compare the Northwestern Plains sample to three known Amerindian groups, the Algonkian, Siouan and Numic, to determine the Northwestern Plains sample's degree of relatedness to any of the three groups.

Tanner, Russel L. (Bureau of Land Management, Rock Springs, WY) [S #9]
Pronghorn in the Rocky Mountains, Like Poetry in Motion: An Ethnohistory of Antilocapra Americana, and its Role in the Lives of Western Pioneers and Indigenous People

The paper provides a survey of primary and secondary references to pronghorn by pioneers, explorers and naturalists. This literature review recalls accounts of pronghorn from eighteenth and nineteenth century Europeans and Americans, as well as those taken from ethnographic studies of Native American cultures. While not all descriptions of the pronghorn are as colorful as that of Warren Angus Ferris, most do appreciate the animals' remarkable speed, endurance and tenacity in surviving in the desert regions of western North America. Native peoples became increasingly dependent on pronghorn as bison herds diminished, and the agrarian frontier rushed across the west. Finally, the pronghorn were nearly killed off before early twentieth century game management practices focused on saving this uniquely American species.

Tannich-Gose, Eileen (see Williams)

Thompson, Kevin W. (see Gardner)

Thompson, Kevin W. (see Johnson)

Torres, John A. (Navajo Nation Archaeology, Farmington, N.M.) [S #5]
Athabaskan Migration Revisited...Again: A View of Lithic Technology from the Southern Rocky Mountains

The Athabaskans who entered the American Southwest brought with them a specialized set of lithic technologies. The subsistence strategies for which these technologies were adapted relied on a mixed economy with a heavy emphasis on big game hunting. This hunting lifeway recently had its roots in the intermountain regions of the Rocky Mountains and was probably derived ultimately from the High Plains. This paper explores the similarities of southern Athabaskan lithic technologies with lithic assemblages of the eastern slopes of the Rocky Mountains as another method of determining an Athabaskan migration route.

Tratebas, Alice (Bureau of Land Management, Newcastle, WY) [S #2]
Using Rock Art to Trace Prehistoric Migrations

North American archaeologists have been researching the question of peopling the New World using comparisons of lithic industries between early New World and Asian sites. Lithic tools and technologies are constrained by functional requirements and the nature of the available raw materials. Prehistoric rock art provides data that have few functional constraints and more closely convey information about prehistoric cultures. A compari-

son between south Siberian petroglyphs and the older petroglyph traditions in the Northern Plains and Central Rocky Mountains show possible cultural ties between the two regions.

Vivian, Brian C. (University of Calgary, Alberta) [S #8]
Populations and Paradigms on the Periphery

Throughout the eastern slopes of the Northern Rockies the transition from Paleoindian to the Middle Prehistoric Period has been interpreted in the light of cultural sequences of the Northern Plains. Under this dominant paradigm the Rocky Mountains are presented as an area peripheral to the Plains, and one of little consequence in the development of cultural manifestations. Due to this bias, the apparent diversity in Middle Prehistoric assemblages throughout the eastern slopes of Southern Alberta is overlooked, and generally grouped under the poorly defined 'Mummy Cave' sequence. This paper attempts to readdress this bias, and examine cultural change in the early Middle Prehistoric Period from a Rocky Mountain perspective.

Waitkus, Brian (Office of Wyoming State Archaeologist, Laramie) [S #13]
The China Wall Site 48AB1

This paper provides an initial look at a multicomponent site located in the Laramie Mountains of Southeastern Wyoming. This site appears to have been a stop over point by groups using the Sybille Creek corridor to traverse or access these low mountains. The China Wall environment and nearby Casper Formation chert outcrop delayed their migrations, leaving evidence of these occupations.

Waitkus, Brian R. (see McFaul)

Walde, Dale (University of Calgary, Alberta) [S #8]
DhPs-4: A Pelican Lake Occupation in the Canadian Rockies

DhPs-4, a prehistoric campsite, is situated along the edge of the north end of a 100 meter high glacial outwash terrace overlooking the Elk River, approximately 4 km upstream from the junction of the Elk and Wigwam rivers. Excavations at the site conducted in 1992 and 1993 indicate at least two temporally distinct Pelican Lake Phase occupations focused around large, dense concentrations of fire-broken rock. The two occupations exhibit dissimilar lithic assemblages. Faunal and immunological studies indicate a broad spectrum hunting subsistence pattern and lithic source analysis indicates a widespread exchange network. Implications for cultural historical taxonomic systems are discussed.

Walker, Danny N. (Office of Wyoming State Archaeologist, Laramie) [S #9]

Pleistocene and Holocene Records of Antilocapra Americana: A Review of the FAUNMAP Data

FAUNMAP is an electronic database documenting the late Quaternary (Pleistocene and Holocene) distribution of mammal species in the United States, developed at the Illinois State Museum with support from the National Science Foundation. The primary purpose of the database is to investigate evolution of mammalian communities, although individual species distributions are readily examined. With a Geographic Information System (GIS), changes in the distributions of individual species and their effects upon mammal community composition can be documented for the late Quaternary. As of 1994, there were encoded data from 2919 sites in the contiguous 48 states during the last 40,000 years. The database is known to be highly incomplete and does not represent the entire locality distribution of species, primarily because only a select few Cultural Resource Management reports were included. The FAUNMAP database was queried for *Antilocapra americana*, the sole living representative of a once extensive widespread family of pecoran artiodactyls. Ten GIS maps were generated showing the distribution of *Antilocapra americana* from the Wisconsinan, through the Holocene and the modern extant range. These maps reveal *Antilocapra americana* has been consistently present throughout what early twentieth century mammalogists consider the species "Historic Range," with only an occasional locality outside those boundaries. These latter localities can be correlated with short-term shifts in the distribution of the short-grass prairie eastern border.

Walker, Danny N. (Office of Wyoming State Archaeologist, Laramie) [Forum]

Looting of Archaeological Sites

(No abstract)

Walker, Danny N. (see Hill)

Walker, Deward E., Jr. (University of Colorado, Boulder) [S #1]

Alpine Environments in the Columbia Plateau of the Rocky Mountain Cultural Province

Permanent as well as seasonal occupation and utilization of Alpine environments and their resources in the Plateau produced regular interaction and exchange among diverse cultural groupings. This paper will examine this interaction and suggest various ways in which it may influence ethnographic, linguistic, and archaeological interpretation in the Rocky Mountain cultural province. Alternative hypotheses concerning tribal movements and linkages will be considered.

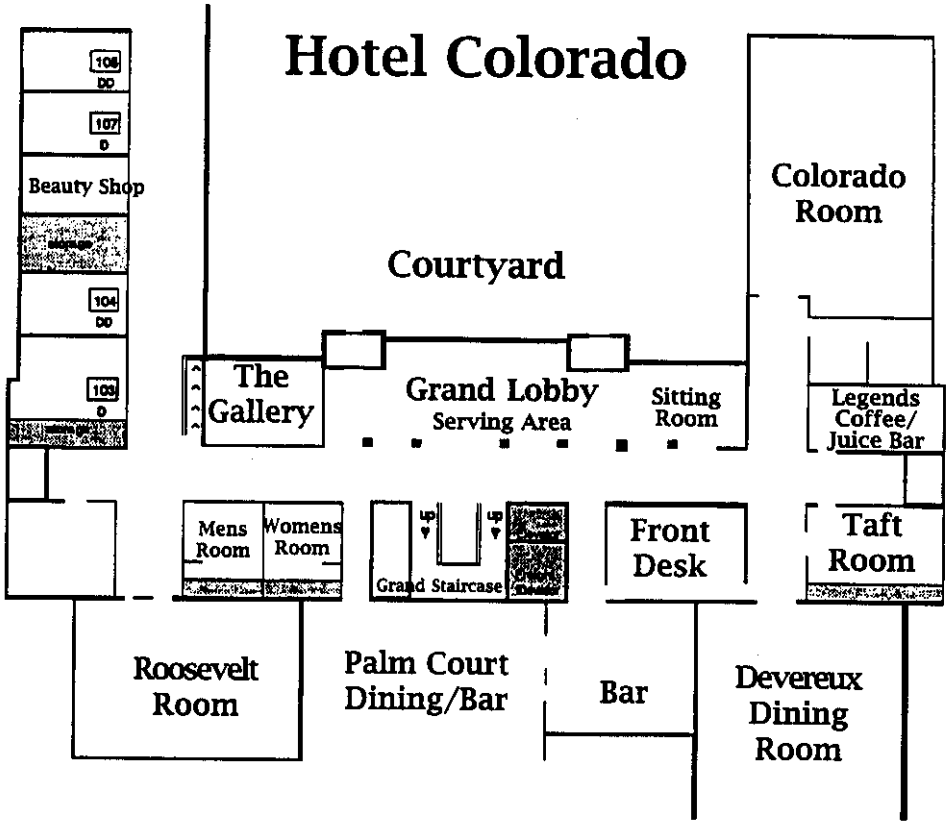
Watkins, Robyn (University of Wyoming, Laramie) [S #15]
Plant Utilization and the Uinta Mountains

Data indicates the possibility that the Uinta Mountains in Northeastern Utah were used year-round as well as seasonally. Prehistoric plant use may be important in testing this model. Ongoing excavations at Chepeta Lake (10,000 ft.) and the Ashley National Forest interaction with Ute Elder, Clifford Duncan, will form part of this discussion.

Wolf, Dan (see McFaul)

Williams, Pat and Eileen Tannich-Gose (Colorado Archaeological Society - Pikes Peak, Colorado Spirngs) [Forum]
The Evolution of a Successful Educational Program

(No abstract)


Hotel Colorado
108
107
Beauty Shop
104
103
Courtyard
Colorado Room
The Gallery
Grand Lobby
Serving Area
Sitting Room
Legends Coffee/ Juice Bar
Mens Room
Womens Room
Grand Staircase
Front Desk
Taft Room
Roosevelt Room
Palm Court Dining/Bar
Bar
Devereux Dining Room

Craig

Time		FRIDAY
	room	COLORADO
am	8:10	Duncan
	8:20	Kornfeld [1]
	8:30	Gill
	9:00	Reeves
	9:30	Frison
	10:00	***BREAK***
	10:30	Davis
	11:00	Walker
	11:30	Goss

SESSIONS
[1]-Plenary; [2]-Rock Art [3]-Features & Stone Houses [4]-Sites; [5]-Mountains & Plains [6]-Jackson Hole; [7]-Posters

Casey ↑ Houston ↑

		COLORADO	DEVEREUX	T. ROOSEVELT	THE GALLERY	TAFT
pm	1:00	Billo & Mark [2]	Andrews & Joy [3]	Byers et al. [5]	Kornfeld [7]	
	1:20	Bies	Johnson	Burgess & McKee	Sanderson	
	1:40	Francis	Pugh	Black	McDonald	
	2:00	Greer & Greer	Letts	Charles	VENDORS, BOOKS, & OTHER DISPLAYS	
	2:20	Loendorf	MacDonald	Adams et al.		
	2:40	Main	Atkinson	Torres		
	3:00	***BREAK***	Shields	Husted		
	3:20	Merrell	Stiger	***BREAK***		
	3:40	Moreschini	Hauck	Eckerle [6]		
	4:00	Poetschat et al.	Pool [4]	Dickerson		
	4:20	Tratebas	Loosle	Cannon et.al		
	4:40	----	Hauck	Cannon		
	5:00	RMAC business meeting		CAS BOARD MEETING		
	5:20					
	5:40					
7:30-9:30		CAS Public Forum Williams & Tannich Vogel Canyon Collins Walker				

Beth –

SATURDAY

	room	COLORADO	DEVEREUX	T. ROOSEVELT	THE GALLERY	TAFT
am	8:00	Vivian [8]		Owsley [10]	VENDORS, BOOKS, & OTHER DISPLAYS	CAS SILENT AUCTION DISPLAY
	8:20	Oetelaar		Gill		
	8:40	Gillespie		Stuart		
	9:00	Walde		Jepson		
	9:20	***BREAK***		Baker		
	9:40	Lubinski [9]	Gardner [11]	Schillaci		
	10:00	Fisher & Frison	Merrell [12]	***BREAK***		
	10:20	Hill et al.	Kvamme & Kvamme	Phillips		
	10:40	Frison	Bjornstad & Broadhead	Pickering		
	11:00	Lippincott	Dukeman	Schilling		
	11:20	Smith & McNees	Greubel	Pickering		
	11:40	Lubinski	Schilling			
pm	1:00	Miller & Sanders	Campbell [14]	Husted [13]	VENDORS, BOOKS, & OTHER DISPLAYS	CAS SILENT AUCTION DISPLAY
	1:20	Saysette	Dean & Marler	Waitkus		
	1:40	Walker	Risch	McFaul et al.		
	2:00	Arkush	Snyder	Johnson et al.		
	2:20	Tanner	***BREAK***	Richings-Germain		
	2:40	***BREAK***	Watkins [15]	Pitblado		
	3:00	Metcalf	Puseman	***BREAK***		
	3:20	Francis	Hadden	MacMillan		
	3:40	Madsen	Scott-Cummings	Baker		
	4:00	Duncan	Bennett	Husted		
	4:20			Morris & Metcalf		
	5:00	CAS BUSINESS MEETING				
	5:20					
	5:40					
	6:00	Social Hour - Silent Auction Results				
	7:00	Banquet, Awards, Entertainment				

SESSIONS
[8]-Northern Rockies; [9]-Pronghorn; [10]-Bioarchaeology;
[11]-Historical Archaeology;[12]-Middle Range;
[13]-Paleoindian/Archaic;[14]-Who You Are; [15]-Plants.

Deward ~~Swa~~ Walker - limiting factor to culture area is
baggage of the environmental determinism → and also
c. area stereotypes characteristics. - the bison hunters, salmon
eaters, etc.
> there is a network of food resources that people
relied upon
have discouraged comperative work, have limited us
hard clear boundaries don't exist between
culture areas
arches never limit their __ to culture area boundaries
they are valuable, but are limiting, are good
instructional - but perhaps not heuristic
Now, the Plateau Culture Area
use ethnographically verified reconstructions
Bitterroots - small groups adaptive strategies
a few large congregations - salmon + roots occasionally
interaction with widely dispersed cultures of languages
Goss - on Lamb's model of the Numic spread
- wastes of time. Directly affected the quality
of Numic life. Discounts Lamb's hypotheses - with the
25 years ago
all of peoples names aren't what archs
anthros call them - outsides have
cut them up and separated them

Wade-? Bonnie P intro'ed me is working w/ P.W. Buchanan for a month is using ArcView

---

Greg Campbell. Lemhi Ethnogeneais
social Identity - grounded common heritage
cont! long list of characteristics
invented distinctiveness
origins of Lemhi - during ethnogenetic times
Shoshone defined. Historic groups always
in the process of becoming
Plains expansion - Kutenai J. Whitebull notes relationship
w/ Blackfoot > but 1730s hostility led to warfare
1780 smallpox pandemic - created fragmentation & reformation
of groups. Emergence of ~~Shoshone~~ Comanche, and the
appearance of Green River/Washakie's band.

- NMAC has never had a banquet speaker
- CAS usually — Great to Mtn Conference

- Plains Conference - last year - Fred Snyder mystery ~~entertainment~~ "banquet speaker"
- Instead we got Jack Gladstone
  - > asked him what he was doing at the end of Sept. '99 with the approval of Marcel Kornfeld & Mike Metcalf & others
- I am pleased to introduce Jack Gladstone
  - he is an enrolled member of the Blackfeet tribe - The UofW recruited Jack
  - Jack was ~~played to~~ graduated from the University of Washington with a degree in Speech and Communications and a Rose Bowl Ring
  - After Grad. - he taught for 4 years at Blackfoot Community College for 4 years
  - in 1985 he founded a lecture series ~~in~~ for Glacier National Park on Blackfeet Cultural Heritage & ~~that~~ they have just completed their 15th season there
  - Since 1987 he has recorded 7 CD's and has recently been nominated for the Native American Music Associations as the 1999

song writer of the year. The awards will be presented in Nov. in Albuquerque.

He will perform his winning song ~~in Albuquerque~~ for us tonight.

Thank our sponsors,
OUR volunteers

48 CAS
198 Anthro
20 No shows
19 Shirts