



**SEPTEMBER 20 - 23, 2001**

Waterton Lakes National Park, Alberta

**FIFTH BIENNIAL ROCKY MOUNTAIN ANTHROPOLOGICAL CONFERENCE**

FRISON/  
KORNFELD

FRISON INST. LIBRARY  
FROM THE LIBRARY OF:  
KORNFELD/LARSON

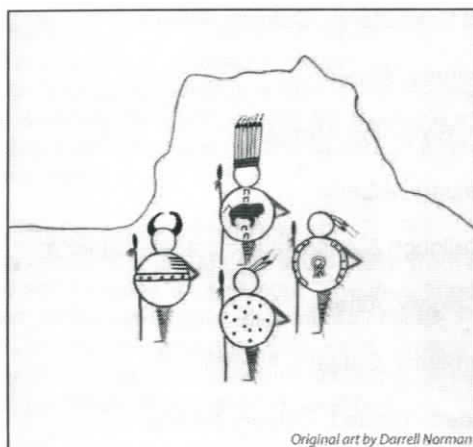
SEPTEMBER 20 - 23, 2001

Waterton Lakes National Park, Alberta

FIFTH BIENNIAL ROCKY MOUNTAIN ANTHROPOLOGICAL CONFERENCE

*fifth biennial*  
ROCKY MOUNTAIN  
ANTHROPOLOGICAL CONFERENCE

**ROCKY MOUNTAIN ARCHAEOLOGY  
IN THE  
21st CENTURY**



*Original art by Darrell Norman*

**Conference Chairpersons:**

Marty Magne (Parks Canada - Western and Northern Regions)

Barney Reeves (Lifeways of Canada)

Brian Vivian (Lifeways of Canada)

**SEPTEMBER 20 - 23, 2001**

Waterton Lakes National Park, Alberta

## **ACKNOWLEDGEMENTS**

The Fifth Biennial Rocky Mountain Anthropological Conference at Waterton Lakes National Park, Alberta would not have been possible without the generous contributions of the following organizations and individuals:

Alberta Community Development

Bison Historical Consultants, Calgary, Alberta

Colin Poole, Calgary, Alberta

Darrell Norman, Browning, Montana

Don Hanna, Calgary, Alberta

Fedirchuk McCullough & Associates, Calgary, Alberta

Glenn Olson, Calgary, Alberta

Golder Environmental, Calgary, Alberta

Lifeways of Canada Limited, Calgary Alberta

Parks Canada

Stantec Consulting, Calgary, Alberta

Further thanks goes to volunteers Colleen Parsley, Janet Blakey, and Carol McCreary for organizing the registration table, Amanda Dow for compiling the program, and Gwyn Langemann for participating as a guide for the field trip tour. We would also wish to acknowledge the management and staff of the Bayshore Conference Center, the Prince of Wales Hotel, and The Trail of the Great Bear for their hospitality and attention towards conference needs.

## GENERAL INFORMATION

### Registration

All individuals wishing to partake in events at the Rocky Mountain Anthropological Conference must be registered. Unless previously arranged, those wishing to attend may visit the registration table set up in the main lobby of the Bayshore Conference Centre at the following times:

Thursday 6:00p.m.- 10:00p.m. (Ice Breaker/Cash Bar – Glacier Room)

Friday 8:00a.m.- 5:00p.m.

Saturday 8:00a.m. - noon

On-site conference registration is \$65 for non-students, \$40 for students. Evening talks and events are available at an additional cost and have limited space (please inquire at registration desk for more information).

### Thursday PreConference Field Trip

Thursday, September 20 bus trip takes place from 8:30 – 5 p.m., costs \$30 and includes a bag lunch. The tour, titled *Archaeology of Northern Waterton-Glacier International Peace Park* will be led by Gwyn Langemann and Barney Reeves. Space on the bus is limited. Departs Bayshore Convention Centre. Make sure you have your personal identification or passport.

### Friday Night BBQ and Talk

On the evening of September 21, at 6:30 at Bayshore join us for a BBQ and evening talk by Andy Russell, noted naturalist and author. Andy will speak on *real* bears. Reservations must be made before hand as space is limited. Tickets to the BBQ are \$25 per person. A cash bar will be open.

### Biannual RMAC General Meeting

Registrants are invited to attend the biennial meeting to discuss matters of interest and the location of the next conference. This meeting will be held on Friday evening (September 21) in the GLACIER room at the Bayshore Convention Centre at 5:15 p.m.

### Book Room and Exhibits

Books and other items for sale will be on display in the Bayshore Convention Centre lobby during certain hours of the Conference.

### Silent Auction

Throughout Thursday, Friday, and Saturday, registrants are invited to place a silent bid on a number of items generously donated to the Conference (see next page). Items will be on display in the Convention Centre lobby. Bidding will stay open until late Saturday afternoon. The winning bids will be announced at the Saturday night banquet.

### Poster Presentations

Contributed poster presentations will be exhibited in the Convention Centre lobby on Saturday, September 22.

### Saturday Night Banquet

The Conference banquet will be held at 6:30 in the evening of Saturday, September 22 at the Prince of Wales Hotel in Waterton. The cost of the banquet (\$40) includes your meal and entertainment by noted singer/storyteller Jack Gladstone. A cash bar will be open. Reservations must be made before 6:00 p.m. on Thursday, September 13 if you wish to attend.

### Sunday Field-Trip

Registrants attending the Fifth Biennial Rocky Mountain Anthropological Conference are invited to visit **Head Smashed In Buffalo Jump Interpretive Centre** on Sunday, September 23. The cost of entrance to the UNESCO world heritage site has been waived by Alberta Community Development for conference registrants. Depart Bayshore Convention Centre 8:30 a.m., arrive Head Smashed In 10:00, depart anytime after 2:00. Cafeteria open at the site.

## EVENTS SUMMARY

### THURSDAY, SEPTEMBER 20

- 6:00 – 10:00 p.m. **Conference Registration & Ice/Breaker – Glacier Room**  
Bayshore Convention Centre (Cash Bar)
- 8:30 – 5:00 p.m. **PreConference field trip**  
Departs from the front of the Bayshore Convention Centre.  
Please be on time.

### FRIDAY, SEPTEMBER 21

- 8:00 – 5:00 p.m. **Conference Registration**  
Registration table in lobby of Bayshore Convention Centre
- 9:00 – noon **Plenary Session**  
Peace Park Room
- 1:30 – 4:50 p.m. **Symposium 1: First Peoples**  
Glacier Room
- 1:30 – 4:10 p.m. **Symposium 2: Roots & Routes**  
Waterton Room
- 5:15 – 5:45 p.m. **RMAC Biannual Meeting**  
Glacier Room
- 6:00 – 10:00 p.m. **BBQ and Talk**  
Bayshore Convention Centre (Cash Bar)

### SATURDAY, SEPTEMBER 22

- 8:00 – noon **Conference Registration**
- 8:30 – 12:10 p.m. **Symposium 3: Hunting**  
Glacier Room
- 8:30 – 10:10 a.m. **Symposium 4: Aesthetics**  
Waterton Room
- 10:30 – 11:50 a.m. **Symposium 5: Historic**  
Waterton Room
- 1:30 – 5:30 p.m. **Symposium 6: Transition**  
Glacier Room
- 1:10 – 2:50 p.m. **Symposium 7: Settlement/Subsistence**  
Waterton Room
- 3:10 – 5:30 p.m. **Symposium 8: Palaeoenvironments**  
Waterton Room
- 6:30 – 10:00 p.m. **Banquet**  
Prince of Wales Hotel

### SUNDAY, SEPTEMBER 23

- 8:30 a.m. **Field Trip**  
Head Smashed In Buffalo Jump, UNESCO World Heritage Site. Depart Bayshore Convention Centre.

## **SYMPOSIUM**

### **Plenary**

#### **"Ascending New Peaks:**

Archaeology, Paleoecology, Traditional Knowledge and Rocky Mountain  
Ecosystem Management in the 21st Century "

**Chair: Barney Reeves**

### **Symposium 1**

#### **"First Peoples: Early Holocene Occupancy and Environments of the Rocky Mountains"**

Cochairs: Alison Landals (U. of Calgary) and Bonnie Pitblado (Western Colorado  
State College)

### **Symposium 2**

#### **" First Nations, Roots, Routes & The Rocky Mountain Corridors"**

Chair: Marty Magne (Parks Canada)

### **Symposium 3**

#### **" Hunting the High Country: Precontact Rocky Mountain Alpine Hunting Patterns"**

Cochairs: Brian Vivian (Lifeways of Canada) and Bill Butler (US National Park  
Service, Rocky Mountain National Park)

### **Symposium 4**

#### **"Rocky Mountain Aesthetics"**

Chair: Michael Klassen

### **Symposium 5**

#### **" The Rocky Mountain Experience: Historic Use and Settlement in the 19th and 20th Centuries."**

Chair: Margaret Kennedy (University of Saskatchewan)

### **Symposium 6**

#### **Pleistocene Holocene Transition in the Rockies: Synthesis and Current Research**

Cochairs: Marcel Kornfeld (U. of WY) and Todd A. Surovell (U. of AZ)

### **Symposium 7**

#### **Cooking up Settlement and Subsistence Studies.**

Chair: Mack Shortt (Lifeways of Canada)

### **Symposium 8**

#### **" Postglacial Palaeoenvironments of the Rocky Mountains and Adjacent Areas from Palaeoecological and Geoarchaeological Records"**

Cochairs: Alwynne Beaudoin, (Provincial Museum of Alberta) and Bill Eckert  
(Western Geoarch Research, Salt Lake City)



<i>Day /</i>	<i>Time</i>	<i>GLACIER ROOM</i>	<i>WATERTON ROOM</i>
<b>Friday</b>			
AM	9:00 – 12:00	Plenary	Plenary
	12:00 – 1:30	L U N C H	L U N C H
PM	1:30 - 1:50	Symposium 1	Symposium 2
	1:50 - 2:10	Symposium 1	Symposium 2
	2:10 - 2:30	Symposium 1	Symposium 2
	2:30 - 2:50	Symposium 1	Symposium 2
	2:50 – 3:10	<b>BREAK</b>	<b>BREAK</b>
	3:10 - 3:30	Symposium 1	Symposium 2
	3:30 - 3:50	Symposium 1	Symposium 2
	3:50 - 4:10	Symposium 1	Symposium 2
	4:10 - 4:30	Symposium 1	Symposium 2
	4:30 - 4:50	Symposium 1	
<b>Saturday</b>			
AM	8:30 - 8:50	Symposium 3	Symposium 4
	8:50 - 9:10	Symposium 3	Symposium 4
	9:10 - 9:30	Symposium 3	Symposium 4
	9:30 - 9:50	Symposium 3	Symposium 4
	9:50 – 10:10	<b>BREAK</b>	Symposium 4
	10:10 – 10:30	Symposium 3	<b>BREAK</b>
	10:30 - 10:50	Symposium 3	Symposium 5
	10:50 - 11:10	Symposium 3	Symposium 5
	11:10 - 11:30	Symposium 3	Symposium 5
	11:30 - 11:50	Symposium 3	Symposium 5
	11:50 - 12:10	Symposium 3	L U N C H
	1:10 – 1:30	L U N C H	Symposium 7
PM	1:30-1:50	Symposium 6	Symposium 7
	1:50-2:10	Symposium 6	Symposium 7
	2:10-2:30	Symposium 6	Symposium 7
	2:30-2:50	Symposium 6	Symposium 7
	2:50-3:10	Symposium 6	<b>BREAK</b>
	3:10-3:30	Symposium 6	Symposium 8
	3:30-3:50	<b>BREAK</b>	Symposium 8
	3:50-4:10	Symposium 6	Symposium 8
	4:10-4:30	Symposium 6	Symposium 8
	4:30-4:50	Symposium 6	Symposium 8
	4:50-5:10	Symposium 6	Symposium 8
	5:10-5:30	Symposium 6	Symposium 8

## PROGRAM

**Sept. 21**

**Friday Morning 9:00 – 12:00**

**PEACE PARK ROOM**

### **Plenary**

**"Ascending New Peaks:**

**Archaeology, Paleoecology, Traditional Knowledge and Rocky Mountain  
Ecosystem Management in the 21st Century "**

**Chair: Barney Reeves**

**9:00 – 9:10      Opening remarks**

**9:10 – 9:30      Cliff White:** Parks Canada- Banff National Park:

*The anthropogenic hypothesis for Rocky Mountain montane ecosystem  
development and decline.*

**9:30 – 9:50      Alwynne Beaudoin:** Alberta Provincial Museum

*Natural, Static, and Empty Landscapes: Postglacial Palaeoenvironmental  
Research, People, and Ecosystems in the Canadian Rockies*

**9:50 – 10:10      Martin Magne:** Parks Canada - Western Region

*Traditional Knowledge and Ecosystems in National Parks: An  
Archaeological Perspective*

**10:10 – 10:30      Ann Johnson:** U.S. National Park Service

*The Archaeology of Northern and Middle Rocky Mountain National Parks*

**10:30 – 10:40 BREAK**

**10:40 – 11:00      Duncan, Metcalf, Knight and Goss:**

*The Ute Trail Project, White River National Forest, Colorado*

**11:00 – 11:10      Peter Lamb:** Parks Canada, Waterton Lakes N.P.

*Ecological Integrity in Canada's National Parks: A Shared Vision with  
Aboriginal Peoples*

**11:10 – 11:30      Elliott Fox:** Kainai First Nation,

**11:30 – 11:50      Jack Gladstone:** Blackfeet Nation

*Piikani Traditional Knowledge and Northern Rocky Mountain Ecosystem  
Management*

**11:50 – 12:10      Marc Stevenson:** University of Alberta

**Friday Afternoon 1:30 – 5:00**

**GLACIER ROOM**

**Symposium 1**

"First Peoples: Early Holocene Occupancy and Environments of the Rocky Mountains" Cochairs: Allison Landals (U. of Calgary) and Bonnie Pitblado (Western Colorado State College)

**1:30 – 1:50      Choquette:**

*Palaeoenvironmental correlates of early Holocene sites in the upper Columbia drainage.*

**1:50 – 2:10      Gillespie:**

*Coming Late to the Starting Line: The Clovis Occupation in Alberta.*

**2:10 – 2:30      Landals:**

*Recent Research at the Lake Minnewanka Site*

**2:30 – 2:50      Davis, Kay, Collins and Root:**

*A Northern Rocky Mountains Paleoindian Biface Cache Perspective on the Clovis-to- Folsom Technological Transfer.*

**2:50 – 3:10      BREAK**

**3:10 – 3:30      Camp:**

*Late Paleoindian Core Technology at Hell Gap*

**3:30 – 3:50      Pitblado:**

*Early Holocene Occupation of the Late Paleoindian Chance Gulch Site  
Gunnison Basin, Colorado*

**3:50 – 4:10      Knell:**

*The Cody Complex in the mountains, foothills, and plains of the  
Northwestern High Plains: A temporal and spatial review.*

**4:10 – 4:30      Richings-Germain:**

*The Jerry Craig Site: A Cody Complex Bison Kill Site in the Colorado  
Rockies*

**4:30- 4:50      Stiger:**

*The Tenderfoot Site: A Version of the Early Archaic in Western Colorado*

**Friday Afternoon 1:30 – 4:35**

**WATERTON ROOM**

**Symposium 2**

**"First Nations, Roots, Routes & The Rocky Mountain Corridors"**

Chair: Marty Magne (Parks Canada)

**1:30 – 1:50      Brunswig, Elinoff, and Lux:**

*Shamans, Spirit Power, and Cultural Landscapes in Mountain Territories*

**1:50 – 2:10      Oetelaar:**

*Paths into the Mountains: Landmarks and Passes of Nitsitapi Explorers, Traders and Warriors*

**2:10 – 2:30      Tanner:**

*THE INDIAN GAP TRAIL: A Landscape Archaeology Approach to Locating and Understanding an Historic Native American Trail.*

**2:30 – 2:50      Kindig:**

*Prehistoric Ceramics in the Indian Peaks Wilderness, Colorado: Evidence of a pedestrian travel route over the Continental Divide*

**2:50 – 3:10      BREAK**

**3:10 – 3:30      Elinoff:**

*Native North Americans in Rocky Mountain National Park: the Protohistoric and Historic Periods.*

**3:30 – 3:50      Magne:**

*Plateau And Plains Athapaskan Movements In Late Prehistoric And Early Historic Times: A View From The Middle*

**3:50 – 4:10      Husted:**

*The Rocky Mountains as the Utaztekan Homeland: If at First You Don't Succeed...!*

**4:10 – 4:30      Bies and Boeka:**

*Sam' Site: A New Conical Pole Lodge Locality*

**Saturday Morning 8:30 – 12:30**

**GLACIER ROOM**

**Symposium 3**

"Hunting the High Country: Precontact Rocky Mountain Alpine Hunting Patterns"

Cochairs: Brian Vivian (Lifeways of Canada) and Bill Butler (US National Park Service, Rocky Mountain National Park)

**8:30 Opening Remarks**

**8:30 – 8:50 Black:**

*The Real South Park: 3 Late Holocene Sites in Central Colorado*

**8:50 – 9:10 Foxworth:**

*Hunting Blinds and Game Drives in the Gunnison Basin: The Other Side of the Mountain.*

**9:10 – 9:30 Butler:**

*Some Thoughts On Subsistence In Rocky Mountain National Park*

**9:30 – 9:50 Brunswig:**

*High Altitude Cultural Landscapes and Hunting Systems at the Pleistocene-Holocene Boundary: Comparison of the late Upper Paleolithic Pyrenees and the Paleoindian Rocky Mountains.*

**9:50 – 10:10 BREAK**

**10:10 – 10:30 Loosle and Johnson:**

*Prehistoric Use Trends in the Uinta Mountains.*

**10:30 – 10:50 Husted:**

*Archaeology in the Middle Rocky Mountains: Some Observations and Concerns*

**10:50 – 11:10 Wood:**

*High Elevation Archaeological Sites In The Southern Canadian Rockies: Distribution, Interpretation & Management*

**11:10 – 11:30 Riemer:**

*not available*

**11:30 – 11:50 Franck:**

*Skagit Highland Archaeology North Cascade Mountains, British Columbia*

**11:50 – 12:10 Mierendorf:**

*High Elevation Land Use in the North Cascades and other Western Cordillera of North America*

**Saturday Morning 8:30 – 12:00**

**WATERTON ROOM**

**Symposium 4**

**"Rocky Mountain Aesthetics"**

Chair: Michael Klassen.

**8:30                    Opening Remarks**

**8:30 – 8:50        Greer and Greer:** *Rock Art of the Southern Little  
Rockies*

**8:50 – 9:10        Merrell:**

*Legacy from the Tukudeka or Mountain Shoshone: Pictographs from the  
Middle Fork of the Salmon River*

**9:10 – 9:30        Merkley and Loosle:**

*Red Canyon Basketry*

**9:30 – 9:50        Tolman:**

*The Pronghorn Eccentrics of Wally's Beach (DhPg-8)*

**9:50 – 10:10      Magne and Klassen:**

*A Flute Player Site Near Exshaw, Alberta*

**WATERTON ROOM**

**Symposium 5**

**"The Rocky Mountain Experience: Historic Use and Settlement in the  
19th and 20th Centuries."**

Chair: Margaret Kennedy (University of Saskatchewan)

**10:30    Opening Remarks**

**10:30 – 10:50    Walker:**

*Archaeology and Architecture of Seminoe's Fort, An 1850's Oregon Trail  
Trading Post in Central Wyoming.*

**10:50 – 11:10    Heitzmann:**

*The Archaeology of Ranching on the Rocky Mountain East Slopes of  
Alberta.*

**11:10 – 11:30    Gardner:**

*Excavations of Housing Structures in 19th Century Coal and Railroad  
Camps in Wyoming*

**11:30 – 11:50    Kennedy:**

*The World at Its Doorstep: Technological Decision-making in an Early  
20th Century Mining Town.*

**Saturday Afternoon 1:30 – 5:30**

**GLACIER ROOM**

**Symposium 6**

**Pleistocene Holocene Transition in the Rockies: Synthesis and Current Research**

Chairperson: Marcel Kornfeld (U. of Wyoming) and Todd A. Surovell (U. of Arizona)

**1:30 – 1:50 Reasoner and Jodry**

*Late Pleistocene and early Holocene Climate in the Rocky Mountains*

**1:50 – 2:10 Walker**

*The Mammalian transition across the Pleistocene-Holocene boundary...*

**2:10 – 2:30 Jodry**

*Implications of the Younger Dryas for understanding Folsom archaeology*

**2:30 – 2:50 Kornfeld**

*Human Occupation Of The Rocky Mountains During And After The Pleistocene/Holocene Transition: A Preliminary Summary*

**2:50 – 3:10 Stiger**

*The Mountaineer site: A Folsom occupation in western Colorado*

**3:10 – 3:30 Surovell and Waguespack**

*Barger Gulch Locality B: A Folsom site in Middle Park, Colorado*

**3:30 – 3:50 BREAK**

**3:50 – 4:10 Larson**

*Paleoindians at the edge of the Rockies...*

**4:10 – 4:30 Mayer**

*Report of geoarchaeological investigations at the Krmpotich Folsom site...*

**4:30 – 4:50 Janetski**

*Late Paleoindian evidence from the Eastern Great Basin*

**4:50 – 5:10 Brunswig and Doerner**

*The Lawn Lake Site (5LR318): New Evidence for High Altitude Late Paleoindian Adaptations and Paleolandscapes of Colorado's Southern Rockies in the Early Holocene*

**5:10 – 5:30 Frison**

*Southsider Cave 48BH364*

**Saturday Afternoon 1:10 – 3:10**

**WATERTON ROOM**

**Symposium 7**

Cooking up Settlement and Subsistence Studies.

Chair: Mack Shortt (Lifeways of Canada)

**1:10 – 1:30 Heitzmann:**

Late Prehistoric Subsistence Strategies in the Upper Columbia Trench, B.C.

**1:30 – 1:50 Smits and Knoll:**

Excavation Report for 42Da1005

**1:50 – 2:10 Shortt**

*The Canyons of The Yellowstone: 1996 -2000 Museum Of The Rockies Research*

**2:10 – 2:30 Johnson and Loosle:**

*Slab-lined Basins, Wyoming*

**2:30 – 2:50 Damkjar:**

*An Unusual Pit Feature at Head-Smashed-In Buffalo Jump, Alberta*

**2:50 – 3:10 BREAK**



**Saturday Afternoon 3:10 – 5:30**

**WATERTON ROOM**

**Symposium 8**

**" Postglacial Palaeoenvironments of the Rocky Mountains and Adjacent Areas from Palaeoecological and Geoarchaeological Records"**

Chair: Alwynne Beaudoin, (Provincial Museum of Alberta) and Bill Eckerle (Western Geoarch Research, Salt Lake City)

**3:10 – 3:30**

**Langemann:**

*Zooarchaeological Research in support of Ecological Integrity*

**3:30-3:50**

**Albanese:**

*Pedogenic and Sedimentary Events during the Late Holocene in the Eastern Powder River Basin, Wyoming.*

**3:50 – 4:10**

**Finley:**

*Rockshelter Formation Processes and the Neoglacial Climate Record: Reconstructing Late Holocene Environments in the Bighorn Mountains, Wyoming.*

**4:10 – 4:30**

**Charles:**

*The Holocene climate and associated prehistoric landscape utilization along the Animas River, Southwestern Colorado*

**4:30 – 4:50**

**Walker:**

*Defining natural variability: paleoecological investigations of forest fires, vegetation and drought since glaciation in the Southern Canadian Rockies*

**4:50 – 5:10**

**Plastino and Current:**

*A Series of Radiocarbon Dates from the Jonah Gas Field, Sublette County, Wyoming.*

**5:10 – 5:30**

**Miller:**

*Middle Holocene Geochemical Alteration of Latest Pleistocene and Early Holocene Deposits.*

**Saturday 8:30 – 5:30 (all day)**

**Convention Centre Lobby**

**Poster Presentation**

**Perry :** GIS and Cultural Resource Management in Parks Canada  
(abstract received)

## ABSTRACTS

**Albanese, John [S # 8]**

(Consulting Geoarchaeologist; [albanes@trib.com](mailto:albanes@trib.com))

*Pedogenic and Sedimentary Events during the Late Holocene in the Eastern Powder River Basin, Wyoming.*

Within the valley of the Belle Fourche River at Site 48CA1366, five cultural horizons that date between 560 - 450 rcybp (5 dates) are buried within sandy alluvium. An argillic soil envelopes the cultural horizons. Pedogenesis was followed by a 4.5 m deep incision in two stages of the channel of the Belle Fourche River into Paleocene bedrock. This resulted in the creation of a three-tiered, paired terrace system. All of these events, human occupation, burial of cultural horizons, pedogenesis and terrace creation have all occurred in less than 500 rcybp, a remarkably short period of time.

**Beaudoin, Alwynne B. [Plenary]**

(Provincial Museum of Alberta; [abeaudoi@gpu.srv.ualberta.ca](mailto:abeaudoi@gpu.srv.ualberta.ca))

*Natural, Static, and Empty Landscapes: Postglacial Palaeoenvironmental Research, People, and Ecosystems in the Canadian Rockies*

In recent decades, several implicit assumptions have underlain research into postglacial palaeoenvironments in the Canadian Rockies. These include the beliefs that pre-EuroCanadian landscapes were essentially "natural" and unmodified by human activity. Such assumptions have important consequences for our understanding of landscape history, especially as it relates to global change and management issues. Specifically, little attention has been paid to detecting an anthropogenic signal in the palaeoenvironmental record. Moreover, the emphasis on "natural" landscapes has led to a view that pre-EuroCanadian conditions are a "baseline" for ecosystem management. Both these assumptions require deeper examination, in light of the time depth of human occupation in the mountains, ecosystem dynamism and response to perturbation, and awareness of Aboriginal traditional land management practices.

**Bies, Michael T. and Molly S. Boeka [S # 2]**

(Worland Field Office BLM; [mike\\_bies@blm.gov](mailto:mike_bies@blm.gov))

*Sam's Site: A New Conical Pole Lodge Locality*

Sam's Site is a new conical pole lodge locality with four lodges located at approximately 8,100 feet amsl in the Absaroka Mountains of Wyoming. The lodges are located approximately 60 meters from a probable travois trail. Sam's Site has

been recorded and the condition of the four lodges documented, the results are presented in this paper. The trail has been initially identified and will require additional field work to record. The presumed trail route is identified and provided for others working in the area in the future.

**Black, Kevin [S # 3]**

(Colorado Historical Society; [kevin.black@chs.state.co.us](mailto:kevin.black@chs.state.co.us))

*The Real South Park: 3 Late Holocene Sites in Central Colorado*

Inventory of a 1600 acre tract at the Tomahawk State Wildlife Area in South Park is being conducted as a training opportunity for volunteers in Colorado Program for Avocational Archaeological Certification. The study tract encompasses a mix of grassland and conifer woodland environments bordering the Middle Fork of the South Platte River at elevations of 2735-2880 m. Work during the past two field seasons has documented a series of open camps and lithic scatters of which a sizable number post-date 3500 BP. This paper illustrates the landscape inventoried to date emphasizing trends in lithic material use, settlement patterns and chronology.

**Boeka, Molly S. (see Bies) [S # 2]**

(Worland Field Office, University of Wyoming; [mollyboeka@excite.com](mailto:mollyboeka@excite.com))

**Brunswig, Robert H [S # 3]**

(Dept of Anthropology, University of Northern Colorado; [rhbruns@unco.edu](mailto:rhbruns@unco.edu))

*High Altitude Cultural Landscapes and Hunting Systems at the Pleistocene-Holocene Boundary: Comparison of the late Upper Paleolithic Pyrenees and the Paleoindian Rocky Mountains*

This paper compares and contrasts evolving hunting strategies in two world mountain regions, the French-Spanish Pyrenees and American Rockies, at the end of the Pleistocene and during the Early Holocene. Those strategies, based on quite different cultural traditions, even so, exhibit broad similarities in topographies, climate-based ecosystem changes, and prey species adaptations. Archaeological, paleoenvironmental, and animal behavior data are examined to develop a general model of hunter-gatherer adaptations in Late Ice-Early Holocene montane territories.

**Brunswig, Robert, Louise Elinoff, and Tom Lux [S # 2]**

(Dept of Anthropology, University of Northern Colorado; [rhbruns@unco.edu](mailto:rhbruns@unco.edu))  
(University of Colorado at Denver; [laelinoff@ouray.cudenver.ca](mailto:laelinoff@ouray.cudenver.ca))

*Shamans, Spirit Power, and Cultural Landscapes in Mountain Territories*

Human communities have for millennia, exploited mountain resource territories in complex, seasonal transhuman adaptive systems. Such systems, when studied by archaeologists, most frequently reconstruct them within explicitly economic frameworks. However, post-modern archaeological thought dealing with whole cultural systems as cognitive (mental) based templates leads us to combine the physical (archaeological-environmental) reality with that of the spiritual in interpreting those systems in mountain terrains. This paper proposes a broad cultural landscape model of mountain-focused traditions, based on shamanic rituals and cosmological world-views in the Rocky Mountains, the European Pyrenees, and South America's Andes.

**Brunswig, Robert H. and James Doerner [S # 6]**

(Dept of Anthropology, University of Northern Colorado; [rhbruns@unco.edu](mailto:rhbruns@unco.edu))

(Dept of Geography, University of Northern Colorado; [jpdoern@unco.edu](mailto:jpdoern@unco.edu))

*The Lawn Lake Site (5LR318): New Evidence for High Altitude Late Paleoindian Adaptations and Paleolandscapes of Colorado's Southern Rockies in the Early Holocene*

The Lawn Lake site (3365 m asl), in Rocky Mountain National Park, was test excavated in summer 2000 by the University of Northern Colorado. 50 cm of three intact cultural units were recovered. The earliest unit was of particular importance. Dated to between 8000 and 7160 BP, it contained lithic tools, debitage, and a Mountain Paleoindian projectile point base. Its Paleoindian lithic materials derived from Middle Park, Colorado, and Central Wyoming sources. Paleoenvironment research on radiocarbon-dated samples from comparable archaeological and nearby fen deposits provided a sound basis for reconstruction of the local Early Holocene climate and environment during Lawn Lake's Late Paleoindian occupation.

**Butler, William B. [S # 3]**

(Rocky Mountain National Park; [Bill\\_Butler@nps.gov](mailto:Bill_Butler@nps.gov))

*Some Thoughts on Subsistence In Rocky Mountain National Park*

Pre-horse subsistence in Rocky Mountain National Park focused on elk, deer, big horn sheep, and smaller mammals. Although there are many plants that could be eaten, consultation with Ute and Arapaho informants resulted in only 25 plants being identified as being used for food. Most of these plants are available for consumption in the late summer and fall. Thus, hunting is suspected to have played a major source of food in the early spring. No evidence presently exists for positing overwintering in the park, and subsistence is geared toward the seasonal availability of these resources. However, special techniques such as formal game drives for elk and big horn had to be designed to work in the high altitude environment. It is suggested that the manos and metates found in the Park were used to grind dried meat and some vegetable material to make pemmican.

**Camp, Beth Ann [S # 1]**

(Western State College of Colorado; bcamp@western.edu)

*Late Paleoindian Core Technology at Hell Gap*

The Eden-Scottsbluff and Frederick late Paleoindian core assemblage from the Hell Gap site, a classic Paleoindian site located in southeastern Wyoming, is presented. The late Paleoindian period is considered as a time of higher logistical and lower residential mobility. The idea that technology will shift from curated to expedient core types when mobility decreases is not validated by the late Paleoindian core assemblage at the Hell Gap site. The Eden-Scottsbluff cores are predominately bifacial in nature, a "curated" technology, whereas the Frederick cores are primarily multidirectional yet, bifacial and multidirectional-blade cores also are present. This assemblage indicates that ideas concerning curated and expedient core technologies used during the late Paleoindian period need to be re-examined.

**Charles, Mona C [S # 8]**

(Dept of Anthropology, Fort Lewis College; charles\_m@fortlewis.edu)

*The Holocene climate and associated prehistoric landscape utilization along the Animas River, Southwestern Colorado*

The Animas River begins in the heart of the San Juan Mountains in Southwestern Colorado and flows south to its confluence with the San Juan River in northwestern New Mexico. Throughout prehistory, the Animas River Valley was occupied intermittently from the Archaic through to the historic Ute occupation. Two occupational periods, however, are particularly prominent—the Basketmaker II and the Transitional Basketmaker III/Pueblo I periods. Data is presented in this paper that sheds light on the settlement and economic use of this mountainous river valley. This paper presents a synthesis of paleoenvironmental data acquired from previous regional studies and integrates these data with new data from the Darknold site, 5LP4991. These data suggest that the prehistoric populations of the valley may have moved across the landscape partially as a result of climatic perturbations and that these perturbations are reflected in residential and subsistence patterns.

**Choquette, Wayne [S # 1]**

(wchoquette@cyberlink.bc.ca)

*Palaeoenvironmental correlates of early Holocene sites in the upper Columbia drainage*

Abstract unavailable

**Collins, M. (see Davis) [S # 1]**  
(Univeristy of Texas at Austin)

**Current, Bill (see Plastino) [S # 8]**  
(Current Archaeological Research; [current@allwest.net](mailto:current@allwest.net))

**Damkjar, Eric [S # 7]**  
(Heritage Resource Management Branch, Alberta Community Development,  
[eric.damkjar@gov.ab.ca](mailto:eric.damkjar@gov.ab.ca))

*An Unusual Pit Feature at Head-Smashed-In Buffalo Jump, Alberta.*

Pit features are commonly encountered in the processing area of Head-Smashed-In Buffalo Jump (HSI), located on the edge of the Porcupine Hills, about 75 km north of Waterton. Most pits at HSI are interpreted as subsistence-related boiling, roasting, or hearth features. However, one large and unusual pit defies simple functional interpretation. Conical in shape and about a metre in depth, it contained 927 identifiable bison elements, including articulated joints, several skull portions, and bones from one or more very large bison. The 46 artifacts fall into upper and lower groupings. The upper group includes a typical assortment of HSI lithics such as projectile points, an end scraper, modified flakes and cores. The lower group is made up of 19 sherds of a single large pottery vessel, two ochre-painted bones, and two spatulate objects made from bison mandibles. A suite of radio-carbon dates indicates an (uncalibrated) age of  $1250 \pm 50$  B.P. and the artifacts suggest an Avonlea affiliation. The shape and contents of this pit are unique and there is no obvious functional interpretation. A ceremonial association is suggested.

**Davis, L, M. Kay, M. Collins and M. Root [S # 1]**  
(Museum of the Rockies, Bozeman: [rdemail@in-tch.com](mailto:rdemail@in-tch.com))  
(University of Arkansas)  
(Univeristy of Texas at Austin)  
( Range Shadow Research Inc.)

*A Northern Rocky Mountains Paleoindian Biface Cache Perspective on the Clovis-to-Folsom Technological Transfer.*

An archaeological model of behavioral dynamics instrumental to the transition from Clovis to Folsom-diagnostic types of biface technology is difficult to derive empirically. One approach to such inference might be analysis of bifaces that display flaking and use characteristics attributable to both of these historically linked technologies. The cached Elser Ranch biface in the Madison River drainage area of southwest Montana presents such a singular opportunity. Microwear

analysis of this large Knife River flint biface revealed that it satisfies technomorphic requisites as a Clovis biface while also displaying secondary modification by Folsom biface techniques. Reconstruction of provenience, accompanied by development of various lines of evidence associated with postdepositional history of the bifaces (knife / core and drill / perforator), established primary context originally formed ca. 11,000 to 10,000 years B.P. by early Paleoindians who purposely abandoned these still-servicable bifaces.

**Doerner, James (see Brunswig) [S # 6]**

**Duncan, Clifford, Michael Metcalf, Bill Kight and Jim Goss [Plenary]  
(Uinta and Ouray)**  
(Metcalf Archaeological Consultants, Inc [mike@metcalfarchaeology.com](mailto:mike@metcalfarchaeology.com))  
(White River National Forest)  
(Texas Tech University)

*The Ute Trail Project, White River National Forest, Colorado*

"The Ute Trail is the teacher. This road leads to taking care of your Mother". So says Clifford Duncan, Northern Ute Elder and spiritual advisor to the Ute Trail Project. The Ute Trail Project is a multi-faceted project based on a collaboration of efforts on the part of the Uinta and Ouray Indian Tribe, the White River National Forest, and an array of other researchers and volunteers. The physical remnants of an ancient trail across the White River Plateau or Flattops is the unifying theme to a project that has evolved from an archaeological study designed to locate and protect trail segments and features to an annual gathering with a focus on sharing the traditional lifeways of the Ute people. Participants include the youth of the Ute people, Heritage Managers, public volunteers, scholars and others. Although the trail, which crosses 3350 m summit of the plateau between the confluence of the Eagle and Colorado Rivers and the White River, is an exemplar model of preserved trail, the focus of the project has expanded to encompass the cultural significance of the larger landscape and the values that can be preserved and passed on through oral tradition and sharing.

**Elinoff, Louise [S # 2]**  
(University of Colorado at Denver; [laelinoff@ouray.cudenver.ca](mailto:laelinoff@ouray.cudenver.ca))

*Native North Americans in Rocky Mountain National Park: the Protohistoric and Historic Periods.*

Historic documents show that protohistoric and early historic tribes that once visited and hunted within the modern territory of Rocky Mountain National Park included the Apache, Arapaho, Cheyenne, and Sioux. However, only the Ute appear to have had a very long term, possibly even prehistoric, record of claiming Park territory as traditional lands. Extensive archaeological research conducted to date and Native American consultation indicate the entire Park is well-represented

by what are believed to be Ute archaeological features and artifacts, including: Ute ceramics, wickiups, culturally peeled trees, and rock structures ranging from rock cairns, U0-shaped stone walls, ceremonial stone circles, to complexes of multiple stone alignments.

**Elinoff, Louise (see Brunswig) [S # 2]**

**Finley, Judson Byrd [S # 8]**

(Washington State University; [traveler@wsunix.wsu.edu](mailto:traveler@wsunix.wsu.edu))

*Rockshelter Formation Processes and the Neoglacial Climate Record:  
Reconstructing Late Holocene Environments in the Bighorn Mountains, Wyoming.*

The Bighorn Mountains are the site of a wealth of rockshelters, many of which hold stratified occupational histories spanning the Holocene. Focusing on the Late Holocene, or Neoglacial period, this paper addresses the capacity of rockshelters to serve as a tool for understanding the processes of climate change and associated human response. Specifically, I use granulometry and palynology to reconstruct the environmental record of the last 2,500 years. This period is marked in rockshelter deposits by significant accumulations of endogenous and exogenous debris related to cyclical climatic fluctuations of the Neoglacial. These data test notions of culture change, particularly the Late Archaic-Late Prehistoric transition in the Rocky Mountains and Intermountain West.

**Foxworth, Bob [S # 3]**

(Southern Methodist University; [rfoxwort@mail.smu.edu](mailto:rfoxwort@mail.smu.edu))

*Hunting Blinds and Game Drives in the Gunnison Basin: The Other Side of the Mountain*

Previous descriptions of game drives and hunting blinds, in proximity to high elevation passes in the Colorado Rocky Mountains, indicate that the placement of these features is a function of topography, environment and animal behavior. Current research in the Gunnison basin confirms this perspective, but the patterning of these features within the landscape is unlike that found in the high elevation passes. The observed pattern in the Gunnison Basin is likely due to a differential response in the hunting tactics, resulting from a broader range of variability in the topography, environment, animal behavior and diversity among ungulate species available at these lower elevations.

**Franck, Ian [S # 3]**

(Equinox Research and Consulting Ltd.; [ifranck@equinoxresearch.net](mailto:ifranck@equinoxresearch.net))

*Skagit Highland Archaeology, North Cascade Mountains, British Columbia*



The archaeology of southwestern British Columbia is best known for large lowland village sites associated with the processing of salmon and other marine animals. The mountainous areas surrounding these sites has long been overlooked by archaeologists who have assumed that the resources they would have offered to aboriginal people would have been marginal at best. Traditional use information on the other hand suggests that mountainous areas were important areas not only to hunt and gather unique resources but to assert and map territory.

A two-season long field study centred around the Galene Lakes in Skagit Valley Provincial Park provides evidence that such areas were important to the aboriginal inhabitants of southwest British Columbia. Sites identified included the first high-elevation huckleberry processing trenches recorded in Canada and the highest known quarry of Hozomeen chert.

Background research indicates that site distribution and discovery in the study area is complicated by a shifting treeline correlated with changes in climate through time. Sites which were originally created in a subalpine parkland setting may now be obscured today by heavy subalpine tree cover; depending on the time period of the site this may even be reversed.

All sites recorded appear to be associated with a network of trails focussed around prominent ridgelines, not necessarily close to permanent water. This suggests that the people who used this area were highly mobile and familiar enough with the areas' resources to risk venturing away from life-sustaining water in order to perform tasks. The short working season in high elevation areas would have required an intimate knowledge of the resources available in order to

**Frison, George [S # 6]**

(Prof. Emeritus, Dept. of Anthropology, University of Wyoming)

**SOUTHSIDER CAVE 48BH364**

Caves and rockshelters have yielded a large share of the information on the prehistoric human occupations of the foothills and higher elevations of the Rocky Mountains. Most of these sites are in open, exposed and visible locations. A notable exception is Southsider Cave on the western slope of the Big Horn Mountains at an elevation of 2330 meters. Well hidden and with a poorly lighted interior because of thick brush and timber and high over-cliff deposits in front of the drip-line, the site would most likely still be unnoticed except for accidental discovery. The cave was utilized sporadically from Late Paleoindians through Late Archaic times.

**Gardner, Dudley [S # 5]**

(Western Wyoming College; dgardner@wwcc.cc.wy.us)

*Excavations of Housing Structures in 19th Century Coal and Railroad Camps in Wyoming*

The nature of social stratification has often been identified as a part of the nineteenth century mining frontier. In this paper we will look at how nineteenth century industrial sites exhibit social and cultural stratification and how this leaves a distinct archaeological signature.

**Gillespie, Jason [S # 1]**

(Dept. of Archaeology, University of Calgary; [gdgilles@ucalgary.ca](mailto:gdgilles@ucalgary.ca))

*Coming Late to the Starting Line: The Clovis Occupation in Alberta*

Recent typological analysis of fluted points from Alberta, combined with a late Pleistocene deglacial model, suggest that Alberta was originally colonized late in the process for the peopling of North America. Furthermore, it is likely that Alberta's first people moved into the province from the south as the continental ice sheets disintegrated. This means that, contrary to common opinion, Alberta was not one of the first places to be occupied (via the "ice-free corridor"), but rather one of the last.

**Jack Gladstone [Plenary]**

Blackfeet Nation

*Pikani Traditional Knowledge and Northern Rocky Mountain Ecosystem Management*

**Goss, Jim (see Duncan) [Plenary]**

(Texas Tech University)

**Greer, Mavis and John Greer [S # 4]**

(Greer Services, Casper, WY; [mavis@greerservices.com](mailto:mavis@greerservices.com))

(Greer Services, Casper, WY; [jgreer@greerservices.com](mailto:jgreer@greerservices.com))

*Rock Art of the Southern Little Rockies*

Pictograph sites on the southern side of the Little Rocky Mountains are distinctly different from those of the surrounding plains. Paintings reflect a long use of these high caves and indicate different functions from petroglyph boulders in the rest of the region. These paintings appear to have a closer relation to those of island mountain ranges and the rocky mountain front to the west than they do to the surrounding Northwestern Plains.

**Heitzmann, Roderick J. [S # 5]**

(Cultural Resource Services, Parks Canada, Calgary; [Rod\\_Heitzmann@pch.gc.ca](mailto:Rod_Heitzmann@pch.gc.ca))

*The Archaeology of Ranching on the Rocky Mountain East Slopes of Alberta*

In the last half of the nineteenth century ranching became a dominant resource activity along the Eastern Slopes of the Rockies. In Alberta, ranching was initiated by missionaries, metis and white opportunists who capitalized on free grass and an uncertain legal situation prior to the establishment of North West Mounted Police and the signing of treaties with First Nations. In 1880 the Government of Canada created the ranching lease policy which led to the rapid establishment of large leased ranches. This paper explores the archaeological record and highlights data gaps of early ranching in Alberta's Eastern Slopes.

**Heitzmann, Roderick J. [S # 7]**

(Cultural Resource Services, Parks Canada, Calgary; Rod\_Heitzmann@pch.gc.ca)

*Late Prehistoric Subsistence Strategies in the Upper Columbia Trench, B.C.*

The Salmon Beds Archaeological Site (EdQa 121) was an important campsite and food processing area occupied repeatedly over the last 1000 years. The site is situated along the Columbia River just north of the outlet of Windermere Lake. This paper examines the significance of the site in light of the historical and ethnographic record. The evidence for salmon fishing and other subsistence based activities at the site is discussed. The significance to prehistory of the Upper Columbia Valley and the Central Canadian Rockies will be explored.

**Husted, Wilfred M. [S # 2]**

(Billings, MT; [wmhusted@wtp.net](mailto:wmhusted@wtp.net))

*The Rocky Mountains as the Utaztekan Homeland: If at First You Don't Succeed!*

Over 30 years ago I proposed that the northern Rocky Mountains are the homeland of the Utaztekan-speaking peoples of the west and their linguistic relatives. The hypothesis is diametrically opposed to the generally accepted southern Great Basin origin for Utaztekan and late Numic spread proposed by Sydney Lamb in 1958. Although my proposal is supported by the regional archaeology, it has met with a resounding silence. The hypothesis is offered once again in hopes of generating a response from the Rocky Mountain anthropological community.

**Husted, Wilfred M. [S # 3]**

(Billings, MT; [wmhusted@wtp.net](mailto:wmhusted@wtp.net))

*Archaeology in the Middle Rocky Mountains: Some Observations and Concerns*

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

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

**Janetski, Joel C. [S # 6]**

(Dept. of Anthropology, Brigham Young University; [joel\\_janetski@byu.edu](mailto:joel_janetski@byu.edu))

*Late Paleoindian Evidence From The Eastern Great Basin*

Late Paleoindian style artifacts from lake edge surface collections and basal levels in Spotten Cave suggest early Plains influence along the Wasatch Front of the eastern Great Basin. Diagnostic tools include a stemmed point in the Scottsbluff II tradition, several Cody knives, and gravers. Toolstone is predominantly a dark chert, a material rarely seen in later collections. The items most resemble chipped stone tools from the Larsen Cache and the Horner Site, both in Wyoming and both late Paleoindian in age.

**Jodry, Margaret A. [S # 6]**

(Paleoindian/Paleoecology Program, National Museum. of Natural History, Smithsonian Inst.; [jodrym@nrmnh.si.edu](mailto:jodrym@nrmnh.si.edu))

*Implications Of The Younger Dryas For Understanding Folsom Archaeology*

The abrupt onset of the Younger Dryas altered biotic resources in the Rockies and adjacent regions. I discuss an ecological model whereby increased moisture, nitrogen availability, and high quality forage resulted in enhanced bison nutrition and fertility rates between 11,000-10,900 BP. Concurrently, Folsom people developed an economic focus on bison and are predicted to have experienced a nutritionally related increase in fertility. Folsom social dynamics and technology are discussed in relation to planning depth and the anticipated frequency of large-scale bison processing in late summer and fall. Evidence of Folsom campsites near 3100 meters in the Colorado Rockies is described.

**Jodry, Margaret A. (see Reasoner) [S # 6]**

(Paleoindian/Paleoecology Program, National Museum. of Natural History, Smithsonian Inst.; [jodrym@nrmnh.si.edu](mailto:jodrym@nrmnh.si.edu))

**Johnson, Ann [Plenary]**

(Yellowstone National Park; [ann\\_johnson@nps.gov](mailto:ann_johnson@nps.gov))

*The Archaeology of Northern and Middle Rocky Mountain National Parks*

Over the past 20 years, the first intensive archaeological investigations of Grand Teton, Yellowstone, and Glacier National Parks have been carried out.

These document the presence of the earliest inhabitants of western North America with all groups represented through the historic period. However, the chronology is dominated by sites in the A.D. 1100-1000 B.C. period. Economic adaptations include fishing but evidence for fish exploitation is limited to a few hundred years. Archaeological sites assignable to the past five to six hundred years are few. This dramatically contrasts with the plentiful sites from the Late Middle and early Late Prehistoric periods, and this probably relates to deteriorated environmental conditions associated with the Little Ice Age. Archaeologists seek out interdisciplinary data and relationships of those scientists in other fields and Aboriginal Peoples. Thus, archaeology can illuminate past environmental conditions and the human responses to environmental change.

**Johnson, Clay and Byron Loosle [S # 7]**  
(Ashley National Forest; [cejohnson@fs.fed.us](mailto:cejohnson@fs.fed.us))  
(Ashley National Forest; [bloosle@fs.fed.us](mailto:bloosle@fs.fed.us))

*Slab-lined Basins, Wyoming*

In Wyoming slab-lined basins are suspected of being a high plains feature for roasting tubers. More extensive data suggests that slab-lined basins may be relatively common in foothill to mid-elevation situations in the Uinta Mountains. Starch residue and macrofloral analyses indicate that although tubers like biscuit root were roasted, a larger variety of resources were processed. The primary import of slab-lined basins may be the implications for mobility.

**Johnson, Clay (see Loosle) [S # 3]**  
(Ashley National Forest; [cejohnson@fs.fed.us](mailto:cejohnson@fs.fed.us))

**Kay, M (see Davis) [S # 1]**  
(University of Texas at Austin)

**Kennedy, Margaret [S # 5]**  
(Dept. of Anthropology and Archaeology, Univ. of Saskatchewan;  
[margaret.kennedy@usask.ca](mailto:margaret.kennedy@usask.ca))

*The World at Its Doorstep: Technological Decision-making in an Early 20th Century Mining Town.*

Making decisions about what technology to employ in mining and smelting facilities during economic booms, particularly in the late 19th and early 20th centuries, often had less to do with sound scientific practice and perhaps more to do with the desire to project a successful image to competitors. The Frank Smelter in the Crowsnest Pass manifests this characteristic well and will be used, along with archaeological evidence from the mining towns of Frank and Lille, to discuss the introduction of outside technologies and influences into a remote industrial area in the early 1900s.

**Kindig, Jean Matthews [S # 2]**

(University of Colorado Museum-Associate; [archaeomom@idcomm.com](mailto:archaeomom@idcomm.com))

*Prehistoric Ceramics in the Indian Peaks Wilderness, Colorado: Evidence of a pedestrian travel route over the Continental Divide*

Two sites in the Devil's Thumb valley in the Indian Peaks Wilderness in Colorado produced ceramic sherds. Coarsely tempered plain brownwares are attributed to Ute potters. Finely tempered, tooled rim sherds are attributed to Plains Apache. The Dismal River sherds were recovered from a popular hiking trail that also yielded a Late Paleoindian lanceolate, Archaic corner-notched hunting points, and natural glass flakes. These artifacts indicate the use of the Devil's Thumb Trail over time by different transient people who may have used this same trail to traverse the Continental Divide connecting Middle Park with the Boulder Valley.

**Klassen, Michael (see Magne) [S # 4]**

([mklassen@telus.net](mailto:mklassen@telus.net))

**Knell, Edward J. [S # 1]**

(Washington State University, Pullman; [eknell@earthlink.net](mailto:eknell@earthlink.net))

*The Cody Complex in the mountains, foothills, and plains of the Northwestern High Plains: A temporal and spatial review.*

This paper reviews temporal and spatial patterns from published Cody Complex sites on the Northwestern High Plains. First, I refine the date range of Cody sites, and then examine the spatial distribution of the dated sites in the mountains, foothills, and plains. Variation in site type/function, seasonality, and site location by geomorphic landform are then used to assess the spatial and temporal patterns. Finally, I address potential causal mechanisms for the observed patterns, which ultimately will provide a basis for future research on the Cody Complex in the Northwestern High Plains.

**Kight, Bill (see Duncan) [Plenary]**

(White River National Forest)

**Knoll, Michelle (see Smits) [S # 7]**

(Ashley National Forest)

**Kornfeld, Marcel [S # 6]**

(George C. Frison Institute of Archaeology and Anthropology, U. of Wyoming, [anpro1@uwyo.edu](mailto:anpro1@uwyo.edu))

*Human Occupation Of The Rocky Mountains During And After The Pleistocene/Holocene Transition: A Preliminary Summary*

Since the Rocky Mountains are generally not considered a study universe, regional syntheses commonly include portions of the province with the surrounding culture areas. However, culture change and continuity may look quite different if the spatial boundaries are shifted. In this paper I explore the Paleoindian occupation of the Rocky Mountains from the perspective of the Rocky Mountains rather than from the perspective of the surrounding culture areas. Enough recent research has been carried out that preliminary statements can be made about Pleistocene/Holocene transition occupations of at least the southern and central portions of the Rocky Mountain region.

**Lamb, Peter [Plenary]**  
Parks Canada – Waterton Park

*Ecological Integrity in Canada's National Parks: A Shared Vision with Aboriginal Peoples*

Parks Canada recognizes that Aboriginal Peoples have an important role to play in enhancing the ecological integrity of our national parks. This discussion will focus on recommendations made by the Ecological Integrity Panel concerning partnership building that can be of mutual benefit. Existing models in place in certain Parks will be briefly presented, with discussion leading to recommendations on how we can move forward in the Rocky Mountains.!

**Landals, Alison J [S # 1]**  
(Dept. of Archaeology, University of Calgary; [ajlandal@ucalgary.ca](mailto:ajlandal@ucalgary.ca))

*Recent Research at the Lake Minnewanka Site*

The eastern slopes of the Rocky Mountains in Alberta contain the best representation of excavated PaleoIndian sites in the province. In particular, the upper Bow River valley provides the strongest evidence for the earliest known human occupation of the region. At the Lake Minnewanka site, four occupations predating 10,000 rcybp have recently been identified, providing new evidence for human adaptation and landscape use during this period. This paper presents preliminary results from a five year research program at the site, funded by Parks Canada.

**Langemann, Gwyn [S # 8]**  
(Cultural Resource Services, Parks Canada, Calgary; [Gwyn\\_Langemann@pch.gc.ca](mailto:Gwyn_Langemann@pch.gc.ca))

*Zooarchaeological Research in support of Ecological Integrity*

Ecological Integrity is the issue driving research and management in Parks Canada today. National Parks are not a pristine wilderness; people have

always been part of the ecology. Cultural research can address the way in which ecosystems have changed over time. Human hunting, gathering, and fire-starting behaviour helped to shape the ecosystems observed at the time the parks were created. Stable carbon isotopic research, DNA analysis, and standard zooarchaeological studies are being used by parks managers who must consider how best to assure the integrity of modern ungulate populations and their habitat.

**Larson, Mary Lou [S # 6]**

(Dept of Anthropology, University of Wyoming; [MLarson@uwyo.edu](mailto:MLarson@uwyo.edu))

*Paleoindians At The Edge Of The Rockies: Hell Gap Chipped Stone Tool Production*

This paper focuses on chipped stone production activities for the Paleoindian levels at Locality I of the Hell Gap site, Wyoming. Locality I contains 3,000 years of Late Pleistocene/Early Holocene deposition that allows a diachronic analysis of the range of variation in Paleoindian lithic technology at the edge of the Rockies. My and others analyses of Hell Gap lithic technology between 11,000 and 8,000 years ago at Locality I are providing exciting insights. Significantly, analysis of the Hell Gap materials demonstrates that the relation of biface production with Paleoindian lithic technology is simplistic at best.

**Loosle, Byron and Clay Johnson [S # 3]**

(Ashley National Forest; [bloosle@fs.fed.us](mailto:bloosle@fs.fed.us))

(Ashley National Forest; [cjohnson@fs.fed.us](mailto:cjohnson@fs.fed.us))

*Prehistoric Use Trends in the Uinta Mountains.*

The Uinta Mountains of northeastern Utah were extensively occupied between 4000 to 1000 years ago. After 2000 years ago there was a dramatic increase in activity coinciding with the introduction of domesticates. The focus and timing of activities in the Uintas shifted with the new economic strategy. Production of maize in the lowlands provided a reliable food source that allowed Fremont farmers to spend more time in the uplands. In the Uintas farmers procured nutritional or ceremonial resources, while individuals participating in these logistical excursions accrued status.

**Loosle, Byron (see Johnson) [S # 7]**

(Ashley National Forest; [bloosle@fs.fed.us](mailto:bloosle@fs.fed.us))

**Loosle, Byron (see Merkley) [S # 4]**

(Ashley National Forest; [bloosle@fs.fed.us](mailto:bloosle@fs.fed.us))

**Lux, Tom (see Brunswig) [S # 2]**

([tlux@du.edu](mailto:tlux@du.edu))



**Magne, Martin [Plenary]**

(Cultural Resource Services, Parks Canada, Calgary; Marty\_Magne@pch.gc.ca)

*Traditional Knowledge and Ecosystems in National Parks: An Archaeological Perspective*

Ecosystem management in National Parks takes a cautious approach to controlling human and natural factors. Archaeological knowledge and methods contribute by offering long-term perspectives on human-environment interactions that can be checked against traditional knowledge at local and regional levels. This discussion focusses on the advantages and limitations of each kind of approach, offering recommendations for establishment of explicit strategies to include traditional knowledge in ecosystem management practices.

**Magne, Martin [S # 2]**

(Cultural Resource Services, Parks Canada, Calgary; Marty\_Magne@pch.gc.ca)

*Plateau And Plains Athapaskan Movements In Late Prehistoric And Early Historic Times: A View From The Middle*

Archaeological research and speculation in western North America has resulted in the formulation of several arguments concerning the circumstances under which Athapaskan speaking groups moved from a northern homeland to points south. None of the arguments have examined from a northern perspective, the linguistic, ethnohistoric and archaeological evidence concurrently for Plains/Eastern Slopes and Plateau/Pacific Athapaskan distributions. This papers reviews this evidence and offers a bimontane model for Athapaskan movements through Interior British Columbia and western Alberta.

**Magne, Martin and Michael Klassen [S # 4]**

(Cultural Resource Services, Parks Canada, Calgary; Marty\_Magne@pch.gc.ca)  
(Vancouver)

*A Flute Player Site Near Exshaw, Alberta*

Forty years ago Thelma Habgood recorded a faint pictograph site in southwestern Alberta as possibly including an image of Kokopelli, a mythological Hopi character. Polarized light photography by Jim Henderson has greatly enhanced the panel on which the flute player occurs, including zoomorphs and anthropomorphs in Basketmaker style. Several possible origins of the site are presented: it is a confirmation of Hopi stories concerning northward migration of the flute clan; Stoney captured Hopi people and captives left the images; captors used their knowledge of southwestern imagery and captured power to render the

images; other Aboriginal visitors to the SW painted the panel using their memories of what they saw; or the whole panel is an excellent fake.

**Mayer, James H. [S # 6]**

(Dept of Geography, University of Wisconsin; [jhmayer@students.wisc.edu](mailto:jhmayer@students.wisc.edu))

*Report Of Geoarchaeological Investigations At The Krmopotich Folsom Site (48sw9826), Killpecker Dunes, Wyoming*

Geoarchaeological investigations were carried out at Krmopotich to reconstruct the geomorphic history of the site, as well as to determine the relationship between the Folsom material and a buried soil. Three eolian units were recognized, with the Folsom material and buried soil occurring in the middle unit. Sedimentological data indicate that the Folsom material occurs across an unconformity. OSL and radiocarbon ages support this finding, indicating that the middle eolian unit and buried soil are late Holocene in age. Thus, the relationship between the buried soil and Folsom material is erosional, and some vertical displacement of the artifacts has occurred.

**Merkley, Tami and Byron Loosle [S # 4]**

(Ashley National Forest; [tmerkley@fs.fed.us](mailto:tmerkley@fs.fed.us))

(Ashley National Forest; [bloosle@fs.fed.us](mailto:bloosle@fs.fed.us))

*Red Canyon Basketry*

In the mid 1950's Flaming Gorge dam was being constructed on the Ashley National Forest. Five nearly complete coiled baskets were recovered during the construction. Three of these baskets were on display, while two were in storage. In the process of writing the report for the Hayes Site, Byron Loosle, forest archaeologist, felt that the baskets should be included in this report, because two of the baskets were from this site. The remaining baskets were located within a five-mile radius, and were of the same construction type.

**Merrell, Carolynne [S # 4]**

(Archaeographics, Moscow, Idaho; [GAMerrell@worldnet.att.net](mailto:GAMerrell@worldnet.att.net))

*Legacy from the Tukudeka or Mountain Shoshone: Pictographs from the Middle Fork of the Salmon River*

The broken rugged Rocky Mountain country of central Idaho from the east-west course of the Salmon River southward to the ranges forming the northern boundaries of the Snake River Plain was home to the Tukudeka. Known by many names these private Mountain Shoshone people sought refuge from the encroaching white man in the depths of the Middle Fork of the Salmon River. Long before this time their ancestors spent winters in semi-permanent camps along its banks where they shared the land with the abundant game and salmon. As part of

their spiritual practices they created pictographs which remain today a visual testimony of the past lifeways of these people.

**Metcalf, Michael D. (see Duncan) [Plenary]**

(Metcalf Archaeological Consultants, Inc [mike@metcalfarchaeology.com](mailto:mike@metcalfarchaeology.com))

**Mierendorf, Robert R. [S # 3]**

(National Park Service, U.S. Department of Interior; [Bob\\_Mierendorf@nps.gov](mailto:Bob_Mierendorf@nps.gov))

*High Elevation Land Use in the North Cascades and other Western Cordillera of North America*

The northern Cascades Range of Washington State and the province of British Columbia is one of several maritime-influenced cordillera that are only now beginning to receive the research attention of archeologists. By comparison, the Rocky Mountain and Great Basin cordillera demonstrate a relatively long tradition of high elevation research. This paper advocates the importance of a broad, interregional perspective in understanding precontact human involvement in high elevation settings. Such a perspective requires a clear understanding of important differences in resource structure and land use strategies between maritime and continental-influenced montane ecosystems. A comparison of these differences suggests several different methodological and conceptual approaches useful in addressing theoretical issues and research problems in human use of the high country.

**Miller, James C. [S # 8]**

(Dept. of Geology, University of Wyoming)

*Middle Holocene Geochemical Alteration of Latest Pleistocene and Early Holocene Deposits.*

Mineralogical products of in-place weathering of latest Pleistocene and early Holocene deposits in the western Great Plains and Rocky Mountain basins persistently indicate a cooler, concomitantly moister climate 6500 to 3500 BP, the coolest since 13,000 BP. Formation of clay, carbonate, iron oxy-hydroxide, sulfide and other minerals indicate long-term vadose water storage and episodic phreatic water saturation. Rates of mineral production are controlled by pH, and aerosol calcium contributions prove insignificant. Most pit-house sites containing various storage features — certain evidence of semi-sedentism — date between 6000 and 4000 BP, during the peak of ameliorating conditions.

**Oetelaar, Gerald A. [S # 2]**

(Department of Archaeology, University of Calgary; [gaoetela@ucalgary.ca](mailto:gaoetela@ucalgary.ca))

*Paths into the Mountains: Landmarks and Passes of Nitsitapi Explorers, Traders and Warriors*

Although identified as nomadic bison hunters, the *Nitsitapi* were indeed quite familiar with the landscape of *mistakis* or the Rocky Mountains. *Mistakis* served as a guide for the Old North trail, perhaps the most important north-south trail in *Nitsitapi* territory. Further, as indicated on their maps, the *Nitsitapi* recognized a number of distinctive peaks along the Front Ranges, the most important of which was Chief Mountain. The other peaks identified on these maps include Devil's Head, Crowsnest Mountain, Heart Butte and Teton Peak, each of which represents a distinctive landmark in the vicinity of an important mountain pass. Significantly, these mountain peaks also occur at the heads of the most important east-west trails in *Nitsitapi* territory. This paper uses historical and archaeological data to explore the possible age of these routes into the mountains and examines the nature of the interaction between the respective groups.

**Perry, William - POSTER**

(Cultural Resource Services, Parks Canada, Calgary; bill\_perry@pch.gc.ca)

*GIS and Cultural Resource Management in Parks Canada*

Over the past 10 years, Geographical Information System (GIS) technologies have added a new facet to cultural resource management in Parks Canada in three main areas by: - combining cultural and natural information to identify high potential landforms and locations through predictive modelling exercises, - providing decision support tools through input into planning processes such as environmental impact assessments and park planning documents, and - enhancing regional and local archaeological site analysis. With the capacity of a GIS to store, manipulate and analyze vast amounts of digital information, the value of GIS technologies will only increase in the coming years as the quality of digital data and spatial software improves.

**Pitblado, Bonnie [S # 1]**

(Anthropology, Western State College of Colorado; bpitbaldo@western.edu)

*Early Holocene Occupation of the Late Paleoindian Chance Gulch Site Gunnison Basin, Colorado*

The Chance Gulch site is an 8,000 year-old campsite located just southeast of Gunnison, Colorado. This paper will report on 1999 - 2001 findings at the locality, which so far include two fire features, numerous lanceolate projectile point fragments, groundstone, a variety of chipped stone tools, and thousands of flakes. Data collected thus far have the potential to yield insights into how the occupants of Chance Gulch site utilized the greater Gunnison Basin landscape, ca. 8,000 years ago.

**Plastino A.T. and Bill Current [S # 8]**

(Current Archaeological Research; [aplastin@wyoming.com](mailto:aplastin@wyoming.com))

(Current Archaeological Research; [current@allwest.net](mailto:current@allwest.net))

*A Series of Radiocarbon Dates from the Jonah Gas Field, Sublette County, Wyoming.*

The Jonah Gas Field is located in the upper Green River Basin, Wyoming, USA. Natural gas exploration has lead to the salvage excavation of features discovered in prehistoric sites. Study sites are minimally buried by eolian, slopewash and alluvial fan deposits. The eolian sequence suggests two intervals of dune mobilization and advance ca. 500-900, and 2400-4770 RYBP. The earlier period is also associated with an episode of rill and gully erosion. The later period of eolian deposition also appeared to coincide with renewed deposition of alluvial fan material in certain localized areas. Additional process-related changes are suggested by preliminary analysis of one additional site dated to before 7500 RYBP.

**Reasoner, Mel A. and Margaret A. Jodry [S # 6]**

(Mountain Research Initiative Coordination Office, Bern, Switzerland;

[mel.reasoner@sanw.unibe.ch](mailto:mel.reasoner@sanw.unibe.ch))

(Paleoindian/Paleoecology Program, National Museum. of Natural History, Smithsonian Inst.; [jodrym@nmnh.si.edu](mailto:jodrym@nmnh.si.edu))

*Late Pleistocene And Early Holocene Climate In The Rocky Mountains*

Both cosmogenic exposure dating of moraines and radiocarbon dating of terrestrial macrofossils in glaciolacustrine records indicate that cirque glaciers in the Rocky Mountains advanced during the Younger Dryas (YD) interval. These findings are corroborated by well-dated reconstructions of alpine timberline fluctuations in the Colorado Rockies that imply a summer temperature cooling of 0.5-1.0 °C at the onset of the YD. The wide distribution of records showing an in-phase relationship with the European YD climate oscillation suggests that extreme gradients were not a feature of palaeoclimate in the region during this time. Apparent diachronous behaviour of late-glacial and early Holocene climate in western North America may be an artefact of poor dating control.

**Rudy Reimer [S # 3]**

(Squamish Nation; [rreimer@sfu.ca](mailto:rreimer@sfu.ca))

**UNTITLED**

Current research into the use of high elevation regions of the southern coast of British Columbia has revealed that human use of these areas extends back into the early Holocene. Ethnographic place names and accounts of hunting alpine fauna are apparent at a number of alpine sites. Furthermore evidence for

long term use comes from artifact materials found at sites in low and high elevation contexts. The role of Garibaldi Glassy Rhyodacite in Coast Salish economic, social and ideological belief is greater than previously believed.

**Richings-Germain, Sam [S # 1]**  
(University of Wyoming)

*The Jerry Craig Site: A Cody Complex Bison Kill Site in the Colorado Rockies*

The Jerry Craig site is a Cody Complex bison kill site located in Middle Park, Colorado. The artifact assemblage from the site contains projectile points that fall within the range of Cody Complex variability, stone tools, lithic debitage, and faunal remains primarily composed of extinct bison. A description of the site, the fauna, and the stone tool assemblage is presented. The Jerry Craig site and its assemblage contributes to our understanding of Paleoindian adaptations to the upland Rocky Mountain region. With clear affinities to the Plains, the presence of a site like Jerry Craig in the Rocky Mountains offers an opportunity to compare these two regions.

**Root, M. (see Davis) [S # 1]**  
(Rain Shadow Research Inc.)

**Shortt, Mack [S # 7]**  
(Lifeways of Canada Limited; [shortt@telusplanet.net](mailto:shortt@telusplanet.net))

*The Canyons of The Yellowstone: 1996 -2000 Museum Of The Rockies Research*

A long term contract archaeological research program for the National Park Service through the Museum of the Rockies began on the Yellowstone River in Yellowstone National Park in 1996. This program has essentially completed the archaeological inventory of the river from Gardener, MT through the Black Canyon to above Tower Falls in the Grand Canyon and downstream from Yellowstone Lake through Hayden Valley to the Grand Canyon. Sites are particularly numerous in the Black Canyon and Hayden Valley. Test excavations have been carried out at a number of sites threatened with erosion in the Black Canyon. Four sites tested in the lower terrace date back to McKean Complex (ca 4500 - 3000 yrs), with more recent and intensive occupations related to the Pelican Lake (ca. 3000 - 1600 yrs) and Uinta (ca. 1600 -800 yrs) phases followed by a minor late Shoshonian occupation ca 800 -500 years ago prior to the Little Ice Age, a time when there appears to have been limited cool/warm occupation in the Park.

**Smits, Nicholas and Michelle Knoll [S # 7]**  
(Ashley National Forest)

*Excavation Report for 42Da1005*

Excavation and survey work in the northeastern foothills of the Uinta Mountains has produced interesting information about upland Archaic occupations. A model for seasonal Archaic movement in the Uinta Mountains was proposed based on data obtained from excavations at Dutch John, Utah. One missing element in this model was the location of winter occupation. 42Da1005 is located in sand dunes near Sheep Creek Bay and has many of the right characteristics for a winter occupation site. In the summer of 2001 a Forest Service Passport in Time crew tested portions of this site, including a possible pithouse, to determine the period and season of occupation.

**Stevenson, Marc [Plenary]**

(All Nations Consulting, University of Alberta)

*Plenary Discussant*

**Stiger, Mark [S # 1]**

(Western State College of Colorado; [mstiger@western.edu](mailto:mstiger@western.edu))

*The Tenderfoot Site: A Version of the Early Archaic in Western Colorado*

Research at the Tenderfoot Site near Gunnison, Colorado, has uncovered the remains of numerous Early Archaic occupations. Individual occupations are interpreted as representing the range from brief camping episodes to winter seasonal residential habitations. Artifacts associated with different occupations show several patterns of change through time. While several activities such as processing of plant and animal resources, stone tool and spatial maintenance, and tool stone acquisition and disposal are common to all Early Archaic occupations, the organization of these activities is structured differently relative to feature type and age.

**Stiger, Mark [S # 6]**

(Western State College of Colorado; [mstiger@western.edu](mailto:mstiger@western.edu))

*The Mountaineer Site: A Folsom Occupation In Western Colorado*

Excavations at the Mountaineer Site near Gunnison, Colorado, have uncovered the remains of at least one Folsom occupation. Initial analyses of material from Mountaineer indicate some similarities to and differences from regional patterns in Early Archaic settlement and technology. Most of the stone tool raw material is derived from local sources with some notable exceptions. While the flaked stone assemblage is plentiful, the ground stone assemblage is (at the time of this writing) nonexistent. Several clusters of Folsom material indicate either different episodes of occupation or different spatially discrete activities.

**Surovell, Todd A. and Nicole M. Waguespack [S # 6]**

(Dept of Anthropology, University of Arizona; [surovell@u.arizona.edu](mailto:surovell@u.arizona.edu))

(Dept of Anthropology, University of Arizona; nmwagues@u.arizona.edu)

*Barger Gulch Locality B: A Folsom Site In Middle Park, Colorado*

Locality B of the Barger Gulch site sits at approximately 7,600 feet in Middle Park, Colorado. Recent work at the site by the University of Wyoming has identified an extensive, high density Folsom component associated with a shallowly buried paleosol. To date, excavations and surface collections have produced more than 7,500 artifacts. Although the locality was initially thought to be a quarry or workshop area focused on the exploitation of locally available Troublesome Formation chert, multiple lines of evidence suggest that it is more likely one or multiple intensive, long term residential occupations.

**Tanner, Russel L. [S # 2]**

(BLM, Rock Springs Field Office; Russ\_Tanner@BLM.gov)

*THE INDIAN GAP TRAIL: A Landscape Archaeology Approach to Locating and Understanding an Historic Native American Trail.*

Accounts from both Eastern Shoshone and Northern Ute oral tradition describe a Nineteenth Century trail connecting the Uintah -Ouray Reservation in Utah with the Wind River Reservation in Wyoming. Historical records are limited, but substantiate the existence of the trail. This route was apparently used by Native Americans to travel between the two reservations during the early years of the reservation era (about 1870-1910). Aerial photography has enabled us to identify several likely portions of the trail. Landscape features, and archaeological resources including campsites and rock art sites may also be connected with the trail. If so, the trail may be much older than the historic era and may have been a passage way used by Shoshonean peoples for several millennia.

**Tolman, Shayne [S # 4]**

(U. of Calgary Dept. of Resources and the Environment;  
shayne.tolman@westwind.ab.ca)

*The Pronghorn Eccentrics of Wally's Beach (DhPg-8)*

Extreme disturbance factors in the St. Mary reservoir basin account for the recent exposure and dispersal of thousands of lithic and faunal remains. Among the surface collected lithic component at Wally's Beach (DhPg-8) are 5 eccentric artifacts. The two largest specimens are over 16 cm in length, distally bipointed and notched. Morphologically, both are similar and are made of Knife River Flint. Several pieces of these two anomalies were collected over a 6 month period in a 20 meter radius. It is assumed that originally they were relational. Comparative data on these two eccentric forms from collections and the literature is non existant, therefore, a biological interpretation is considered.



**Waguespack, Nicole M. (see Surovell) [S # 6]**

(Dept of Anthropology, University of Arizona; [nmwagues@u.arizona.edu](mailto:nmwagues@u.arizona.edu))

**Walker, Danny N. [S # 5]**

(Assistant State Archaeologist, Wyoming; [dnwalker@wyo.edu.us](mailto:dnwalker@wyo.edu.us))

*Archaeology and Architecture of Seminoe's Fort, An 1850's Oregon Trail Trading Post in Central Wyoming.*

Constructed in 1852, Seminoe's Fort was abandoned in 1855, re-occupied in 1856 and burned in 1857. Archaeological investigations in 2001 revealed a distinctive architectural style was used throughout the nine buildings in the trading post. This style consisted of vertical posts placed a minimum of two to three feet into the ground, flat foundation rocks placed between the posts and then logs cribbed up to form the walls, with nails holding the logs to the posts. During the early 1860s, another cabin was built within the limits of one of Seminoe's cabins, using foundation rocks from at least four of the earlier cabins, an adaptive reuse of construction materials.

**Walker, Danny N. [S # 6]**

(Assistant State Archaeologist, Wyoming; [dnwalker@wyo.edu.us](mailto:dnwalker@wyo.edu.us))

*The Mammalian Transition Across The Pleistocene-Holocene Boundary And Its Ecological Implications*

Data collected from paleontological and archaeological sites throughout the Middle Rocky Mountains show a distinct difference in mammalian species composition shortly after the Pleistocene-Holocene boundary. Disregarding extinct species, the species composition difference can be seen to represent a major climatic (and therefore habitat and ecological) change that occurred in the Rocky Mountains at the time. This climatic change is best reflected in the small mammal (i.e., rodent) species composition. However it also had a major effect on the resource seasonality aspect of the landscape, causing changes in ways larger mammals adapted to local habitat and ecology. This is especially illustrated with body size reduction of *Bison bison* throughout the Holocene.

**Walker, Rob [S # 8]**

(Parks Canada - Lake Louise, Yoho, Kootenay; [Rob.Walker@pch.gc.ca](mailto:Rob.Walker@pch.gc.ca))

*Defining natural variability: paleocological investigations of forest fires, vegetation and drought since glaciation in the Southern Canadian Rockies.*

Ongoing paleoecological research in Kootenay National Park uses high resolution paleological data at two temporal depths to reconstruct vegetation, forest disturbance processes and climate and to define the range and character of natural variability. The 10,000 year charcoal and pollen record indicates three temporal zones of variable fire frequency and forest type. Pollen ratio analysis *Chara* macrofossil record indicates a strong relationship between periodic drought and large fires. Droughts occurred periodically and were accompanied by large, stand destroying fire events. Based on this drought and fire frequency reconstruction, the next peak drought period is forecast for 2030-2050 AD.

**White, Clifford A. [Plenary]**  
(Parks Canada – Banff)

*The anthropogenic hypothesis for Rocky Mountain montane ecosystem development and decline.*

Low elevation, montane ecosystems of the Rocky Mountains are characterized by forests of Douglas-fir, trembling aspen, and lodgepole pine, interspersed by areas of aspen, wetland, and grassland vegetation. These ecosystems are critical habitat for numerous wildlife species, and are focal areas of prehistoric, historic, and current human use. Many montane areas, but particularly those in national parks, demonstrate a suite of symptoms related to ecosystem decline including collapse of wildlife populations (e.g., beaver, moose, wolves) and reduced cover of aspen, willow, and grasslands. Climate change and suppression of lightning fires are often-proposed hypotheses for these changes, but lack supporting evidence. The anthropogenic hypothesis holds that long-term, traditional human use (hunting and burning) was critical to the development of montane conditions. Those conditions changed, though, with reduced burning by First Nation cultures before 1875, and were accelerated in national parks where, in addition to fire, hunting and predators were also aggressively controlled. Evidence for the anthropogenic hypothesis includes archaeological and historical data on human lifeways, lightning-fire ignition patterns, and recent ecological studies on predation, herbivory, and wildlife behaviour and mortality. Montane restoration requires reliable knowledge of how the contrast between current human effects and long-term, human-ecosystem interactions could cause ecosystem decline.

**Wood, Barry [S # 3]**  
(Arrow Ltd. Archaeological & GIS Consultants; akamina@telusplanet.net)

**HIGH ELEVATION ARCHAEOLOGICAL SITES IN THE SOUTHERN CANADIAN ROCKIES: Distribution, Interpretation & Management**

Recently completed research in the Southern Canadian Rocky Mountains in both Alberta and British Columbia, north of Glacier National Park, Montana is beginning to fill in the regional archaeological picture.

Archaeological site distributions, potential for interpretation or stakeholder education and issues related to management in the near wilderness, multi-jurisdictional environment is proving both challenging and rewarding.

