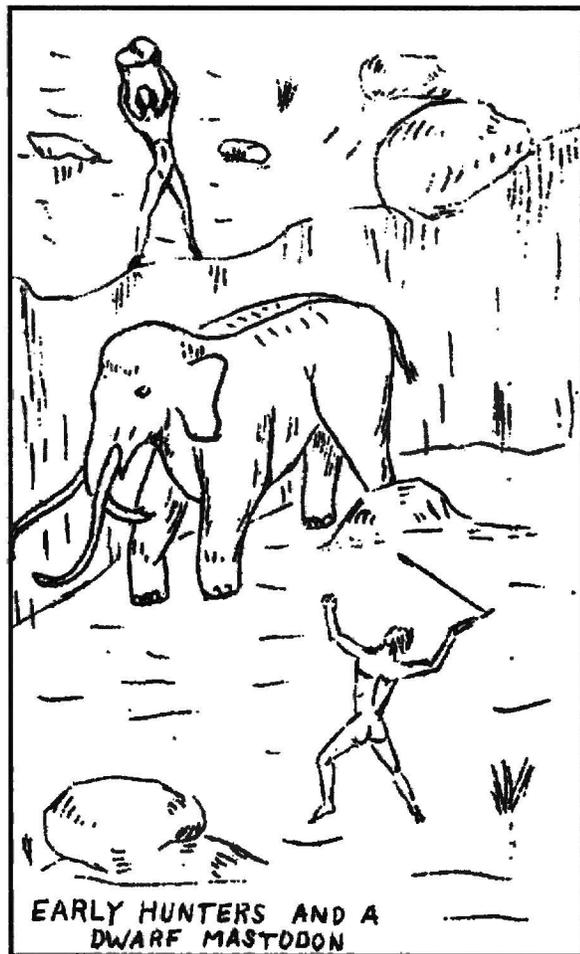


# THE WYOMING ARCHAEOLOGIST

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[THIS ISSUE  
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# **THE WYOMING ARCHAEOLOGIST**

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Please send a minimum of two (2) hard copies of each manuscript submitted. A third copy would speed the process. Please contact the Managing Editor for instructions if the manuscript is available in electronic format.

Readers should consult the articles in this issue for style and format. Deadline for submission of copy for spring issues is January 1 and for fall issues is July 1. Reports and articles received by the Managing Editor after those dates will be held for the following issue.

The membership period is from January 1 through December 31. All subscriptions expire with the Fall/Winter issue and renewals are due January 1 of each year. Continuing members whose dues are not paid by March 31 of the new year will receive back issues only upon payment of \$5.00 per issue. If you have a change of address, please notify the Executive Secretary/Treasurer. Your WYOMING ARCHAEOLOGIST will not be forwarded unless payment is received for return and forwarding postage. Back issues in print can be purchased for \$5.00 each, plus postage. Back issues out of print are available at \$0.25 per page plus postage.

Checks for chapter subscriptions and renewals should be sent to the chapter secretary involved. All other checks, subscriptions, and renewals should be addressed to the Executive Secretary/Treasurer. Correspondence and orders for back issues should be addressed to the Executive Secretary/Treasurer.

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Individual Associate Member - \$20.00  
Institutional Member - \$30.00  
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# THE WYOMING ARCHAEOLOGIST

## VOLUME 56(2), FALL 2012

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**THIS ISSUE PUBLISHED FEBRUARY 2014**

WYOMING ARCHAEOLOGICAL SOCIETY  
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Given by: Miss, Mrs., Mr., Ms., Dr. \$ \_\_\_\_\_ (Amount)

Name: Last \_\_\_\_\_ First \_\_\_\_\_ Middle \_\_\_\_\_

Address: \_\_\_\_\_ City & State \_\_\_\_\_ Zip \_\_\_\_\_

Donor phone number ( ) \_\_\_\_\_

TYPE OF GIFT: General Contribution [ ] Specific Contribution [ ]

In Memory of: \_\_\_\_\_  
Name City & State

In Honor of: \_\_\_\_\_  
Name City & State

Specify where you would like your money to go (e.g., Mulloy or Frison Scholarship Funds, The Wyoming Archaeologist, ????????)

Please make your check payable to THE WYOMING ARCHAEOLOGICAL SOCIETY  
Send to Carolyn Buff, Executive Secretary/Treasurer, 1617 Westridge Terrace, Casper, WY 82604

WYOMING ARCHAEOLOGICAL FOUNDATION  
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NAME: LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY & STATE \_\_\_\_\_ ZIP \_\_\_\_\_

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Name City & State

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Please specify where your donation is to be placed.  
Jensen/Robson Research Grant \_\_\_\_\_; Jensen/Robson PhD Travel Award \_\_\_\_\_;  
Hell Gap Research \_\_\_\_\_; WAF General Operations \_\_\_\_\_; Other \_\_\_\_\_.

WAF Funding Initiatives: George C. Frison Institute Endowment \_\_\_\_\_.

WAF has pledged \$100,000.00 to the Frison Institute Endowment (2011 – 2016). Funds given to the GFI Endowment will be matched dollar for dollar by the Wyoming State Legislature, doubling your donation. For further information please contact Todd Surovell ([surovell@uwyo.edu](mailto:surovell@uwyo.edu), Frison Institute Director.

Please make your check payable to the WYOMING ARCHAEOLOGICAL FOUNDATION and mail to Barbara Nahas, WAF Treasurer, P.O. Box 725 – Cody WY, 82414; 307-868-2685.

## IN MEMORIAM



**Kenneth J. Feyhl**  
**1924-2013**

Kenneth John Feyhl died May 31, 2013. He was born Sept. 17, 1924 in Virginia City, now North Long Beach, Calif., a son of George Harold and Mayme Goff Feyhl. Shortly after his birth the family returned to Wyoming where both parents had been raised. Ken attended elementary and high schools in Cody.

Ken enlisted in the U.S. Army Air Force where he served from 1942 to 1945 with the 74th Troop Carrier Squadron, 434th Troop carrier Group, 53rd Wing of the 9th Air Force. His glider unit participated in airborne invasions at Normandy (D-Day), Northern France, and evacuation operations across France and Germany.

With assistance from the G.I. Bill, Ken attended the Universities of Wyoming and Washington, graduating from the latter with a bachelor's degree in Geology. He was employed by CENEX as Drilling Superintendent for 37 years, retiring in 1988.

Ken married Laura Marion Boyd on May 27, 1946, in Livingston. To this union were born daughters Helen Marjorie Moser, Annette Feyhl Bayley (Stan), Josephine Kay Feyhl (Jim

Buska) and Laura Lee Steinmetz.

Interests included membership in the Montana Archaeological Society, Montana Historical Society, Yellowstone Corral of Westerners, Montana Geological Society, American Association of Petroleum Geologists, Society of Petroleum Engineers, and Friends of the Library.

Ken was a beloved son, husband, father, grandpa, uncle, friend; accomplished musician, veteran, avocational archaeologist, historian and paleontologist; hunter, fisherman, and humanist. He adored his family, and in turn was cherished by them and countless friends and associates. This pebble in the pond ripples far.

Private graveside services were held at Sunset Memorial Gardens in Billings. Memorial donations may be sent to the charity of one's choice.

(adapted from *Billings Gazette* June 5, 2013)

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*Personal Note from George C. Frison, University of Wyoming*

In 1958, I was sent to Billings, Montana for

a back operation and discovered my doctor and one of the nurses were members of the local Billings archaeological group. They and other members made my hospital stay more bearable than it would have been otherwise. I vaguely recall Ken Feyhl at that time but he traveled around the northern Wyoming area and would occasionally stay at a motel in Ten Sleep. We became better acquainted during the last years I was in the ranching business.

While working on archaeological sites in the Sheridan-Buffalo area in 1964-1966 while in Graduate School at the University of Michigan, I made several trips to the Billings, Montana area and became better acquainted with Ken and other members of the Billings archaeologi-

cal group. Ken developed a genuine interest in archaeology and became a regular contributor of high-quality articles to the journal *Archaeology in Montana*. In 1986, a joint meeting with the Wyoming Archaeological Society and the Montana Archaeological Society took place in Cody, Wyoming. Papers were presented by both professionals and avocationalists on developments in Montana and Wyoming archaeology. At the end, the discussants agreed the best paper was the one by Ken Feyhl describing salvage operations after a wildfire destroyed the timber lodges at Thirty Mile Mesa in Montana. Sadly, all of us who remember the early days of Montana and Wyoming archaeology feel the loss of Kenneth Feyhl as a friend and colleague.

## NEWS AND ANNOUNCEMENTS

Wyoming Archaeological Society, Inc.  
2013 Annual Meeting Minutes  
8:00 a.m. – Hilton Garden Inn –  
Laramie WY  
Saturday, April 27, 2013

**Presiding:** Larry Amundson, President  
**Call to Order:** 8:00 a.m.

**Report of Credentials Committee/  
Roll Call of Delegates:** Executive Secretary/  
Treasurer Carolyn Buff certified the voting  
delegates: Absaroka – Gary Bingham; Ancient  
Trails – Cher Burgess and Alice Tratebas;  
Casper – John and Mavis Greer; Cheyenne –  
Dan Bach and Richard Curritt; Fremont County  
– Gina Clingerman and Eva Peden; June Frison  
– Mark Lane and Dale Wedel; Pumpkin Buttes  
– Denise Tugman and Stacy Umus; Sheridan/  
Buffalo – absent; Sweetwater County – Bill  
Current; and Upper Green River Basin – Dave  
Vlcek.

Roll Call showed nine chapters represented:  
Absaroka, Ancient Trails, Casper, Cheyenne,  
Fremont, June Frison, Pumpkin Buttes, Up-  
per Green River, and Sweetwater. Absent was  
Sheridan/Buffalo.

**Approval of Minutes of April 26, 2012:**  
Motion by Eva Peden, second by Denise Tug-  
man, to approve as published in Volume 56(1)  
Spring 2012 issue of *The Wyoming Archaeolo-  
gist*. Carried.

**Treasurer's Report:** Executive Secretary/  
Treasurer Carolyn Buff gave the treasurer's re-  
port. Motion by Dale Wedel, second by Leneigh  
Schrinar to file the report for audit. Carried.

**Auditor's Report:** Due to an error in the  
treasurer's report, the auditing committee of  
Bill Scoggin and Barbara Nahas refused to  
verify the books were in order until such time  
the error could be found and corrected.

**Editor's Report:** Danny Walker – An-  
nounced the fall 2012 issue of *The Wyoming  
Archaeologist* is about half done and then he  
has no more manuscripts.

**Librarian's Report:** Danny Walker – Have  
received more donations to the library and we  
are still getting a few exchange journals.

**Committee Reports: Scholarship:** Caro-  
lyn Buff announced the Scholarship Committee  
would meet at lunch in the Garden 1 room to  
evaluate the scholarship applications.

**SAA/COAS:** Marcel Kornfeld announced  
there was no 2013 business meeting, but there  
was a small avocational attendance at the con-  
ference, and the editor had resigned.

**Chapter Reports:** The chapter reports will  
be published in *The Wyoming Archaeologist*.

**State Archaeologist's Report:** Mark Miller  
announced Jody Clauter has been hired as the  
new University of Wyoming Archaeological  
Repository Collections Manager, replacing  
Marty Rogers who is still helping out part-time.  
Paul Sanders has retired and Marcia Peterson  
has been hired as the Survey Section Director.  
The Military Context has been completed. Bill  
Scoggin and Mark Miller are working on a  
Scoggin site monograph.

### OLD BUSINESS:

**Wyoming Archaeology Awareness  
Month:** Judy Wolf reported Wyoming had  
placed first again with the poster at the SAA  
annual meeting. She requested \$250 for Ar-  
chaeology Awareness Month in September and  
thanked the Society for the continued support.  
She announced chapters could pick up posters.  
T-shirts, aprons and caps were available for  
purchase.

Motion by Leneigh Schrinar, second by  
Dale Wedel to donate \$250. Carried.

**Wyoming History Day:** Danny Walker announced he was working with the American Heritage Center to get the word out to sixth through twelfth grade students the award was available.

**Friends of the George G. Frison Institute:** Bill Scoggin, who has been designated as the contact/liaison between the WAS and Friends group, said members can ask him questions during the conference.

**Wyoming Archaeological Foundation:** Janice Baars, Foundation president, announced teachers bring students from Wheatland to do projects. \$100,000 was matched by the State of Wyoming in December 2012. She thanked Todd Surovell and Bob Kelly for their work on behalf of the Foundation. She also announced field school would be held at Hell Gap again this summer.

**Web Site:** [www.wyomingarchaeology.org](http://www.wyomingarchaeology.org) Dan Bach and John Laughlin reported there had been over 612,000 hits to the site. The web page is updated frequently and Dan is spending about 20 hours per month on it. If billed, it would equal about \$12,000 per year.

Motion by Bill Current, second by Carmen Clayton to renew the web site. Carried.

**iGive:** Carolyn Buff announced we had earned \$34 in donations from the iGive site. Business partners are listed on the web site, [betty.igive-694908-@igive.com](mailto:betty.igive-694908-@igive.com), and instructions for the WAS to receive the donations are also on the web site. This is an easy way for the WAS to get a little more funding, and it is painless. Anyone ordering through the internet can participate. This is a site whereby companies agree to donate a small percentage of customer purchases to a designated non-profit.

**Names, addresses, etc.,** will be published and Carolyn Buff requested names, addresses, phone numbers and emails be updated as soon as possible.

**Wyoming Rock Art Interest Group:** The group is inactive.

## NEW BUSINESS

**Frison Institute Fund Raising:** Bob Kelly announced Todd Surovell is the new Institute Director and \$12,000 had been generated for research, mostly supporting student research, with additional fund-raising ongoing.

**Stewardship Program:** John Laughlin reminded chapter members the SHPO has an ongoing program and hoping chapter members will volunteer. John has information available on the program and he and Joe Danielle will travel to the chapters to explain the program and train volunteers.

**Wyominghistory.org:** Tom Rea from Casper stated his attendance was a way to let people know about Wyoming history. There are now over 300 articles on the web site, [www.wyominghistory.org](http://www.wyominghistory.org), with an archaeological content and events with each county represented. There will soon be a launch with radio spots with other organizations and groups. All articles are written by people with expertise in a specific area. He also announced the Historical Society will be celebrating their 60<sup>th</sup> anniversary.

Motion by Judy Wolf, second by Gene Smith to donate \$500.00 to the organization. Carried.

**Fall Activities:** Mark Miller mentioned the Archaeology Month speaker would be in Laramie on September 26, 2013.

**Brochures, Letterhead, Envelopes, Membership Cards:** are available from Carolyn Buff.

**State Historic Preservation Office:** Mary Hopkins announced SHPO would be hosting the Preserve Wyoming Conference in Rawlins in May at the Jeffery Center. The workshops are free but there is a conference cost. Dr. Ethen Carr will be the keynote speaker.

There will be public meetings in Fremont and Hot Springs counties on the Wind River Interpretive project. Details can be obtained from Mary.

SHPO has hired a new architect and trails person. A field experience with the UW

field school will be held on the Wold ranch this summer.

John Laughlin discussed the Mariah Ranch project and announced there will be field work to decide what needs to be done if they get a grant from the Cultural Trust Fund. He also announced stewardship is ongoing in Dubois at a bison kill site which is being looted.

**Correspondence:** Carolyn Buff noted there were thank-you notes on the table for perusal after the meeting.

**Survey Section:** No report.

**Election of Officers:** Judy Wolf, chair, June Frison Chapter; Sylvia Huber, Absaroka Chapter, and Denise Tugman, Pumpkin Buttes Chapter. Nominated were Bill Scoggin, president; Judy Wolf, 1<sup>st</sup> vice president; Dan Bach, 2<sup>nd</sup> vice president; and L. J. Turner, member-at-large to the Wyoming Archaeological Foundation. Motion by Eva Peden, second by Cher Burgess to cease nominations and cast a unanimous ballot. Carried.

Nominating Committee procedures will be posted to the web site and will be passed on to the next committee.

**2014 Nominating Committee:** Dan Bach, 2nd vice president, Cheyenne Chapter, chair; Sylvia Huber, Absaroka Chapter, and Denise Tugman, Pumpkin Buttes Chapter.

**Selection of Site for 2014 Annual Meeting:** The 2014 meeting will be held in Pinedale and hosted by the Upper Green River Chapter on May 2-4, 2014.

**Selection of Site for 2013 Summer Meeting:** Hell Gap, dates TBA.

**ANNOUNCEMENTS:** Carolyn Buff asked for an updated list of chapter officers.

Bill Scoggin talked about the UP Mammoth Site, southwest of Rawlins. The site has not been taken care of. Mary Pracsinus has gotten money to work the site and there may be room for volunteers. The site is on private property and the land owners do not want a lot of people on the site. If anyone wants to visit,

please contact Bill. Please do not go on the site without permission. The dates of the work are unknown at this time.

The Wyoming Archaeological Foundation will meet at 7:30 a.m., and the field trip to the Wyoming Territorial Prison will begin at 9:00 a.m.

Carolyn Buff announced the membership database will be published in the journal, space permitting. Anyone not wanting their information published must make a request in writing.

Carolyn Buff announced the WAS window clings and magnetic decals were available for sale from Mavis Greer. They are also available on the website.

**OTHER BUSINESS TO COME BEFORE THE BODY:** Ranel Capron talked about Project Archaeology for teachers at the Rosebud Battlefield June 17-20, 2013. Flyers are available from her.

Bill Scoggin asked for a round of applause for the outgoing president Larry Amundson.

Marcel Kornfeld announced there was a table set up in the lobby for the Paleoindian Research Lab (PIRL) and the avocational poster is available to chapters.

Nick Freeland and Mary Lou Larson are working on a national landmark designation.

Eva Peden announced the 50<sup>th</sup> anniversary of the Fremont County Chapter.

Carolyn Buff thanked everyone for their thoughts, prayers, cards and help to her family during her recent illness.

Sylvia Huber of Cody was awarded the Golden Trowel Award for 2013.

**Adjourn:** There being no further business, the meeting adjourned at 9:11 a.m.

/s/ Carolyn M Buff  
Executive Secretary/Treasurer

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**Wyoming Archaeological Society, Inc.  
Scholarship Committee Minutes  
April 27, 2013 – Hilton Garden Inn,  
Garden Room 1 - Laramie  
11:50 a.m.**

**Presiding:** Carolyn Buff, Chair

**Present:** Larry Amundson, Dewey Baars, Carolyn Buff, Mary Lou Larson, (ex officio), Mark Miller (ex officio), Barbara Nahas, Paul Sanders, Bill Scoggin, and Judy Wolf.

Motion by Mary Lou Larson, second by Barbara Nahas to award \$1,000 to Katie Johnson for the Reiss Scholarship. Carried.

Motion by Judy Wolf, second by Barbara Nahas to award \$500 each to Jennifer Black and Jozlynn Hall for the Mulloy Scholarship. Carried.

Motion by Mark Miller, second by Barbara Nahas to award \$500 to Madeline Mackie for the Frison Scholarship. Carried.

Motion by Mark Miller, second by Judy Wolf to award the Henry and Clara Jenson Doctoral Travel Award to Allison Grunwald, with \$250 coming from the Wyoming Archaeological Foundation, \$250 from the Wyoming Archaeological Society, and \$250 from the Wyoming Association of Professional Archaeologists, for a total of \$750. Carried.

Mark Miller announced Dr. Tom Buchanan, University of Wyoming President, will again match the scholarship amounts. Upon receipt of the check, the amounts will be forwarded to the students. Our thanks are extended to Dr. Buchanan and the University of Wyoming.

In an effort to entice more students to apply for the scholarships, the following people agreed to again visit classes beginning early in January as soon as the second semester begins, to speak with students and faculty re the Reiss Memorial Scholarship: Casper, Carolyn Buff; Central, Leneigh Schrinar; Western, Bill Current; LCCC, Cheyenne and Laramie, Mark Miller; Northwest, Sylvia Huber; Sheridan, Vi Gardner; Gillette, Denise Tugman; Eastern, Dewey Baars will locate a designee, and UW,

Mark Miller. Each person will take the appropriate application forms and encourage students to apply and faculty to write recommendation letters. It was decided just emailing faculty was not a viable option at this time; we needed to present to students face-to-face since the opportunities were not reaching the students.

**Adjourn:** 12:17 p.m.

/s/ Carolyn M Buff  
Scholarship Chair

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**Wyoming Archaeological Society, Inc.  
Chapter Reports for the  
2012-2013 Year**

**Absaroka:** Activities – Members participated in an archaeology excavation in Ethiopia and the Caribbean.

**Public Education:** Distributed Archaeology Awareness month posters around the Bighorn Basin; monthly chapter meetings open to the public

**Work With Other Organizations –** Reiss Scholarship information presented to Northwest College students. Awarded Milford Hanson Scholarship through Basin-wide high schools. Members are active in the Site Stewardship and Monuments and Markers program.

**Other –** Continued to expand the Chapter Library with a collection of DVDs, articles and books to be checked out.

**Programs Presented –** Todd Guenther, “Pacific Springs Station;” Dr. Mavis Greer, “Rock Art in the Caves of Southern France and Northern Spain;” Dr. Danny Walker, “Searching for My Wife’s Ancestors: Archaeology and History of the Czech Republic;” Michael Page, “Results of the 2010-2011 Game Creek (48TE1573) Excavation;” John Laughlin, “A History of Investigations at the Finley Site;” movie night, “Otzi – the Iceman” and the Christmas potluck and gift exchange.

**Field Trips –** National Trails Day Event, Edelweiss Creek, volunteer day to record the

Nez Perce Trail; Little Buffalo Basin, tipi rings/  
buffalo jump/historic ranches in the Bighorns;  
and annual picnic at Ewing Snell Ranch

**Ancient Trails:** Public Education – Chapter members helped sponsor the Island in the Plains conference on Black Hills archaeology and history, along with the Northern Hills Chapter of the South Dakota Archaeological Society and Federal and State agencies, held in Spearfish, South Dakota.

**Casper:** Programs Presented – John Albanese, “Three Paleoindian Sites;” Dan Bach, “Year 2010 Excavations at the Raven’s Nest Site (48SU3871), Located near Pinedale, WY;” Dr. Mavis Greer, “Review of Wyoming Rock Art;” Dr. Danny Walker, “History of the University of Wyoming Archaeological Repository (UWAR): Past, Present, and Future;” Chuck Carrig, “The Vernacular Architecture of Soledad Canyon, New Mexico;” Dora Ridenour, “The Five Eagles Site: 10,000 Years of Occupation Along the Clearwater River Idaho;” Dr. Todd Surovell, “Folsom Households at the Barger Gulch Site, Middle Park, Colorado;” and Dr. Nicole Waguespack, “Changing Interpretations of Clovis Subsistence.”

**Cheyenne:** Programs Presented – Dr. George C Frison, “Wyoming Archaeology, the Wyoming State Archaeologist and the University of Wyoming;” Dr. Charles Reher, “High Plains Panorama: Stone Circle Landscapes, Old Stone Barns, Large Lithic Quarries, Human Effigies, Buffalo Jumps, Interpretive Centers;” Rebecca Simon, “Brothels, Bars, and 4<sup>th</sup> Graders: Project Archaeology and Educational Opportunities Possible with the Vanoli Project;” Dr. Todd Surovell, “Mapping People in Their Living Space: The Dukha Ethnoarchaeological Project;” Spencer Pelton, “Destination Game Drives of the Colorado Front Range Alpine Zone: Why We Still Don’t Know What was Hunted and What We Can Do About It;” Dr.

Danny Walker, “Prehistoric Archaeology at Fort Laramie National Historic Site and a Red Horse Pictograph at Register Cliff.”

**Fremont County Chapter:** Survey – Toured Woodard Site-Sand Draw near Riverton; toured Lookingbill Site and Wiggins Fork Bighorn Sheep Trap and located Sheepeater Indian shelters and features; located and photographed the Black Mountain Bighorn Sheep Trap and Bull Elk Pass Sheep Trap; field trip to 48FR2389; site visit to 48FR6484 to help Todd Guenther and students record site; field trip to 48FR2506 and 48FR93; Boedeker Butte Site Field School; Bull Elk Pass Sheep Trap Survey; Wiggins Fork Sheep Traps and Black and Denison Mountains Survey; stone circle mapping above Dubois; exploration of possible sites in the Lost Cabin and Nowood areas.

Public Education – Presentation on Utah Rock Art and Ruins at Central Wyoming College; distributed Wyoming Archaeology Month Posters to schools in Riverton, Pavillion, and all schools on the reservation.

Vandalism Report – Picked up trash at Woodward Site/Sand Draw south of Riverton.

Work With Other Organizations – Central Wyoming College.

Publications/Reports - Printed booklets for Fremont County Archaeological Society Chapter, containing programs, membership and history.

Programs Presented – Dr. Danny Walker, “University of Wyoming Archaeological Repository, 1967-2007;” Duki Smaglik and Dave Raynolds, “The Power of Place;” Mike Bies, “Prehistoric Travel Routes in the Absarokas;” Jack States, “How an Ancient Anazai Artifact Disproved Biological Theory;” Todd Guenther, William Hovendick, Jordan Stapley and Bill Elder made presentations; Lonnie Woodard, “Woodard Site/Sand Draw;” Melinda Bobo, “Boedeker Butte, Hunter Blind in Torrey Valley and Buffalo Jump West of Dubois;” Dr. Richard Adams, “The Shirley Basin Site Revisited;”

Russell Richard, "Overview of the Atlatl: Pre-historic and Historic Use of the Spear Thrower;" and Christmas Dinner at Svilar's in Hudson.

**June Frison Chapter:** Survey – Evaluation of select sites in Yellowstone National Park including Military and Nez Perce sites in Lower Geyser Basin, Lower Nez Perce Creek, Spurgin's Beaver Slide, Nez Perce Ford, and Indian Pond.

**Public Education –** Presentations on Archaeology of the Nez Perce Historic Trail, Yellowstone National Park.

**Work With Other Organizations –** Dan Eakin assisted Lee Whittlesey, Yellowstone National Park Historian, with identification and documentation of Spurgin's Beaver Slide (named for Captain William F. Spurgin, 21<sup>st</sup> Infantry). The site is a military feature related to the Nez Perce War of 1877.

**Publications/Reports –** Dan Eakin produced several publications.

**Programs Presented –** Brigid Grund, "Soil Microbes and Archaeology: Exploring the Potential at Hell Gap, Wyoming;" Dr. Todd Surovell, "Mapping People in Their Living Space: The Duikha Ethnoarchaeological Project;" Dr. Richard Adams, "The Shirley Basin Site Re-visited;" Dr. Danny Walker, "The Prehistoric Record for the Atlatl in Wyoming;" Michael Page, "The Game Creek Site: 10,325 Years of Human Occupation in Southern Jackson Hole;" Nathaniel Kitchell, "The Quispisisa Obsidian Source, Peru;" Dr. George Frison, "Punching Holes in Elephants;" Dr. Phil Roberts, "Giving Away a National Monument: Shoshone Cavern National Monument and Federal Land Policy in the 20<sup>th</sup> Century.

**Pumpkin Buttes Chapter –** No report was submitted.

**Sheridan-Johnson County:** No report was submitted.

**Upper Green River Basis Chapter:** No report was submitted.

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**Wyoming Archaeological Foundation  
2013 Annual Meeting Minutes  
April 28, 2013**

The annual meeting of the Wyoming Archaeological Foundation Board of Directors was held in conjunction with the Wyoming Archaeological Society Meeting at the Hilton Garden Inn, Laramie Wyoming, 7:30 am. Board members in attendance included Janice Baars (WAF President and Past-President WAS), Barb Nahas (Treasurer), Marcel Kornfeld (Hell Gap Site Manager), George C. Frison (Life-Time Member, ex-officio), Judyth Reed (Member-At-Large), John Laughlin (Member-At-Large) Mark Miller, (State Archaeologist, ex-officio) Bill Scoggin (WAS President, incoming), Larry Amundson (WAS President – outgoing), Todd Surovell (Frison Institute Director), Judy Wolf (guest), Nick Freeland (guest). Leland J. (L. J.) Turner (Member-At-Large - absent).

President Janice Baars called the meeting to order at 7:38 a.m.

L. J. Turner, newly elected member-at-large was absent from today's meeting.

Minutes of the last meeting: Janice asked if there were any additions, corrections on the 2012 Annual WAF Board Minutes. Hearing none, John Laughlin moved and Larry Amundson seconded a motion to approve the minutes. Passed unanimously by voice vote.

**TREASURER'S REPORT**

Barb presented and discussed the Treasurer's Report for Fiscal Year 2012.

Balance in checking as of  
04/01/2012                      \$4,152.76

Income:  
Henry Jensen Estate  
    (Oil Royalties)                      \$2,209.51  
WAS Dues Year 2012                      \$ 460.50  
Jensen Doctoral Award –

WAS/WAPA	\$ 500.00
University of Wyoming (Doctoral Match)	\$ 750.00
Book royalties	\$ 209.61
Clovis to Cowboy Posters	\$ 30.00
<b>Total Income</b>	<b>\$4,159.62</b>
<b>Expenditures:</b>	
Travelers Insurance	\$1,722.00
Wells Fargo – Safe Deposit Box	\$ 10.00
Goshen County Treasurer	\$ 451.25
Wyoming Secretary of State-Annual Report	\$ 28.00
Postmaster – Annual PO Rental/Postage	\$ 118.50
Jensen Doctoral Award Recipient	\$1,500.00
<b>Total Expenditures</b>	<b>(\$3,829.75)</b>
<b>Balance In Checking as of 03/31/2013</b>	<b>\$4,482.63</b>
<b>Reserve Funds</b>	
Foundation Operations Certificate of Deposit #6026430 (a/o 04/01/2012)	\$13,890.88
Interest Paid 2012/2013	\$ 6.89
Balance Ending (a/o 03/31/2013)	\$13,897.77
Money Market Account #20098502 (a/o 4/1/2012)	\$15,842.27
Interest Paid 2012/2013	\$ 17.78
Balance Ending (a/o 03/31/2013)	\$15,860.05
Foundation Operations Sub-Total	\$29,757.82
Henry E. Jensen Trust Certificate of Deposit #6015170 (a/o 04/01/2012)	\$18,794.61
Interest Paid 2012/2013	\$ 9.84

Balance Ending (a/o 03/31/2013)	\$18,804.45
Certificate of Deposit #6213161 (a/o 04/01/2012)	\$ 5,592.18
Interest Paid 2012/2013	\$ 2.76
Balance Ending (a/o 03/31/2013)	\$ 5,594.94
Jensen/Robson Research Grant Certificate of Deposit #6015170 (a/o 04/01/2012)	\$21,119.70
Interest Paid 2012/2013	\$ 9.85
Balance Ending (a/o 03/31/2013)	\$21,129.55
Jensen Trust Subtotal	\$45,528.94
George Frison Endowment Money Market Account #20098502 (4/1/2012)	\$ 39,903.00
Interest Paid 2012/2013	\$ 35.00
Deposits 2012/2013	\$ 62,270.00
Withdrawal 2012/2013	\$102,208.00
Balance Ending (a/o 03/31/2013)	\$ 0.00
Endowment Subtotal	\$ 0.00
<b>Total Net Worth as of March 31, 2013</b>	<b>\$79,769.9</b>

Mark moved, Judyth seconded that we accept the treasurer's report. Motion carried unanimously by voice vote.

This year's audit was completed by Judyth Reed, Janice Baars, and Larry Amundson. The books were reported to be in order. Mark moved and John seconded that we accept the auditor's report. Motion carried unanimously by voice vote. Volunteers for next year's audit committee are Judyth Reed, Larry Amundson, and Bill Scoggin.

Correspondence: none

**OLD BUSINESS**

Foundation Stationery: Barb reported that

we are waiting for the final stationary design from B. J. Earle. Barb reports that she is running out of stationary. Therefore, if she doesn't receive anything from BJ by the time she leaves for Alaska (July), she will email other possibilities to the board, so we can vote on a new logo.

**Foundation Inventory:** Barb made a trip to Laramie and looked at the material housed at the UW Archaeological Repository, with Marcel, and others. Barb is impressed with the curation of WAF material at UWAR. She found it to be very well organized and easy to work in. As a result, Barb recommends that we let the collection stay in the UWAR, rather than trying to do a separate inventory of the material. Barb will organize the records that she has in Cody using the same system used by the repository. In addition to boxes at her house, WAF has a safe deposit box in Cody; the box contains deeds, Certificates of Deposit, and the Jensen/Robson Trust. Barb and Eva Peden each have keys to the box. Marcel has information on publications written about the Hell Gap site. Marcel has just revised the list of theses, dissertations, publications, and other work completed on Hell Gap written since UW started working there in the 1990s. The list is available on the Advanced Archaeological Field Studies (ANTH 5180) web site or from Marcel. The board discussed the possibility of scanning these documents so they could be accessed more easily. Larry Amundson wondered where the title insurance for the property is kept. Barb said she will look to see if the document exists in the collection.

#### **NEW BUSINESS**

##### **Hell Gap:**

**Condition Report:** Marcel noted that while UW and WAF made some disability access improvements to the house and trailer a few years ago, these improvements were done in a haphazard fashion. Plans are underway to improve the access and work on other maintenance aspects of the house and lab-trailer at Hell Gap between May 22nd and June 1st. Barb Nahas, Stewart Keiry, Eva Peden, Don Peden, Nick

Palmer, Mary Lou Larson, and others have offered to help.

**2013 Excavations:** Excavation plans for this summer include field sessions starting July 2nd thru August 12th. The primary goal is to begin excavations in the area known as Locality IE (one east). The area is a critical part of Hell Gap research, because of existence of an old channel that cut through much of the area at some time in the Holocene period. Marcel also discussed Locality IV which is subject to erosion and other threats. The plan would be to do some excavations there in the future. Part of the excavation team will include members of UW's ANTH's 5180, Archaeological Field Studies course, taught by Marcel.

This area at Locality IE where excavations are planned this summer is outside of the existing structure and there is a need to cover the area of excavation. Marcel and Stewart estimate that the cost for the structure will be around \$2000. The original structure was funded by UW and private funds. Barb moved, Mark seconded that the Board add \$1000 to help with this extension. Motion carried unanimously by voice vote. Marcel reminded the board that it had approved funding last year of \$1000 to purchase between 20-30 steel posts and to fix the autogate. Due to health problems, the work was not completed. Barb states that the money will be available to complete the repairs whenever they can be done. Finally, plans are in the works to paint the house.

Marcel mentioned that when he took Charlie Hacker (NPS), Judy Wolf (SHPO), and Nick Freeland (SHPO) on a tour of the site to show Charlie the site and discuss the National Historic Landmark nomination that the group observed many more tipi-rings and a cairn in the vicinity of the tipi rings on the southwestern edge of the property (just south west of Locality II). Judy mentioned that a future plan would also be a detailed map and survey of the stone circles. Discussion centered on doing a simple map of the rings to document them. One possibility would be to do a drone survey, another

to use the total station to map circle locations.

Hell Gap National Historic Landmark Nomination: Judy Wolf reported on the progress of the nomination. Since last year, the Park Service has approved the briefing statement. SHPO hired Nick Freeland to write the nomination, which he completed this past fall. He received advice (editorial and subject advice) from Mary Lou and Marcel. The nomination is currently under review with the Park Service. Judy does not anticipate that it will be approved until late this year or next year. The nomination focuses on Localities I and II, arguing that the most significant portions of the site and the ones we know the most about are there. Richard Collier from the SHPO office did photos of the area for the nomination.

**FRISON INSTITUTE:**

Todd Surovell has been interim director of the Institute this year while Bob Kelly was on sabbatical, and he will take over officially as Director of the Institute for a three year term in Fall 2013.

Todd reported that the Institute through help from the Foundation has made their second \$100,000 fund raising goal for the Institute Endowment. This money will be matched by the state, giving the Institute approximately \$455,000. These funds will earn 3.75% interest/year. This will produce approximately \$17,000/year within two years to support archaeological research. Todd reports that annual operating expenses for the Institute are ~\$5,000, most of which is spent on the Fall Frison Institute meeting and lecture. This year the Institute has focused on funding student research including Brigid Grund, a PhD student who will be in Mongolia to identify evidence for children in the archaeological record. Allison Grunwald (PhD student) will study impact and cutmarks on frozen bison bone. Heather Rockwell (PhD student) received funding for her microwear analysis of Paleoindian projectile points from the east coast, and Mary Prasciunas received funds for work at UP Mammoth. The Institute

also provides yearly support in the form of the Rhoda O. Lewis non-traditional student scholarship (split between Rachael Shimek (MA student) and Les Brown (PhD student). Brian Schroeder (University of Montana PhD student) received funding for Thermoluminescence dates from the Alpine Archaeological Fund on pottery from High Rise Village (Fremont County, WY).

Todd announced that there will be a fund raiser August 3, 2013 in Dubois for the Alpine Archaeology Fund. This fund is designated for support of alpine research in Wyoming.

Todd asked the Board for a donation of \$5000 to the Institute. Discussion centered on fund availability and the mission of the foundation. Mark Miller moved and Barb Nahas seconded that the Board approve a \$5000 donation to the Institute. Motion carried unanimously by voice vote.

**JENSEN RESEARCH GRANT APPLICATIONS**

John Laughlin and Todd Surovell were asked to leave the room because of their conflicts of interest with the grants.

The board discussed the grant applications from Todd Surovell (Wold Ranch Buffalo Jump Project), Richard Adams (Moriah Ranch Archaeological Pilot Project), and Sarah Trabert (Social Identities beyond the Colonial Core). Larry Amundson and Barb Nahas seconded that the \$1000 grant be given to Todd Surovell, Motion carried unanimously by voice vote.

Election of officers: Barb nominated Judyth Reed as President and Mary Lou Larson as Secretary. Mark seconded. Janice asked the Board to accept the slate of officers. (Barb is treasurer by appointment by the board therefore no nomination necessary. She is considered member-at-large of WAS without a term on the WAF Board).

**ANNOUNCEMENTS**

**Jensen Travel Funds**

One PhD graduate student from UW was awarded the Jensen/Robson Doctoral Travel

Award for 2013. WAS, WAF and WAPA all participate in the funding for the Jensen/Robson Doctoral Travel Award at \$250.00 each. Allison Grunwald received \$750 from the fund this year. The University of Wyoming President's Office will match the total amount of the award (\$750.00) per discussions between Tom Buchanan (UW President) and Mark Miller.

Summer WAS meeting: Hell Gap, July 19-21, 2013.

Frison Institute/Wyoming Archaeology Month Lecture and WAS fall meeting: Laramie, September 26th Dr. Vance Holliday will present the lecture.

Next Foundation Meeting: The next WAS Spring Meeting and WAF Foundation Board meeting will be held at Pinedale Wyoming, hosted by the Upper Green River Basin Chapter, in early May 2014.

Mark Miller moved and Barb Nahas seconded that the meeting be adjourned. Motion carried unanimously by voice vote. (9:47 am).

**WAF Board Members 2012-2013:**

- Janice Baars (WAF President, WAS Immediate Past President)
- Barb Nahas (WAS Member at large Treasurer, ex-officio)
- Mary Lou Larson (Secretary, University of Wyoming, ex-officio)
- Mark Miller (State Archaeologist, ex-officio)
- Larry Amundson (WAS President)
- John Laughlin (Member-at-Large – Term Expires 2013)
- Judyth Reed (Member-at-Large – Term Expires 2014)
- George C. Frison (Lifetime member)
- Marcel Kornfeld (Hell Gap Site Manager) – non-voting
- Todd Surovell (George C. Frison Institute) – non-voting

**WAF Board Members 2013-2014:**

- Judyth Reed (WAF President, Member-at-Large – Term Expires 2014)

- Barb Nahas (WAS Member at large – Treasurer, ex-officio)
- Mary Lou Larson (Secretary, University of Wyoming, ex-officio)
- Mark Miller (State Archaeologist, ex-officio)
- Bill Scoggin (WAS President)
- Larry Amundson (WAS Immediate Past President)
- L. J. Turner (Member-at-Large – Term Expires 2015)
- George C. Frison (Lifetime member)
- Marcel Kornfeld (Hell Gap Site Manager) – non-voting
- Todd Surovell (George C. Frison Institute) – non-voting

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## **ANNOUNCEMENTS**

### **2013 WYOMING ARCHAEOLOGY AWARENESS MONTH PROCLAMATION**

Citing the importance of the study of Wyoming's "continuity and change in diverse cultures that thrived in the state," and a celebration of archaeology and the Legend Rock State Petroglyph Site, Governor Matt Mead proclaimed September 2013, as Wyoming Archaeology Awareness Month (WAAM).

September's WAAM celebration included the 15th Annual George C. Frison Institute of Archaeology and Anthropology sponsored lecture by Vance T. Holliday, PhD., School of Anthropology and Department of Geosciences, at the University of Arizona. Dr. Holliday's lecture "Hunting Gomphotheres at the End of the World: El Fin Del Mundo (Sonora, Mexico) and Clovis Archaeology in the Greater Southwest," was held on September 26 at the University of Wyoming Agriculture Auditorium. A reception followed in the Department of Anthropology foyer.

The centerpiece of WAAM is a poster pro-

duced every year. It is distributed statewide, nationally, and internationally to more than 5,000 people and organizations to commemorate Wyoming Archaeology Awareness Month.

Wyoming posters have been honored with numerous awards in the State Archaeology Week Poster Contest sponsored by the Society for American Archaeology's Public Education Committee and Council of Affiliated Societies.

The 2013 WAAM poster features Legend Rock and is available free of charge, and may be picked up at the State Historic Preservation Office, Barrett Building, 2301 Central Avenue in Cheyenne, or in Laramie in the Anthropology Building located at 12th and Lewis, Room 312.

The posters are also available via mail with a \$10 charge to cover mailing costs. Limit one poster per person. Send your request along with a check or money order payable to "Wyoming Archaeology Month" and your name and mailing address to: Judy Wolf, State Historic Preservation Office, Wyoming Archaeology Month, Dept. 3431, 1000 E. University Ave.,

Laramie, WY 82071.

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**CONGRATULATIONS TO WYOMING  
SHPO STAFF MEMBERS**

Congratulations to Judy Wolf and Richard Collier of the Wyoming State Historic Preservation Office on the award they received in September, 2013 from the Wyoming State Historical Society!!!!

The Historical Society awarded the society's annual *Judge and Mrs. Percy W. Metz Memorial Award* to Judy Wolf and Richard Collier. The award is a plaque and is presented to an individual or organization in recognition of outstanding contribution to the history of Wyoming in the field of photography or oral history which may span many years. Judy and Richard were nominated for the award by the Albany County Historical Society Chapter.

For twenty-four years, Wyoming Archaeology Awareness has been supported through the Wyoming State Historic Preservation Of-



2013 Wyoming Archaeology Awareness Month Proclamation signing by Wyoming Governor Matt Mead. See article on page 14.



Richard Collier and Judy Wolf with their 2013 Wyoming Historical Society *Judge and Mrs. Percy W. Metz Memorial Award*.

Richard Collier has been employed as SHPO's photographer for 31 years and has taken over 20,000 photographs for their collection. It is this collection from which Judy selects the photo for the annual poster.

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**PRELIMINARY ANNOUNCEMENT**

**Wyoming Archaeological Society/  
Wyoming Association of Professional  
Archaeologists**

**Spring 2014 Meeting: Pinedale Wyoming  
May 2nd through 4th, 2014**

Greetings! The Spring WAS/WAPA meetings are planned for Pinedale, Wyoming beginning on Friday, May 2nd and running through mid-afternoon on Sunday, May 4th. Blocks of rooms have been reserved for out-of town conference participants as follows:

A block of 25 rooms at a conference rate of \$89 (code WAS) is reserved at the Hampton

Inn and Suites, Pinedale (west end of town, next to BLM). Online contact: [pinedalesuites.hamptoninn.com](http://pinedalesuites.hamptoninn.com). Phone 307-367-6700; fax: 307-367-8883. We are told their complimentary breakfast is excellent.

A block of 25 rooms at a conference rate of \$89 (code WAS) is reserved at the Baymont Inn and Suites, Pinedale (west end of town, across the highway from Wyoming Highway Dept.). E:mail contact: [gm@staypinedale.com](mailto:gm@staypinedale.com). Phone 307-367-8300; fax: 307-367-3091. We are told the Baymont is pet friendly.

The Friday afternoon WAPA meeting is scheduled to meet in the Sublette County Commissioners Meeting Room on Friday afternoon, May 2nd from 1:00 pm to 4:00 pm. Enter the Sublette County building complex off of Tyler Ave (there's a traffic light on Pine St.) and follow the signs.

All WAS meetings are planned for the Sublette County Library Complex: Use the south entrance of the library complex on Charles St., one block south of Pine St. off Tyler. You can't miss it; it's a huge log structure with ample parking all around. On-site registration will be in the long hallway adjacent to the Lovatt Room, Friday afternoon through Saturday. Registration is required to access all WAS activities. Name tags identify WAS registrants and spouses.

The Friday evening Welcome Reception and Early Bird get together is scheduled for the Lovatt Room, (that's the Library's big meeting room) from 6:00 pm until 9:00 pm. Entrance and parking are off Charles Street. Cash bar and free snacks will be available on site.

The WAS Business Meeting is planned for the Lovatt Room Saturday, May 3rd, 08:00 to 10:00 am. Coffee and light snacks will be available free of charge. The Scholarship Committee will meet at the Library Board Room Saturday, Noon to 13:00 pm.

The Silent Auction will be held in the long hallway adjacent to the Lovatt Room Friday evening until Saturday evening.

Saturday's paper presentations are sched-

uled for the Sublette County Library Lovatt Room Saturday, May 3rd, from 10:00 am until 5:00 pm. Coffee, snacks (free of charge) and information will be provided on site. The Saturday evening banquet is scheduled for the Lovatt Room from 6:00 pm until ca. 10:00 pm. Banquet tickets will be available during registration (or pre-registration) and Pinedale is famous for putting out a good feed. Details, cost and menu will be forthcoming; planning is for a limited, but ample beef-centered menu with vegan and gluten free needs also accommodated. A cash bar will also be available. Our banquet speaker is Dr. Dennis Stanford, Smithsonian Institution, Washington, D.C. (topic: Peopling of the New World). Dr. Stanford is known to many of you as a dynamic, entertaining and inspiring archaeologist, so register for the banquet and enjoy Dr. Stanford! We sure will!

The WAS Foundation meeting is planned for the Library Board Room Sunday, May 4th, 7:00 to 09:00 am., adjacent to the Lovatt Room.

Sunday morning's field trip is planned to leave the Pinedale Library ca. 9:00 am 5/4/14 and travel to the Green River Valley Museum, a 45 minute drive from Pinedale. Here, we'll view the Wardell Buffalo Trap artifact exhibit and mural. Then, it's a short 15 minute drive to the actual Wardell Buffalo Trap (weather permitting) where the operation of the site will be expertly explained.

Additional self-guided trips to the Sommers Ranch Historic District, the Lander Trail, New Fork Crossing Historic Park and other regional historic sites (cf. Father DeSmet 1840 Prairie of the Mass; the 1832 Ft. Bonneville Site, Trappers Point, all National Register listed sites) are available to WAS registrants. Maps to these sites and informative brochures will be available at the Library.

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### **WYOMING ARCHAEOLOGICAL SITE STEWARDSHIP PROGRAM (WYSSP)**

Established in 2006, the Wyoming Archaeological Site Stewardship Program (WYSSP) is comprised of concerned people committed to protecting and preserving Wyoming's rich cultural heritage. Professional heritage/cultural resource specialists and trained volunteers work together to monitor cultural resources throughout the state, adding to the existing documentary record, sustaining a regular presence to deter looting and vandalism, and reporting these activities when they occur.

The primary purposes of the Wyoming Site Stewardship Program are:

1. To protect and preserve prehistoric and historic cultural resources for the purposes of conservation, scientific study, interpretation, and public enjoyment.
2. To increase public awareness of the significance and value of cultural resources.
3. To discourage/deter site vandalism and looting.
4. To assist with permanent management of monitored sites.
5. To promote understanding and cooperation between the Wyoming State Historic Preservation Office, the Bureau of Land Management, and the interested public.

Since 2006, several WYSSP training sessions have taken place around Wyoming. The BLM field office in Pinedale hosted the inaugural training with strong community interest and participation. BLM Cody has hosted several training sessions and volunteers regularly monitor a number of sites for that field office. Interested volunteers in the Rock Springs/Pinedale area have been successful monitoring a number of archaeological sites for the Rock Springs BLM including rock art and historic ranches.

The Wyoming Site Stewardship Program is sponsored jointly by the Wyoming State Historic Preservation Office (SHPO) and the United States Department of Interior, Bureau of Land Management (BLM) in Wyoming.



Absaroka Chapter member of the WAS at site stewardship training with Wyoming SHPO staff and Cody BLM staff.

Other agencies, organizations and individuals are invited to become official supporters of the program. In fact, the Wyoming SHPO would love to partner with the various chapters of the Wyoming Archaeological Society. If your chapter is interested in participating, then please use the contact information below. The Wyoming SHPO would love to come speak to your chapter about all that WYSSP has to offer.

For more information please contact Joseph Daniele (307-777-8793) or John Laughlin (307-777-3424) at the State Historic Preservation Office, or visit us on the worldwide web at <http://wyoshpo.state.wy.us/Steward/Index.aspx>.

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### **NATIONAL REGISTER OF HISTORIC PLACES STUDENT INTERNSHIP PROGRAM**

The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. Because listing in the National Register is largely honorary, the focus in Wyoming has tended to be on historic period buildings, sites, and districts. As a way to address this situation, in the fall of 2010

a new internship program was initiated by the State Historic Preservation Office in partnership with the University of Wyoming Department of Anthropology to work with graduate students who wish to obtain practical experience writing National Register nominations of important archaeological sites in Wyoming.

To date, seven nominations of archaeological properties have been successfully completed with the properties listed in the National Register of Historic Places and two nominations are in preparation:

- Muddy Creek Site Complex – Dr. Charles Reher and Julian Sitters – listed on May 16, 2012
- Trading Posts in Wyoming, Multiple Property Document – Greg Pierce – listed on July 18, 2012
- Southsider Shelter – Nick Freeland – listed on August 1, 2012
- Helen Lookingbill Site – Nicholas Freeland – listed on March 20, 2013
- High Rise Village - Heather Rockwell - listed on July 23, 2013
- Powder Wash Archaeological District – Melissa Benner (Texas Tech University) – listed on December 20, 2013
- LaBarge Bluff Petroglyph site – Melissa Benner (Texas Tech University) – Approved by the National Register Review Board September 2013 – forwarded to the Keeper of the National Register in January 2014
- Tolar Petroglyph Site – Elizabeth Lynch – in preparation Spring 2014
- New Fork Crossing Island Site – Greg Pierce – in preparation 2014

Greg Pierce was hired for a second internship during the fall 2011/spring 2012 semesters. Based on his research for the Multiple Property Document on trading posts, he prepared a public booklet titled *Negotiating the West: A History of Wyoming Trading Posts*. Two thousand copies were printed and have been widely distributed.

In addition, Nicholas Freeland began work

with Dr. Mary Lou Larson and Dr. Marcel Kornfeld on a National Historic Landmark nomination of the Hell Gap site as a student intern. After graduation, he was hired to continue work for the SHPO on this complex nomination.

For more information, contact Judy Wolf, Chief Planning and Historic Context Development Program - National Register of Historic Places Student Internship Program Coordinator, at [jkwolf@uwyo.edu](mailto:jkwolf@uwyo.edu) or 307-766-5366.

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#### **STATE ARCHAEOLOGIST TO RETIRE**

Dr. Mark Miller, Wyoming State Archaeologist, has formally announced his retirement effective June 6, 2014. Dr. Miller plans to stay active with his on-going archaeological and historical research topics. A national search has been initiated to recruit a replacement. It is hoped a new state archaeologist will be on-staff by the end of the summer.

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#### **2014 PRESERVE WYOMING CONFERENCE**

Please mark your calendar for the 2014 Preserve Wyoming Conference to be held in Powell, Wyoming at Northwest Community College. The Wyoming State Historic Preservation Office, Wyoming Main Street, Wyoming Office of Tourism, Powell Main Street, Park County Historic Preservation Board, the Wyoming State Historical Society and the Alliance for Historic Wyoming and beginning to plan a very exciting program on September 11 - 13, 2014. We will be holding a pre-conference workshop, tours and timely topics in historic preservation, and Main Street. There are great resources to see in the Powell area and we always have interesting and educational sessions. There are scholarships available through the Wyoming State Historical Society if you need travel assistance. We will also be

holding our Preserve Wyoming Awards banquet on Friday evening and a silent auction. We would love to have members of the Wyoming Archaeological Society attend!

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**UNIVERSITY OF WYOMING  
DEPARTMENT OF ANTHROPOLOGY  
SPRING 2014 SEMINAR SERIES**

**Friday January 24, 4:10pm CR 105**

Dr. Robert L. Kelly  
University of Wyoming  
*The Abyss: An Academic Archaeologist  
Looks at the Future*

**Friday February 14, 4:10pm AN 150**

Adam Liebman  
PhD Candidate UC Davis  
*Turning Trash into Treasure: Waste and  
Environmentalism in Postsocialist China*

**Friday February 28, 4:10pm AN 150**

Dr. Sarah Strauss  
University of Wyoming  
*The Yoga of Change: Energy, Climate,  
Culture*

**Friday March 28, 4:10pm ANTH 150**

Dr. Lin Poyer  
University of Wyoming  
*Experiences of Indigenous Peoples in  
World War II*

**Friday April 4, 4:10pm Agriculture Auditorium**

**18th Annual Mulloy Lecture**

Dr. Douglas Owsley  
Division Head of Physical Anthropology  
Smithsonian Institution  
*A Skeleton's Story from  
Jamestown's Starving Time*

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## EXCAVATIONS AT 48CR103 NEAR SAVERY CREEK, CARBON COUNTY, WYOMING

by

**James Gillentine, III and Dee Ann Espinoza**

### ABSTRACT

Data recovery excavations were conducted at 48CR103 in southern Carbon County, Wyoming. A single component was identified consisting of at least three features. Soil profiles from these excavations indicated a deflated dunal setting which experienced a high degree of erosion from extensive livestock grazing and extended drought conditions. While no radiometric datable material was recovered, lithic tools suggest a Middle to Late Plains Archaic Period of occupation. Artifacts and features show the area was lightly used by small groups of hunter-gatherers and likely represents a seasonal hunting camp.

### INTRODUCTION

Site 48CR103 was initially recorded by Colorado State University as part of the Savery-Pothook Project, a Class II Sampling Inventory (WYCRIS ID# 76), performed for the National Park Service in 1975 (Jennings and Daniels 1976). The resource was originally recorded as a multi-component site which included prehistoric and historic components. These components consisted of a light prehistoric lithic scatter and remains of an abandoned late nineteenth/early twentieth century ranch house. The ranch portion of the site was determined not eligible for inclusion on the National Register of Historic Places (NRHP) with the prehistoric portion being recommended as potentially eligible for inclusion to the NRHP (no criteria were provided). Both eligibility recommendations had

Wyoming State Historic Preservation Office (SHPO) concurrence. Further testing had been recommended on the prehistoric component to evaluate eligibility during the initial site recording.

In 2011, the Natural Resource Conservation Service (NCRS), working in concert with the Bureau of Land Management, Rawlins Field Office, requested an intensive testing of 48CR103 before construction of the Montgomery Livestock Reservoir adjacent to Coal Gulch Creek. Benchmark Environmental Consultants, Inc. was awarded a contract to conduct the data recovery project. The work was based on the research design developed before field efforts (Cannon 2011). Between June 25<sup>th</sup> and July 3<sup>rd</sup>, Benchmark, supported by Espinoza Cultural Services, conducted field investigations at 48CR103, consisting of mapping, surface collection, and excavation of 18 subsurface units. A data recovery report was issued in September 2011 (Gillentine and Espinoza 2011).

This article documents the results of these efforts at 48CR103. Overall, subsurface artifact density was extremely low with artifacts predominately occurring on the surface in highly eroded areas. All features were light, lens-shaped soil stains less than three cm thick. Beyond a descriptive analysis of the fieldwork and interpretation of the field results, the research had hoped to place the site within the context of the region's current understanding of the paleoenvironmental sequence (e.g., Broughton et al. 2008) and cultural historical questions (e.g.,

Metcalf 1987; Kornfeld et al. 2010). However, preservation issues (namely erosion and deflation), the dunal setting, and the brief periods of occupation at the site made inferences concerning hunter-gatherer lifeways, migrations and subsistence during the prehistoric period in the region minimal at best.

**SITE DESCRIPTION**

Site 48CR103 is a prehistoric open camp located on a low-lying ridge at the foot of a higher northwest-southeast trending ridge, overlooking Savery Creek to the north and east and Coal Gulch Creek to the north and west (Figure 1). The two creeks converge east of the site. The site is approximately 7,000 ft. (2,133 m) above sea level. The low ridge overlooks the Savery Creek floodplain to the northeast and is bound by larger ridges to the north and northeast. The site is approximately 20 to 30 feet (6-9 m) above the floodplain adjacent to Coal Gulch Creek.

The site is situated on Holocene and Pleis-

tocene alluvial fan deposits. The soil is fine-grained silt and silty loam overlying silty clay. Sparse and poorly sorted gravels of quartzite, quartz, sandstone, and various igneous cobbles typical of the surrounding areas are also present (USDA 2006). Exposed profiles revealed five to 25 cm of loosely compact, deflated dunal deposits. A moderately undulating contact with deeper, more clay-laden soils was likely created by repeated aeolian movement of soil and slope wash events.

Vegetation across the site is consistent with Wyoming Basin shrub steppe and consists of native sagebrush (*Artemisia tridentata*) and shadscale (*Atriplex confertifolia*) interspersed with prickly pear cactus (*Opuntia* sp.) and short prairie grasses (predominately *Fescue* sp.) (Knight 1994:Figure 2). The ridge formations upland from the site (Steele Shale, a gray marine shale including the Deep Creek Sandstone Member) outcrops dominate the slope. The top of the ridge consist of Hay Stack Formation,



Figure 1: Overview of 48CR103 in foreground, 48CR91 in the upper left hand corner, looking north-northeast (photo by Dee Espinoza).



Figure 2: Northwest overview of Coal Gulch Creek and ridge displaying Deep Creek Sandstone Member outcrops adjacent to 48CR103 (photo by Dee Espinoza).

consisting of gray marine shale and sandstone.

The prehistoric component of 48CR103 was originally recorded to be over five acres, but the current investigations revealed the site to be just over two acres and consisting of three thermal features and a sparse scatter of non-diagnostic and diagnostic lithic artifacts, faunal remains, groundstone, and dispersed fire-cracked rock. Subsurface artifact density was extremely low (one artifact per 53 m<sup>2</sup>) with artifacts predominately occurring on the surface in highly eroded areas. The most concentrated area of the site had one artifact every six m<sup>2</sup>.

Collectively, 65 point plotted surface artifacts and 18 excavation units (1x1 m) revealed three buried features (Figures 3 and 4) (Table 1). Several artifact and fire-cracked rock concentrations were visible on the site surface. Subsurface units were excavated to a maximum depth of 33 cm below the modern ground surface (cmbs). The diffuse, buried features were largely de-

flated lens-shaped ash-stained sediments. All were found at the contact between the aeolian deposits and the underlying, more clay-bearing deposits. It is suspected a considerable amount of downward percolation of artifacts and sediments has occurred over time. No distinct activity or isolated cultural components were visible during excavation activities. All features appeared expedient with none displaying formal preparation.

#### SITE INVESTIGATIONS

Surface investigations consisted of point plotting visible surface artifacts and other cultural manifestations. At 65 point plotted locations, 156 lithic and groundstone artifacts and fire-cracked rock (FCR) fragments were documented. Artifacts consisted of 129 pieces of lithic debitage, eight cores, two hammerstones, two retouched flakes, one expedient graver, eleven formal stone tools, three groundstone

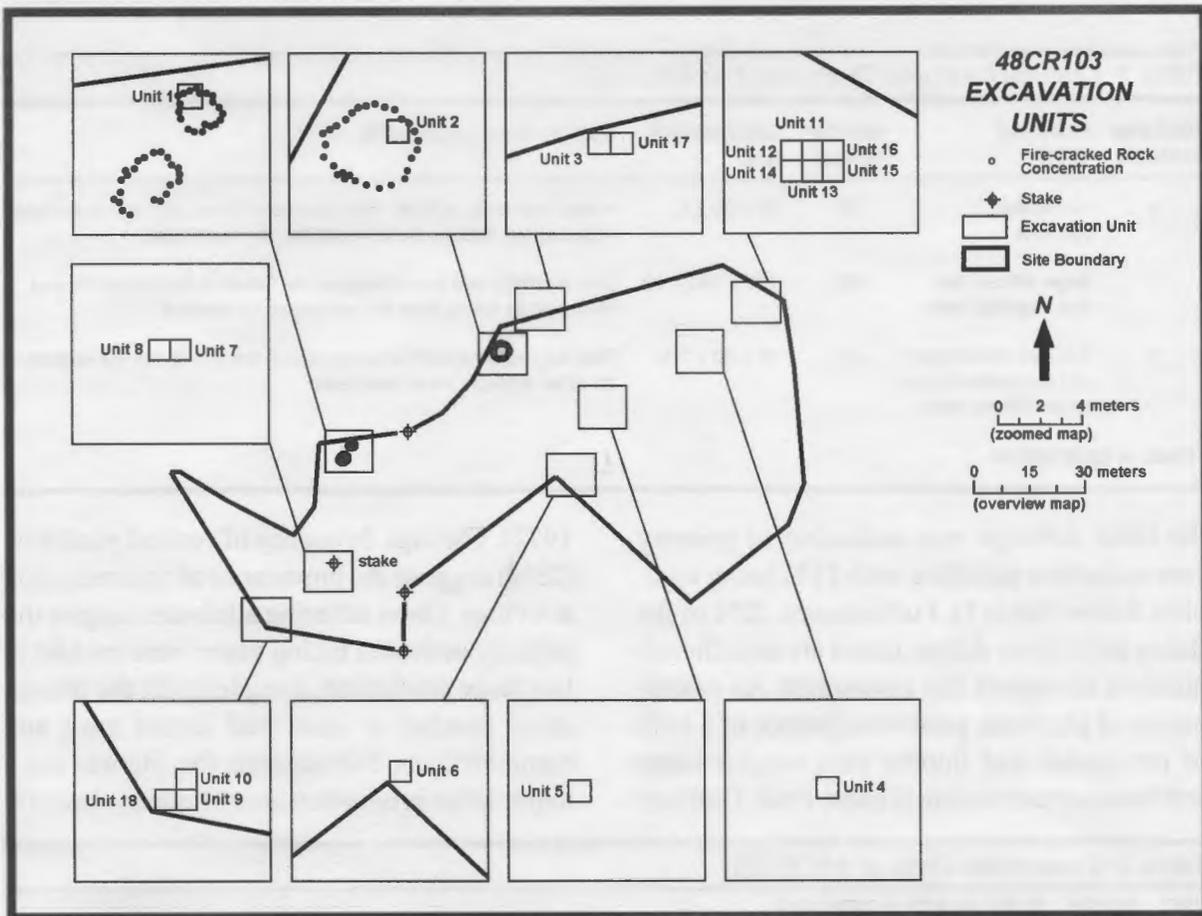


Figure 4: Subsurface investigations at 48CR103.

Sixteen of the units contained subsurface artifacts with most artifacts recovered from the upper levels (Table 2). It is suspected the soft, loosely compact soils in the upper stratum may have allowed artifacts to move vertically through the upper soil.

No morphological analyses were performed on the three thermal features located during subsurface investigations (Table 1). All were on the margins of the landform. Each was heavily deflated and impacted by either roots or rodent holes (for example, Feature 2; Figure 5 and Feature 3; Figure 6). These hemispherical features are typical of those found prehistorically throughout Wyoming. The size, content, and informal preparation of the features suggest these represent temporary cooking or heating fires associated with seasonal hunting or gath-

ering activities.

### LITHIC TECHNOLOGY

Lithic material recovered at 48CR103 consisted of 185 flaked stone tools and debitage, including nine cores, 13 formal tools, twelve informal tools, and 151 pieces of unmodified debitage. The following discussion will focus on attributes defined by Sullivan and Rozen (1985) because most of the flaked stone artifact assemblage was collected from the surface (n=141; 76%).

The overall assemblage is small, but an analysis of flake types appears to indicate the main site activity in relation to lithic production is, primarily, the creation of expedient tools from local materials and, secondarily, the creation or use of formal tools. Over 60% of

Table 1: Cultural Features Discovered at 48CR103

FEATURE NUMBER	FEATURE TYPE	DEPTH <sup>1</sup> (cmbs)	DIMENSIONS (cm)	ASSOCIATED ARTIFACTS
1	curvilinear ash lens	27	30 x 50 x 4	A few fragments of FCR, three quartzite flakes, and one chert flake in soil above feature, no artifacts directly associated.
2	large, diffuse ash and charcoal stain	20	130 x 190 x 10	One quartzite and one orthoquartzite flakes in the feature fill and six quartzite flakes from the soil above the feature.
3	thin oval of oxidized soil surrounded by a larger diffuse stain	15	18 x 30 x 1.5	Five fragments of FCR were located in the soil above the feature, no other artifacts were associated

<sup>1</sup> Depth is top of feature.

the lithic debitage was indicative of primary core reduction activities with 71% being complete flakes (Table 3). Furthermore, 22% of the flakes are angular debris. Cores are in sufficient numbers to support this assessment. An examination of platform, presence/absence of a bulb of percussion and lipping also suggest some soft hammer percussion (Frison 1968; Crabtree

1972). The high frequency of cortical platforms (23%) suggests the importance of core reduction activities. These differing attributes suggest the primary activities taking place were middle to late stage production. Coupled with the overall small number of recovered formal tools and hammerstones, this suggests the site was not a major lithic production area or quarry. Instead,

Table 2: Excavation Units at 48CR103.

UNIT	DEPTH (cms)	SUBSURFACE RESULTS	COMMENTS
1	21	Negative	In FCR Concentration #1: Surface: two fragments of FCR; Levels 1-2: no artifacts
2	33	Positive	In FCR Concentration #3: Surface: three FCR; Level 1: four FCR and four small fragment of FCR, two lithics
3	8	Positive	Level 1: ended at 8 cm, encountered Feature 3 at contact
4	25	Positive	Surface: one FCR; Level 1: ten lithics; Level 2: three lithics
5	30	Positive	Level 1: no artifacts; Level 2: three lithics, one modified flake, one thumbnail scraper, and two FCR; Level 3: two lithics and two FCR at top of level.
6	16	Positive	Surface: one lithic, Level 1: two lithics.
7	32	Positive	Surface: two lithics; Level 1: one FCR, two bone fragments, four lithics; Level 3: one bone fragment, three lithics
8	20	Negative	Surface: two FCR, one core fragment
9	30	Positive	Level 1: one fragment of angular debris and one lithic; Level 2: one fragment of angular debris; Level 3: one lithic.
10	31	Positive	Level 1: four fragments of FCR;
11	9	Positive	In Artifact Concentration #1: Level 1: 5 cm bmgs charcoal staining (Feature 2) encountered in southern portion of unit, opened adjacent units
12	6	Positive	In Artifact Concentration #1: Level 1: two lithics, 3 cm bmgs charcoal staining (Feature 2) encountered in eastern portion of unit, opened adjacent units
13	5	Positive	In Artifact Concentration #1: Level 1: 5 cm bmgs charcoal staining (Feature 2) encountered in northern portion of unit, opened adjacent units
14	3	Positive	Level 1: 2 cm bmgs charcoal staining (Feature 2) encountered in northeastern portion of unit, opened adjacent units
15	2	Positive	In Artifact Concentration #1: Level 1: one lithic, one FCR, 2 cm bmgs charcoal staining (Feature 2) encountered in northwestern portion of unit
16	3	Positive	In Artifact Concentration #1: Level 1: two lithics, 1 cm bmgs charcoal staining (Feature 2) encountered in southeastern portion of unit
17	10	Positive	Opened due to feature located in Unit 3. Level 1: one FCR, ended at Feature 3 at contract with very compact soil.
18	20	Positive	Excavated south half of unit one level (20 cm), no artifacts several fragments of FCR, ended level at top of Feature 1. Feature was exposed in sidewall of adjacent unit.



Figure 5: Feature 2 profile at 48CR103, facing south (photo by James Gillentine).

an expedient tool production locale using local materials with a secondary emphasis on formal tool production using local and non-local materials. The high frequency of smaller flakes and low frequency of bifacial thinning flakes indicates retouch of expedient tools, rather than crafting of formal tools. Lithic production at 48CR103 appears to reflect a range of activities associated with hunting and game processing.

**LITHIC RAW MATERIAL**

Locally available quartzite and non-local chert comprise 83% of lithic assemblage with lesser amounts of Knife River Flint, quartz, orthoquartzite, rhyolite, chalcedony, petrified wood, obsidian, Moss Agate, and fine-grained basalt (Table 3).

Quartzite is the most abundant raw material

Table 3: Distribution of Raw Material by Cortex at 48CR103.

MATERIAL	PRIMARY REGIONAL CORTEX	SECONDARY REGIONAL CORTEX	NO CORTEX	TOTAL
Quartzite	54	4	22	80
Chert	25	3	27	55
Knife River Flint	6		1	7
Quartz			6	6
Ortho-quartzite	1		4	5
Chalcedony	1		2	3
Rhyolite		3		2
Petrified Wood	1		1	2
Basalt	1			1
Obsidian			1	1
TOTAL	89 (55%)	10 (6%)	64 (39%)	163 (100%)

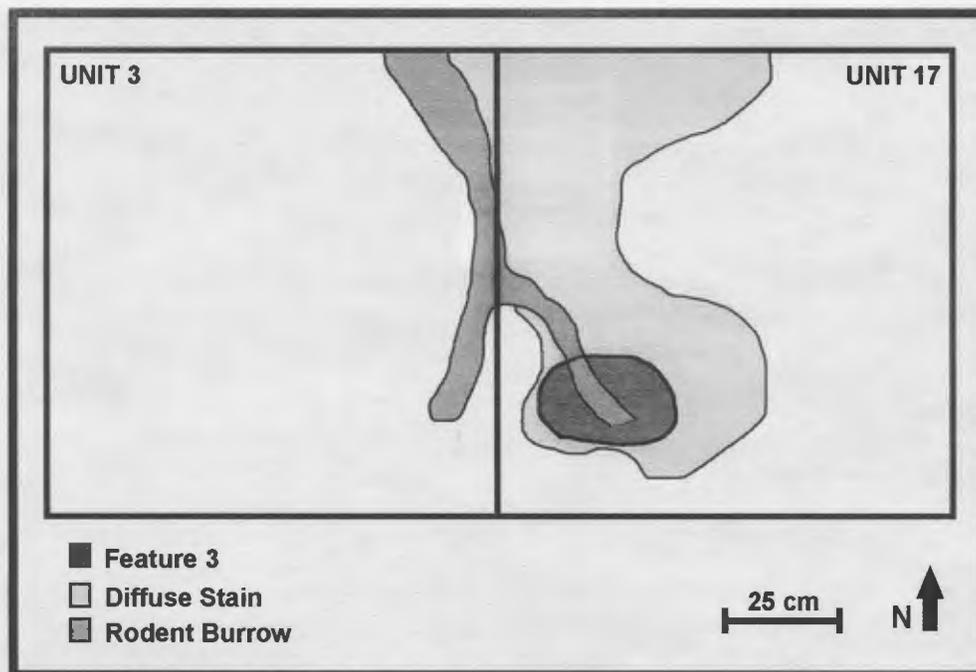


Figure 6: Feature 3, 48CR103, Units 3 and 17, planview.

in the assemblage and is the only local material. Raw quartzite cobbles were available along the low ridge at the site and plentiful on the ridge top (also noted by Barclay 1976). Some materials, such as basalt and rhyolite, are regionally present in the nearby Horse Mountains or in the Little Snake River (Green and Drouillard 1994). It is unknown where the chert may have originated, but seven pieces appear to be similar to Alibates chert and four appear similar to either Hartville Uplift or Madison Formation chert. True Alibates cherts would have come from Texas Panhandle, but Alibates-like cherts have been found in central Colorado and northeastern New Mexico. Hartville Uplift chert is found in eastern Wyoming roughly 150 miles to the east. Thirteen of the chert artifacts were gray with fusulinids, similar to several of the cherts from eastern Nebraska, such as Southbend and Nehawka chert, or could be a local chert from the Washakie Basin, west of the site. The closest source for moss agate is the Granite Hills of central Wyoming (Sweetwater River), which is approximately 85 miles north of the project area. The closest sources for obsidian

are either the Snake River Plain in northwest Wyoming/southern Idaho (approximately 375 miles northeast) or Cochetopa Dome in central Colorado (roughly 250 miles due south). While direct sourcing of lithics was not attempted, the possible sources of raw materials suggest the people who camped at 48CR103 had access to local and regionally procured materials, as well as some from farther distances such as the oolitic chert and obsidian.

### LITHIC TOOLS

The analysis of the lithic tools present at 48CR103 allows for more inferences to be made concerning the habitation patterns and types of activities. For example, most of the 14 tools recovered had low edge angles suggestive of light cutting (Table 4; Andrefsky 2005). Light cutting tools would be used for a variety of tasks such as game processing and gathering of non-woody plants.

Most tools are bifacial fragments or other expedient cutting tools such as modified flakes. Three items found indicate other activities, at least minimally, also occurred at the site.

Table 4: Edge Angles of Tools, 48CR103.

MATERIAL TYPE	LIGHT CUTTING (<40°)	HEAVY CUTTING (41-60°)	SCRAPING (>60°)	TOTAL
Quartzite	3			3
Chert	5		1	6
Knife River Flint	1			1
Quartz				
Ortho-quartzite				
Chalcedony	3			3
Rhyolite		1		1
Petrified Wood				
<b>Total</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>14</b>

A graver, SF 60, suggests an activity such as leather working (Figure 7); one chopper, SF 3, suggests woody plant processing (Figure 8), and a scraper, from Unit 5, suggests hide preparation (Figure 9). While these few tools suggest an array of activities, most suggest a focus on game and non-woody plant processing. The low frequency of artifacts and an emphasis on light cutting rather than chopping or scraping tools suggests short-term, seasonal occupation. A longer occupation would display wider range of activities and a higher density of artifacts.

The tools found at 48CR103 indicate repeated and short-term, task specific activities. While vertical integrity of artifacts at the site appears compromised, some horizontal integrity appears to be generally retained given the general distribution of surface artifacts. According to Gifford-Gonzalez et al. (1985), horizontal integrity appears to be retained in similar dunal setting even when vertical integrity has been lost. Impacts at the site would have, at the most,



Figure 7: Graver, SF 67, 48CR103.



Figure 8: Chopper, SF 3, 48CR103.

washed artifacts downslope toward the northern portion of the site.

Biface fragments and projectile points are found throughout the site with the chopper being found on the far eastern corner of the site near Coal Gulch Creek, the scraper in the farthest south central portion of the site, and the graver in the central portion of the site. Core reduction activities appear to be associated with thermal features with other processing activities (chopping, scraping, and boring hides) taking place away from thermal features.

Four diagnostic flaked stone tools were recovered from 48CR103: two projectile point fragments, one whole projectile point and a corner-notched knife (Figures 10-13). All four artifacts were recorded as surface finds during the initial surface mapping of the site. The late prehistoric point was unprovenienced and was recovered by NRCS personnel during a pre-



Figure 9: Thumbnail scraper, Unit 5, 48CR103.

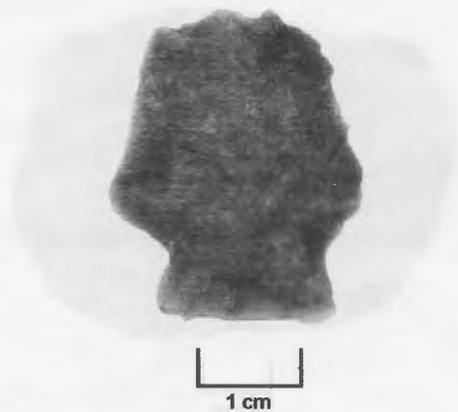


Figure 10: Archaic projectile point, SF 52, 48CR103.

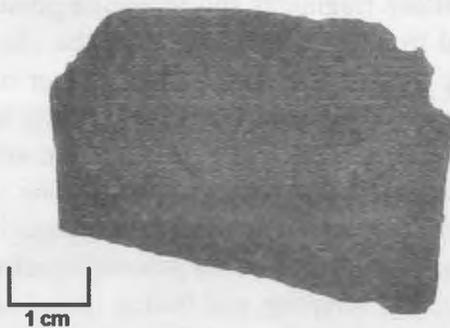


Figure 11: Corner-notched knife, SF 59, 48CR103.

work site visit (Figure 13).

The formal tools date predominately to the Middle to Late Plains Archaic Period. SF 52 is a 2.6 x 2.2 x 0.6 cm (length x width x thickness) notched arrow point with an expanding, straight based stem and upward rounded shoulders. This grey chert projectile point is characteristic of a Hanna Northern (Figure 10) dating between 4500-3000 B.P. The 4.7 x 3.9 x 0.5 cm corner tang knife, SF 59, was made from reddish-brown quartzite and is typically of those found during the Late Archaic Period (Figure 11). The unprovenienced formal tool is a 1.9 x 1.2 x 0.3 cm chalcedony projectile point, similar to an Elko corner-notched, which normally dates between 4000 and 2000 B.P. (Figure 12). SF 65 is a 1.2 cm wide x 0.2 cm thick projectile point



Figure 12: Projectile point fragment, SF65, 48CR103.



Figure 13: Unprovenienced Late Archaic/Late Prehistoric projectile point, 48CR103.

base made from white chert. This Late Plains Archaic/Late Prehistoric Period point base is likely a Glendo Arrow, dating between 1500-800 B.P. (Figure 13).

Each of the formal tools displays retouch, modification, or use. While many researchers have examined fracturing and use-wear in archaeological samples and experimental settings (Crabtree 1972; Ho Ho Committee 1979; Johnson 1979; Frison and Bradley 1980; Bradley 1982; Odell and Cowan 1986; Bradley and Frison 1987; O'Farrell 1996), because of the small size of this collection, macrofractures were only classified using Frison (1974) and Fischer et al. (1984). SF 52 displays retouch along one margin and the point. The end of the tool displays point initiation or cone fracture scarring from being broken from impact at the tip (Ahler 1979). The tang knife displays a perverse fracture which was retouched followed by a hinge fracture on the adjacent corner, rendering the tip of the knife blunt. SF 65 displays light remodeling of the base and a bending snap fracture which likely occurred during the base

remodeling. The unprovenienced point displays remodeling along one margin with a small impact scar after the remodeling, but is otherwise in seemingly original condition.

All of the Archaic Period points appear to have been broken, retouched, and broken again during remanufacturing. The second break likely lead to their discard. The other unprovenienced point displays retouch, then an impact fracture on its margin. This suggests the point may have been lost during use and thus incidental to the main site use.

### GROUNDSTONE

Four groundstone fragments, three grinding slabs and one mano, were located on the site surface. Each was highly fragmented and lightly used on one side, suggesting they had been discarded or reused. Three display pecking on the grinding surface or along the margins of the grinding area. Two showed evidence of reuse; one has flake scars and one is fire-cracked.

All groundstone artifacts are the type of milling equipment used on wild food resources, rather than domesticates like corn. All fragments were situated on the northern margins of the site where the surface is most deflated and subject to the largest amount of erosion. The materials could all be found locally or regionally and include quartzite, sandstone, and rhyolite. In general, the type, use and groundstone material supports short-term occupation of the site with plant processing being a minor task related to site use.

### HAMMERSTONES

Two hammerstones were located on the surface, in the northeast portion of the site. One 9.4 x 5.3 x 2.7 cm fine-grained gray quartzite hammerstone displayed moderate use on both ends. The other, a 9.2 x 4.0 x 2.8 cm gray granite hammerstone, had moderate use on one end. One hammerstone was recovered on the surface above Unit 11.

Both hammerstones were of expedient

manufacture and were made from local or regionally derived materials. They were located within Artifact Concentration 1, which appears to have been a lithic processing locale.

### FAUNA

The recovered faunal assemblage consisted of four indeterminate long bone fragments from a large-sized mammal. The cortical thickness of all four bone fragments is consistent with deer/pronghorn, but no positive identification can be made because of the overall fragment size. Each bone displays cutmarks but no other modifications. Bone fragments were recovered from Unit 7, Levels 1 and 2, and from the NRCS's shovel test unit.

### SPATIAL ANALYSIS

Poor site condition from deflation and probable alluvial movement of artifacts downslope to the north hindered an in-depth evaluation of surface artifacts based on location. Despite the poor condition, an examination of the site surface may provide the best clues to site function as at least some horizontal integrity appears to have been preserved enough for a general examination of the distribution of artifacts across the site surface.

Most surface artifacts were located downslope and on the northern margin of the site. This area also contained three fire-cracked rock concentrations which represent the sparse remains of small thermal features, one artifact concentration, and two deflated thermal features.

Artifact Concentration #1 consisted of 20 lithic artifacts, five cores and core fragments, two hammerstones, two biface fragments, one fire-cracked mano fragment, and seven fragments of fire-cracked rock in a 200 m<sup>2</sup> area along the northeastern site margins. Excavation Units 11-16 were placed in this area, revealing Feature 2, a deflated hearth, and eight additional flakes. Flakes associated with this concentration and feature were primarily from core reduction

activities. Roughly 90% were core reduction flakes with 60% containing cortex. This area had the highest diversity of both artifacts and raw lithic materials than any other area of the site. Subsurface excavations revealed the area was predominately deflated with less than nine cm of buried cultural deposits. The lithic debris suggests core reduction and tool sharpening activities. The mano is fire-cracked and as such does not represent primary use at this location. Overall, the diversity of artifacts in this task area suggests it was likely used for short periods, probably a single incident, to process game and/or non-woody plants.

Ten meters to the east is a small 10 x 3 m area containing three cores and eleven flakes. The lithic debitage is fairly large, 3-4 cm, resulting from core reduction activities. Three of the flakes also demonstrate bifacial retouch on one edge. Use of this area was likely similar to Artifact Concentration #1.

Two FCR Concentrations (#1 and #2) were located in the northwestern margin of the site. FCR Concentration #1 was a 3 x 2 m (NE/SW x NW/SE) disbursement of six FCR. FCR Concentration #2 is approximately two meters northeast from FCR Concentration #1 and consists of a scatter of eight FCR in a two meter diameter. Excavation Unit 1 was placed over this concentration, and revealed two additional fragments of FCR but no other cultural materials. Artifacts in general are sparse in this area of the site with a light scatter of core reduction flakes and FCR along the margin.

FCR Concentration #3 was located in the north margin of the site. This five meter diameter concentration consisted of seven FCR and eleven flakes. Unit 2 was placed in this area, revealing eight additional FCR fragments, two lithics, and less than four cm of buried cultural deposits. Flakes from this concentration consisted of seven quartzite, three orthoquartzite, two chert, and one of Knife River Flint. These flakes were primarily the result of core reduction activities (n=11) with two biface thinning flakes.

Only four of the 14 formal tools found were located on the north end of the site where surface artifacts are most numerous. All task-related tools, like the scraper, chopper, and graver, and two projectile points were located in areas with sparse artifacts. These either represent incidental use of the site or activities not representing the main site occupation.

### **DISCUSSION**

Site 48CR103 was initially recorded during an archaeological survey in September 1975. The initial site recorders recommended it should receive further testing to determine the site's eligibility for the National Register of Historic Places and any research potential the site might have. The present project was to recover any data available from the site before the proposed construction and, if possible, to answer questions about or provide a better understanding of site use and how it relates to the overall prehistoric settlement pattern of the period(s) during which it was occupied.

It was hoped 48CR103 would contain intact subsurface material and well-preserved macro-botanical, bone, and other organic material, which would assist in establishing a better picture of the prehistoric landscape. The excavated units showed the soils to be extremely deflated. Unfortunately these highly deflated soils made it difficult to estimate the amount of damage other impacts, such as looting, livestock, and erosion, have had over time.

The subsoil was generally reached within 20 to 30 cm of the modern ground surface. Most artifacts recovered during the excavation were part of the initial surface collection. All test units showed little in the way of subsurface artifacts, and the features noted presented no discreet form and little integrity.

### **RESEARCH QUESTIONS**

Changing views on the Archaic have come to light recently with more detailed field excavations and new methods and technologies.

Once thought to be a long period of stasis, the mid-Holocene appears to be having been fairly dynamic with a range of new technologies and subsistence patterns developing (Larson and Francis 1997; Cannon 2011).

During drafting of the research design (Cannon 2011), it was speculated 48CR103 would date to earlier in the Archaic Period when the area was more impacted by climatic change. The short duration of site use and the temporally later occupation of the site hindered the answering of two of the three questions posed in the research design. Useful information can still be derived from the features and artifacts associated with this site. The focus of the following section will be on what answers the site may contain rather than those it cannot.

The questions put forth in the research design were:

1. *Is cultural change tied to changes in the local environment?*
2. *How did people's use of the location change over time?*
3. *How do local adaptations dovetail into larger cultural systems?*

### ***Cultural Change and the Local Environment***

According to current theory, approximately 5,000 years ago environmental conditions in the region began to receive more moisture (Thompson and Pastor 1995). This climatic change likely led to an increase in large herbivores and changes in the flora. 48CR103 was occupied well after the start of this change and likely did experience moister seasons. Exactly how much moister this particular region received 5,000 years ago is unclear as site integrity did not lend itself to macro-botanicals or carbon preservation. Furthermore, the site lacked intact subsurface features and buried groundstone from which pollen or phytoliths could be derived to reconstruct the local environment. Ultimately, the current research could not ad-

dress this question. When examining sites found during inventories in this general region, many of them did not have temporal designations and none have been excavated. 48CR103 is typical of sites in the Middle to Late Archaic, by representing a temporally short occupation with use concentrated on specific seasonal tasks.

### ***Location Use and Change through Time***

Cultural features recorded at the site were consistent in form, numbers, and setting, with activities associated with a seasonally used site. The features were all light charcoal stains, with no discreet shape. The features lack the permanence of house pits or slab-lined hearths and are more consistent with ephemeral seasonal use, such as a hunting camp or deer/antelope kill site.

In terms of a larger region and cultural sphere, the general material and consistency of the lithic debitage indicates a Middle to Late Plains Archaic period occupation. This is also suggested by the material composition of the overall tool assemblage. Both are consistent with the subsistence and resource procurement strategies of highly mobile groups common to the Middle to Late Plains Archaic. The groundstone artifacts also are indicative of similar activities. The four temporally diagnostic artifacts from the site suggest a broad date(s) of occupation based on the commonly accepted chronology of point and tool types, from roughly 4,000 to 3,000 B.P. The single Late Archaic/Late Prehistoric projectile point has no provenience but is clearly temporally different from the rest of the assemblage.

The overall material remains consist primarily of lithic debitage, with low quantities of FCR and groundstone fragments. The low number of tools at the site and their condition suggests they were broken during remanufacturing and discarded. The setting and tool assemblage indicate a lightly used seasonal hunting camp.

Several factors suggest this site was a briefly occupied stopping point on a seasonal round by a small group. The lithic materials

are both local and non-local. All of the formal tools and some informal tools demonstrate one or more instances of retouch. Most groundstone was reused as hearth stones.

Other sites in the vicinity demonstrate similar characteristics. In 1984, an inventory of cultural resources in the upper Savery Creek area, including Coal Gulch, Bird Gulch, and Little Savery Creeks, was conducted for the proposed Upper Savery Reservoir (Moe 1985). The reservoir was never built but it did outline sites along the drainages. These consisted of three lithic scatters, five camp sites (including 48CR103), two small bison kill sites, one small rockshelter, and one groundstone site. All of the sites were originally recorded in the 1970s and 1980s. The 1970s recordings also consisted of surface collections. At least three of the sites were documented as containing projectile points, but none were described or typed in the report. From the sparse information provided, activities in this region appear to be similar to those expressed at 48CR103: a short-term occupation centered on activities associated with tools used for non-woody plant gathering or animal processing, or tool production. None of these sites contained the density of artifacts or complexity of features necessary for long-term habitation. Sites less than a half mile north, such as 48CR91, 48CR4084, and 48CR4085, may provide additional clues to micro-regional occupation.

Even without temporal designations for many of the sites in the immediate region, site use appears to be relatively uniform throughout the Upper Savery Creek area, regardless of time. The area was used sporadically and seasonally from at least the Archaic through the Late Prehistoric Periods. Further studies at the sites in the region may provide evidence of more permanent settlements.

### ***Local Adaptations and the Larger Cultural System***

Researchers have theorized this region

forms part of a corridor connecting the Great Basin and the Northern Plains with use spanning into the adjacent Rocky Mountains (La Point 1987). It is seen as a location of cultural contact, mixing, and population movement. Nomadic traditions between the Great Basin and Northern Plains in the Archaic Period are similar. The most prevalent culturally diagnostic materials in these regions during the Archaic Period are lithics as the mobile groups do not have other durable diagnostic cultural markers, such as ceramics. Fortunately, this site has clearly diagnostic formal tools which allow us to examine how it fits into the larger cultural system.

The relevant formal tools for this discussion are: one Hanna Northern, one Elko Corner-notched, and one Glendo arrow projectile point, one corner-tang knife, and one graver. All other tools, including bifaces, scrapers, informal tools, cores, etc., are similar between the regions. 48CR103 sits on the southernmost extent of the range for Hanna Northern Points. The Hanna tradition is typically one of the Northern Plains. The Elko Corner-notched is a Great Basin tradition point found as far east as Wyoming and Montana. The Glendo Arrow Point is found from New Mexico north to Montana and into Idaho and Nebraska. The tradition is predominately Plains based. Corner-tang knives are a greater Plains tradition and being found in sparse quantities from Texas north through the Northern Plains.

With the understanding that small, mobile groups of the Middle and Late Archaic moved fluidly across the landscape, 48CR103 appears to fit more into a Plains model of cultural development rather than a Great Basin. Great Basin influence can be seen in the presence of a Desert-style corner-notched point.

### **CONCLUSIONS**

Investigations at 48CR103 show this site was a predominately Northern Plains tradition seasonal camp for exploiting non-woody plants

or game during the Middle to Late Archaic Period. It is one of several similar sites within the Upper Savery Creek area. With the deflation of original dunes once comprising the site, investigations extracted the maximum amount of information from the cultural remains present. While being unable to answer as many questions as researchers would have liked, 48CR103 provides a brief snapshot of the people who inhabited the Savery Creek area over 4,000 years ago.

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**REFERENCES CITED**

Ahler, Stanley  
 1979 Functional Analysis of Non Obsidian Chipped Stone Artifacts: Terms, Variables, Quantification. In: *Lithic Use-Wear Analysis*, edited by Brian Hayden, pp. 301-328. Academic Press, New York.

Andrefsky, William Jr.  
 2005 *Lithics Macroscopic Approaches to Analysis*, Cambridge University Press, New York, NY.

Cannon, Kenneth P.  
 2011 *Data Recovery Plan for 48CR103, Carbon County, Wyoming*. Benchmark Environmental Consultants and USU Archeological Services, Inc., Dallas.

Bradley, Bruce A.  
 1982 Flaked Stone Technology and Typology. In: *The Agate Basin Site: a Record of the Paleoindian Occupation of the Northwestern High Plains*, edited by George C. Frison and Dennis J. Stanford, pp. 181-20. Academic Press, New York.

Bradley, Bruce A. and George C. Frison  
 1987 Projectile Points and Specialized Bifaces From the Horner Site. In: *The Horner Site. The Type Site of the Cody Cultural Complex*, edited by George C. Frison and Larry C. Todd, pp. 199-232. Academic Press, New York.

Barclay, C. S. V.  
 1976 *Preliminary Geologic Map of the Tullis Quadrangle, Carbon County, Wyoming: U.S. Geological Survey*. Open-File Report OF-76-794, scale 1:24000. Accessed digitally, July 2012 at: [http://ngmdb.usgs.gov/Prodesc/proddesc\\_15426.htm](http://ngmdb.usgs.gov/Prodesc/proddesc_15426.htm)

Broughton, Jack M., Dave A. Byers, Reid A. Bryson, William Eckerle, and David B. Madsen  
 2008 Did Climatic Seasonality Control Late Quaternary Artiodactyl Densities in Western North America? *Quaternary Science Reviews* 27(19-20):1916-1937.

Crabtree, Don E.  
 1972 *An Introduction to Flintworking*. Occasional Papers Idaho State Museum 28. Pocatello.

Fischer, Anders, Peter Vemming Hansen, and Peter Rasmussen  
 1984 Macro and Micro Wear Traces on Lithic Projectile Points. *Journal of Danish Archaeology* 3:19-46.

Frison, George C.  
 1968 A Functional Analysis of Certain Chipped Stone Tools. *American Antiquity* 33:149-55.  
 1974 *The Casper Site: A Hell Gap Bison*

- Kill on the High Plains*. Academic Press, New York.
- Frison, George C and Bruce A. Bradley  
 1980 *Folsom Tools and Technology at the Hanson Site, Wyoming*. University of New Mexico Press, Albuquerque.
- Gifford-Gonzales, Diane P., David B. Damrosch, Debra R. Damrosch, John Pryor, and Robert L. Thunen  
 1985 The Third Dimension in Site Structure: An Experiment in Trampling and Vertical Displacement. *American Antiquity* 50: 803-818.
- Gillentine III, James and Dee Ann Espinoza  
 2011 *Montgomery Livestock Reservoir Project in Carbon County, Wyoming: Eligibility Testing at 48CR103*. Benchmark Project Number: 4533-11C, Fort Worth, Texas.
- Green, Gregory N. and Patricia H. Drouillard  
 1994 *The Digital Geologic Map of Wyoming in ARC/INFO Format*. U.S. Geological Survey Open-File Report 94-0425. Accessed digitally, July 2012 at: <http://mrddata.usgs.gov/sgmc/wy.html>
- Ho Ho Committee  
 1979 The Ho Ho Classification and Nomenclature Committee Report. In: *Lithic Use-wear Analysis*, edited by Brian Hayden, pp. 133-135. Academic Press, New York.
- Jennings, Calvin H. and Donna C. Daniels  
 1976 *Preliminary Report on the Archaeological Reconnaissance of the Savery-Pot Hook project, Colorado and Wyoming*. Prepared by Laboratory of Public Archaeology, Colorado State University, Fort Collins. On file, Wyoming State Historic Preservation Office, Cultural Records, Laramie, Wyoming.
- Johnson, Jay K.  
 1979 Archaic Biface Manufacture: Production Failures, A Chronicle of the Misbegotten. *Lithic Technology* 8(2):25-35.
- Knight, Dennis H.  
 1994 *Mountains and Plains: The Ecology of Wyoming Landscapes*. Yale, New Haven.
- Kornfeld, Marcel, George C. Frison and Mary Lou Larson  
 2010 *Prehistoric Hunter-Gatherers of the High Plains and Rockies*. Third Edition. Left Coast Press, Walnut, California.
- La Point, Haleyon  
 1987 *An Overview of Prehistoric Cultural Resources: Little Snake River Resource Area, Northwestern Colorado*. Colorado Bureau of Land Management, Cultural Resource Management Series #20. Denver, Colorado.
- Larson, Mary Lou and Julie Francis  
 1997 *Changing Perspectives of the Archaic on the Northwest Plains and Rocky Mountains*. University of South Dakota Press, Vermillion.
- Metcalf, Michael D.  
 1987 Contributions to the Prehistoric Chronology of the Wyoming Basin. In: *Perspectives on Archaeological Resources Management on the Great Plains*, edited by Alan J. Osborn and Rick C. Hassler, pp: 233-262. I&O Publishing Company, Omaha, Nebraska.
- Moe, Jeanne M.  
 1985 Results of a Class III Cultural Resource Inventory of the Proposed Upper Savery Reservoir, Carbon County, Wyoming. Unpublished Cultural Resource Management Report prepared for Wyoming Water Development Commission, by the Wyoming Office of the State Archaeologist. On file, Wyoming State Historic Preservation Office,

Cultural Records, Laramie, Wyoming.

Odell, George H. and Frank Cowan  
 1986 Experiments with Spears and Arrows on Animal Targets. *Journal of Field Archaeology* 13: 195-212.

O'Farrell, Magen  
 1996 *The Functional Technology of Gravette Points from the Site of Corbiac*. Dipomes d'Etudes Approfondies, Universite' Bordeaux 1.

Sullivan, A. P. and K. C. Rozen  
 1985 Debitage Analysis and Archaeological Interpretation. *American Antiquity* 50:755-779

Thompson, Kevin W. and Jana V. Pastor  
 1995 *People of the Sage: 10,000 Years*

*of Occupation in Southwestern Wyoming*. Archaeological Services, Western Wyoming Community College, Rock Springs.

USDA -- United States Department of Agriculture  
 2006 *Soil Data Mart*. Accessed on July 2012 at <http://websoilsurvey.nrcs.usda.govfapp/WebSoilSurvey>

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**BESANT-WOODLAND ARTIFACTS FROM  
THE CEDAR GAP SITE (48NA83)  
IN NORTHWESTERN NATRONA COUNTY,  
WYOMING**

by

**David G. Eckles, Jody A. Clauter, Mark E. Miller  
and Danny N. Walker**

The Cedar Gap site is located in extreme northwestern Natrona County, Wyoming, among the southernmost foothills of the Big-horn Mountain Range and eastern fringe of the Wind River Basin (Figure 1). Artifacts and features are found along an ephemeral drainage and on a nearby ridge and hill slopes and tops.

The site was brought to the attention of the Bureau of Land Management (BLM) by Henry Jensen of the Casper Chapter, Wyoming Archaeological Society in 1974. It was initially recorded by Daniel Hutchinson of the BLM in the summer of 1974 and a brief site form was prepared. The site is located on lands administered by the Wyoming Office of State Lands and Investments. It was described as consisting of a camp site containing stone circles, rock piles (cairns), Middle Period projectile points, cordmarked pottery and bison bone eroding from the bank of an arroyo.

Subsequent investigation was carried out in the spring of 1990 by George Frison, Mark Miller, and Don Davis of the University of Wyoming Anthropology Department and Office of the Wyoming State Archaeologist. Several surface artifacts, including a Besant point from the bison bone bed, were collected. A charcoal sample from the bone bed was also recovered. In the summer of 1992, a field school under the direction of Susan Hughes (University of Wash-

ington) spent about 10 days mapping the site, conducting a surface collection, and excavating test units. The bulk of the analysis herein derived from the results of the field school studies.

The site was nominated to the National Register of Historic Places in 1993 and was enrolled in 1994. Collections, field notes, and laboratory notes from 48NA83 are housed at the University of Wyoming Archaeological Repository.

Features found at the site include at least 68 stone circles, 34 stone cairns, a stone lined pit, a bison bone bed seen eroding from an arroyo cut, an extensive surface scatter of chipped stone artifacts, and a few ceramic sherds. Late Archaic period Besant points, probable corner-notched Pelican Lake points, and a Late Prehistoric arrow point were collected from the surface. Several cordmarked (Woodland) ceramic sherds were also collected. Probable Late Prehistoric to Protohistoric Crow pottery fragments were also found on the surface and in the area of one of the stone circles.

Test excavations by Susan Hughes and the field school were conducted within the bison bone bed, one of the stone circles, and in areas near the bone bed appearing to be processing locations. Block Area A included 14 test units placed on the east side of the arroyo opposite the bison bone bed. Block Area B included eight test units placed just north of Block Area

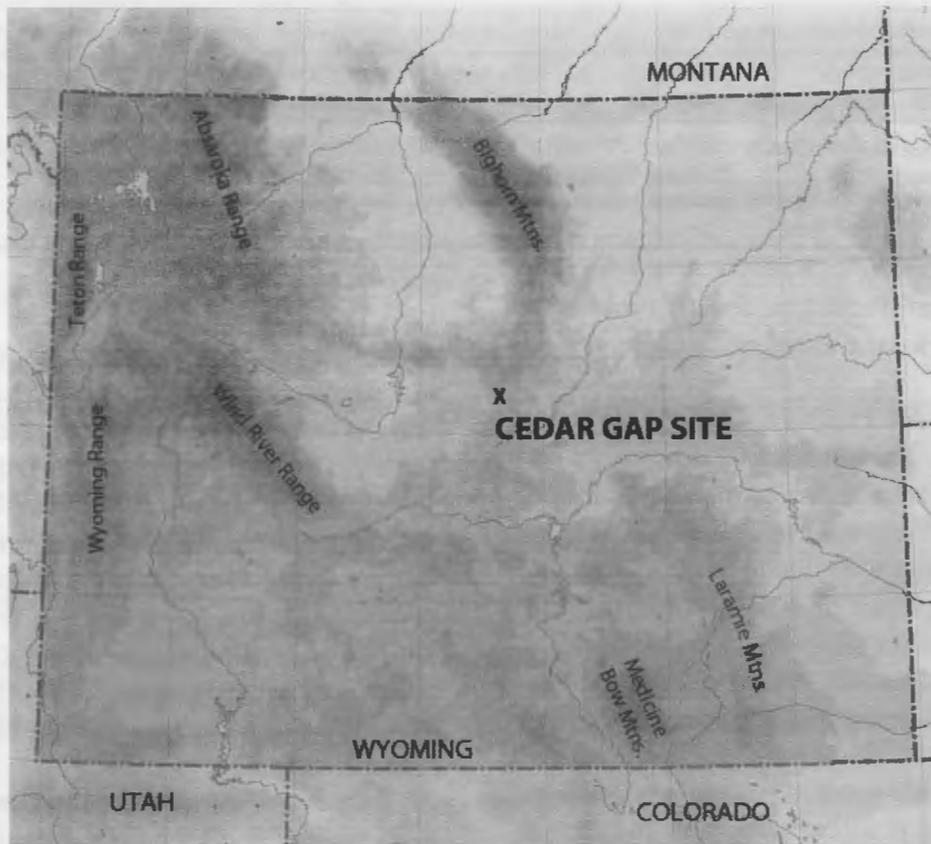


Figure 1: Map of Wyoming showing the location of the Cedar Gap Site.

A. Block Area C included four test units and was located within a stone circle. Block Area D included three test units and was placed on the west side of the arroyo just south of the bison bone bed and west of Block Area A. No site map is currently available.

The depth of excavations in each of the block area units rarely exceeded 50 cm below surface; some units reached only 25-30 cm below surface. Regardless of depth, a relatively large quantity of broken animal bone (mostly bison and a few small mammals), chipped stone artifacts (mostly debitage), ceramic sherds, and fire altered rock were recovered from Block Areas A, B, and D. Remnants of hearths were noted in Block Areas A and B. Cordmarked (Woodland) sherds were found in all three of these excavation blocks. In fact, pottery fragments were found in nearly all levels excavated. Besant points were recovered from the upper

and lower levels of Block Areas A and B. The remains found in these block areas appear to be similar to others which are associated with bone processing.

Radiocarbon dates from the various investigations are presented (Table 1). Based on laboratory notes associated with the 48NA83 collection, the 1820 B.P. and 1960 B.P. dates are considered to be associated with the Besant-Woodland component; the 2540 B.P. date is likely too early for this component and may be inaccurate or dates to an earlier, unrecognized occupation.

Relatively few remains were recovered from Block Area C (stone circle). They include probable Crow pottery fragments, chipped stone debitage, and weathered bone fragments. A small tri-notched arrow point was found on the surface of the site and may be associated with this component. The date of 185 B.P. indicates

Table 1: Radiocarbon dates from the Cedar Gap Site (48NA83). All dates are uncorrected.

LOCATION WITHIN THE SITE	MATERIAL SAMPLED	RADIOCARBON DATE B. P.	LABORATORY REFERENCE NO.	COLLECTOR AND DATE
Bison bone bed	Charcoal	1820+/-130	Beta-37559	Frison, Miller and Davis, 1990
Block Area B	Charcoal	1960+/-60	QL-4724	Hughes, 1992
Block Area A	Charcoal	2540+/-130	Beta-62486	Hughes, 1992
Stone Circle, Block Area C	Charcoal	185+/-30	QL-4725	Hughes, 1992

a terminal Late Prehistoric or early Protohistoric association for the tested stone circle.

### BESANT POINTS AND OTHER FORMAL TOOLS

The distinctive Besant point was first described by Wettlaufer (1955) at the Mortlach site in southern Saskatchewan. It has since been recognized in many Northern Plains components, from south-central Canada, the Dakotas, Montana, Wyoming and possibly Nebraska, Kansas, and northeastern Colorado (Hughes 1981:23). Besant points are typically lanceolate side-notched projectile points with a straight base. In general, they have convex body edges with sharp to rounded obtuse shoulders (Reeves 1970:42). Slightly convex and concave bases are present; a few specimens exhibit a deeply concave base. Side-notches are usually twice as broad as they are deep (Epp and Dyke 1983:115). Length ranges from just under 30 mm to just over 80 mm, width from 18-25 mm, and hafting distance across the neck from 10-20 mm (see Hughes 1981:77; Epp and Dyke

1983:115).

Several projectile points from the surface and excavated contexts at 48NA83 clearly fall into the category of Besant (Figures 2 and 3; Table 2). While there is some variation in morphology, these points generally conform to the attributes commonly associated with Besant. Few are complete and several show indications of re-working.

The projectile point of Phosphoria formation chert (Figure 3e) found in Block A, Unit 1 appears to be a corner-notched, eared variety. It is somewhat smaller in overall size and generally thinner than the side-notched Besant points. It is roughly similar to corner-notched points found at the Ruby site (Frison 1971:82).

It should be noted the point from Block A (Figure 3d) made of Knife River Flint has a rather deep concave base which is not usually characteristic of Besant. Two specimens from the Muddy Creek site also exhibit deep convex bases (see Hughes 1981:Plate III, Plate VIII), and one of the points from the Ruby site (Frison 1971:82) has a moderately deep basal concavity.

Table 2: Besant Component Projectile Points from the Cedar Gap Site (48NA83).

PROVENIENCE	PORTION	RAW MATERIAL	BASE FORM	COUNT	FIGURE
Surface	Nearly complete	Chalcedony	Straight	1	2a
Surface	Tip missing	Quartzite	Concave	1	2b
Surface	Tip missing	Quartzite	Straight	1	2c
Surface	Tip missing	Quartzite	Concave	1	2d
Surface	Nearly complete	Dendritic chert	Straight	1	2e
Surface	Complete	Dendritic chert	Straight	1	2f
Surface	Midsection	Blue-white Opaline chert?	Undetermined	1	not shown
Surface	Base	Quartzite	Straight	1	not shown
Surface	Midsection	Chalcedony	Undetermined	1	not shown
Bone bed	Tip missing	Blue-white Opaline chert?	Concave	1	3a
Block B	Nearly complete	Quartzite	Straight	1	3b
Block B	Complete	Dendritic chert	Straight	1	3c
Block A	Base, midsection	Knife River Flint	Concave	1	3d
Block A	Nearly complete	Phosphoria Fm. chert	Concave	1	3e

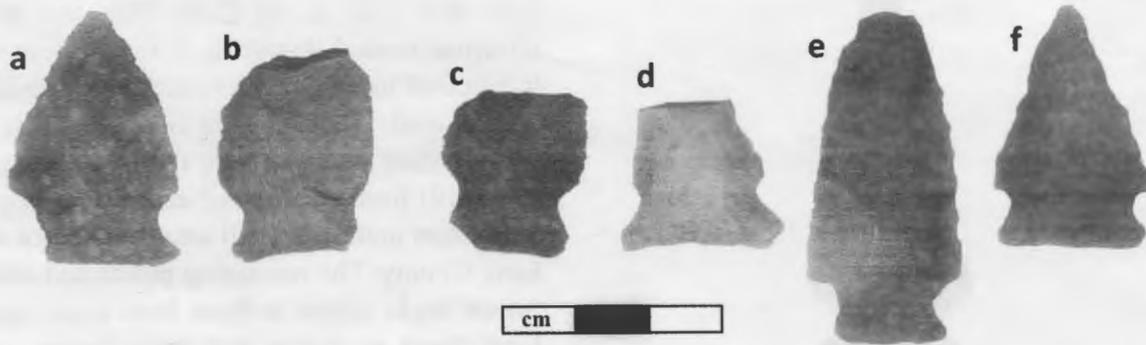


Figure 2: Besant points from surface contexts at 48NA83.

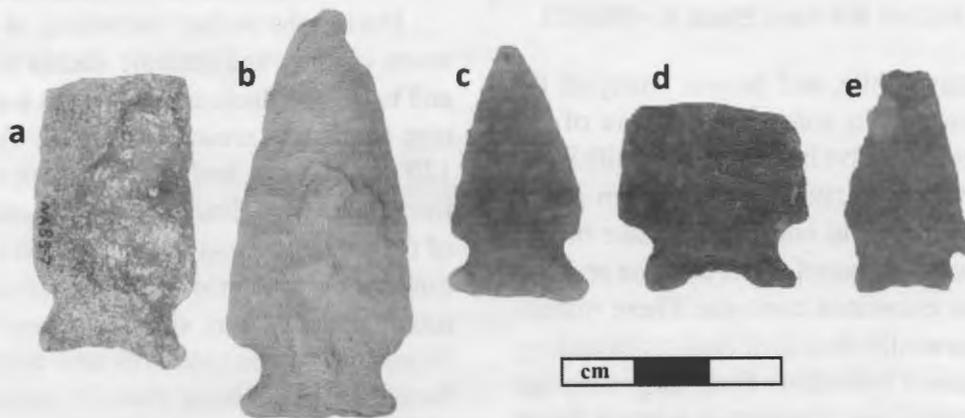


Figure 3: Besant points from excavated contexts at 48NA83.



Figure 4: Other projectile points from 48NA83.

Other projectile points found at the site include two probable Pelican Lake varieties found on the surface (Figure 4a-b). As noted above, a tri-notched Late Prehistoric point of dendritic chert was found on the surface, near Block Area C (Figure 4c).

Other formal tools include a hafted drill (Figure 5) made of brown chert recovered from Block Area A, Unit 4A. The basal morphology is similar to a Besant Point. Chipped stone drills

were also recovered from the Butler-Rissler site (Miller and Waitkus 1989:14). Three end scrapers made of brown chert were found on the surface of the site. Two large ovate bifaces of gray quartzite were found on the surface while flake tools were found on the surface and in the excavation units.

Most of the chipped stone artifacts (including tools and debitage) are made of local cobble cherts and quartzites. These are predominantly



Figure 5: Hafted drill from Block A, 48NA83.

hues of gray, white, and brown. Many of the large flakes retain some cortex. One of the points appears to have been made of Knife River Flint (generally derived from western North Dakota sources) and one tertiary flake of this material was also noted. Both of these artifacts came from excavated contexts. These materials are also similar to a dark brown chalcedony called Scenic Chalcedony from Oligocene age White River Group deposits in western South Dakota (Hoard et al. 1993:700). Three of the Besant points are made of cherts containing manganese oxides (dendrites), which could have been derived from Mississippian age deposits in the Bighorn Mountains or Pennsylvanian age deposits in the Hartville Uplift (Miller 1991:461-463). Dendritic agates have also been reported from central Wyoming along the Sweetwater River (Root 1972:15; Hausel 2005). The corner-notched point is clearly of Phosphoria Formation (Permian age) chert. Source locations for Phosphoria Formation cherts are known from the Wyoming Bighorn Mountains and Pryor Mountains in Montana (Miller 1991:463).

Two of the points were made of an unusual opaque blue-white mottled chert with similarities to opals or opaline cherts found in the Oligocene age White River Formation deposits southwest of 48NA83. Hausel and Sutherland

(2005:10) describe opaque milky white and light blue opals in the Cedar Rim area near Riverton, central Wyoming. Some of these are translucent light-blue opals enclosed by milky opaque opal. These artifacts are also similar to a blue-white mottled agate reported by Root (1972:10) from the Pennsylvanian age Casper Formation in the Marshall area of northern Albany County. The remaining points and other formal tools appear to have been made from local cherts, quartzites, and chalcedonies.

### WOODLAND CERAMICS

During the surface recording of 48NA83, seven cordmarked ceramic sherds were noted and collected, including one with a small portion of the rim preserved (Figure 6). Another 120 cordmarked body sherds were recovered from excavation Block Areas A, B, and D. Most of the sherds are less than 60 mm in maximum dimension and most have extensive cordroughened exteriors similar to several Plains Woodland wares (see Hill and Kivett 1941, Neuman 1975; Tibesar 1980; Miller et al. 1987; Miller and Waitkus 1989; Clark 2008).

Day (1996) provided a general descriptions of the pottery at the site. The pottery core has a laminar structure likely from paddle and anvil manufacture. Evidence of the anvil marks appears on the interior portion of some sherds. Temper consists of subangular to angular quartz sand grains measuring from 0.9-1.7 mm in



Figure 6: Woodland ceramic rim sherd from the surface at 48NA83.

diameter. Temper particles are unevenly distributed within the paste. Sherd thickness ranges from 6.9-9.1 mm. Hardness of the sherds ranged from 2.5-3.0 on the Mohs scale. The exterior surfaces were decorated with two-ply Z-twist cordage. Cordmarkings are from about 1.5 to 2.6 mm thick with spacing between marks about 2.0-2.5 mm. Cordmarkings are spaced about 4-5 strands per centimeter. Direction of the marks is vertical or slightly diagonal to horizontal. There is some overlapping of cordmarks. Smoothing of cordmarks from final surface treatment or usage is evident on some sherds.

The rim sherd collected from the surface has slightly diagonal to horizontal cordmarks (Figure 6). The exterior appears to have been smoothed during manufacture, thus somewhat obscuring the cordmarks. The exterior surface is a buff to reddish-buff color. The interior surface is a light gray color and the paste is a darker gray color. A rim profile was not attempted given the small portion of rim remaining.

In Block Area A, cordmarked sherds occur at all levels with over half found near the lowest levels of the excavated units. They include three rim sherds and 61 body sherds. Two of the rim sherds fit together (Figure 7a). The third rim sherd is in a fragile condition, but appears similar to the two refitted sherds. While it does not refit with the two rim sherds in Figure 6b, it is likely from the same vessel. All have slightly diagonal to horizontal exterior cordmarks. One of the refitted sherds contains remains of a round perforation extending through the sherd. This perforation has been smoothed (almost countersunk) on both the exterior and interior. All three have a rounded lip. These three rims and all the body sherds from Block Area A are jet black to dark gray. These rim sherds retain encrusted carbon residue, especially near the lip and this causes the dark color.

In Block Area B, cordmarked sherds occur in the upper two levels. They include four rim sherds and 49 body sherds. Two of the

rim sherds refit (Figure 7b). One of these rims is quite small and is not illustrated. The two refit sherds exhibit a straight rim, rounded lip, and vertical cordmarks on the exterior. The exterior and interior surfaces of these two rims are a buff to reddish-buff color and the paste is a light gray color. Block Area B also produced a rim with a flat lip with horizontal to slightly diagonal cordmarks (Figure 7c) and another rim with vertical cordmarks and a slightly thickened upper rim with a round lip (Figure 7d). These two rims, as well as most of the body sherds, from Block Area B are jet black to dark gray on both surfaces. They also retain a small amount of encrusted carbon residue.

In Block Area D, only four body sherds were recovered in the upper levels of the excavated units. These sherds have jet black to dark gray surfaces and cores. No carbon residue was observed.

It was determined five vessels are represented based on rim forms and the orientation of exterior cordmarks. They include the surface rim sherd (vessel 1; Figure 6), the two refit rims sherds from Block Area A (vessel 2), the two refit pointed rim sherds with vertical cordmarks from Block Area B (vessel 3), the squared rim with horizontal cordmarks from Block Area B (vessel 4), and the thickened rim sherd with vertical cordmarks from Block Area B (vessel 5).

#### OTHER ARTIFACTS

A fragment of freshwater shell was recovered from Block Area A (Figure 8). It is a highly weathered specimen with no apparent cultural modification. The hinge area is not present so identification to species was not attempted. The fragment is similar in general morphology to shell artifacts recovered from the Butler-Rissler site southwest of Casper (Miller and Waitkus 1989). These were identified to the genus *Lampsilis*, one of three genera of the family Unionidae (riverine bivalve mollusca) occurring in Wyoming (Beetle 1989:638).

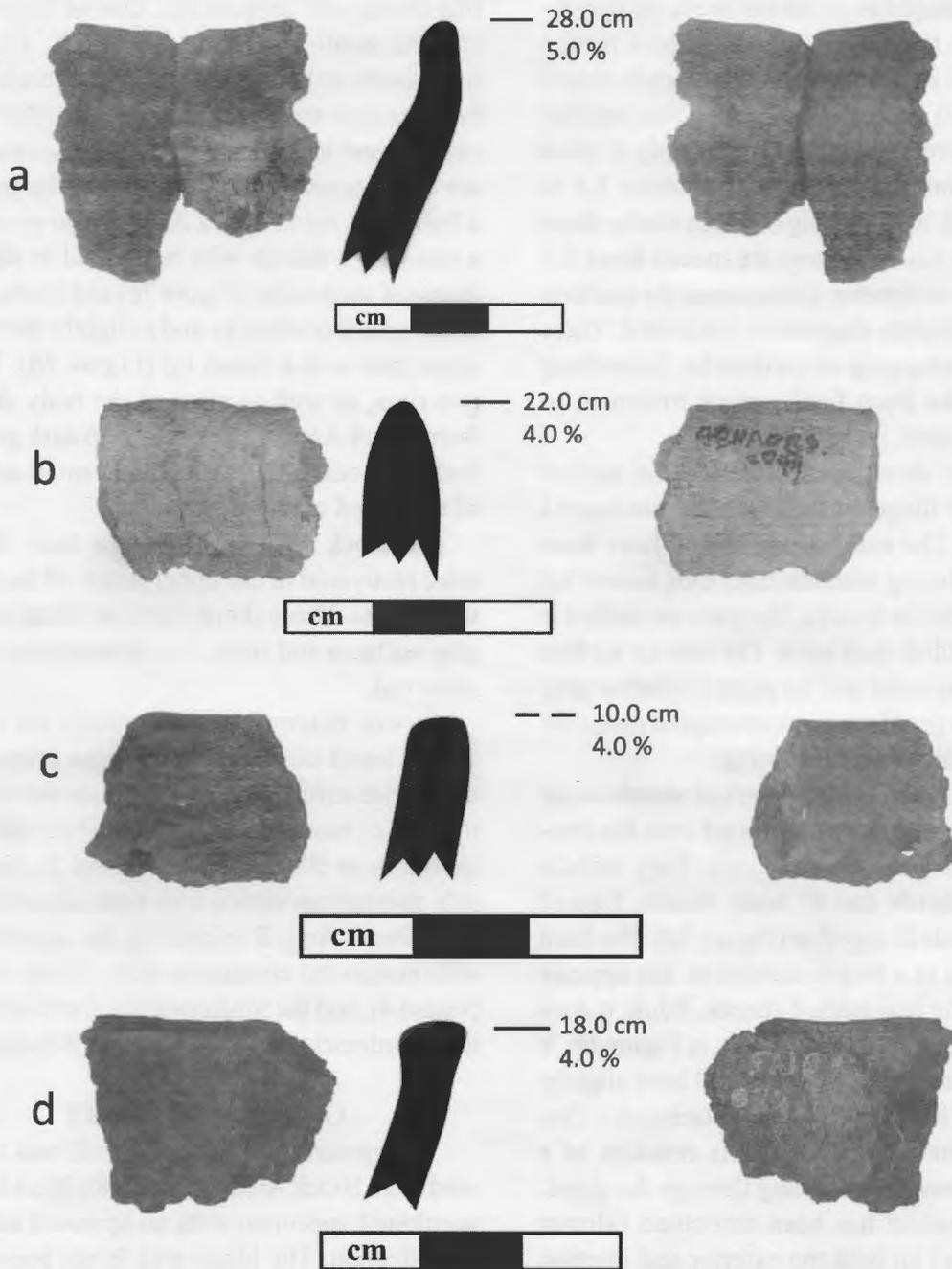


Figure 7: Woodland ceramic rim sherds from excavated contexts at 48NA83.

**DISCUSSION**

The Cedar Gap site contains the remnant of a bison bone bed which may have been an arroyo trap or pound and bone processing areas containing both Besant projectile points and Woodland ceramics. This makes the site quite

significant as relatively few sites in Wyoming have yielded both Besant points and Woodland pottery. Five other sites have been recorded in the state with Besant points and Woodland ceramics in dated components (Table 3). Of these, the ceramics usually occur at camp and processing areas, but have not been found within



Figure 8: Mussel shell fragment from Block A, 48NA83.

the bison (or elk) bone beds. A recent analysis of dated Besant sites in southeastern Montana indicates a similar pattern (Clark 2008:31).

All of the sites with dated Besant/Woodland components in Wyoming are located in the eastern half of the state. They occur in the Powder River Basin of northeastern Wyoming (Campbell and Johnson Counties), the Laramie Basin (Albany County) and Shirley Basin of southeastern Wyoming (Carbon County), and the Denver-Julesburg Basin and Hartville Uplift

of east-central Wyoming (Platte and Goshen Counties). The two sites in Natrona County are closer to the central portion of the state and appear to represent the westernmost presence of Besant in Wyoming. The Butler-Rissler site is located southwest of Casper on the North Platte River and the Cedar Gap site is located at the southern end of the Bighorn Mountains. Surface finds of Besant points and Woodland ceramics indicate a similar pattern. Most artifacts identified as Besant/Woodland occur in southeastern, northeastern, and east-central Wyoming (data from SHPO Cultural Records).

The temporal range of Besant for Canadian sites has been suggested between 1200-2500 B.P. (Reeves 1983:8). An early manifestation of Besant in Canada comes from the Fincastle site in extreme southern Alberta. Most of the radiocarbon dates indicate site occupation from about 2500-2600 B.P. (Foreman 2010:33). A range of 1300-2000 B.P. has been suggested for southeastern Montana (Deaver and Deaver

Table 3: Probable Besant/Woodland site components in Wyoming. All dates are uncalibrated.

SITE	SITE TYPE	RADIOCARBON ASSAY (BP)	BESANT POINTS	WOODLAND POTTERY	REFERENCE
Willow Springs (48AB130)	Bison pound	undated	Yes	No	Bupp (1981)
Benick (48AB571)	Human burial	1400 +/- 60; 1510 +/- 60; 2340 +/- 70	Yes	No	Davis (1992)
Joe Miller (48AB18)	Elk bone processing	1510 +/- 40 to 1780 +/- 40	Yes	No	Burnett et al. (2006); Kornfeld et al. (2010)
Ruby (48CA302)	Bison pound	1670 +/- 135; 1800 +/- 140	Yes	No	Frison (1971) Frison (1991)
Mooney (48CA104)	Bison kill	2040 +/- 90	Yes	No	Frison (1991)
Rourke (48CA130)	Bison pound	1870 +/- 120	Yes	No	Zeimens et al. (1978)
Muddy Creek (48CR324)	Bison pound	1720 +/- 110	Yes	No	Reher (1987)
Muddy Creek (48CR325)	Village, Burial mound	1720 +/- 120	Yes	Yes	Reher (1987)
48JO938	Camp	1810 +/- 70	Yes	Yes	Bower et al. (1991)
Cedar Gap (48NA83)	Bison trap/ pound; bone processing; Camp	1820 +/- 70; 1960 +/- 60; 2540 +/- 130	Yes	Yes	Frison (1991) and this article
Butler-Rissler (48NA1000)	Camp	1660 +/- 90; 1800 +/- 100	Yes	Yes	Miller and Waitkus (1989)
Grayrocks (48PL65)	Camp	1750 +/- 110; 1890 +/- 120	Yes	Yes	Tibesar (1980)
Hell Gap (48GO305)	Bone processing?	1750 +/- 70	Yes	Yes	Shimek and Boyd (2013)

1988:100). Recent research by Clark (2008:33) indicates a range of 1100-2100 B.P. for Besant in southeastern Montana.

Besant/Woodland sites in Wyoming range in age from about 1400-2000 B.P., with most dating from about 1600-1900 B.P. At this time, dates exceeding 2300 B.P. appear to be too early for Besant occupations in Wyoming (Table 1) (also see Davis 1992).

### SUMMARY

Investigations at the Cedar Gap site (48NA83) resulted in the identification of a buried bison bone bed, buried bison bone processing areas, stone circles and stone cairns, and an extensive scatter of chipped stone artifacts along with pottery fragments. A Besant/Woodland component is present which includes the bone bed and processing areas. A Late Prehistoric to Protohistoric component is also present in at least one stone circle. The site contains one of the relatively few Besant components in Wyoming whose assemblages include both Besant points and cordmarked Woodland pottery.

### ACKNOWLEDGMENTS

The staff of the University of Wyoming Archaeological Repository was of great assistance with the 48NA83 collections and associated field and lab documents. The collections were well organized and cataloged and there were abundant field and laboratory notes and forms which Susan Hughes and her field prepared. The various field investigations were conducted under an archaeological research permit to Dr. Mark Miller by the Wyoming Office of State Lands and Investments. Great thanks also to Steven Sutter and Jeremy Planteen of the Wyoming State Historic Preservation Office, Cultural Records Office for researching the site data base and producing a list of sites containing Besant points.

### REFERENCES CITED

- Beetle, Dorothy E.  
1989 Checklist of Recent Mollusca of Wyoming, USA. *Great Basin Naturalist* 49(4):637-645.
- Bower, Patrick, Steven D. Creasman, William Current and Barbara Amidon  
1991 *Archaeological Investigations of the Exxon Wyoming-Dakota CO2 Pipeline, Segment 2, Bairoil Terminal to Hartzog Draw*. Report by Archaeological Services, Western Wyoming College, prepared for Exxon Pipeline Company. On file at Wyoming SHPO Cultural Records, Laramie, Wyoming.
- Bupp, Susan L.  
1981 *The Willow Springs Bison Pound, 48AB130*. Unpublished Master's Thesis, Department of Anthropology, University of Wyoming.
- Burnett, Paul, Charles Bollong, John Kennedy, Chris Millington, Cary M. Berg, Venesa Zietz, Ashley Fife, Karen Reed, and Maxine Seletstewa  
2008 *Archaeological Data Recovery for the Rockies Express/Entegra Pipeline Project at the Joe Miller Site (48AB18), Albany County, Wyoming*. Prepared by SWCA Environmental Consultants, Broomfield, Colorado, for Kinder Morgan, Inc., Federal Energy Regulatory Commission, and Bureau of Land Management. On file at Wyoming SHPO Cultural Records, Laramie, Wyoming.
- Clark, Gerald R.  
2008 The Kalfell-Franks Site: Besant and Plains Woodland in Southeastern Montana. *Archaeology in Montana* 49(2):1-46.
- Davis, Don P.  
1992 *The Archaeology and Human Osteology of the Benick Ranch Site*

- (48AB571). Unpublished Master's Thesis, Department of Anthropology, University of Wyoming.
- Day, Sandra  
 1996 Pottery Analysis at 48NA83. Unpublished Student Paper for Archaeology 499 Class, Department of Anthropology, University of Wyoming. On file, University of Wyoming Archaeological Repository, Laramie, Wyoming.
- Deaver, S. and K. Deaver  
 1988 *Prehistoric Cultural Resource Overview of Southeast Montana*. Report prepared by Ethnoscience for the Bureau of Land Management, Miles City, Montana.
- Epp, H. T. and I. Dyke.  
 1983 *Tracking Ancient Hunters: Prehistoric Archaeology in Saskatchewan*. Saskatchewan Archaeological Society, Regina.
- Foreman, Christine  
 2010 *Besant Beginnings at the Fincastle Site: A Late Middle Prehistoric Comparative Study on the Northern Plains*. Unpublished Master's Thesis, Department of Geography, University of Lethbridge, Lethbridge, Alberta, Canada.
- Frison, George C.  
 1971 The Buffalo Pound in Northwestern Plains Prehistory: Site 48CA302, Wyoming. *American Antiquity* 36:77-91.  
 1991 *Prehistoric Hunters of the High Plains, Second Edition*. Academic Press, San Diego.
- Hausel, W. Dan  
 2005 *Minerals and Rocks of Wyoming: A Guide for Collectors, Prospectors, and Rock Hounds*. Wyoming State Geological Survey Bulletin No. 72.
- Hausel, W. Dan and Wayne Sutherland  
 2005 Geology of the Cedar Rim Opal Deposit, Granite Mountains, Central Wyoming. *Wyoming State Geological Survey Open File Report 05-1*.
- Hill, A. T. and Marvin Kivett  
 1941 Woodland-like Manifestations in Nebraska. *Nebraska History* 21(3):143-243.
- Hoard, Robert J., John R. Bozell, Steven R. Holen, Michael D. Glascock, Hector Neff, and J. Michael Elam  
 1993 Source Determination of White River Group Silicates from Two Archaeological Sites in the Great Plains. *American Antiquity* 36:77-91.
- Hughes, Susan S.  
 1981 *Projectile Point Variability: A Study of Point Curation at a Besant Kill Site, Southcentral Wyoming*. Unpublished Master's Thesis, Department of Anthropology, University of Wyoming.
- Kornfeld, Marcel, George C. Frison and Mary Lou Larson  
 2010 *Prehistoric Hunter-Gatherers of the High Plains and Rockies*. Third Edition. Left Coast Press, Walnut Creek, California.
- Miller, James C  
 1991 Lithic Resources. In *Prehistoric Hunters of the High Plains*, Second Edition, edited by George C. Frison, pp. 449-476. Academic Press, San Diego.
- Miller, Mark E. and Brian K. Waitkus  
 1989 The Butler-Rissler Site: Plains Woodland Occupation Along the North Platte River, Wyoming. *The Wyoming Archaeologist* 32(1-2):1-37.
- Miller, Mark E., Brian K. Waitkus and David G. Eckles  
 1987 A Woodland-Besant Occurrence in Central Wyoming. *Plains Anthropologist* 32:420-423.

Neuman, Robert W.

- 1975 *The Sonota Complex and Associated Sites on the Northern Great Plains*. Nebraska State Historical Society, Publications in Anthropology No. 6, Lincoln.

Reeves, B. O. K.

- 1970 Cultural Dynamics in the Manitoba Grassland 1000 B.C – A.D. 700. In, *Ten Thousand Years: Archaeology in Manitoba*, edited by W. M. Hlady, pp. 153-174. Manitoba Archaeological Society, Winnipeg, Manitoba.

- 1983 *Cultural Change in the Northern Plains: 1000 B.C. – A.D. 1000*. Archaeological Survey of Alberta Occasional Paper No. 20. Archaeological Survey of Alberta.

Reher, Charles A.

- 1987 Documentation and Evaluation of the Muddy Creek Archaeological Site Complex. Report prepared by the Department of Anthropology, University of Wyoming. Submitted to the Wyoming Bureau of Land Management. On file at Wyoming SHPO Cultural Records, Laramie, Wyoming.

Root, Forrest K.

- 1972 *Minerals and Rocks of Wyoming*. Wyoming State Geological Survey Bulletin No. 56.

Shimek, Rachael Lea and Joshua Robert-Allen Boyd

- 2013 Analysis of an Early Late Prehistoric Archaeological Assemblage from Hell Gap Valley, Eastern Wyoming.

Paper presented at the 2013 Annual Meeting Wyoming Archaeological Society, Laramie, Wyoming.

Tibesar, William L.

- 1980 *An Intra-site Discussion of the Grayrocks Archaeological Site, 48PL65*. Unpublished Master's Thesis, Department of Anthropology, University of Wyoming.

Wettlaufer, Boyd N.

- 1955 *The Mortlach Site in the Besant Valley of Central Saskatchewan*. Department of Natural Resources, Anthropological Series No. 1, Regina.

Zeimens, George M, Thomas K. Larson, Julie Longenecker and Cary Craig

- 1978 Summary of Archeological Investigations for the Buckskin Coal Mine, Campbell County, Wyoming. Report by the Office of the Wyoming State Archaeologist, prepared for Shell Oil Company. On file at Wyoming SHPO Cultural Records, Laramie, Wyoming.

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