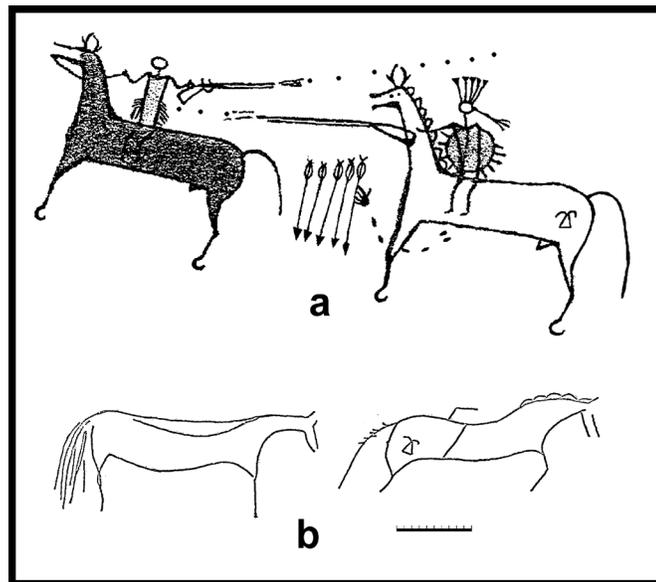


THE WYOMING ARCHAEOLOGIST



VOLUME 54(2)
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[THIS ISSUE
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FEBRUARY 2012]

THE WYOMING ARCHAEOLOGIST

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THE WYOMING ARCHAEOLOGIST is published quarterly by the Wyoming Archaeological Society, Inc, with the assistance of the Wyoming Department of State Parks and Cultural Resources. Address manuscripts and news items for publication to: Dewey Baars, Editor, The Wyoming Archaeologist, 1000 W 19th St, Wheatland, WY 82201-2343.

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 all 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.

Society yearly subscription rates are as follows:

Individual Associate Member - \$20.00
Institutional Member - \$30.00
Canada and Other Foreign - \$34.00

Other memberships may be available. Contact the Executive Secretary/Treasurer for information. Local chapter dues are in addition to state society dues. The Wyoming Archaeological Society is a Nonprofit Organization.

The Wyoming Archaeological Society, Inc. and its local chapters do not discriminate on the basis of age, gender, sexual orientation, gender identity, gender expression, ethnicity, disability, national origin, political affiliation, or religious belief.

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THIS ISSUE PUBLISHED FEBRUARY 2012

WYOMING ARCHAEOLOGICAL SOCIETY
MEMORIAL GIFT or CONTRIBUTION FORM

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
MEMORIAL GIFT or CONTRIBUTION FORM

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

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 RLKelly@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 MEMORIUM



CAROLYN 'JUNE' (GLANVILLE) FRISON

Carolyn "June" (Glanville) Frison, 87, Laramie, died Monday, Aug. 22, 2011, at Mountain Towers Healthcare in Cheyenne.

She was born in Crosby on April 9, 1924. No evidence remains of Crosby, located between Thermopolis and Kirby, although at that time, it was home to an estimated 1,100 people. The Crosby mine flooded in the early 1930s and the Glanville family moved to the Ten Sleep area in 1935 and built a home in Ten Sleep Canyon.

Her only sibling, William Glanville, was killed in an accident in 1940 just after graduating from high school.

She graduated from Ten Sleep High School in 1942. She worked briefly at a defense plant in Tooele, Utah, in 1942 at which time, a girlfriend convinced her to come to Washington, D.C., where she secured a position as secretary in the Pentagon, a part of her life of which she was extremely proud.

She returned to the Ten Sleep area after the war where, in 1946, she met and married a former classmate, George Frison, who had just returned from the Navy. They stayed on the Frison family ranch at Ten Sleep until 1962, at which time he returned to school.

After two years at the University of Wyoming and three years at graduate school in Ann Arbor,

Mich., the couple returned to Wyoming in 1967 when a position opened up at the University of Wyoming for an anthropologist.

She particularly enjoyed life at UW. She helped her husband on summer research projects where she became a highly accomplished field cook and camp manager.

She loved travel and followed her husband to regional, national and international meetings. She especially enjoyed 1980 when he was on a year's fellowship at the Smithsonian Institution in Washington, D.C.

She loved the Big Horn Mountains and especially, Ten Sleep Canyon. She was equally fond of wildflowers and playing bridge.

She was preceded in death by her parents, Earl and Carol Glanville; and her brother, William Glanville.

She is survived by her husband, George Frison, of Laramie; and her daughter, Carol Placek, of Tucson, Ariz.

At her request, cremation has taken place and no services are planned although a memorial is being planned at a later date.

Memorial contributions may be made to the Alzheimer's Association, Alzheimer's Affiliation of Wyoming, P.O. Box 1493, Casper, WY 82602.

IN MEMORIUM



WILLIAM J. SCOGGIN

William (Bill) J. Scoggin, 95, died Dec. 13, 2011.

He was born May 17, 1916, in Hugo, Colo., the son of Dr. William J. and Essie M. Scoggin. He spent his early years in Saratoga, Ovid, Colo., and Julesburg, Colo., which is where he attended school.

He married Floy Mae Pash in 1939 in Bayard, Neb. They moved to Julesburg, Colo., and then Sinclair (then Parco) in 1941. He worked for the refinery for 17 years. In 1958 they moved to Richland, Wash., where he had a studio and art gallery. He became well known throughout the Pacific Northwest for his velvet paintings, Western art and woodcarvings.

They returned to Wyoming in 1978, moving to Rawlins. He continued his art work and enjoyed spending time with his son and friends. He also enjoyed the outdoors. He was an avid fisherman, archer, rock collector and - later in life - he was proficient with a metal detector.

As a child, Bill was afflicted with Polio in his left leg. His parents were told he would never walk, but his mother exercised his leg every day as he grew. Though he had to walk on his toes and the ball of his foot, Bill will be remembered for never letting his leg interfere with walking or the activities he loved.

He was preceded in death by his parents; brothers Jim, Charles and Bob; sisters Helen and Byrdene; wife, Floy; and daughter, Julia. He is survived by

his son, William; grandsons Sean (Jenifer) and Bill (Stacey); granddaughters Shannon (Fabrice), Julia Dawn and Cary; and several great-grandchildren.

Bill Scoggin was a long-time member and contributor to the Wyoming Archaeological Society. He was instrumental in helping the Rawlins Chapter get started and in hosting the annual WAS meetings when they were held there. For decades he was an active volunteer on field projects in and around Rawlins. In the early 1970s he and his son, William, discovered the Scoggin bison kill in Carbon County during one of their frequent treks. The Scoggin's reported this discovery to the State Archaeologist and University, and subsequent research led to investigations in the 1970s and in 1985. This Middle Archaic McKean site was discussed in at least two Master's Theses in Anthropology at the University of Wyoming, and in subsequent publications. His metal detecting skills also were used effectively in another Master's Thesis that reported on target ranges at Fort Fred Steele. Bill's quick wit and sense of humor were always welcome on the projects he attended, and his home was open to many a wandering archaeologist. Wyoming archaeology has lost a strong champion, and Bill will be missed by many.

A memorial service was held at 2 p.m. Dec. 21, 2011 at Rostad Mortuary in Rawlins.

NEWS AND ANNOUNCEMENTS

WYOMING ARCHAEOLOGICAL SOCIETY, INC.

2011 ANNUAL MEETING MINUTES
8:05 A.M. – SHERIDAN HOLIDAY INN –
SHERIDAN, WY
SATURDAY, APRIL 16, 2011

Presiding: Janice Baars, President

Call to Order: 8:05 a.m.

Report of Credentials Committee/Roll Call of Delegates: Executive Secretary/Treasurer Carolyn Buff certified the voting delegates: Absaroka – Sylvia Huber; and Kierson Crume; Ancient Trails – Alice Tratebas; Casper – Mavis Greer and Stuart Mckenzie; Cheyenne – Russell Kaldenberg and Judith Reed; Fremont County – Tom Harken and Leneigh Schrinar; June Frison – Carmen Clayton and Dale Wedel; Pumpkin Buttes – Ron Cossette and Denise Tugman; Sheridan/Bufalo – BJ Earle and Vi Gardner; Sweetwater County – Bill Current; and Sublette County – Dawn Ballou and Sam Drucker.

Roll Call showed 10 chapters represented: Absaroka, Ancient Trails, Casper, Cheyenne, Fremont, June Frison, Pumpkin Buttes, Sheridan/Bufalo, Sublette, and Sweetwater. Not represented at the meeting were Rawlins and Teton. Rawlins and Teton are inactive.

Approval of Minutes of April 10, 2010: Approved as published.

Treasurer's Report: Executive Secretary/Treasurer Carolyn Buff gave the treasurer's report showing a total net worth of \$77,885.04, a net increase of \$6,154.54 over 2010. Motion by Stuart Mackenzie, second by Carmen Clayton to file the report for audit. Carried.

Auditor's Report: Danny Walker, Sylvia Huber and Rachel Richardson performed the annual audit and found the accounts to be in order after a small correction.

Editor's Report: Danny Walker announced he is out of manuscripts for another issue of the journal. As of 2009, there has been a requirement of memorandums of agreement with contractors that compliance reports should be finalized for submission to the journal.

All mailings now must be CASS certified in order to qualify for bulk rates. If not certified, first class postage must be affixed. The new rules necessitate gathering zip plus four numbers. Anyone not knowing their plus four can look on any piece of junk mail to get that number.

In addition, the journal needs avocational submissions. Avocational manuscripts are not peer reviewed,

only edited and then published. Professional submissions are peer reviewed. Danny has a list of reviewers. Any submission is appropriate: site reports, news from chapters, field trip experiences, etc. News items will be treated as news items.

Librarian's Report: Danny Walker: The current goal is to put all library listings in a data base. The WAS library is expanding and is open to anyone for use.

Scholarship Committee: Carolyn Buff announced the Scholarship Committee would meet at lunch to evaluate the scholarship applications.

SAA/COAS: Marcel Kornfeld announced Hester Davis is continuing as president of COAS and Arizona has joined. The newsletter can now be found on the web. COAS is now the main sponsor of the archaeology month posters.

Chapter Reports: The chapter reports will be published in *The Wyoming Archaeologist* (see below).

State Archaeologist's Report: Mark Miller announced there were flyers available for the 15th annual Mulloy lecture. He also gave a brief history of WAS. He noted Louis Binford had died. Binford was known as the father of the "new" archaeology. Miller discussed the opportunities and challenges facing archaeologists today and how we need to be focused on how we interact with other organizations – federal, private, state, etc. and that the dialogue at our annual meetings is an opportunity to strengthen our networks.

OLD BUSINESS

Wyoming Archaeology Awareness Month: Judy Wolf requested \$250 for Archaeology Awareness Month in September and thanked the Society for the continued support. She announced chapters could pick up posters and t-shirts, aprons and caps were available. Motion by Dale Wedel, second by Leniegh Schrinar to donate \$250. Carried.

Wyoming History Day: Danny Walker announced Wyoming History Day would be held on April 18, 2011 at the University. WAS gives \$100 and a one-year membership to the winner of an appropriate archaeology presentation.

Friends of the George G. Frison Institute: Bill Scoggin, who has been designated as the liaison between the WAS and Friends group, reported the institute has been very active with fund-raising with a goal of meeting the endowment of \$200,000. They are also working on an application form for funding in the near future. Bob Kelly has been named the new director of the institute.

Wyoming Archaeological Foundation: Margaret Har-

less announced the Jenson research grant was awarded to Rich Adams. Mary Ann Koons brought 90 students to visit Hell Gap.

Member 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.

Bylaws Revision: After reviewing the document, the committee decided no revisions were necessary at this time.

NEW BUSINESS

Ward Weekly Memorial Fund: Erik Gantt from the Colorado Council of Professional Archaeologists is seeking applications for a \$750 grant to be awarded to a qualified applicant. The link is on the WAS/WAPA web site.

Wyoming Scholarships: Carolyn Buff, scholarship committee chair, announced the organization had money to give away and perhaps we should be more active in promoting these funds. Bob Kelly noted there was a time factor involved and we perhaps should lump some of the money together to make a larger award. Mark Miller pointed out each scholarship carries a history and intent which we need to be attentive to, and every category of student is now covered: community college sophomores, UW undergraduates, UW graduate students, UW doctoral students, and UW non-traditional students.

IGive: Carolyn Buff announced there is a web presence which arranges for donations to the WAS from sales. Business partners are listed on the web site, 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.

Fall Activities: Bob Kelly invited all attendees to the WAAM speaker on September 22 in Laramie. This year's lecturer will be Dr. Mary Steiner from the University of Arizona who will speak on faunal analysis from Neanderthal sites.

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

State Historic Preservation Office: Mary Hopkins announced April 29-30 would be the Preservation Conference at Casper College, with focus on the revitalization of downtown Casper, with an advocacy session with legislators. Also discussed will be school preservation and a tour of Natrona County High School and the downtown area. The conference information is on the SHPO website.

WAS/WAPA Web Site: Motion by Bill Current, second by Dale Wedel to pay the renewal fee for the website. Carried. John Laughlin reported he and Dan Bach would renew the website.

David Reiss Community College Memorial Scholarship: Paul Sanders reminded everyone he had donated items to the silent auction with a portion of the proceeds to go to the scholarship fund.

He also announced there would be an open house at the Game Creek Site near Jackson in August. The site is located on Highway 191, 4.5 miles south of Jackson. There is another site being excavated in Yellowstone and visitors are always welcome there, too.

If the governor approves the hiring of AWECs, there will be employment opportunities with his office for anyone who might want to work.

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

Election of Officers: Bill Scoggin, chair, June Frison Chapter; Sylvia Huber, Absaroka Chapter, and Joe Wheeler, June Frison Chapter. Nominated were Larry Amundson, president; Bill Scoggin, 1st vice president; Judy Wolf 2nd vice president; and John Laughlin, member-at-large to the Wyoming Archaeological Foundation. Motion by Sylvia Huber, second by Denise Tugman 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.

2012 Nominating Committee: Judy Wolf, 2nd vice president, June Frison Chapter, chair; Sylvia Huber, Absaroka Chapter, and Margaret Harless, Fremont County Chapter.

Selection of Site for 2012 Annual Meeting: The 2012 meeting will be held in Gillette and hosted by the Ancient Trails and Pumpkin Buttes Chapters.

Selection of Site for 2011 Summer Meeting: Will be held at Hell Gap with an atlatl contest directed by Russell Richard June 18-19. Work at the site will be held from June 4 through July 11.

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

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

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

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

Other Business to Come Before the Body: Stuart Mackenzie suggested a letter be written to the governor pointing out what excellent value archaeology is for the money and how the public money is well spend, even with volunteers.

Bob Kelly announced there is a man who reprints out-of-print books and he is trying to do *Prehistoric Hunters of the High Plains*, *The Agate Basin Site*, and

The Casper Site.

Bill Scoggin asked for a round of applause for Janice Baars, outgoing president.

Adjourn: 9:30 a.m.

/s/ Carolyn M Buff

Executive Secretary/Treasurer

**WYOMING ARCHAEOLOGICAL
SOCIETY, INC.
SCHOLARSHIP COMMITTEE
MINUTES**

**APRIL 16, 2011 – SHERIDAN HOLIDAY
INN, SHERIDAN; 12:00 P.M.**

Presiding: Carolyn Buff, Chair

Present: Larry Amudson, Dewey Baars, Janice Baars, Carolyn Buff, Bill Current, Mary Lou Larson, (ex officio), Mark Miller (ex officio), Barbara Nahas, Paul Sanders, Bill Scoggin, and Danny Walker.

Motion by Bill Current, 2nd by Barbara Nahas to move the Mulloy scholarship amount to the David Reiss scholarship since there were no applications for the Mulloy Undergraduate Scholarship, with \$500 awards given to Gale Brow, Crystal Rae Rose Reynolds, and William G Elder. Carried.

Motion by Mark Miller, 2nd by Mary Lou Larson to award \$500 to Jason Bogstie for the Frison Graduate Scholarship. Carried.

Motion by Mark Miller, 2nd by Mary Lou Larson to award the \$750 Henry and Clara Jensen Doctoral Travel Award to Joe Gingerich. Carried.

Dr Tom Buchanan, University of Wyoming President, offered to double all scholarship amounts, thereby raising the scholarships to \$1,000 and \$1,500 respectively. 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 visit classes beginning early in the spring semester to speak with students and faculty: Casper, Carolyn Buff; Central, Le-neigh Schrinar; Western, Russ Tanner; LCCC, Cheyenne and Laramie, Mark Miller; Northwest, Sylvia Huber; Sheridan, Vi Gardner; Gillette, Denise Tugman; Eastern, Dewey Baars, 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; and we needed to present to students face-to-face since the opportunities were not reaching the students.

Adjourn: 12:23 p.m.

/s/ Carolyn M Buff
Scholarship Chair

**AUDITING COMMITTEE REPORT
March 31, 2011**

In accordance with the bylaws, the Auditing Committee has reviewed the Treasurer’s books and records for the Wyoming Archaeological Society, Inc. for fiscal 2010.

**AUDITING COMMITTEE SUMMARY
March 31, 2011**

The Wyoming Archaeological Society, Inc. owns one checking account, one savings account, two money market accounts, and two certificate of deposit accounts at the Reliant Federal Credit Union, 4015 Plaza Dr, Casper, WY 82604.

Balance on hand March 31, 2010 – \$71,730.50

Receipts

Interest Earned – \$999.25

Deposits – \$90,669.43

Disbursements – \$13,630.90

Balance on hand March 31, 2011 – \$77,885.04

Includes two outstanding check(s) in the amount of \$18.49 and \$30.55, and no outstanding deposits. Audited and found correct.

/s/ Rachel Richardson

Date April 16, 2011

/s/ Danny N Walker

Date April 16, 2011

/s/ Ashley Rooney

Date April 16, 2011

**WYOMING ARCHAEOLOGICAL
SOCIETY, INC.
CHAPTER REPORTS FOR THE 2010-
2011 YEAR**

ABSAROKA

Public Education: Distributed Archaeology Awareness month posters around the Big Horn Basin, monthly chapter meetings open to public.

Work With Other Organizations: Signature Rock site cleanup with BLM.; instituted SHPO Historic Monument/Marker Stewardship Program; continued with participation in Site Stewardship program; awarded Milford Hanson Scholarship through Basin-wide high schools; and participated in multi-group garage sale as annual fundraiser for chapter.

Other: Began Chapter Library with a collection of DVDs, articles, and books that can be checked out.

Programs Presented: Chris Finley, “Restoration of Historic Ranches and CCC structures in the Big Horn

Recreation Area;" Paul Fees, "Bennett Buttes Battlefield;" Dr. Danny Walker, "Battle of Red Buttes;" Kierson Crume, "The Bridger Trail;" Dr. Larry Todd, "11,000 Years Ago, Early Settlers at the Horner Site;" field trips to Medicine Lodge, McCullough Peak rock art and cave dwelling Sites; annual picnic; Ev Diehl, "Tour and History of Chamberlin Inn;" Dr. Greg Smith, "On the Edge of the Inca Empire: Recent Archaeological Research in the Quijous Valley, Ecuador;" Christmas Party/gift exchange.

CASPER

Programs Presented: Dr. Danny Walker, "Results of Archaeological Investigations at the 1866 Infantry Barracks, Fort Laramie;" Dr. Kerry Lippincott, "Lithic Procurement Sources for the Chipped Stone Artifacts from 39LM56;" Ben and Marian Walkowaik, "Artifacts from Saudi Arabia;" Jeff Sun, "Using GIS to Represent the Passage of Time;" Mike Bies, "Nature Conservancy, Tensleep Preserve, Rock Art Recording Project;" David Vleck, "Past and Present Perspectives in the Puuc Region of Southern Mexico;" and Michael Page "Excavations at the Game Creek Site".

CHEYENNE

Programs Presented: Dr. Julie Francis, "Prehistoric and Ethnohistoric Rock Art in Rock Art in Northwestern Wyoming;" Dr. Steve Cassells, "The Sawtooth Game Drive: A High Altitude Hunting System in the Colorado Alpine Tundra;" Dr. Mark Miller, "Investigating the Dune Murder in Carbon County Wyoming, Circa 1880-1920;" Dr. Robert Brunswig, "The Numic Expansion and Colorado's Southern Rockies: The View from North Park Valley and Rocky Mountain National Park;" Dr. Danny Walker, "The 2010 Archaeological Studies at the 1866 Infantry Barracks, Fort Laramie National Historic Site;" Bill Smith, "The Challenges of the Johnston Island Atoll, North Pacific;" presented the award-winning documentary, "Legend Rock: Preserving Ancient Visions;" Dan Bach, "Year 2010 Excavations at the Raven's Nest Site (48SU3871) Located Near Pinedale, Wyoming;" Drs. Mavis and John Greer, "Rock Art in the Caves of Southern France and Northern Spain;" Dr. Jason LaBelle, "Archaeology of the Laramie Foothills: On-going Research on the Belvoir, Red Mountain, and Soapstone Prairie Open Spaces of Southern Wyoming and Northern Colorado;" Jeremy and Wanda Manley brought in lithics from North Africa; and Charlie Moore gave a tour of the historic Cheyenne Masonic Hall.

FREMONT COUNTY CHAPTER

Survey: Helped coroner with search; petrified wood sourcing-campsite/tool making site in Absaroka Range; soap stone site.

Testing/Excavation: Fort Laramie; Last Canyon Dig; Game Creek.

Public Education: Placed posters in museums, schools, libraries, college. Set up posters for BLM archaeologist;

and arranged for Traveling Rock Art Display.

Work With Other Organizations: BLM, Fremont County Schools, Libraries, Museums, and Central Wyoming College.

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

Programs Presented: Dr. Danny Walker, "Battle Site, Burials at Red Buttes;" Gene Gables, "Vore Site;" Lily Hovendick, artifacts from collection; Ed McAuslan, "Ghosts of Fremont County;" Dr. Mark Miller, "Native American Battle Sites;" field trips and volunteer work; Tom Lucas, "Big Horn Sheep Antler Bow;" Members, artifacts; Larry Amundson, "Research in High Mountain Sites;" and Christmas Party.

JUNE FRISON CHAPTER

Survey: Richard Adams, with volunteers and students, conducted surveys of the Larry Mathews soapstone bowl site, the Inck Wells area in the Wind River Mountains, and the Shirley Basin Lodge site. Dan Eakin surveyed sections of the Nez Perce National Historic Trail in Nez Perce Creek Valley, Hayden Valley, Yellowstone River, Mirror Plateau, and Lamar Valley; Julie Eakin and Andrew Woodhouse served as crew member. Volunteers were Ray Kunselman and Bill Eckerle.

Testing/Excavation: High Rise Village in the Wind River Range, obtaining more charcoal for radiocarbon dating.

Public Education: Richard Adams, Bryon Schroder, and Christina Servetnic taught the anthropology segment of University of Pittsburgh Honor College's Summer Ecological Field School; spoke at the Dubois Museum; guest lectured in Dr. Charles Reher's Northwest Plains Prehistory class. Carmen Clayton talked to two groups of students for the Cody High School Career Fair.

Work with Other Organizations: Dubois Museum, Frison Institute, and David Hurst Thomas, Robert Bettinger and Robert Kelly discussed the future of high altitude archaeology.

Publications/Reports: Richard Adams's dissertation, "Archaeology with Altitude: Late Prehistoric Settlement and Subsistence in the Northern Wind River Range Wyoming," is now available for download at <http://disexpress.umi.con/dxweb> through ProQuest.

Dan Eakin's report of the "2009 Cultural Resource Investigations Along Four Sections of the Nez Perce National Historic Trail, Yellowstone National Park" was submitted to the National Park Service, and "Cultural Resource Investigations at Sheep Trap sites in Fremont and Park Counties, Wyoming" was submitted to the U S Forest Service.

Both Adams and Eakin gave programs at different venues throughout the year.

Programs Presented: Dr. Danny Walker, trip to Czech Republic; Martha Rogers discussed the history of the

archaeological repository at the University of Wyoming; Dr. Robert Kelly, "Ice Patch Archaeology in Glacier National Park;" Claren Copp-Larocque, "Three Crossings: A Re-imagined Setting;" Dr. Jason Toohey, "Community Organization, Social Stratification, and Conflict in the Late Prehistoric Peruvian Andes;" Bryon Schroder, "The Times They Were A Changin'," and Heather Rockwell, "Use-Wear Analysis at the Potter Site: Implications for Paleoindian Behavior in New Hampshire's Great North Woods."

PUMPKIN BUTTES CHAPTER

Survey: Three field trips were made on a possible Native American camp site and buffalo jump or kill site on private property. Artifacts located during the survey included a scraper, flakes, pottery shards, and numerous bones.

Testing/Excavation: One shovel test was done on site mentioned above; however no artifacts were present. The landowner has given permission to use a backhoe to remove overburden.

Public Education: The chapter created fliers and applications for membership.

Work with Other Organizations: Chapter members participated in the Pumpkin Buttes and Ruby Site field trip hosted by the Rock Pile Museum. Denise Tugman gave a presentation on the history of each of the sites. The chapter was given table space at the Native American Artifact show hosted by the Rock Pile Museum to display membership information. Several chapter members also

displayed private artifact collections.

Publications/Reports: Tommie Butler submitted a chapter briefing to the Editor of *The Wyoming Archaeologist*.

Programs Presented: Gene Munson conducted a field trip to a site within the North Antelope Rochelle Coal Mine area.

Other: Chapter members plan to volunteer with the South Dakota School of Mines and Technology, Department of Geology and GeoIE on a paleontological site in the Black Hills of Wyoming, as well as participate in the excavation of paleontological remains on private property near Keyhole Reservoir.

SHERIDAN-JOHNSON COUNTY

Public Education: Scott Burgan spoke to the Big Horn Historical Society on Father DeSmet.

Work with Other Organizations: Several chapter members assisted Larry Loendorf with recording rock art and graffiti at Rosebud Battlefield/Buffalo Jump.

Programs Presented: Marvin Dawes, "Crow History and Migration;" Kevin O'Dell, "Fort Phil Kearny Research;" Bill Mathews, "Big Horn Forest Project;" Jessie S Savilles, "Los Capas Site, AZ;" Gene Gade, "Vore Buffalo Jump;" "Ghosts of Machu Pichu" DVD; Marty Rogers, "UWAR Archaeological Repository;" Dr. Kerry Lippincott, "Shell Mask Gorgets;" and Dave McKee, "The Riverbend Site".

Other: Field trips to Salt Creek and Meike Ranch to view 1865 graffiti and the Big Horn Medicine Wheel.

Preserving Private Archaeological Collections

The Association of Professional Archaeologists of Kansas (PAK) has produced a brochure detailing the value of privately held collections of archaeological artifacts, and the importance of preserving those collections for future generations. Currently, many privately held collections are lost or their value is greatly diminished when the original collector dies. Heirs sometimes do not appreciate the true value of the collections, and the collections often are either sold at auction or divided. Crucial information on where and when the collections were found is often destroyed or separated from the artifacts. This brochure informs avocational collectors and their families throughout the State of Kansas about issues that arise in passing on their collections to future generations. It discusses both legal and ethical considerations in assuring these collections are preserved for future generations, and provides concrete suggestions for owners of collections to use in their estate planning. It discusses ways to make the collections accessible to the general public, and to assure that crucial data about where the objects were collected is not lost. The brochure has been financed in part with funds from the National Park Service, which are administered by the Kansas Historical Society. For copies of this brochure, you may contact via e-mail either Donna Roper (droper@k-state.edu) or Virginia Wulfskuhle (vwulfskuhle@kshs.org).

WYOMING ARCHAEOLOGICAL SOCIETY, INC.

Treasurer's Report for Fiscal Year Ending March 31, 2011

CHECKING ACCCOUNT - RELIANT FFEDERAL CREDIT UNION

	INCOME	EXPENSES	BALANCE
Beginning Balance	\$ 2,827.99		
Deposits	\$ 16,280.00		
Interest Earned	\$ 1.61		
TOTAL INCOME - Checking			\$ 19,109.60

EXPENSES

Merback Awards - Trowel Engraving	\$ 25.15		
Staples - office supplies	\$ 120.19		
Casper Chapter - reimburse for spring meeting	\$ 2,765.00		
Wyoming History Day	\$ 100.00		
UW Copy Center - Journal Printing	\$ 495.45		
Jennifer Black - Mulloy Scholarship	\$ 1,000.00		
Wyoming Archaeological Foundation - Jensen Award	\$ 250.00		
Wyoming Archaeology Awareness Month	\$ 250.00		
Brian Ostahowski - Frison Scholarship	\$ 500.00		
Douglas Bamforth - Honorarium	\$ 300.00		
Michael O'Toole - Reiss Scholarship	\$ 500.00		
Kipp Sterling - Reiss Scholarship	\$ 500.00		
Parkway Plaza - Bamforth Expenses	\$ 269.58		
USPS -Bulk Mailing	\$ 185.00		
Brian Ostahowski - UW Scholarship Match	\$ 500.00		
Mountain States Lithographing - Envelopes	\$ 122.60		
Dan Bach - Web Billing	\$ 119.40		
Wyoming Archaeological Foundation	\$ 750.00		
Michael O'Toole - UW Scholarship Match	\$ 500.00		
Kipp Sterling - UW Scholarship Match	\$ 500.00		
Jennifer Black - US Scholarship Match	\$ 1,000.00		
Mountain States Lithographing - Membership Cards	\$ 77.00		
USPS -Bulk Mailing	\$ 44.00		
Sam's Club - BLM Grant	\$ 163.30		
Albertson's - BLM Grant	\$ 112.94		
Danny Walker - BLM Grant	\$ 539.37		
Danny Walker - BLM Grant	\$ 191.72		
Society for American Archaeology - Dues	\$ 30.00		
USPS -Bulk Mailing	\$ 44.00		
USPS -Bulk Mailing	\$ 500.00		
USPS -Bulk Mailing	\$ 29.66		
UW Copy Center - Journal Printing	\$ 857.50		
Modern Printing - Journal Mailing	\$ 240.00		
Bloedorn Lumber - Trowel	\$ 18.49		
Merback Awards - Trowel Engraving	\$ 30.55		
TOTAL EXPENSES		\$ 13,630.90	
ENDING BALANCE - Checking Account			\$ 5,478.70

SAVINGS ACCOUNT

BEGINNING BALANCE	\$ 126.15
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Interest Earned	\$	0.38	
ENDING BALANCE			\$ 126.43
 MONEY MARKET ACCOUNT - 0040			
BEGINNING BALANCE	\$	6,734.58	
Deposits	\$	1,000.00	
Interest Earned	\$	17.33	
ENDING BALANCE			\$ 7,751.91
 MONEY MARKET ACCOUNT - 0041 (BLM)			
BEGINNING BALANCE	\$	9,211.35	
Interest Earned	\$	27.79	
ENDING BALANCE			\$ 9,239.14
Total available after March 31, 2011 = \$7,013.18			
 CERTIFICATE OF DEPOSIT - 00100			
BEGINNING BALANCE	\$	42,185.42	
Interest Earned	\$	848.84	
ENDING BALANCE			\$ 43,034.26
 CERTIFICATE OF DEPOSIT - 0101 - Reiss Account			
BEGINNING BALANCE	\$	12,151.32	
Interest Earned	\$	103.30	
ENDING BALANCE			\$ 12,254.60
 TOTAL NET WORTH AS OF MARCH 31, 2011			
Total Income		\$ 91,515.94	\$ 77,885.04
Total Expenses		\$ 13,630.90	
Net Increase (Decrease)			\$ 6,154.54
 SCHOLARSHIP ACCOUNT			
Beginning Balance		\$(10,086.00)	
Deposits (Donations)		\$ 7,500.00	
Scholarships Awarded		\$ 5,250.00	
Ending Balance			\$ (7,836.00)

/s/ Carolyn M Buff
Executive Secretary/Treasurer

**TITLES AND ABSTRACTS,
PAPERS PRESENTED AT THE 2011
ANNUAL MEETING, WYOMING
ARCHAEOLOGICAL SOCIETY**

Adams, Richards (Wyoming State Archaeologist's Office) and Larry Mathews (Fremont County Chapter, WAS). **DATING THE MATHEWS SOAPSTONE BOWL: A WAF, WAS, AND OWSA COLLABORATION POSTER PAPER**

In 2010 professional and avocational archaeologists teamed up to radiocarbon date a soapstone bowl recently discovered at site 48SW17902. The date was made possible by the Wyoming Archaeological

Foundation. The bowl was found at what appears to be a single component, Late Prehistoric habitation site with artifacts and features consistent with occupation by Shoshone Indians. A thick layer of charcoal-appearing residue coated some of the bowl fragments. The residue adhering to one of these fragments was dated to 160+/- BP (Beta 282441), a date which intercepts the calibrated radiocarbon curve several times between 1670 and 1800AD. This is only the third directly dated soapstone bowl in Wyoming. We propose to test the site this summer.

Berg-Mattson, Noah (University of Wyoming), Mark Clementz (University of Wyoming), Judson Finley (University of Memphis), Crystal Friese (University of Wyoming), Paul Haslehorst (University of Wyoming), Jonathan Hoffman (University of Wyoming), Marcel Kornfeld (University of Wyoming), Mary Lou Larson (University of Wyoming), Houston Martin (University of Wyoming), Tom Minckley (University of Wyoming), and David Reid (University of Wyoming). **LAST CANYON - LOST CANYON**

Last Canyon, although almost lost to researchers due to looting, has been found to abound with a wealth of information on past peoples and environments of southern Montana and northern Wyoming and by extension contain data on wider issues of global paleoclimate. First recorded in the 1970s, the inconspicuous shelter at the southwestern edge of the Pryor Mountains contains a record of the past extending back as much as 40,000 years. Investigations in the last several years have revealed a low intensity human occupation over the past several thousand years or more, preceded by at least 36,000 years of occupation by various animal species that left behind bones and dung within sediment encasing other forms of paleoenvironmental data. In this presentation we report some preliminary results of our studies.

Black, Jennifer (University of Wyoming). **2010 ARCHAEOLOGICAL TESTING AT FORT SANDERS, WYOMING** Fort Sanders has recently seen pedestrian and geophysical surveying. Following this, a series of initial excavation units were opened. These included both test units over the site of the former Officer of the Guard's house as well as cores taken in spots identified as anomalies during the geophysical survey. The methods behind the excavation and the process used to select the spots for will be presented along with the artifacts and materials recovered from the test units.

Brow, Gale (Central Wyoming College). **48FR6761 PROBABLE 1862 SEMINOE TRAIL GRAVE AND ADJACENT SITES**

During the 2010 CWC Field School, students read an Oregon-California Trails Assoc. Newsletter Telling the story of two men killed by Indians on the Seminoe Cutoff in 1862. they were buried

above Alkali Creek by 11th Ohio Volunteer Cavalry soldiers and the grave remarked upon in several emigrant journals. One account told of a loyal dog who refused to abandon his master's grave and apparently starved to death there. The crew decided to try to find the grave. In the process, they also recorded a number of prehistoric cairns and a vision quest circle in the vicinity.

Borges, Rachel (Central Wyoming College). **48FR6772 & 48FR6773: THE 1870s-1880s QUARTER CIRCLE 71 RANCH HEADQUARTERS COMPLEXES**

The Quarter Circle 71 was founded by a wealthy Nebraska cattleman during the 1870s, then acquired by a Scottish consortium whose manager was President of the Wyoming Stock Growers Association during the range wars. Located just downstream from the Three Crossings, the original headquarters complex of barns, corrals, and cabins was built on the north side of the river. In the early 1880s, new buildings were erected on the south side. Surface evidence at these two sites suggests markedly different "levels of settlement" that does not agree with written accounts. In addition, there is considerable evidence of illegal fencing predating the small homesteaders' fences which so enraged the cattle barons and were used as partial justification for their assaults on the small ranchers.

Copp-LaRocque, Claran (University of Wyoming). **WAS THE SINKS CANYON LADY FREMONT?**

This paper will analyze the artifacts found with the skeleton uncovered in Sinks Canyon during the summer of 2010 at site 48FR6810. Over 300 beads of various types were recovered from the grave, most of them a type often associated with the Fremont culture of the Great Basin. I will discuss the beads, their similarities to other sites, and possible sources or trade routes.

Elder, Bill (Central Wyoming College). **48FR6762 - 6765: THE SODA LAKES STONE CIRCLES**

This series of sites contain small to very large stone circles on the leeward side of a large granite outcropping in the Sweetwater Rocks near Three Crossings on the Oregon Trail. Slab lined hearths, obsidian flakes, and projectile points from the Late Archaic and Late Prehistoric periods were observed. In addition, a large quartz crystal (not from this

area) set vertically in the ground was found at one site. Segments of original 1862 transcontinental telegraph wire were also recorded within this site complex which is located several miles from the telegraph route.

Hahn, Ardeth (Buffalo Field Office, BLM). **MIDDLE FORK SITE RECORDING I, BLM BUFFALO FIELD OFFICE'S 2010 PASSPORT IN TIME (PIT) PROJECT** *POSTER PAPER*

Eight volunteers from five states came to Outlaw Campground to participate in the Buffalo Field Office's first Passport in Time (PIT) project, July 11 through July 16, 2010. Volunteers contributed 320 hours to updating previously recorded sites, recording new sites, and surveying for rock art in the Middle Fork Recreation Area. Four days were spent at the Middle Fork Recreation Area on the south side of Middle Fork Canyon, and one day was spent recording on Buffalo Creek, in the southern portion of the field office. By the end of the week, this incredibly hard working group of volunteers had updated or revisited seven sites, identified and recorded two new sites, and surveyed approximately two miles of sandstone exposures for rock art. This important work will allow the BLM to determine eligibility for the National Register of Historic Places (NRHP) and establish a management plan for the important resources of this area.

Hovendick, Billy (Central Wyoming College). **48FR2717: A POSSIBLE US ARMY CIVIL WAR-ERA "FORWARD OPERATING BASE" (FOB) NEAR SOUTH PASS**

Long-known locally as "The Chimneys," this site consists of several stone fireplaces, foundations, and an artificially excavated spring in the foothills of the Wind River Mountains near South Pass. The site appears to have consisted of a barracks and at least two other buildings. It contained at least one Army cot before the site was first looted in the 1950s. CWC Project Directors speculate that it functioned as an outpost to house US Army wood-cutters and stock-tenders for the garrisons stationed at Burnt Ranch and/or Pacific Springs to guard the Oregon Trail during the 1860s. The author will compare this site to USMC FOBs he occupied under some similar circumstances in Afghanistan.

Jensen-Ryan, Danielle (University of Wyoming). **NEW TECHNOLOGIES, OLD STORIES: THE CULTURAL AND ENVIRONMENTAL IMPACTS OF URANIUM EXTRACTION ACTIVITIES IN RURAL WYOMING**

Freshly coined the "uranium renaissance" by market analysts, the new decade uniquely positions Wyoming as a place ripe for prospecting, exploration, and uranium mining, both using traditional methods and the newer in-situ recovery technique. As the "uranium renaissance" commences, recalling the impacts of past uranium mining becomes important so future companies protect local communities and the environment. This paper discusses Jeffrey City, Wyoming, a place once home to 4,000 uranium workers who turned a simple ranching homestead into a full-blown, vibrant mining culture. The Gas Hills Uranium Mining District of eastern Fremont County, Wyoming is also discussed because it embodies evidence of past circulation and movement, as though the place had been devoured quickly and then spat out, with a midden of antique garbage left behind.

Munson, Gene (GCM Services, Inc.). **PIT DWELLINGS IN THE EASTERN POWDER RIVER BASIN**

Three sites with pits that contain Middle Plains Archaic Period hearths and artifacts have been excavated in a four by six mile area in southern Campbell County. Whether the pits were dug by hand or represent utilization of natural depressions for house pits is open to debate. Regardless, there was a desire for partial subterranean dwellings around 4000 years ago in the eastern Powder River Basin.

Ostahowski, Brian (University of Wyoming). **THE PREHISTORY OF RICE CAVE: SALVAGING INSIGHT THROUGH AN ANALYSIS OF FAUNAL REMAINS**

Rice Cave (48WA363) is situated within the western foothills of Bighorn Mountains on the periphery of the well known Medicine Lodge Creek site. Upon finding the cave's opening, local rancher, Gary Rice, discovered the cave had been heavily disturbed by looters. As peripheral sites such as rockshelters and caves were excavated to enhance the data at Medicine Lodge Creek, Rice Cave was excavated in August 1976 to salvage prehistoric remains. An analysis of the recovered faunal remains conducted in 2010 indicate that considerable insight can be gained about how prehistoric peoples used Rice

Cave and what resources were available for them throughout the Paleoindian, Archaic and Late Pre-historic periods.

Pierce, Greg (University of Wyoming). **THE 21ST CENTURY STATUS OF WYOMING'S 19TH CENTURY TRADING POSTS**

There were 29 trading posts operating in Wyoming between 1832 and 1865. The early trading posts were integrally involved in the initial exploration of the region and in establishment of social and economic ties with local native tribes during the fur trade years. Later trading posts provide for the initial settlement of the West in providing necessary goods and services to passing emigrants. Through the 1850s into the 1860s, the trading posts were involved in Native American unrest serving as the provider of arms, location of treaty negotiations, and the focus of native depredations. These sites have the potential to yield valuable information relating to the earliest exploration and settlement of Wyoming because of this involvement in these historically important events. Unfortunately, of these 29 posts, only 12 have seen serious archaeological investigations. Every investigation has yielded data providing information on early trading activity in the state, and in some cases excavations have aided in post reconstruction and site interpretation. The remaining 17 posts have seen no work, and many are threatened by agricultural, mineral, and urban development. This presentation will discuss the sites and their significance, look at the types of investigations conducted and information gained. The talk will end with a discussion on options for future work for maximizing data recovery and preservation of these threatened sites.

Reynolds, Crystal (Central Wyoming College). **48FR1270: PACIFIC SPRINGS STATION**

Pacific Springs was the first water that Oregon Trail emigrants encountered on the Pacific side of the Continental Divide and the site was a major landmark on the Oregon-California Trail. Countless draft animals perished in the dangerous bogs. In 1853, famous Mormon "Avenging Angel," "Wild Bill" Hickman, opened the first trading post here -- in a tent. The first substantial station was probably erected in 1859 to house traders and stage line personnel, then Pony Express employees, the transcontinental

telegraph, a US Army garrison, and others. The site continued to function as a way station and trading post until 1917, since which time it has been used as a summer cow camp. The site contains standing structures, numerous foundations and depressions, a vast trash scatter, remnants of a causeway across the bog, and other evidence of human activity.

Sitters, Julian Andrew (University of Wyoming). **THE MUDDY CREEK ARCHAEOLOGICAL COMPLEX**

The Muddy Creek Archaeological Complex is a Late Plains Archaic Bison Kill, processing, and residential area composed of three sites (48CR324, 48CR325, and 48CR1737) located along Muddy Creek in the Northern Foothills of the Shirley Mountains, Carbon County, Wyoming. The complex reflects the presence of a sophisticated Bison hunting economy and, with the presence of diagnostic projectile points, identifies the site as belonging to the Besant cultural complex. The abundance of diagnostic Besant projectile points and two radiocarbon samples date the complex to $\sim 1720 \pm 110$ B.P. The Besant culture is prevalent on the Northern Plains extending from southern Canada south into Wyoming and adjacent states. The Muddy Creek Archaeological Complex is one of the southernmost Besant sites currently known to exist, but more importantly, the complex exhibits all identifying features of the Besant Cultural Complex, which include a bison drive lane, bison pound, religious feature associated with the bison pounding operations, and a habitation area consisting of numerous tipi rings. I will review the Besant culture and the association of Besant with the Muddy Creek Archaeological Complex to provide support for the significance of the complex at a statewide and national level.

Squarcia, Cynthia M. (University of Wyoming). **WHAT WAS GOING ON AT THE FORT LARAMIE 1866 INFANTRY BARRACKS IN 1890?**

Archaeological investigations at the Fort Laramie 1866-1890 2-Company Barracks in 2009 and 2010 ended with more questions than answers, chief among being what was happening inside the barracks in 1890 as the fort was being decommissioned. The adobe structure lost its roof and floor in 1893 and by 1898, the adobe clay began sealing the archaeological record. Artifacts dating from

throughout the 24 year occupation of the building were recovered, but most appear to have been lying on the floor when the structure was abandoned, including over 50 shoes and boots recovered from only 10 square meters. The variety of recovered artifacts suggests the structure was used as more than a barracks when occupied by the last soldiers stationed at Fort Laramie.

Walker, Danny N. (Wyoming State Archaeologist's Office). **NEW DEAL AND RIVER BASIN SURVEY ARCHAEOLOGY AT FORT LARAMIE NATIONAL HISTORIC SITE** *POSTER PAPER.*

Fort Laramie National Monument was established in 1938. That same year, the first archaeological investigations began before restoration of the building started by a CCC group from Camp Guernsey, Wyoming. Since then, River Basin Surveys, National Park Service, University of Wyoming and Wyoming State Archaeologist's Office have continued the work. The early projects (CCC and RBS) will be presented, with a short review of the future

at Fort Laramie.

Wheeler, Joe (University of Wyoming). **FORT SANDERS: "ALL THE RICH...LANDS ALONG THE CREEK"**

Fort Sanders (1866-1882), just south of present day Laramie, Wyoming was established as an Indian fighting post during the First Sioux Wars. The guard house was listed on the National Register of Historic Places in 1977. But other than a 1995 contract to monitor a water line installation, no archaeology had been conducted on the constructed portion of the post. Years of potting hunting and commercial development led most Laramie residents to believe little of interest remained of the site. Beginning in the fall of 2009 and continuing until November of 2011, archival, GIS, and geophysical research, followed by initial excavations, determined much more of this historic site remains than had been previously thought. This presentation provides a brief history of the site and the results of recent archaeological research.

MINUTES
WYOMING ARCHAEOLOGICAL
FOUNDATION BOARD MEETING
Sunday, April 9, 2006
Cheyenne, Wyoming

The annual meeting of the Wyoming Archaeological Foundation Board of Directors was held in conjunction with the 53rd Annual Wyoming Archaeological Society Meetings 7 a.m., April 9, 2006 at the Plains Hotel in Cheyenne, Wyoming. Board members in attendance included Dewey Baars (President), Barb Nahas-Keiry (Treasurer), Mary Lou Larson (Secretary, ex-officio, University of Wyoming), George C. Frison, Mark Miller (ex-officio-State Archaeologist), Eva Peden (Past-President of the WAS), Don Bailey (President WAS), Marcel Kornfeld, Judy Wolf (new board member). Guests included Dale Wedel, Janice Baars, and June Frison. Terry Wilson (Board member) was absent. The terms of members are listed at the end of these minutes. President Dewey Baars called the meeting to order at 7:15 a.m.

Minutes of the Last Meeting: Barb handed out copies of the minutes from the last WAF board meeting. Barb moved that the minutes be accepted and Eva seconded the motion. Motion passed unanimously by voice vote.

TREASURER'S REPORT

Barb presented the Treasurer's Report. This years audit was completed by Janice Baars, Don Bailey, and Eva Peden. Eva reported that the books were in order. WAF income 2005-2006 was \$3778.99 and expenditures \$4724.41. The balance of the checking account as April 30, 2005 was \$5736.66 and that balance as of today is \$4,791.24. Total net worth as of today is \$108,515.12. This includes reserve fund money in a CD (\$12,527.85), funds with the Henry E. Jensen Trust (\$41,612.35), and George C. Frison Paleoindian Endowment (\$49,583.68). Although the amount reported in the Institute endowment is not at \$50,000, Barb reported that the Foundation met its goal of \$50,000 (after she closed the books), the total promised to the University of Wyoming to guarantee dollar-for-dollar state matching funds. Mark moved and Mary Lou seconded the motion that the Treasurer's report be accepted. Voice vote was unanimous in favor of accepting the report.

Barb noted that she discovered that the Foundation's fiscal year is April through March in working with the By-laws and Articles of Incorporation. She will now begin working on that fiscal year.

OLD BUSINESS

Foundation Grant Guidelines: Barb reminded everyone about the Grant guidelines that we began discussion on last year. Last year, Chris Lippincott handed out the South Dakota guidelines for their grant program. Mark, Barb, and Mary Lou came up with ideas about such a grant for WAF. Barb then argued that the foundation should not be in the business of giving out grants, given that running Hell Gap costs about \$2400/year. And we need to keep about 10 years of money in reserve funds in order to accommodate shortfalls in income. Our income keeps going down and our expenses keep coming up. Barb handed out the grant guidelines to the Board. Discussion ensued.

Mark recommended that we decide to table voting on the guidelines until after we decide on how (and if) we should do such a grant program. The Board might want to wait a few years to see if our funding stabilizes. Barb reminded everyone that there are other expected costs associated with Hell Gap, such as drilling a new well that could keep us from giving out grants. Mark stated that it was good to have an emergency fund in the past, but the ownership of Hell Gap changes the dynamic. Marcel noted that since the Institute is the main user of Hell Gap that it should be the responsibility of the Institute to supply maintenance money as part of the Institute's research costs. Eva said that even with what Marcel has said that because we are taxed as ranch land we need to keep it as such. Mark moved that we table the decision and postpone a decision on the award fund until the next spring meeting, look over, and decide at the next meeting, Barb seconded the motion. Voice vote was unanimous. Barb then asked the Board to email suggestions to Barb and she'll get the information out to the Board. George remembered that buying Hell Gap was an idea of his and Milford Hansen's, as a rallying point for the Society – he wasn't sure if that has happened. If Hell Gap isn't working out for WAS, perhaps it should be rethought. He stated that whatever the Foundation wanted to do with Hell Gap that the Society should feel free to do with it whatever they want to. Mark

reminded the Board that at the time the site was purchased, that was the only viable option for the site. Marcel noted that shifting Hell Gap to another foundation would complicate things. Barb stated that her primary obligation is to keep the Foundation solvent. George then said that at the time the decision was made, Allen Korell stated that while a lot of people probably wouldn't like it now, but 50-100 years from now people will look back and think that was one of the greatest things the Society ever did. George hopes that the Foundation can keep it and maintain it. Barb said that the Foundation is on the road, especially with the royalties from Henry's oil leases and help from the Institute on maintenance will keep it running. Henry Jensen said that buying Hell Gap was a good idea, but that it would bring back much more to the Society.

Changes in the By-laws and Articles of Incorporation: Barb discussed the proposed changes. Amendments to create a position of Executive Treasurer. The By-Laws and Articles that she passed out have changes written in red. Dewey explained that because Barb has volunteered to do the job permanently the Board decided last year to institute the office of Executive Treasurer as an alternative to Treasurer. The treasurer's job is an extremely hard job to do and Barb is currently doing a great job. Mark pointed out the necessity for continuity in where the Foundation is now, with Hell Gap and all.

Mark moved and Eva seconded that the Board accept the proposed changes in the by-laws. Marcel noted that Plains Anthropological Society changed the position from non-voting ex-officio to a voting ex-officio so that they could vote. He thinks that such a move would be a good idea in this situation as well, because Barb is part of the WAS community. Mary Lou clarified that the board cannot vote on the changes at this meeting, but has to wait 30 days between handing out the by-laws and articles and the vote. What she and Barb had decided to do was to give everyone the changes now and then get back to them at the end of the 30 days for a vote because there is nothing in the By-laws that says such a vote has to be done in a face to face meeting, but that the 30 day wait is necessary. Mary Lou and Barb will make all of the changes in the By-laws and the articles, and then send them out to the Board for a vote within 30 days of receipt of the changes. Mark withdrew his motion.

Discussion then turned to the number of people on the Board with the change in permanent members. If Barb moves into the Executive Treasurer position and can still vote, do we want to accept a new person onto the Board so that the voting members of the Board go to six, rather than five? The changes in the By-laws and Articles do not do away with the office of treasurer, in case WAF ever needs to return to an elected treasurer – and may be the simplest way to make the changes is to leave the office of Executive Treasurer as a voting member. Mary Lou and Barb will draft the changes to solve these problems, and will email out advice and suggestions to the rest of the Board.

Hell Gap:

Tree thinning: Marcel reported that the effort has been started. Some of the worst piles of brush have been cleared. Dewey and Marcel will need to gather up brush and burn it once they get some students to help them Marcel told everyone that they are welcome to come get wood.

Condition Report: Dewey reported that the house was painted and roofed for a cost of \$3200 – and the building has been improved quite a bit.

Hell Gap Outdoor Museum: Marcel handed out copies of the 2003 and 2005 Hell Gap technical reports. The 2005 has a proposal for the museum. Victoria Rose gave a paper on the proposal and there was a poster up yesterday. He noted that both Phil Noble and Milward Simpson mentioned the \$10 million Wyoming state Cultural Trust fund – and that the outdoor museum would be a great way to get some money to do the museum. He also suggested that after coming up with a plan that the idea should be taken to professional planners to get a good one. He also reminded the Board that they could decide what they want to do. Judy reported that the guidelines for the grants are out on the State Parks and Cultural Resources web site. Mark thought that the fund could also be used for long-term site stewardship, but he thought that the property should be listed on the National Register. Judy reminded the Board that by having it on the register that Hell Gap would be eligible for other sources of funding. George thought that putting the site on the Register would be a good idea. Mark and Judy thought a start on a nomination would look good to the Cultural Trust. Mary Lou suggested that writing the NRHP nomination could be wrapped into a grant to the Cultural Trust for the

museum. Barb wondered what the insurance costs would be to cover the site – costs of liability insurance would probably go up (to cover people coming to visit the Outdoor Museum). Marcel suggested that we need to talk to planners who know about all of these pitfalls, and that the Board should consider developing a proposal for the trust.

NEW BUSINESS

Oil Company Lease: Encana (lease holder on the Jensen estate oil) has sent out information on the leases, the income is good. Barb has a letter from Howe Petroleum which she has not opened. She also noted that Henry preferred that we not sell the leases, or the land, and that we keep them within the foundation. Barb reported that the leases at Salt Creek field. WAF shares these leases with the Wyoming Historical Society and the UW foundation.

Hell Gap use in 2006: There is a student tour that visits Hell Gap every year as usual. Albert's lease is good for about another five years (Albert is paying the electric bill for his grazing of the land). As long as we have it leased for grazing, it keeps it in agricultural use. Marcel reported that the only UW use of the site would be backfilling and some tree thinning during 2006.

Marcel talked a little about the Hell Gap research. UW's primary research work in 2005 was under the building at Locality I. This year we got into a good Cody level there. There is a least another meter of cultural deposits to dig though. This last summer was the first time that we opened up the east side of Locality I (IEast), and discovered a cut and fill sequence there that needs to be investigated. The Baars Clovis locality hasn't yield much – but the 1/16" hasn't been picked yet. They also tried to use ground penetrating radar to find the bedrock, but it appears that it won't work in the summer. They will try to use the GPR in the winter with frozen ground.

Frison Institute Endowment Fund: Barb reported that we met our \$50,000 goal. Eva asked whether or not any money above the \$50,000 would be matched – Marcel reported that anything above the \$50,000 pledge would be matched. Some of the extra funds have come from memorial contributions for Ray Gossett, which comes to an additional \$5,000 or so. He is planning to ask the Board of the Friends of the Frison Institute if they would like to pledge another set amount for the endowment. If the WAF Board

agrees to collect the money, that would lock in the state match for a given period of time. Dewey asked about the transfer of the first \$50,000 from WAF to the UW Foundation. Marcel reported that he hopes that something can be arranged in mid-May where UW could receive the \$50,000 so the Institute can start accruing interest on the endowment. He would like to have an official ceremony in front of the new building's sign. Barb asked that Marcel give her the information on where to send the money.

Jensen Trust Travel Award: Barb read the letter that she sends out to the recipients of the Henry E. and Clara T. Jensen Doctoral Travel Award Fund that explains where the money comes from and Henry and Clara's philosophy about Wyoming archaeology. Barb would like to insert a sentence that asks the recipient to acknowledge the donors. She also wondered is she was the correct person to be signing the letter. It was suggested that she should sign the letter Barb Nanas, representative of the Board of WAF. Rory Becker and Mary Passions will split \$750 for their 2006 travel to the Society for American Archaeology meetings in San Juan, Puerto Rico at the end of April.

Upkeep needs at Hell Gap: Dewey reported on the upgrade needs at Hell Gap for this year – which, as usual, includes fences, auto gates that need to be dug out, and a poor well. Before the 2007 the septic tank will need to be pumped and recharged with a starter. Barb will budget money for that.

Election of officers for next year: Barb nominated Judy Wolf (President), Mary Lou Larson (Secretary), and Barb Nahas (Treasurer). Don moved nominations cease. Officers elected for the next year unanimously.

Dewey asked if there was any other new business – of which there was none.

Mark moved and Barb seconded that we adjourn. Passed unanimously by voice vote.

Adjournment 8:25 a.m.

WAF Board Members and date of end of term on board:

Dewey Baars (President) 2006

Barb Nahas-Keiry (Treasurer) 2007

Terry Wilson (2008)

Judy Wolf (2009)

Mary Lou Larson (ex-officio, Dept. of Anthropology)

Mark Miller (ex-officio, State Archaeologist)
George C. Frison
Eva Peden (WAS Past-President)
Don Bailey (WAS President)

MINUTES
WYOMING ARCHAEOLOGICAL
FOUNDATION BOARD MEETING
Sunday, April 22, 2007
Saratoga, Wyoming

The annual meeting of the Wyoming Archaeological Foundation Board of Directors was held in conjunction with the 54th Annual Wyoming Archaeological Society Meeting at 7 a.m., April 22, 2007 at the Warm Spring Restaurant, Saratoga, Wyoming. Board members in attendance included Judy Wolf (President), Barb Nahas (Treasurer), Mary Lou Larson (Secretary, ex-officio, University of Wyoming), Mark Miller (ex-officio-State Archaeologist), Eva Peden (WAS Past-President), Stuart Mackenzie (WAS President), Terry Wilson, Marcel Kornfeld, Dewey Baars. Guests included Dale Wedel, Janice Baars, John Laughlin, Stewart Keiry. George Frison (Board Member) was absent. The terms of members are listed at the end of these minutes. President Judy Wolf called the meeting to order at 7:18 a.m.

Minutes of the Last Meeting. Judy asked if there were any additions or corrections on the minutes from the 2006 meeting of the WAF board meeting. Barb moved that the minutes be accepted and Eva seconded the motion. Motion passed unanimously by voice vote.

TREASURERS REPORT

Barb presented the Treasurer's Report. This year's audit was completed by Eva Peden, Judy Wolf, and Mavis Greer. Eva reported that the books were in order and complimented Barb for the job and order she has brought to the foundation's books. WAF income 2006/2007 was \$6,151.74 and expenditures \$3,800.76. The balance in the checking account as of March 31, 2007 was \$7,142.22. Total net worth as of March 31, 2007 is \$68,685.82. This includes reserve fund money; Foundation CD \$13,959.43, Henry E. Jensen Trust CD \$43,092.68 and George Frison Paleoindian Endowment \$4,491.49. The Foundation received

a check from Carolyn Buff, WAS Secretary/Treasurer for \$480.00, which included the dues from 2005/2006 and 2006/2007. The reason for the low amount and delay in sending WAS needed to build their reserves to pay for the Wyoming Archaeologist because the state of Wyoming was no longer paying for the journal.

Terry moved and Eva seconded the motion that the Treasurer's report be accepted. Voice vote was unanimous in favor of accepting the report.

OLD BUSINESS

Foundation Grant Guidelines. Barb reported that there had been no changes in the Grant Guidelines since last year except to remove "telegraph" and add "communication systems" as means of communication. The Board tabled any decisions of the grants until it had a better feel for the fixed costs of Hell Gap. Mark noted that the Foundation is going to continue to get emergency requests for funds and the Foundation, rather than WAS is the vehicle with which to fund these requests. Barb reported that currently the base cost for Hell Gap is approximately \$3,500.00 per year including a buffer for increases. So, figuring three years in advance, WAF needs to have ~\$11,000.00 in the bank at all times to cover Hell Gap expenses. The current Foundation reserve fund is at \$13,959.43 and is dedicated to cover these expenses. We also have reserve accounts for the Henry and Clara Jensen travel fund and the Frison Endowment. It was noted that we should continue to grow these accounts, because if we don't, the money will lose value through the years.

There were discussions of fund raising possibilities, such as, reprinting and selling the "Clovis to Cowboy" poster, silent auction items at the fall WAS meeting, etc. The Board decided in order to award up to \$1,000.00 per year we needed to establish a reserve fund of \$20,000.00, assuming 5% interest.

Mark moved and Mary Lou seconded that Barb transfer \$20,000.00 of the Jensen Trust into a Jensen Research Grants account to support research in the future. Vote passed unanimously by voice vote.

Mark moved and Eva seconded that the total amount of grants given out in any one year will not exceed \$1,000.00. Vote passed unanimously by voice vote.

The grant guideline committee (Mark, Barb, Mary Lou) will clarify the wording on the grant

guidelines before next year's WAS meeting.

Hell Gap.

Hell Gap Outdoor Museum: Marcel reported that since 2006 was an "off year" at Hell Gap (i.e., no work was done there) that no work has been done on the outdoor museum. However, the museum will be part of the work planned for this summer.

Tree Thinning: Dewey asked the board what percentage of the cedar should be cut out of the drainages and surrounding area. A suggestion was made that Dewey and Marcel should contact the County Extension agent or NRCS for their recommendations. Clearing the cedar will increase the amount of water available in the draws, clear the area for fires, and make more space available for visitors and workers.

Condition Report: Dewey's condition report identified a number of places at Hell Gap where work needs to be done. Items for discussion included fence repairs, spraying sage and cactus, mowing and clean up, garbage on property, fixing wings on auto gates, pack rats (currently under the house and in well). Dewey also reported that he had not yet gotten a gate on the old mine and that mapping of the interior had not yet been completed. Discussion followed on what to do with the old cabin that is deteriorating.

Hell Gap Actions:

Spraying sage and cactus. Some board members questioned whether spraying is the safest method to use to rid the area of sage and cactus given the presence of campers, etc. sleeping on the ground. The board did not come to any decision on the best way to proceed with this maintenance problem.

Old Mine. The Abandoned Mine Lands program may be able to close up and gate the mine. Judy will find out whom to contact about the mineshaft.

Old Log Cabin. Suggestions included looking to NCPTT for restoration funds.

Pack Rats. Trap them rather than using poison because of dogs at camp. Dewey will contact the local weed and pest folk.

Dewey reported that there had been ~170 visitors to the site in 2006 and ~120 in 2005. The 2005 numbers do not include field school or crewmembers.

NEW BUSINESS

Hell Gap Nomination for Historic Landmark:

John Laughlin proposed to nominate Hell Gap for a Historic Landmark. He stated he would write the paper but it would take about a year and he could only devote approximately an hour per week if his workload permitted. He would keep the board informed on the progress.

Hell Gap Research Report: Marcel stated that a manuscript was put together going back to the 1960's excavation. Copies will go to board members only.

Hell Gap 2007: Marcel reported that there will be a field school this year but he's not sure how many students will attend. Dewey presented the board a list of items that needed attention and anyone willing to assist please let him know. Also, the Kimball Family who previously owned the Hell Gap site was planning on coming out this year. Since that was their old home site they have information from the past, which could be beneficial for our use.

In 2006 there was a fire at Hell Gap and the fire department asked if we would give them a fire plan so they would know what to protect and what to let burn. It was agreed by the board to let the trees burn but protect the buildings. Mary Lou stated she would provide the fire department with a fire plan and determine where the breaks would be and what took first priority.

Mary Lou requested that since we would have a work crew at Hell Gap this year we need to install outdoor hot and cold water taps, and wash tubs. This makes it much easier for the people to wash up and do dishes while working there. There is always a big crew and small kitchen. The plumbing will need to be checked to see if can accommodate and what the cost will be. Mary Lou will let the board know.

Ord Ranch Survey: John Laughlin is checking into doing a survey at Ord Ranch in 2007. Wanted to know if WAF would like to partner on obtaining a grant for the work? John will get more information to the board before a decision can be made.

Frison Institute Endowment Fund: Barb reported that we met our \$50,000.00 goal. Eva asked whether or not any money above the \$50,000.00 would be matched – Marcel reported that anything above the \$50,000.00 pledge would be matched. Some of the extra funds have come from memorial contributions for Ray Gossett, which comes to an additional \$5,000.00 or so. He is planning to ask the Board of the Friends of the Frison Institute if they would like

to pledge another set amount for the endowment. If the WAF Board agrees to collect the money, that would lock in the state match for a given period of time. Dewey asked about the transfer of the first \$50,000.00 from WAF to the UW Foundation. Marcel reported that he hopes that something can be arranged in mid May where UW could receive the \$50,000.00 so the Institute can start accruing interest on the endowment. He would like to have an official ceremony in front of the new building's sign. Barb asked that Marcel give her the information on where to send the money.

OTHER BUSINESS

Judy Wolf asked if we could change the 2008 Sunday morning meeting to 8 a.m. instead of 7 a.m. The board agreed to change the meeting to 7:30 am to 9:30 am. The reason we had the 7 am meeting was so people could go on field trips or start back home early.

Election of Officers: Judy Wolf moved that we appoint Barbara Nahas for the Executive Treasurer's position. Since we changed the By-laws last year this position is appointed by the board. The position is still a voting member but is ex-officio and no treasurer is elected. The board agreed unanimously. Barbara Nahas will be the Executive Treasurer.

Barbara Nahas moved that the nomination for President be Judy Wolf, and Secretary Mary Lou Larson, second by Mark Miller. Nominations closed and nominees accepted by board unanimously.

There were no Henry E. and Clara T. Jensen Doctoral Travel Award recipients for the year.

Summer Meeting for 2007 will be held at Hell Gap, June 15 – 17, 2007.

Fall Meeting will be in Laramie September 27, 2007.

The Annual 2008 Meeting will be held in Rock Springs, dates to be determined.

Mark moved and Barb second that we adjourn. Passed unanimously by voice vote.

Adjournment 8:49 a.m.

WAF Board Members and End of term dates

- Judy Wolf (President 2009)
- Mary Lou Larson (Secretary – Ex-Officio, Dept. of Anthropology)
- Barbara Nahas (Executive Treasurer, Ex-Officio Appointed by Board)

- Terry Wilson (Member at Large 2008)
- Mark Miller (Ex-Officio, State Archaeologist)
- George C. Frison (Ex-Officio)
- Eva Peden (WAS Past President)
- Stuart Mackenzie (WAS President)

MINUTES
WYOMING ARCHAEOLOGICAL
FOUNDATION BOARD MEETING
 Sunday, April 27, 2008– Rock Springs,
 Wyoming

The annual meeting of the Wyoming Archaeological Foundation Board of Directors was held in conjunction with the 55th Annual Wyoming Archaeological Society Meetings 7:30 a.m., April 27, 2008 at the Outlaw Inn, Rock Springs, Wyoming. Board members in attendance included Judy Wolf (President), Barb Nahas-Keiry (Treasurer, ex-officio), Mary Lou Larson (Secretary, ex-officio, University of Wyoming), Mark Miller (ex-officio-State Archaeologist), Mavis Greer (new board member), Eva Peden (Past-President of the WAS), Dale Wedel (acting WAS President/President Elect), Terry Wilson, Marcel Kornfeld, Dewey Baars. Guests included Janice Baars. George Frison (Board member) was absent. The terms of members are listed at the end of these minutes.

President Judy Wolf called the meeting to order at 7:42 a.m. Dale Wedel and Mavis Greer were introduced as new members of the board. Barb added Rich Adam's request for funding to New Business. **Minutes of the Last Meeting:** Judy asked if there were any additions of corrections on the minutes of the 2007 meeting of the WAF board meeting. Barb moved that the minutes be accepted and Terry seconded the motion. Motion passed unanimously by voice vote.

TREASURER'S REPORT

Barb presented the Treasurer's Report.

Balance in checking as of 3/31/2007	\$ 7, 142.22
Income	\$ 5,273.37
Expenditures	(\$ 2,650.69)
Balance in checking as of 3/31/2008	\$ 9,764.90

Reserve Funds

Certificate of Deposit #6026430 (a/o 3/31/2007)

	\$12,951.05
Interest paid 2007/2008	\$ 531.39
Balance ending a/o 3/31/2008	\$13,464.44

Money Market Account #20098502 (a/o 3/31/2007)

	\$1,008.38
Interest paid 2007/2008	\$ 13.00
Balance ending a/o 3/31/2008	\$ 1,021.38

Foundation Subtotal \$14,485.82

Henry E. Jensen Trust

Certificate of Deposit #6211373 (a/o 3/31/2007)

	\$ 37,802.51
Interest paid 2007/2008	\$ 650.79
Balance ending a/o 3/31/2008	\$ 18,453.30

Certificate of Deposit #6213161 (a/o 3/31/2007)

	\$ 5,290.17
Interest paid 2007/2008	\$ 202.84
Balance ending a/o 3/31/2008	\$ 5,493.01

Jensen Research Grant

Certificate of Deposit #6211373 (a/o 3/31/2007)

	\$ 0.00
Deposit April 5, 2007	\$ 20,000.00
Interest paid 2007/2008	\$ 733.85
Balance ending a/o 3/31/2008	\$ 20,733.85

Jensen Trust Subtotal \$ 44,680.16

George Frison Endowment

Money Market Account #20098502 (a/o 3/31/2007)

	\$ 4,491.49
Interest paid 2007/2008	\$ 76.72
Deposits 2007/2008	\$ 17,807.84
Withdrawals 2007/2008	\$ 18,000.00
Balance ending a/o 3/31/2008	\$ 4,375.95

Endowment Subtotal \$ 4,375.95

Total Net Worth as of March 31, 2008

\$ 73,306.83

Barb explained that the money market account contains additional monies for the Frison endowment. Marcel explained that the university has already committed to match the second \$50,000 pledge in full no matter what happens with the state match program. Once the money reaches the university, it will be matched and the money can be used.

This year's audit was completed by Mavis Greer, Judy Wolf, and Eva Peden. Eva reported that, as usual they were in beautiful condition and everything matched. Dale moved and Mark seconded accepting the auditor's report. Motion passed unanimously by voice vote.

OLD BUSINESS

WAF Fundraiser Update: Judy explained what she had done about reprinting the "Clovis to Cowboy" poster. Can't just use the old poster, instead have to drum scan the image (\$100) and have the graphic designer redo the poster (\$120), 150 posters would cost \$571; the total expense would be about \$800 in expense if we decide to do it. If we sell it for \$40 then we would make \$4,000. Eva volunteered to buy one and Terri volunteered to help. They would be numbered as well. Discussion then centered around different ways to sell them including in the State Museum store, on a web site, at Plains Conference, WAPA list serve. Judy suggested auctioning off the first five posters and Barb suggested it should be done at the WAS meeting in Cody. Judy explained the process of making and framing the posters.

The distribution of money from the poster was discussed. Barb explained that Foundation operations are about \$14,000/year and that if we reached a point where we had no money coming in we would need to have that much in a reserve account (the current Reserve Fund) and she would like to build that up to \$20,000. Currently the Jensen Estate oil royalties (Salt Creek Oil Field) are paying our bills. If oil prices drop, then we are in trouble and need to have the \$20,000 which would cover about three years of expenses. The insurance on the Hell Gap property is about \$1500 and is sure to go up. Last year's meeting discussed the need for three year's reserve in operating funds and the Jensen Research grant. It was never decided where the money from the poster sale was to go. Mark moved and Terry seconded that after we recoup the expenses of printing the poster, we split the proceeds evenly between the Reserve and the Jensen Research Grant. Discussion then centered around the needs of the Foundation – for keeping the Hell Gap property (taxes, insurance, and other necessities) and a Research Fund giving out at least \$1000/year. Both were considered to be important.

Mark amended the motion so that 80% of the

proceeds go to the Jensen Research Grant and 20% to the Reserve Fund. Motion passed unanimously by voice vote.

Mark moved and Eva seconded that we print 150 Clovis to Cowboy posters and sell at a price to be determined. The price will be at the discretion of the board. Motion passed unanimously by voice vote.

WAF Grant Guidelines: Barb reported that we'd been working on the guidelines for the grants over the past three years, and how we should get the information disseminated. Suggestions putting it in the *Wyoming Archaeologist*, announce in Laramie when the scholarships are announced in the spring (many students are members), host chapter for spring meeting should mail out an announcement with their packet, post on any web site (WAPA, Anthropology Department, State web sites). Deadline date for applications was discussed, and March 15 was suggested as a deadline. Discussion then centered on the wording of the grant guidelines, and the board decided to work on this application over the next year and get it out. Mark suggested changing the donation form the *Archaeologist* to allow them to specify a particular fund for their donation.

Hell Gap Nomination to the National Register: Judy reported that the SHPO office was finishing up the Finley nomination (to be done Fall 2008). John Laughlin hasn't had time to work on the Hell Gap Landmark nomination. Landmark nominations entail much more work than a nomination to the National Register, and the Park Service might even write the nomination.

Ord Ranch Survey: Judy mentioned that John Laughlin had reported at yesterday's WAS meeting that the Ord Ranch survey had not happened yet. Dewey noted that the landowners had sold the ranch, but the manager was still on the property.

NEW BUSINESS

Hell Gap Report:

Summer grazing: Albert was ready to move cows onto the property, but Dewey had turned on the well and discovered a few small leaks that needed to be fixed before he could turn it on. He will do this in the next few weeks.

Tree Removal: Last year, Terri and her husband removed some trees, but we've barely scratched the surface. Worked on the fence along the road and

pulled out a lot of the trees that were wound into the fence.

Mine Shaft: Dewey will order the material for the door to the mineshaft and install it.

Fire Plan: Marcel reported that he and Dewey had not done the fire plan for the property. They will circle the house, lab trailer, and building over the site to be saved, and that there should be no four wheelers, dozers, or graders allowed on the land during firefighting.

2008 Plans and visitors: The only plans for 2008 will be some maintenance, including painting roof on trailer. The lab trailer is deteriorating, but we can just maintain it until it is no longer useable at this point. There will be no archaeology this summer.

Visitors: School children are still eager visitors to the site. Mary Lou Larson and Robert Kelly took Henry Wright, the Mulloy lecturer and some graduate students to visit the site just recently.

Upgrades to the house at Hell Gap: Potential upgrades to the house at Hell Gap include the installation of an outside sink with hot and cold water, removing the sink/stove/counter top in the kitchen, and subdividing the back room into a guest room for sick field crew, visitors without tents, etc. Mary Lou reported that they were still working on it.

Frison Institute Endowment Fund: Barb explained the report she had received from the UW Foundation about the Frison Institute Fund. Mary Lou questioned the \$24,344.00 for Endowment purpose expenditures. Marcel reported that the next pledge of \$50,000 may be a little more difficult to get than the first one. He still has about 4,000 books that he could sell, but will wait until there is evidence that we need to raise more money for the endowment. He also explained that in order to get the match from the state, any donations that people want to make need to be sent through the Foundation. If people send money directly to the UW Foundation it will not be matched.

Salt Creek Oil Field: Barb reported that Howell Petroleum wants to increase the drilling in Salt Creek Oil Field.

Grant Request from Rich Adams: Need to decide whether or not to fund Rich Adams \$450 to rent a horse to take George Frison to High Rise Village. Mark moved and Eva seconded to give Rich the \$450.00. Terry Wilson volunteered to take a horse to George, and she should charge us for the gas to

take the horse there and back. Recommend that Rich talk to Terry and if that doesn't work out then WAF would pay for the horse. Voice vote carried unanimously.

Election of officers for next year: Barb nominated Judy Wolf (President), Mary Lou Larson (Secretary), and Barb Nahas (Treasurer). Eva moved nominations cease. Officers elected for the next year unanimously.

Barb moved and Dale seconded that we adjourn. Passed unanimously by voice vote.

Adjournment 8:55 a.m.

WAF Board Members and date of end of term on board

- Judy Wolf (President 2009)
- Barb Nahas-Keiry (Treasurer) 2010, but permanent member
- Terry Wilson (2008)
- Mavis Greer (2011)
- Mary Lou Larson (Secretary, ex-officio Dept. of Anthropology)
- Mark Miller (ex-officio, State Archaeologist)
- George C. Frison (ex-officio)
- Eva Peden (WAS Past-President)
- Dale Wedel (Acting WAS President/WAS President Elect)

MINUTES

WYOMING ARCHAEOLOGICAL FOUNDATION BOARD MEETING

Sunday, April 4, 2009 – Cody, Wyoming

The annual meeting of the Wyoming Archaeological Foundation Board of Directors was held in conjunction with the 56th Annual Wyoming Archaeological Society Meetings. The WAF Board Meeting was held at the Holiday Inn Meeting Room, 7:30 am. Board members in attendance included: Judy Wolf (President), Barb Nahas-Keiry (Treasurer, ex-officio), Mary Lou Larson (Secretary, ex-officio, University of Wyoming), Mark Miller (State Archaeologist, ex-officio), Dale Wedel (WAS President), Eva Peden (WAS Immediate Past President), Mavis Greer (Member-at-Large), Margaret Harless (Member-at-Large), Marcel Kornfeld (George Frison Institute).

President Judy Wolf called the meeting to order

at 7:40 am. Judy stated Danny Walker has requested copies of the WAF Minutes for the last three years. Mary Lou will send them to him. Margaret Harless was introduced as the new member of the board.

Minutes of the Last Meeting: Judy asked if there were any additions, corrections on the 2008 meeting of the WAF Board Meeting. Hearing none, Dale Wedel moved that the minutes be accepted and Mark Miller seconded the motion. Motion passed unanimously by voice vote.

TREASURER'S REPORT

Barb presented the Treasurer's Report:

Balance in checking as of 3/31/2008	\$ 9,764.90
Income:	\$ 5,810.37
Expenditures:	(\$4,895.48)
Balance in checking as of 3/31/2009	\$10,679.79

Reserve Funds

Foundation Operations

Certificate of Deposit #6026430 (a/o 3/31/2008)	
\$13,464.44	
Interest Paid 2008/2009	\$ 354.99
Balance Ending (a/o 3/31/2009)	\$13,819.43
Money Market Account #20098502 (a/o 3/31/2008)	\$ 1,021.38
Interest Paid 2008/2009	\$ 10.08
Balance Ending (a/o 3/31/2009)	\$ 1,031.46
Foundation Operations Sub-Total	\$14,850.89

Henry E. Jensen Trust

Certificate of Deposit #6015170 (a/o 3/31/2008)	
\$18,453.30	
Interest Paid 2008/2009	\$ 293.25
Balance Ending (a/o 3/31/2009)	\$18,746.55
Certificate of Deposit #6213161 (a/o 3/31/2009)	
\$ 5,493.01	
Interest Paid 2008/2009	\$ 84.71
Balance Ending (a/o 3/31/2009)	\$ 5,577.72

Jensen Research Grant

Certificate of Deposit #6015170 (a/o 3/31/2008)	
\$20,733.85	

Interest Paid 2008/2009	\$ 330.70
Balance Ending (a/o 3/31/2009)	\$21,064.55

Jensen Trust Sub-Total
\$45,388.82

Clovis to Cowboy Fundraiser

Money Market Account #20098502 (a/o 3/31/2008)	\$ 0.00
Deposit October 21, 2008	\$ 420.00
Balance Ending (a/o 3/31/2009)	\$ 420.00

Fundraiser Sub-Total **\$ 420.00**

George Frison Endowment

Money Market Account #20098502 (a/o 3/31/2008)	\$ 4,375.95
Interest Paid 2008/2009	\$ 16.70
Deposits 2008/2009	\$ 2,675.00
Balance Ending (a/o 3/31/2009)	\$ 7,067.65

Endowment Subtotal **\$ 7,067.65**

Total Net Worth as of March 31, 2009
\$78,407.15

Barb also presented an “Oil Well Royalties Summary” on collections from Year 2003 thru Year 2008. (Year 2009 summary sheet has not been sent by the oil company as of this date.)

This year’s audit was completed by Eva Peden, Dale Wedel, and Mavis Greer. Eva reported all the books were correct. Mark moved and Dale seconded accepting the auditor’s report. Motion passed unanimously by voice vote.

OLD BUSINESS

Clovis to Cowboy Fundraiser: We made 200 posters and have sold 16. Judy commented the poster wasn’t selling as well as we thought, partially because people think since the WAAM posters are free. Judy stated that the posters at the Gallery in Laramie are not moving as well as expected. Discussion focused on the distribution of the poster and if there are any places to distribute. Mavis will ask the Trail Center in Casper if they would agree to sell some, as well as Fort Casper. Everyone agreed that they could add an additional \$5.00 onto our price for their costs. Barb suggested that we all check in

our home towns and find out if people are willing to sell the poster. Barb thought we could put together an order form to take to the Historical Society to see if they’d be interested in assisting us to sell them. Judy stated if people were to order them we needed to add shipping and handling. Mary Lou suggested taking the poster to Hell Gap for the WAS Summer meeting as well as to Fort Laramie and the Frison meeting in the fall. Judy stated if we put the poster on the web page we had to add at least \$10.00 shipping and handling to the price.

NEW BUSINESS

Hell Gap Report: Barb reported for Dewey. Over 90 children visited the site last year. Dewey is in the process of clearing bushes and trees. The brush will be burned at the appropriate time. Didn’t get a chance to clean out the septic system and we need to do it this year. Eva moved and Mavis seconded that we spend \$200.00 to have the septic system pumped. Motion passed.

Albert Martin’s lease is up for renewal in August 2009. His lease keeps us in the agricultural land tax bracket. Barb sent Dewey a copy of the lease and amendments. Albert also pays the electric bill at Hell Gap. Marcel noted that Albert has a good situation, but so do we. A number of people in the vicinity would be interested. Mark moved, Mavis seconded we renew Albert’s lease for another five years. Motion passed. Dewey will have Albert sign the lease then file it with the Goshen County Assessor.

Marcel reported that there were several other visitors to the site over the last year. The Frison Institute brought Ivor Karavanic from the University of Zagreb; Gustavo Politis from Argentina visited the site as well.

Marcel explained that the house at Hell Gap has a small, double interior sink that is too small for use for field crews. The dishes have been washed in dish pans in past years. Stewart Keiry estimated about \$700.00 for the plumbing supplies and a concrete pad with a pipe going down to the arroyo. Mark moved we proceed with the plumbing plan for Hell Gap this summer (May) Mavis seconded. Motion passed.

Judy asked Marcel to put together a plan for the summer meeting at Hell Gap so that WAS members can know what they will be doing. The activities at Fort Laramie will be going on at the same time – we

should coordinate these two activities.

Marcel discussed the Cooperative Agreement between the Wyoming Archaeological Foundation and the George C. Frison Institute of Archaeology and Anthropology which will expire in 2010. Barb passed out copies of the 2000-2010 cooperative agreement. The Institute has completed many of the activities listed on the agreement and some addition/alterations. Mark asked if there had been any drainage problems around the building over Locality I. Marcel reported that the structure itself hasn't affected the drainage much. The taxes on the property did go up between 1999 and 2000.

Finally, the Hell Gap monograph will be out in 4 weeks, but he had order forms for anyone who wanted to order and you could get a conference discount. Marcel also talked about summer field plans, which will include a field school. There had been some testing at Locality IIW in the past and Marcel is thinking he'll put a weather port donated by Mike and Sally Metcalf to the Institute over at Locality IIW to be used out there.

Institute Foundation Report: The UW Foundation has not sent out the annual report at the time of this meeting. Barb reported on the activity up to now. We need just under \$24,932.45 to meet the match by 2011. Mark asked if there had been any talk of the state freezing any of the funds – part of this year's packet included a letter from the UW Foundation saying that they would support the remainder of the \$200,000.00 total (donations plus match).

Foundation Stationery: Barb reported that she had found two different images – one a mammoth and another bison skull (which is similar to the one WAPA uses). The mammoth was drawn by Bob Edgar. We have no information in file giving us permission to use Bob's drawing. Since Bob is in an assisted living home, Larry Edgar is handling his affairs. Mark suggested we get written permission to use Bob's drawing as our stationery. Barb will talk to Larry to obtain written permission for the usage of the drawing.

Election of officers: Barb nominated Eva Peden as President and Mary Lou Larson as Secretary. (Barb is treasurer by appointment by the board therefore no nomination necessary). Board accepted nomination of officers. Barb is considered member-at-large of WAS without a term.

Judy Wolf was given a gift and card from the

board as a thank you for her service as President over the last three years.

Jensen Travel Funds: There was no recipient this year 2009/2010. No applications were received. Also, Bill Currant is the liaison for WAPA regarding this award program. WAS, WAF and WAPA all participate in the funding for the Henry & Clara Jensen Doctoral Travel Award.

The board packet under Tab #4 has a thank you note to the board from Norbert Wasilik regarding his award for the year 2008/2009.

Also under Tab #4 is a picture of the gate now in place across the mine entrance at the Hell Gap property.

Fall Meeting of the Friends of the Frison Institute: The fall WAS meeting along with the Wyoming Archaeology Awareness Month and the Frison Institute will be held at the Frison Institute on September 24, 2009, Laramie Wyoming. At this time no speaker has been identified.

Summer Meeting: The summer meeting of WAS will be held at Hell Gap on June 19, 2009.

Next Foundation Meeting: Mavis announced that the next WAS Spring Meeting will be in Casper Wyoming, April 9-11, 2010 at the Parkway Plaza.

Mark moved and Dale seconded the meeting adjourn. Passed unanimously by voice vote.

Meeting adjourned 8:59 a.m.

MINUTES

WYOMING ARCHAEOLOGICAL FOUNDATION BOARD MEETING

Sunday, April 10, 2010 – Casper, Wyoming

The annual meeting of the Wyoming Archaeological Foundation Board of Directors was held in conjunction with the 57th Annual Wyoming Archaeological Society Meeting in the Parkway Plaza Hotel, 64 Grille restaurant at 7:30 am. Board members in attendance included: Eva Peden (President), Barb Nahas-Keiry (Treasurer, ex-officio), Mary Lou Larson (Secretary, University of Wyoming, Department of Anthropology, ex-officio), Mark Miller (State Archaeologist, ex-officio), Janice Baars (WAS President), Dale Wedel (WAS Immediate Past President), Mavis Greer (Member-at-Large), Margaret Harless (Member-at-Large), Alice Tratebas (Member-at-Large), Dewey Baars (Hell Gap site caretaker), Marcel Kornfeld (George Frison Institute).

President Eva Peden called the meeting to order at 7:32 am.

Minutes of the Last Meeting: Eva asked if there were any additions, corrections on the 2009 meeting of the WAF Board Meeting. Hearing none, motion to accept the minutes passed unanimously by voice vote.

TREASURER’S REPORT

Barb presented and discussed the Treasurer’s Report:

Balance in checking as of 4/01/2009

\$ 10,679.79

Income:

Henry Jensen Estate	\$ 1,531.29
WAS Dues	\$ 259.00
Checking Interest	\$ 0.68
Book Royalties	\$ 1,279.41
Donation Mary Lou Larson – Hell Gap Improvements	\$ 730.00
Total Income	\$ 3800.38

Expenditures:

Traveler’s Insurance	\$ 1,569.00
Wells Fargo – Safe Deposit Box/Fees	\$ 20.00
Goshen County Treasurer	\$ 407.32
Wyoming Secretary of State Annual Report	\$ 25.00
Postmaster – Annual P.O. Rental	\$ 56.00
Holiday Inn – Meeting Room	\$ 75.00
Pinnacle Bank – Transfer Fm Ckg to Money Mrkt	\$ 8,000.00
Bank of West – New Checks	\$ 20.00

Hell Gap Maintenance

Home Depot	\$ 571.34
Bloedorn Lumber	\$ 156.18
Wheatland REA	\$ 52.36
Eva Peden – Fuel	\$ 45.00
Total Expenditures	(\$10,997.20)

Balance in Checking as of 3/31/2010

\$ 3482.97

Reserve Funds

Foundation Operations

Certificate of Deposit #6026430 (a/o 04/01/2009)	\$13,819.43
Interest paid (2009/2010)	\$ 30.19

Balance Pending (a/o 03/31/2010)

\$13,849.62

Money Market Account #20098502 (a/o 04/01/2009)

\$ 1,031.46

Interest Paid 2009/2010 \$ 15.91

Deposit 2009 \$ 8,000.00

Balance Ending (a/o 3/31/2010)

\$ 9,047.37

Foundation Operations Sub-Total

\$22,896.99

Henry E. Jensen Trust

Certificate of Deposit #6015170 (a/o 04/01/2009)

\$18,746.55

Interest Paid 2009/2010 \$ 23.07

Balance Ending (a/o 03/31/2010)

\$18,769.62

Certificate of Deposit #6213161 (a/o 04/01/2009)

\$ 5,577.72

Interest Paid 2009/2010 \$ 6.88

Balance Ending (a/o 04/01/2010)

\$ 5,584.60

Jensen Research Grant

Certificate of Deposit #6015170 (a/o 04/01/2009)

\$21,064.55

Interest Paid 2009/2010 \$ 26.04

Balance Ending (a/o 3/31/2010)

\$21,090.59

Jensen Trust Sub-Total \$45,444.81

Clovis to Cowboy Fundraiser

Money Market Account #20098502 (a/o 04/01/2009)

\$ 420.00

Deposit 2009/2010 \$ 325.00

Balance Ending (a/o 03/31/2010)

\$ 745.00

Fundraiser Sub-Total \$ 745.00

George Frison Endowment

Money Market Account #20098502 (a/o 04/01/2009)

\$ 7,067.65

Interest Paid 2009/2010 \$ 5.70

Deposits 2009/2010 \$ 2,100.00

Withdrawl 2009 \$ 7,000.00

Balance Ending (a/o 04/01/2010)

\$ 2,173.35

Endowment Sub-Total \$ 2,173.35

Total Net Worth as of March 31 2010

\$74,743.12

Barb also presented an “Oil Well Royalties Summary” on collections from Year 2003 thru Year 2009. (Year 2010 summary sheet has not been sent by the oil company as of this date – they send it out on an annual basis).

This year’s audit was completed by Dale Wedel, Margaret Harless and Mavis Greer. The books were reported to be in order. The auditor’s report was accepted by the board.

Eva passed out a letter from George C. Frison urging the board’s to continue agreement between the board, the Frison Institute, and the Department on Anthropology.

OLD BUSINESS

WAF Fundraiser (Cowboy to Clovis posters): As of yesterday morning (4/9/2010), we have recovered \$745.00 of the original cost of \$872 for the posters. Yesterday at the meeting we took in \$100 (\$75 selling, \$25 outright donations) leaving \$27 to break even. 175 posters remain, and we had only sold a total of 28 posters. The Board discussed whether or not we should reduce the price of the poster to sell more. Mark moved we offer a poster to anyone who donates a minimum of \$20 to the Foundation with additional money for shipping and handling. Mavis seconded. Motion passed unanimously by voice vote. Barbara agreed to create a letter thanking the person who gave a donation, stating the value of the poster, so the individual could deduct their donation from their taxes.

Foundation Stationery: The Board had a discussion about the current status of the Foundation stationery. Although we had decided to use Bob Edgar’s drawing on our stationery, Larry Edgar and his daughter have not responded to Barb’s calls. Eva remembered that we considered doing a contest with students around the state (or at UW). It was then suggested that we have a logo drawn for the letterhead. Margaret moved and Barb seconded that we ask BJ Earle to draw us a mammoth. Motion passed unanimously by a voice vote. Alice agreed to talk to BJ about doing the art for us.

NEW BUSINESS

Hell Gap Report:

Educational Use of Hell Gap: The UW Department of Anthropology held their biennial

archaeological field studies class at Hell Gap during June 2009 directed by Mary Lou Larson and Marcel Kornfeld. Excavations were conducted on the “witness block” at Locality I. With field crew, UW students and volunteers as many as 20 people were in attendance. The WAS summer meeting was held at Hell Gap during one of the 10-day sessions. Part of the activities of the 2009 summer meeting included installation of outside sinks and drains at the dining hall and replacement of flooring in one section of the laboratory trailer. The carpenter and plumbing skills of Don Peden and Stuart Keiry and procurement and transportation abilities of Don, Stuart, Barb Nahas-Keiry and Eva Peden are greatly appreciated as are the supervisory role of all in the vicinity. Costs for the improvements were covered by a donation from Mary Lou Larson.

Mary Ann Koons and another fourth grade teacher brought students over to look at the site during the regular school year. Mary Ann also brought 4th graders out to work with UW when they were out during the summer of 2009. About 90 students visited the site last year.

Care and upkeep needs: Dewey reported that we need to do the following maintenance items:

- Redo part of the well at the dining hall. The bottom has rusted out of the pressure tank, as have the fittings. Barb moved and Mary Lou seconded that we replace the pressure tank as soon as possible. Motion passed by voice vote.
- We need to work on the fence, as Albert is no longer doing much fencing.
- Still have problems with the cedar trees. Jim Wilson trimmed about 100 feet and many other people have worked on parts of the drainage to try to get them out. Dewey thinks we really need to make a concerted effort to get these removed.
- Sage grows really well around the house and he thinks we need to spray to kill the sage. May is the best time to spray for sage. Marcel will call Alan and find out about getting free spray from the county.

Fire plan: Barb reported that both the Goshen County Commissioners and the Goshen County Fire Department had requested we **send** a general plan outlining which buildings to save while letting the rest burn in case of a fire. She noted that we still

need a map of where the fire crews can blade and where they should not during a fire. Barb remembers giving Mary Lou maps of the areas where we would allow blading.

Care taker: Dewey is retiring from his job as caretaker of the Hell Gap site. Eva presented him with a certificate and a gift card.

Renewal of Albert Martin's lease: His lease was due last fall (and we renewed it for five years last year) and he wants to add his son to the lease for a 5 year lease. Mark moved and Dale seconded that we add Albert's son to the existing lease and sustain it when it comes up for renewal. Marcel will follow up on who will turn the water on and off this year.

Septic pumped: The board agreed we didn't need to pump the septic system since we don't use it much; especially in an off year such as 2010.

WAF/Frison Agreement: Marcel presented a brief report on the work done by the University of Wyoming at the Hell Gap site. After a brief discussion of the ten year agreement between the Board, the Frison Institute, and the Department of Anthropology Dale moved and Mavis seconded that we approve the 10 year research agreement. Motion passed by voice vote.

Institute Foundation Report: Barb reported that we have a total \$163,724 towards the \$200,000 endowment. We still need to find \$22,826 to complete the \$200,000 endowment.

Election of officers: Barb nominated and Mark seconded Margaret Harless as President and Mary Lou Larson as Secretary. Board accepted nomination 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: Three PhD graduate students from UW were awarded the Jensen Travel Fund for 2010. WAS, WAF and WAPA all participate in the funding for the Henry & Clara Jensen Doctoral Travel Award at \$250.00 each and the University of Wyoming President's Office will match the total amount of the award (\$750.00). Margaret Morris, Elizabeth Lynch and Patrick Mullin each received \$500.00.

Eva thanked Marcel and Mary Lou for their

donations to the board of royalties of the Hell Gap book.

Summer Meeting: The summer meeting of WAS will be held at Fort Laramie.

Fall Meeting of the Friends of the Frison Institute: The fall WAS meeting along with the Wyoming Archaeology Awareness Month and the Frison Institute will be held at the Frison Institute on September 23, 2010, Laramie Wyoming. Ted Goebel from the Center for the Study of the First Americans will be this year's speaker.

Next Foundation Meeting: The next WAS Spring Meeting will be in Sheridan, Wyoming, Date to be announced.

Dale is 2011 chair of the audit committee, Margaret and Janice will be on the committee.

We have two applications for the Jensen Research fund. Both Rich Adams and Rory Becker have taken out applications for the award.

Eva Peden was given a gift and card from the board as a thank you for her service as President over the last year, as well as her years of service on the Board of Directors. The board expressed their appreciation to Mavis Greer for her service on the board as Member-At-Large.

Mark moved and Margaret seconded the meeting adjourn. Motion passed unanimously by voice vote.

Meeting adjourned 9:01 am.

WAF Board Members:

Eva Peden (President)

Barb Nahas-Keiry (Treasurer, ex-officio)

Mary Lou Larson (Secretary, ex-officio, University of Wyoming)

Mark Miller (State Archaeologist, ex-officio)

Janis Baars (WAS President)

Dale Wedel (WAS Immediate Past President)

Mavis Greer (Member-at-Large – Term Expires 2010)

Margaret Harless (Member-at-Large – Term Expires 2011)

Alice Tratebas (Member-at-Large – Term Expires 2012)

George C. Frison (Lifetime member)

“MY NAME WAS MADE HIGH:” A CROW WAR RECORD AT 48HO9

by

James D. Keyser

Until quite recently the Bighorn Basin has not been known for its Biographic rock art imagery. In fact, in their excellent overview of the region, Francis and Loendorf (2002:179-183) note only two sites in the Bighorn Basin proper—Military Creek and Mahogany Buttes—that contain horses and riders, and both of those are in the Bighorn Mountain foothills on the basin’s extreme eastern edge.¹ They also note (Francis and Loendorf 2002:181) that “illustrations of Historic period weaponry are less common than those of horses.” In the last few years, however, intensive effort on the part of Mike Bies, Bureau of Land Management Worland field office archaeologist, to document Biographic imagery has produced several significant new discoveries of classic Northwestern Plains Biographic Tradition rock art (e.g., Bies and Walker 2009; Francis 2007:221-224; Greer and Greer 2009; Keyser and Poetschat 2009). Recording work at 48HO9 in June of 2011 adds another important image to this growing list.

Site 48HO9, located in the approximate center of Wyoming’s Bighorn Basin, almost 30 miles (50 km) west of Worland, Wyoming (Figure 1), was originally recorded in 1976 by George Zeimens who noted two tipi rings and eroded fire hearths associated with a lithic scatter that yielded one quartzite side-notched projectile point of indeterminate type (Zeimens 1976). In late 2010, Mike Bies was informed of a petroglyph panel containing a horse and rider, and after doing preliminary photographic documentation (Figure 2) and GPS work it was discovered that the image was situated at the northern boundary of the site. A few weeks later Mike contacted me to see if my crew would be interested in recording the site at the finish of an informal research project that we were planning to investigate Fremont Tradition images in far southwestern Wyoming. I enthusiastically agreed, and

Mike and Marit Bovee took us to the site on June 2, 2011. This report is the result of about an hour’s work recording the site’s single petroglyph panel by tracing it on a clear plastic sheet.

The petroglyph is very clearly and carefully incised on a low, east-facing surface of a large, free-standing sandstone boulder that long ago detached from the high cliff looming above the eastern edge of the site and fell and rolled to its present position (Figures 3, 4). Located on a relatively flat terrace along a shallow, dry drainage less than 50 meters from the base of the cliff, the small pickup truck-sized boulder stands more than two meters tall and is between six and eight meters in circumference. The terrace is covered by a typical, sparse sagebrush-shortgrass prairie characteristic of much of the desert-like center of the Bighorn Basin.

The petroglyph shows a very precisely-drawn horseman armed with a long spear and small equestrian-period buffalo hide shield who is attacking a pedestrian enemy through a hail of bullets or (less likely) arrows that have missed their mark (Figure 5). Unfortunately, the pedestrian opponent is badly damaged (and, in fact, nearly obliterated) by cattle (and possibly bison in the late 1800s) rubbing against the projecting corner of the boulder, as such animals commonly do. Given the relatively late date of the image, however, and the significant accumulation of dried cow manure at the base of the sheltered side of the boulder, I suspect that most of this damage postdates the introduction of large scale cattle ranching in the Bighorn Basin in 1879 (Vision West 2011).

The rider, who wears extremely long hair, has a bent-kneed posture with feet clearly shown but no arms indicated. The horse is a typical mature style animal with open nose, two erect ears, hook hooves, and a flowing tail composed of four long lines. Three

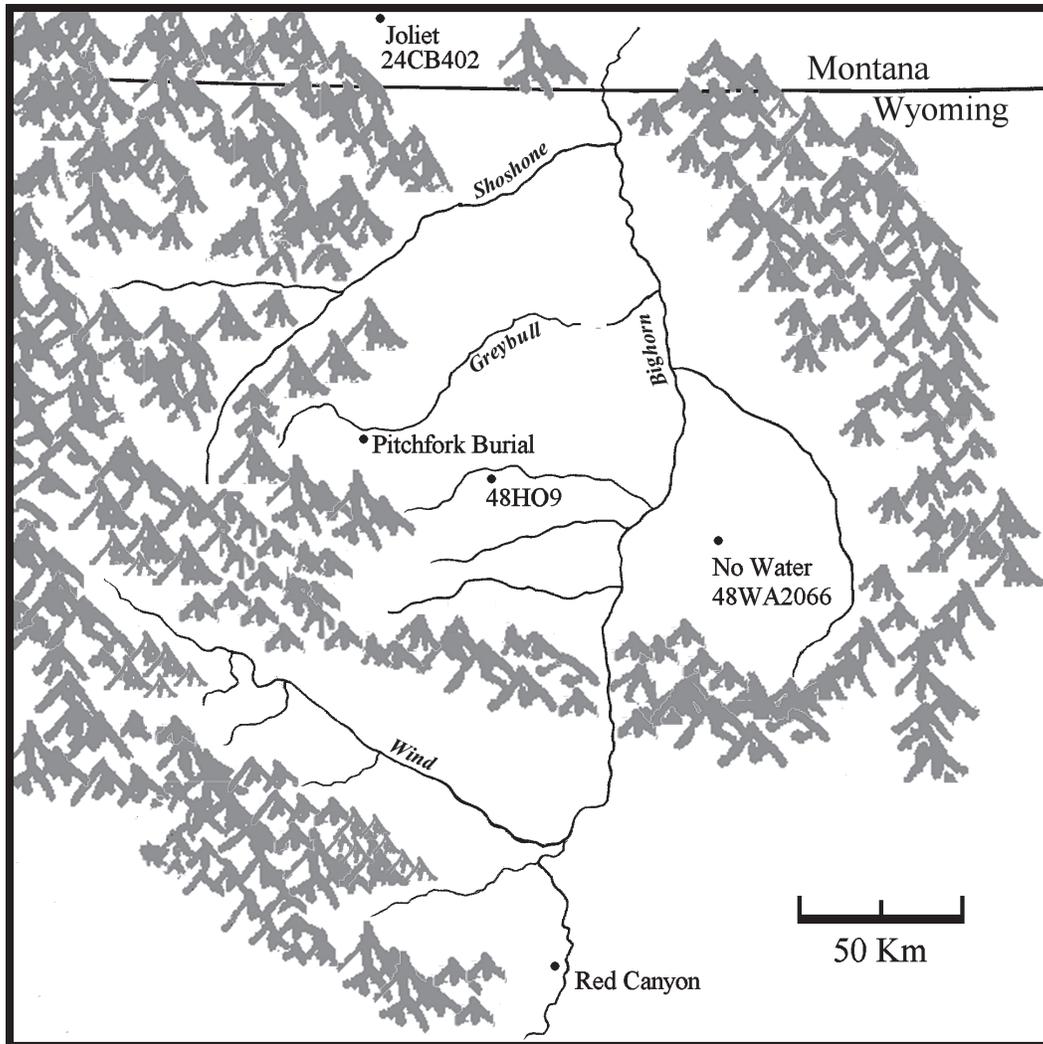


Figure 1: Bighorn Basin of Wyoming, showing referenced site locations. Joliet, No Water, 48HO9, and Red Canyon are all petroglyph sites. Pitchfork Burial has no rock art.

single, stylized eagle feathers project obliquely out from the rearmost and longest line of the tail at approximately equal intervals along its length. These are shown as long, oblique lines terminating in a long triangular tip, and were originally thought to represent guns attacking the horse, but they all lack both trigger guard and hammer (cock) and frizzen that typically identify guns (Keyser 1977:41; Keyser and Poetschat 2009:29), and their form is identical to stylized eagle feathers commonly drawn by Crow and Mandan warrior artists to indicate horse bonnets and to decorate shields and spears (Brownstone 2001b:70, 80; Keyser 2011c).

The horse is also branded on its left hip with a triangle that has—at its extreme apex—a distinctive

“branch” curving upward and outward from each side. An identical brand is drawn on the left hip of at least two other Biographic art horses. One is painted on a Northern Plains bison robe (Figure 6) now in the British Museum (King 2001:75) and thought to be of Blackfoot origin (Brownstone 2001a) that is tentatively dated on a stylistic basis to the period between about A.D. 1825 and 1850. A rock art horse at site 24YL589 in Montana, known from a tracing, has the same brand (McCleary 2008:174, 262), but that site has since been destroyed (McCleary, personal communication 2011).² McCleary (2008:174-175) identifies this brand as “T hanging triangle” that was registered to the Ryan Brothers Ranch that operated in the late 1800s between Billings and Roundup,



Figure 2: Petroglyphs at 48HO9 as first photographed, November 2010. (Mike Bies photograph).



Figure 3: Location of boulder at 48HO9 in relation to cliff in background. Arrow points to panel with rock art located on back side of boulder in this view. (George Poetschat photograph).



Figure 4: Tracing in place showing location of rock art on boulder. (David Kaiser photograph).

Montana. The occurrence of this brand in several places on different media, plus the fact that the robe art example may have been drawn before 1850 suggests that this brand may not be the Ryan Brothers brand. It also has some limited similarity to a few US cavalry brands (e.g., Figure 7) as they are depicted in rock art (McCleary 2008:163, 244) and ledger drawings (Afton et al. 1997:139, 177, 181, 247; McCleary 2008:244; Peterson 1988:29, 31). This information indicates that positive identification of this brand awaits further study of additional brands as they are portrayed in Plains Indian Biographic art.

The horseman's shield is undecorated, and using the system designed to measure such items (e.g., Keyser 2010) it was apparently 44-45 cm (17-18 inches) in diameter in real life—perfectly consistent with the size of equestrian period shields from all across the Northwestern Plains (Keyser 2010:93). Using a similar body size to weapon size ratio, the spear, which is tipped with a greatly outsized triangular point, would measure between 3.9 and 4.0

meters (12.75 - 13 feet) long. The point would be at least 1.2 meters (47 inches) long.

In the art style to which this image belongs, spears are commonly-depicted weapons and examples from three other rock art sites and six painted bison robes (Figures 8, 9) measure between 1.6 and 4.8 meters (5.5-15.5 feet) in length, with three in the 3-5 meter (10-16 feet) range. While occasional Historic period spears were, in fact, quite long—some stretching as much as eight feet (Utley 2008:19)—the length of the longest ones in this art style (including the one at 48HO9) seems to be significantly exaggerated.

The same sort of exaggeration seems evident for the large, outsized, triangular spear point at this site, just as has been noted at other sites (Keyser and Kaiser 2010). Almost certainly most such points were metal blades and some are positively identifiable as such by the crosspiece that indicates a notched tang blade (Keyser and Kaiser 2010:113-116). However, if we take into account the likely exaggeration of the spear and its tip at this site, it still seems that this

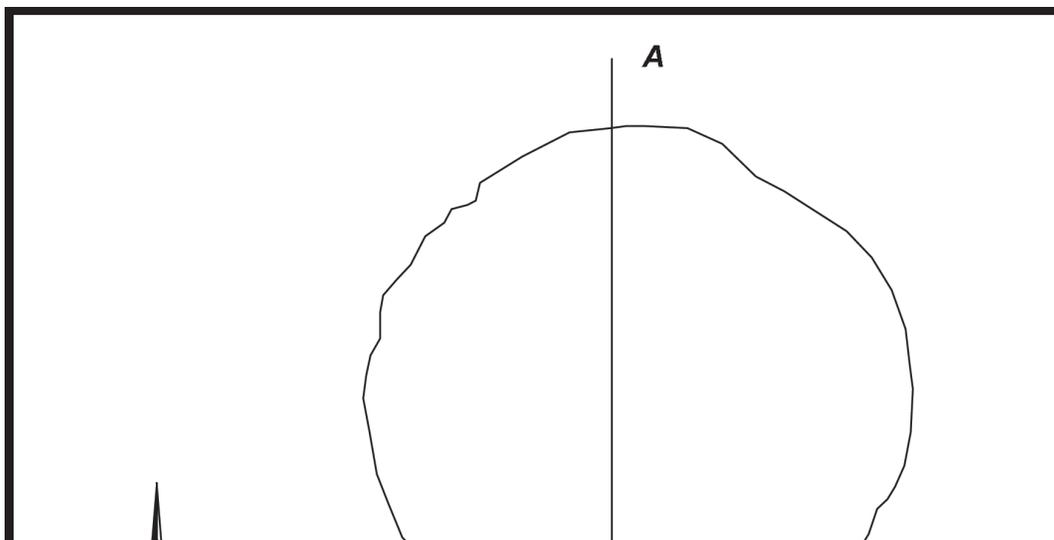


Figure 5: Petroglyph at 48HO9. Sketchy nature of pedestrian opponent and probable weapon due to animal abrasion on this corner of boulder that has removed all but faint traces of figures. Note brand on horse's left hip.

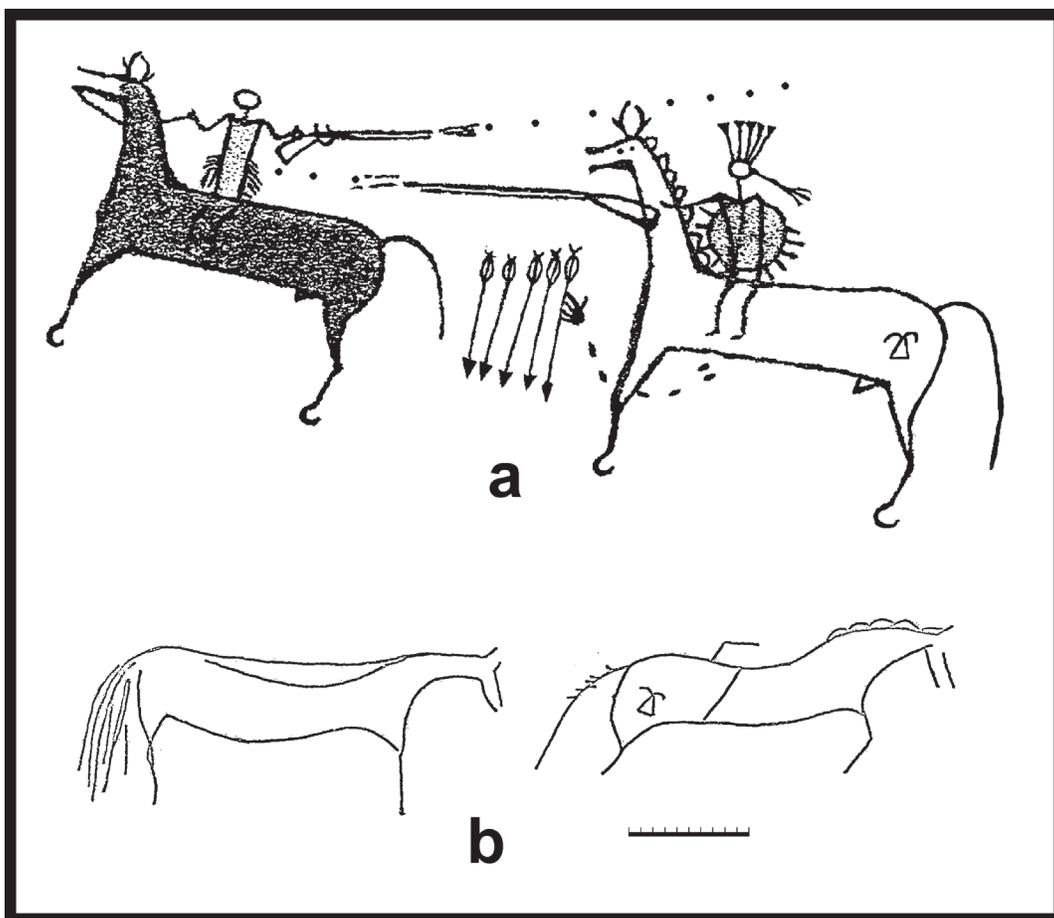


Figure 6: Other instances of the same brand on horses in Biographic art. a, Malcolm Robe, British Museum (adapted from David Williams tracing in King 2001:74); b, 24YL589 (adapted from McCleary 2008:262).

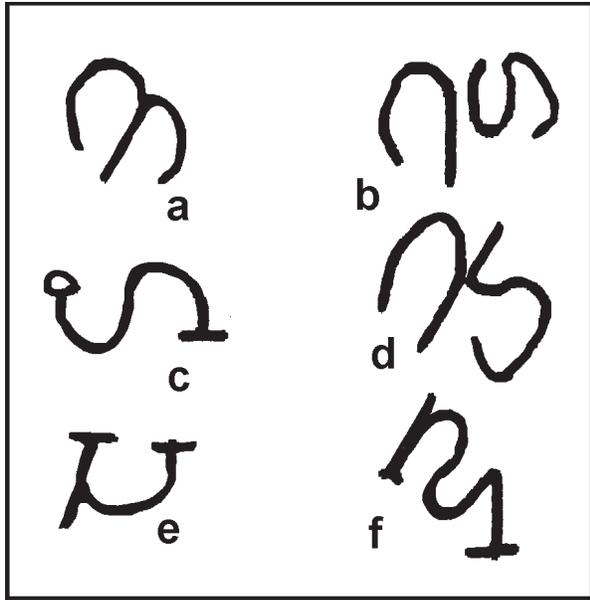


Figure 7: Variations of US cavalry brand in rock art (a, Joliet) and ledger art (b-f). (adapted from McCleary 2008:244).

point is a metal blade. For instance, if we assume the true size of the 48HO9 spear was between 6 and 7 feet long (1.8 – 2.1 meters)—the more or less the standard length for Historic period spears (Keyser and Kaiser 2010:121)—then the point would still be between 53 and 62 cm (21 -25 inches) long. Clearly the point was oversized, regardless of the “artistic license” used to exaggerate it. Anywhere in the 50 to 60 cm range, the point would have certainly been metal.

This exaggeration of the weapon and its killing tip is quite common in Ceremonial and Biographic art in all media, but especially prevalent in rock art (Keyser 2011a; Keyser and Kaiser 2010:120-123). While some of the exaggeration may be due to the types of perspective employed to structure scenes in Biographic art (e.g., Keyser 2011a:179), the continuity of this convention from Ceremonial through Biographic art and its use for floating weapons drawn to count coup (which need not be depicted as exaggeratedly long) suggests that rock artists drew these weapons in an oversized form to emphasize their potency as killing instruments.

The warrior’s hair and the horse’s tail are also illustrated as quite long. While the length of the horse’s tail is almost certainly exaggerated (since it is one and a half times as long as the rider is tall), the warrior’s hair (which is almost exactly as long

as he is tall) may actually have been as long as is shown here. Long tresses were highly valued by Crow men, who often incorporated horse hair into their own long locks by attaching it with various kinds of fixatives. Based on comparison with his own body size, the length of this horseman’s hair would be nearly 1.7 meters (5.5 feet), but this is well within the range of length for Historically-known Crow warriors’ hair. The longest reliably reported example is that of Long-Hair, whose own tresses (without extensions) were said to measure at least ten feet long in the 1830s (Denig 1976:194, editor’s footnote 40; Keyser and Poetschat 2009:35).

The warrior’s pedestrian opponent, though badly damaged by cattle rubbing, is stylistically nearly identical to the rider, though somewhat simpler in that he lacks a hairstyle or headdress. Badly eroded vertical lines between the pedestrian and horseman are probably what remain of the pedestrian’s weapon and it is tempting to identify the longer, slightly recurved line as a bow, but this cannot be verified.

Directly behind the horseman and his mount is a vertically-stacked series of more than two dozen long, horizontal lines. Using the Biographic art lexicon (Keyser 1987), we can interpret these in two possible ways. Most likely, since they are of varying lengths but each is in almost exactly the same orientation, they represent flying bullets (and possibly arrows) that document the fusillade of fire through which the warrior artist rode to attack and count coup on his enemy. Such depictions are one of the most common (if not the most common) ledger art conventions (Afton et al. 1997:201, 211, 233, 239; Bates et al. 2003:245, 249; Berlo 1996 107, 111, 207; Powell 2002a:63-67) but they are also found in rock art at several sites (Keyser 2011b; Keyser and Poetschat 2005:37). Some ledger art depictions (e.g., Powell 2002b:56) are almost identical to this, and it is possible that some of the shorter lines in this series might represent arrows, as they do in some ledger drawings.

A second plausible (though seemingly less likely) interpretation is that these lines represent members of the warrior artist’s own war party. However, none is clearly drawn as a recognizable weapon (e.g., gun, spear) and all are quite elongated. Furthermore, the fact that they are not arranged either in the typical shallow (seemingly protective) arc centered around the warrior and/or in a phalanx

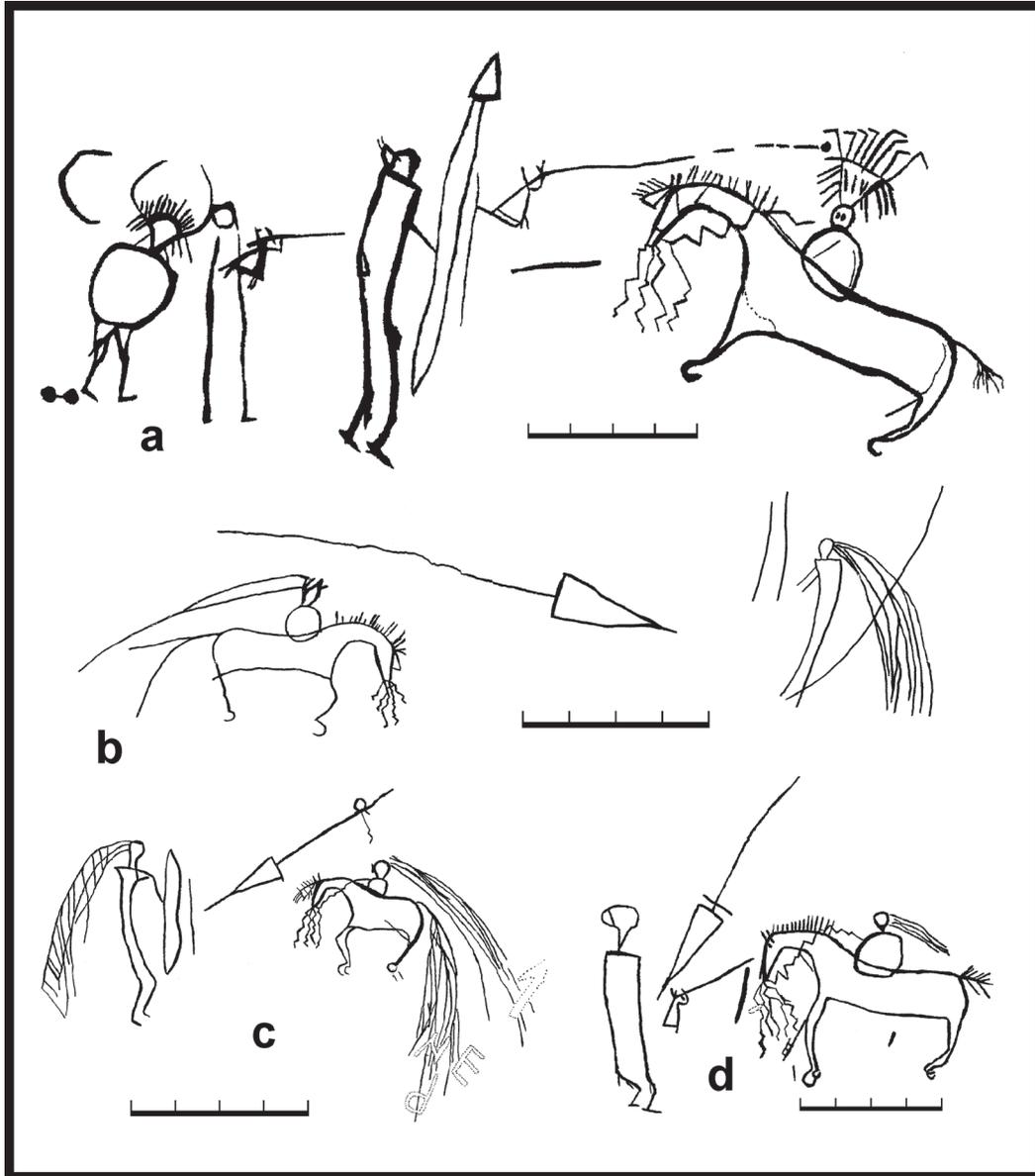


Figure 8: Crow horsemen counting coup at No Water, 48WA2066. Note similarity of pedestrian humans in a-c to that at 48HO9.

extending both above and below him (e.g., Keyser 2000:38, 50-52, 2005:35-36; Keyser and Poetschat 2008:58) suggests that these are projectiles that missed their mark rather than supporting comrades.

Identification as a fusillade of fire is consistent with the warrior's clearly-implied forward motion against his opponent, which creates a pictorial narrative as indicated by the position of his mount's galloping posture and the visual effect of the forward-thrust shield and long spear, which essentially forces the observer's eye to go from the rider, down

his outsized spear, to his pedestrian opponent. In such a composition these conventions of movement are used to indicate the rush into battle; hence the interpretation of these as bullets whizzing past the charging protagonist is most consistent with the scene's overall structure.

Thus, we can certainly identify this as one warrior's coup against a pedestrian foe, probably accomplished against heavy firepower from the enemy side. That this occurred as part of an organized raid or battle, which required some level of preparation,

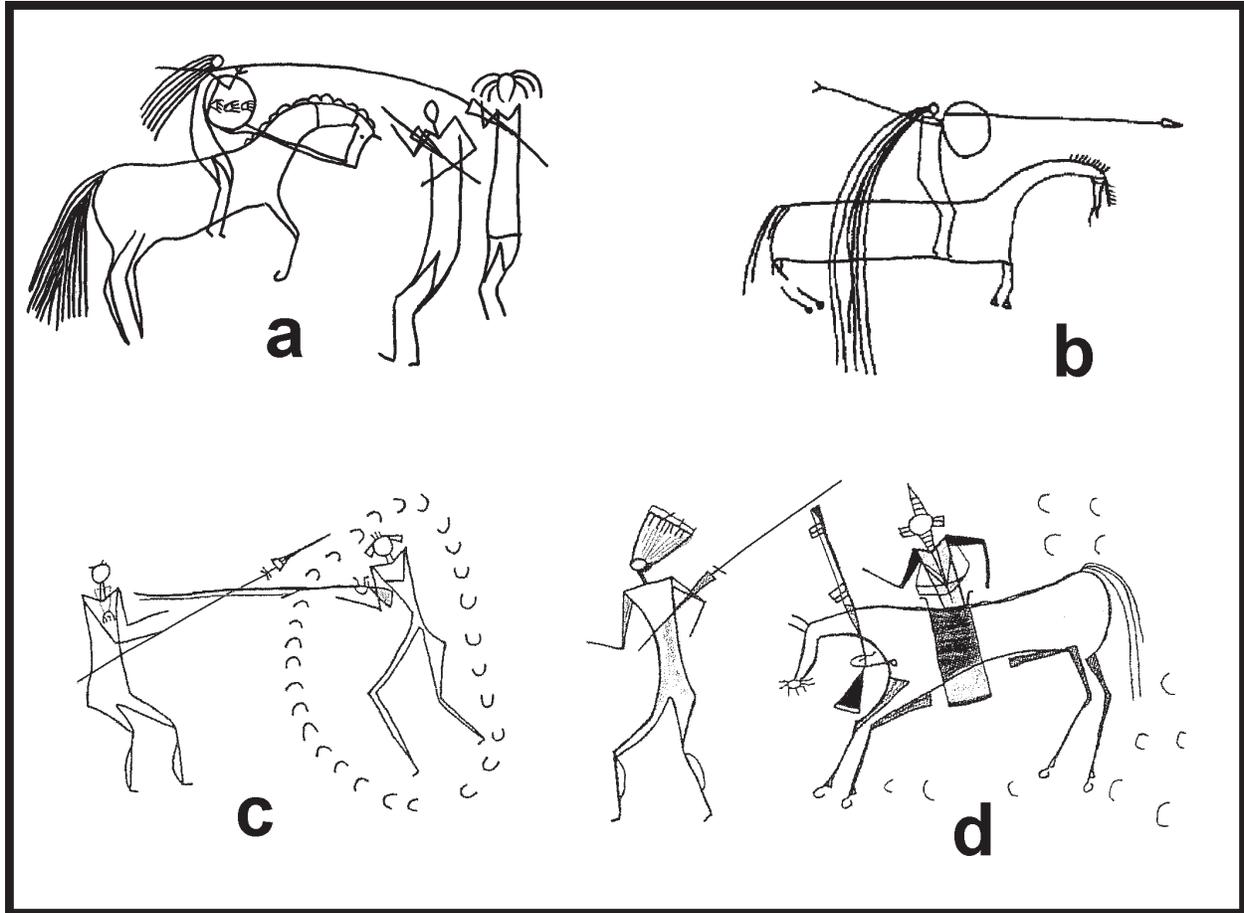


Figure 9: Other Crow coup count scenes in rock art (a, b) and robe art (c, d). a, Manuel Lisa site (24YL82); b, Red Canyon, Wyoming; c, robe in Bernisches Historisches Museum, Bern, Switzerland; d, robe in Kobenhaven Nationalmuseet, Copenhagen, Denmark. Note elongated spear points in a, c, d.

rather than a casual, spur-of-the-moment confrontation (such as defending one's own horse herd from marauding raiders) is indicated by the rider's carrying his shield and having had time to prepare his war horse by tying the eagle feathers in its tail.

CULTURAL AFFILIATION

Several stylistic clues, coupled with the site's location, strongly suggest that this is a Crow petroglyph. The horse is a mature style animal typical of Historic period Indian drawings throughout the early to mid 1800s (Keyser and Klassen 2001:224-253). Stylistically, it is far more similar to other mature style horses previously identified as Crow in both rock art and robe art (Keyser and Poetschat 2009; McCleary 2008), than to horses of the same period drawn by Blackfeet, Sioux, Cheyenne, Ute, or Shoshone artists (Keyser 1977, 2004, 2007; Keyser and Poetschat 2005, 2008, 2009, 2011).

The two humans illustrated at 48HO9 display a number of distinguishing features that they have in common with other Crow figures painted on bison robes and drawn in rock art elsewhere in Crow country (Figures 8, 9). Their body style shows a tall, significantly-elongated torso with legs bent at the knees. Figures routinely have a forward-leaning posture suggestive of almost realistic movement and action. Brownstone (2001b:74) has noted that such figures show "strong sense of line alternating between curves and angles." The result is an early Biographic style human that is far less rigid and stiff than those typically portrayed in Blackfoot Biographic art (e.g., Bouma and Keyser 2004; Dempsey 2007; Keyser 1977:67-71, 2007:11-13).

The warrior's long hair is also consistent with a Crow identification, since a similar hair style is found on numerous, stylistically-similar warriors in rock art throughout Crow territory (Keyser and

Poetschat 2009:18, 96) and on documented Crow bison robes from the Historic period (Brownstone 2001b:70-72; Keyser and Poetschat 2009:75). However, at the No Water petroglyphs, only 65 kilometers (40 miles) southeast of 48HO9, both Crow attackers and their pedestrian opponents wear this long hairstyle in two separate scenes (Keyser and Poetschat 2009:18, see Figure 8b, c). Hence, the long hair style was also obviously worn by members of other tribes.

The exaggeratedly elongated, triangular, needle-nosed lance point was commonly used among the Crow, but also drawn by at least one Comanche artist. On at least three Crow robe paintings, two painted warshirts, one shield, and three rock art sites attributed to Crow artists there are more than two dozen such lances tipped with these points (Figures 8, 9). Brownstone (2001b:80-82) makes a convincing argument that these are straight rapier sword blades used as lance points, since they are quite similar to swords also illustrated by Crow warrior artists. Such rapier blades, either complete or partial, could well have been between 60 cm and 1.2 meters (2 - 4 feet) long, just as this specimen at 48HO9 is illustrated, either in its more realistic or exaggerated form.

Probably the most distinctive ethnic identifier in this scene, however, is the form of the eagle feathers tied in the horse's tail. While attaching feathers down one's horse's tail is quite common in ledger art and the similar equidistantly-spaced, three-feather arrangement occurs among at least Sioux and Cheyenne (e.g., Afton et al. 1997:24-25; Maurer 1992:212-213), drawing eagle feathers as a central stem with a triangular termination (Figure 10) is characteristic only of Crow, Mandan, and Comanche artists' work on painted buffalo robes and in rock art (Brownstone 2001b; Keyser 2011c; Keyser and Cowdrey 2008; Loendorf and Olson 2003:6).³ Mandan chief, *Mato-tope* (Four Bears), and the unnamed artist who drew the main image at the Tolar site are the only known warrior artists other than Crow men to draw feathers in this manner. *Mato-tope* drew such feathers on several robes to indicate a special horse bonnet, while the Comanche artist drew them around the perimeter of his shield.

Numerous Crow warrior artists drew such feathers decorating lances and shields and composing war bonnets and feathered tabs attached to various

weapons on at least three robes and two war shirts, and at half a dozen rock art sites (Figure 10) in the middle Yellowstone River drainage centered on Billings, Montana (Brownstone 2001b:70-73, 80; Keyser 2011c; Keyser and Cowdrey 2008:28). One of these depictions (Figure 10b) at the Joliet site (24CB402) in Montana shows such feathers tied in the horse's tail just as at 48HO9 (Keyser 2004:38; Keyser and Klassen 2001:32). One bird on a Crow shield also has its tail feathers indicated in this manner (Brownstone 2001b:80).

Thus, in this sample of Crow art we see that feathers of all sorts—a bird's tail, feathers composing war bonnets, and others decorating horses and weapons—were drawn in this style. However, when drawn as individual entities (such as these decorating the horse's tail), their shape may indicate that they were stripped along the quill and had the end cut into a straight termination—a form with specific meaning among several northern Plains tribes including the Sioux, Ponca, and others (Mallery 1893:433-434; Taylor 1994). Taylor (1994:203) notes that:

“feathers stripped nearly to the top, leaving the black tip which would flutter in the breeze when worn, indicated a successful scout who had succeeded in discovering many dwellings—the black tip symbolizing the smoke-blackened tipi or earth lodge tops. Such feathers, [Ponca warrior], Buffalo Chief said, were commonly upright in the crown, ‘but the meaning is the same when attached to . . . the mane or tail of the horse.’”

Ample ethnographic, ethnohistoric, and archaeological evidence attests to Crow use of the Bighorn Basin (Keyser and Poetschat 2009:97). Lowie (1956:4) documents that much of the Crow tribe wintered in the Wind River region and that the Mountain Crow and their Kicked-In-The-Bellies clan subdivision used the Bighorn Basin area as its home territory most of the year (Voget 2001:695-696). The basin was widely known as an ideal place to winter horse herds (Medicine Crow 1992:xxii). Finally, Crow oral tradition also documents their use of—and travel through—the Bighorn Basin where they often encountered hostile enemies from several

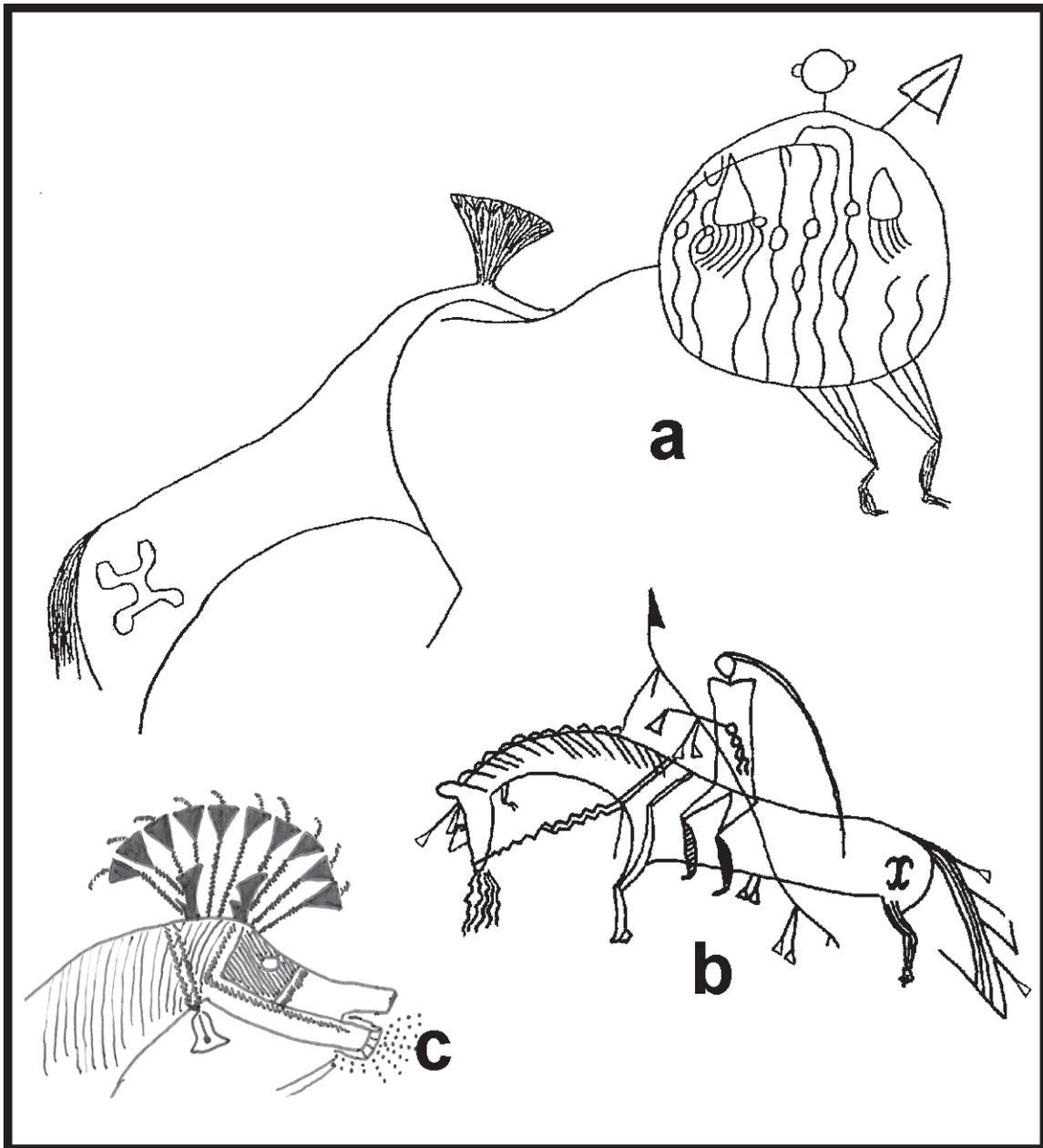


Figure 10: Feathers drawn with a central stem and triangular termination. a, horse bonnet, Razor Creek site, 24YL578, b, feathers decorating horse's tail and forelock and "long-bow" weapon, Joliet, 24CB402; c, horse bonnet, Mato-tope robe drawing.

tribes (Bauerle 2003:77; Medicine Crow 1992:100).

Archaeological evidence pointing to Crow occupation of the Bighorn Basin includes Late Prehistoric period Crow ceramics found at several sites (Frison 1976, 2007:99-105), which attest to pre-horse period use of the general area, and skeletons interred in the Pitchfork Burial, found not far from 48HO9. These have been identified as Crow based on both craniometric measurements and as-

sociated material culture items (Scheiber 1994), and they date between A.D. 1800 and 1840—exactly the time period during which the evidence suggests this narrative scene was carved at 48HO9.

CHRONOLOGY

Clearly the mature-style horse indicates that the petroglyph at 48HO9 was carved in the Historic period, a date consistent with the small, equestrian-

period shield held by his rider. Stylistically, however, we can narrow this range a bit, since both horse and human are similar to a series of relatively well-dated Crow rock art and robe art depictions that were drawn between A.D. 1800 and 1860.

The horse is drawn in a distinctive mature-style form that emphasizes its high arched neck and hooked hooves. This form shows the beginning of the use of a somewhat more naturalistic body shape for the neck and rounded rump than was used to draw horses in earlier Crow rock art. Likewise, the human figures with their fluid posture are somewhat more realistic than earlier Biographic Style depictions. When one carefully compares this scene with well-dated Crow Bison robes and the imagery from the nearby No Water petroglyphs, detailed similarities between all of them are obvious and specific, especially given that rock art figures are inherently somewhat less refined than bison robe paintings.

In a study that identified a Crow robe painting style, Brownstone (2001b) shows a series of Crow drawings from the period between 1830 and 1860 that portray both horses and humans in a style very similar to this scene at 48HO9. Furthermore, other later Crow drawings on bison robes dated between 1860 and 1890 (e.g., Brownstone 2001b:71, 78; Schmittou 1996; Wildschut 1926), in petroglyphs at the Joliet site (Keyser and Klassen 2001:32, 230-242; McCleary 2008), and in ledger drawings from the 1880s and 1890s (e.g., Heidenreich 1985; Keyser 2000:Plate 7, 2004:97; Maurer 1992:216), show considerably more realistic images, especially with regard to horses' legs and hooves and humans' facial features and clothing. Thus, the evolution of Crow Biographic art helps us date this petroglyph to the first half of the nineteenth century.

SUMMARY

Sometime in the approximate half-century between about A.D. 1810 and 1860 a Crow warrior artist came to what we now know as 48HO9 and carved a petroglyph representing a significant episode in his war record on the smooth, east-facing surface of a large boulder. Documenting his charge through a hail of enemy bullets to where he touched or killed an enemy warrior with his long spear, the artist was announcing to his own tribesmen, his enemies, and his gods that he was a man of status—an accomplished warrior performing the deeds of brav-

ery that might one day make him a chief within his tribe. To this man, carving this petroglyph was part of the culturally prescribed warfare system that led to adulation of the warrior ideal and ultimately to the status of chief. Crow warrior chief, Two Leggings, best described the hero worship that accompanied such deeds:

“We were singing as we walked into the village, and I held a long willow stick with [the scalp I had taken] tied to the end. For two days and nights the women danced the scalp dance and my name was spoken as the one who had taken revenge on the [enemy]” (Nabokov 1967:36).

(Endnotes)

- 1 Most of the horses, guns, and tipis mentioned and illustrated in their work (Francis and Loendorf 2002:140, 175-183) are from the Clark Fork and Yellowstone River drainages in Montana (particularly Pictograph Cave and Joliet), or the Green and Wind River drainages in southwestern Wyoming (particularly Red Canyon and Names Hill).
- 2 A third instance of this brand is reported at the Joliet site (Conner 1984:1; McCleary 2008:174-175) but consultation with Tim McCleary indicates that this brand cannot be verified at Joliet. Possibly the dagger-like, “T over V” brand that McCleary (2008:174) reports, was previously conflated with the brand found at 48HO9 and 24YL589.
- 3 On this basis, in conjunction with other imagery, a shirt attributed to the “Apache” (Dockstader 1966) has been correctly re-identified as Crow.

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SCRAPED STAINS: MIDDLE ARCHAIC AND LATE PREHISTORIC FEATURES OF OVEN TOWN, SITE 48FR5928, FREMONT COUNTY, WYOMING

by

Russell Richard

ABSTRACT

Testing and data recovery excavations were conducted at Oven Town (48FR5928) in northeastern Fremont County, Wyoming. Two components (Components I and II) were identified at Oven Town. Component I consisted of five basins and localized stains in two excavation blocks and one isolated unit and eight features on the disturbed surface. Component I dates to the Middle Archaic Period based on 13 radiocarbon age estimates ranging from $4,330 \pm 60$ to $3,680 \pm 40$ years before present. Component II produced only surface features and dates to the Late Prehistoric Period based on seven radiocarbon age estimates ranging from $1,630 \pm 50$ to $1,210 \pm 50$ years before present. Both Component I and Component II appear to reflect short-term occupations by small groups of hunter-gatherers primarily to conduct plant processing activities.

INTRODUCTION

Noble Energy, Inc. (Noble) proposed an oil well pad and access road, which were inventoried by Greer Services in 2006 (Greer 2006). A historic isolate (IF 6803-1), consisting of nine cans, was recorded on the east and south sides of the proposed pad. No potential for buried cultural deposits was recognized at the location, and no further work was recommended. Construction of the well pad began on September 28, 2006. Approximately one m of soil was removed from the southern and eastern portions of the well pad, and approximately 50 cm of soil was removed from the western and northern portions before the scraper operator noticed the presence of stains. Construction was halted, and the Bureau of Land Management (BLM) archaeologist from the Lander Field Office (LFO) was notified of the discovery. In October 2006, a site assessment

was conducted by Archaeological Energy Consulting, Inc., and 13 charcoal stains, representing a mixture of definite and potential prehistoric hearths, were identified. The new site was given the Smithsonian trinomial 48FR5928 (Enders 2006). It was estimated any original intact living surface had been removed by the initial surface disturbance. The well was then relocated approximately 100 m further east, and construction of the new location proceeded with no further discoveries (Enders 2006). Following consultation with the BLM LFO archaeologist and the Wyoming State Historic Preservation Office (SHPO), Noble agreed to have TRC Environmental Corporation (TRC) develop a testing plan for the site to determine the National Register of Historic Places (NRHP) eligibility status (Lowe 2008). TRC conducted fieldwork under this testing plan between July 20-30, 2008. The original 13 potential features (charcoal stains) were relocated, and an additional 25 potential features (charcoal stains/heat-altered rock features) were identified. Seven of the combined 38 charcoal stains/heat-altered rock features were identified as basin features and salvaged. Test excavations consisted of one 1 x 1m test unit (TU) and 173 shovel/auger tests. After consultation with the BLM LFO archaeologist, the testing was suspended, pending the development of a revised testing plan to address the combined discoveries. To properly evaluate the contributing status of these areas, further test excavations were conducted from September 28-October 7 and October 12-18, 2009, following the revised testing plan (Richard 2009a). Excavations consisted of the salvage of 13 additional features, four backhoe trenches, and seven additional 1 x 1-m test units to document the site's potential to contain significant intact buried cultural deposits. The test units, backhoe trenches,

and continued erosion of the surface revealed an additional 18 features, for a combined total of 56 features.

Based on the presence of the newly discovered cultural features, BLM LFO, SHPO, and TRC determined the well pad construction activities adversely affected a NRHP contributory portion of the site (Criterion D). As a result, data recovery excavations were recommended to mitigate the adverse effect to the site. After further consultation with the BLM LFO, SHPO, Noble, and TRC, Noble agreed to have TRC develop a data recovery plan to mitigate the adverse effect of construction disturbance to Oven Town. A report detailing the test results and a data recovery plan was completed in April 2010 (Richard 2010), and data recovery excavations were conducted at Oven Town in October 13-22, 2010. A data recovery report was issued in April 2011 (Richard 2011). This article documents the results of the 2008-2009 testing and 2010 data recovery excavations conducted at Oven Town and serves to complete the mitigation requirements stipulated by the BLM LFO. It further aims to augment the understanding of settlement patterns and subsistence

practices in this region of the Wind River Basin and the understanding of energy development archaeology.

SITE DESCRIPTION

Oven Town is a prehistoric open camp located on the western end of an undulating plain bounded by the broad Alkali Creek drainage valley to the north and an unnamed ridge system to the south. The surrounding terrain slopes from south to north and consists of similar north-trending plain and ridge systems separated by drainage valleys (Figure 1). The ridge systems emanate from a prominent ridge to the southeast. The site is located on a broad and relatively stable aeolian sand sheet deposit of varied thickness on the gentle east-facing slope just west of the edge of a large northwesterly trending tributary of Alkali Creek. This tributary provides the border of the slope and the western edge of the similarly dissected plain beyond. Sediment on-site consists of a pale brown fine- to coarse-grained sandy loam with frequent poorly sorted chert, quartzite, sandstone, and mudstone gravel often partially coated with carbonate concretion. Exposed profiles revealed a fairly



Figure 1: Overview of Oven Town in center, looking north-northeast (photo by Russell Richard).

Table 1: Cultural Features Discovered at Oven Town.

FEATURE NUMBER	FEATURE TYPE	DEPTH (CMBS) ¹	DATE ² (YEARS B.P.)	COMMENTS
1	Large circular basin	8		Excavated 2009
2	Generalized surface staining with heat-altered rock	Scraped surface	----	Recorded 2008
3	Generalized surface staining	Scraped surface	----	Recorded 2008
4	Medium circular rock-filled basin	24	----	Excavated 2008
5	Medium circular rock-filled basin	37	3,680 ± 40	Excavated 2010
6	Large slab-lined basin	30	3,700 ± 40	Excavated 2010
7	Medium cylindrical rock-filled basin	12	----	Excavated 2010
8	Generalized surface staining with heat-altered rock	Scraped surface	----	Recorded 2008
9	Generalized surface staining	Scraped surface	----	Recorded 2010
10	Medium circular rock-filled basin	11	----	Excavated 2008
11	Large circular rock-filled basin	27	----	Excavated 2008
12	Generalized surface staining	Scraped surface	----	Recorded 2008
13	Large slab-lined basin	30	4,040 ± 40	Excavated 2008
14	Medium circular basin	10		Excavated 2008
15	Generalized surface staining	Scraped surface	----	Recorded 2010
16	Generalized surface staining	Scraped surface	----	Recorded 2008
17	Generalized surface staining with heat-altered rock	Scraped surface	----	Recorded 2008
18	Large circular basin	30	3,750 ± 40	Excavated 2010
19	Small circular basin	5		Excavated 2010
20	Medium circular basin, straight sides, flat bottom	40	3,950 ± 40	Excavated 2010
21	Medium cylindrical rock-filled basin	33	1,300 ± 40	Excavated 2010
22	Generalized surface staining	Scraped surface	----	Recorded 2010
23	Medium cylindrical rock-filled basin	30	1,490 ± 50	Excavated 2008
24	Generalized surface staining	Scraped surface	----	Recorded 2008
25	Heat-altered rock concentration	Scraped surface	----	Recorded 2008
26	Medium cylindrical rock-filled basin	34	1,260 ± 40	Excavated 2010
27	Heat-altered rock concentration	Scraped surface	----	Recorded 2008
28	Medium cylindrical rock-filled basin	39	1,210 ± 50	Excavated 2008
29	Medium circular basin	8	----	Excavated 2010
30	Large circular basin, straight sides, flat bottom	74	4,180 ± 40	Excavated 2009 and 2010
31	Generalized surface staining	Scraped surface	----	Recorded 2008
32	Medium cylindrical rock-filled basin	12	----	Excavated 2010
33	Generalized surface staining	Scraped surface	----	Recorded 2010
34	Medium circular basin	14	----	Excavated 2010
35	Medium circular basin, straight sides, flat bottom	19	----	Excavated 2010
36	Medium circular basin, straight sides, flat bottom	17	4,070 ± 50	Excavated 2010
37	Large circular basin, straight sides, flat bottom	25	4,330 ± 60	Partially excavated in 2009
38	Generalized surface staining	Scraped surface	----	Recorded 2010
39	Medium circular basin	21	----	Excavated 2009
40	Medium circular basin	17	----	Excavated 2010
41	Medium cylindrical rock-filled basin	25	1,410 ± 50	Excavated 2009
42	Medium cylindrical rock-filled basin	60	1,400 ± 60	Excavated 2009
43	Medium cylindrical rock-filled basin	25	----	Excavated 2010
44	Medium circular rock-filled basin	10	----	Excavated 2010
45	Medium circular basin, straight	24	----	Excavated 2009

Table 1 (continued).

FEATURE NUMBER	FEATURE TYPE	DEPTH (CMBS) ¹	DATE ² (YEARS B.P.)	COMMENTS
	sides, flat bottom	9		
46	Medium cylindrical rock-filled basin	60	---	Excavated 2009
47	Unknown remnant	55	---	Recorded 2009
48	Medium circular basin	33	---	Excavated 2009
49	Medium circular basin, straight sides, flat bottom	47	1,630 ± 50	Excavated 2009
50	Medium circular basin, straight sides, flat bottom	12	---	Excavated 2010
51	Large slab-lined basin	22	3,690 ± 40	Excavated 2009
52	Medium circular basin, straight sides, flat bottom	25	4,090 ± 40	Excavated 2009
53	Generalized surface staining with heat-altered rock	Scraped surface	---	Recorded 2010
54	Medium cylindrical rock-filled basin	28	---	Excavated 2010
55	Heat-altered rock cluster surface	Undisturbed	---	Located on undisturbed surface off pad
56	Heat-altered rock cluster	50	---	Excavated 2009
57	Medium circular basin, flat bottom	22	3,810 ± 40	Excavated 2010
58	Medium circular basin, straight sides, flat bottom	22	3,990 ± 40	Excavated 2010
59	Small circular basin	10	---	Excavated 2010
60	Medium circular basin, flat bottom	15	---	Excavated 2010
61	Medium circular basin, straight sides, flat bottom	31	3,750 ± 40	Excavated 2010
62	Medium circular rock-filled basin	20	---	Excavated 2010

¹ Depth = bottom of feature below surface.

² Conventional radiocarbon age; years before present.

homogenous blend of sand and gravel; no particular stratigraphy was discernible in the aggradation of material by countless aeolian and slope wash processes. The site encompasses approximately 15,525 m² and consists of numerous thermal features, sparse non-diagnostic lithic, faunal, and flora remains, diffuse stains, and dispersed heat-altered rock.

Combined, the 14 excavation units, eight test units, 173 auger/shovel tests, and four backhoe trenches excavated in the vicinity of the features discovered six additional buried features for a total of 62 investigated features in 2010 (Figure 2) (Table 1). The 1 x 1-m units, auger tests, and trenches were excavated through sand to depths ranging from 60 to 180 cm below surface (cmbs). The features were largely at or immediately below the disturbed surface, but a few were more deeply buried. The presence of buried charcoal-stained sediment suggested the site contained a buried component, and excavations confirmed the presence of such; however, no stratigraphically isolated cultural compo-

nents are discernible in the vicinity of most of the features, stains, and heat-altered rock. No evidence of structures was encountered at the site.

FEATURE TECHNOLOGY

Test and data recovery excavations (2008-2010) at Oven Town resulted in the excavation of 44 basin features. The features were assigned to Components I (13 features) and II (seven features) according to their associated radiocarbon age estimates (Table 2). The basins ranged from fairly well to poorly preserved, with some exhibiting minimal disturbance from small animal and insect burrowing and others being largely deflated and disturbed.

All the features can be generally categorized as hemispherical basins, which represent the standard basin form employed prehistorically throughout Wyoming, most likely because it is easily constructed and maintained and is well suited for a variety of functional needs (Frison 1991; Smith and McNees 1999; Smith et al. 2001; Thompson and

Table 2: Radiocarbon Age Estimates By Component, Oven Town.

FEATURE NUMBER	LAB NO. (BETA)	AGE ESTIMATE (YEARS B.P.) ¹	CALIBRATED AGE ESTIMATE (YEARS B.P.) ²	SAMPLE ANALYSIS TYPE ³	SUBMITTED	COMPONENT
37	268440	4,330 ± 60	5,040 to 4,830	Standard	2009	I
30	268439	4,180 ± 40	4,840 to 4,580	AMS	2009	I
52	268445	4,090 ± 40	4,810 to 4,750 and 4,710 to 4,510 and 4,480 to 4,440	AMS	2009	I
36	288810	4,070 ± 50	4,810 to 4,750 and 4,710 to 4,420	AMS	2010	I
13	255661	4,040 ± 40	4,790 to 4,770 and 4,620 to 4,420	AMS	2009	I
58	288812	3,990 ± 40	4,530 to 4,410	AMS	2010	I
20	288807	3,950 ± 40	4,520 to 4,460 and 4,450 to 4,290	AMS	2010	I
57	288811	3,810 ± 40	4,390 to 4,370, 4,350 to 4,320, and 4,300 to 4,090	AMS	2010	I
18	288806	3,750 ± 40	4,240 to 3,980	AMS	2010	I
61	288813	3,750 ± 40	4,240 to 3,980	AMS	2010	I
6	288805	3,700 ± 40	4,150 to 3,920	AMS	2010	I
51	268444	3,690 ± 40	4,150 to 3,910	AMS	2009	I
5	288804	3,680 ± 40	4,140 to 4,120 and 4,100 to 3,900	AMS	2010	I
49	268443	1,630 ± 50	1,680 to 1,670 and 1,620 to 1,400	Standard	2009	II
23	255662	1,490 ± 50	1,520 to 1,300	Standard	2009	II
41	268441	1,410 ± 50	1,390 to 1,270	Standard	2009	II
42	268442	1,400 ± 60	1,400 to 1,260	Standard	2009	II
21	288808	1,300 ± 40	1,300 to 1,170	AMS	2010	II
26	288809	1,260 ± 40	1,280 to 1,070	AMS	2010	II
28	255663	1,210 ± 50	1,270 to 1,050 and 1,040 to 990	Standard	2009	II

¹ Conventional; years before present.

² Calibrated; expressed as range and two sigmas.

³ AMS = accelerated mass spectrometry.

Pastor 1995; Gunnerson 1987). The hemispherical basin category encompasses a broad range of different basin morphologies and subsumes a variety of functionally distinct basin types (Kornfeld et al. 2010; Thoms 2009; Wandsnider 1997, 1999). Differences between hemispherical basin types at Oven Town are based on combinations of various attributes, including diameter, shape, depth, wall and base shape, quantity and density of rock fill, presence/absence of a rock lining, etc. The features were further differentiated based on size (large, medium, and small). However, to better discuss feature function, the 44 excavated basins are classified into three functional groups: circular basins, slab-lined basins, and cylindrical rock-lined basins. Each group is detailed below.

CIRCULAR BASINS

Most features investigated at Oven Town are

classified as circular basins (n = 29). Among the circular basins are two distinct subsets: Type 1 and Type 2 (Table 3). Type 1 circular basins exhibit a circular/oval shape with generally straight sides and flat bottoms (n = 14) (Figures 3 and 4), while Type 2 circular basins display a generally hemispherical shape with sloping sides and a rounded bottom (n = 12) (Figures 5 and 6). The presence (n = 8) or absence (n = 4) of heat-altered rock can serve to further differentiate the Type 2 basins. The Type 2 subset is also understood to include damaged features which could only be characterized by the extant portion. Type 1 basins are largely typified by a lack of heat-altered rock with only one feature (Feature 30) proving to be an exception. The remaining three circular basins (see Table 3) are indeterminate because of their poor preservation or extensive construction damage. The feature fill

Table 3: Characteristics of Circular Basins, Oven Town.

FEATURE NUMBER	COMPONENT	FEATURE TYPE	DIMENSIONS (CM) ^{1,2}			HEAT-ALTERED ROCK OXIDIZED	NO.	KG	AGE ESTIMATE (YEARS B.P.)	ARTIFACTS
			L	W	D					
TYPE 1										
37	I	Large circular basin, straight sides, flat bottom	65	30p	25	Yes	1p	0.1p	4,330 ± 60	--
30	I	Large circular basin, straight sides, flat bottom	84	70	30	Yes	15	4.2	4,180 ± 40	metate, mano, groundstone fragment, one core, modified cobble, and three flakes
52	I	Medium circular basin, straight sides, flat bottom	46	12p	25	Yes	--	--	4,090 ± 40	--
36	I	Medium circular basin, straight sides, flat bottom	57	45p	17	No	--	--	4,070 ± 50	--
58	I	Medium circular basin, straight sides, flat bottom	75	50p	22	Yes	--	--	3,990 ± 40	--
20	I	Medium circular basin, straight sides, flat bottom	80	40p	40	Yes	--	--	3,950 ± 40	--
57	I	Medium circular basin, flat bottom	115	88	22	No	--	--	3,810 ± 40	--
61	I	Medium circular basin, straight sides, flat bottom	80	75	31	No	--	--	3,750 ± 40	two flakes
5	I	Medium circular basin, straight sides, rounded bottom	55	55	37	Yes	1	0.1	3,680 ± 40	two flakes and six small mammal bones (four burned)
49	II	Medium circular basin, straight sides, flat bottom	52	22p	47	Yes	--	--	1,630 ± 50	one burned small mammal bone
35	--	Medium circular basin, straight sides, flat bottom	67	49	19	No	--	--	--	--
45	--	Medium circular basin, straight sides, flat bottom	54	30p	24	No	--	--	--	--
50	--	Medium circular basin, straight sides, flat bottom	85	70	12	No	--	--	--	four flakes
60	--	Medium circular basin, flat bottom	80	75	15	No	--	--	--	--
TYPE 2										
18	I	Large circular basin	118	95	30	No	9	0.3	3,750 ± 40	--
4	--	Medium circular rock-filled basin	58	50	24	No	19	1.4	--	one flake, one burned mustard seed
11	--	Large circular rock-filled basin	80	75	27	No	14	33.1	--	--
19	--	Small circular basin	46	35	5	No	--	--	--	one flake
29	--	Medium circular basin	60	48	8	No	--	--	--	--
34	--	Medium circular basin	76	74	14	No	4	0.1	--	--
39	--	Medium circular basin	46	42	21	Yes	--	--	--	--
40	--	Medium circular basin	57	45	17	No	--	--	--	--
44	--	Medium circular rock-filled basin	35	30	10	No	6	3.2	--	--
48	--	Medium circular basin	43	30p	13	No	--	--	--	--
62	--	Medium circular rock-filled basin	62	51	20	Yes	6	1.3	--	--
59	--	Small circular basin	36	17p	10	Yes	3	1.7	--	one burned small mammal bone
INDETERMINATE										
1	--	Large circular basin	83	76	8	No	3	0.1	--	--
10	--	Medium circular rock-filled basin	50	40	11	No	5	1.4	--	--
14	--	Medium circular basin	60	60	10	No	--	--	--	--

¹ L = length; W = width; D = depth (bottom of feature below surface).

² p = partial number or measurement.

³ Conventional radiocarbon age; years before present.

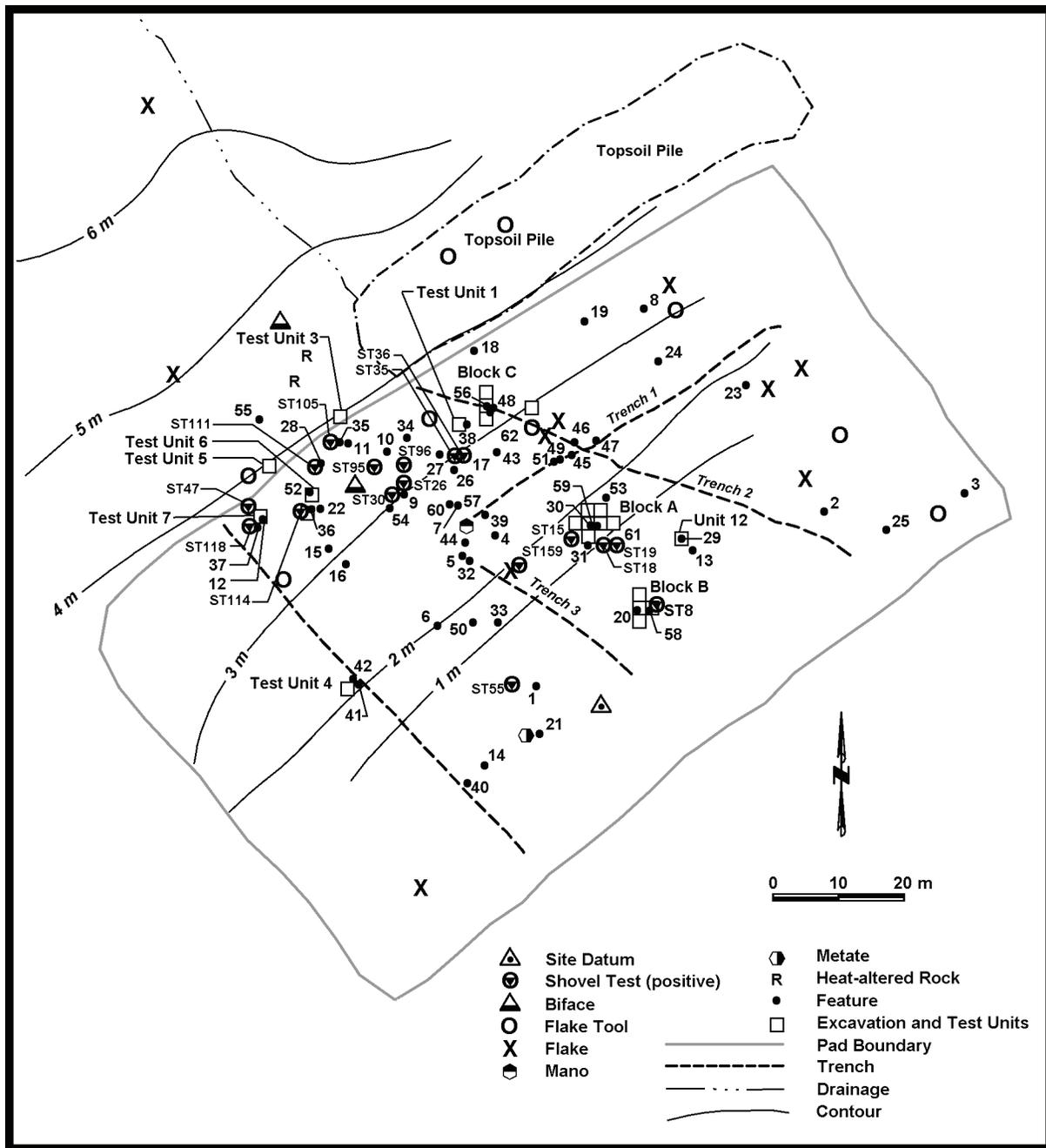


Figure 2: Plan view of features, data recovery excavations, test units, trenches, and selected surface artifacts, Oven Town.

ranged from extremely dark charcoal-stained sand containing small pieces of charcoal to features filled with mottled gray sediment and only a small pocket of darker stained sediment located at the feature bottom. Oxidation spotting is usually present on the feature's rim, walls, and bottom of the feature and the absence is likely due to the vagaries of preservation. The diameters of the circular basins ranged

from between 118 to 36 cm. The generally better preserved features indicate the typical feature was usually 60 cm or more in diameter (n = 16; 55%) with most of those larger than 70 cm in size (n = 11; 38%). The depths ranged from 8-47 cm, but, again, the better preserved features indicate the typical feature was usually 30+ cm deep.

The circular basin features excavated at Oven

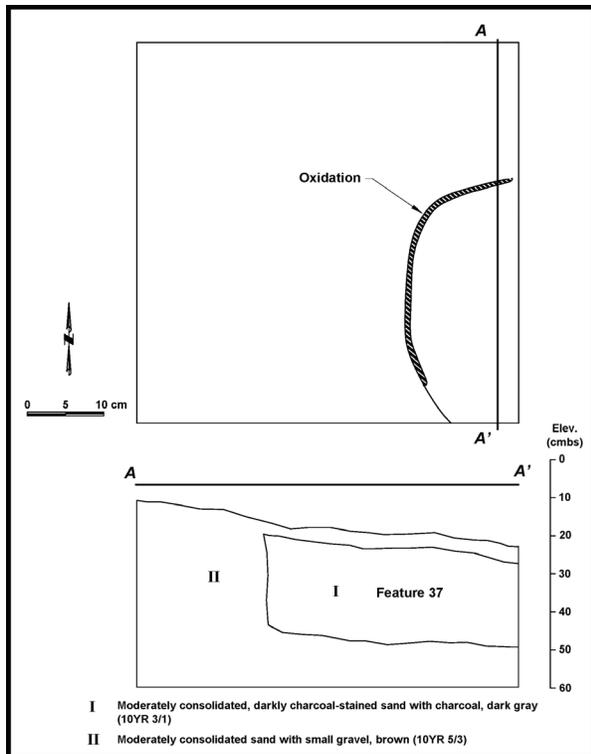


Figure 3; Test Unit 7, east and south profiles, Feature 37, Oven Town.

Town tended not to contain artifacts in the fill. Only eight features (27%) yielded additional minimal information. The most prevalent artifact recovered from the circular basins were flakes (n = 11; six features; 20%), followed by bone fragments (n = 3; three features; 10%), and groundstone (n = 3; one feature; 3%). A single insignificant burned seed found in one Type 2 basin (Feature 4) represented the sum total of the floral remains recovered from the circular basins.

Activity areas associated with Type 1 basins were defined in Block A (Figure 7), Block B (Figure 8), and Unit 17 (Figure 9). These feature-oriented activity areas were typified by the presence of a variety of groundstone, sparse numbers of cores, lithic tools, debitage, low amounts of scattered heat-altered rock, and associated and widespread staining.

SLAB-LINED BASINS

Three features excavated at Oven Town were classified as slab-lined basins (Features 6, 13, and 51). The type represents 7% of the total excavated features. The slab-lined basins exhibit a circular/oval plan view, generally straight to slightly slop-



Figure 4: Test Unit 7, east and south Profiles, Feature 37, looking east, Oven Town (photo by Caitlin Guthrie).

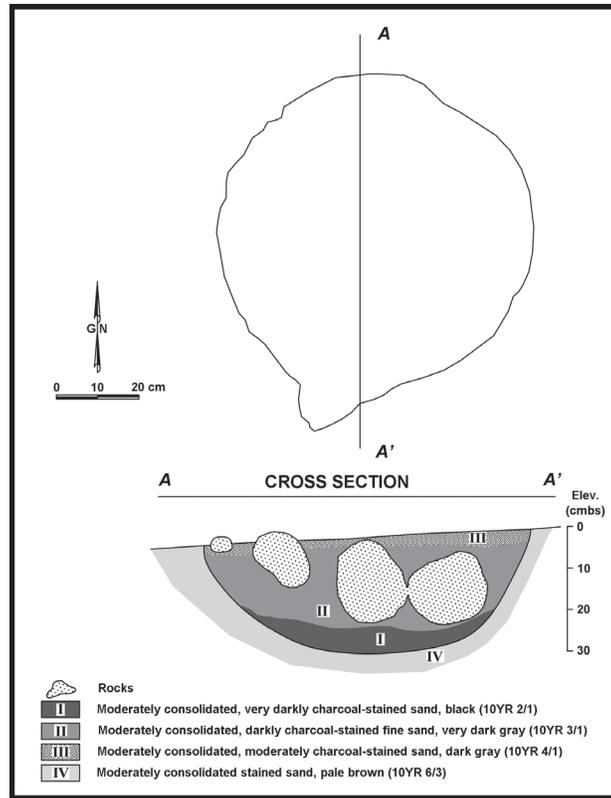


Figure 5: Feature 11, plan view and cross section, Oven Town.



Figure 6: Feature 11, profile view, looking west, Oven Town (photo by Russell Richard).

Table 3: Characteristics of Circular Basins, Oven Town.

FEATURE NUMBER	COMPONENT	FEATURE TYPE	DIMENSIONS (CM) ^{1,2} L W D	HEAT-ALTERED ROCK ² OXIDIZED NO KG	AGE ESTIMATE (YEARS B.P.)	ARTIFACTS
TYPE 1						
37	I	Large circular basin, straight sides, flat bottom	65 30p 25	Yes 1p 0.1p	4,330 ± 60	--
30	I	Large circular basin, straight sides, flat bottom	84 70 30	Yes 15 4.2	4,180 ± 40	metate, mano, groundstone fragment, one core, modified cobble, and three flakes
52	I	Medium circular basin, straight sides, flat bottom	46 12p 25	Yes -- --	4,090 ± 40	--
36	I	Medium circular basin, straight sides, flat bottom	57 45p 17	No -- --	4,070 ± 50	--
58	I	Medium circular basin, straight sides, flat bottom	75 50p 22	Yes -- --	3,990 ± 40	--
20	I	Medium circular basin, straight sides, flat bottom	80 40p 40	Yes -- --	3,950 ± 40	--
57	I	Medium circular basin, flat bottom	115 88 22	No -- --	3,810 ± 40	--
61	I	Medium circular basin, straight sides, flat bottom	80 75 31	No -- --	3,750 ± 40	two flakes
5	I	Medium circular basin, straight sides, rounded bottom	55 55 37	Yes 1 0.1	3,680 ± 40	two flakes and six small mammal bones
49	II	Medium circular basin, straight sides, flat bottom	52 22p 47	Yes -- --	1,630 ± 50	one burned small mammal bone
35	--	Medium circular basin, straight sides, flat bottom	67 49 19	No -- --	--	--
45	--	Medium circular basin, straight sides, flat bottom	54 30p 24	No -- --	--	--
50	--	Medium circular basin, straight sides, flat bottom	85 70 12	No -- --	--	four flakes
60	--	Medium circular basin, flat bottom	80 75 15	No -- --	--	--
TYPE 2						
18	I	Large circular basin	118 95 30	No 9 0.3	3,750 ± 40	--
4	--	Medium circular rock-filled basin	58 50 24	No 19 1.4	--	one flake, one burned mustard seed
11	--	Large circular rock-filled basin	80 75 27	No 14 33.1	--	--
19	--	Small circular basin	46 35 5	No -- --	--	one flake
29	--	Medium circular basin	60 48 8	No -- --	--	--
34	--	Medium circular basin	76 74 14	No 4 0.1	--	--
39	--	Medium circular basin	46 42 21	Yes -- --	--	--
40	--	Medium circular basin	57 45 17	No -- --	--	--
44	--	Medium circular rock-filled basin	35 30 10	No 6 3.2	--	--
48	--	Medium circular basin	43 30p 13	No -- --	--	--
62	--	Medium circular rock-filled basin	62 51 20	Yes 6 1.3	--	--
59	--	Small circular basin	36 17p 10	Yes 3	1.7	one burned small mammal bone
INDETERMINATE						
1	--	Large circular basin	83 76 8	No 3	0.1	--
10	--	Medium circular rock-filled basin	50 40 11	No 5 1.4	--	--

Table 3: (continued).

FEATURE NUMBER	COMPONENT	FEATURE TYPE	DIMENSIONS (CM) ^{1,2}			HEAT-ALTERED ROCK ² OXIDIZED	NO	KG	AGE ESTIMATE (YEARS B.P.)	ARTIFACTS
			L	W	D					
14	--	Medium circular basin	60	60	10	No	--	--	--	

¹ L = length; W = width; D = depth (bottom of feature below surface).
² p = partial number or measurement.
³ Conventional radiocarbon age; years before present.

Table 4: Characteristics of Slab-lined Basins, Oven Town.

FEATURE NUMBER	COMPONENT	FEATURE TYPE	DIMENSIONS (CM) ^{1,2}			HEAT-ALTERED ROCK OXIDIZED	NUMB.	KG	AGE ESTIMATE (YEARS B.P.) ³	ARTIFACTS
			L	W	D					
13	I	Large slab-lined basin	78	72	30	No	18	11.6	4,040 ± 40	3 flakes
6	I	Large slab-lined basin	68	50p	30	No	--	--	3,700 ± 40	--
51	I	Large slab-lined basin	75	60p	22	No	21p	30.9p	3,690 ± 40	--

¹ L = length; W = width; D = depth (bottom of feature below surface).
² p = partial number or measurement; slab lining not removed from Feature 13.
³ Conventional radiocarbon age; years before present.

Table 5: Characteristics of Cylindrical Basins, Oven Town.

FEATURE NUMBER	FEATURE TYPE	DIMENSIONS (CM) ^{1,2}			HEAT-ALTERED ROCK ² OXIDIZED	NO.	KG	AGE ESTIMATE (YEARS B.P.) ³	ARTIFACTS
		L	W	D					
23	Medium cylindrical rock-filled basin	60	60	30	Yes	24	50.4	1,490 ± 50	One burned mustard seed
41	Medium cylindrical rock-filled basin	45	40p	25	No	29p	15.3p	1,410 ± 50	13 small-mammal bones (12 burned)
42	Medium cylindrical rock-filled basin	60	58p	60	Yes	35p	68.2p	1,400 ± 60	79 small-mammal bones (36 burned), burned cactus
21	Medium cylindrical rock-filled basin	73	60	33	No	26	16.2	1,300 ± 40	Five small-mammal bones (four burned)
26	Medium cylindrical rock-filled basin	72	60	34	Yes	40	20.7	1,260 ± 40	Four flakes, one burned cactus seed
28	Medium cylindrical rock-filled basin	59	59	39	Yes	35	62.8	1,210 ± 50	14 flakes, six bones (three small-mammal, three medium-mammal), burned cactus and unknown tuber
7	Medium cylindrical rock-filled basin	58	58	12	No	43	16.0	--	--

Table 5: (continued).

FEATURE NUMBER	FEATURE TYPE	DIMENSIONS (CM) ^{1,2}			HEAT-ALTERED ROCK ²		AGE ESTIMATE (YEARS B.P.) ³	ARTIFACTS
		L	W	D	OXIDIZED	NO. KG		
32	Medium cylindrical rock-filled basin	35	30	12	No	23	13.6	--
43	Medium cylindrical rock-filled basin	58	57	25	Yes	27	9.2	Flake tool, one flake, and seven small-mammal bones (six burned)
46	Medium cylindrical rock-filled basin	60	22p	63	Yes	8p	11.0p	--
54	Medium cylindrical rock-filled basin	53	53	28	Yes	21	37.0	Flake tool, one burned flake, and two small-mammal bones

¹ L = length; W = width; D = depth (bottom of feature below surface).

² p = partial number or measurement.

³ Conventional radiocarbon age; years before present.

ing sides, a flat bottom, and tabular stones lining the edges (Table 4). One of the basins (Feature 51) was also lined with stones on the bottom (Figures 10 and 11). Feature 13 differed from the other two slab-lined basins in the evident care taken to select thin slabs of sandstone and fit them tightly to the interior of the basin. Feature 6 was heavily damaged and only provided minimal information regarding details of its construction. The basins are thought to represent a greater labor investment than the other two types present at the site.

The feature fill ranged from extremely dark charcoal-stained sand (Feature 51) to mottled gray sediment with only a small pocket of darker stained sediment located at the bottom of the feature (Feature 6). Oxidation is absent from this feature type and is likely because the surrounding sediment was shielded from heat by the stone lining. The diameters of the slab-lined basins ranged from a width of 78 to 68 cm, but only one feature (Feature 13) was undamaged and whole (Figures 12 and 13). The depths ranged from 22-30 cm, but, again, the better preserved features (Features 13 and 51) indicate the typical feature was usually 30+ cm deep.

Feature 13 was the only slab-lined basin excavated at Oven Town containing heat-altered rock in the fill. Eighteen rocks weighing 11.6 kg were distributed across the feature in the upper 10 cm of fill. The slab-lined basin features tended not to contain artifacts in the fill, with only Feature 13 yielding additional minimal information (three tertiary flakes). No floral remains were recovered from the slab-lined basin type, and no intact activity areas associated with slab-lined basins were defined at the site.

CYLINDRICAL ROCK-LINED BASINS

The second most prevalent feature type present at Oven Town are classified as cylindrical rock-lined basins (n = 11; 25%) (Table 5). The cylindrical rock-lined basins exhibited a strikingly similar morphology consisting of a cylindrical shape, generally straight sides and flat bottoms, and several kilograms of heat-altered rocks piled two to three stones deep lining the bottom of the entire feature (Figures 14 and 15). The feature fill in the lower third of the basins was generally dark-stained sediment with pieces of sagebrush charcoal intermixed with the stones. The upper two-thirds of the fill tended to be light gray-stained sediment containing flecks of

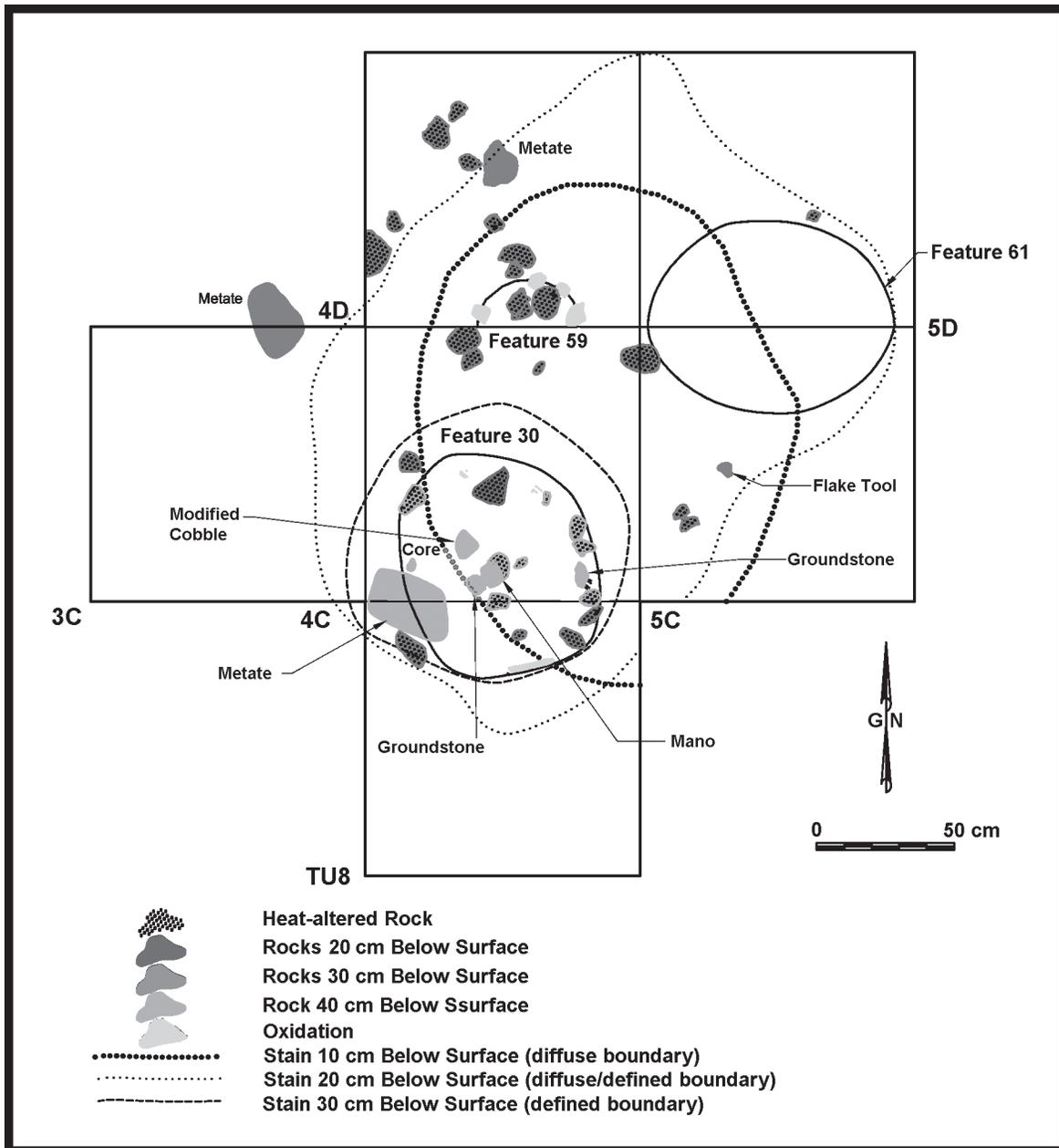


Figure 7: Plan view of Block A, Oven Town.

charcoal. Most of the cylindrical basin features (n = 7; 63%) showed a rind of oxidation extending upward from just above the bottom rock layer. The absence of oxidation in four of the features is likely from damage suffered during the surface stripping.

The diameters of the cylindrical rock-lined basins ranged from 73 to 35 cm. The generally better preserved features indicate the typical feature was usually 60 cm or more in diameter (n = 8; 72% [includes features with diameters 58 cm or more]) and the larger examples tended to be 70 cm in size

(n = 2; 18%). The depths ranged from 12-63 cm, but, again, the better preserved features indicate the typical feature was usually 30-40+ cm deep.

The cylindrical rock-lined basin features excavated at Oven Town contained more artifacts in the fill than either of the other two feature types. Eight features (72%) yielded additional minimal information. The most prevalent artifact recovered from the circular basins were bone fragments (n = 112; six features; 54%). Most of the bone specimens (n = 109; 97%) were classified as small mammal

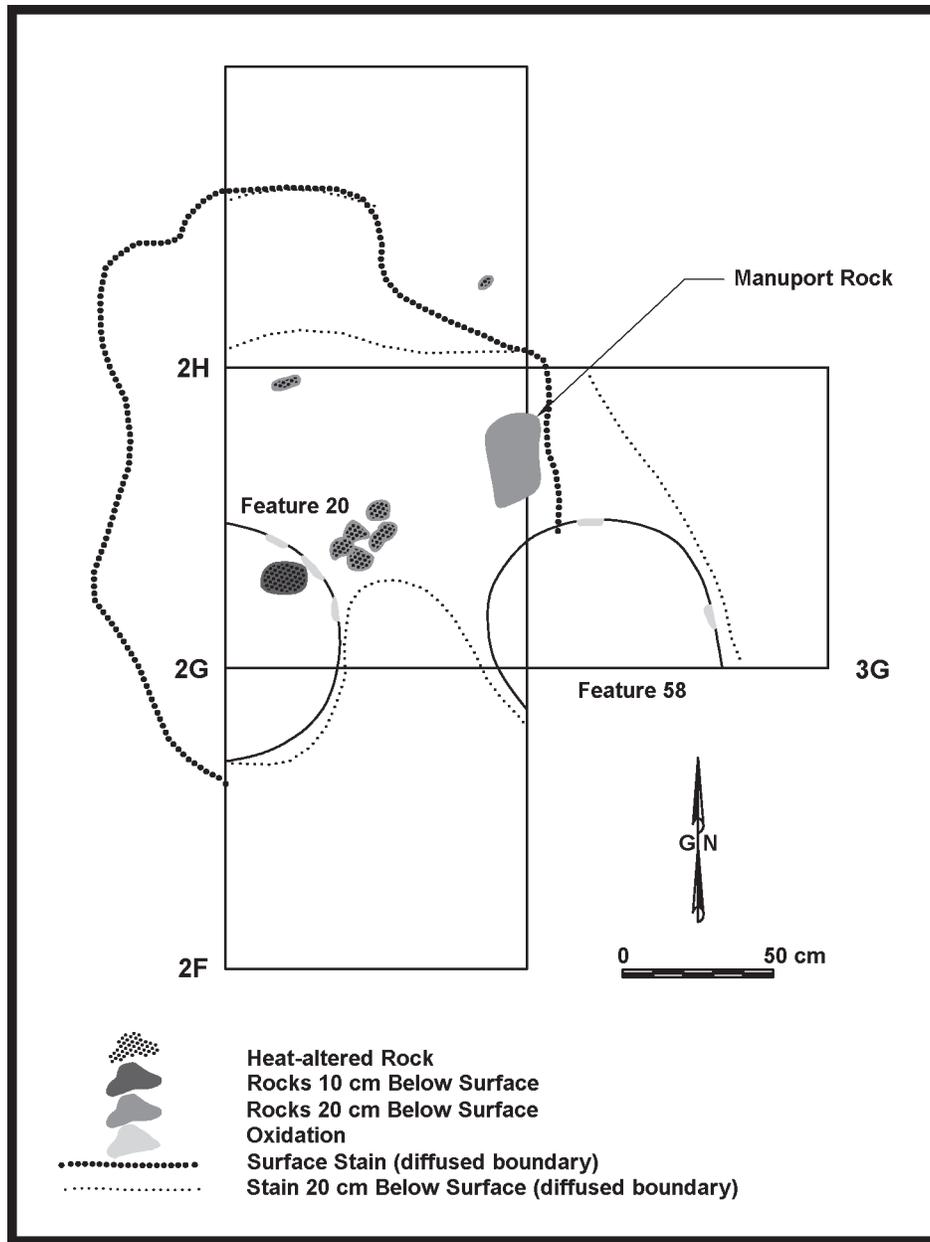


Figure 8: Plan view of Block B, Oven Town.

remains, with only three fragments in Feature 28 indicating the presence of a medium-sized mammal. Three elements in Feature 42 were identified as prairie dog, and unknown rabbit pieces were present in Features 28 and 41. Flakes (n = 20) were recovered from four features (36%) with two features (Features 43 and 54; 18%) also yielding one expedient flake tool each. Floral remains were recovered from four (36%) of the cylindrical rock-lined basins. Features 26, 28, and 42 each contained either cactus pad fragments (Features 28 and 42), a cactus seed (Feature

26), or unknown tuber fragments (Feature 28).

Only one activity area was associated with cylindrical rock-lined basins at Oven Town. Test Unit 4 was placed immediately southwest of Features 41 and 42 and yielded small scattered heat-altered sandstone rocks in Level 1 (0-10 cmbs) and Level 2 (10-20 cmbs). One tertiary flake was recovered from both Level 3 (20-30 cmbs) and Level 4 (30-40 cmbs). No charcoal stains were recorded in the test unit.

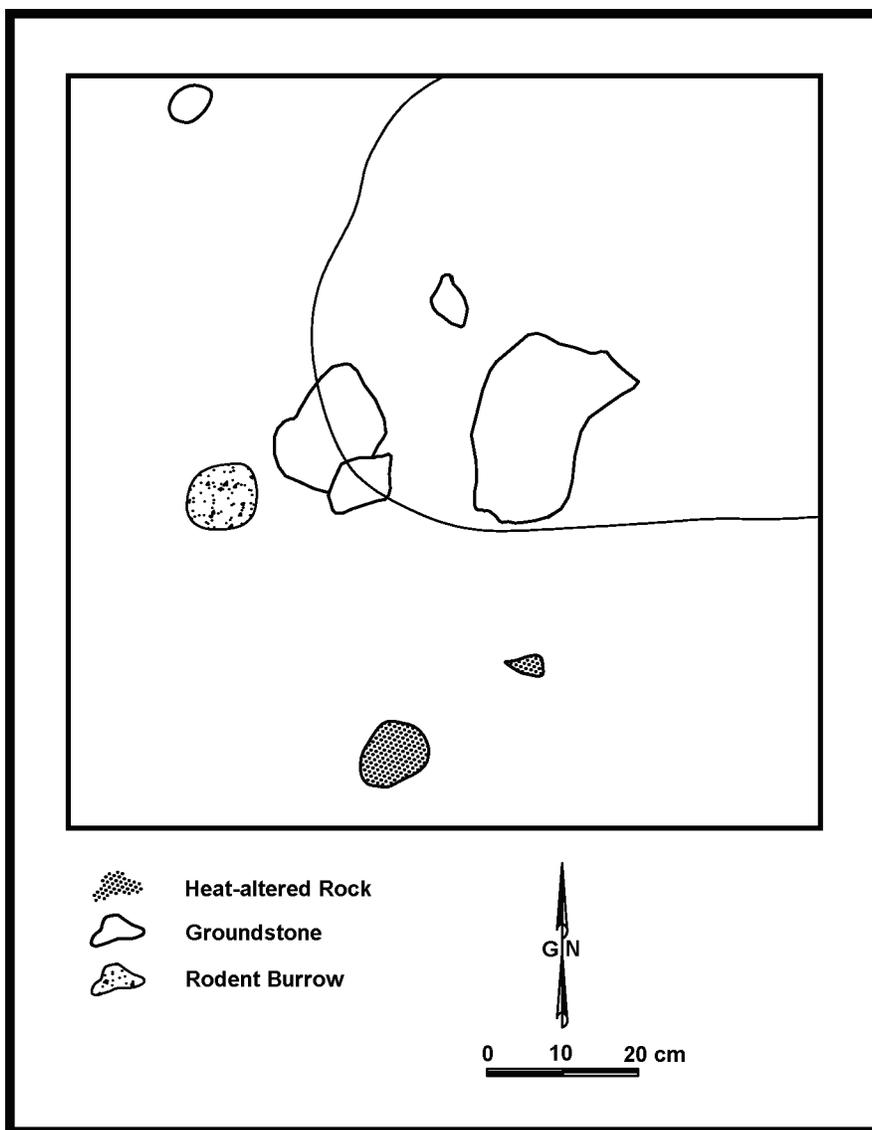


Figure 9: Plan view of Unit 17, Oven Town.

**LITHIC TECHNOLOGY
FLAKED STONE ARTIFACTS**

A limited quantity of flaked stone artifacts (n = 76) was recovered during the investigation of Oven Town. Unfortunately, most pieces were displaced or deflated surface discoveries. The assemblage consists of three bifaces, 14 flake tools, six cores, one modified cobble, and 52 pieces of debitage (Tables 6 and 7). Specific lithic trajectories include initial reduction of raw material and tool maintenance/discard. Both components exhibited a pattern of using raw material from secondary sources surrounding the site.

The use of lithic raw material from areas adja-

cent to the site indicates a casual direct procurement strategy was consistently employed. The locally available raw material is only a few steps from the features and consists of secondary deposits of a variety of low to mid-quality cherts (semi-translucent and opaque) and cobble quartzite in small pebble/cobble form. These materials account for all of the flaked stone tools, cores, and debitage. No exotic material types were noted in either component.

Initial reduction of raw material is evidenced by presence of cores and moderate percentages of cortical debitage. The cores generally exhibit extensive flaking and were likely discarded because of the inability to remove additional material. Most corti-

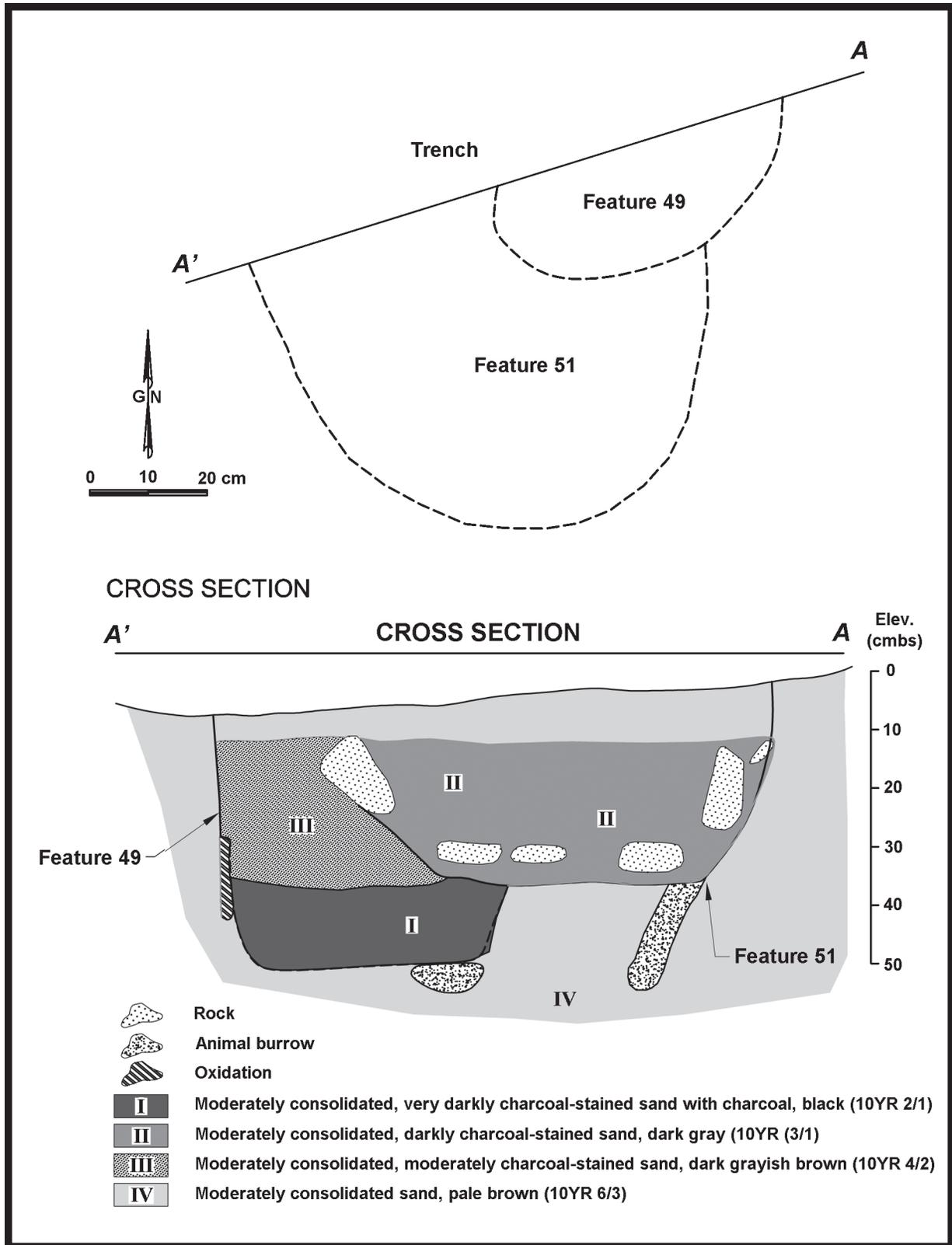


Figure 10: Features 49 and 51, plan view and cross section, Oven Town.



Figure 11: Feature 51, profile, looking southeast, Oven Town (Photo by Caitlin Guthrie).

cal debitage ($n = 9$; 60% of total cortical debitage) was from opaque chert pebbles, followed by three cortical fragments of cobble quartzite (20% of total cortical debitage) and three cortical pieces of semi-translucent chert (20% of total cortical debitage).

Tool maintenance/discard activities are evidenced by presence of discarded tool fragments and a low quantity of pressure flakes. The discarded tool fragments include three bifaces and 14 flake tools apparently no longer of use to the inhabitants. The production of flake tools suggests an expedient technological system, which is consistent with the suggested casual direct procurement strategy discussed earlier. The small debitage assemblage from the site suggests biface and/or formal tool production activities were not frequently conducted.

In conclusion, the limited number of flaked stone artifacts from the components reflects a limited variety of non-intensive non-specialized lithic activities using only locally available materials. No exotic or high-quality material types are present at the site. The cores within the flaked stone artifact assemblage suggest the inhabitants attempted to use readily available, albeit low to mid-quality, lithic

raw material as part of a casual direct procurement strategy. An expedient technological system is represented by limited expedient tool manufacture and initial reduction of raw material and tool maintenance/discard activities. The recovery of tool fragments suggests viable tools were likely curated and only fragmented/nonviable artifacts were discarded.

GROUNDSTONE

Groundstone tools recovered from Oven Town consist of five complete and 11 fragments of metates and two complete manos. Two whole and six fragments of metates and one mano were associated with Component I (Table 8). Groundstone was not present in any of the Component II cylindrical basins. The remainder of the groundstone (eight pieces and one mano) was recovered from unassigned contexts (surface, test units, and excavation units).

The presence of groundstone is consistent with the posited plant processing function of the Component I features. Evidence of shaping on the metate fragments and the moderately to heavily ground surfaces may indicate specific and fairly intensive processing of the posited plant resources. The fragmented nature of one groundstone piece and the

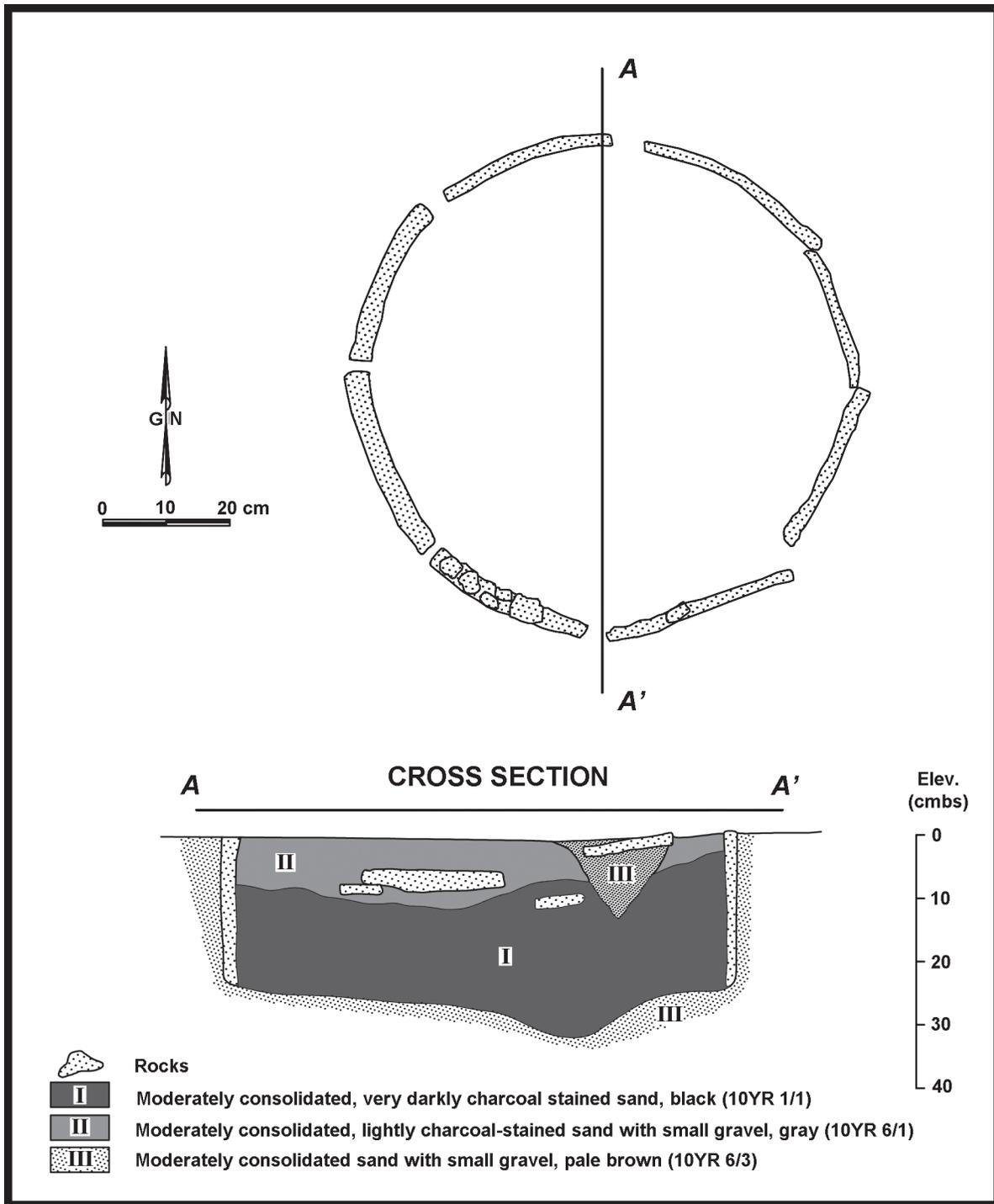


Figure 12: Feature 13, plan view and cross section, Oven Town.

location of it and a mano in Feature 30 most likely indicate processing before the feature construction and then discard/secondary use of the broken tool into the feature. Two metates constructed of large heavy cobbles were located in activity areas immediately adjacent to Features 30 and 58 (see Figures 7

and 8) and may indicate processing of plant material occurred in those locations. The mano located in Feature 30 bore traces of red ochre on the ground surface, but no other evidence of ochre was present in the component. The metate fragments next to Feature 36 (see Figure 9) refit. The breakage of the thin



Figure 13: Feature 13, final, looking south, Oven Town (photo by Russell Richard).

sandstone appears to have resulted from weathering while exposed on the surface. Sandstone sources for the tools are present along the east-facing slope of the ridge adjacent to the site.

The unassigned groundstone consists of similar types of metates, constructed both on large sandstone rocks and thin tabular stones. Groundstone fragments were found in unassigned activity areas in two locations (TU 2 and Block C). The mano recovered from the surface is similar in shape and ground surface to the one located in Feature 30.

FAUNAL REMAINS

Limited quantities of faunal remains were recovered from both components at Oven Town. The remains consist of bone fragments likely representing general domestic debris resulting from processing of animals for consumption. A total of 120 bone fragments was recovered from nine features (Table 9). Only one Component I feature (Feature 5) yielded a small amount of bone (five small mammal fragments), and no faunal remains were located in the general component activity areas. Component II produced 104 bone fragments (86% of assemblage total) from five cylindrical rock-filled basins (Fea-

tures 21, 28, 41, 42, and 49).

Due to the overall fragmentation of the assemblage, most bone specimens ($n = 5$; 96%) could not be identified to species. The limited number of fragments identified to species includes two cottontail (*Sylvilagus* sp.) and three prairie dog (*Cynomys* spp.) specimens. The remaining fragments were classified into generalized size taxa, including small and medium mammal. The minimal number of individuals for each feature is one animal.

Limited amounts of faunal material from a limited number of individual animals were found in each of the nine features. The adjacent and contemporary Component II Features 41 and 42 account for most of the overall faunal assemblage ($n = 92$; 76.7%), followed by Feature 43 ($n = 7$; 5.8%), Feature 5 ($n = 6$; 5%), Feature 28 ($n = 6$; 5%), Feature 21 ($n = 5$; 4.3%), Feature 34 ($n = 2$; 1.6%), and Features 49 and 59 each with a single fragment (1.6%). All but one of the features produced remarkably similar faunal material from one size taxa: small mammal. Small mammals (includes unidentified bone) dominate the faunal assemblage (97.5%). One individual animal is represented in each feature by specific elements, but the medium mammal remains consist only of

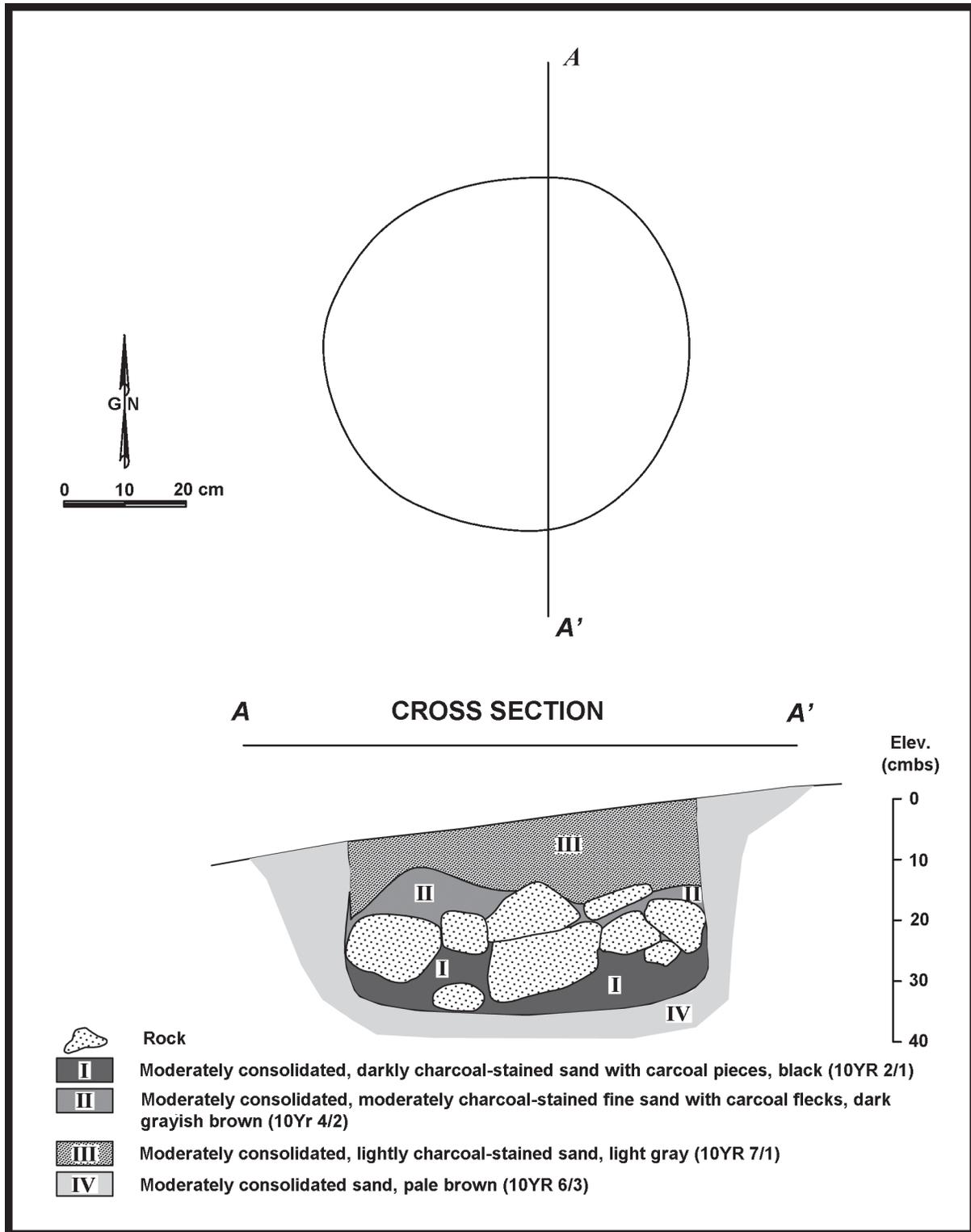


Figure 14: Feature 28, plan view and cross section, Oven Town.



Figure 15: Feature 28, rocks, looking north, Oven Town (photo by Russell Richard).

three small long bone fragments in Feature 28.

The highly fragmented nature of the overall site faunal assemblage suggests intensive processing techniques that may have included marrow extraction and/or the crushing of the entire carcass (especially of the small mammals) for stewing or bone grease manufacture (Vehik 1977; Yohe et al. 1991) or simple consumption (Bovee 2006). Additionally, over half of the fragments ($n = 65$; 54%) exhibited some form of heat-alteration, which may indicate cooking or roasting of the processed animals or simply discard into the feature.

The component faunal assemblages reflect a similar general use pattern in which a limited number of individual animals representing a limited variety of taxa were processed. Eight of the nine features exhibit evidence of exploitation of small mammals with only minimal evidence of a medium-sized mammal. It appears small mammals were consistently exploited to a greater degree in Component II. This focus on smaller animals was apparently non-intensive and limited in scope. The small numbers of animals from each taxa suggest hunting strategies focused on the procurement of

individual animals rather than multiple or mass kills. This characteristic (a limited number of individual animals) is consistent with remains produced by a generalized hunting strategy, and this type of strategy appears to be reflected most intensely in Component II. The animals procured within each component were likely processed for immediate or daily consumption, rather than as food stores as part of a large-scale procurement or mass processing strategy. Additionally, most animals represented (rabbits and probable pronghorn) would have been available year-round in the area and none of the specimens could be ascribed to juvenile/season specific animals. The prairie dog remains in Feature 42 most likely indicate a spring-fall period of occupation (early March-Late October) since they are generally in hibernation from November-February.

FLORAL REMAINS

Indirect evidence in the form of groundstone fragments and specific feature types provide the strongest indication of plant processing activities at Oven Town. Feature types and combinations typically associated with plant processing activities

Table 6: Summary of Lithic Tools from the Surface and Excavations, Oven Town.

CATALOG NUMBER ¹	LOCATION	COMPONENT ²	TYPE	MATERIAL ³	DIMENSION (CM) ⁴			COMMENTS
					L	W	T	
BIFACES								
6	Surface	U	Final biface	STC	2.5	1.9	0.5	Use wear and polish on both lateral margins
23	Surface	U	Pre-blank	STC	7.6	5.4	2.3	No use wear
85	Surface	U	Preform	OP	2.3	1.9	0.4	Burned
FLAKE TOOLS								
1	Shovel Test 15	U	Expedient	OP	2.6	1.4	0.3	Moderate use wear
7	Surface	U	Formal	AC	5.2	1.9	0.9	End scraper, moderate use wear
8	Surface	U	Formal	STC	3.8	3.9	1.3	End scraper, moderate use wear
13	Surface	U	Expedient	OP	2.0	2.4	0.5	Moderate use wear
14	Surface	U	Modified	OP	5.6	4.1	1.5	Retouched, moderate use wear
15	Surface	U	Modified	Q	10.4	7.5	2.2	Retouched, moderate use wear
17	Surface	U	Modified	Q	5.4	3.6	1.5	Moderate use wear
21	Surface	U	Expedient	OP	3.1	2.1	0.4	Moderate use wear
24	Surface	U	Modified	AC	4.5	4.0	0.8	Retouched, moderate use wear
26	Surface	U	Modified	Q	8.4	6.6	2.0	Retouched, moderate use wear
29	Test Unit 2	U	Modified	STC	2.2	1.0	0.5	Retouched, light use wear
58	Feature 43	U	Expedient	OP	3.7	2.5	0.8	Moderate use wear
64	Block A: Unit 5C	U	Modified	OP	5.4	4.3	3.2	Retouched, light use wear
88	Feature 54	U	Expedient	Q	7.8	3.0	0.7	Moderate use wear
CORES								
18	Surface	I	Bidirectional	OP	5.0	4.3	1.4	
36	Test Unit 8	I	Multidirectional	AC	6.1	3.1	3.0	
68	Block C: Unit 13	U	Bidirectional	STC	8.4	5.9	3.5	Burned
71	Block C: Unit 14	U	Bidirectional	STC	5.4	2.7	1.6	Burned fragment
81	Unit 17	I	Multidirectional	STC	7.9	6.8	4.9	Burned
104	Block A: Unit 4C: Feature 30	I	Multidirectional	P	5.6	4.0	1.7	Fragment
MODIFIED COBBLE								
102	Block A: Unit 4C: Feature 30	I	Bidirectional	Q	12.0	10.0	4.2	Two flake scars on broken cobble

¹ Begins with the prefix "FR5928-"; excludes debitage from features and surface.

² U = Unassigned; I = Component I.

³ AC = algalitic chert; OP = opaque chert; Q = quartzite; STC = semi-translucent chert; P = permineralized wood.

⁴ L = length; W = width; T = thickness.

Table 7: Summary of Total Debitage, Oven Town.

DEBITAGE TYPE	NUMBER.	PERCENT
SIZE		
<1 cm	6	11.5
1-2 cm	20	38.4
2-3 cm	7	13.4
3-4 cm	10	19.2
4-5 cm	9	17.5
Total	52	100
CORTEX		
Present	15	28.0
Absent	37	72.0
Total	52	100
MATERIAL TYPE		
Semi-translucent chert	8	15.3
Opaque chert	31	59.6
Quartz	1	2.1
Cobble quartzite	12	23.3
Total	52	100

were excavated in both components. Nearly all of the basins excavated at the site appear to have been used primarily as pit ovens for the baking of roots/tubers. Roots such as biscuitroot and spring parsley contain high levels of inulin and fructan and require long cooking times at sustained higher temperatures to become digestible (Smith and Martin 1999). These pit ovens would have been capable of providing such a need. Component I contained both large pit ovens, slab-lined basins, and groundstone in associated activity areas, but no plant remains were recovered from any of the component (and suspected component) features. Floral remains were recovered from four (36%) of the Component II cylindrical rock-lined basins (Table 10). Features 26, 28, and 42 each contained either cactus pad fragments (Features 28 and 42), a cactus seed (Feature 26), or unknown tuber fragments (Feature 28). Feature 23 yielded one burned mustard seed. The gentle slope on which the site is located would have provided plant resources for processing by the prehistoric inhabitants, and the adjoining plain is

known to contain similar resource patches (Richard 2009b). Component II represents multiple occupations of the site during the Late Prehistoric period for a postulated similar purpose. The seasonal exploitation of a reliable resource was likely embedded in the annual collecting strategy of all the prehistoric groups who briefly occupied Oven Town.

The two components identified during the excavations date to the Middle Archaic Period and Late Prehistoric Period, with occupations ranging from 4,330 ± 60 years before present (B.P.) (Component I) to 1,210 ± 50 years B.P. (Component II). The Component I subsistence activities were almost exclusively focused on plant procurement activities represented by the prominent presence of groundstone in and around the circular basins and the almost complete lack of faunal resources in the component. The remains associated with Component II indicate subsistence activities included primarily plant processing along with some faunal procurement.

SUMMARY OF SUBSISTENCE PATTERNS

Components I and II represent the repetitious use of the site locale primarily for plant processing activities. This assertion is based on the feature technology composed of feature types generally associated with plant processing activities and apparent multiple occupations indicated by the span of radiocarbon age estimates. Specifically, the circular basins, slab-lined basins, and rock-filled cylindrical basins were most likely used as pit ovens for the baking of roots/tubers. Unfortunately, direct evidence of the specific plant resource(s) used is lacking beyond the scanty floral remains associated with Component II. The primary use of the site

Table 9: Summary of Faunal Remains, Oven Town.

FAUNAL TAXON ²	FEATURE ¹									
	5	21	28	41	42	43	49	54	59	TOTAL
Md-m			3 (3)							3 (3)
Sm-m	4 (3)	5 (4)	2 (1)	10 (10)	76 (34)	7 (6)		2	1 (1)	107 (59)
Cottontail	2 (1)									2 (1)
Prairie dog					3 (2)					3 (2)
Unknown rabbit			1 (1)	3 (2)			1 (1)			5 (4)
TOTAL	6 (4)	5 (4)	6 (5)	13 (12)	79 (36)	7 (6)	1 (1)	2	1 (1)	120 (68)

¹ Counts of size classes; parentheses indicate burned or heat-altered specimens.

² Md-m = unidentified medium mammal; Sm-m = unidentified small mammal.

Table 8: Summary of Groundstone, Oven Town.

CATALOG NUMBER ¹	LOCATION ²	COMPONENT ³	TYPE	MATERIAL	SIZE (CM)	WEIGHT (GMS)	COMMENTS
9	Surface	U	Mano	Medium-grained sandstone	12.6 x 9.5 x 5.1	850	Complete, end and margins battered, heavy grinding on both faces.
10	Surface	U	Metate	Medium-grained sandstone	24.5 x 21.2 x 2.0	1,380	Complete, surface moderately ground.
30	Test Unit 2: Level 3	U	Metate	Fine-grained sandstone	13.9 x 7.7 x 2.9	305	Surface heavily ground, fragment, burnt.
31	Test Unit 2: Level 3	U	Metate	Medium-grained sandstone	9.3 x 3.1 x 1.9	61	Surface lightly ground, fragment.
56	Block A: Unit 3C: Level 2	U	Metate	Medium-grained sandstone	28.5 x 19.7 x 11.3	6,885	Complete, large broken cobble, stippled surface lightly ground, end lightly battered, tipped on edge and up to south.
63	Block A: Test Unit 8/Unit 4C: Level 4: Feature 30	I	Metate	Medium-grained sandstone	30.0 x 19.1 x 10.0	10,170	Complete, large rectangular cobble, surface moderately ground, tipped up to west.
67	Block C: Unit 13: Level 2	U	Metate	Fine-grained sandstone	8.2 x 7.8 x 2.9	238	Broken tabular stone, both surfaces heavily ground, edge shaped, burned, refits with Numbers 72 and 73.
72	Block C: Unit 14: Level 5	U	Metate	Fine-grained sandstone	10.4 x 5.1 x 2.8	181	Refits with Numbers 67 and 73.
73	Block C: Unit 14: Level 5	U	Metate	Fine-grained sandstone	4.9 x 3.6 x 2.8	58	Refits with Numbers 67 and 73.
75	Block B: Units 2G/3G: Level 2	I	Metate	Fine-grained sandstone	25.5 x 17.2 x 8.3	4,700	Complete, lightly ground surface, heavily ground edge, shaped end and margin.
76	Unit 17: Level 1	I	Metate	Medium-grained sandstone	13.1 x 7.0 x 2.0	273	Moderately ground surface, fragment of number 77.
77	Unit 17: Level 2	I	Metate	Medium-grained sandstone, Curved	24.0 x 17.6 x 2.3	1,620	Tabular slab, surface lightly-moderately ground, refitted.
78	Unit 17: Level 2	I	Metate	Medium-grained sandstone	8.2 x 5.1 x 2.0	98	Lightly ground surface, fragment of Number 77.
79	Unit 17: Level 2	I	Metate	Medium-grained sandstone	17.0 x 15.2 x 2.0	693	Lightly ground surface, fragment of Number 77.
80	Unit 17: Level 2	I	Metate	Medium-grained sandstone	12.7 x 6.9 x 1.9	236	Lightly ground surface, fragment of Number 77.
83	Block A: Unit 4D: Level 2	U	Metate	Medium-grained sandstone	14.5 x 17.8 x 3.9	1,030	Broken tabular stone, surface heavily ground and troughed, burned.
101	Block A: Unit 4C: Level 4: Feature 30	I	Mano	Silicified sandstone cobble	10.0 x 4.9 x 2.8	433	Complete, lightly-moderately ground surface, both ends battered, red ochre traces on ground face.
103	Block A: Unit 4C: Level 4: Feature 30	I	Metate	Coarse-grained sandstone	9.3 x 4.4 x 2.6	114	Broken tabular stone, one edge heavily ground, burned.

¹ Begins with the prefix "FR5928-".

² Level 1 = 0-10 cmbs; Level 2 = 10-20 cmbs; Level 3 = 20-30 cmbs; Level 4 = 30-40 cmbs; Level 5 = 40-50 cmbs.

³ U = Unassigned; I = Component I.

Table 10: Summary of Floral Remains, Oven Town.

TAXA ²	FEATURE ¹					TOTAL
	4	23	26	28	42	
<i>Opuntia</i> sp.			1 (1)	3 (3)	3 (3)	7 (7)
<i>Brassica</i> sp.	1 (1)	1 (1)				2 (2)
Unknown tuber				4 (4)		4 (4)
Total	1 (1)	1 (1)	1 (1)	7 (7)	3 (3)	13 (13)

¹ Counts of specimens; parentheses indicate burned or heat-altered specimens.

² *Opuntia* sp. = prickly pear cactus pad and/or seeds; *Brassica* sp. = mustard seed.

for plant processing suggests the locale may have been associated with logistically oriented collector groups or with the daily foraging radius of a group of foragers (Binford 1980, 1983). The extended baking time of roots/tubers may have required the group to spend a night or more at the site, which

would account for the limited density and limited diversity of flaked stone artifacts and faunal remains associated with the feature activity areas.

While the remains from Components I and II suggest the possible use of the site as a specialized plant processing locale, limited faunal procurement activities were conducted as well. Indirect evidence for subsistence exists within Component I by the proximity of easily obtainable plant, lithic, and groundstone resources and indications of minimal faunal procurement. Component II produced evidence of both plant processing and the procurement/processing of a limited number of small and medium mammals (prairie dog, rabbits, and, most likely, pronghorn). However, the small quantities of remains suggest the activities were likely non-intensive and opportunistic.

The locale surrounding Oven Town apparently was conducive to the long-term exploitation of a consistent resource. The area has not been visited in

Table 11: Feature Types and Radiocarbon Ages, Four Selected Alkali Creek Sites.

SITE	FEATURE NUMBER	TYPE	DATE ¹ (YEARS B.P.)
48FR5653	9	Medium circular basin, flat bottom	4,700 ± 50
48FR6292	6	Medium circular basin	4,650 ± 60
48FR5928	37	Large circular basin, straight sides, flat bottom	4,330 ± 60
48FR5928	30	Large circular basin, straight sides, flat bottom	4,180 ± 40
48FR5928	52	Medium circular basin, straight sides, flat bottom	4,090 ± 40
48FR5928	36	Medium circular basin, straight sides, flat bottom	4,070 ± 50
48FR5928	13	Large slab-lined basin	4,040 ± 40
48FR5928	58	Medium circular basin, straight sides, flat bottom	3,990 ± 40
48FR5928	20	Medium circular basin, straight sides, flat bottom	3,950 ± 40
48FR6292	7	Medium circular basin, straight sides, flat bottom	3,930 ± 40
48FR5928	57	Medium circular basin, flat bottom	3,810 ± 40
48FR5928	18	Large circular basin	3,750 ± 40
48FR5928	61	Medium circular basin, straight sides, flat bottom	3,750 ± 40
48FR5928	6	Large slab-lined basin	3,700 ± 40
48FR5928	51	Large slab-lined basin	3,690 ± 40
48FR5928	5	Medium circular basin	3,680 ± 40
48FR5928	49	Medium circular basin, straight sides, flat bottom	1,630 ± 50
48FR5928	23	Medium cylindrical rock-filled basin	1,490 ± 50
48FR5928	41	Medium cylindrical rock-filled basin	1,410 ± 50
48FR5653	C	Medium cylindrical rock-filled basin	1,410 ± 40
48FR5928	42	Medium cylindrical rock-filled basin	1,400 ± 60
48FR5653	B	Large circular basin, straight sides, flat bottom	1,370 ± 40
48FR6292	5	Medium circular basin, straight sides, flat bottom	1,360 ± 50
48FR6451	5	Medium cylindrical rock-filled basin	1,310 ± 50
48FR5928	21	Medium cylindrical rock-filled basin	1,300 ± 40
48FR5928	26	Medium cylindrical rock-filled basin	1,260 ± 40
48FR6292	1	Medium circular basin, flat bottom	1,220 ± 90
48FR6451	3	Medium cylindrical rock-filled basin	1,220 ± 40
48FR5928	28	Medium cylindrical rock-filled basin	1,210 ± 50
48FR6451	2	Medium cylindrical rock-filled basin	1,160 ± 40

¹ Conventional; years before present.

the spring, but it is suspected the edible plants noted at a similarly dated and nearby site were present at Oven Town as well (Richard 2009c). The location of the site on the lee side of the ridge would create a greater snow dump in the area, thus providing more abundant moisture for plants on the slowly creeping sand sheet than would be available on the nearby hills and plain. The site also offered easy procurement of all the necessary items for plant processing, namely fuel (abundant large sagebrush in the nearby drainage and scattered across the landscape), toolstone (material present in secondary deposits along the adjacent ridge), groundstone, and heating stone (both also available from the secondary deposits). The location of the east-facing gentle slope receives early light, provides some shelter from the typical storm track, and the sand deposit would have allowed for easy digging of the features.

Although the site integrity was likely affected by various post-depositional processes (Burger et al. 2008; Huckleberry 2001), it was impacted most directly by the surface scraping and subsequent erosion/deposition of the disturbed sandy loam deposit. Therefore, the density and distribution of artifacts within each component was curtailed largely to only what was present within the features, which allows only a limited definition of activity areas. Component I yielded evidence of three activity areas, representing the remains of at least three occupations of the site. Component II did not produce any activity areas, and is represented by seven features likely produced by a limited but unknown number of occupations. Combined, the two components identified at Oven Town represent occupations during the Middle Archaic and Late Prehistoric periods. Unfortunately, the dearth of activity area information gleaned from the Late Prehistoric period occupations precludes any discussion on differential use of the site over different culture historic phases or meaningful comparisons with other sites in the region. However, discussion of how the specific site location was used during the mid- to late Middle Archaic period is possible.

COMPONENT I

Component I contained fairly discrete concentrations of features and stains representing the remains of at least three occupations during the Middle Archaic period. The component is concentrated in three distinct loci: Activity Locus A situated within

Block A near the center of the site, Activity Locus C situated within Block B near the eastern edge of the site, and Activity Locus D found within Unit 17 on the western side of the site. Radiocarbon age estimates of $4,180 \pm 40$ (Locus A), $4,070 \pm 40$ (Locus D), $3,990 \pm 40$ (Locus C), and $3,950 \pm 40$ (Locus C) years B.P. were associated with the activity areas. Activity Loci B, E, and F are unassigned to either component and are not discussed in this publication.

Activity Locus A is a feature-oriented activity area postulated to have been primarily focused on plant processing. Activities were centered on a circular basin (Feature 30) (see Figure 7). While plant processing activities were likely the dominant activity conducted in association with the feature, no direct evidence exists to support the supposition; however, the activity area did include groundstone, flaked stone, and heat-altered rock to support the range of activities included in plant processing. The feature did not produce any evidence of a specific specialized function, but the relative size and depth of the feature suggests it may have been used for baking purposes as part of plant processing. The presence of limited quantities of lithic material suggests other domestic activities were conducted in association with the feature. The composition of the limited flaked stone artifacts assemblage suggests the inhabitants engaged in the limited initial reduction of chert cobbles gathered from the surrounding area. Based on the low density of the lithic material, associated activities were apparently non-intensive. The generalized staining associated with the activity area suggests the focus of the activity was in the immediate vicinity of the feature.

Activity Locus C is also a feature-oriented activity area postulated to have been primarily focused on plant processing (see Figure 8). Activities were centered on two circular basins (Features 20 and 58). While plant processing activities were likely the dominant activity conducted in association with the features, no direct evidence exists to support the supposition; however, the activity area did include groundstone and heat-altered rock to support the range of activities included in plant processing. The features produced no evidence of a specific specialized function, but the relative size and depth of the features suggests they may have been used for baking purposes as part of plant processing. The generalized staining associated with the activ-

ity area suggests the focus of the activity was in the immediate vicinity of the features. Based on their spatial proximity, stratigraphic relationship, and nearly identical radiocarbon age estimates, the features were likely used in conjunction with each other. Such feature groupings are typically associated with plant processing activities.

Activity Locus D is again a feature-oriented activity area postulated to have been primarily focused on plant processing (see Figure 9). Activities were centered on a circular basin (Feature 36). While plant processing activities were likely the dominant activity conducted in association with the feature, no direct evidence exists to support the supposition; however, the activity area did include a core, groundstone, and heat-altered rock to support the range of activities included in plant processing. The feature did not produce any evidence of a specific specialized function, but the relative size and depth of the feature suggests it may have been used for baking purposes as part of plant processing. The presence of limited quantities of lithic material suggests other domestic activities were conducted in association with the feature. The composition of the limited flaked stone artifact assemblage suggests the inhabitants engaged in the limited initial reduction of a chert cobble gathered from the surrounding area. Based on the low density of the lithic material, associated activities were apparently non-intensive. The proximity of the artifacts suggests the focus of the activity was in the immediate vicinity of the feature.

Comparison of the activity areas reveals shared activities consisted of plant processing involving groundstone and the presumed baking of the resource in circular basins in Loci A, C, and D. The primary difference between these three activity areas is the presence of non-intensive domestic activities conducted within Activity Loci A and D, as represented by limited initial reduction of locally available chert cobbles/pebbles. The overall low density and diversity of artifacts from each activity area suggests the associated occupation(s) were of short duration.

COMPONENT II

Component II is the upper cultural component identified during both testing and data recovery excavations but was only encountered on the scraped surface. The component represents the remains of at

least two or more short-term occupations of the site during the Late Prehistoric period. Seven radiocarbon age estimates ranging from $1,630 \pm 50$ to $1,210 \pm 50$ years B.P. date the component. Archaeological remains associated with the component are limited to the artifacts gleaned from the seven basin features and consist of 18 pieces of debitage, 104 faunal fragments, burned cactus pads and unknown tuber fragments, and 165.4 kg of heat-altered rock. The remains suggest specialized plant processing activities, as well as generalized domestic and manufacturing tasks, were conducted within the component and were feature oriented. In addition to being used for specialized plant processing, the basin features were also the center of generalized domestic tasks (cooking of animals) and manufacturing tasks (lithic reduction).

The horizontal distribution of the features suggests the component represents multiple occupations. The clustering of Features 41 and 42 suggests the basin features were possibly the center of limited and non-intensive generalized domestic tasks and manufacturing tasks, although no artifactual evidence of any such tasks remained due to the blading disturbance. The overall lack of artifacts suggests the site was either used for short periods of time or, more likely, any discernible evidence of activities was removed by the construction activities.

Generalized domestic and manufacturing tasks conducted within the component appear to be relatively diverse and non-intensive. These likely include limited animal procurement, processing, and consumption activities, as well as tool maintenance. Limited faunal remains associated with the component indicate faunal exploitation activities focused primarily on small mammals. The overall small faunal assemblage suggests only a single animal was likely taken on an encounter basis for immediate consumption, with no indication of intense exploitation. Tool maintenance activities are also suggested by the few tertiary flakes recovered from Feature 26.

SUMMARY OF SITE ACTIVITIES

Analyses of the activities conducted within the two components led to the identification of three discrete activity loci in Component I but none within Component II. Each of these activity loci was feature-oriented, but only two (Activity Locus

A and Activity Locus D) were associated with a low density and diversity of artifacts including flaked stone artifacts, indicating low-intensity lithic reduction and tool maintenance. The composition of the limited artifact assemblages is indicative of non-intensive activities associated with relatively short-term occupations. Generalized feature-focused activities were fairly consistent among all of the activity loci in attributes, including feature form and the presence of groundstone. No structures of any type were apparent at the site; all the occupations appear to have been short-term.

Each of the Component I activity loci produced individual features which appear to be associated with plant processing activities. Each was also associated with groundstone. While these features were likely used in plant processing activities, the associated artifact assemblages from Activity Locus A and Activity Locus D suggest they were also the focal point for generalized tasks, including lithic-based activities.

In summary, Component II represents the remains of at least two, and most likely more, short-term occupations in which specialized plant processing activities were conducted, as well as generalized domestic and manufacturing tasks. Activities represented in the component include probable root/tuber processing, additional processing of unknown plant resources, limited faunal exploitation for immediate consumption that primarily focused on small mammals, and lithic tool maintenance activities using locally available materials. The overall density of artifacts suggests the area was used (most likely seasonal) for short periods of time.

DISCUSSION

Oven Town is situated in a resource zone probably exploited multiple times based on a large number of similar open camp/thermal feature sites situated along the same and nearby perennial drainages. To place Oven Town within a larger cultural context of the Wind River Basin, 99 selected prehistoric sites situated along a selected 12.0 mi (19.3 km) long portion of the Alkali Creek drainage were re-examined in relation to the radiocarbon age estimates and activities discovered at the similarly dated 48FR5653 (Richard 2009c). The study area encompasses Oven Town and consists of 22 adjoining sections stretching approximately 1.0-2.0 mi (1.6-3.2 km) north and

south of the drainage. The sites represent every prehistoric site within the selected sections with records available in 2009. All of the sites were recorded as the result of various cultural resource management (CRM) projects by both private and federal archaeologists; consequently, the distribution of the sites largely reflects the distribution of the projects, and site density is believed equally high beyond the boundaries of this area. It must also be noted this area of the basin has long been hunted by artifact collectors, and, therefore, the relative surface dating of many sites has probably been destroyed. The sites are classified into five general types: stone circle sites, open camps, lithic scatters, isolated features, and cairn sites.

The 99 Alkali Creek sites contain a limited number of dated sites ($n = 16$; 16%), which are dated either by relative means (e.g., diagnostic artifacts) ($n = 11$; 11%), radiocarbon ($n = 5$; 5%), or both ($n = 1$; 1%). The 16 dated sites represent 20 components, most being Late Prehistoric period ($1,630 \pm 50$ to 950 ± 50 years B.P.) occupations (11 single components and three multicomponent), followed by three Middle Archaic period ($4,700 \pm 50$ to $3,690 \pm 40$ years B.P.) occupations in multicomponent sites and three Late Archaic period (relative dating) sites (two single component and one multicomponent). Open camps are the most prevalent site type ($n = 11$); eight of these contain multiple hearths and three have heat-altered rock only. Open camp occupations span the Middle Archaic ($n = 3$), Late Archaic ($n = 2$), and Late Prehistoric ($n = 10$) periods. Two of the dated sites are sparse stone circles with Late Archaic period Pelican Lake and Late Prehistoric period Paskapoo projectile points, two are lithic scatters with Late Prehistoric period Prairie side-notched arrow points, and the single dated cairn site contains an unidentified Late Prehistoric period arrow point.

Repeated occupations of specific landscape locales such as Oven Town suggest both the Middle Archaic and Late Prehistoric period occupants probably intensively exploited known resource locations on a scheduled basis across long periods of time (Martin et al. 1999; Smith and Martin 1999) during periods of increased mesic conditions across the region (Eckerle 1999; Meltzer 1999). The specialized resource processing hinted at the site exemplifies a strategy “designed to extract more useable resources out of the same amount of raw resource”

(Kornfeld et al. 2010:602). The site undoubtedly complemented other site types in the area, including stone circle sites and lithic scatters.

Oven Town must also be considered as representing a local pattern of resource use. TRC has conducted salvage and data recovery excavations on three similarly scraped well pad sites in the same area of the Alkali Creek drainage in Wind River Basin (Table 11). These three sites, 48FR6451 (Richard 2009b), 48FR6292 (Nelson 2008), and 48FR5653 (Richard 2009c), are located south of Alkali Creek on similar gently sloping to flat sand sheet terrain adjoining large tributaries of the drainage. They are located southeast of Oven Town. 48FR6451 is approximately 2.3 mi (3.7 km) distant, 48FR6292 is located approximately 2.5 mi (4.0 km), and 48FR5653 is approximately 4.8 mi (7.7 km) from Oven Town. 48FR6451 consists of a Late Prehistoric period occupation with by three radiocarbon age estimates ranging from $1,310 \pm 50$ to $1,160 \pm 40$ years B.P. obtained from cylindrical rock-filled basins. 48FR6292 has both a Middle Archaic period component using circular basins dating to $4,650 \pm 60$ and $3,930 \pm 40$ years B.P. and a Late Prehistoric period component with dates of $1,360 \pm 50$ and $1,220 \pm 90$ years B.P., also obtained from circular basins. 48FR5653 consists of a Middle Archaic period component circular basin dating to $4,700 \pm 50$ years B.P. and a Late Prehistoric period component with dates of $1,410 \pm 40$ and $1,370 \pm 40$ years B.P., obtained from a cylindrical rock-filled basin and a circular basin, respectively.

Together, these three sites, along with Oven Town, provide 30 radiocarbon age estimates delineating two extensive and discrete periods of occupation with largely differing feature types in this small portion of the basin. Beginning approximately 4,700 years ago, Middle Archaic period peoples were processing plant material in large/medium straight-walled and flat-bottomed basins on the south side of Alkali Creek, which continued some 1,000 years to an abrupt ending with the same feature form. Around 4,000 years B.P., the slab-lined basin was used, but is evident only three times in a 300-year span and only at one site. After a 2,000-year period of no detectable occupation at any of the four sites, the first Late Prehistoric period occupation occurs some 1,600 years B.P. with a similar circular basin form which continues in use a third

of the time throughout the period of the occupations. The cylindrical rock-filled basin first makes an appearance around 1,500 years B.P. and quickly supplants the circular basin form after 1,300 years B.P., although the occasional circular basin is still seen as late as 1,200 years B.P. The youngest date suggests the Late Prehistoric period occupations persisted until 1,100 years B.P., for an overall span of approximately 500 years. The change in feature form during these two cultural periods may indicate differing processing practices related to differing resources, or the change in form relates to discoveries of a more-efficient method of processing plants, or perhaps a different set of practices derived elsewhere arrived with a later wave of occupations. Combined, the four sites serve to indicate a locally widespread and long-standing method of subsistence that may be expected to be encountered in numerous similar locales in this region of the basin during the continued development of the energy resources, and to illustrate the process of oversight and reporting inherent in CRM archaeology.

ACKNOWLEDGEMENTS

No one digs alone. My thanks for the long hours and good humor are due the excavators of Oven Town (in order of appearance): Caitlin Guthrie, Bridget Hollingsworth, Brian Armstrong, Garry Luoma, and Robert (Bob) Shinkle. Apt and helpful oversight of the project was provided by Craig Bromley and Karina Bryan of the Lander Field Office, BLM, and James Lowe served as the principal investigator. No one writes alone, behind this paper stand the unsung many at TRC whom either carried or pushed the project to completion. Additional thanks are due the unnamed scraper operator who reported the stains and particularly to Noble for their funding of the investigations completed at Oven Town.

Postscript

The author was requested to divulge the intent behind the naming of Oven Town. This then is that. After living with three seasons of stains and ever-interesting weather on that slope, it was both obvious what the intent was and when not to be there doing it. It was a field of ovens tending to a field of roots where women ground something and cooked something that fed children and hungry

men. And then there is the 1883 illustration cut from “*Frank Leslie’s Popular Monthly*” hanging on my office wall entitled “*ANCIENT AND PRIMITIVE KITCHENS.-THE KITCHEN OF PRIMEVAL WOMAN-SEE PAGE 748.*” that depicts a buxom skirt-clad woman two-handed grinding something that flows in a thick stream onto the ground around a huge metate while her two naked sons tend to a fire composed of a few sticks and the dog lays contentedly by, watching her. In the shadowy distance of the scene striding away are a toga-clad man, a cow, a pig, and a goat. It was the same for me and the hungry stockmen up on the summer range below Copper Mountain and the winter range on Kirby Creek being fed from campfires, wood ranges, and propane by women. Women are like that, and I thank them for it. Oven Town is meant in honor of those life-giving laborers, both the ancient and the known.

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**WYOMING
ARCHAEOLOGICAL
SOCIETY**

2012 Spring Meeting
April 27-29, 2012
Gillette, Wyoming



Welcome to Gillette!

The Pumpkin Buttes and Ancient Trails Chapters are pleased to host the 2012 Spring Meeting of the Wyoming Archaeological Society (WAS) and the Wyoming Association of Professional Archaeologists (WAPA).

Meeting Location

All meetings, the silent auction, and the Saturday banquet will be held at the host hotel, the Best Western Tower West Lodge, 109 N Hwy 14/16, Gillette, WY 82716. Events will take place in the Devil's Tower and Summitt rooms. A block of rooms have been reserved at the Best Western Tower West Lodge, and individuals need to make their own room reservations. **Room Reservations:** Call: 307-686-2210. Mention you are with the **Wyoming Archaeological Society** to get the special rate of: \$69.99 + tax. The room block is being held until April 13, 2012.

Banquet Speaker



Dr. Douglas Scott will discuss his work on Sand Creek and the subsequent Indian War of 1865 in his presentation titled, "**Archaeological Insights into the Sand Creek Massacre.**" Retired from the National Park Service after more than 30 years, his last position was as Great Plains Team Leader, Park Programs, Midwest Archeological Center, U.S. National Park Service, Lincoln, NE. He is currently an Adjunct Professor, Department of Anthropology and Geography, University of Nebraska, Lincoln and an Adjunct Professor, Master's of Forensic Science Program, Nebraska Wesleyan University, Lincoln. He has worked throughout the Great Plains and Rocky Mountain West on a variety of archeological projects and specializes in nineteenth century military sites archeology and forensic archeology. He is particularly noted for his expertise in battlefield archeology and firearms identification. Dr. Scott has worked on more than 40 battlefield sites, including Palo Alto, Sand Creek, Big Hole, Bear Paw, Wilson's Creek, Pea Ridge, Centralia, and Santiago de Cuba.

Welcome Social

The welcome social on April 27th is from 6:00 pm to 9:00 pm in the Summitt room at the Best Western Tower West Lodge. There will be a no host cash bar and hors d'oeuvres. Please come and mingle with the group!

Field Trip or Rockpile Museum Private Tour (no charge for either event - you will need to provide your own transportation).

A field trip is scheduled for Sunday, April 29th departing at 9:00am (weather permitting). In the morning we will visit the Daly Petroglyph Site (48CA58). In the afternoon we will visit the Sorenson Tipi Rings and Historic Indian Artifact Sites. Both sites are located north of Gillette on private property. John and Mavis Greer have graciously volunteered to lead the field trip. Bring a lunch and water.

The Rockpile Museum Association Board has offered to host a Private Museum Tour on Sunday, April 29, 2012 at the Rockpile Museum, 900 W. 2nd Street, from 9am to 11am. Refreshments will be provided.

Silent Auction

The annual fund-raising auction provides a variety of items for your bidding pleasure. If you have items you would like to donate to the auction, please bring them with you to the meeting. Please direct any questions to Denise Tugman at 307-351-6919 or dtugman@lsi-inc.us.

Vendors

If you are interested in selling archaeologically related items at the meeting, please check the web site for an application.

Please check the WAS web site for information or forms: <http://www.wyomingarchaeology.org>