

# THE WYOMING Archaeologist

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# THE WYOMING **Archaeologist**

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Please send a minimum of two (2) hard copies of each manuscript submitted. A third copy would speed the process. Please contact the 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.

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## On the Cover:

Lithic tools from the Battle Springs West Site.  
See article by Chris Kinneer, this issue.

# THE WYOMING ARCHAEOLOGIST

## VOLUME 57(2), FALL 2013

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**THIS ISSUE PUBLISHED MARCH 2016**

**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  
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Given By: Miss, Mrs., Mr., Ms., Dr. \$ \_\_\_\_\_  
Amount

NAME: LAST FIRST MIDDLE

ADDRESS: CITY & STATE ZIP

Donor phone number: \_\_\_\_\_

Type of Gift: General Contribution [ ] Specific Contribution [ ]

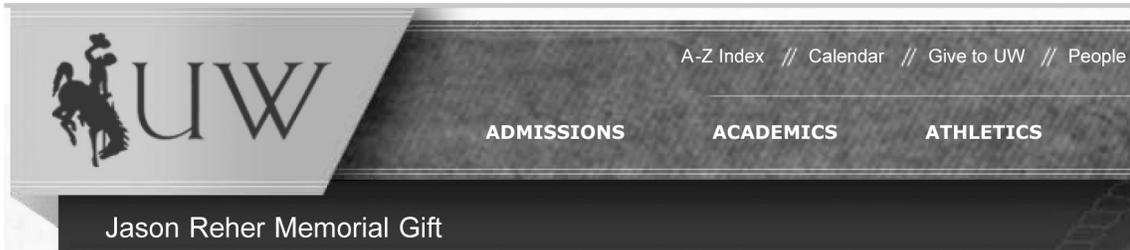
In Memory of: \_\_\_\_\_  
Name City & State

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

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 \_\_\_\_\_.

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.

Any funding for the George C. Frison Institute please contact Todd Surovell at University of Wyoming, Dept. 3431, 1000 E. University Avenue, Laramie, WY 82071; or email Surovell@uwyo.edu; or telephone 307-399-5437.



## Jason Reher Memorial Gift

### Memorial Gift for Beloved Son Supports Next Generations of Archaeologists

Driving through the peaceful rolling grasslands of eastern Wyoming on Interstate 90, you'd never guess the life and death struggle that took place nearby.

From 1500 to 1800 AD, the Kiowa, Apache, Shoshone, Hidatsa, Crow, and Cheyenne people fed their families by stampeding buffalo over the steep cliffs of the Vore Buffalo Jump. The cliffs surround a sinkhole that formed where gypsum soil was eroded, leaving a steep-sided pit about 40 feet deep and 200 feet in diameter.

This type of hunting was dangerous for everyone involved, particularly for the decoy. Here Meriwether Lewis describes the job of the decoy:

one of the most active and fleet young men is selected and disguised in a robe of buffalo skin ... he places himself at a distance between a herd of buffalo and a precipice proper for the purpose; the other Indians now surround the herd on the back and flanks and at a signal agreed on all show themselves at the same time moving forward towards the buffalo; the disguised Indian or decoy has taken care to place himself sufficiently near the buffalo to be noticed by them when they take to flight and running before them they follow him in full speed to the precipice; the Indian (decoy) in the mean time has taken care to secure himself in some cranny in the cliff ... the part of the decoy I am informed is extremely dangerous.

The history of the Vore Buffalo Jump is investigated and preserved thanks to archaeologists from the University of Wyoming, including the iconic archaeologist George Frison. The first excavation crew was led by graduate student Charles Reher, who wrote his doctoral dissertation on the Vore at the University of New Mexico. He later returned to UW as a professor of anthropology and is now emeritus.



Tragically, the son of Charles Reher and his wife Sandra died at 38 in an industrial accident. Jason was an electrical engineer who loved doing things. He loved working on archaeological digs with his father and traveling the United States with his mother and sister. He went from playing in the site backdirt piles with his trucks, to taking field classes, to professional employment on site excavations.

Jason loved skiing, and for at least one day in 1986 he was the best skier in Wyoming when he won the Governor's Cup Race. He could make stone tools, install and repair computer systems, catch trout, and bowl a perfect 300. He loved Led Zeppelin, Pink Floyd, the Beatles, and science fiction. He was charismatic and kind and loved his cats Milton and Buscha. He is greatly missed by all who knew him.

Charles and Sandra established the Jason Reher Memorial Fund in his memory, which supports undergraduate and graduate students studying Wyoming archaeology. It is used for fellowship awards; support for archaeological research activities such as stipends, travel, equipment, supplies; and educational activities related to archeological research such as public programs, museum projects, and coordination with Native American tribes. Preference is given to research activities conducted in the eastern part of Wyoming that involve post-Paleoindian

time periods.

And so it comes full circle. Families take care of families and pay it forward through centuries, ensuring the next generations.

<http://www.uwyo.edu/foundation/news/2016/jason-reher-memorial-gift.html>[2/6/2016 6:43:06 AM]

## IN MEMORIAM



**DAVID S. BASKETT  
1922-2015**

David S. Baskett, 92, died peacefully July 1 at Poplar Living Center in Casper. Services were held on July 9, at St. Mark's Episcopal Church in Casper. Dave was born in Shoshoni in 1922 and lived all his life in Wyoming, except for his college years and his service during World War II.

He attended Casper schools, graduating from NCHS with the Class of 1939. He studied engineering at the University of Wyoming and the University of Michigan, where he was a member of Sigma Alpha Epsilon. He enlisted in the Army Air Corps in 1942 and served in the Pacific. After the war, he worked for United Air Lines, Casper Concrete and Lock Joint Pipe Co. before joining Monolith Cement Co. as a salesman and lobbyist. He retired in 1987. In 1949, he married Charlaine Austin, and they had four daughters.

He was interested in politics, starting out as a Democrat in college. He switched parties in the 1950s and became active in the Republican Party. He was a county GOP chairman and in 1964 headed the statewide Goldwater campaign.

He was a longtime member of St. Mark's Episcopal Church in Casper, where he served on the vestry in the 1960s and was a diocesan

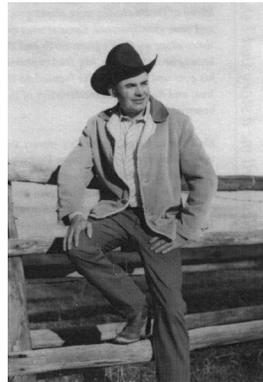
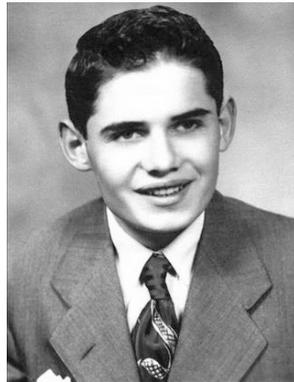
delegate to the General Convention in 1967. He was state president of the Wyoming Archaeological Society and was on the board of the Casper Chamber of Commerce. Other clubs include the Wyoming Contractors Association, the Wyoming Engineering Society, the Exchange Club, the Masonic Lodge and the Shrine Club.

Along with spending time with his family, his favorite activities were fishing at Little Deep Creek in the Big Horns and swimming at Thermopolis. Dave loved to drive, traveling all over the U.S. and Europe. He served on the regional transportation council. He will be remembered for his cheerfulness to the very end and his great sense of humor.

Survivors include his wife, Charlaine; three daughters, Jane Baskett of Dallas, Sue (Hobe) Harden of Minneapolis, and Mary (Scott) Hunter of Spokane; two grandsons, Lawrence and Richard Harden of Minneapolis; and a sister, Virginia Leach of Lexington, Va. He was predeceased by his daughter Anne.

Memorials may be made to St. Mark's Memorial Fund or Wyoming Dementia Care, 1831 E. Fourth St., Casper, Wyo., 82601.

<http://www.bustardsfuneralhome.com/obits/obituary.php?id=558261>

**IN MEMORIUM**

**JOHN ARTHUR GRIEVE  
1933 - 2015**

John A. Grieve was born in Rawlins, Wyoming on July 19, 1933 to Clarence M. Grieve and Clara Belle McIntosh Grieve. John went to be with the Lord on June 28th, 2015. John was raised on the JJ Ranch, on the Sweetwater River between Lander and Casper. John has two sisters, Irene Grieve Moore, who preceded him in death, and Barbara Grieve Rieman, who lives in Lander. John married his high-school sweetheart, Elizabeth Estey and together they owned and operated several ranches in the Sweetwater and Lander area. John is survived by his wife of 62 years. John and Betty are the proud parents of John C. Grieve, who preceded his Father in death, Preston L. Grieve of Winnemucca, Nevada and Debra Grieve Allen of Burley, Idaho. John's much loved grandchildren are Andrea, Justice, Tanya, Cheyenne and John William who preceded him in death.

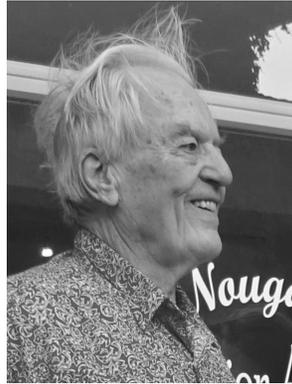
John was an accomplished private pilot, logging many miles and flying across the Arctic Circle. He was an avid Outdoorsman and knew the state of Wyoming like "the back of his

hand." He enjoyed his work on the board of the Fremont County Planning Commission and the Popo Agie Conservation Board of Supervisors. John was a 32nd Degree Mason and an active member of The Wyoming Stock Growers, and the Wyoming Archaeological Society. John was the Co-Author of the book 'HISTORY, TALES, FRIENDS REMEMBERED, which won the Wyoming State Historical Society 2006 Award for best self-published book. John will be greatly missed by his many friends here and eagerly welcomed by his many friends in Heaven.

Johns' Memorial Service was on July 8, 2015 at Hudson's Funeral Home. Graveside Services will follow at Mount Hope Cemetery. Fellowship coffee will be held at the First Baptist Church from 3:00p.m.-5:00 p.m.

<http://www.hudsonsfuneralhome.com/obituary/John-Grieve/Lander-WY/1523577>

## IN MEMORIUM



**DAVE R. W. RAYNOLDS**  
**1928-2015**

David R. W. Raynolds of Lander, Wyoming died Friday June 19, 2015 of heart failure. Born in New York City on February 15th, 1928, son of author Robert F. Raynolds and Marguerite E. Gerdau Raynolds, Dave enjoyed a rural childhood with his younger sisters Ann and Barbara in Newtown, Connecticut. His high school years were spent at the Putney School in Vermont, class of 1945. Dave graduated from Dartmouth College in 1949.

Dave met Mary Alice Kean of Elizabeth, New Jersey while she was attending Smith College and he was at Dartmouth. He courted her with his winnings from poker games. The couple married in 1951, and embarked on 64 years of shared adventure. Always together, they traveled the world, visiting many countries in Latin America, Europe, Asia, and Africa. Their five children were born during overseas postings and in Washington, D.C.

After Army service in Occupied Japan, where his first two children were born, Dave completed his MA at Wesleyan University, did pre-doctoral work at Johns Hopkins School of Advanced International Studies, and graduated from the National War College in 1973. Joining the Foreign Service in 1956, he served in the Diplomatic Corps in El Salvador, France, Haiti, Pakistan, and Washington, D.C. He was

the recipient of the Meritorious Service Award by the Department of State in 1966.

Following the trail of his great uncle William Franklin Raynolds, who explored the Yellowstone region, Dave and May discovered Lander, Wyoming, and became familiar with the character and sinews of the west. In 1964, the family spent a year in Lander while Dave wrote a book on El Salvador's economy. The couple settled permanently in the Lander area in 1975, and developed a bison herd at Table Mountain Ranch, perched above the Popo Agie River west of town. Here Dave spent almost forty years becoming deeply involved in the community. He was especially proud of his 26 year membership on the steering committee of the Wyoming Business Alliance, with its Leadership Wyoming program. Wyoming Farm Bureau, Lander Leader, Wyoming Heritage Foundation, American Legion, Wyoming Historical and Archeological Societies and Museum of the American West are a few of the organizations he joined. He was Past President of the National Buffalo Association and Lander Rotary, and life member of the Explorer's Club. He was proud to be listed in Marquis Who's Who. Dave and May shared their buffalo meat with the community through the Farmers Market, and at the annual Fourth of July Buffalo

Barbecue. Dave, in his cowboy hat and shaggy buffalo coat, shared his taste and enthusiasm for the west with all he encountered. He will also be remembered for his letters to the editor in the Casper Star Tribune and other periodicals.

Dave had a wonderful ability to soak up knowledge and share perspectives from the lives of ants to the lives of artists, from the biology of buffalo to the nature of international conflict resolution. His encyclopedic knowledge and his generous and gregarious nature made him a valued member of the community and of the organizations he joined. An entertaining storyteller, he delighted in recounting tales from his travels and encounters which would surprise and inform his audience. He loved books and the printed word, and had an astounding memory and ability to comprehend and communicate the larger contexts of history, society and economics. He had a knack for gathering information and making intuitive leaps, arriving at valid conclusions.

Dave's love of adventure took him and his family from the Serengeti to the Sweetwater.

His last trip, earlier this year, was to the South of France within the walled city of Carcassonne, where he and May introduced their granddaughters to the subtleties of croissants and siege strategies of European armies.

Dave is survived by his wife May, and sister Ann Listokin (Bob) of Winston-Salem NC; children Bob (Mary) of Longmont CO, Linda (Elijah Cobb) of Cody WY, Martha (Sam Dashevsky) of Fairbanks AK, Laura (Alex Blackmer) of Fort Collins CO, and David (Sharon Bolles), of Talent OR; by grandchildren Will and Bobby Raynolds, Margi and Danny Dashevsky, Courtney and Lisa Blackmer-Raynolds, Jasper Raynolds and Kyrianna Bolles. Dave was predeceased by his parents and sister Barbara. He leaves behind hundreds of friends and admirers.

Donations in Dave's honor can be made to the Lander, WY Rotary Club, or to the Putney School in Vermont.

<http://county10.com/2015/06/29/dave-raynolds-bison-rancher-diplomat-author/>

## NEWS AND ANNOUNCEMENTS

WYOMING ARCHAEOLOGICAL  
SOCIETY, INC.  
2015 ANNUAL MEETING MINUTES  
8:00 A.M. – HOLIDAY INN -  
RIVERTON, WY  
SATURDAY, MAY 2, 2015

**Presiding:** Judy Wolf, President

Call to Order: 8:00 a.m.

**Report of Credentials Committee/Roll Call of Delegates:** Executive Secretary/Treasurer Carolyn Buff certified the voting delegates: Absaroka – Sylvia Huber and Dorothy Frey; Ancient Trails – absent; Casper – Kerry and Chris Lippincott; Cheyenne – Dan Bach and Richard Curritt; Fremont County – Gail Gossett and Tom Harless; June Frison – Maddie Mackie and Greg Pierce; Pumpkin Buttes – Tommy Butler and Denise Tugman; Sheridan/Buffalo – Naomi Ollie and Tammy Sorenson; Sweetwater County – Bill Current; and Upper Green River Basin – Mike Hawkins and Dave Vlcek.

The Carbon County chapter has disbanded.

Roll Call showed nine chapters represented: Absaroka, Casper, Cheyenne, Fremont, June Frison, Pumpkin Buttes, Sheridan/Johnson County, Upper Green River, and Sweetwater. Absent was Ancient Trails.

**Approval of Minutes of May 2, 2014:** Motion by Bill Current, second by Denise Tugman, to approve as published in Volume 57(1) Spring 2013 issue of *The Wyoming Archaeologist*. Carried.

**Treasurer's Report:** Executive Secretary/Treasurer Carolyn Buff gave the treasurer's report showing a total net worth of \$85,941.82, an increase of \$3,499.73.

**Auditor's Report:** Sylvia Huber, John Laughlin, and Mavis Greer certified the treasurer's report was in order.

**Editor's Report:** Danny Walker – Announced he has enough manuscripts for another issue of

*The Wyoming Archaeologist* but then he would need more and asked for submissions. The journal is two years behind on publications.

**Librarian's Report:** Jody Clauter – The library continues to receive materials into the inventory, and the materials are available for check-out.

**Committee Reports: Scholarship:** Carolyn Buff announced the Scholarship Committee would meet at lunch in the board room to evaluate the scholarship applications, and committee members need to order lunch to be delivered. She also announced Dr. Richard McGinity, president of the University of Wyoming, had agreed to a partial \$2,000 match to the scholarship amounts.

**SAA/COAS:** Marcel Kornfeld reported the Council of Affiliated Societies is made up of local and regional societies and SAA provides a table to display brochures, publications, etc. He also announced Hester Davis had died and the current editor of the COAS publication has not been able to publish the brochure and there were no volunteers for the editorship at this time. SAA also would like to make it easier for societies to send a representative and attend the meetings.

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

**State Archaeologist's Report:** Marcia Peterson – The Survey Section has moved to the anthropology building; the Game Creek report has been completed; Dan Eakin has completed the report on the Shoshone projects; the Yellowstone report has been completed and plans are being made to publish it as an occasional paper; and more work is being planned on high altitude sites.

Greg Pierce – Has been working with several curation projects and continues to hire students to work in the lab. He is in the process of developing a larger education program to introduce K-12 students to archaeology, includ-

ing tours and field work. He is also looking into providing avocational training classes, and looking for partners. He announced Marcia Peterson has been selected as the new Assistant State Archaeologist, to begin her duties June 1.

**OLD BUSINESS:**

**Constitution/Bylaws Amendments:** Carolyn Buff, Sam Drucker, Mavis Greer, John Laughlin, and Danny Walker asked for comments and discussion on the proposed changes. Carolyn explained she had emailed the edited documents to the chapter officers whom she had addresses for, asking them to distribute to their memberships. Motion by Danny Walker, second by Bill Current to approve the constitution and bylaws amendments as presented. Carried.

**Job Descriptions for all Executive Committee Members:** Danny Walker – Carolyn had sent the job descriptions to all chapter officers, asking them to be distributed to the membership. Danny announced the descriptions would be printed in the journal.

**125<sup>th</sup> Anniversary of Wyoming Statehood:** Judy Wolf – SHPO and the Wyoming State Historical Society are partnering to sponsor the Preserve Wyoming conference in Laramie June 11-14, 2015.

**Wyoming Cultural Trust Fund Grant:** Bryon Schroeder – Students and volunteers worked the Shirley Basin Lodge site. The site was originally excavated in 1969 by members of WAS. Bryon received a WCTF grant to re-examine the site in the summer of 2014. The site dates indicate the 1640s, with one occupation. Eight units were dug and work will continue with more dating and the report is pending.

**Wyoming Archaeology Awareness Month:** Judy Wolf reported Wyoming had placed third with the poster. She 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, bags, and caps were available for purchase. Motion by Leneigh Schrinar, second by Greg Pierce to donate \$250 to WAAM.

Carried.

**Wyoming History Day:** Danny Walker announced no archaeology award was given this year.

**Frison Institute:** Todd Surovell announced the Institute continues a successful fund-raising campaign and the amount is now at \$578,000, with an actual investment of \$625,000. There is currently \$16,000 available to help with research projects. The fall speaker will present on September 18. He will speak on the Chaco Meridian.

**Friends of the George G. Frison Institute:** Larry Amudson requested this item no longer be listed on the agenda.

**Wyoming Archaeological Foundation:** Dave Vlcek, president, reported Hell Gap had seen a lot of activity over the past year with 231 visitations. The main house painting was completed; bathroom refurbished; a new door was added to the lab; and the lab roof was repaired.

A National Historic Landmark nomination was submitted to the National Park Service and is in the process of being approved.

The WAS summer meeting was held July 25-27, with the public invited to tour the site, participate in excavations and other activities. Four UW field school sessions were held July through August.

The Foundation has awarded seven Jensen/Robson Research grants since the inception in 2007. This grant is also available to WAS members to further any research members may be doing, and the membership was encouraged to take advantage of the grant.

**Web Site:** John Laughlin reported the rebuild of the site had been completed in January of 2013 and he and Dan Bach continue to keep it updated. He recently added a page for the archaeology fair and the John Albanese symposium.

There is a problem with the chapters providing information to keep the site updated on chapter activities. Information can be sent to either John or Dan.

Dan asked the student papers be sent in pdf format so they can be included on the site, since is probably the only way they will be available to the public.

**Names, addresses, etc.:** Carolyn Buff requested names, addresses, phone numbers and emails be updated as soon as possible and to please provide zip +4s. Any piece of junk mail can provide information. Just look at the address.

#### **NEW BUSINESS**

**Archaeology Fair:** Greg Pierce – The SHPO, state museum, arts council, and OWSA are planning an archaeology fair on Sept 12 at the Territorial Prison in Laramie during Wyoming Archaeology Awareness Month. Activities will include performances, atl-atl contests, soap-stone carving, and other activities. A request for \$500 was made. Motion by Tom Harless, second by Todd Surovel to donate \$500 to the archaeology fair. Carried.

**Honorary Lifetime Memberships:** Carolyn Buff announced the Executive Committee had voted to award Dr. Danny Walker with an honorary lifetime membership and he was presented with the award.

**Credit Card Request:** Carolyn Buff requested she be allowed to apply for a credit card through the credit union where the society's accounts are held. It is becoming harder and harder for her to use checks to pay some of the financial obligations of the society. Motion by Denise Tugman, second by Richard Currit to approve the application of a credit card by the executive secretary/treasurer. Carried.

**State Historic Preservation Office** – Judy Wolf announced they were in the process of updating the ten-year plan. The information will be on the web site, and comments have been solicited.

Student internships were begun in 2010 to get more nominations on the Register. Anyone knowing of potentially worthy sites, please let her know.

Richard Curritt reported there were many on-going projects.

**Survey Section:** Marcia will continue with

the Targhee project, as well as any WYDOT projects.

**Fall Activities:** Greg Pierce mentioned the Archaeology Month speaker would be in Laramie on September 18, 2015.

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

**Correspondence:** Carolyn Buff noted there were thank-you notes on the table for perusal after the meeting from the Natrona County Library for the memorial to Evelyn Albanese.

**Election of Officers:** Sylvia Huber, chair, Absaroka Chapter, Denise Tugman, Pumpkin Buttes Chapter, and Rich Adams, June Frison Chapter. Nominated and agreeing to serve a second term were Judy Wolf, president; Dan Bach, 1<sup>st</sup> vice president; Sylvia Huber, 2<sup>nd</sup> vice president; and Bonnie Smith, Absaroka Chapter, member-at-large to the Wyoming Archaeological Foundation (term ends 2017). Motion by Greg Pierce, second by Dave Vlcek 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.

**2016 Nominating Committee:** Sylvia Huber, 2nd vice president, Absaroka Chapter, chair; Denise Tugman, Pumpkin Buttes Chapter; and Mavis Greer, Casper Chapter.

**Selection of Site for 2016 Annual Meeting:** The 2016 meeting will be held in Cheyenne and hosted by the Cheyenne Chapter.

**Selection of Site for 2015 Summer Meeting:** Invitation by Marcel Kornfeld to visit the Hell Gap site from July 25-July 26, 2015. Camping facilities are available on site. In addition, there will be three, ten-day field sessions, beginning July 5 through August 10.

**Announcements:** Mavis Greer announced the American Rock Art Research Association will hold its annual meeting May 22-25, 2015 in Loflin, NV

Kerry Lippincott announced there would be a symposium honoring the geoarchaeology

work of John Albanese at the Geologic Society of America Rocky Mountain Section conference, on May 21, in Casper at the Ramkota Inn. Persons planning to attend must fill out the registration form provided and give to Kerry so he can turn them in on Monday. Payment will be made at the door on the day of the symposium.

Carolyn Buff announced Kayla Bradshaw will be sending out an email survey to WAS members as part of her thesis project.

Bonnie Smith, Buffalo Bill Center of the West, discussed their participation in International Archaeology Day by having 3<sup>rd</sup> through 5<sup>th</sup> graders take part in activities relating to the theme of stewardship. This year they plan to sponsor rock art, bone biology, flint knapping, etc.

The Wyoming Archaeological Foundation will meet at 7:30 a.m. in the board room with breakfast being ordered off the menu. The field trips will leave from the hotel parking lot at 9:00 a.m., traveling to the County Museum and the Museum of the American West in Lander, then to Sinks Canyon, and on to the petroglyphs and other sites.

Carolyn Buff announced the WAS window clings and magnetic decals were available for sale from the website.

**Other Business to Come Before the Body:** Marcel mentioned brochures were available for anyone wishing to volunteer at Hell Gap.

Tom Harless commented the tribes were grateful for the archaeology posters are delivered to the reservation schools.

**Adjourn:** There being no further business, the meet adjourned at 9:20 a.m.

**Golden Trowel Award:** 2015 recipient Ed McAuslan.

/s/ Carolyn M Buff  
Executive Secretary/Treasurer

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**AUDITING COMMITTEE REPORT**

**March 31, 2015**

In accordance with the bylaws, the Auditing Committee has reviewed the Treasurer’s books and records for the Wyoming Archaeological Society, Inc. for fiscal 2014.

**AUDITING COMMITTEE SUMMARY**

**March 31, 2015**

The Wyoming Archaeological Society, Inc. owns one checking account, one savings account, three 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,  
2014 - \$82,442.09

Receipts

Interest and Dividends - \$508.74

Income - \$22,558.26

Disbursements – \$19,567.27

Balance on hand March 31, 2015 – \$85,941.73

Includes one (1) outstanding check(s) and no outstanding deposits.

Audited and found correct.

/s/ Sylvia Huber      May 1, 2015

/s/ John Laughlin      May 1, 2015

/s/ Mavis Greer      May 1, 2015

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**WYOMING ARCHAEOLOGICAL  
SOCIETY, INC.**

**SCHOLARSHIP COMMITTEE  
MINUTES**

**MAY 2, 2015 – BOARD ROOM –  
HOLIDAY INN – RIVERTON, WY  
12:00 P.M.**

**Presiding:** Carolyn Buff, Chair

**Present:** Dan Bach, Carolyn Buff, Jody Clauter, Sylvia Huber, Mary Lou Larson, (ex officio), Greg Pierce (ex officio), Barbara Nahas, Paul Sanders, Brian Waitkus, and Judy Wolf.

Carolyn Buff reminded all committee mem-

bers if they had printed the scholarship applications they must destroy the copies so we are in compliance with the FERPA Act. We assure students the applications will be destroyed after the granting of the money because of the personal information contained in the applications.

The Reiss Scholarship applicants were voted on by the Scholarship Committee in February with Eli Mrak and Chelsea Cheney being awarded \$500 each.

Paul Sanders reported Chris Reiss may want to increase the amount of the Reiss Scholarships and he will get back to the committee after he has visited with Chris.

Motion by Mary Lou Larson, second by Judy Wolf to deny the application of Elizabeth Dayln Grindle for the Mulloy Scholarship because the applicant asked for tuition to attend field school and did not propose a specific project. Carried.

Motion by Mary Lou Larson, second by Judy Wolf to edit the guidelines of the Mulloy and Frison Scholarships to include the information we will not support funding for tuition, fees or books. Carried.

Motion by Judy Wolf, second by Mary Lou Larson to award \$1,000 to Sean Carroll for the Frison Scholarship. Carried.

Motion by Judy Wolf, second by Mary Lou Larson to award \$1,000 to Connor Johnen for a second Frison Scholarship. Carried.

Again this year, Dr. McGinity of the University of Wyoming gave us partial matching funds in the amount of \$2,000 toward the scholarship program.

Motion by Barbara Nahas, second by Judy Wolf to award \$500 to each of the four scholarship winners: Sean Carroll, Frison; Connor Johnen, Frison; Eli Mrak, Reiss, and Chelsea Chene, Reiss.

Our thanks are extended to Dr. McGinity and the University of Wyoming Foundation.

In an effort to entice more students to apply for the scholarships, the following people agreed to again visit classes beginning early

in January as soon as the second semester begins, to speak with students and faculty re the Reiss Memorial Scholarship: Casper, Carolyn Buff; Central, Leneigh Schrinar; Western, Bill Current; LCCC, Cheyenne and Laramie, John Laughlin; Northwest, Sylvia Huber; Sheridan, Vi Gardner; Gillette, Denise Tugman; Eastern, Alan Korell, and UW, Greg Pierce. Each person will take the appropriate application forms and encourage students to apply and faculty to write recommendation letters. It was decided just emailing faculty was not a viable option at this time; we need to present the information to students face-to-face since the opportunities were not reaching the students.

**Adjourn:** 12:20 p.m.

/s/ Carolyn M Buff  
Scholarship Chair

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**WYOMING ARCHAEOLOGICAL  
SOCIETY, INC.  
CHAPTER REPORTS FOR THE 2014-  
2015 YEAR**

**ABSAROKA CHAPTER:** Activities – Continue to provide chapter with Northwest College program information.

Public Education - Distributed Archaeology Awareness month posters around the Bighorn Basin, monthly chapter meetings with programs open to the public. WAS Reiss Scholarship information presented to Northwest College students. Absaroka Chapter Milford Hanson Scholarship information distributed to Big Horn Basin high schools. Awarded Milford Hanson Scholarship.

Work With Other Organizations – Members are active in the Site Stewardship and Monuments and Markers program. Members organized and participated in International Archaeology Day Museum Adventure for local grades 3-5 through the Buffalo Bill Center of the West.

Other – Continued to expand the chapter library with a collection of DVDs, articles and books which can be checked out to chapter members. Expanding email-connections to share archaeology-based information and upcoming programming.

Programs Presented – Viewed “Wyoming’s Atlantic Rim Historic Trails” film; Dr. Todd Surovell, “The Ethnoarchaeology of Mongolia’s Reindeer Herders”; Mike Bies, “Rolling Rock”; Ardeth Hahn, “BLM Buffalo Field Office’s Passport in Time Projects 2010-2013”; Tom Burge, “Archaeology in the High Sierras”; Dr. Danny Walker, “Three, Sort of Fancy Artifact Types in the University of Wyoming Repository”; Dr. Gregory Smith, “Black Glass, Red Blood: Obsidian and the Ancient City of Cantona, Puebla, Mexico”; Christmas Party/Gift Exchange

Field Trips – Mummy Cave followed by presentation on CD by Wil Husted at Pahaska Tepee’s old lodge, Absaroka Program Committee; Lime Mine Petroglyphs, Mike Neville; Medicine Wheel and annual picnic, Bill Matthews; Kane townsite/cemetery, Mason-Lovell Ranch, John Blue’s cabin, Karen Spragg

**ANCIENT TRAILS CHAPTER:** Field Work – Plans are underway to GPS preserved segments of the Cheyenne-Deadwood Trail along Stockade Beaver Creek in the Black Hills. The chapter had surveyed to locate these segments several years ago and now plans to map trail remnants not overlaid by the Stockade Beaver Creek gravel road. The chapter is also cooperating with the Weston County Historical Society to organize a trek to be held in July 2015 to visit segments of the Cheyenne-Deadwood Trail in northeastern Wyoming.

**CASPER CHAPTER:** Programs Presented – Dr. Danny Walker, “Three Neat Artifact Types in the University of Wyoming Archaeological Repository”; John Laughlin, “East of Eden, The Finley Site Bison Kill”; Dr. Greg Pierce, “Alternative Dating Methods”; Patrick Walker, “JO Ranch: Rural Historic Landscape”; Leilani

DeClue, “Online Anthropology at Casper College”; Dr. Richard Adams, “The Rocky Mountain Soapstone Industry and High Altitude Archaeology”; Dr. Lawrence Todd, “Post-Fire Archaeology in the Washakie Wilderness: Recording Unknown Landscapes in NW Wyoming”; Dr. Jody Clauter, “Old Collections, New Explorations: Recent Investigations at the Elk Mountain Site (48CR301).”

**CHEYENNE CHAPTER:** Work With Other Organizations – Worked closely with the Northern Colorado Chapter, Colorado Archaeological Society.

Programs Presented – Treloar Bower, “Lindenmeier: The Excavations of the Lindenmeier Site in the 1930s Forever Changed the Discipline of Archaeology”; Christopher Johnson, “Late Prehistoric Bison Hunting in Northern Colorado and Southern Wyoming”; Russell Richard, “Atlatl Petroglyphs, Pictographs, and Paintings”; Dr. Marcel Kornfeld, “Paleoindian Archaeology and Lifeways in Colorado’s Middle Park”; Dr. Robert Kelly, “A Prehistoric Future: Searching for Meaning in Human Antiquity”; Dr. Danny Walker, “30 Years of Archaeology at South Pass City, Wyoming: 1972-2002”; Madeline Mackie, a discussion of the investigation of the idea of estimating age and sex of individuals who created hand spray rock art sites based on hand size and shape; Dr. Jody Clauter, “Old Collections, New Explorations: Recent Investigations at the Elk Mountain Site (48CR301)”

**FREMONT COUNTY CHAPTER:** Survey – Field trip to Powers II Paleoindian Red Ochre site; toured LaPrele Mammoth dig site near Douglas; located and photographed East Fork Bighorn Sheep Traps near Dubois; researched high altitude petrified wood tool making sites in Absaroka Range, and researched rock art and ruins in Utah.

Public Education – Distributed Wyoming Archaeology Awareness month posters to school and museums in Fremont County and all schools on the Wind River Reservation; the

planning committee worked on events for the 2015 WAS/WAPA Spring meeting hosted by the Fremont County Chapter; put public service announcements about the keynote speaker on Wyoming Public Radio, county10.com, daily-ranger.com, Riverton Ranger, KTRZ/KVOW radio; opening of New Fork Park and the “Drift” in Sublette County; donation of an historic knife found on the Lander Cutoff to Museum of the Mountain Man in Pinedale; promoted nine archaeology-related free public programs; ten days of volunteering at the Shirley Basin Village site; and planned for field trips.

Work With Other Organizations – Central Wyoming College students practiced presenting their programs; attendance at the Frison Institute board meeting, and helped with fund-raising.

Publications/Reports – Printed annual shirt-pocket membership booklets for the Fremont County Archaeological Society listing goals of WAS, online sources of Wyoming archaeology reports, membership, programs and history.

**JUNE FRISON CHAPTER:** Programs Presented – Paul Taylor, Australian performing artist; Dr. Lawrence Todd, “Wildland Fire, Archaeology, and Climate Change in the Greater Yellowstone Ecosystem”; Dr. James Ahern, “Modern Human Origins in Central Europe”; David Eckles, “Chipped Stone Raw Materials from the Garrett Allen Site, 48CR301”; Dr Jody Clauter, “Old Collections, New Investigations: Recent Investigations at the Elk Mountain Site (48CR301)”; Dr. Mark Miller, “The Scoggin Site (48CR304) Forty Years Later: Revisiting a Middle Plains Archaic Bison Kill-Butchery Locale in South Central Wyoming”

**PUMPKIN BUTTES CHAPTER** – Survey – A field trip to the Hole-in-the-Wall Buffalo Jump Site.

Public Education – Presentation of Reiss Scholarship opportunity to students and faculty at Gillette Campus.

Work With Other Organizations – Members attended a site stewardship training co-sponsored by the Bearlodge Ranger District of the

Black Hills National Forest and the Pumpkin Buttes and Ancient Trails Chapters, hosted by the BLM Newcastle Field Office with instruction provided by Joe Daniele from the State Historic Preservation Office. Field training was held at the Whoopup Canyon Petroglyph Site with instruction by Alice Tratebas and Joe Daniele. Members participated in and assisted with the Rockpile Museum’s 40<sup>th</sup> Anniversary Celebration.

Other – The chapter made a donation to the Vore Buffalo Jump Foundation to be applied to the safety rail installation.

**SHERIDAN-JOHNSON COUNTY**

**CHAPTER:** Survey – Assisted at Pilot Knob near Fort Phil Kearny.

Programs Presented – Andrew Owens, “Let’s Go Fly A Kite: Kite Aerial Photography and Archaeology”; Pat Bowar, archaeology work on Easter Island; Bill Matthews, field work in the Cloud Peak area of the Bighorn Mountains where he recorded 30+ prehistoric sites as well as a turn-of-the-century mining district; Alan Hutchinson and Naomi Ollie, work in the Pine-Scoria Hills between Wyoming and Montana; Georgia Knauss, taxonomy and morphology of water dwelling species long extinct in Wyoming; Scott Burgan, tipi rings near Fort Phil Kearny and their possible association with the nearby buffalo jump at Piney Creek excavated by Dr. Frison in 1965; Dr. Greg Pierce, latest field work; and Dr. Danny Walker, “Interesting Artifact Types in the University of Wyoming Repository”

**SWEETWATER CHAPTER** – No report submitted.

**UPPERGREENRIVERBASISCHAPTER**

- Public Education – Hosted state WAS and WAPA meeting featuring presentations by Mark Miller and Dennis Stanford, and a special tour of the Wardell Buffalo Trap lead by George Frison.

Work With Other Organizations – Fort Bonneville – worked with State Parks and Cultural Resources to develop a management and monitoring plan for the state historic site.

Programs Presented – Dr. Dudley Gardner, “Northern Colorado Rock Shelter”; Dave Vlcek, “Duck Creek Skeletons”; Richard and Carmel Kail, “Bison Drive Lines on Blackfoot Reservation”

Other – Grand opening of New Fork River Crossing Historical Park including display by Ken Cannon of emigrant artifacts found at the site.

**WYOMING ARCHAEOLOGICAL SOCIETY, INC.  
Treasurer’s Report for Fiscal Year Ending March 31, 2015  
RELIANT FEDERAL CREDIT UNION**

<b>CHECKING ACCCOUNT</b>	INCOME	EXPENSES	BALANCE
Beginning Balance	\$8,125.91		
Deposits	\$16,123.12		
Interest Earned	\$3.20		
<b>TOTAL INCOME - Checking</b>			<b>\$24,252.23</b>

**EXPENSES**

History Day	\$100.00
Merback Awards - Trowel Engraving	\$29.35
Kevin Malloy - Jenson/Robson Scholarship	\$250.00
Jordan Stapley - Reiss Scholarship	\$500.00
Starla Rameriz - Reiss Scholarship	\$500.00
Gale Brow - Mulloy Scholarship	\$1,000.00
Dennis Stanford - Honorarium	\$300.00
University of Wyoming - Miller and Reher Gifts	\$60.00
Hampton Inn - Stanford Lodging	\$285.69
Wyoming Archaeology Awareness Month	\$250.00
Smithsonian Institution - Stanford Expenses	\$497.25
Wyoming Archaeological Foundation	\$375.50
Staples - Supplies (paper, printer ink, etc)	\$80.92
Fredrick’s Septic & Supply - Porta Potty - Schroeder Grant	\$110.00
Wyoming Diposal Systems - Schroeder Grant - Porta Potty	\$182.00
Todd Heward - Trespass Fees - Schroeder Grant	\$200.00
Richard Adams - Food and Supplies - Schroeder Grant	\$853.33
Move to Money Market Account #0042 - Schroeder Grant	\$5,850.00
Gale Brow - Mulloy Scholarship - UW Match	\$1,000.00
Kevin Malloy - Jenson/Robson Scholarship - UW Match	\$750.00
Carolyn Buff - Schroeder Grant - Sun Shade Replacement	\$52.49
WAPA - GoDaddy - Web Site	\$350.00
Geochemical Research Lab - Schroeder Grant - Obsidian Sorcing	\$900.00
Jordan Stapley - Reiss Scholarship - UW Match	\$500.00
Natrona County Library - Donation - Evelyn Albanese Memorial	\$100.00
SAA - Annual Dues	\$30.00
Mountain State Lithographing - Business Cards	\$76.07
Starla Rameriz - Reiss Scholarship - UW Match	\$500.00
Green River Chapter - Dues Overpayment	\$33.50
Danny Walker - Labels, paper, envelopes for spring meeting	\$100.00
United States Postal Service - Bulk Permit	\$220.00

Accium Biosciences - Schroeder Grant - Dating	\$837.00	
Move to Reiss Certificate of Deposit	\$585.14	
Wyoming Secretary of State - Corporation Fees	\$25.00	
Modern Printing - Mailing	\$57.00	
United States Postal Service - Bulk Permit	\$500.00	
Holiday Inn -- Pierce Lodging 2015	\$178.00	
UW Copy Center - Journal Printing	\$1,037.88	
Mountain State Lithographing - Stationary, Membership Cards	\$254.15	
Modern Printing - Mailing	\$57.00	
TOTAL EXPENSES	\$19,567.27	
<b>ENDING BALANCE - Checking Account</b>		<b>\$4,684.96</b>

<b>SAVINGS ACCOUNT</b>		
BEGINNING BALANCE	\$125.01	
Interest Earned	\$0.12	
<b>ENDING BALANCE</b>		<b>\$125.13</b>

<b>MONEY MARKET ACCOUNT - 0040</b>		
BEGINNING BALANCE	\$7,785.63	
Interest Earned	\$7.06	
<b>ENDING BALANCE</b>		<b>\$7,792.69</b>

<b>MONEY MARKET ACCOUNT - 0041 (BLM)</b>		
BEGINNING BALANCE	\$9,279.32	
Interest Earned	\$8.37	
<b>ENDING BALANCE</b>		<b>\$9,287.69</b>

Total available after March 31, 2011 = \$7,204.71 for Big Horn Basin projects, digitization, and report-writing

<b>MONEY MARKET ACCOUNT - 0042 (SCHROEDER) (\$2,718.38 available)</b>		
BEGINNING BALANCE	\$5,850.00	
Interest Earned	\$3.20	
Trespass Fee	\$200.00	
Food, Supplies	\$853.33	
Sun Shade Reimbursement	\$52.49	
Obsidian Sourcing	\$900.00	
Porta Potty	\$110.00	
Porta Potty	\$182.00	
Dating	\$837.00	
Total Expenses to date (not included in balance)	\$3,134.82	
<b>ENDING BALANCE</b>		<b>\$5,853.20</b>

<b>CERTIFICATE OF DEPOSIT - 00100</b>		
BEGINNING BALANCE	\$44,724.72	
Interest Earned	\$449.30	
<b>ENDING BALANCE</b>	<b>\$45,174.02</b>	

**CERTIFICATE OF DEPOSIT - 0101 - Reiss Account**

BEGINNING BALANCE	\$12,401.50	
Interest Earned	\$37.49	
Deposit - Silent Auction Items	\$585.14	
<b>ENDING BALANCE</b>		<b>\$13,024.13</b>

<b>TOTAL NET WORTH AS OF MARCH 31, 2015</b>		<b>\$85,941.82</b>
<b>Total Income</b>	<b>\$105,509.09</b>	
<b>Total Expenses</b>	<b>\$19,567.27</b>	
<b>Net Increase (Decrease)</b>		<b>\$3,499.73</b>

Carolyn M Buff  
Executive Secretary/Treasurer

**WYOMING ARCHAEOLOGICAL SOCIETY  
EXECUTIVE COMMITTEE JOB DUTIES**

**WYOMING ARCHAEOLOGICAL  
SOCIETY PRESIDENT JOB  
DESCRIPTION/DUTIES:**

The President serves as the Society’s representative in all its official affairs and transactions.

- Presides over all Society meetings and Executive Board meetings.
- Appoints committees as necessary, with the assent of the Executive Committee.
- As a member of the Executive Committee, acts in behalf of the Society to further the goals of the Society as set forth in its Constitution and Bylaws.
- As president and immediate past president, serves as a member of the Wyoming Archaeological Foundation.
- Serve on scholarship committee(s).
- Serves on the Executive Committee.

**WYOMING ARCHAEOLOGICAL  
SOCIETY FIRST VICE PRESIDENT  
JOB DESCRIPTION/DUTIES:**

- If, during the duration of the President’s term, vacancies occurring by death, resignation, or failure to serve, for the duration of the term to which the officer was elected or appointed will be filled by appointment by the remaining members of the Executive Committee for the

balance of the term, except President and First Vice President, which offices will be filled by the First Vice President and Second Vice President for the balance of the term.

- The President along with the First Vice President, and Second Vice President shall appoint an Executive Secretary/Treasurer, a State Editor, and a State Librarian. These officers shall be appointed from the present paid-up membership and shall serve at the discretion of the Board.
- The State President, First Vice President and Second Vice President shall be elected by a simple majority of a delegation consisting of two (2) delegates from each of the affiliated Chapters. The officers shall be elected from the present paid-up memberships of the Society. Election of State officers shall take place annually at the regular annual meeting. Elected officers shall serve for a term of one (1) year. A member cannot serve in one (1) elective office for more than two (2) consecutive years.
- Serve on scholarship committee(s).
- Serves on the Executive Committee.

**WYOMING ARCHAEOLOGICAL SOCIETY SECOND VICE PRESIDENT  
JOB DESCRIPTION/DUTIES:**

- Second Vice President serves as WAS Nominating Committee chair.
- Performs the duties of the First Vice President during the term for which they were elected due to FVPs absence, resignation or removal from office.
- Serves on the WAS Executive Committee during the elected term with duties as outlined in the WAS Constitution and Bylaws.
- Attends Scholarship Committee Meeting at Annual Spring Meeting.

**WYOMING ARCHAEOLOGICAL SOCIETY SECRETARY/TREASURER  
JOB DESCRIPTION/DUTIES:**

- Work closely with the State Archaeologist and staff and members of the Executive Committee.
- Represent the Wyoming Archaeological Society in matters of interest to the Society, i.e., commenting on Section 106 issues, preservation issues, volunteer opportunities, or anytime such information or advice is requested.
- Serves as Scholarship Committee chair. Serve on scholarship committee(s). Serves on the Executive Committee.

**SECRETARY**

- Take and transcribe minutes of the annual meeting and any special meetings
- Prepare the agenda for the annual meeting
- Answer all correspondence: telephone, email, letters, and inquiries
- Maintain the inside front and inside back covers of *The Wyoming Archaeologist*
- Maintain the membership list
- Send out chapter report forms to

each chapter

- Help new chapters get started
- Help with organizing the annual meeting
- Provide mailing list for journal and any other mailings
- Represent the Society in Section 106 issues
- Represent the Society in other matters where the WAS voice should be present
- Write thank-you letters when needed

**TREASURER**

- Maintain all financial accounts
- Prepare the treasurer's report for each annual meeting
- Provide the auditors with the report form and financial documents
- Send out invoices in the early part of each new year
- Pay bills in a timely manner
- Report and pay the Wyoming Archaeological Foundation annual dues
- Pay SAA annual dues
- File IRS statements annually in April
- File and pay corporation report and fees to the Wyoming Secretary of State
- Track grant expenditures separate from the general funds of WAS
- Purchase and have engraved the trowel for the annual Golden Trowel Award
- Reconcile bank statements each month

**EDITOR, *THE WYOMING***

***ARCHAEOLOGIST* JOB DESCRIPTION/DUTIES:**

- The State Editor shall be responsible for the production and distribution of all

Society publications and other membership mailings.

- The Editor must continuously solicit manuscripts and other news articles at all Wyoming professional and avocational meetings and get-togethers.
- When three edited manuscripts are available, or two manuscripts and the annual business meeting minutes of the Wyoming Archaeological Society are available, the issue is ready for mockup.
- After printing the issue, take the electronic membership database and an equivalent number of copies of the issue to a mailing facility that works with non-profit organizations for address labeling. This place will then take it to the Post Office for mailing.
- The WAS has a non-profit mail permit at the Laramie Post Office. About every two mailings of an issue of the *Archaeologist* check with the bulk mail office at the post office to see how the account stands. If it is under \$100, notify the Executive Secretary because this will not be enough for the next mailing.
- Serve on scholarship committee(s).
- Serves on the Executive Committee.

**WYOMING ARCHAEOLOGICAL SOCIETY LIBRARIAN JOB DESCRIPTION/DUTIES:**

- The Wyoming Archaeological Society State Librarian shall be appointed by the WAS Executive Committee and shall serve at the discretion of the Committee. The Librarian shall be appointed from

the present paid-up membership of the Society. The appointment by the Committee is for an indefinite term of office.

- The State Librarian shall have charge of all library materials including the Exchange publications. The Librarian shall keep a list of all publications and books available for loan to members and may have the list published in the Society's publication when space is available. Rules and regulations pertaining to publication loans to members and non-members must be approved by the WAS Executive Committee.
  - The Librarian serves as the Society contact for persons or organizations who wish to donate materials to the WAS Library. The Librarian has the authority, on behalf of the Society, to accept or reject any donated material, including deaccessioning of materials no longer relevant to the Society's mission. The Librarian may consult with other members of the Executive Committee at any time concerning status of donated materials or the relevancy of any proposed donations.
  - All inventoried items in the WAS library are housed in the Frison Institute Library at the Department of Anthropology, University of Wyoming. Uninventoried items are presently stored in Room B15 at the Department of Anthropology, University of Wyoming.
  - Serves on the Executive Committee.
-

**WYOMING ARCHAEOLOGICAL SOCIETY, INCORPORATED  
CONSTITUTION**

ARTICLE I – NAME

The name of this Society shall be the Wyoming Archaeological Society, Incorporated.

ARTICLE II – TERM

The term of existence of the Society shall be perpetual.

ARTICLE III – MEMBERSHIP

Membership shall be open to all duly organized Chapters in the State of Wyoming, to any person, persons, societies, or institutions upon payment of specified dues, and who subscribes to the purposes and abides by the rules of the Society.

ARTICLE IV – PURPOSES

1. To encourage the preservation of archaeological materials and sites.
2. To disseminate archaeological information.
3. To receive, maintain and hold, by bequest, devise, gift or otherwise, either real or personal, any fund or funds without limitation as to amounts or values; and to convey such property and to invest and reinvest any principal or interest; and to direct, manage, and expand the income and principal of the association, and administer any special funds for various purposes as agreed upon by the governing Board of the Society, and for purposes and uses herein set forth; to buy, lease, hold, and exercise all privileges of ownership over such real or personal property as may be deemed necessary for the conduct and operation of the business of this Society or incidental thereto.
4. To promote scientific research and cooperation with scientific organizations to further archaeological studies.

ARTICLE V – OFFICERS

The management of this Society shall be vested in the duly elected officers and appointive officers of the Wyoming Archaeological Society, Inc. and their duly elected successors. The elective officers shall include a President, First Vice President, and Second Vice President. The appointive officers shall include the Executive Secretary/Treasurer, Editor, and Librarian, who shall be appointed by the Executive Committee. All State officers, elected and appointed shall be members in good standing of a Society Chapter. The appointed officers shall be appointed for an indefinite term of office. The elective State officers shall be elected at the annual business meeting by a majority vote of the qualified delegates present at the meeting.

ARTICLE VI – EXECUTIVE COMMITTEE

There shall be an Executive Committee consisting of the elected and appointed State Officers. The State Archaeologist shall act in advisory capacity for this Committee.

ARTICLE VII – CHAPTER ORGANIZATION

Ten (10) or more people residing near each other may apply to the Executive Committee for a Chapter Charter, provided the aforementioned persons are paid-up members of the Society and their Chapter Application is approved by the Executive Committee by a majority vote.

ARTICLE VIII – AMENDMENTS

Any proposed change in the Constitution and Bylaws of the Wyoming Archaeological Society, Inc. shall first be submitted to all the Chapters at least sixty (60) days prior to the annual State meeting or any special meeting called by the Executive Committee for the purpose of amendment. An affirmative vote of two-thirds (2/3) of the legal delegates present at the annual business meeting shall be required for any proposed change in the Constitution or Bylaws of the Society.

IN OFFICE ARTICLE IX – VACANCIES

All State Society officer vacancies occurring by death, resignation, or failure to

serve, for the duration of the term to which the officer was elected or appointed will be filled by appointment by the remaining members of the Executive Committee for the balance of the term, except President and First Vice President, which offices will be filled by the First Vice President and Second Vice President for the balance of the term.

ARTICLE X-- MEETINGS

The Wyoming Archaeological Society, Inc. shall hold an annual business meeting in the spring of each year. Other meetings may be called at such times and places as may be determined by the Executive Committee. The Executive Committee shall be responsible for the organization of the business meeting. A quorum at any duly authorized meeting of the State Society shall be a simple majority of those certified voting delegates present.

ARTICLE XI – ACCOUNTING PERIOD

The annual accounting period of the Wyoming Archaeological Society, Inc. shall begin on April 1 of each year and end on March 31 of the following year.

ARTICLE XII – RULES

The Wyoming Archaeological Society, Inc. shall be governed by the current edition of Roberts Rules of Order.

*Revised and amended 05/02/2015*

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**WYOMING ARCHAEOLOGICAL SOCIETY, INCORPORATED  
BYLAWS**

ARTICLE I – AUTHORITY OF OFFICERS

1. The elected and appointed officers, with the State Archaeologist in advisory capacity, shall serve as the Executive Committee and shall have charge of all affairs, funds, and property of the State Society subject to the control of the State Executive Committee
2. A majority of all the members of the Executive Committee is sufficient to remove any State officer or officers for due cause.
3. The Executive Committee shall serve in an advisory capacity to all the Chapters of the Society.
4. The Executive Committee shall not be liable for any debts, bills, or liabilities incurred by any of the Chapters or their members.
5. No officers, elective or appointive, of the Wyoming Archaeological Society, Inc., either State or Chapter, will receive any compensation or be exempt from any dues unless honored with an honorary lifetime membership. The State Executive Secretary/Treasurer shall be given a mileage rate and per diem for official business travel at a rate set by the Executive Committee.
6. All libraries, equipment and monies of a disbanded Chapter shall be turned over to the Executive Committee for disposition.
7. The Executive Committee shall appoint an Executive Secretary/Treasurer, a State Editor, and a State Librarian. These officers shall be appointed from the present paid-up membership and shall serve at the discretion of the Executive Committee.
8. The Executive Committee may specify a permanent Society mailing address. The permanent mailing address shall be one convenient to the Executive Committee, the Executive Secretary/Treasurer, the Chapters, and to any members of the Society who shall have occasion to contact this Society on any matter of archaeological interest or routine Society business.
9. The Executive Committee may designate an official State Repository. Said repository shall

contain all of the records of the Executive Committee, which the Executive Secretary/Treasurer shall maintain in a current and accessible condition, so that records shall be available during all reasonable business hours for inspection by any member of the Society. The repository shall also serve as the Society's official repository for all archaeological material which is now, or may thereafter become, the property of the State Society, and the Executive Secretary/Treasurer shall serve as custodian thereof, and make the same available for public view in a place generally available to the public. The Executive Secretary/Treasurer, on his/her own determination, or at the request of any member of the Society, may limit access to site reports, archaeological surveys, and collections, when such action is deemed necessary and reasonable to preserve archaeological sites.

**ARTICLE II – DUTIES OF OFFICERS**

1. The President shall preside at the annual business meeting of the State Society and at the meetings of the Executive Committee, and at any special meetings. The President shall perform such duties as usually pertain to that office, including the naming of a Nominating Committee and any other standing and select committees. The President, with the approval of the Executive Committee, shall also make any appointments necessary for the furtherance of the aims and purposes of the State Society.
2. The First Vice President shall perform all duties of the president during the absence or disability of the President, and in the event of death, resignation, or removal of the President from office during the term for which the President was elected, the First Vice President shall serve for the balance of the term.
3. The Second Vice President shall perform all the duties of the First Vice President in the absence or disability of the First Vice President, and in the event of death, resignation, or removal from office during the term for which the First Vice President was elected, the Second Vice President shall serve as First Vice President for the balance of the term. The second vice president shall serve as the Nominating Committee Chair.
4. The Executive Secretary/Treasurer shall maintain the Society repository and shall serve as custodian for any and all archaeological materials and records contained in the repository. The Executive Secretary/Treasurer shall assist the elected officers in the conduct of Society business, and shall keep records of such business. The Executive Secretary/Treasurer shall assist the Chapters and coordinate activities between the Chapters, and shall keep the Chapters informed on all Society business. The Executive Secretary/Treasurer shall keep and maintain all financial records of the Society for the Executive Committee. The Executive Secretary/Treasurer shall collect state dues and issue memberships and certificates as appropriate for Associate, Active State, Institutional, and Honorary memberships. The Executive Secretary/Treasurer shall establish and maintain Society checking and savings accounts as needed, with arrangements for the signing of all checks and/or savings account withdrawals by either the Secretary/Treasurer or the President's appointee. The Executive Secretary/Treasurer shall present a financial report at the annual state business meeting and shall keep the Executive Committee apprised of the Society's financial position..
5. The State Editor shall be responsible for the production and distribution of all Society publications.
6. The State Librarian shall have charge of all library materials including the Exchange publications. The State Librarian shall keep a list of all publications and books available

for loan to members and shall have the list published as appropriate in the Society's publication, on the Society's web page, or available upon request by any member of the Society. Rules and regulations pertaining to the loan of publications to members must be approved by the Executive Committee.

ARTICLE III – ELECTION AND TERMS OF OFFICE

The State President, First Vice President and Second Vice President shall be elected by two (2) delegates from each of the affiliated Chapters at the annual spring business meeting. They shall be elected from the present paid-up memberships of the Society. Elected officers shall serve for a term of one (1) year. A member cannot serve in one (1) elective office for more than two (2) consecutive years.

ARTICLE IV – CHAPTER ORGANIZATION

1. Each Chapter must choose a name for itself and must adopt its own Constitution and Bylaws which must not be in conflict with the State Constitution and Bylaws.
2. Local Chapters may designate the time and place of their meetings, but it is recommended that Chapters meet at least once a month, typically September through May.
3. Each Chapter has complete self-determination in the election of its officers, business and projects, as long as it does not violate the policies of the Society as a whole.
4. It shall be the function of the Chapter to issue all memberships and collect dues.
5. Each chapter shall have full custody of, and determined disposition of, archaeological material recovered by the Chapter in accordance with State and Federal laws and in conformance with State Society policy.
6. Each Chapter shall have as a minimum the following officers as its Executive Committee: President, Vice President, and Secretary/Treasurer. The President, Vice President, and Secretary/Treasurer shall serve one- (1-) year terms. A vacancy in any Chapter office may be filled by appointment by the Chapter President until the next regular election.
7. The annual election of regular Chapter officers shall be held in January of each year.
8. Each Chapter shall set its own membership fees which shall include the State fees for each active individual or family membership.

ARTICLE V – CHAPTER RELATIONSHIP WITH THE STATE SOCIETY

1. Each Chapter shall remit to the State Executive Secretary/Treasurer, by March 31 of each calendar year, that amount as set by the Executive Committee for each active individual or family membership effective with the calendar year beginning January 1 of each year. The Society publication will be mailed to all members when published.
2. Each Chapter shall submit to the Annual meeting of the State Society a complete report of its activities during the previous year.
3. Each duly organized Chapter shall be entitled to two (2) delegates to the annual state meeting. Each delegate must be certified by the Secretary of each Chapter of which he or she is a member, and certified by the Executive Secretary/Treasurer at annual business meeting.

ARTICLE VI – MEMBERSHIPS

1. Individual Associate Membership.  
Such members shall be members of the State Society only, shall not be affiliated with any Chapter, and shall not have any voting privileges. Associate members shall be entitled to receive the periodical publication of the Society as issued.
2. Institutional Membership.

Any institution, such as colleges, universities, libraries, museums, other archaeological societies, etc. shall be members of the State Society only. Institutional members shall not have any voting privileges. Such members shall be entitled to receive the periodical publication of the Society as issued.

3. Active Membership.
  - a. Any individual who affiliates with a local Chapter and takes active interest in the work of such Chapter, shall be issued an Active Membership card by the Chapter Secretary. This shall entitle such members to Active Membership in the Chapter with full voting rights in the Chapter, but with Family Membership limited to a maximum of two (2) votes. All Active Memberships shall be members of the State Society also, and shall be entitled to receive the periodical publication of the Society as issued, but family memberships shall include only one copy of each publication and one membership card.
  - b. Individuals residing out-of-state or in areas remote from a local Chapter may apply to the State Secretary/Treasurer or to a Chapter Secretary for an Active Membership, either individual or family. These memberships shall have no voting rights, but shall be entitled to receive the periodical publication of the Society as issued, and shall be allowed to participate in any of the State Society's activities.
4. Honorary Lifetime Memberships.

Candidates for Honorary Lifetime Memberships may be nominated by a local Chapter for reasons based upon significant service to archaeology in Wyoming. Nominations must be voted upon by the voting delegates at the annual business meeting of the State Society and such membership shall be granted in an open session of the annual business meeting. The State Secretary/Treasurer shall issue one (1) Honorary Lifetime Membership Certificate and an Honorary Lifetime Membership card to each Honorary Lifetime member. Honorary members may retain their active status and voting rights and are eligible to hold office. No institution can qualify for an Honorary Lifetime Membership.
5. Renewals.

All renewals of membership in each Chapter or State Society shall be made on or before March 31 of each calendar year or the membership and all Society privileges shall be terminated.

**ARTICLE VII – RULES OF CONDUCT**

1. The Executive Committee may, for reasons of conduct inappropriate to an archaeologist, revoke the membership of any member of the Wyoming Archaeological Society, Inc. Such reasons may include:
  - a. Any conduct which is contrary to the state intents and purposes of the Society.
  - b. The conduct of any excavation by methods inappropriate to a professional archaeologist.
  - c. Failure to complete and make public the records of a site upon completion of the investigation within a reasonable length of time.
  - d. Misrepresentation of membership in, or official relation to, any archaeological organization.
  - e. The sale of artifacts from or information about, any archaeological site for personal gain.
  - f. Aiding or abetting, by work or action, any persons who loot or destroy an ar-

chaeological site for any reason whatsoever.

- g. Failure to secure the consent or permission of the Executive-Committee of the member's Chapter prior to excavation and permitting.

ARTICLE VIII – ORDER OF BUSINESS OF THE ANNUAL STATE MEETING

1. Call to order by the President.
2. Certification of Voting Delegates.
3. Roll Call of the Delegates or Alternates.
4. Reading of the minutes of the previous meeting by the Executive Secretary/Treasurer.
5. Treasurer's Report.
6. Auditor's Report.
7. Editor's Report.
8. Librarian's Report.
9. Committee Reports (standing and select committees).
10. Old or unfinished business.
11. New Business.
12. Election of officers.
13. Selection of site for the summer meeting.
14. Selection of site for the annual meeting.
15. Comments and introduction of new officers who take office at this time.
16. Adjournment.

*Revised and amended 05/02/2015*

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## ANNOUNCEMENTS

### PETERSON APPOINTED ASSISTANT STATE ARCHAEOLOGIST

Marcia Peterson, the Wyoming State Archaeologist Archaeological Survey manager, has been named Assistant State Archaeologist, according to State Archaeologist Greg Pierce. Peterson brings a passion and enthusiasm for archaeology and public outreach to this position, and we are looking forward to working with her as part of our team, according to Pierce.

Peterson has more than 13 years of experience on a range of cultural resource management and academic archaeological projects in Wyoming, Montana, Michigan, Utah, Colorado, Oregon, Texas, Florida, Alabama, and Bolivia. She is currently the President of the Wyoming Association of Professional Archaeologists.

Since April 2013, Marcia has served as the Office of the Wyoming State Archaeologist Archaeological Survey Manager, where she has supervised at least seven employees in the conduct of cultural resources management archaeology. Peterson also holds a Juris Doctor from the University of Wyoming, College of Law.

In accepting this appointment she says "I am excited to start a new chapter in my career in the Wyoming State Archaeologist's office. I look forward to sharing my passion for Wyoming archaeology with other archaeologists, both professional and avocational, and Wyoming citizens of all ages for years to come."

**2015 PRESERVE WYOMING  
AWARDS PRESENTED IN MAY  
DURING ANNUAL MEETING**

**DR. GEORGE C. FRISON RECEIVES LIFE-  
TIME ACHIEVEMENT AWARD**



Dr. George C. Frison, center, received a Lifetime Achievement Award for Historic Preservation from Milward Simpson, Director of the Wyoming Department of State Parks and Cultural Resources, left, and Dr. Todd Surovell, Director of the George C. Frison Institute.

Dr. George C. Frison, emeritus faculty member of the University of Wyoming, Department of Anthropology, and one of the most distinguished archaeologists in North America, was recognized with a Lifetime Achievement Award in Historic Preservation from the Wyoming State Historic Preservation Office during a recent ceremony at the Preserve Wyoming Conference held recently at the University of Wyoming. Dr. Todd Surovell, director of the George C. Frison Institute, made the presentation.

Wyoming's first state archaeologist, Dr. Frison has been awarded the Society for American Archaeology's Lifetime Achievement Award, the paleoarchaeologist of the Century Award and is a member of the National Academy of Sciences. His many books and papers have made him an internationally-recognized figure in archaeology. When he retired, the state leg-

islature celebrated George Frison Day to recognize his election to the prestigious National Academy of Sciences.

Dr. Frison's commitment to quality research, his selflessness, and quiet western manners have enriched the lives of all who have known him. Almost every archaeological resource listed on the National Register of Historic Places in Wyoming has been recorded, investigated, or published on by him.

There are so many sites – the Colby Mammoth Kill near Worland, Medicine Lodge Creek State Archaeological Site near Ten Sleep, Agate Basin near Lusk are among the few he has studied. Not only did he complete and orchestrate many field crews, he also was awarded numerous grants from the National Science Foundation and the National Geographic Society. Also, despite his retirement, he still actively accomplishes field work at the age of 90.

The Wyoming State Historic Preservation Office honors Wyoming citizens for their involvement in the preservation of Wyoming history and historical properties during the Preserve Wyoming Conference held annually throughout the State.

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**CWC PROFESSOR TODD GUENTHER  
RECEIVES PRESERVE WYOMING AWARD**



Two CWC students congratulate CWC Professor Todd Guenther following his receipt of Preserve Wyoming Award.

Central Wyoming College professor Todd Guenther received a Preserve Wyoming Award from the State Historic Preservation office at the

2015 Preserve Wyoming conference in Laramie this past week.

Preserve Wyoming awards are given to those who contribute to the preservation of the history of Wyoming. Guenther, director of Western American studies and professor of anthropology, history and museum studies, was awarded this honor based on his development of CWC's Western American studies program. This program uses an interdisciplinary approach to explore the history, prehistory, anthropology and geography of the people who have lived near or crossed the Continental Divide at South Pass in the central Rocky Mountains.

"I'm honored to have Todd representing CWC at these types of events," said Mark Nordeen, dean of liberal arts at CWC. "His program is certainly "second to none" and Todd continues to demonstrate the rewards of genuinely putting student learning at the forefront. His hard work pays huge dividends for our students."

Guenther is an archaeologist and a former curator at South Pass City and the Pioneer Museum in Lander. In addition, he is an award winning author of articles about Wyoming and regional history.

In a congratulatory letter, Senator Enzi wrote "Your love for our state's heritage not only inspired you, it challenged you to make a difference. And you have. With your efforts you are helping this and future generations to understand how their world has been shaped and influenced by pioneers who came in pursuit of a dream."

Guenther is a dedicated professor, who provides his students with hands-on opportunities to work at archaeological digs. Recently, students presented intensive research projects done alongside Guenther at this year's statewide Wyoming Archaeological Society conference. One of the projects utilized human osteology, archeology, ethnohistory and facial reconstruction techniques to identify skeletal remains of a late 1800s Native American female found near

Dubois.

<http://county10.com/2015/06/25/cwc-professor-todd-guenther-receives-preserve-wyoming-award/>

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**NORTHWEST COLLEGE'S DR. LAWRENCE TODD RECEIVES PRESERVE WYOMING AWARD**



Dr. Lawrence Todd, professor at Northwest College in Powell, receives a Preserve Wyoming Award from Bobbi Barrasso, left, and Milward Simpson, Director of the Wyoming Department of State Parks and Cultural Resources, right.

Dr. Lawrence Todd, a professor at Northwest College in Powell and chair of the Park County Historic Preservation Board, was recognized with a Preserve Wyoming award from the Wyoming State Historic Preservation Office during a recent ceremony at the Preserve Wyoming Conference held recently at the University of Wyoming.

Bobbi Barrasso, wife of Senator John Barrasso, made the presentation.

Dr. Todd began his career as an archaeologist at the University of Wyoming as an undergraduate student of Dr. George Frison, and later earned a Ph.D. in Anthropology from the University of New Mexico in 1983, and began a career of teaching, research and advocacy. For more than 35 years, Dr. Todd has been participating in archaeological research projects seeking to refine our understanding of human-

landscape interactions, focusing primarily on the North American Great Plains.

The Wyoming State Historic Preservation Office honors Wyoming citizens for their

involvement in the preservation of Wyoming history and historical properties during the Preserve Wyoming Conference held annually throughout the State.

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## ARCHAEOLOGICAL CONSERVANCY GAINS FIRST PRESERVE IN WYOMING

Chaz Evans, Southwest Field Representative Regional Coordinator for the Archaeological Conservancy (<http://www.archaeological-conservancy.org/>), announced in August 2015, the creation of the first Archaeological Conservancy in Wyoming. Richard and Addie Wagner have agreed to donate their private lands with rock art at the Legend Rock Petroglyph Site (48HO4) to the Archaeological Conservancy. The Richard D. Wagner Family Archaeological Preserve at Legend Rock will be

dedicated later when the formal land survey, appraisal and other details have been finalized. This is the first Archaeological Conservancy Preserve in Wyoming. If you know Richard and Addie or their children please thank them for their generosity. This is an extremely exciting and surprising outcome, we should all thank the Wagoner family and the Archaeological Conservancy for their efforts to preserve part of the Legend Rock Petroglyph site.



Richard and Addie Wagner (on right) at the Legend Rock Petroglyph site following their donation of adjacent rock art to the Archaeological Conservancy. Mike Bies (left, OW Heritage Research, LC) and John Fish (second from left, Wyoming State Parks, Historic Sites and Trails) congratulate the Wagners on their donation).



**2015 ARCHAEOLOGY MONTH  
PROCLAMATION SIGNED**

Citing the importance of Wyoming’s cultural landscapes and the part they play in the state’s heritage and collective identity, Governor Matt Mead proclaimed September, Wyoming Archaeology Awareness Month (WAAM).

September’s WAAM celebration will include the 17th Annual George C. Frison Institute of Archaeology and Anthropology sponsored lecture titled “A Millennium on the Meridian: One Thousand Years of Political and Ritual Power in the Ancient Southwest” by Dr. Stephen H. Lekson of the University of Colorado.

Dr. Lekson’s lecture will take place in the University of Wyoming Ag Auditorium, September 18 at 4 p.m. A reception will follow in the Department of Anthropology foyer.

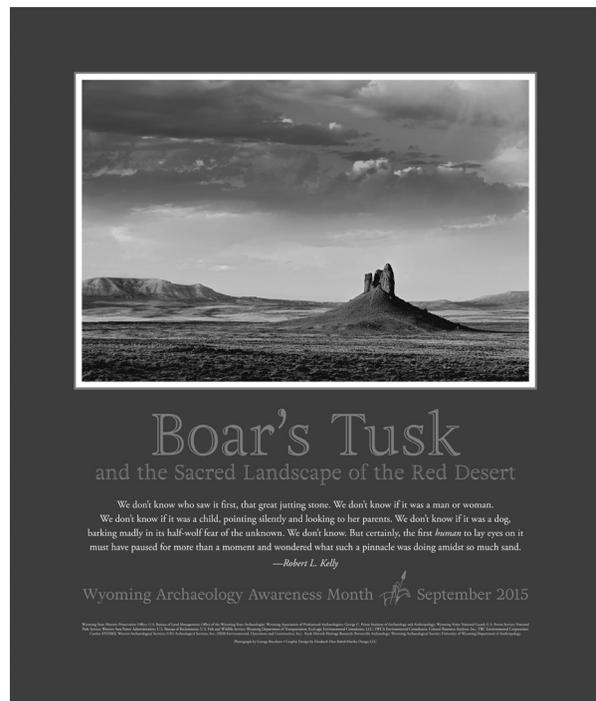
Also this year, an archaeology fair will be held at the Wyoming Territorial Prison State Historic Site in Laramie on September 12, from 10 a.m. to 3 p.m. The fair will showcase Wyoming’s rich cultural heritage from prehistory to the present day and will provide a unique and fun hands-on learning experience for all ages.

Planned events include flint knapping, atlatl throwing, and pottery making demonstrations, as well as hide painting, cordage making, soapstone

carving and more.

The centerpiece of WAAM is a poster produced every year. It is distributed statewide, nationally, and internationally to more than 5,000 people and organizations to commemorate Wyoming Archaeology Awareness Month.

The 2015 WAAM poster highlights the Boar’s Tusk, located in Wyoming’s Red Desert.



**GOVERNOR’S PROCLAMATION  
2015 WYOMING ARCHAEOLOGY MONTH**

**WHEREAS, Archaeology** is the scientific study of artifacts, features, sites, and cultural landscapes that yield clues to how people lived long ago, and how they helped shape the world we live in today; and

**WHEREAS, Cultural Landscapes** have been defined by the World Heritage Convention as the “combined works of nature and of man” which testify to the creative genius, social development and imaginative and spiritual vitality of humanity.

**WHEREAS, Cultural Landscapes** are part of our cultural heritage and collective identity; and

**WHEREAS, Wyoming Archaeology Awareness Month** was inaugurated in response to the growing public interest in our cultural heritage. WAAM celebrates archaeology as a means to engage our citizens in learning about human behavior, which helps sustain the bond between past and present in our nation; and

**WHEREAS, this year’s Wyoming Archaeology Awareness Month celebrates Boar’s Tusk**, the most prominent feature within a sacred cultural landscape of importance to several Native American tribes. Together with the Table Mountains, Pilot Butte and other features of the Leucite Hills, the landscape stands out against the backdrop of the white Killpecker Sand Dune Field; and

**WHEREAS**, the recognition and preservation of this landscape, and many others, serves to protect living traditional cultures and preserve the traces of those which have disappeared.

**NOW, THEREFORE, I, MATTHEW H. MEAD**, Governor of the State of Wyoming, do hereby proclaim September 2015 to be

**“WYOMING ARCHAEOLOGY AWARENESS MONTH”**

in Wyoming, and urge the people of Wyoming to take part in the activities planned to enhance public awareness of archaeology.

**IN WITNESS WHEREOF**, I have hereunto set my hand and caused the Executive Seal of the governor of Wyoming to be affixed this \_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_ Governor

**WYOMING ARCHAEOLOGICAL FOUNDATION  
JENSEN/ROBSON RESEARCH GRANT REPORTS**

**IN THE HINTERLANDS OF HISTORY:  
ANALYSIS OF POST-CONTACT  
ABORIGINAL ADAPTATIONS IN THE  
LITTLE SNAKE RIVER VALLEY OF  
WYOMING**

by  
**CODY NEWTON**

In June of 2011, the Archaeological Field School from the University of Colorado - Boulder recorded and tested five sites in the Little

Snake River Drainage in southern Wyoming. The sites are all located in the forested east-west trending anticlinal ridges or rims north of the Little Snake River and Powder Wash. This fieldwork was part of the initial phase of the Little Snake River Postcontact Project (LSRPP), undertaken to document postcontact sites and provide data for dissertation research. Fieldwork included a surface artifact inventory; mapping of artifacts, features, and topography; systematic metal detector surveys; feature re-

cording; limited test excavations within and around architectural features; as well as excavation and sampling of thermal features.

The five sites are part of a larger sample of known locations with postcontact features (e.g., wickiups) and artifact types (e.g., glass beads). Four different types of habitation structures (59 total) were recorded at the five sites (Martin et al. 2005): free-standing lean-tos, lean-tos incorporating live trees, free-standing wickiups, and lean-to wickiups. The individual site topography varies, but the wickiups and lean-tos are largely found in sheltered locations with south to southeast aspects. Recovered chipped stone included obsidian artifacts, large bifacial cutting tools; numerous endscrapers; ground stone, including a grooved abrader; and teshoas. Quartzite teshoas, being large cobble flake tools (Eyman 1970; Scheiber and Finley 2010), noted at four of the sites were primarily found in association with wickiup or lean-to features. Metal and ceramic trade good artifacts recovered include white ball clay pipe fragments matching the "Simple Cockled Bowl" type described by Pfeiffer (2006:122) based on specimens found at Fort Union (1829-1867), along with several cut metal pieces, a lead bar and musketball, percussion caps, a needle fragment. The glass artifact assemblage from the five sites totals 455 drawn and wound beads. Test units both within and around wickiups and lean-tos revealed intact floors and hearth features in three out of four cases, and a 1 x 2 m within a single lean-to wickiup produced 293 beads.

Based on the presence of red-on-white compound drawn beads (i.e., whitehearts), percussion caps, and clay pipe fragments, these sites appear to document an early to middle nineteenth century indigenous occupation. The radiometric assays of bone recovered from interior hearth features (150±20 BP [UGAMS 9557] and 130±20 BP [UGAMS 9555]), generously funded by a Jensen/Robson Research Grant, affirm this assessment. Obsidian sourced to the northwest combined with Spanish-style

bridle bits (found previously at these sites) and location in a historically known borderland and trading center provide the initial evidence for postulating an occupation based, or at least partially based, on the trade of European goods and horses. With potentially dozens more of these sites known in the region, the on-going work of the LSRPP is poised to develop a much more robust understanding of this little-known period of Native history.

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**OBSIDIAN SOURCING GARRETT  
ALLEN SITE  
by  
DAVID ECKLES**

Energy dispersive X-ray fluorescence analysis was performed by Geochemical Research Laboratory (Hughes 2013; 2014) on 83 obsidian specimens from the Garrett Allen site from a total assemblage of 161 items. This constitutes a minimum 50 percent sample of obsidian and black non-volcanic glass artifacts from nearly all excavated depths. X-ray fluorescence analyzes trace element content of obsidian and non-volcanic glass artifacts as a signature of the source from which they were derived. There are eleven different sources for these artifacts from six different regions in the Rocky Mountain West. Sources include the Yellowstone area of northwestern Wyoming, eastern Idaho, southwestern Utah, north-central Colorado, north-central New Mexico, and southeastern Montana (black non-volcanic glass).

The most common source area is Malad, Idaho, represented by 39.3 percent of the assemblage. Obsidian from the Malad source occurs in nearly all depth increments, and is absent only from 49-60 inches below surface. Obsidian Cliff specimens are represented at the upper elevations and lowermost elevations, and

constitute 16.8 percent of the sample. Obsidian artifacts from the Wild Horse Canyon, Conant Creek Tuff, Lava Creek Tuff, Bear Gulch and New Mexico Obsidian Ridge sources occur in the upper elevations. The La Poudre Pass, Colorado obsidian pebbles occur in the 43-48 inch depth increment. The same is the case for the Packsaddle Creek, Idaho source and the single artifact from Cerro del Medio, New Mexico. All of the black non-volcanic glass artifacts are from the Powder River, Montana source; most were recovered from 43-60 inches below surface with one specimen from 7-12 inches below surface.

These data indicate some variation in the use of obsidian and black non-volcanic glass source areas over time. The clearest examples of this are the presence of the Wild Horse Canyon obsidian only from 0-18 inches below surface (probably spanning the Late Prehistoric period), the La Poudre Pass obsidian pebbles at 43-48 inches (probably dating to the early Late Archaic period) and most of the Powder River black glass being recovered from 43-60 inches (probably spanning the late Middle Archaic to early Late Archaic periods). Obsidian from the Malad and Obsidian Cliff sources appears to have been used across the prehistoric sequence at the site.

# A POPULAR SPOT: FOUR THOUSAND YEARS OF OCCUPATION AT THE BATTLE SPRING WEST SITE (48SW16604) IN THE GREAT DIVIDE BASIN, WYOMING

by  
**Christopher C. Kinner**

## ABSTRACT

Excavations for the Ur-Energy Lost Creek Project at the Battle Spring West site yielded remains from multiple occupations extending from the Opal phase through Uinta phase. The excavation data did not reveal evidence of long-term occupation, such as structural elements or semi-permanent, immovable processing tools such as large ground stone implements. Taken as a whole, the site assemblage suggests the archaeological remains are the result of hunting-related activities including camping, tool maintenance or production, and faunal processing. Although the excavation data do not permit elucidation of generalized hunter-gatherer settlement or subsistence strategies for any of the time periods, they do provide useful baseline information about landscape use in the Great Divide Basin through time.

## INTRODUCTION

The Battle Spring West site (48SW14404) is a large, partially buried, multicomponent prehistoric locale situated in the northeastern portion of the Great Divide Basin (Figure 1). The site was initially identified during a surface inventory as a large, sparse scatter of prehistoric lithic artifacts. Test excavation conducted in 2006 revealed potentially significant subsurface archaeological remains in the form of a hearth, debitage, and faunal remains. A formal data recovery program in the fall of 2012 resulted in the excavation of 94 grid units, most of which

were encompassed within four large grid blocks. The excavations revealed the presence of remains from at least four periods of prehistoric occupation ranging from the Opal through Uinta phases (7420-610 B.P.).

The dating of these occupational episodes is based on radiocarbon assays from charcoal recovered from hearths and occupational surfaces. The calibrated 2-sigma radiocarbon ages range from 5470 to 1270 B.P., indicating the site was used during the Opal, Pine Spring, Deadman Wash, and Uinta phases. The hearths are believed to be the remnants of fire pits, or cooking facilities, and the expansive undefined charcoal-stained horizons are debris from the accumulation and mixture of charcoal and organic materials related to occupation. Fragmentary faunal remains recovered in and surrounding hearths suggest the site was a locus for preparation of a variety of meats including small mammals like rabbit, but with particular emphasis on the use of medium to large artiodactyls such as pronghorn. Lithic debris and tools suggest the site was also used for tool manufacture and maintenance. The site is interpreted to be a short-term hunting camp or temporary residential base revisited throughout a 4200-year span of time. Investigations at the Battle Spring West site resulted in the collection of information with the potential to address the research themes of chronology, subsistence, settlement patterns, and prehistoric technology.

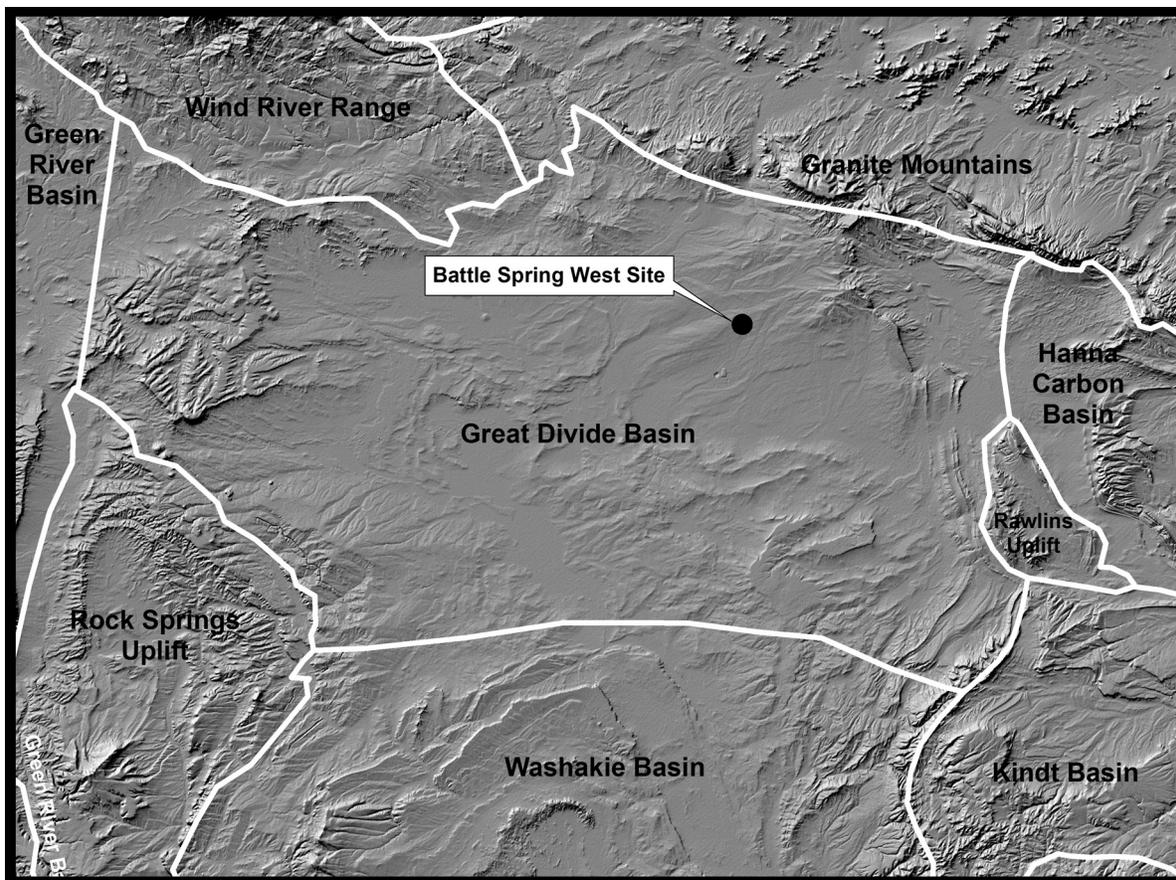


Figure 1: Relief map of Great Divide Basin and surrounding physiographic features in relation to location of Battle Spring West Site.

**SITE DESCRIPTION**

The Battle Spring West site lies at an elevation of 6946 ft (2117 m). The surrounding terrain includes expansive flats, low hills, and ridges dissected by intermittent drainages flowing from the southern slopes of Green Mountain toward a series of low-lying flats at the center of the basin (Neidhardt et al. 2000:6). The site occurs on the west bank of an intermittent tributary drainage of Battle Spring Draw, which heads seven miles to the northeast and terminates in Battle Spring Flat, a large depression with playas and dry lakes 13 miles to the southwest.

Cultural deposits at the Battle Spring West site were identified on two landforms. An upper surface throughout the western portion of the site, which is generally flat to gently eastward-sloping, overlooks a lower surface with low rolling topography in the eastern part of the site.

The lower surface slopes gradually downward toward an unnamed ephemeral tributary of Battle Spring Draw. The channel of this seasonal drainage forms the eastern site boundary.

Based on the surface inventory (Kinner et al. 2008), this large, sparse lithic scatter encompasses around 13,500 square meters. The observed surface assemblage, consisting of tenflaked stone tools and 26 flakes, was dispersed across the site area, although greater artifact densities were observed throughout the eastern portion. Chronologically diagnostic tools and tools with notable characteristics collected from the surface include an arrow point from the Firehole phase, a Pelican Lake-type dart or arrow point from the Pine Spring/Deadman Wash Phases, and a mid-section of a large biface with fine parallel oblique flaking on one side (Figure 2).



Figure 2: Projectile points collected from surface of site 48SW16604.

Formal test unit excavation, conducted in 2006, was preceded by bucket augering and excavation of shovel test units (Figure 3). Bucket augering showed deep deposits were present in the eastern third of the site area. This smaller area, encompassing 2600 m<sup>2</sup>, was the focus of the subsequent excavation. Testing showed cultural deposits occurred mainly within a 40-m-wide strip paralleling the drainage on the eastern edge of the site.

Three prehistoric activity areas were revealed during excavation of four grid blocks in 2012. The cultural deposits are anchored by thermal features and consist primarily of distributions of flaked lithic artifacts and fragmentary faunal remains. Grid Blocks I and III encompassed positive test excavation units. An additional eighteen 1 m x 1 m test units were laid out throughout the eastern portion of the site at the beginning of the data recovery phase, and these exploratory units guided the placement of the Grid Blocks II and IV. A small amorphous charcoal stain (Feature 2) was identified in one of the exploratory units. This feature produced a radiocarbon age range of 3390-3270 cal B.P. (Beta 342493), and is assigned to the Pine Spring phase (Table 1). (Radiocarbon dates from the 2012 field work are calibrated at 2 $\sigma$

with program INTCAL09 [Reimer et al. 2009].)

Shortly before the publication of this article, during the late summer of 2015, additional charcoal stains were identified at the site by mining staff while clearing drilling pads. Ultimately, four discreet charcoal concentrations were salvaged from a small area located about nine m northeast of Block III. Radiocarbon age ranges for these four features (Features 12-15) are included in Table 1. These newly salvaged features are not included in the following text, but both the morphology and the accompanying dates align closely with nearby features identified in Blocks III and IV from Occupation Period 1. (The 2015 radiocarbon dates are calibrated at 2 $\sigma$  with program INTCAL013 [Reimer et al. 2013].)

### BLOCK I

Block I encompassed 27 units. Artifacts and faunal materials were abundant throughout the block, particularly in the southern half. Artifacts include 2100 chalcedony flakes, fragments of 35 flaked stone tools, and a small number of ground stone implements. Small fragments of burned and unburned ungulate long bone, probably pronghorn (*Antilocapra americana*), were also recovered throughout the block, particularly

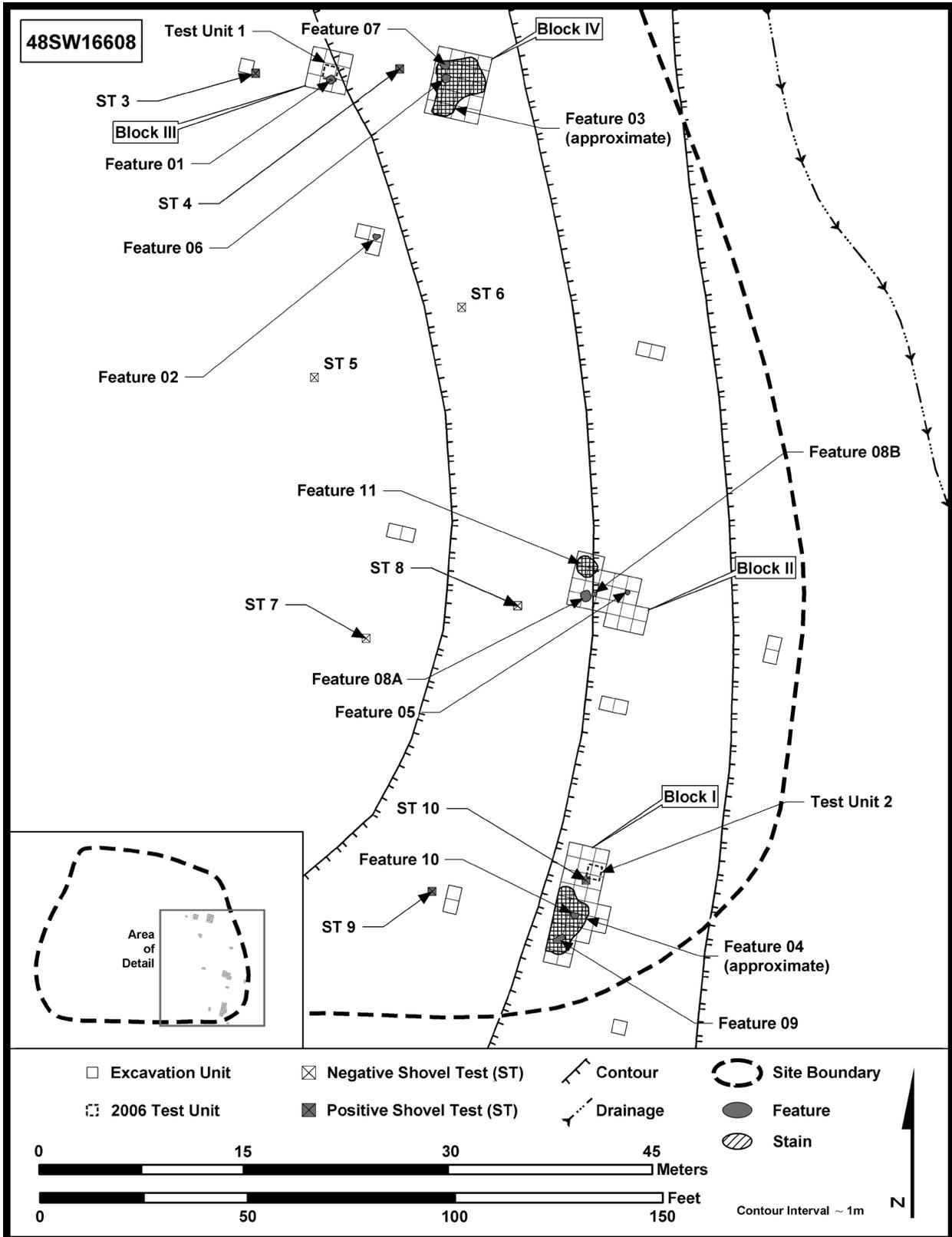


Figure 3: Plan map of excavated portion of the Battle Spring West site.

Table 1: Radiocarbon Age Assessments from Select Features

SAMPLE NUMBER (BETA)	FEATURE NUMBER	DEPTH BELOW SURFACE (CM)	DATED MATERIAL (B.P.)	CONVENTIONAL RADIOCARBON AGE	CALIBRATED 2-SIGMA RANGE
224676	1	28	Charred material	4240 +/- 40 BP	4860-4660 BP (2910-2710 BC)
342493	2	17	Charred material	3120 +/- 30 BP	3390-3270 BP (1440-1320 BC)
344655	4	30-40	Sediment	3000 +/- 30 BP	3320-3080 BP (1370-1130 BC)
342494	5	21.5	Sediment	1360 +/- 30 BP	1310-1270 BP (AD 640-680)
342495	6	20	Charred material	4140 +/- 30 BP	4820-4530 BP (2880-2580 BC)
342496	7	20	Charred material	4660 +/- 30 BP	5470-5310 BP (3520-3360 BC)
342497	8A	21.5	Sediment	1890 +/- 30 BP	1890-1740 BP (AD 60-210)
344656	8B	19	Sediment	1960 +/- 30 BP	1990-1860 BP (0-80 BC)
342498	9	37	Sediment	2180 +/- 30 BP	2310-2120 BP (360-170 BC)
342499	10	40	Sediment	3050 +/- 30 BP	3360-3170 BP (1410-1220 BC)
418612	12*	30	Charred material	4050 +/- 30 BP	4780-4435 BP (2830-2485 BC)
418611	13*	25	Charred material	4480 +/- 30 BP	5295-5035 BP (3345-3025 BC)
418610	14*	25	Charred material	4100 +/- 30 BP	4810-4455 BP (2860-2505 BC)
418613	15*	33	Charred material	4070 +/- 30 BP	4785-4445 BP (2835-2495 BC)

\*Additional features encountered during mechanical grading, late summer 2015.

within and surrounding features. Artifacts and faunal remains were distributed within a zone lying 25 cm to 40 cm below the present ground surface, among the two charcoals concentrations (Features 9 and 10) and an amorphous stain (Feature 4). Feature 4 consisted of a variable gray-stained soil horizon, designated Feature 4, which is presumed to represent an occupational surface.

Radiocarbon assays from Block I indicate at least two periods of occupation occurred in this area. Feature 9 consists of a lens of charcoal intruding into the southern portion of the Feature 4 stain. Charcoal-laden sediment from this feature produced an age range 2310-2120 cal B.P. (Beta 342498), which is assigned to the Deadman Wash phase. Artifacts from Feature 9 consist of 937 small pink chalcedony flakes and six flake tool fragments. Platform-bearing flakes from the feature suggest a propensity for bifacial thinning and retouch over core reduction. Features 4 (3320-3080 cal B.P. - Beta 344655) and 10 (3360-3170 cal B.P. - Beta 342499) are from the Pine Spring phase (Table 1). Cultural materials from Feature 10 are limited to small bone fragments and one biface fragment.

## BLOCK II

This grid block was excavated on the lower

terrace in the east-central portion of the site, 16 m north of Block I, and encompassed 21 units (Figure 3). Cultural materials in the form of dense artifact deposits and the remains of thermal features suggest this area was used intensively. The sample of bone (325 fragments) and artifacts encountered in Grid Block II includes more than 6600 flakes as well as a projectile point fragment, 44 flaked stone tool fragments, and the remains of two features (Features 5 and 8). For the most part, features and artifacts were encountered in discrete deposits identified between 15 and 35 cm below the surface (cmbs) in or near Feature 8.

Radiocarbon analysis of a soil sample from Feature 5 produced a date of 1310-1270 cal B.P. (Beta 342494). This date is within the Pine Spring phase. Few artifacts were recovered from this feature.

Feature 8 is a large, thin, amorphous charcoal deposit actually composed of two partially overlapping stains, both of which provide evidence of Uinta phase occupations. Feature 8A, the larger of the two stains, exhibited light-gray feature fill with no dark concentrations or large charcoal fragments. However, the stain was easily distinguished from the surrounding matrix. Three pieces of fire-altered sandstone were incorporated into the feature fill. This portion of

the feature co-occurred with an extremely high concentration of debitage, consisting of 2916 small, non-cortical pink chalcedony flakes. Based on visual characteristics, this material is probably derived from one source or deposit. Oolitic chert and quartzite make up the remaining material types. Faunal materials in Feature 8A consist of 235 fragments identified as indeterminate large mammals (e.g., deer, pronghorn, or elk) and include unidentified fragments of long bones. Many of the specimens exhibit evidence of burning. Carbon from a bulk soil sample produced a date of 1890-1740 cal B.P. (Beta 342494).

Feature 8B was identified at about the same level as 8A, and consisted of a dark gray smear of charcoal-laden soil underneath a thin layer of light gray mottled feature fill. The dark fill contained medium-sized fragments of heavily burned sandstone, in addition to debitage and bone. Debitage consists of 113 specimens. Forty-one bone fragments were recovered from the 8B feature fill, consisting of 20 unburned and 16 burned pieces of long bone shaft. Four are fragments of indeterminate small/medium mammals (e.g., beaver, small canids), and one is an indeterminate large mammal. Bulk soil from the Feature 8B fill yielded a date of 1990-1860 cal B.P. (Beta 344656).

### **BLOCK III**

Block III, located on the upper bench in the northeastern portion of the site, consisted of a 3 m x 3 m grid laid out over the location of Test Unit 1 (Figure 3). Feature 1, consisting of a basin-shaped charcoal stain filled with the charred remains of sagebrush and four small/medium mammal long bone fragments, was the only potential evidence of human activity in Block III. This feature provided a date of 4868-4660 cal B.P. (Table 1).

### **BLOCK IV**

Grid Block IV was located in the northeastern portion of the site (Figure 3). Excavation

of 19 units yielded evidence of three features, 198 bone fragments, and 77 lithic artifacts, suggesting the area was an activity center. The highly fragmented faunal remains range from unidentifiable long bone fragments, to small mammal bones such as rabbits, and medium and large fragments of mammal bone tentatively identified as pronghorn or elk. Lithic artifacts are comprised mainly of small chalcedony re-touch flakes. Cultural remains were encountered in a zone between 10-30 cmbs. Over half of the materials were recovered from an amorphous gray-stained lens designated Feature 3, and two discreet charcoal concentrations, Features 6 and 7. The tops of Features 6 and 7 both lay within the Feature 3 lens, which is proposed to be the remains of an occupational surface. Seventy-four cultural items consisting of 56 bone fragments, 17 pieces of debitage, and one flaked stone tool were recovered from Feature 3.

Radiocarbon ages from Features 6 and 7 show an occupation range corresponding with the Opal phase. Feature 6 was a deep basin-shaped stain filled with black charcoal-laden soil extending to a depth of 50 cmbs. Forty-three bone fragments and five pieces of debitage were recovered from the feature fill. The faunal fragments are identified as medium-sized mammals (e.g., pronghorn); one large rib fragment was identified near the base of the feature. Debitage from this feature includes a small number of quartzite flakes and one flake of pink chalcedony. The charcoal sample produced a date of 4820-4530 cal B.P. (Beta 342495). Feature 7 consisted of a discrete, irregularly shaped charcoal stain, located less than one m north of Feature 6. The soil exhibited a grayish brown color easily distinguished from the surrounding Feature 3 sediment. Cultural materials from the feature were a few bone fragments and one pink chalcedony micro-debitage flake. The charcoal sample provided a date of 5470-5310 cal B.P. (Beta 342496).

Table 2: Occupation Periods at the Battle Spring West Site, 48SW16604

FEATURES – CALIBRATED 2- SIGMA RANGE (BP)	OCCUPATION DESIGNATION	ASSOCIATED WYOMING BASIN PHASE CALIBRATED 2-SIGMA RANGES	UNCALIBRATED RCYBP	CALIBRATED 2- SIGMA CALENDAR YEAR (BP)
7 (5470-5310 BP) 1 (4860-4660 BP) 6 (4820-4530 BP)	Occupation 1	Opal (7420-4850 BP)	4500 4000	5313 4788 4259
2 (3390-3270 BP) 10 (3360-3170 BP) 4 (3320-3080 BP)	Occupation 2	Pine Spring (4850-2920 BP)	3000	3347 3005
9 (2310-2120 BP) 8B (1990-1960 BP) 8A (1890-1740 BP)	Occupation 3	Deadman Wash (2920-1720 BP)	2000	2113 1827
5 (1310-1270 BP)	Occupation 4	Uinta (1720-610 BP)	1500	1518 1305

### PERIODS OF OCCUPATION

The excavation data provide information about four general periods of site use (Table 2). These four periods range from the Opal through the Uinta phase, following the Wyoming Basin cultural chronology (Metcalf 1987; Thompson and Pastor 1995).

#### OCCUPATION PERIOD 1

The three earliest dates are from two hearths (Features 1 and 6) and a stain (Feature 7), all of which are located on the upper bench at the north end of the site in Blocks III and IV. These dates indicate a late Opal through Early Pine Spring phase occupation corresponding with the Middle Plains Archaic period (Frison 1991). The limited artifact assemblage from this component was found within Block IV. Features 6 and 7 are probably contemporaneous with the Feature 3 stain, which is interpreted as occupational disturbance and deposition. Radiocarbon dates for Features 6 and 7 (5470-4530 cal B.P.) are within the generally accepted range of the McKean Complex (Kornfeld et al. 2010:49). The artifacts and features from the Occupation 1 component suggest the range of activities was limited, especially when compared to regional trends during the same time period. Cultural materials from Occupation 1 are dominated by small fragments of bone, many of which are unidentifiable. Identified specimens are primar-

ily medium/large artiodactyls, and are likely to be the remains of pronghorn. All of the artifacts from this component are lithic and consist of fewer than 100 flakes, and a few flaked stone tools. The only temporally diagnostic tool is a drill base (Figure 4). Based on inspectional analysis of the base, the specimen is similar to McKean shouldered (stemmed/indented) points, sometimes referred to as Duncan points, with dates ranging from 4600-3500 B.P. (Taylor 2006:322-323; Frison 1991:91).

Thompson and Pastor (1995:41) postulated Opal phase occupations are typically identified by the presence of housepits, large side-notch projectile points, and slab-lined features. During the concurrent Middle Archaic period on the Great Plains, it has been noted site frequency increases over the preceding period, and there is an apparent increase in the use of grinding slabs (Kornfeld et al. 2010:114). The characteristics of sites of a similar age located within the basin support this. For example, the Bald Knob site (48SW5982), located 17 miles northeast of the Battle Spring West site near the town of Bai-roil, is an example of a residential locale with six housepits, abundant features, ground stone, debitage, heat-altered rock, and bone (Reust et al. 1993:313-317). The Scoggin site (48CR304) is located on the eastern edge of the basin and differs greatly from the Battle Spring West site



Figure 4: Feature 3, flaked stone tool

with features indicating intensive hunting activities focused around a bison jump and pound traps (Kornfeld et al. 2010:114; Lobdell 1973; Miller 1976:19). The Sinclair site (48CR4522), located east of Rawlins, included components with Opal phase and Pine Spring phase dates. The Opal component yielded a housepit along with debitage and ground stone, while the Pine Spring phase component was a palimpsest with characteristics of a transient hunting camp (Reust 1989).

In general, Occupation 1 at the Battle Spring West site exhibits a relative paucity of cultural materials, especially those indicating functions beyond short-term or transitory camping activities. The lack of housepits or residential structural remains, slab-lined pits, and ground stone items, and the presence of small retouch flakes, heavily degraded bone fragments, and minimally prepared hearths, suggest expedient behaviors organized around a limited range of activities, possibly related to hunting.

#### **OCCUPATION PERIOD 2**

Based on radiocarbon dates from Features 2, 4, and 10, the second period of site use occurred between 3390 and 3080 years cal B.P. and corresponds with the middle to late Pine Spring

phase. Features 4 and 10 were encountered in Block I at the south end of the site. Feature 2, (with no recovered artifacts) was discovered in isolation on the upper bench to the north. Two hundred forty-three pieces of bone and 2200 artifacts were recovered with Block I. However, the deposit in which these artifacts were recovered is a palimpsest representing a minimum of two stratigraphically inseparable occupations, suggested by the later Deadman Wash date from Feature 9. While distinct stratigraphic units with definitive temporal associations could not be discerned, general patterns revealed by the Block I assemblage are useful for characterizing the potential range of activities conducted during Occupation 2, regardless of depositional mixing.

No major changes are apparent in the archaeological record of the Great Divide Basin between the preceding Opal phase and the Pine Spring phase. Subsistence patterns appear to remain oriented around what has been termed the Wyoming Interior Basin Adaptation Type (McNees 1999). During the Pine Spring phase, there is continued use of large game (most notably pronghorn antelope), with abundant ground stone and formalized roasting pits suggesting the potential for sustained, if not increased, reliance on gathering and processing plants (McNees 1999:3-62 – 3-66; Thompson and Pastor 1995:48-52). The Pine Spring components at the Fivemile Ditch site (48SW13155) and the Arthur site (48SW1023) are presented for comparison. The Fivemile Ditch site, located 30 miles southwest, has a Pine Spring component with charcoal stains appearing similar to Features 3 and 4 at the Battle Spring West site. However, the Fivemile Ditch site component exhibited well-preserved butchered remains of several adult pronghorns, and at least one rabbit. Temporally diagnostic artifacts included two Pelican Lake points and one Elko point, along with heat-altered rock, bifaces, flake tools and ground stone, all of which appear to be related to butchering activities (McClelland 2005:2-16,

2-18 to 2-36). The Arthur site in southwestern Wyoming produced a Pine Spring-age component with three basin-shaped pits and fire-altered rock. Artifacts from this component consist of debitage, mainly late stage reduction. A few of the faunal remains from the Pine Spring component at this site are identified as rabbit; however, most of the bone was too fragmentary to be identified (Thompson and Pastor 1991).

The artifact assemblage and faunal remains from the Occupation 2 component suggest the locale was used as a hunting camp, where at least limited processing of artiodactyls (probably pronghorn) occurred along with lithic reduction. Poor bone preservation precludes a more robust interpretation of the subsistence techniques at this site during the Pine Spring phase. The features lack formalized characteristics, such as slab lining, indicating more intensive site preparation. No architectural remains were identified.

### **OCCUPATION PERIOD 3**

This period of occupation corresponds with the late Deadman Wash phase, identified by three features with a date range from 2310 to 1740 years cal B.P. One of the features, Feature 9, is located near the southern end of Block I. The other two features, Features 8A and 8B, are located within Block II. These two features overlap physically and may have been the result of a single event or period of use. In both blocks, the artifacts and bone from the Deadman Wash occupation are difficult to separate from those of the other periods of occupation because of the lack of clearly defined stratigraphic units. Feature 9 intrudes upon the amorphous Feature 4 deposit, and Features 8A and 8B were identified at the same depth as Feature 5, which yielded radiocarbon dates assignable to the later Uinta phase. No temporally diagnostic tools were recovered.

The cultural materials from the Deadman Wash phase features are suggestive of activities focused mainly on lithic reduction. The combined count of bone and artifacts from the three

Deadman Wash phase features is 4370, or 45% of the site assemblage. This figure includes 3968 flakes, 394 bone fragments, seven flaked stone tools, and one ground stone implement. The debitage is dominated overwhelmingly by small non-cortical pink chalcedony flakes from late-stage lithic reduction or maintenance. Most of the faunal materials directly from the Deadman Wash phase consist of long bone shaft fragments from medium-sized artiodactyls. Artifacts and bone are tentatively assigned to this occupation if recovered within the upper 33 cmbs of Blocks I and II, based on the depths of the features. Sixty-four pieces of bone and 4221 artifacts were recovered within 33 cm of the ground surface. The artifacts include 4159 pieces of debitage, 60 flaked stone tools, and two ground stone fragments. The debitage is similar to debitage from the features, and consists predominantly of small non-cortical flakes correlated with bifacial thinning and retouch reduction. Activities conducted during Occupation 3 are heavily weighted toward lithic reduction and flaked stone tool manufacture or maintenance. Most faunal remains were found within the amorphous features and suggest processing of medium-sized mammals.

Within the basin, the Deadman Wash phase is often associated with potentially wetter conditions and an apparent increase in large game procurement (Thompson and Pastor 1995:52). When compared to the preceding and subsequent phases, fewer sites in the basin yield radiocarbon dates from the Deadman Wash phase, and it has been acknowledged the phase is poorly understood (Thompson and Pastor 1995:32, 52; McNees 2005:3-26; McNees and Lowe 2007). There is an apparent occupational hiatus during the middle of the Deadman Wash phase based on a decline in radiocarbon date frequencies from 2600 to 2300 B.P. (McNees 2005:3-27). Sites with components dating to this phase reveal lithic reduction and tool manufacture activities, as well as limited faunal processing, are characteristic (Thompson and

Pastor 1995:52-53). McNees (2005:3-28) suggests a possible link with the Besant complex bison-hunting culture might be established for Deadman Wash phase components in the northeastern portion of the Great Divide Basin. Projectile points from the phase include Craven Creek corner-notched, side-notched Maxon Ranch types, and the more common Pelican Lake points (McNees 2005:3-27).

The characteristics of the Deadman Wash component at site 48SW16604 are similar to those elsewhere in the region. As with the two previously described occupations, the artifact assemblage for the Occupation 3 component is related to limited hunting and camping activities oriented around lithic reduction and tool manufacture, with some minimal faunal processing. The features are amorphous and there is no evidence of intensive site preparation in the form of habitation structures or storage pits. The features, although densely packed with artifacts, are poorly preserved, perhaps indicating long exposure before burial. Flaked stone tools are relatively sparse when compared to the volume of debitage recovered, as is ground stone.

#### **OCCUPATION PERIOD 4**

Evidence for a fourth occupation of the site during the Uinta phase is represented by a single radiocarbon date from Feature 5. A small quantity of lithic artifacts and bone was recovered from this occupation, which occurred between 1310 and 1270 cal B.P. Seven artifacts and two bone fragments were recovered from Feature 5. However, a large amount of debitage and bone was found in the surrounding units within Block II. It is difficult to separate the materials in this block based on the lack of distinct stratigraphic units. Features 8A and 8B, recovered from Occupation 3, were densely packed with debitage and bone, and it seems likely most of the cultural materials within the surrounding block are associated with the earlier occupation.

Uinta phase components in the basin are common, and this phase is considered to be comparable to the Opal phase (Thompson and

Pastor 1995; McNees 2005). The Uinta phase shares characteristics with the Opal phase including multiple reoccupations of the same localities, cylindrical basin features, basin houses, and wide-spectrum use of animal prey (McNees 2005:3-29). The limited size of the Uinta phase component at the Battle Spring West site limits comparison with other sites in the basin.

#### **DISCUSSION**

As proposed by McNees (1999) and McNees and Lowe (2007), prehistoric approaches to settlement within the interior basins of southwestern Wyoming are largely a function of subsistence-related regimes, and are linked to specific adaptations developed for the expansive and resource-limited environmental zones of the region. This particular adaptation has been termed the Western Wyoming Interior Basin Adaptation Type, and is characterized by environmental attributes including broad, horizontally expansive terrain; a limited number of ecological zones; generally low biomass and biological resources including pronghorn, rabbits, roots and seeds; and apparently few bison relative to adjacent regions (McNees 1999:3-63). The attributes of the basin adaptation type, with respect to subsistence-linked settlement patterning, lean upon generalized models developed by Larson (1990, 1997) and Creasman and Thompson (1997) for Archaic groups wherein complex composite systems incorporate reoccupation of residential base camps by aggregated groups, in combination with dispersion by smaller, and perhaps specialized, groups for logistical procurement of specific resources (McNees 1999:3-68).

These models are both seasonal and cyclical, and are thought to have been the basic system operationalized from the end of the Paleoindian period through, and probably beyond, the Uinta phase (Creasman and Thompson 1997:295). The sites with a basin adaptation tend to exhibit uniform characteristics for both artifact assemblages and feature types, but

the intensity of occupation within geographic sub-regions is suggested to vary through time (McNees 1999:3-64). McNees (1999) and McNees and Lowe (2007) associate the maximal periods of interior basin occupation with the Opal (Green River) phase and Uinta phase. The intervening period from 3500 to 1500 B.P. is poorly understood, with some evidence of incursions into the interior basins by groups who did not strictly exhibit the basin adaptation characteristics (McNees and Lowe 2007:4-16).

Great Divide Basin settlement patterns through time, as described by McNees (1999), are suggested to have been maximal during the Uinta phase. This supposition is supported by the high proportion of temporally diagnostic Uinta phase projectile points found during surface inventories of the surrounding Lost Creek study area (Figures 5 and 6). However, based on projectile point associations the area also exhibits intensive use during the Late Paleoindian stage, and significant use during the Deadman Wash and Firehole phases. While the Opal phase is well represented, it is by no means dominant.

Thus, the chronology of occupations at the Battle Spring West site diverges marginally from the proposed pattern of the basin adaptation type. While the maximal period during the Opal phase aligns with the Battle Spring West Occupation 1 data, Occupations 2 and 3 during the Pine Spring and Deadman Wash phases showed intensive site use during a time span generally poorly understood and presumably poorly represented in the basin. The potential for a period of intensive use of the Lost Creek study area during the Deadman Wash phase, and to a lesser degree during the Pine Spring phase, is bolstered by the relatively large number of projectile points types identified among the Lost Creek study area surface assemblages. It is acknowledged these patterns may be errant because of typological mis-associations of projectile points with periods of use; however, they should prove useful as the basis for future comparisons when more information becomes

available.

The Battle Spring West site is among a small number of sites excavated in the western Wyoming interior basin region. The site is compared to a representative sample of these sites, including the Arapahoe Creek Housepit site (48SW13152) (Lowe 2005:4); the Bald Knob site (48SW5982) (Reust et al. 1993:305-403); the Battle Spring Draw site (48SW13156) (Craven 2005:3); the Buffalo Hump site (48SW5057) (Harrell 1987); the Chain Lakes Rim Housepit site (48SW13159) (Fleming 2005:5); the Fivemile Ditch site (48SW13155) (McClelland 2005:2); and the West Crooks Creek site (48FR4435) (Karpinski 2005:6).

These sites exhibit feature types similar to those identified at the Battle Spring West site. However, basin houses and deep cylindrical roasting pits often present at other sites in the area were not found here. The lack of these more formalized feature types at Battle Spring West supports the idea site function through time was related to short-term habitation. Features 3 and 4, which contained light charcoal staining, are considered to be occupational stains with indeterminate boundaries, rather than thermal features. This type of stain is common at sites in the region, including three lenses of stained soil at the Five Mile Ditch site (McClelland 2005:2-42 – 2-45, and 2-177), Stains A-D at the Battle Spring Draw site (Craven 2005:3-67 – 3-72), and Stain A at the Arapaho Creek Housepit site (Lowe 2005:4-47).

Four of the seven sites in the comparative group produced features identified as housepits. Three of the sites with housepits are datable to intensive periods of Opal phase occupation, and one to primarily a Uinta phase component. These sites are interpreted as residential base camps. Like the Battle Spring West site, three of the sample group sites did not have housepits or architecture of any kind. Clearly, these types of features may have been present at any or all of the sites but remain undiscovered in unexcavated portions of the sites. However, the

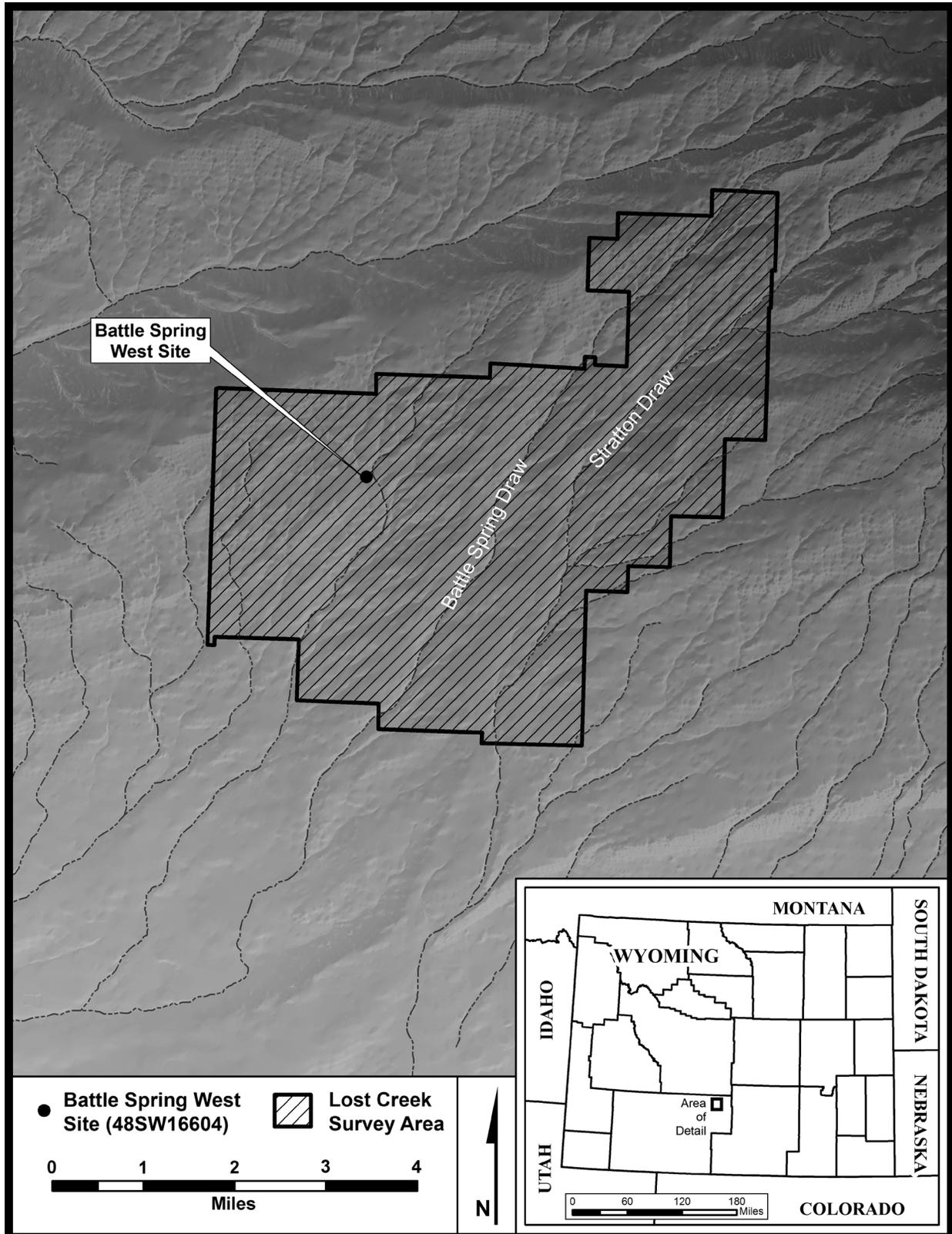


Figure 5: Map of the Lost Creek study area in relation to location of Battle Spring West Site.

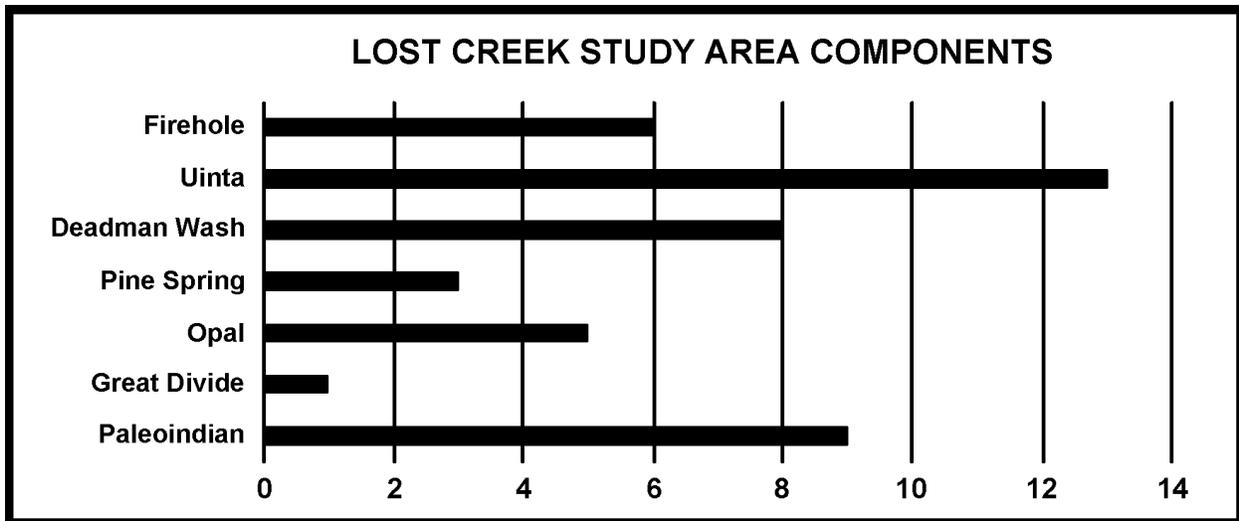


Figure 6: Number of prehistoric components identified at sites within Lost Creek Study area based on surface projectile points.

Battle Spring Draw site is datable to the Paleoindian period and housepits are not necessarily expected. The West Crooks Creek site and the Fivemile Ditch site both exhibited evidence of reoccupations and similar sparse assemblages of lithic artifacts and subsistence-related remains. Perhaps these sites, along with the Battle Spring West site, represent short-term temporary hunting camps where minimal effort was invested in construction of formalized pit structures. In such a scenario, windbreaks made from readily available sagebrush may have been considered sufficient for protection from the elements, especially during warmer parts of the year.

Site location comparisons do not exhibit strong patterning with respect to orientation, and as such there is no clear preference for site placement in terms of particular slope angles. Generally, however, the sites in this sample occur on open, north-facing or southeast-facing slopes. Most of the sites are located at points on the landscape where there is at least some topographic relief, albeit minimal. The Arapaho Creek site (48SW13152) is a clear outlier on a broad, open expanse of unbroken plains with little protection from prevailing winds (Lowe 2005:4). Several of the sites, including the Battle Spring West site, are located in areas of

stabilized dune deposits near major, seasonally active drainages or their tributaries. A few of the sites are situated in proximity to significant landmarks. For example, the Buffalo Hump, Chain Lakes Rim Housepit, and Bald Knob sites are found near highly visible landmarks. It is worth noting the Battle Spring West site is located near a low hill which is the only protruding landform visible in the surrounding terrain for many miles. These comparisons suggest site placement may not be predicated on easily delineated landscape variables, but tend to occur where there are either topographic landmarks or breaks in the terrain. Site placement may be indicative of a particular period during the year; summer camps may be placed to take advantage of landscape variables (for example, wind direction, sun angle, proximity to building materials, and distance to water) are different from those affecting winter camp placement.

All of the sites in this comparative sample exhibit evidence of multiple occupations extending from the Paleoindian period through the Firehole phase. Radiocarbon assays from five of the sites indicate Opal phase occupations are the most common; furthermore, many of the Opal phase components appear to be the result of multiple reoccupations. For example,

the Arapaho Creek Housepit site yielded evidence of at least three occupations during the Opal phase (Lowe 2005:4-71), and the Chain Lakes Rim Housepit site is dated to Opal phase occupations (Fleming 2005:5-131). The Battle Spring Draw site yielded multiple dates, all of which fall within the Late Paleoindian period. The remaining sites, including the Battle Spring West site, contain multiple occupations across multiple phases. Uinta phase occupations are in evidence in at least three sites. Great Divide, Pine Spring, Deadman Wash, and Firehole phase occupations are the least well represented. The Fivemile Ditch site, which exhibited components ranging from the Opal through the Firehole phase (McClelland 2005:2-238 – 2-239), is considered to be most similar to the Battle Spring West site. The large number of Opal phase components is consistent with the contention of McNees (1999) and McNees and Lowe (2007) for this phase representing one of the maximal periods of occupation, particularly in this part of the western Wyoming interior basin area.

The lack of ground stone from any of the components at the Battle Spring West site is consistent with the absence of macrofloral remains in flotation samples. Tools typically related to faunal processing (e.g., scrapers, and expedient flake tools) are present, but complete tools are almost nonexistent in the assemblage. Although 40% of the tools are identified as types related to processing of faunal resources, the correlation between animal processing and tool types is weak, especially given the significant numbers of small fragments of expedient tools. Tools identified as scrapers are poorly represented, consisting of just seven specimens, including fragments.

Subsistence remains from the Battle Spring West site indicate through all four periods of occupation, medium-sized mammals, probably pronghorn, sheep, or deer, played a significant role as a food source. However, there is evidence of at least some use of rabbit during

Occupation 1. While other elements are present in the sample, the most commonly identified consist of long bone shaft fragments. Although the effects of differential preservation cannot be discounted, it seems reasonable to suggest the high percentage (67%) of appendicular elements in the bone sample is indicative of special selection of transportable units. Initial processing and disarticulation appear to have been accomplished elsewhere.

Subsistence-related artifacts and other materials from the sample group of regional sites are comparable to those found at the Battle Spring West site. Faunal remains recovered from the sites in the comparative group are generally poorly preserved and fragmentary, and reflect a reliance on artiodactyls (pronghorn), with smaller mammals exhibiting an elevated importance in some cases (e.g., Battle Spring Draw). The poor preservation of faunal materials is probably related to the harsh environment where seasonal extremes and lack of deposition result in quick degradation of bone. None of the sites, whether they are regarded as residential base camps or temporary short-term locales, exhibits evidence of large-scale processing and butchering of game. Artifact assemblages are similarly modest in the sample group. Many of the assemblages suggest limited-scale lithic reduction or tool maintenance rather than tool production or coarse reduction from raw materials. The absence of macrobotanical remains is notable. Macrobotanical remains and processing tools were identified at only two of the seven sites in the sample group, including the Buffalo Hump site (Harrell 1987:5.32-5.33) and the Chain Lakes Rim Housepit site (Fleming 2005:5-133).

Based on the results of excavation, the components at the Battle Spring West site are identified as the remains of at least four camping episodes during a range of time extending from the Opal phase through the Uinta phase. The material remains suggest occupational activities at this site revolved around minimal processing and consumption of large to medium-sized

ungulates such as pronghorn, lithic reduction, and limited flaked stone tool manufacture. The lack of significant deposits of faunal remains may simply reflect poor preservation or may suggest primary faunal processing tasks were accomplished elsewhere. Pedestrian surveys in the surrounding area have identified sites with high densities of flaked stone tools commonly identified as game processing tools. No definitive architectural or structural remains were identified. The reuse of the locale suggests landscape use patterns throughout the area were persistent. Reoccupation of residential base camps is one of the characteristics identified with the basin adaptation type (Creasman and Thompson 1997). The patterns of site placement in the Lost Creek study areas may be indicative of a system of locality reuse which extends to short-term residential or logistical procurement camps.

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## BOOK REVIEW

*Across Atlantic Ice: The Origin of America's Clovis Culture* by Dennis J. Stanford and Bruce A. Bradley. © 2012 by the University of California Press, Berkeley, Los Angeles, London. 319 pages; figures, maps, tables. Hard cover \$34.95; paperbound \$27.95.

*Across Atlantic Ice* is a long awaited presentation of Dennis Stanford and Bruce Bradley's work on the origins of New World Clovis culture and possible links with the Paleolithic Solutrean Culture of France. Written in a very readable format, this volume brings the reader up to date with much of the recent work on early Paleoindian sites along the eastern seaboard. There are two parts to the volume with ten chapters, a conclusions appendix and Cluster Analysis sections. Part one consists of five chapters reviewing the history of Clovis and early Paleoindian sites and literature. A primer on flaked stone technology is useful to the uninitiated and Clovis lithic technology and projectile point variation is clearly presented. Critical sites like Gault, Cactus Hill, Meadowcroft and Kincaid are discussed, as is the "Clovis First" model (now held by many in disrepute). Wyomingites will read of the work of George Frison, but also John Albanese! Intriguing early and abundant finds made on the East Coast and even offshore are presented. The section concludes with a presentation of the Solutrean Culture of Southwestern Europe, which will be especially useful to those not familiar with it.

Part two presents quantitative and qualitative analyses of Solutrean lithic technology, tools and tool kit. Solutrean lithic technology is compared to the lithic assemblages of Beringia, Asia, and the United States in a very readable

format. Bone, antler and even art forms are analyzed. Chapters eight and nine discuss Solutrean maritime adaptations, modeling the coast of Spain, presenting paleoclimatic models, sea depth measurements including what would have been dry land during terminal Pleistocene times and during the Last Glacial Maximum. The environment along the edge of Pleistocene glaciers is discussed. Chapter ten then presents what it would have taken for Solutrean peoples to traverse the mid Atlantic to arrive in the New World via Greenland, Iceland, or the edge of the Late Pleistocene ice sheet. Multiple resource exploitation centering upon seal hunting, but including fishing, the need for boats and overall ice edge challenges is presented. An analogy to the Inuit Culture is used to model Solutrean or pre Clovis peoples. Clovis "travel" is discussed, using examples such as Knife River Flint artifacts appearing in New York. The volume concludes with a discussion of new sites, new research direction, a lack of a Siberian Clovis, the overall diversity of Clovis technology and post Clovis diagnostics including Goshen and Plainview, familiar to Wyomingites.

The authors make an extremely strong argument for, at a minimum, the partial peopling of the New World via a mid Atlantic crossing. The high numbers of paleoindian sites along the East Coast can no longer be ignored, or under-interpreted. The volume also includes delightful inserts and anecdotal presentations of the authors own personal musings over many decades of Paleoindian research, fieldwork and insights. *Across Atlantic Ice* is an essential volume for all paleoindian scholars, interested avocationalists and those studying issues surrounding the Peopling of the New World. Its highly readable format will be a delight to the non scholar.

Every Wyoming archaeologist will need to be familiar with the data presented within. It is thus highly recommended. (Less expensive volumes are available via Amazon Books, as is a kindle release). Note: recent 2014/2015 DNA analysis of key Paleoindian material, such as reported from Montana's Anzick Site weigh heavily on European ancestry for "peopling of the New World". More to come!

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