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RENEW YOUR MEMBERSHIP TODAY!

Once again it is time to renew your membership to IPCAS. A New and Renewal of membership form is at the end of the newsletter. Your membership dues help support our Chapter in pursuing the goals and mission of both IPCAS and the CAS by helping fund publications, lectures, and outreach activities. So don't wait, RENEW today!

From the President

By Rosi Dennett

At our February lecture, we were so very fortunate to have IPCAS Vice-President Dr. Lynda McNeil present the compelling research she and Dr. Scott Ortman compiled regarding historical relationships among Pueblo, Fremont, and Northwest Plains peoples. If you missed the lecture...stay tuned...their paper will be published soon, and we will let you know where to access it. This month's lecture by Larry Benson on the oldest known petroglyphs in North America is another one you don't want to miss (on March 9).

For those interested in our annual field trips...this year we're working on a fall excursion in the Comb Ridge area in southeastern Utah. This trip will likely involve some camping, lots of hiking to various ruins and rock art sites, and possibly a float trip down the San Juan River to some of those hard-to-reach sites. Watch for more details in the near future!

As mentioned in last month's newsletter, our State's archaeological resources are possibly being threatened by federal actions under consideration by the current administration. Please let us know if you are aware of specific situations that you have concerns about, as we join other organizations to advocate for the protection of these important resources.



Cave ruins in bluffs of San Juan River. Utah. Photo by William Henry Jackson (1875). Provided by the National Archives and Records Administration.



Larry Benson (right) and Rory Gauthier (left). Photo courtesy of Larry Benson

About Larry Benson

Dr. Benson received his PhD in Earth Science from Brown University in 1974. He arrived in Boulder in 1982 for a job with the U.S.G.S. One of the outcomes of his work with the USGS was demonstrating that fluctuations in the sizes of large paleo-lake systems in the Great Basin of the western United States reflected changes in the climate of the North Atlantic between 45,000 and 10,000 years ago. During the past decade, he applied geochemical methods to the sourcing of Native American prehistoric maize and textiles and, in addition, used high-resolution records of past climate to better understand the impact of climate change on prehistoric Native Americans via their subsistence base. One of these studies indicated that Chaco and Cahokia were abandoned at approximately the same time due to a megadrought that extended from California through Illinois.

IPCAS Lectures

When: Thursday, MArch 9 at 7:00 pm

Where: CU Museum, Dinosaur Room

Cost: Free and Open to the Public

Dr. Larry Benson - Adjunct Curator of Anthropology in the CU Museum of Nature and Science

Winnemucca Lake, NV Petroglyph Site, 10,000 to 14,800 Years B.P.

A recent study led by a University of Colorado Boulder researcher shows the oldest known petroglyphs in North America, which are cut into a large carbonate mound in western Nevada, date to at least 10,500 years ago and perhaps even as far back as 14,800 years ago. The petroglyphs located at the Winnemucca Lake petroglyph site 35 miles northeast of Reno consist of large, deeply carved grooves and dots forming complex designs on several large limestone boulders that have been known about for decades. Although there are no people, animals or handprint symbols depicted, the petroglyph designs include a series of vertical, chain-like symbols and a number of smaller pits deeply incised with a type of hard rock scraper. Several methods were used to date the petroglyphs, including determining when the water level in the Winnemucca Lake basin. When the lake level was at a specific height, the petroglyph-peppered boulders near the base of the mound were submerged and therefore not accessible for carving. The oldest dates calculated for the Winnemucca Lake petroglyph site correspond with the time frame linked to several pieces of fossilized human excrement found in a cave in Oregon. The caves, known as the Paisley Caves in south central Oregon, held not only fossilized human coprolites that dated to roughly 14,400 years ago. Fifty-five sites near and southeast of the Paisley Caves exhibit the same type of petroglyphs as the Winnemucca Lake glyphs, suggesting the same people may have occupied both areas 14,000 ± years ago.

Next Month...

On Thursday, April 13th

**Dr. Kevin Gilmore - Archaeology Program Manager
in HDR's Englewood Office**

**Franktown Cave, CO (5DA272): New Analysis of Data and
Its Relation to Apachean Migrations**

Spotlight: Delane Mechling

By Delane Mechling

As a child I was always interested in anything of historical value and people who lived in different places and times. This fascination carried on through college where I earned a B.A. in Anthropology at the University of Florida. I did the coursework for my Master's at Ball State University in Cultural Anthropology, specializing in Native American Studies. From there, I did several cultural surveys, including the SW Native Americans, NW Native Americans, and Jamaica. One field survey was done at Crow Canyon in 1990. That was when I knew I would one day return to this awesome state!

I began teaching Anthropology in 1994 at two of the local community colleges in Denver. Several years later I earned a TESOL certificate and taught ESL as well. After that, I took a "break" to have two daughters, one hamster, one dog, and three cats. I more recently graduated from Post University with a M.Ed. in Instructional Design and Technology. I currently work for CCCOnline where I teach every subfield but linguistics, and often help revise courses.

I also serve as the PAAC coordinator of the Indian Peaks chapter of CAS. I enjoy taking classes here to refresh my skills and knowledge, and I love having the opportunity to participate in field trips, surveys, and attend lectures. I recently went on the Mesa Verde trip this past September, and also did some short field trips before and after this past year's annual conference.

That being said, I love Anthropology and anything remotely related to history. The many facets and qualities that make up all people have always fascinated me, as well as how they, as a group, have adapted their lives to their unique environments. I love teaching any field of Anthropology partly because, to many it is mostly new material and I think it's exciting to watch students' minds and attitudes grow and flourish. I really love teaching it because I feel that having the knowledge and understanding of our past can help us better appreciate the importance of our present and our future.



Delane Mechling from Eagle's Nest, at the Ute Mountain Tribal Park. Courtesy of Delane Mechling.

News Highlights from the World of Archaeology

By Christopher J. Kerns

Welcome back to the semi-regular World Archaeology News column. Generally this is where I write about new discoveries and exciting archaeological research, and there is some of that in this edition. There are, however, occasions where it seems appropriate to discuss broader heritage issues which are making headlines in the news. One such occasion took place last fall when the Dakota Access Pipeline was making headlines, another is starting to take place in New Mexico in the vicinity of Chaco Canyon.

With the election of a new president there is potential for heritage issues to make headlines. If you are concerned about broad national heritage issues, I highly recommend visiting the Society for American Archaeology's website (www.saa.org). The SAA recently launched a system which enables anyone to contact their congressional representatives regarding heritage issues through the SAA website. In addition, the SAA has joined other heritage organizations as part of the Leadership Council in the Coalition for American Heritage (CAH). The SAA has a strong Government Affairs committee and are in the process of trying to revive their volunteer state-level Government Affairs Network. If you are interested in the Government Affairs Network, contact David Lindsay at david_lindsay@saa.org.

The new administration is pushing for the completion of the Dakota Access Pipeline despite ongoing protests (Check out the October 2016 Calumet for our original coverage of the pipeline controversy). Further news concerning the protection of cultural heritage emerged from New Mexico in late January. The Bureau of Land Management has auctioned drilling rights for nearly 850 acres of land in the vicinity of Chaco Canyon (Peterson 2017). The auction of these drilling rights has been postponed three times over the past five years due to public protest and concerns over the impact of hydraulic fracturing. Several legal suits have already been filed against the leases. The parcels won't be released, along with the name of the winning bidder, until the legal suits are resolved. Although Chaco Canyon itself is protected from development because it is a National Historic Park and as well as a UNESCO World Heritage Site (along with a 10 mile buffer), the greater Chaco region is not afforded the same protection. Approximately 90 percent of the greater Chaco region has already been leased for oil and gas development (Peterson 2017). Any future leases on BLM land should trigger the Section 106 process requiring an archaeological study of the area, however, a concern of many archaeologists are the proposals by the new presidential administration to streamline and expedite the permitting process for oil and gas development. Such streamlining may, in effect, reduce the protection afforded significant cultural resources or restrict how cultural resource management policies are enacted across the country. The greater Chaco region is important culturally not only because it is considered sacred by Native American groups, but also because it contains valuable archaeological evidence which provides further insight into past cultures and societies. News came out at the end of February regarding

exciting DNA results from elite burials associated with Chaco. These exciting finds will be reported on next month.

Over the last several months there has been a lot of news about archaeological discoveries at high altitudes in Wyoming. In November, the Casper Star Tribune (Peterson 2016) published the discovery of the “world’s highest buffalo jump” at the edge of Dinwoody Glacier in the Wind River Mountains. Then in February, both Wyoming Public Media (Preston 2017) and The Sheridan Press (Coli 2017) wrote about the efforts of archaeologists to recover precious perishable artifacts as they melt out of high altitude snow packs and ice-fields at an alarming rate due to climate change.

The bison jump was discovered as part of the Central Wyoming College’s new Interdisciplinary Climate Change Expedition which is studying the rapidly shrinking glaciers in the Wind River Range and their relationship with human activity. The archaeological research, led by Todd Guenther, has recorded a significant human presence at the foot of Dinwoody Glacier and on Burro Flat including campsites dating back 11,500-years-ago (Peterson 2016). Guenther and his team tentatively suggest that the evidence they are collecting from these high altitude sites might indicate year-round occupation by prehistoric groups, but acknowledge that further evidence is required to support their hypothesis. The conclusions made by Guenther mirror the conclusions for recent research conducted by Dr. Larry Todd. Last year Dr. Todd and his team of researchers recorded tens of thousands of artifacts in the mountains near Meeteetse including the highest known stone circles (tipi rings) in Wyoming (Preston 2017). The research conducted by Dr. Todd has suggested that entire family groups were living and working at high elevations for long periods of time during multiple seasons of the year.

Further news focused on the research of Dr. Staffan Peterson, the former archaeologist for Yellowstone National Park and current archaeologist at the Little Bighorn Battlefield (Coli 2017). Dr. Peterson identified the remote nature of the ice-patches and the speed at which they are melting due to climate change as major challenge for archaeologists working in Yellowstone. The next research expedition to the ice-patches in Yellowstone is not scheduled until 2019 due to funding. Based on visits to the ice patches over the last ten years and the current rate they are disappearing, Dr. Preston is concerned that the ice-patches won’t last another ten years. The impact of climate change on “ice-patch” archaeology has not just been observed in the Rocky Mountains, but it is also having significant impact in Europe and around the world where material culture, buried for thousands of years under snow and ice, is quickly melting out of ice and snow fields. Many of the artifacts being uncovered by the retreating snow and ice are perishable and decay very quickly once exposed. Ice-patch archaeology is quickly changing our understanding of how prehistoric people lived in high altitudes. Without significant support from funding bodies for research in these remote areas, precious and insightful archaeology could be lost forever.

This month’s feature article is by Dr. Bryon Schroeder, whose own research parallels the

high-altitude research by his peers (Schroeder 2015). A news article about his research recently garnered a lot of interest on the IPCAS facebook page. You can read more about his research by checking out his Phd available online here:

<http://scholarworks.umt.edu/cgi/viewcontent.cgi?article=5642&context=etd>

Exciting archaeology in the Amazonian rain forest was making headlines in February. Hundreds of earthwork geoglyphs in the state of Acre, in far western region of Brazil, drew the excitement of archaeologists and the public (Pappas 2017). The research team investigating the geometric geoglyphs was led by Dr. Jennifer Watling and included researchers from both the UK and Brazil. Over the past several years the researchers have published several articles on the geoglyphs and their archaeological significance (Carson *et al.* 2014; Watling *et al.* 2015; Watling *et al.* 2017). The geoglyphs were first identified in the 1980 when deforestation exposed the earthworks, but their significance wasn't appreciated until recently when the research team was able to show that the geoglyphs were nearly 2,000-years-old and were built within forests that had already been altered by human presence in the region since 4,000-years-ago (Pappas 2017). Watling *et al.* (2017: 1872) argue that the geoglyphs were associated with a "long tradition of agroforestry and resource management that altered the composition of native bamboo forest over millennia." Further, the findings challenged the hypothesis that reforestation after the area was depopulated may have triggered the Little Ice Age. The research team conducted detailed environmental and paleoecological studies which suggested that the geoglyphs were constructed in small localized clearings within a sustainably managed rainforest which emphasized palms and other useful plants. Overall, the research is important as it examines long term sustainability of rainforest management by indigenous groups while providing further insight into enigmatic earthwork features.

Finally, it was reported in February that students at Stanford University had recreated 5,000-year-old Chinese beer based on archaeological research (Dormehl 2017; Shashkevich 2017). The beer recreation experiment was an assignment in a class for students of Professor Li Liu and PhD candidate



Amazonian Geoglyph. Photo by Diego Gurgel, courtesy of Dr. Jennifer Watling.

Jiajing Wang. The recipes used in the experiments by the students are based on a combination of different analytical techniques applied to pottery from the Mijiaya site in Shaanxi, North China dating from the Yangshao period (3400-2900 BC). The research combined lipid analysis with analysis of phytoliths to identify the different plants used for making beer. The beer that was stored in the ceramic vessels contained broomcorn millet, barley, Job's tears, and tubers (Wang 2016: 6444). The evidence for barley in the ceramics is particularly exciting because it predates all previous evidence by nearly 1000 years in China. This has led the researchers to suggest that the adoption of domesticated barley in China may be directly associated with beer production.

The University of Colorado has their own beer archaeologist, Travis Rupp, who works in the Classics Department and at Avery Brewing in Gunbarrel (Wertheimer 2016). His archaeological research in the Mediterranean region has led to the development of several archaeologically inspired beers available at Avery Brewing including *Nestor's Cup*. Nestor's Cup is inspired by research Rupp conducted last summer in Greece and Turkey to study Mycenaean vessels. Rupp is very clear that his creations at Avery are inspirations rather than recreations. Avery Brewery is having a special **ALES OF ANTIQUITY DINNER** on Tuesday March 7th at 7:00 pm. Check out the event here: <https://www.averybrewing.com/events/ales-of-antiquity-dinner>

As always, I encourage you to follow IPCAS on facebook or twitter (@indianpeaksCAS) where I frequently post news stories related to archaeological discoveries and research. You can also check out some of these websites, pages, podcasts and twitter feeds for additional archaeology news.

ALL REFERENCES AVAILABLE ON PAGE 13

Archaeology Podcast Network: <https://www.archaeologypodcastnetwork.com/>

Science Daily: http://www.sciencedaily.com/news/fossils_ruins/archaeology/

Archaeology Magazine: <http://archaeology.org/news>

The Archaeology Channel: <http://www.archaeologychannel.org>

Western Digs: <http://westerndigs.org/>

Heritage Daily: <http://www.heritagedaily.com>

SPECIAL FEATURE: Shirley Basin Lodge Site

By Bryon Schroeder

The Shirley Basin Lodge site (48AB301) is a large domestic site with distinct stacked stone walled structures that represent the foundation remains of prehistoric domestic houses. A cluster of 50 stack walled structures is enmeshed within a larger complex of more typical stone circles that encompass a total area of 1.6 kilometers (1 mile) north-south by 5.23 kilometers (3.25 miles) east-west (ca 485.6 ha or 1200 acres) and may extend beyond this estimated boundary. The site is in central Wyoming on BLM land administered by the Rawlins field office. There have been two major periods of research at the site. The first was a large-scale excavation in 1969 followed by a forty-three-year lull followed by recent small-scale excavations in 2012 and 2014. The Late Prehistoric artifact assemblage and infrequent occurrence of the stacked walled structures in the immediate region led the original excavators to interpret the site as the consequence of a Shoshonean group possibly running out of hides and turning to local materials to build expedient structures. With similar domestic features and associated cultural artifacts recently reported from high-elevation sites in Wyoming, California, and Nevada, it is clear that the previous interpretation needs reevaluation (Figure 1).

The history of work at the Shirley Basin Lodge site is, in many regards, as interesting as the site itself. It was first test excavated in 1968, and then in 1969 twenty-one “House Sites” were identified and excavated over a long July 4th weekend by the Wyoming Archaeological Society (WAS) under the direction of State Archaeologist Dr. George C. Frison (Figure 2). Preliminary results of this excavation were published in the Wyoming Archaeologist (Steege 1969). After a more thorough analysis, the results of the long weekend’s excavation were preliminarily written up as a Master’s thesis at the University of



Figure 1: Example of Similar Lodge at Shooting Star Village in the White Mountains of California. Note that the tri-notch point found on the exterior of the feature is similar to those found at the Shirley Basin Lodge Site. Courtesy of Bryon Schroeder.



Figure 2: House Site #5 at the end of the 1969 excavation. Courtesy of Bryon Schroeder.

Wyoming (Zeimens 1975). The site is visible in all three editions of *Prehistoric Hunters* where it is listed on maps as a key Late Prehistoric site (Frison 1971: Figure 2.12, Frison 1991: Figure 2.65) and several of the “Shoshone Knives” (Figure 3) from the site are depicted (Kornfeld 2010 et al.: Figure 2.69). So, the importance of the site has always been acknowledged but contextualization and more in-depth work languished for several key reasons.

The first major issue was all the carbon material from excavated hearths was sent to an archeomagnetic lab and lost – so no radiocarbon dates from the site were ever reported. This made it impossible to contextualize the occupation and use of the site beyond a generic Late Prehistoric designation. Second, the artifacts were not curated until 41 years after the excavation. This was a monumental task because at some point during that 41-year storage period the original cardboard boxes and paper bags had melted together from being stored on the floor of a basement. This presents the last major problem -



Figure 3: Example of one of the “Shoshone Knives” collected from the 1969 excavation, there was no scale in the original photo. Courtesy of Bryon Schroeder.

there are no original site notes or excavation plan maps from the 1968 or 1969 efforts. Therefore, given the storage issues, any counts by “House Sites” from the re-cataloging efforts should be taken with a grain of salt, but there are still interesting results worth further discussion.

The most significant finding was well over half (68 percent) of the collected materials from the 1969 excavation came from only two House Sites (#7 and #17). George Zeimens in his MA thesis does say the original excavators reported that House Site #7 was the most artifact rich structure lending some support for these findings – but keep in mind

no absolute counts or notes exist. Additional results from cataloging suggest there were excavated House Sites that contained no occupational debris, or some with only formal tools, or lithic materials from exotic non-local sources. Exotic tool material is interesting because the site is situated on-top of a high-quality tool-stone source – weapons grade as they say. The results made it clear that the 1969 site map needed to be reestablished in order to corroborate some of these findings with an on-the-ground analysis of the House Sites.

So, in 2012, with the aid of a field school from CSU and a volunteer land surveyor – Alf Berry of Massachusetts - we reestablished the 1969 excavation map and determined there was little more we could do than map the original excavated House Sites (Figure 4). During this fieldwork we did find additional unexcavated structures consistent with the design of the House Sites. We test excavated one of these newly discovered structures and the associated exterior hearth - both were in danger of being destroyed from erosion. The results suggest it was a refuse midden – with clear evidence of ceramic vessel dumps – and not a formal domestic feature. The adjacent hearth feature had several interesting artifacts inside the feature fill like a knuckled sandstone abradar, and probable canine toe bone beads, as well as sufficient carbon to provide the first radiocarbon date from the site (Figure 5). This portion of the site is located on a small terrace remnant in the bottom of a deeply incised drainage and the association of a possible refuse

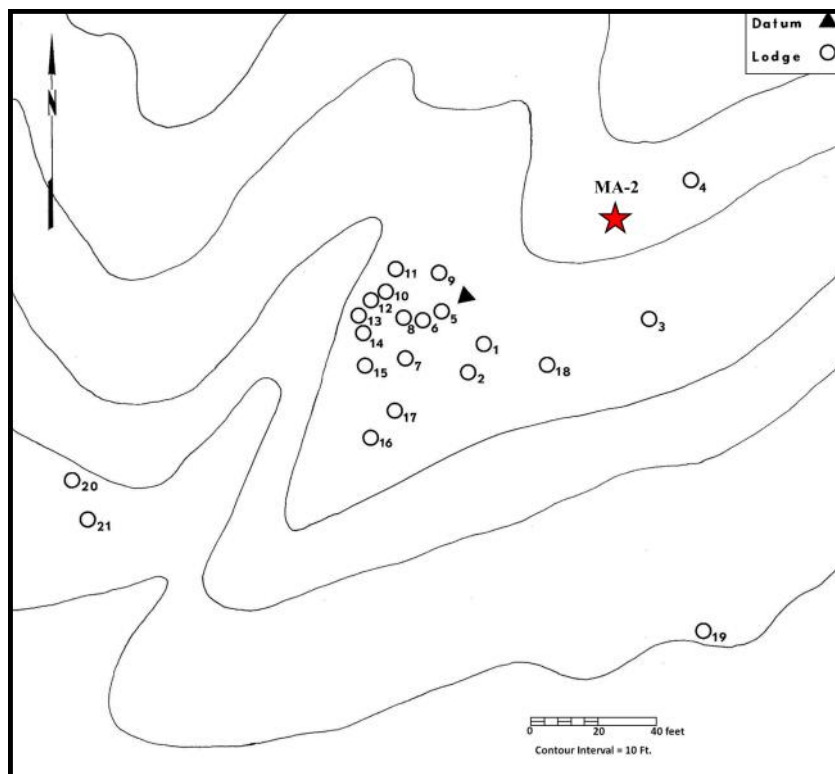


Figure 4: The original 1969 excavation map showing the location of the new structure MA-2 discovered in 2012. Courtesy of Bryon Schroeder.

midden and hearth in an atypical occupational location is one of the many unusual findings from the site.

By the end of the 2012 fieldwork, I had not yet excavated a structure from the site comparable to the House Sites excavated in 1969. The recataloging efforts suggested there was good reason to do further excavation to examine similar House Structures. Therefore, with the support of the Rawlins BLM and Wyoming Cultural Trust Fund we went back in 2014 with a crew from the Wyoming Archaeological Society and tested seven structures comparable to those excavated in 1969. The excavation yielded interesting results; some of the newly tested structures had very few artifacts while others had obvious occupations best characterized from our findings in structure MA-2 (Figure 6).



Figure 5: The knuckled sandstone abradar and probable candid bone beads from the hearth excavated in 2012. Courtesy of Bryon Schroeder.

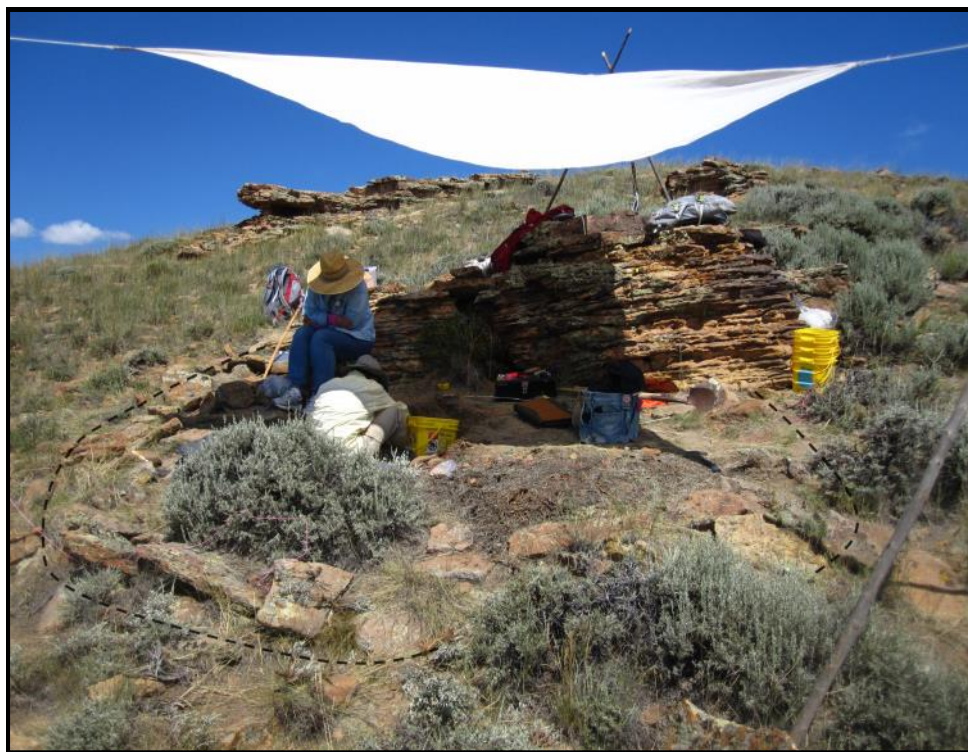


Figure 6: Overview of Structure MA-2 that was partially tested in 2014. Courtesy of Bryon Schroeder.

Inside of structure MA-2 we placed a 2 x 2 meter block that was one of the few untouched structures both identical to and adjacent with those excavated in 1969. In it, we found a central hearth, an activity area with large butchering tools, a sandstone shaft abradar, and both metal and lithic debitage, located on the upslope portion of the structure (Figure 7). Like all of the structures on the site, there was a substantial investment

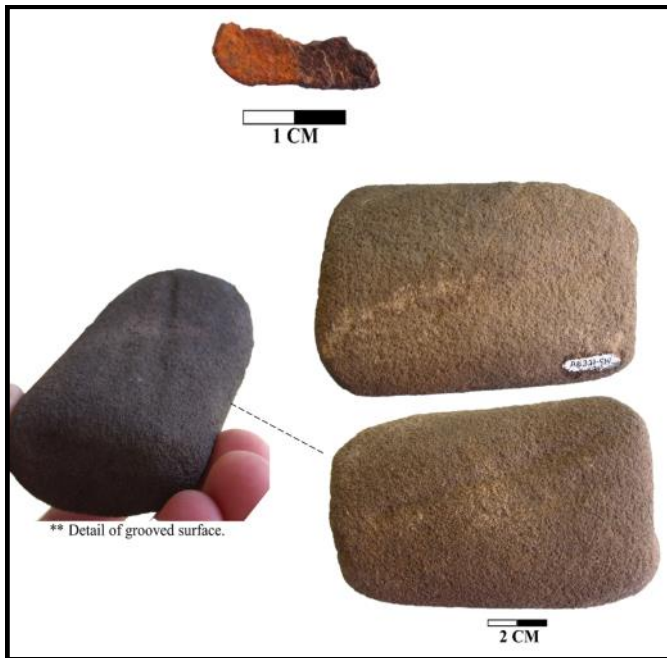


Figure 7: An example of the metal debitage and Sandstone Shaft abrader from inside Structure MA-2. Courtesy of Bryon Schroeder.

of time into the architecture but the occupants took no time to level the living surface or hearth, both were sloped and this was unique to this structure. The three radiocarbon dates taken from MA-2 are coeval with the dates from the hearth excavated in 2012 and all suggest a contemporaneous long occupation of the site.

At the moment, interpreting the site is fraught with challenges as many different angles need to be address and further evidence evaluated. The original excavators thought the heavily coursed structures were the result of poor planning by a group of Shoshonean people. They also are rumored to have found three distinct occupational packed floors in the

House Sites they excavated and recent excavations support neither of these claims. In analyzing and interpreting the site many aspects need to be considered including: the location of the site, the movement of the obsidian from variable sources like New Mexico, Yellowstone, Idaho, and Teton Pass, the high artifact counts, possible refuse middens, as well as numerous unique ceramic vessels. I think the best interpretation for the site – based on the available evidence - is that it represents a gathering point for inter-regional groups all focused on bison hunting. There are so many exotic artifacts found throughout the years of work, and the site is so large and complex, that no other explanation seems more plausible. My hope is that the unique nature of the site and interest of groups like the Indian Peaks chapter of the Colorado Archaeological Society will make sure the importance of the site is not lost for another 40 years and this interpretation can be better tested.

About the Author

Bryon Schroeder is a Project Archaeologist at the Center for Big Bend Studies in Alpine, Texas. He received his Ph.D. in archaeology from the University of Montana with research focused on high-altitude hunter-gatherer sites in the Wind River Range of the Middle Rocky Mountains. He also holds both a B.A. and M.A. in archaeology from the University of Wyoming where he studied Late Prehistoric and Protohistoric hunter-gatherer refuge fortification and defensive structures. He has worked throughout Wyoming, Colorado, Utah, New Mexico, Montana, and most recently the Central Coast of California.



REFERENCES

Carson, John Francis, Bronwen S. Whitney, Francis E. Mayle, Jose Iriarte, Heiko Prumers, J. Daniel Soto, and Jennifer Watling.

2014 Environmental impact of geometric earthwork construction in pre-Columbian Amazonia. PNAS. Vol. 111, no. 29. 10497-10502.

Coli, Chelsea

2017 Climate change leads to research hurdles in Yellowstone. The Sheridan Press. Feb. 3, 2017. Published online at: http://thesheridanpress.com/climate-change-leads-research-hurdles-yellowstone/?utm_content=bufferfa68b&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer

Dormehl, Luke

2017 Scientists at Stanford Uncovered a 5,000-year-old Chinese Beer Recipe, Then Brewed It. Digital Trends. February 10, 2017. Published online at: <http://www.digitaltrends.com/cool-tech/5000-year-old-beer/>

Frison, George C.

1991 Prehistoric Hunters of the High Plains, 2nd ed. Academic Press, New York.

1978 Prehistoric Hunters of the High Plains, 1st ed. Academic Press, New York.

Kornfeld, Marcel, Mary Lou Larson, and George Frison

2010 Prehistoric Hunters of the High Plains and Rockies, Third Edition. Left Coast Press, Inc., Walnut Creek CA.

Pappas, Stephanie

2017 Mysterious Amazonian Geoglyphs Were Built in Already-Altered Forests. Live Science. February 6, 2017. Published online at: http://www.livescience.com/57775-humans-altered-amazon-rainforests-geoglyphs.html?utm_content=bufferccdb3&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer

Peterson, Christine

2016 Wyoming college discovers world's highest buffalo jump. Casper Star Tribune. November 1, 2016. Published online at: http://trib.com/lifestyles/recreation/wyoming-college-discovers-world-s-highest-buffalo-jump/article_e4946a0e-b5ab-5496-bf1b-8b480276fbaf.html

Peterson, Jodi

2017 The BLM leases lands near Chaco Canyon for \$3 million: The controversial parcels are the first auctioned online in New Mexico. High Country News. Jan. 27, 2017. Published online at: <http://www.hcn.org/articles/land-near-chaco-canyon-leased-for-oil-and-gas-development>

Preston, Penny

2017 Climate Change Revealing Archaeological Finds. Wyoming Public Media Statewide Netork. Feb. 3, 2017. Published online at: <http://wyomingpublicmedia.org/post/climate-change-revealing-archaeological-finds>

Shashkevich, Alex

2017 Stanford students recreate 5,000-year-old Chinese beer recipe. Stanford University. February 6, 2017. Published online at: http://news.stanford.edu/2017/02/06/recreate-5000-year-old-chinese-beer-recipe/?utm_content=buffer6968d&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer

Schroeder, Bryon

2015 It takes a Village: Placing Middle Rocky Mountain high altitude residential sites of the Late Prehistoric Firehole Phase into a broader regional context. Unpublished PhD Thesis. The University of Montana. Missoula, MT. Available online: <http://scholarworks.umt.edu/cgi/viewcontent.cgi?article=5642&context=etd>

Steege, Louis C.

1969 Preliminary report: Site 48AB301, Chalk Hills No. 1. The Wyoming Archaeologist: 12(3): 9 - 12.

Wang, Jiajin, Li Liu, Terry Ball, Linjie Yu, Yuanqing Li, and Fulai Xing

2016 Revealing a 5,000-y-old beer recipe in China. PNAS. Vol. 113. No. 23. 6444-6448.

Watling, Jennifer, Sanna Saunaluoma, Martti Parssinen, and Denise Schaan

2015 Subsistence practices among earthwork builders: Phytolith evidence from archaeological sites in the southwest Amazonian interfluvies. Journal of Archaeological Sciences: Reports. Reports 4. 541-551.

Watling, Jennifer, Jose Iriarte, France E. Mayle, Denise Shcaan, Luiz C. R. Pessenda, Neil J. Loader, F. Alayne Street-Perrott, Ruth E. Dickau, Antonia Damasceno, and Alceu Ranzi.

2017 Impact of pre-Columbian "geoglyph" builders on Amazonian forests. PNAS. Vol. 114. No. 8. 1868-1873.

Wertheimer, Carah

2016 'Beer archaeologist' balances invention at Boulder's Avery Brewing, teaching at CU Boulder - Travis Rupp is speaking at the Longmont Public Library on Thursday. Longmont Times-Call. October 11, 2016. Published online at: http://www.timescall.com/carbon-valley-news/ci_30459074/brewery-archaeologist-balances-invention-at-avery-brewing-teaching

Zeimens, George

1975 48AB301: A Late Prehistoric period site in the Shirley Basin of Wyoming. Unpublished Master's thesis, Department of Anthropology, University of Wyoming, Laramie.

MARCH EVENTS CALANDER

Lectures			
23/1/2017 7:00pm	Pottery, Paintings, and Pinakides: the latest dirt from Petsas House, Mycenae	Dr. Kim Shelton	University of Colorado Museum, Paleontology Hall (IPCAS Lecture)
3/9/2017 7:00pm	Winnemucca Lake, NV Petroglyph Site, 10,500 to 14,800 Years B.P.	Dr. Larry Benson	University of Colorado Museum, Paleontology Hall (IPCAS Lecture)
3/11/2017 1:00pm to 4:00pm	Mayan Commoners and their Uncommon Lives	Dr. Payson Sheets	University of Colorado, Jennie Smoly Caruthers Biotechnology Building, Butcher Auditorium
3/11/2017 2:00pm	Secrets of the Ness of Brodgar: a Stone-Age Complex in the Heart of Neolithic Orkney World Heritage Site	Nick Card	University of Colorado - Denver, Department of Anthropology, North Classroom #4002
3/20/2017 1:00 pm & 7:00pm	Exploring Colorado and the American West: Creating a Field Guide to the Regional Landscape	Dr. William Wyckoff	Colorado Room, History Colorado Center
Events and Conferences			
03/07/2017 7:00 pm	Ales of Antiquity Dinner	Avery Brewing Gunbarrel, CO	https://www.averybrewing.com/
03/09/2017 to 03/12/2017	Colorado Council of Professional Archaeologists (CCPA) Annual Meeting	Doubletree Hotel Grand Junction, CO	http://coloradoarchaeologists.org/meetings-events/annual-
03/29/2017 to 04/02/2017	Society for American Archaeology (SAA) 82nd Annual Meeting	Vancouver, BC	http://saa.org/AbouttheSociety/AnnualMeeting/tabid/138/Default.aspx
Exhibitions			
March 10th thru August 13th	Vikings: Beyond the Legend	Denver Museum of Nature and Science	http://www.dmns.org/calendar

2017 IPCAS Board & Supporting Members

Board Members

President	Rosi Dennett	rosidennett@gmail.com
Vice President Elect	Lynda McNeil	lynda.mcneil@colorado.edu
Secretary	Debbie Smith	debbiesmithcmc@gmail.com
Treasurer	Hal Landem	hal963landem@gmail.com

At Large Board Members

	Cheryl Damon	cheryl_damon@msn.com
	Kris Holien	kjholien@aol.com
	Joanne Turner	joanne.turner@colorado.edu

Appointed Positions

PAAC Coordinator/CAS Rep	Delane Mechling	mechlings@hotmail.com
Outreach Coordinator	Allison Kerns	AllisonMKerns@gmail.com
CU Liaison	Gretchen Acharya	gacharyafinearts@gmail.com
Archivist	Kris Holien	kjholien@aol.com
Calumet Editor/News & Events	Christopher Kerns	ChrisJKerns@gmail.com
Website Administrator	To be filled...	
Professional Advisor	Bob Brunswig	robert.brunswig@unco.edu

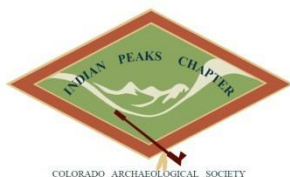
Editor: Christopher J. Kerns

Members are encouraged to send ideas or material for The Calumet. All content is subject to review and approval by the IPCAS Board.

The submission deadline is the 3rd Monday of the month for the next month's issue.

Send to indianpeaksarchaeology@gmail.com or ChrisJKerns@gmail.com





MEMBERSHIP APPLICATION – INDIAN PEAKS CHAPTER

Category	Amount
Individual	\$28.00
Family	\$33.00
Senior – Individual (does not receive <i>Southwestern Lore</i>)	\$14.00
Senior – Family (does not receive <i>Southwestern Lore</i>)	\$16.50
Student – Individual	\$14.00
Student – Family	\$16.50
Secondary Membership (Must be a member of a separate CAS Chapter)	\$10.00

____ New ____ Renewal Tax-Exempt Donation ____\$10, ____\$25, ____\$50, Other ____

***Membership period runs from January 1 through December 31 (calendar year).

Name(s) _____

Primary Email: _____ Secondary Email: _____

Address _____

City _____ State _____ Zip Code _____

Primary Chapter Membership (Only if you are requesting a secondary membership): _____

Please make check payable to: Indian Peaks Chapter, CAS. Mail to: PO Box 18301, Boulder, CO 80308-1301

I(We) give CAS permission to :

Yes ____ No ____ disclose phone numbers to other CAS members

Yes ____ No ____ publish name/contact information in chapter directory

Yes ____ No ____ publish name in newsletter (which may be sent to other chapters, published on the internet, etc.)

CODE OF ETHICS

As a member of the Colorado Archaeological Society, I pledge: To uphold state and federal antiquities laws. To support policies and educational programs designed to protect our cultural heritage and our state's antiquities. To encourage protection and discourage exploitation of archaeological resources. To encourage the study and recording of Colorado's archaeology and cultural history. To take an active part by participating in field and laboratory work for the purpose of developing new and significant information about the past. To respect the property rights of landowners. To assist whenever possible in locating, mapping and recording archaeological sites within Colorado, using State Site Survey forms. To respect the dignity of peoples whose cultural histories and spiritual practices are the subject of any investigation. To support only scientifically conducted activities and never participate in conduct involving dishonesty, deceit or misrepresentation about archaeological matters. To report vandalism. To remember that cultural resources are non-renewable and do not belong to you or me, but are ours to respect, to study and to enjoy.

Signature: _____ Signature: _____