President’s Corner
By Anne Robinson, CRAA President

This month we are pleased to announce the two web lectures. Web lectures will allow CRAA members to hear live lectures on their computers at home. There is not a lot of technology involved, most members with reasonably modern computers should easily be able to join us. We hope you will give it a try. We will be sending out a link for the web lecture the day before the lecture.

The first web lecture will be presented by Seth Frame. He will be talking about his experiences with D Stretch on the Wolfe Creek Pictographs. See page 2 for more details.

The second web lecture speaker is Carol Patterson who will be talking about the Rock Art in Nine Mile Canyon. See page 3 for more details.

Please consider joining us as Treasurer or Secretary on the CRAA board. We have a strong need for a new Treasurer and a new Secretary.

Treasurer Position - The treasurer pays the bills, processes memberships and does quarterly a quarterly and year balance sheet and P&L.

Secretary Position - The secretary takes meeting minutes at our board and member meetings.

If you are interested in these positions please contact us at coloradorockartassociation@yahoo.com. Working on the CRAA board is a great way to help shape the direction of CRAA.
Upcoming Rock Art Events

2017

Please let us know if you would be interested in leading a CRAA field trip. Contact us at coloradorockartassociation@yahoo.com if you would like to lead a trip in 2017. We are an all-volunteer organization and would love your participation.

Web Lecture:

*Rock Art Recording at The Wolf Creek Pictograph Site (5RT90): Adventures with D Stretch.*

**Date & Time:** Thursday, March 23 at 7:00 pm  
**Speaker:** Seth Frame  
**Location:** Join the first CRAA web lecture on your computer from your home. Must have web access and a computer with sound. We will send out the link a couple of days prior to the lecture to all CRAA members.

Colorado Department of Transportation (CDOT) also requested an update of the recording of nearby rock art panels associated with the site. The panels are made up of a number of proto-historic pictographs of probable Ute origins as well as some Euro-American historic inscriptions. The rock art was record in 1988 during previous fieldwork and has since degraded significantly, especially the pictographs.

With the help of volunteers from the Vermillion Chapter of the Colorado Archaeological Society (CAS), the rock art panels at the site were recorded and photographed. Each image was digitally enhanced using the D Stretch (a.k.a. Decorrelation Stretch), software program authored by Jon Harman. D Stretch is a photo enhancement program that enriches the intensity of the colors represented in the original photograph. The colors that are strengthened depend upon the particular colorspace chosen by the user. The resulting digitally altered photos visually enhance details of the rock art that are no longer visible to the naked eye. Many of these details were not seen in the earlier recordation.

**Bio:**  
Seth Frame has over a decade of experience in GIS; most of that time was spent in cultural resource management. Formally employed by Alpine Archaeological Consultants, he now lives in New York where he is employed as a GIS Analyst for a software development company. In addition to working in GIS, Seth recently graduated from Colorado State University’s online anthropology program.
Web Lecture:
*The Mu:kwitsi/Hopi (Fremont) abandonment and Numic Immigrants into Nine Mile Canyon as Depicted in the Rock Art*

**Date & Time:** Tuesday, April 11 at 7:00 pm  
**Speaker:** Carol Patterson  
**Location:** Join the second CRAA web lecture on your computer from your home. Must have web access and a computer with sound. We will send out the link a couple of days prior to the lecture to all CRAA members.

The Prehistory of Nine Mile is an analysis of the rock art of Nine Mile Canyon and Range Creek in the Tavaputs Plateau is a portrayal of Fremont people, known to the later Numic arrivals as the Mu:kwitsi/Hopi (1000 – 1300 A.D.). Recent linguistic and mtDNA analysis show these people to have had a mixture of Pre-Hopi (Uto-Aztecan) and Tanoan (Jemez) ancestry. Shaul (2014) writes that the Mu:kwitsi (Fremont) were made up of more than one ethnic group including Tanoan. Ortman (2012) links the Kiowa/Tanoan to the Fremont culture with north to south movement from southern Idaho, into Utah beginning around A.D. 950.

Analysis of the earliest (AD 900-1000) rock art supports this research with depictions of Awanyu, the Tanoan plumed serpent found in the rock art panels in these canyons and those of ancestral Tanoan pueblos of the Rio Grande. Fremont links to Hopi are found in depictions of Hopi hair styles, garden plots and flash flood warnings. Shifts in the climate (A.D. 1100-1300) from warmer wetter seasons to cooler dryer seasons favor “Travelers” strategies over agricultural subsistence, and gathering small seed Cheno/Ams using an intensive procurement and processing strategy to return yields ranging from 4,000 to 7,000 calories per hour.

A.D. 1300-1500 rock art portrays the arrival of Numic immigrants with their large burden baskets for gathering wild seeds, tubers and cactus. Late rock art panels in Nine Mile depict battles between the Fremont (Mu:kwitsi/Hopi) distinguished by their Hopi hairstyle and hock-leg moccasins fighting the Numic (Paiute/Utes) identified by their flat heads with horns. Cultural diagnostics include directionality (left-to-right sun-wise direction) that is demonstrated to be specific to all Numic language speakers, while the Hopi and Tanoan cultural preference is a right-to-left directionality.

Field Trip & Service Project:  
**Ute Mountain Tribal Park Field Trip & Service Project**

**Dates:** Wednesday, April 26 & Thursday, April 27, 2017  
**Location:** Ute Mountain Tribal Park, Colorado

Ute Mountain Tribal Park Trip Description:  
The Ute Tribal Park has a wealth of Ancestral Puebloan sites and rock art. Join us for this two-day trip with the first day being a service project and the second day will be a field trip.

**Trip Leader:** Teresa Weedin
All Participants must sign up with Teresa Weedin in advance. Teresa can be reached at weedin@comcast.net. Teresa will provide additional details to participants.

All Ute Mountain Tribal Park Field Trip participants will need to sign the Colorado Archaeological Society Release, Waiver and Indemnity Agreement and possibly other legal waivers with the Ute Tribal Park.

**Rock Art Recording Project**
**Rio Grande Natural Area and Punche Valley Survey, Testing, and Rock Art Recording, San Luis Valley, Colorado**

**Two Rock Art Recording Sessions** - (Sub-sessions of the PAAC Summer Survey):
- Monday, July 10 - Friday July 14
- Saturday, July 22 – Tuesday, July 25

**Two PAAC Summer Survey Sessions:**
- July 8—July 15 (arrive on July 7)
- July 20—July 27 (arrive on the 19th).

In July, Paleo Cultural Resource Group (PCRG) will study a wide variety of sites located in and adjacent to the little-known Rio Grande Natural Area, a rugged and remote 33-mile stretch of the river immediately north of the New Mexico state line. The project will integrate pedestrian inventory with evaluative testing and rock art documentation. Volunteers will have an opportunity to participate in all phases of the work. No prior experience is required. A professional crew chief will train and assist Rock Art volunteers.

Focused rock art documentation will occur during two sub-sessions. The first will begin on Monday, July 10 and will continue through Friday, July 14. The second will begin on Saturday, July 22 and run through Tuesday, July 25. Rock art recording volunteers are asked to contribute at least three days to the project.

The project field camp will be located at the Forest Service’s Mogote Campground—Juniper Group Camp. The campground is approximately 14 miles west of Antonito, Colorado, on Highway 17, the Cumbres Pass Road.

The project is the first under a new partnership between PCRG and History Colorado’s Program for Avocational Archaeological Certification (PAAC). Major funding for the project comes from the Bureau of Land Management and the Sangre de Cristo National Heritage Area.

Volunteers who wanted to participate in a complete session would arrive the afternoon before work begins—that is, on the 9th or 21st respectively. We’ll be working full days (roughly 7:30 or 8 to 3:30 or 4), so people will need to arrive the evening prior to their first day for work.

Rock Art Volunteers could also participate in survey and site documentation as well, if they wanted to stay longer. We’ll handle sign-ups on a case-by-case basis.
To sign up contact Mark Mitchell at mark.mitchell@paleocultural.org.

Paleocultural Research Group. They have 20 years of experience leading volunteer archaeological projects. See the PCRG website for more information (www.paleocultural.org). This project will be held in conjunction with the PAAC Summer survey. See the PAAC website for additional information http://www.historycolorado.org/oahp/summer-training-survey

Rock Art & Archaeology Conferences
2017
Conferences are a great way to learn more about archaeology, see wonderful archaeological sites and a great way to meet others who share your interest. Avocational archaeologists are welcome at all of these conferences.

American Rock Art Research Association (ARARA) 2017 Conference
June 1–5, 2017 at Redmond, Oregon (near Bend)
Website: http://www.arara.org/conference.html

PLANS are underway for the ARARA 2017 Annual Conference to be held June 1–5. Redmond is just north of Bend, which is between the Willamette and Ochoco National Forests and is graced with the lovely Deschutes River. Jim Keyser is the area Chair, and he and his team have already met with many locals to plan for field trips. The field trip wish list has been drawn up with about 18 sites around Redmond and Bend. Sites include petroglyphs and pictographs in Columbia River Conventionalized and Columbia Plateau, Great Basin, North Oregon Rectilinear, and Yakima Polychrome styles. Our tentative field trips list includes Horsethief Lake, Cascadia Cave, Picture Gorge, Malheur Basin, Devils Pass, and Picture Rock Pass. The conference starts with two days of papers and is followed by field trips. A great way to keep up with Rock Art topics in the United States and North America.

Utah Rock Art Research Association
Fall 2017 – dates not announced on website
Website: http://www.utahrockart.org/
Papers and field trips on Utah Rock Art. Always a popular conference for Colorado Rock Art Members.

Colorado Archaeological Society (CAS) Annual Conference and Meeting
October 27-29, 2017 at History Colorado in Denver.
Website: http://www.coloradoarchaeology.org/BULLETINBOARD/bulletinboard.htm

Join Colorado Rock Art on Facebook
Friends who like Colorado Rock Art Association

Join us on our Facebook page “Friends Who Like Colorado Rock Art Association”. This is a closed group where you can feel comfortable sharing your Rock Art Photos with the group. From the Facebook application search for “Friends Who Like Colorado Rock Art Association.”
Cave Art Provides a Confirmation of a Hybrid Bison Species in Paleolithic Europe

By Peter Faris

Male European bison, Poland. Rafal Kowalczyk

From time to time we hear discussion of the possibility of using cave paintings and other rock art to add to scientific knowledge by identifying animals by species for a given time period and/or location. We now may have an example of just that. Writing in Smithsonian.com of October 19, 2016, Jason Daley reported on a paper from Science by Jessica Boddy that announces that genetic testing, confirmed by cave art, has discovered an unknown species of European bison. Named the "Higgs Bison", a tongue-in-cheek reference to the Higgs Boson particle only recently detected by physicists after a 50-year search.
First detected when a team at the Australian Centre for Ancient DNA at the University of Adelaide, led by Alan Cooper, began sequencing DNA from ancient European bison looking for past impacts of climate change. The DNA from many of the bones had a different genetic makeup to anything they had previously known, which looked to them like a new species.

"The researchers dubbed the creature Bison-X and Higgs Bison. Further examination of the DNA showed that this new animal was actually a hybrid between the steppe bison and the aurochs, a species of wild cattle.
believed to be the ancestor of modern cows. Beyond that, the researchers knew very little about the animal including what it looked like.” (Daley 2016)

"Cooper contacted French cave researchers to see if the animal might have been captured by the hunters who decorated the caves of Lascaux and Pergouset. And indeed there was a record of this creature." (Daley 2016)

They found that images of cave bison which could be dated to between 18,000 to 22,000 years ago clearly depict the steppe bison with its long horns and stout forequarters. However images from 5,000 years later show a creature without such a barrel chest and thinner horns. Researchers of cave art had previously assumed that the differences were ones of style and regional variation in portrayals.

Researchers believe that the shift in dominant types was likely due to the periodic changing climates in the Paleolithic period. "Cooper and his colleagues traced the Higgs Bison back over 120,000 years using DNA from fossil bones from Europe, the Urals and the Caucasus Mountains, according to a press release. During warm spells, the steppe bison was the dominant bovine in western Eurasia. During cold spells, the fossil record suggests that the hybrid animals did better. While the steppe bison eventually went extinct, Higgs Bison survived and is the ancient ancestor of modern European bison." (Daley 2016)
"Once formed, the new hybrid species seems to have successfully carved out a niche on the landscape, and kept to itself genetically,' Cooper says in the press release. 'It dominated during colder tundra-like periods, without the warm summers, and was the largest European species to survive the megafaunal extinctions.'" (Daley 2016)

One contributing factor in the large difference observed in the genome of the Higgs Bison compared to the European Bison is that the modern European Bison went through a genetic bottleneck. During the 1920s the population declined to only 12 animals so the genome looks quite different from its ancient ancestors. (Daley 2016)

With the origin of the hybrid bison traced back to approximately 120,000 years we now have to wonder if the North American bison also carries the genetic markers of the hybrid species. There would have been plenty of opportunity for them to enter North America across Beringia. Careful analysis of North American rock art and genetic testing of Bison bison DNA could reveal new information as well.


Wisent, Higgs bison. Public Domain

(Read the whole story at: http://www.smithsonianmag.com/smart-news/how-cave-art-helped-dig-new-animal-species-180960833/#lclx3TozUKrd8Hah.99)

REFERENCE:

Daley, Jason
2016 Cave Paintings Help Unravel the Mystery of the 'Higgs Bison',

Peter Faris is a 30+ year member of the Colorado Archaeological Society, Founder and former President of the Colorado Rock Art Association, Member of the Arapahoe County Cultural Commission, President of Institute for Archeoesthetics. 2013 recipient of the Ivol Hagar Award for outstanding service to the Colorado Archaeological Society, and a 2013 Colorado Rock Art Association Chapter Achievement Award. Member of Archaeology and Historic Preservation Committee and also Programs Committee of History Colorado. Arapahoe County Cultural Council. He writes a regular blog on Rock Art at http://rockartblog.blogspot.com.
New Rock Art Book – *The White Shaman Mural: An Enduring Creation Narrative in the Rock art of the Lower Pecos*

**Author: Carolyn E. Boyd**

The prehistoric hunter-gatherers of the Lower Pecos Canyonlands of Texas and Coahuila, Mexico, created some of the most spectacularly complex, colorful, extensive, and enduring rock art of the ancient world. Perhaps the greatest of these masterpieces is the White Shaman mural, an intricate painting that spans some twenty-six feet in length and thirteen feet in height on the wall of a shallow cave overlooking the Pecos River. In *The White Shaman Mural*, Carolyn E. Boyd takes us on a journey of discovery as she builds a convincing case that the mural tells a story of the birth of the sun and the beginning of time—making it possibly the oldest pictorial creation narrative in North America.

Unlike previous scholars who have viewed Pecos rock art as random and indecipherable, Boyd demonstrates that the White Shaman mural was intentionally composed as a visual narrative, using a graphic vocabulary of images to communicate multiple levels of meaning and function. Drawing on twenty-five years of archaeological research and analysis, as well as insights from ethnohistory and art history, Boyd identifies patterns in the imagery that equate, in stunning detail, to the mythologies of Uto-Aztecan-speaking peoples, including the ancient Aztec and the present-day Huichol. This paradigm-shifting identification of core Mesoamerican beliefs in the Pecos rock art reveals that a shared ideological universe was already firmly established among foragers living in the Lower Pecos region as long as four thousand years ago. (from Amazon.com)

This books is available directly from Shumla Archaeological Research & Education Center at [https://shumla.org/book-order/](https://shumla.org/book-order/) or amazon.com

**Upcoming CRAA Board Meetings**

**Spring 2017**

We welcome member participation at our board meetings. If you want to join us, just let us know at coloradorockartassociation@yahoo.com and we will send you the details. Even better consider joining us on one of the open board positions.

Monday, March 27 at 8:30 pm to 9:30 pm - conference call  
Monday, April 24 at 8:30 pm - 8:30 pm to 9:30 pm - conference call  
Saturday, May 13 at 1:30 pm to 5:00 pm - In person meeting in Denver. Location TBD.
# CRAA Officers & Board Members

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If you hear of any events or projects relating to rock art, please pass them along to us at coloradorockartassociation@yahoo.com. We will get the information out to CRAA members.