

May 2023 CHIPETA CHAPTER OF THE COLORADO ARCHAEOLOGICAL SOCIETY Volume 40 Issue 5

Mark Your Calendar

May 3: Montrose Historical Society monthly meeting with Nicki Inman of the Dominguez Archaeological Research Group, on the "Murder Ditch." Rooms 1 and 2 of the Montrose County Events Center, 7:00 pm.

May 10: San Juan Basin Archaeological Society monthly meeting with Mona Charles of the Animas Museum on pottery analysis at Old Fort Lewis. Lyceum, Center of Southwest Studies, Fort Lewis College. 7:00 pm. This meeting will be available on Zoom.

May 17: Chipeta Chapter monthly meeting with Rory Tyler on Moab's ancient astronomers (*right*). United Methodist Church, Park Avenue and South 1st Street, 7:00 pm.

July 19: Chipeta Chapter picnic! Save the date!



Our May Presentation Rescheduled from February

Moab's Ancient Astronomers

For nearly thirty years, Rory Tyler has been examining rock art in the Moab area for astronomical markers such as equinoxes and solstices, and finding them. This talk is an in-depth look at four of those sites, including the Solstice Snake, which he decoded in 1997. These sites are mostly of Basketmaker provenance but there are some Archaic markers as well. Rory hopes to draw more attention to the Basketmaker culture and to introduce some new interpretive tools he has developed for those interested in finding astronomical sites on their own.



Photo courtesy of Rory Tyler



Our May Speaker: Rory Tyler

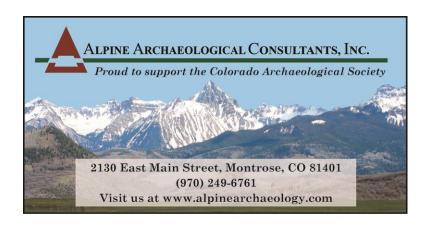
Property of the control of the Sun Dagger there, which piqued his interest in ancient astronomy.

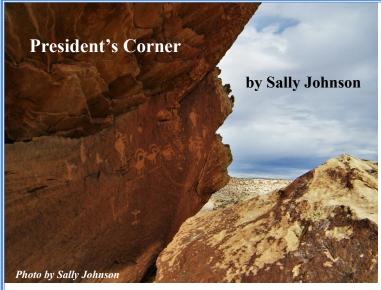
In 1993 he moved to Moab, Utah and began visiting rock art sites as part of his normal hiking regime. In March 1994 he went with two friends to a giant snake petroglyph in the Behind the Rocks Wilderness to see if it was an equinox marker. It wasn't. But, on his subsequent 200+ site visits he identified other astronomical markers there and, in the summer of 1997

identified the Snake as a solstice site. Over 100 people a year now take the long, hot hike to see the Solstice Snake every summer.

In nearly 30 years of observation, he has identified three other major astronomical sites in the Moab area and several minor sites. They are mostly of Basket-maker provenance though there is some Archaic astronomy, too. In his presentation Rory examines these sites in detail, introducing some original techniques for identifying astronomical markers at these rock art panels and ancient native structures. He is still discovering new astronomical markers and has begun to train a cadre of Moab locals in this activity. Rory is also a cowboy poet.

The Uncompahgre Journal
Published 9 times annually
by the
Chipeta Chapter
of the
Colorado Archaeological Society.
P.O. Box 593
Montrose, CO 81402
Submissions for publication
may be emailed to:
Dave Batten, david.batten@enmu.edu





Happy May Day and National Archaeology and Historic Preservation Month! I want to thank Russ Barr for all the wonderful work on the trails at Shavano Valley Historical Site. I hope everyone who made it to the field trip at the Shavano site enjoyed this special place. Hopefully, it will stay cool enough for some day trips and not jump straight into the summer heat.

I do want to bring up the summer gathering on July 19th, so save the date. We will be providing chicken as the main meal, so as it gets closer I will be sending out the poster and getting RSVPs. This is always a great time to visit with other members. We still need to hear from the membership about changing the meeting time to 6:00 pm instead of 7:00 pm. Please let us know how you feel about the

time change. Just remember we do not meet in the summer months for a speaker (June to August) and we gather again for monthly speakers starting in September.

Here's a quick update from the CAS Education and Outreach committee. They have been busy adding an event calendar for all chapters to spread the word about special events or virtual speakers. They are also looking for members for this committee. The good news is they meet via Zoom once a month usually on a Thursday afternoon. They would like to get some activities for International Archaeology Month next October. As a reminder, you can catch up on all the state information through their publications: the *Surveyor* or *Southwest Lore*. I will also be glad to send any information or links, just let me know if you would like the information.

If you do go to a special area and would like to share photos with a small article we would be glad to include them in the monthly journal. Since I am back at work at the museum full time, I might be heading to Utah on Memorial Day weekend, so let me know if you would like to go visit some sites and what area. Remember, if you do see someone enjoying an area it is a great time to share your views on site etiquette, especially during this month.

Last but not least, I would like to welcome all the old (renewing) and new members to Chipeta.



From Leigh Ann Hunt

Field Trips: There is the May 1 field trip to Shavano Valley. The No Thoroughfare field trip scheduled for April 25 was cancelled due to rain, and it will be rescheduled and announced.

Site Stewards: please continue to visit your sites and keep the resulting notes until we call for them in late summer.



To my Friends and Colleagues

Hi everyone, it's Susan Henderson—Chipeta Chapter secretary, in case you don't know me personally. I'm reaching out because a thing happened--life happened. And I'm looking for options. Here's the story.

Imagine a routine blood test revealing an asymptomatic kidney disorder. At that moment polycystic kidney disease had no meaning to me until the doctors told me, "You need a kidney transplant and very soon." The news was unbelievable to me, I knew what the words meant, but until I could process them with my beloved Fred, I could not understand what I had been told.

After a professional career in public education helping the next generations, I was easing into retirement with Fred and looking forward to traveling, exploring archeology sites and enjoying each other's company. Now, we face together the disease which has no symptoms, as it silently intrudes into every aspect of our lives.

If I do not find a donor, the prognosis is that I shall be on dialysis by the end of the year. Polycystic kidney disease is terminal – and also genetic. Blood-relatives are ineligible for kidney donation.

What I am asking for is almost too much to ask. Except I have to ask, because I love my life, and I'm not ready to leave it. And kidney donors go on to live full, normal lives! I am asking for someone to donate a kidney in my name. These are the facts for a prospective donor:

- No match is necessary.
- My insurance will pay the donor's expenses.
- Donor continues a normal long life with one kidney.
- The surgery is done laparoscopically, meaning through tiny incisions.
- Recovery time for the donor is generally 2 weeks.
- More information can be found at: Kidney.org/transplantation/living donors.
- Contact Susan's transplant team at: uchealthlivingdonor.org

Thank you for taking the time to read this. I am full of gratitude for my life, my people, and the possible opportunity to enjoy more of it all. Blessings and love!

From the Editor

Monks live a contemplative life, they say. In Europe, monks in the early days spent a lot of time copying books by hand. Recently, a copy of a lost document by some Greek sage was discovered under a less interesting medieval document. Parchment was so valuable that monks would frequently scrape off the writing in one book in order to copy another book. I guess they didn't know how much more important the first book would end up being than the second book.

That wasn't the only way that monks passed the time. Many made the effort to watch the night skies and record celestial events, providing data for the religious calendar as well as insight into the future. Monks were particularly interested in the color of the moon during total lunar eclipses, in part because of the Bible's association of a blood moon with the onset of the end times.

Paleoclimatologist Sébastien Guillet and colleagues turned to these first-hand descriptions to evaluate volcanic activity during the High Medieval Period (1100-1300 CE) leading up to the Little Ice Age. Very large and powerful volcanic eruptions send dust and ash high into the atmosphere, and this can cool the earth for many months. Guillet's team wanted to evaluate the role volcanoes may have played in the onset of cooling in the fourteenth century, and they reasoned that the monks' records of the color of lunar eclipses would help to narrow down the timing and to identify the most powerful medieval eruptions.

Dust, particles, and chemical compounds from only the most powerful eruptions make it into the stratosphere. As I understand it, these particles result in a dark veil around the earth that prevents the sun's light from getting past the earth to the moon. This makes the moon look quite dark during a total lunar eclipse. If particulates are restricted mostly to the troposphere, below the stratosphere, the moon would have a reddish hue (blood moon).

Until this study, the most accurate dating for eruptions was from ice cores. After eruptions, the particles that were once in the atmosphere rain down on the planet and are incorporated into each year's snow layer in places such as Greenland and Antarctica. The dates of each layer in the ice core can be simply counted (tediously, I imagine) from the present, as each layer will have early season and late season boundaries. These boundaries are variable in strength, however, with some years perhaps merging into one another, so that mistakes can be made in counting.

Total lunar eclipses can be dated exactly, though mysteriously to me, through precise astronomical calculations (and of course the slightly imprecise calendar dates recorded by the monks). By referencing observations from more modern eruptions and lunar eclip-

ses, the timing of an eruption prior to a very dark lunar eclipse could be narrowed to between three and twenty months. Though this might seem somewhat inaccurate to us, it is apparently an improvement over the ice core margins of error.

As Guillet put it in an interview, the fascinating part of this work is the synthesis of ancient knowledge and record-keeping with modern technical sophistication. The creative use of proxies always catches my attention, so using the color of the moon as a proxy for measurements of the intensity of volcanic eruptions is very cool.

References

Choi, Charles Q.

2023 Medieval lunar eclipse observations show how volcanoes affect Earth's climate. Space.com, April 5, 2023.

Guillet, S., Corona, C., Oppenheimer, C. et al.

2023 Lunar eclipses illuminate timing and climate impact of medieval volcanism. *Nature* **616**, 90–95. https://doi.org/10.1038/s41586-023-05751-z.







Chipeta Chapter

Colorado Archaeological Society P.O. Box 593



	Montrose, Colorado 81402	The Social Socia
	Membership Application	
Date:		
		Photos by Dennis DeVore
	;:	
City:	State: Zip:	
Telephone:		25 TME 3
Email:		
(email required	to receive Chipeta Chapter newsletters & field trip info)	
Check One: New Renewal	Annual Dues* (includes state CAS dues): Check one Family (2 or more members same household)\$40 Individual\$35 Student (Circle if Individual or Family)\$25 Secondary (Circle one) Individual (\$10) or Family (\$15) Opt out of printed Southwest Lore	
	*Southwest Lore is the journal of the Colorado Archaeological Soc mailed quarterly, and a .pdf is posted to Member365 for downlow Code of Ethics	
uphold local, state, and fede Respect the property rights o	f landowners.	

- Support only scientifically and legally conducted archaeological activities.
- Conduct field and/or laboratory activities using professionally accepted standards.
- Not condone the sale, exchange, or purchase of artifacts obtained from illegal activities.
- Be sensitive to the cultural histories and spiritual practices of groups that are the subject of archaeological investigation.
- Accept the responsibility, if serving as principal investigator, to publish the results and make the collection available for further study.

Signature:	Other Family Signature:	

Make checks payable to "Colorado Archaeological Society" and mail the signed application to:

CHIPETA CHAPTER BOARD MEMBERS

- President: Sally Johnson, president@chipetachaptercas.org
- Vice Pres: Leigh Ann Hunt, vp@chipetachaptercas.org
- Secretary: Susan Henderson, secretary@chipetachaptercas.org
- Treasurer: Jim Douras, treasurer@chipetachaptercas.org
- CAS Rep: Nick Ard, <u>casrep@chipetachaptercas.org</u>

STANDING COMMITTEES

- Newsletter: Dave Batten, editor@chipetachaptercas.org
- Membership: Sally Johnson, membership@chipetachaptercas.org
- Site Steward Coordinator (acting): Leigh Ann Hunt, sitestewards@chipetachaptercas.org
- Library: Linda Manske, <u>library@chipetachaptercas.org</u>

OTHER COMMITTEES AND POSTS

• **Scholarship:** Jon Horn / Bill Harris / Fred Henderson, scholarships@chipetachaptercas.org

CHIPETA CHAPTER WEBSITE

• https://www.chipetachaptercas.org

TO JOIN OR RENEW:

• Go to the Chipeta Chapter website and follow the membership links.

Want More?

Archaeology Southwest is a great link to find out about current issues and events relating to Southwest Archaeology.

Field Trip Committee

Leigh Ann Hunt, Joe Oglesby, and George Decker

For more information on upcoming field trips and to sign up, please contact the Field Trip Leader

Masthead photo courtesy of Carol Patterson. All other unattributed photos are by the editor.

Program for Avocational Archaeological Certification (PAAC)

The PAAC program is currently being revamped. There is no timeline on when it might be restarted, but if it happens, we'll be sure to notify you.

Future Speakers

We will have no meetings during June, July, and August, but will resume in September. At the moment we have no speaker scheduled for September.