



The Uncompahgre Journal

February 2020 CHIPETA CHAPTER OF THE COLORADO ARCHAEOLOGICAL SOCIETY Volume 37 Issue 2

Mark Your Calendar

Feb 4: [Hisatsinom Chapter](#) monthly meeting with Tim Kearns on Basket-makers in the Chuska mtns. First United Methodist Church, 515 N. Park Street, Cortez, 7:00 pm.

Feb 5: [Montrose Historical Society](#) monthly meeting, program to be announced. Pioneer Room, Friendship Hall, Fairgrounds, 7:00 pm.

Feb 10: [CAS-GJ](#) monthly meeting with Fred Blackburn on historic inscriptions on the walls and ceilings of Aztec Ruins. Redlands United Methodist Church, 527 Village Way, GJ, 6:30 pm.

Feb 12: [SJBAS](#) monthly meeting with Kellam Throgmorton on the nature of social groups at the Basketmaker-Pueblo transition. Lyceum at Center of Southwest Studies at Fort Lewis College, Durango, 7:00 pm.

Feb 19: Chipeta Chapter monthly meeting with Jake Adams on Projectile Point Experiments (*right*). United Methodist Church, S 1st and Park Avenue, Montrose, 7:00 pm.

Feb 22: Red Mountain Mining District Snowshoe Tour, \$30. The trip is currently full, but they are putting people's names on a waiting list. See [UWP](#).

May 20: *Save the date*. To celebrate Archaeology and Historic Preservation Month, Sally Cole, renowned rock art researcher, will be presenting at the Chipeta monthly meeting. The venue will be the Ute Indian Museum. Topic to be announced.

Our February Presentation

Projectile Point Experiments: A Case Study from Early Alaska

by Jake Adams

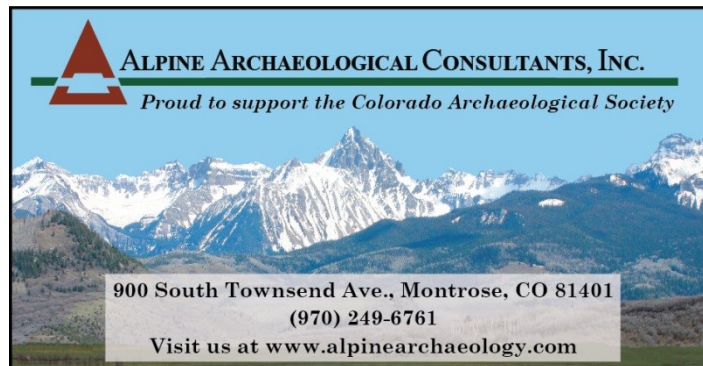
Early inhabitants of Alaska—approximately 14,000 years ago—manufactured and used two diverse types of projectile points, one stone and one bone with stone insets, creating a great deal of debate in the archaeological literature. Did these points represent different cultural groups on the landscape, or were they used for certain tasks (e.g., prey type, propulsion mechanism, seasonality)? One hypothesis is that cold temperatures impacted the points differently, with stone being more brittle when exposed to the extreme temperatures encountered in Alaska. To further test this an experiment was devised to understand the impacts temperature has on projectile point technology. Results produced from the experiment informed on the colonization of Alaska, avenues of decision-making concerning early Alaskan hunter-gatherers, and the way different raw materials were utilized on the landscape.



Our February Speaker: Jake Adams



Jake Adams is an archaeologist for the Grand Mesa, Uncompahgre and Gunnison National Forests in Delta, Colorado. His research interests include stone tool technology, hunter-gatherer lifeways, optimality models, and experimental archaeology. Adams completed a PhD at Washington State University in 2018 studying early projectile point technologies in Alaska through a multifaceted approach.



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Dave Batten, david.batten@enmu.edu

The Squint and Juanita Moore Scholarship

Created in honor of Chipeta Chapter founding member Carlyle “Squint” Moore and his wife, the scholarship is awarded each year to a deserving high school senior or college student intending to enroll or already enrolled in an Anthropology or Archaeology program. Students can apply online at collegeXpress—and note that the deadline is April 1.

The scholarship is managed by the Montrose Community Foundation. If you wish to donate, please send your tax deductible donations to the Montrose Community Foundation, PO Box 3020, Montrose, CO 81402.

Random Notes

By Bill Harris



There's not a lot to talk about this month. But I do want to let you know about a special speaker and venue that we have coming up in May for Archaeology and Historic Preservation Month. Our speaker for May will be the well-known southwestern rock art specialist, Sally Cole, and our meeting that month will be held at the Ute Indian Museum. You won't want to miss this, so mark your calendars for May 20th at Ute Indian Museum. Details TBA.

Report on the First Quarter CAS Meeting, January 25, 2020

Denver, Colorado

Contributed by Nick Ard

The morning session was taken up with a discussion of the Board Retreat Meeting last October and the various committee meetings. Karen Kinnear, Executive Secretary, announced that the Colorado Council of Professional Archaeologists will hold their annual meeting in early March. History Colorado will award several grants of which two will be for archaeology.

Michele Giometti's treasurer report provided an overview of CAS's current status. We have about \$12,300 in cash along with \$23,000 in savings and liabilities of \$2,767.

Notes on future meetings included the April meeting in North Colorado Springs. Hisatsinom Chapter gauged interest in an Edge of the Cedars field trip during their July meeting, and the Annual meeting was scheduled for the weekend of September 25-26 in Longmont. Despite losing the San Juan Chapter, CAS's memberships stood at 772 with 1070 actual members.

Alice Hamilton Scholarship applications are due on March 20th with the winner selected April 25th. Currently no suitable item for a raffle has been donated and there may not be a raffle again this year. Five PAAC classes have been held recently, four of which were well attended. The schedule for March through June has been sent to chapters (*see below*).

An appeal was made to chapters with identifiable outreach proposals for Project Archaeology to submit \$250 grant applications. Some years ago Chipeta obtained a grant to help with the funding of the Fort Crawford sign and a similar project could be presented for approval. Science Advisory committee reported the chapters participated in over 30 conservation projects during 2019 using 174 members with 6307 volunteer hours.

Southwestern Lore is now mostly digital but it is still being published as a hard copy for institutions and those members who prefer to receive a hard copy. Membership applications should designate if a hard copy is preferred. The editor of SWL reports that it is difficult to get articles for issues. Currently he has one submission for the next issue. Jason LaBelle will be the new editor. In other publication news, there should soon be a newsletter coming out every month. Two CAS Facebook pages currently exist with one reporting over 2,500 members.

The meeting closed with several attendees calling for the CAS web page to be dealt with immediately. The web site is, in some cases, several years out of date and that status reflects upon the society as a whole. A recommendation was made to decouple the website from the membership function so the web site could be taken off line and rebuilt. The proposed budget for 2020 called for SWL receiving \$10,000 and the website \$1,000. One dollar per member will be designated for the Alice Hamilton Fund.

Finally, Ray Sumner was confirmed as Publicity Committee Chair.



2020 CHIPETA CHAPTER FIELD TRIPS

Date	Location	Info	Leader(s)
Week of Feb. 10 (TBA)	MUSEUM of the West, Grand Junction	Half day. When was the last time you toured the museum? Behind the scenes look at collections including the Barlow Homestead excavated by Chipeta . Morning tour followed by lunch together downtown.	Leigh Ann Hunt
February 25 (Tues)	Little Park area	One day. Meet at the City Market in Orchard Mesa at 9:00 a.m.	George Decker
March TBA*	Gunnison Rim eagle traps and Delta Power line site recording	One day. Help Leigh Ann find a certain eagle trap site and then gather field data to record the Powerline Site rock shelter	Leigh Ann
Early April	Roc Creek panel	One day . Short hike.	Russ Barr
April 20-23 (M-TH)	NORTHERN CHACO ROADS AND RUINS	Overnight trip camping /motel. Visit Chaco road segments, great kivas, and Red Knobs ruin out of Blanding, Utah; next day , see road segments and pueblos near Lawry Pueblo in Canyon of the Ancients with BLM guide.	Leigh Ann
April or May TBA	Roatcap, Cushman panel and other sites near Montrose	One day.	Bill Harris & site stewards
May 18-19 (mon-tues)	Hanksville Area	Overnight. Petroglyphs. Camp at Goblin valley or motel in Green River.	Dennis Devore
Early June TBA, or maybe late September	Rainbow Park in Dinosaur, and Browns Park	Multi-day. Outlaws, medicine wheel? and Vernal style petroglyphs.	Joe Oglesby and Leigh Ann Hunt
Late June	Ouray County Museum, and Neosho Mine hike	One day. Visit the museum and hike to Neosho Mine ("laundry" cabin) outside Ouray.	Leigh Ann
July TBA	Monarch Pass game drives	One day, onemile hike, has commitment to guide from RGNF archaeologist.	Joe Oglesby and Cat
August TBA **TENTATIVE	Survey near Los Pinos Pass, Gunnison NF	Survey/hike on a plateau with high artifact density, lithics (if we can get it arranged in time).	Leigh Ann
September	Price River Canyon, UT Rock Art	One day, drive and walk. Several panels.	Leigh Ann and Joe Oglesby
October 8-10	West End & Paradox	Multi-day. Camp out at Uravan.	Bill Harris

* DEPENDING ON THE WEATHER. To Be Announced. Watch for detailed Field Trip announcement in your email.

** This list has our goals and dates. As our plans get solidified we will send out specific information on how to sign up and final details. Please ask if you have questions now; it will help us plan.

From the Editor

Nixtamalization. What do you think of when you see that word? It sounds to me like an optimal way of nixing somebody or something. I've known about the process a long time, but I never heard the word until a few weeks ago. It comes from a Nahuatl word referring to the process of breaking down the cell walls of maize kernels in order to get all of the available nutrition out of them. In the limestone rich Mesoamerican area, the grain was soaked in and then cooked with a calcium hydroxide solution (which can be processed from limestone). In the eastern US, lye from tree ash was used. Why nixtamalize? If your diet is composed largely of maize and you haven't learned the super-secret processing method, you will be likely to get sick from Niacin deficiency, and suffer from something called pellagra, which is not a pleasant thing. If you, for example, lived entirely on corn chips (and who among us hasn't considered that possibility?), you would want to check the label on the bag to see if it says "Processed with lime." If it does, you will probably not get pellagra. You might have some other health problems, though.

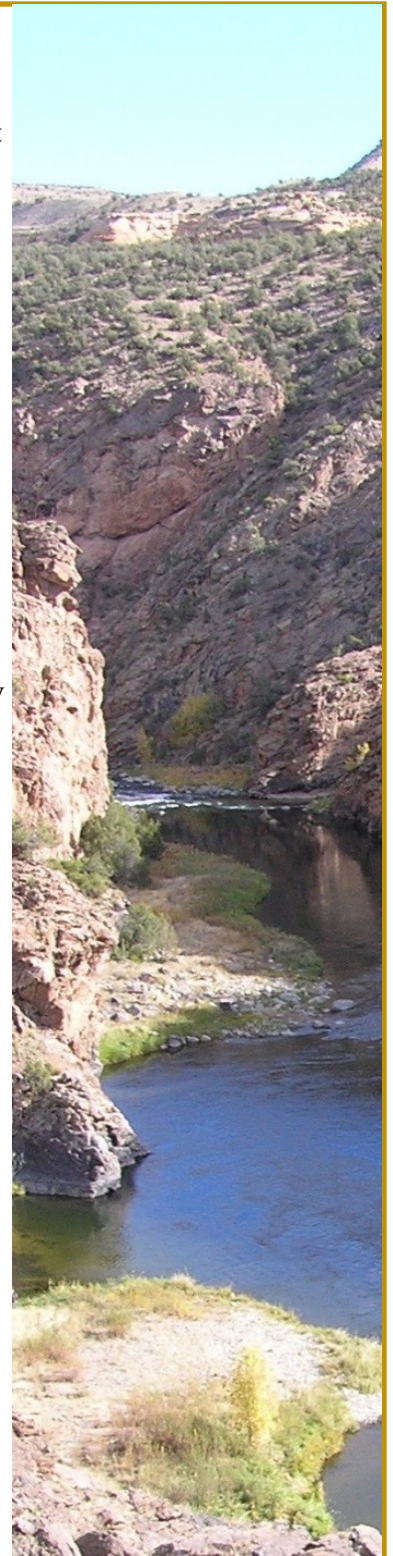
The native populations of the Americas learned fairly quickly how to properly process maize. If they hadn't, it is doubtful that maize would have become the major source of calories for such a large area of the Americas. But we don't really know how early nixtamalization was developed. Until now, no one really could identify the process in the archaeological record. Like most things archaeological, there were indicators, or proxies, that we could use to conclude that a given population knew of the technique. For example, since the arrival of the Spanish, it has been known that native people in Mesoamerica ground the grain after nixtamalization to produce a flour called masa, used for tortillas. If you find the flat ceramic griddle (*comal*) used to fry tortillas, you might conclude that the population was indeed processing maize with lime, but it was hard to know for sure.

A new study addresses that problem by experimentally breaking down maize—nixtamalizing it—and then examining the starch grains resulting from the process. It's rather remarkable, but starch grains can last a long time, and they recognizably differ according to the species of plant that produced them. In the last 20 years, analyses of starch grains recovered from ground stone tools and pottery have pushed back the age of domestication of maize. So it made sense to study starch grains before and after nixtamalization to determine whether the processed grains could be clearly distinguished from uncooked or differently cooked grains. It turns out they could. The starch grains in the outer portions of the corn kernels show quite distinct changes caused by the interaction of the starch, calcium, and water. Experimental nixtamalization resulted in a starchy/limey film or sludge adhering to the cooking pot at the surface of the simmering solution. This sludge would have penetrated the porous pottery used for cooking. It hasn't been done yet, but it should be possible to recover these grains from pottery, and even from the ground where processing has occurred.

There are a number of questions that could be answered if this new study leads to widespread identification of starch grains from nixtamalization. Did the tortilla-cooking tools develop with the nixtamalization process? Even more importantly, how long did it take for maize to become the dominant part of the Mesoamerican diet? It will also perhaps become possible to determine whether the cooking recipe accompanied the grain in its expansion to the American Southwest and Southeast.

Johnson, Emily S., and John M. Marston

2020 "The experimental identification of nixtamalized maize through starch spherulites." *Journal of Archaeological Science* 113 (January). <https://www.sciencedirect.com/journal/journal-of-archaeological-science/vol/113/suppl/C>, accessed 1/31/2020.



President's Corner

by Sally Johnson

Photo by Sally Johnson

It is that time of year for the state CAS annual scholarship announcement asking for applicants. If you know someone that could apply for the Alice Hamilton Scholarship, please have them go to the state CAS website for more information, or contact me and I could send the information to them. The deadline is March 20.

At this time, we have 125 members in the chapter, and we are still the largest in the state. This year the Chipeta Board has decided to share our financial report in the newsletter (*below*), and you will also find in this issue a draft of planned field trips and dates. There will be plenty of room to add a trip if you would like to lead one. There are also scheduled PAAC classes included in the newsletter (*below*). Dave Upchurch is going to add another

class on perishables, but the date has not been set yet. If you are interested in attending one of these courses, please check out the History Colorado website for more information.

Thanks for all the support to the chapter and if there is a subject or speaker you would like to hear more about please let us know.

Chipeta Chapter – CAS Annual Treasurer Report: 2019

by Jim Douras MBA, CPA (inactive)
Treasurer

The chapter has had a successful 2019 financially. Income for the year was \$2,995.50; member dues income was aided by \$894 from donations, the silent auction at the Christmas Party, and the cash midden.

Expenses for the year totaled \$1,833.15, leaving a cash surplus for the year of \$1,162.35. Our speakers this year were mostly from in-state, which resulted in lower travel and lodging costs than in some prior years.

The chapter ended the year with a robust balance in the bank of \$8,251. The board is considering ideas for projects that would utilize some of these funds; contributing to the scholarship fund, and signage and trail work at some of the local archaeology sites are under consideration.

I would be pleased to answer any questions.

PAAC Course Schedule

Grand Junction (CAS-GJ Hosting)
Lab Techniques
March 13-16

Alamosa/San Luis Valley (Fort Garland Hosting)
Lithics
March 27-29

Cortez/Dolores (Hisatsinom Hosting)
Lithics
April 3-6

Boulder (Indian Peaks Hosting)
Geophysics
May 1-4

Durango (San Juan Basin Hosting)
Ceramic Description and Analysis
May 15-18

South Park/Fairplay (Site Stewards Hosting)
Colorado Archaeology
May 29-31

Chipeta Chapter
Colorado Archaeological Society
P.O. Box 593
Montrose, Colorado 81402



Membership Application

Date: _____

Name: _____

Street or RR Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____

Email: _____

(email required to receive Chipeta & CAS 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

☐ Senior/Disabled** (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 Society: print copies are mailed quarterly to all members except seniors, who receive electronic (PDF) copies.

****Senior** is any person who is at least 65 years of age; **Disabled** is any person who is permanently disabled.

Photos by Dennis DeVore



Code of Ethics

As a member of the Colorado Archaeological Society, I pledge to:

- Uphold local, state, and federal antiquities laws.
- Respect the property rights of landowners.
- Report vandalism to appropriate authorities.
- 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
P.O. Box 593, Montrose, CO 81401

CHIPETA CHAPTER BOARD MEMBERS

- **President:** Sally Johnson, sjcas1@gmail.com
- **Vice Pres:** Leigh Ann Hunt, lahunt970@gmail.com
- **Secretary:** Annette Butts, annettebutts63@gmail.com
- **Treasurer:** Jim Douras, mtncpa@gmail.com
- **CAS Rep:** open

STANDING COMMITTEES

- **Newsletter:** Dave Batten, david.batten@enmu.edu
- **Membership:** Sally Johnson, sjcas1@gmail.com
- **BLM Liason:** Bill Harris, trlgpa48@gmail.com
- **Library:** Linda Manske, manske46@gmail.com

OTHER COMMITTEES AND POSTS

- **Scholarship:** Jon Horn / Bill Harris/ Fred Henderson, trlgpa48@gmail.com

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.

Chipeta March Speaker

Zeb Miracle

Gateway and Unaweep, Part 2

Program for Avocational Archaeological Certification (PAAC)

March 13-16: Lab Techniques
Grand Junction (CAS-GJ Hosting)

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Assistant State Archaeologist/
303-866-4671

Dave Upchurch

PAAC Coordinator
uphill1354@gmail.com

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.