Bison Underground

by Dr. Lawrence Loendorf

Hunting and gathering groups around the world, from ancient to modern times, believed in a multi-layer universe with the underground as an important component of the world. In many cultures, it was from the underground that the animals emerged, including bison, the topic of this presentation. Bison inhabiting underground homes is a concept that is especially prevalent among the Hidatsa, Crow and other Siouan-speaking groups who engaged in various practices to encourage the bison to come out to the terrestrial world. These practices involved making rock art images of bison but equally significant, they included placing bison bones in caves, some arranged with the skulls around the outer walls. Plains Indians also made replicas of bison out of stone, some small and others large with the eyes, horns and ribs of the bison represented. At one site, they carved the ribs of a bison on the interior of a cave. At many sites there is an obvious emphasis on birthing bison from the earth.

Dr. Loendorf will present evidence that supports the Siouan practice of placating the bison with stone replicas and of honoring their underground homes with rock art and other features. Loendorf has been associated with Crow Indians for more than 40 years, and many of his ideas come from visits to sites with Crow, Hidatsa and Sioux Indians.
This Month’s Speaker: Dr. Lawrence Loendorf

Larry Loendorf grew up in Montana, received a Ph.D. in Anthropology and Archaeology from the University of Missouri and taught at the University of North Dakota for 21 years and then at New Mexico State University for 12 years. He currently coordinates Sacred Sites Research Inc., a non-profit organization that is dedicated to protecting American Indian traditional properties. He is the author of numerous books on rock art and the people who made it, especially on the Great Plains and in the northern mountains. His current research is directed toward the rock art at the Hole in the Wall Ranch, Wyoming. For the past three years he has cooperated with the University of Wyoming Archaeology Field School and the Wyoming State Historic Preservation Office to record sites and report sites. This work has included consultation with Native Americans.

The Squint and Juanita Moore Scholarship

We’d like to congratulate this year’s recipient:

Jessica Weinmeister

Jessica is a junior at Western State University in Gunnison.

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.

Archaeology and Historic Preservation Month Tour of Shavano Valley Rock Art

Please join us for a free tour of the Shavano Valley Rock Art Site on Saturday, May 11. Start at the Ute museum at 9:00 to 10:00 am for a special screening of “In the Footsteps of Shavano” about the Shavano Valley Petroglyphs and their meaning to modern Ute people. Then drive to the rock art site, which will be open for self-guided tours from 10:00 am to 12:00 pm with docents to share information. Your tour will take one to two hours. These are free events, and no reservation is required. Be sure to bring water and sunscreen and wear sturdy shoes for the rocky trail. This event is hosted by the Chipeta Chapter of the Colorado Archaeological Society, the Ute Museum, and the Montrose County Historical Society. For more information please call Sally at 249-2085.
The Squint and Juanita Moore Scholarship

by Bill Harris

The 2019 recipient of the Juanita and Squint Moore Scholarship Fund is Jessica Weinmeister. She is a junior attending Western State University in Gunnison, Colorado. She’s majoring in Anthropology, serves as a teaching assistant, and is a member of Lambda Alpha, an anthropology honor society. Once she graduates in 2020, she plans to attend graduate school, then return to the 4-Corners area to work as a field archaeologist. She will use her scholarship to defray the cost of attending a field school this summer in Belize.

The Moore Scholarship Fund was set up in 2004 and started awarding a scholarship to students who are majoring in archaeology or anthropology from western Colorado in 2005. The initial scholarship amount was $250 but has been increased to $750 as the endowment has grown.

Squint (Carlyle) Moore and his sister Ruth were early-day avocational archaeologists who made a major contribution to western Colorado archaeology. They helped shape the course of regional archaeology by working with early-day archaeologists Harold Huscher, Betty Holmes, Marie Wormington, and Bill Buckles. Squint was a charter member of the Chipeta Chapter of CAS, established in 1935, months after the Colorado Archaeological Society (CAS) was formed in Gunnison, Colorado. He and his wife Juanita remained active in the chapter until just a few years before his passing in 2006. Juanita now lives in Montrose.

Squint and Juanita ran a family farm and raised their children along Coal Creek, northwest of Montrose, until their retirement. Squint’s knowledge of local sites was legendary. Prior to his death, Squint, along with members of the Chipeta Chapter, visited many of the sites he had discovered over the years in an effort that became known as the “Squint Patrol.”

The Squint and Juanita Moore Scholarship was established to recognize and honor their contributions to the Chipeta Chapter and western Colorado archaeology.

Colorado Archaeological Society Annual Meeting and Conference

The Pueblo Chapter will host (see below). Registration forms should be available soon.

Save the Date

The Pueblo Archaeological & Historical Society
Is Hosting the CAS Annual Conference
October 11-13, 2019
At Pueblo Community College

Keynote: Charles M. Musiba, Ph.D

Dr. Musiba is an associate professor of anthropology at the University of Colorado, Denver and a research associate professor in evolutionary studies at the University of Witwatersrand, Johannesburg. In addition to his university research and teaching work, Dr. Musiba is vice-chair of the non-profit Africa School Assistance Project, has consulted with the Ngorongoro Conservation Area Authority on the construction of local museums, collaborates with Saint Augutine University of Tanzania in the development of their graduate program, and works with UNESCO World Heritage Center in efforts to conserve World Heritage Sites of paleoanthropological significance.

Intriguing Field Trips, Interesting Speakers, and Eye-Popping Green Chili
Highlights from the John Seebach presentation in April
by Leigh Ann Hunt

At the April meeting, Dr. John Seebach from CMU in Grand Junction presented a sweeping survey of the latest research on the "peopling" of the New World. He discussed a number of different avenues of research, especially mitochondrial DNA studies, obsidian material source tracing across different regions containing Paleoindian artifacts, and a few others. A few points that stand out in the many examples he shared:

- The DNA research from both ancient skeletons and people living today suggests that there were at least two major migrations from Asia. However, there is no genetic contribution from European peoples before recent times, so the Solutrean/Atlantic migration theory doesn't hold up unless entire DNA lineages that used to be in North America were wiped out between Paleoindian times and the present (see Uncompahgre Journal Vol. 35 No. 2: From the Editor).

- The DNA suggests that people moved from the Bering/Pacific side of the continent downward along the coast mainly, in the 4000 years before Clovis. Pre-Clovis sites are possible but only along certain parts of the continent that were not covered in a "mile-high wall" of glacial ice sheet.

- The early dates at Monte Verde in Chile (15,000 BP for the best-documented locality) used to be a serious problem for studies of the very earliest Americans, because they required even earlier dates farther north, which just didn’t exist. More recently, a small number of other sites with similar or slightly earlier dates have been accepted, and because the migration model allows for some people to have arrived that far south early on. Otherwise, we’d have to conclude that people sailed across the Pacific to get to Chile!

- Buttermilk, Gault, and Debra L. Friedkin Sites are closely related sites in Texas that have been dated to 15,000 or so years BP. The dates are unfortunately derived using Optically Stimulated Luminescence, which is a tolerable dating technique when you have nothing else, but which is not particularly reliable (and has a large error range), and the artifacts resemble later assemblages enough to question whether the stratigraphy at the sites has not been comprised in some way.

- The Pedra Furada site in Brazil, dating from ca 40,000 years ago, is claimed to be an ancient human site based on a huge amount of vaguely diagnostic stone flakes made from very local low quality tool stone, but monkeys have been videotaped creating those exact type of flakes by bashing rocks to obtain different kinds of monkey delicacies. More importantly, the overwhelming number of broken rocks at the site are very likely to have been naturally created “geofacts,” that fell from the cliffs above the site, and broke in the process. There are no well-attested sites in the Americas that date way before the last Ice Age.

To sum up, we’ve learned a lot, and we’re starting to connect the dots between Beringia and Monte Verde, with a great deal of help from DNA studies. However, we still need to find older sites in North America, either along the West Coast or in the interior.
May is Archaeology and Historic Preservation month. In honor of the month we will be having a special speaker (see article, page 1) and we will be co-hosting (with the Ute Museum and the Montrose County Historical Museum) a public day on May 11th at the Shavano Rock Art site. We do need 3 more volunteers for that day, starting at 9:00am till 12:00pm. Please let me know if you would like to help out on that day. For the volunteers of this event, we would like to invite you to a special visit to the site led by Russ Barr during the week before the event. What a treat for volunteering! The Ute Museum has scheduled many activities for the month, so be sure to check out their calendar.

New from the Board regarding membership: when it’s time to renew, you will get an email reminder, and a follow-up reminder in a month. If you still haven’t renewed by 60 days after your membership’s expiration date, you will be removed from the Chipeta Chapter email list. That means you will not receive field trip notices or newsletters. If you have any questions about your membership, please feel free to contact me.

There will be a newsletter in June for all the summer information, and May will be the last general meeting till September. I know with all the summer activity we tend to forget that there are no meetings in the summer. But don’t forget that there will be a picnic in July—and of course lots of field trips! Thank you again for supporting and preserving history.

Sally

### Chipeta Chapter Field Trips—Save the Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Brief Information</th>
<th>Leader(s)</th>
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<tbody>
<tr>
<td><strong>May 3-4 (Fri-Sat)</strong></td>
<td>Maybell /Rangely area</td>
<td>Clock site and other unusual prehistoric sites</td>
<td>D. DeVore, G. Decker, L. A. Hunt.</td>
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<td><strong>June TBA</strong></td>
<td>Rio Grande Southern Railroad sites</td>
<td>Trout Lake Trestle, Vance Junction coal chutes, possibly Ames power house, with Site Stewards</td>
<td>Fred and Sue Henderson</td>
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<tr>
<td><strong>June TBA</strong></td>
<td>Special</td>
<td>Debeque wild horse herd viewing trip, single day</td>
<td>George Decker</td>
</tr>
<tr>
<td><strong>June 27-28</strong></td>
<td>Los Pinos Old Agency Ute Fort</td>
<td>Single long day or multi-day camp-out in Cochetopa Park south of Hwy 114.</td>
<td>Leigh Ann Hunt</td>
</tr>
<tr>
<td><strong>August 3 or 10 TBA</strong></td>
<td>Monarch Pass Game Drives</td>
<td>Single day hike, Monarch Pass ski area vicinity with Pike-San Isabel Forest Archaeologist</td>
<td>Joe Oglesby</td>
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</tbody>
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* 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.

** To Be Announced. Watch for detailed Field Trip announcement in your email.
Little Park Field Trip

Photos courtesy of George Decker
From the Editor: Labiodental speech sounds and agriculture

DNA analysis has gotten a lot of space in this column. I’m going to talk here about two examples of creative interdisciplinary research, one of which involves DNA and one does not. Both are instances of proxy dating (but not the Cyrano de Bergerac kind!) for a currently undatable problem. A couple of months ago, I saw that linguists have used archaeology and paleoanthropology to determine the timing of particular human speech patterns. It reminded me of one of my favorite instances of proxy dating—the study of body lice to determine when humans began to wear clothes.

The two most closely related human louse varieties, head and body lice, diverged only when clothing made it possible for some head lice to branch out into a new habitat: the warm, clothed, human body. Body lice feed on skin but live and breed in fabric clothing. They thus need clothing to survive. That suggests that the separation of the two louse species coincides with the origin of clothes. If we assume that chimpanzees and humans split approximately 6 million years ago and that DNA diverges at a reasonably constant rate, we can tentatively date the origin of the body louse—and clothing—to about 70,000 years ago. We have no evidence of fabric clothing older than about 22,000 years ago, but perhaps the body lice were just as happy with fur/skin clothing.

My second example of proxy dating is the recent research into the development of labiodental consonants in human speech. Here’s the argument. It was the development of agriculture that allowed humans to develop f and v sounds in our speech. At present, half of the world’s languages use labiodentals, but the new research suggests that it is a fairly recent development. People in modern industrialized societies have an overbite (incisors extend below tops of lower incisors) and overjet (upper incisor row projects farther forward than lower incisors), which is considered normal by dentists. Pre-agricultural humans, as well as some modern hunter-gatherers, have an edge to edge bite, apparently because of the exertion required to chew meat and lightly-processed plants—and because of their tendency to use their teeth as tools. In any case, although children of all time periods normally have overbite and overjet, pre-agricultural adults did not. Their mature bone and muscle development apparently aligned their teeth edge to edge.

Try sounding the consonants f and v; see how your mouth is aligned? These sounds are made by touching the lower lip (labial) to the upper incisors (dental), and they are certainly easier for those of us whose upper front teeth are already touching our lower lip. Linguists think that the ease of the motion probably determines how prevalent a speech sound is in world languages. There was more to the research, of course. They used biomechanical modeling to compare the ease of making labiodental sounds with the two different tooth alignments. They also compared modern languages with the basic food economy of the world’s populations. Modern hunter-gatherers use labiodental sounds only one-fourth as much as agricultural societies.

These two studies used some creative thinking to relate proxies: in the first case, two species of louse (whose divergence is somewhat datable) as a proxy for human clothing; and in the second case the alignment of human teeth (datable) as a proxy (and a prerequisite) for labiodental speech sounds.


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:  
_____ Family (2 or more members same household) ..........$40  
_____ New  
_____ Renewal  

Annual Dues* (includes state CAS dues): Check one  
_____ 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)  

*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.

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, sjicas1@gmail.com
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- **Library:** Linda Manske, cc-manske2@bresnan.net

OTHER COMMITTEES AND POSTS

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

CHIPETA CHAPTER WEBSITE

- [https://www.chipetachaptercas.org](https://www.chipetachaptercas.org)

TO JOIN OR RENEW:

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

**Want More?**

[Archaeology Southwest](https://www.archaeologysouthwest.org) is a great link to find out about current issues and events relating to Southwest Archaeology.

**Chipeta September Speaker**

We haven’t confirmed the fall speaker lineup yet; stay tuned.

**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.