



**Loveland Archaeological Society, Inc.**

A Colorado Non-Profit Corporation

## Arrowheadlines



**The Newsletter of the Loveland Archaeological Society**

August 2019



### Club Minutes

The August meeting of the Loveland Archaeological Society was held on Tuesday, August the 6th at Dwayne Webster Park in Loveland. This was our annual picnic meeting. It was perfect weather, and we had an abundance of great food for our potluck provided by many of our members. Special thanks to Shellene Karst and Jeannie Stewart for arriving early and setting up the food and drink tables. Several members brought in frames of artifacts for everyone's enjoyment. Kevin Hammond came in from Nebraska with a collection of artifacts he acquired from a western Nebraska family. This included many Paleo, Archaic, and Woodland era projectile points. Karla Campbell had an amazing agate she had found recently. The find of the month was a river polished translucent Mallory dart point made of dendritic chert found by Shane Skutvik. Our September meeting will be held on the **SECOND TUESDAY** which is the 10th at the McKee building at the Ranch. Once again this is due to the Ranch having a scheduling conflict and bumping us from the first Tuesday to the second Tuesday of September. Our remaining meetings in October, November and December will all be on the first Tuesday of the month as usual. We will have a presentation by archaeologist Craig Banister on The Swallow Site, which is a sheltered camp under the southwest face of a Fountain formation monolith in the Hogback Valley within the Ken-Caryl Ranch in Jefferson County. The Swallow Site was excavated by the Denver Chapter of the Colorado Archaeological Society from 1983 to 1998 and yielded large samplings from the Early Ceramic Period as well as samplings from the Early, Middle and Late Archaic Periods. Over 200 projectile points were found in this excavation.

Carol Eckhoff called to inform us that Marion (Whitey) Moyes passed away in June. Whitey was a past member of the LAS and many of our long term members will remember him. Service is pending.

Also, a reminder that our Stone Age Fair is September 28th and 29th with set up on Friday the 27th starting at noon. We hope our members will want to display their collections and/or volunteer to help out with the Fair. It's not too late to sign up as an exhibitor at this year's Stone Age Fair.

See **Registration Form** on the last page of this newsletter or contact Andy Coca to reserve space at 303-903-0587 or [arrowhead@what-wire.com](mailto:arrowhead@what-wire.com).



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*Here's a few pictures from our annual Picnic. Enjoy!*

*"I'll see your Folsom and raise you a Clovis"*



## UPCOMING MEETING ANNOUNCEMENTS

|               |  |
|---------------|--|
| Date:         | <b>Note:</b> Next mtg. is <b>September 10th, 2019</b>                        |
| Place:        | McKee 4H Building at The Ranch, Loveland                                     |
| Program:      | Archaeologist Craig Banister on The Swallow Site                             |
| Refreshments: | Several members will bring in food/drinks as the sign-up sheet was misplaced |



## LAS Find of the Month

Members can bring an artifact to be entered into the competition at the monthly meeting, which will be judged based on the following rules:

1. Must be a member of LAS in good standing.
2. The artifact must be a personal find.
3. It must have been found within the specified time frame, i.e., within the month prior to the meeting.
4. The artifact doesn't have to be a Colorado find - all that matters is that it was found in the last month.

The **Find of the Month** for August 2019 was made by Shane Skutvik as judged by all members present.

**Type:** Mallory Dart Point

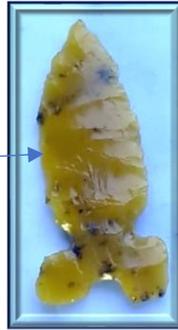
**Material:** Dendritic Hartville Chert

**Where Found:** Arapahoe County, CO.



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### ARCHAEOLOGY IN THE NEWS

#### 15,000 Year Old Spearpoints Reveal Details About The Peopling Of The Americas

A new paper published in the journal *Science Advance* adds support to a model for how the first peoples entered North America. The paper reports the finding of two new types of spear points at the site in Texas underneath (and therefore older than) cultural layers containing Clovis points, the oldest recognized projectile points in North America. For decades, the so-called “Clovis-First” model dominated archaeological ways of thinking about the first peoples to enter the Americas. Under this model, the earliest peoples were those who made and used Clovis points, which appear rather abruptly in the archaeological record at sites all across North America between 13,000-12,700



*15,000 year old in-situ point at the Site*

years ago. The model suggested that the people making the Clovis points crossed the Bering land bridge from Asia and traveled into the Americas through an ice-free corridor which opened up between the Cordilleran and Laurentide ice sheets that covered North America during the Last Glacial Maximum. The finding of projectile points older than Clovis does not overturn the Clovis-First model; that was done long ago by the discovery of pre-Clovis sites in the Americas, and by evidence from genomes of both ancient and contemporary peoples from the Americas. While the details of the complex process of the peopling of the Americas are an area of active research, in general we can say with reasonable confidence that the earliest peoples' Asian ancestors likely lived in Beringia for some extended period of time. Their descendants, the ancestors of Native Americans, emerged as a genetically distinctive group within the Americas. It's noteworthy that although the archaeological details of this history conflict with some-though not all-tribes' knowledge of their own origins, the prevailing genetic model for the origins of Native Americans as a people within the Americas is at least broadly concordant. Archaeological evidence shows a rapid movement throughout the continents between approximately 15-16,000 years ago, with the first peoples reaching the Monte Verde site in Chile by about 14,200 years ago. One important implication of this finding is that it helps clarify the route that the earliest peoples would have taken into the Americas. While arguments have been made for the first entry into North America having taken place through the ice-free corridor, many archaeologists and geneticists have believed for some time that travel by boat along the West Coast (which was accessible to travel beginning around 17,000 years ago) was a more likely means of entry. The people who made these points (dated to between 15,500-13,500 years ago) could not have reached this site in Texas if they traveled along an interior route, which wasn't opened until about 13-12,500 years ago.



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What exactly these tools, which are quite different than the lanceolate fluted style of Clovis points, mean for the origins of Clovis tool technologies remains to be determined. As the first author of the paper, Mike Waters, said in a statement: "The peopling of the Americas during the end of the last Ice Age was a complex process. This complexity is seen in the genetic record. Now we are starting to see this complexity mirrored in the archaeological record."

### Evidence for Pre-Clovis Inhabitants of Americas Emerges from Sea Floor

A fisherman inadvertently dragged up one of the most significant pieces of evidence for the existence of ancient inhabitants of North America prior to the Clovis people, who walked the land some 15,000 years ago. A small wooden scallop trawler was dredging the seafloor off the coastline of Chesapeake Bay, when he hit a snag. When he pulled up his net, he found a 22,000-year-old mastodon skull and a flaked blade made of a volcanic rock called rhyolite. A report in *Live Science* says that the combination of the finds may suggest that people lived in North America, and possibly butchered the mastodon, thousands of years before people from the



Clovis culture, who are widely thought to be the first settlers of North America and the ancestors of all living Native Americans.



Most researchers believe the first Americans crossed the Bering Strait from Siberia about 15,000 years ago and quickly colonized North America. Artifacts from these ancient settlers, who have been named the Clovis culture after one of the archaeological sites in Clovis, New Mexico, have been found from Canada to the

edges of North America. However, a number of discoveries in recent years have challenged the view that the Clovis were the first, and to date, no archaeological evidence of human settlements has ever been found in the Beringian land bridge. The mastodon and stone tool finding further supports the perspective that there were other inhabitants of America that preceded the Clovis. The ancient fossil and tool were first hauled off the seafloor in 1974, and were donated to Gwynn's Island Museum in Virginia, where they sat unnoticed for four decades. However, scientists have now realized the significance of the items after Dennis Stanford, an archaeologist with the Smithsonian Institution in Washington, D.C., carried out radiocarbon dating on the mastodon tusk and found it was more than 22,000 years old. While the stone tool cannot be dated, the characteristics of the artifact suggest it is also of the same age. Both pieces show characteristic weathering that indicated they were exposed to the air for a while and then submerged in a saltwater marsh, before finally being buried in seawater, possible at the same time. Furthermore, the flint-knapping technique used to make it was similar to that found in Solutrean tools, which were made in Europe between 22,000 and 17,000 years ago. Taken together, the discovery gives credence to the Solutrean hypothesis, which proposes that the first inhabitants arrived by sea from southwest Europe millennia earlier than the Clovis.



*Microstriations and wear shown are typical of tool use. The sharp crisp edges suggest it wasn't tumbled in the surf or carried by water. The wear on the tool suggests it was on dry land at some point and then buried by sea water, which means the tool was older than 14,000 years old. Credit: Dennis Stanford*

"I think it's very convincing," said Michael B. Collins, an anthropologist at Texas State University in San Marcos, Texas, who was not involved in the current work. The weathering on both items - first with open air, then saltwater, then seawater exposure - would be almost impossible to get without them having been on land prior to rising sea levels, Collins explained. While this discovery adds one more piece to a very large puzzle, the debate regarding the first inhabitants of the Americas is far from over.



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*The following article was sent in by Joyce Mountain. It was written by Marilyn A. Martorano, who presented a program on musical rocks at the Stone Age Fair a few years back, as well as at one of our monthly LAS meetings.*



### Culturally Modified Trees

*This CMT is located at a historic campsite along the Old Spanish National Historic Trail (OSNHT) in the San Luis Valley, Colorado; the lower branches were removed with an ax to open the area for livestock and/or increase line-of-sight.*

**Culturally Modified Trees (or CMTs)** are trees that exhibit peels, ax cuts, delimiting, wood removal, and other cultural modifications. Numerous CMTs are found in the foothills and mountains of Colorado. Research has shown that these trees are artifacts reflecting cultural utilization of trees by Native Americans and other people from the seventeenth century through the early twentieth century.

Tree bark and bark-related substances are known to have been used for a variety of functions by Native Americans and other early historic peoples. The outer bark of trees was used to construct trays, baskets, and cradleboards, as well as roofs and walls of structures. Resin and pitch obtained from areas of a tree where the bark was peeled were used as adhesives and waterproofing agents for baskets and other objects. Wooden slabs pried from peeled areas on trees were used to construct saddle frames, cradleboards, and wooden tools. The inner bark, pitch, and sap were utilized medicinally as a poultice or drink for many types of disorders. The inner bark was also used by Native Americans as a delicacy or sweet food and as an emergency food in circumstances of starvation.

### Types and Characteristics of CMTs

Types of scientifically recognized CMTs include witness/survey marker, delimiting, fence line, claim marker, trail marker/blazed, and peeled trees. These CMTs exhibit characteristics that differ from natural scarring by animals such as porcupine or bear, or scars created by lightning or ground fires.

Witness/survey marker trees were modified to delineate geographical locations. They are often associated with rock cairns (stacked stones) and metal sign-markers. Trees that were delimiting usually exhibit ax-cut limbs and were often located along trails or roads to enlarge a travel corridor or create open spaces for livestock. Fence-line trees were often peeled vertically to enable attachment of metal fencing. Claim marker trees usually exhibit a peeled area or shelf cut into a tree to place mining claim information or signs. Trail marker / blazed trees were modified with an ax or other sharp tool to delineate trails, roads, and other significant locations or objects along travel corridors. Peeled trees exhibit various-sized scars where bark was removed from the trunk of a tree.

Species of CMTs found in Colorado include cottonwood, ponderosa pine, Engelmann spruce, piñon pine, limber pine, lodgepole pine, Douglas fir, Rocky Mountain juniper, and bristlecone pine. CMTs are found at elevations from approximately 6,000 to 11,700 feet in Colorado. CMTs are often found along trails, travel corridors, mountain passes, within or near campsites, and in the vicinity of water sources such as springs, streams, and rivers.

CMTs that were peeled to obtain inner bark or other bark, or tree substances are the most common type documented in Colorado. Although they can vary in size and shape, peeled CMTs usually exhibit an oval or rectangular-shaped scar with one or more points at the upper end where the bark was removed from the tree trunk. The lower end of the peeled area is usually located one to three feet above the ground and often exhibits a horizontal cut line with visible ax cut marks.



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The peeled areas range from one-half inch to five feet in width. The lengths of the scars range from four inches to nine feet. The average-sized peeled area is approximately seventeen inches wide and four feet long. A study replicating the bark peeling process indicates that approximately one pound of inner bark would have been available from a peel this size. Nutritional analysis of inner bark from pine indicates that one pound contains approximately 600 calories, calcium, carbohydrates, protein, iron, Vitamin C, magnesium, and zinc.

Based on interviews with Native Americans in the 1950s, the bark-peeling process took place as follows: a tree was selected for peeling, and a small sample of outer and inner bark were removed from the tree and tested. If determined acceptable, a horizontal cut was made across the tree trunk with an ax or other sharp tool. A debarking stick (sharpened on the end like a chisel) was utilized to pry the outer bark from the tree trunk. The inner bark was then removed from the outer bark slabs with a scraper and the inner bark was eaten or saved for later use. Other bark/tree substances-such as pitch, sap, and wooden slabs-were also removed, if desired.

### Tree Peelers

Historical evidence and ethnographic studies (descriptions of human cultures) suggest that Native Americans likely created most of the existing peeled CMTs in Colorado from the late 1600s to the early 1900s. Groups in Colorado that were known to have used bark and bark-related substances include the **Ute**, **Apache**, **Navajo**, and various **Ancestral Puebloan** peoples. Other groups that may have created CMTs in Colorado include early Hispano and white explorers, traders, trappers, and settlers.

CMTs can be dated through dendrochronological analysis (**tree-ring dating**). Tree-ring dating is important because it enables archaeologists to determine the actual year that a tree was modified, and in some cases, even the season. This information provides archaeologists with a very detailed picture of how a specific geographical area was used through time during the early historic time period. It can also suggest which groups of people may have created the CMTs and help determine why the trees were used.

### Current Status and Significance of CMTs in Colorado

Culturally modified trees have been recorded as archaeological resources in Colorado for over thirty-five years but prior to that, many of these trees had been overlooked as significant cultural resources. Some were cut down during development, timber harvesting, or road-building projects. Other CMTs have been destroyed or damaged by forest fires, insects, or disease. Additional CMTs have reached their maximum lifespan of 400-600 years and have begun to die of natural causes.

The trees are important cultural resources to help understand past lifeways, especially regarding how Native Americans adapted and survived during the recent historic past in Colorado. Archaeologists and land managers are studying CMTs and consulting with Native Americans to learn more about them and determine how to protect and manage these unique cultural resources. In 2000 a group of over seventy-two ponderosa pine CMTs (**Indian Grove**), located at **Great Sand Dunes National Park and Preserve**, was listed on the National Register of Historic Places. Many additional CMTs have been documented, dated, interpreted to the public, protected, and preserved.



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### ARTIFUNFACTS TRIVIA QUIZ

**The Answer To Last Month's Trivia Question:** Which animal was named the “*National Mammal of the United States*” on May 9, 2016?

**Answer:** The *American Bison* was selected as the “*National Mammal of the United States*” when the National Bison Legacy Act was enacted into law. An estimated 20,000 bison live on public lands in North America and an additional 162,110 live on private farms and ranches.

**This Month's Trivia Question:** Do you remember the ‘crying Indian’ anti-pollution commercials on TV and in print back in the 60's and 70's? His name was *Iron Eyes Cody*. From 1930 to the late 1980s, Iron Eyes Cody starred in a variety of Western films alongside the likes of John Wayne, Steve McQueen, and Ronald Reagan. Clad in headdresses and traditional garb, he portrayed Crazy Horse in *Sitting Bull* (1954), galloped through the plains in *The Great Sioux Massacre* (1965), and appeared in over 100 television programs. When major motion picture houses needed to verify the authenticity of tribal dances and attire, Iron Eyes Cody was brought in as a consultant.



**Question:** Which Native American tribe did *Iron Eyes Cody* belong to?

Answer in Next Month's *Arrowheadlines Newsletter*.

### **News:** The Emery Archaeology Laboratory is Now Open

A new window into the world of archaeology & preservation has been opened in *Zoom In*, literally! Staff members and volunteers from Denver's History Colorado's Office of Archaeology and Historic Preservation (OAHP) use the lab for data collection, cleaning artifacts, and other activities related to Denver's History Colorado's numerous field projects. View ongoing projects in the lab every Monday through Thursday during regular museum hours.



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***2019 STONE AGE FAIR REGISTRATION LETTER***

Andy Coca  
P. O. Box 302  
Keenesburg, CO  
80643

To assist us in determining space requirements for displays, please return this sheet to the above address on or before September 1, 2019. If you have any questions, you may phone Andy Coca at 303-286-7711 after 5:30 PM, MDT (arrowhead@what-wire.com). We encourage and appreciate early registration. However, registrations will be accepted after September 1<sup>st</sup> as long as space is available.

**Please Note:** All exhibitors are required to sign in at the front desk when they arrive at the Fair, *and also to sign out* when they remove their exhibits at the conclusion of the Fair.

**The 2019 SAF Dates are September 28<sup>th</sup> and 29<sup>th</sup>  
McKee 4H Bldg. The Ranch Events Complex Loveland, CO.**

**\_\_ YES, I PLAN TO EXHIBIT AT THE 2019 LOVELAND STONE AGE FAIR:**  
I will need \_\_\_\_\_ tables (8 ft. each), or \_\_\_\_\_ feet of display area.

I hereby release the Loveland Archaeological Society, Inc., of all liability associated with displaying my artifact collection at the Loveland Stone Age Fair.

By my signature below, I acknowledge that I understand the non-commercial policy of the Fair, i.e. no buying, selling, or trading of authentic artifacts, and no soliciting to buy, sell, or trade. I also understand that I'll be asked to leave the Fair for violating this policy.

**Contact Information**

SIGNATURE \_\_\_\_\_

NAME (please print) \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

TELEPHONE NUMBER \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

- Sponsor of the Annual Loveland Stone Age Fair -

<http://www.stoneagefair.com>