



Loveland Archaeological Society, Inc.
A Colorado Non-Profit Corporation

Arrowheadlines



The Newsletter of the Loveland Archaeological Society



NOVEMBER 2019



Club Minutes

The November meeting of the Loveland Archaeological Society was held on Tuesday, November 5th in the McKee Building at The Ranch in Loveland, CO. This was our annual Native American food potluck. We dined on pemmican, elk stew, "javelina" hocks and pinto beans, corn bread, fish and prickly pear jelly among other tasty items. Thanks to all our club members who brought the banquet.

We discussed the club's financial situation in lieu of the cost of presenting the Stone Age Fair at the Ranch for the last three years. Our costs have dramatically increased compared to our prior Stone Age Fairs which were held at the Pulliam Community Center in Old Town Loveland. Thanks once again to our members and exhibitors who have donated funds to help offset the increased costs involved. We have managed to keep the Fair going with free admission to the public and our exhibitors. We will have a complete accounting of the last three Stone Age Fairs made available at our December meeting.

After the discussion of our financial situation, the consensus of the meeting's attendees was that we should once again hold a donation drive for local Native American families that could use a helping hand this Holiday Season. Winter clothing, coats, gift cards, checks or cash can be brought into our December meeting or mailed to the Club c/o Andy Coca, P.O. Box 302, Keenesburg, CO 80643. Please make checks payable to Jan Irons as she facilitates the distribution of gifts through her organization.

Our December meeting will be held Tuesday, December 3rd at 6:30 PM in the Loveland and Fort Collins meeting rooms in the McKee building. The meeting will be our annual Holiday potluck party. Everyone's encouraged to bring in a dish or dessert and some of their favorite artifacts for the year's best show & tell. We may also have Jan Irons group provide some Native American entertainment if they can make it.

We had no entries for Find of the Month in November. Our door prize drawing donations and recipients were:

Donor	Item	Winner
Andy Coca	Bag of Colorado points	Ed Wells
Club	Tapestries in Sand book	Mark Loader
Club	American and Eskimo Pottery book	JacLynn Vealey
Ed 'Honey' Wells	Honey Bunches of Oats	Mark Loader
Hank Miller	Bolo tie (fish lure in acrylic arrowhead)	Andy Coca
Elaine Owens	Navajo mug	Carl Schoal
Elaine Owens	Owl wall hanging	Rhonda Evensiosky
Elaine Owens	Two flower wall hangings	JacLynn Vealey



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UPCOMING MEETING ANNOUNCEMENTS

Date:	Next mtg. is December 3, 2019
Place:	McKee 4H Building at The Ranch, Loveland
Program:	2019 Year's Best Show & Tell
Refreshments:	Annual Holiday potluck party



LAS Find of the Month

There was no **Find of the Month** for November 2019.



ARTIFUNFACTS TRIVIA QUIZ

The Answer To Last Month's Trivia Question: Photo matches in this order - Chief Joseph, Sitting Bull, Geronimo, Crazy Horse, Red Cloud; [No photograph of Crazy Horse has ever been authenticated].

Bonus: Where is Crazy Horse Buried?

Answer: Somewhere near the Pine Ridge Reservation or Wounded Knee battlefield; no one knows for certain. His body was taken away by friends and family after he was killed at Fort Robinson to keep it from the Government. It has never been found.

This Month's Trivia Question: Which of the following Native American - named automotive model(s) are *not* actual vehicles?

- A. Dodge Seneca
- B. Chrysler New Yorker Navaho
- C. Ford Seminole ES
- D. Pontiac Aztek
- E. Jeep Comanche
- F. Lincoln Coca-nental

Thanksgiving Trivia

1. Which president was the first to give a turkey a presidential pardon?

Ronald Reagan

John F. Kennedy was the first president on record for unofficially sparing a Turkey in 1963. But it wasn't until the Reagan administration in 1987 that a turkey was given an official presidential pardon as a joke. Despite it being a joke, the turkey was spared and put into a petting zoo. In 1989 George H. Bush made it an annual tradition and each president following him has carried on the tradition.

2. What state raises the most turkeys?

Minnesota

With 41 million turkeys raised in 2018 Minnesota tops the chart for turkey production. Next up is North Carolina with 31 million turkeys raised. Then Arkansas coming in third with 27.5 million turkeys.



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3. What food was present at the first Thanksgiving but is rarely eaten at Thanksgiving now?

Seafood

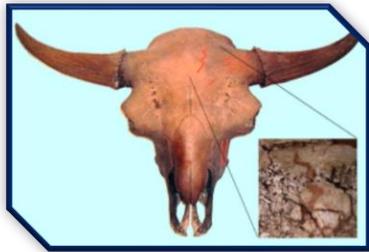
Because Plymouth Colony relied heavily on fishing there was plenty of seafood at the first Thanksgiving including oysters, lobster, clams, mussels, cod, and bass.

4. What is the wobbly red piece of flesh on top of the beak of a turkey?

A snood

The red bit of flesh under the beak is called a wattle.

25 Years of Cooper: Folsom Bison Hunting and Beyond



2018 marked the 25th anniversary of the first excavation at the Cooper Folsom bison kill site in northwest Oklahoma. Cooper's claim to fame includes the discovery of a painted bison skull (the oldest painted object in North America); three separate, stratified, large-scale kill episodes in a single arroyo; and exquisite examples of Folsom projectile points made from a variety of chert sources hailing from as far north as northcentral Kansas and as far south as central Texas.

The distinctive Folsom projectile point, with its sleek lanceolate design, exquisite often minute flaking, and distinctive long channel flakes that extend from the base to the tip, dates to between 10,900 and 10,200 radiocarbon years ago and marks one of the earliest cultures known in the New World. The preceding Clovis culture used larger spear points to hunt mammoths and other large late Pleistocene game. Folsom replaced Clovis and, with the extinction of the late Pleistocene megafauna, turned to hunting the massive bison.



In juxtaposition to the large-scale kills are small-scale kills of usually one or a few bison alongside pooled water. Sites include

the Lubbock Lake site near Lubbock, Texas and the Waugh site near Buffalo, Oklahoma where a small group of bison were ambushed during the winter along a bend of an unnamed spring-fed stream. These sites often have the bones of one or two bison piled together after the meat was removed and are thought to be the handy-work of a single family of

hunters. Other animals besides bison were also hunted and trapped. As one might expect, Folsom groups collected a wide variety of animal and plant resources; but evidence of these resources is not well preserved in the archaeological record. The lithic assemblages contain points and flake knives made of Edwards Plateau chert, Alibates chert, Niobrara jasper, Dakota quartzite, and silicified wood.



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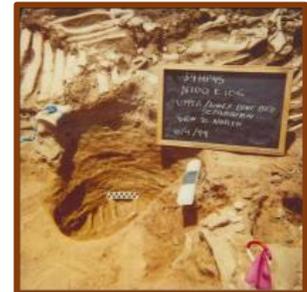
Each kill occurred during the late summer/early fall of the year. Butchery of these animals targeted the highly prized cuts of the hump, shoulders, and tenderloins. This selective style of butchering suggests the hunters were mainly after the prime cuts of meat to provision large numbers of people gathered nearby for other activities, perhaps including dancing, feasting, and socializing associated with annual or at least cyclical aggregations or rendezvous. Although the idea of large group get-togethers had been pondered for Paleoindian times, the archaeological evidence for these aggregations were not readily evident for Folsom times and definitely not expected to be represented in bison kill sites.

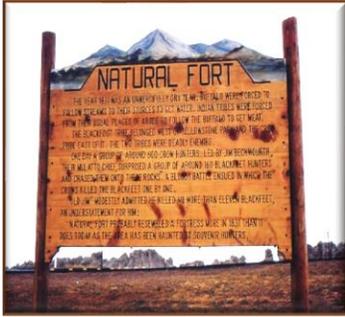
The possibility that hunting groups from different portions of the Plains came together to socialize and feast on bison gave rise to the Cooper model of Folsom hunting adaptations.

Similar large-scale late summer/early fall Folsom bison kills were known at the Lipscomb site along Wolf Creek in the northeast corner of the Texas panhandle and at Lake Theo located further south in the Texas panhandle where a possible shrine consisting of a bison skull placed atop a pedestal of upright mandibles had been unearthed. With the re-analysis of the Folsom type site in northeast New Mexico, yet another example joined the ranks of large-scale arroyo trap bison kills, this one seasonally slightly later in the fall. And finally, in 2010, the Badger Hole late summer Folsom arroyo trap bison kill was found only 700 meters upstream from Cooper. Badger Hole paralleled Cooper in many ways, including the selective pattern of butchery that targeted the hump and shoulders.

In addition to recreating their subsistence practices, we know Folsom flintknappers had a penchant for high quality, colorful cherts to make their distinctive projectile points. The sequence for manufacturing a Folsom point has been reconstructed by studying the flaking debris left at lithic quarries and camps, and by studying the Folsom points themselves. Given all that has been discovered, there is still debate exactly how the distinctive channel flakes were removed. Several different techniques could have been employed, including free-hand soft-hammer percussion, indirect percussion using a punch, or levering the channel flake by use of a pressure flaking fulcrum system. All three techniques replicate the finished Folsom points found at sites. So perhaps all three techniques were used at the discretion of the flintknapper.

There is still much that we don't know about Folsom people, their technology, and subsistence. We do not know what Folsom people looked like or if they buried their dead. The recovery of eyed bone needles indicates they made tailored clothing, a must to combat the cold weather and conditions of the Younger Dryas climate. They probably had dogs, but evidence for dogs is scarce. We also have hints of the types of structures they may have built during cold weather, including roughly circular stone foundations probably covered with hide. But when all the evidence is combined, we have only a sketch of their lives, technology, and subsistence. Each new site promises a better understanding of these people and their culture and a better insight into the diversity of adaptations people develop to handle everyday situations and demands.





The Natural Fort

Almost to the Wyoming-Colorado border south of Cheyenne and just off I-25 near the Terry Bison Ranch, lies a strange rock formation west and east of the highway. Many of us have passed it and not known the storied history behind it.

As the story goes...

The year 1831 was a drought year, and the Apsaalooke Crow and Blackfoot warriors were both following the trail of the buffalo, searching for water and food for their families. These two tribes were mortal enemies

and generally found on opposite sides of Yellowstone, Blackfoot to the West and the Crow to the East, but the drought was severe, and they traveled long and far past their territories to find sustenance for their families. Jim Beckwourth, the famed black mountain man, fur trader and explorer, claimed in his memoirs that he was Chief of the Apsaalooke Crow at this time and was married to the daughter of one of the former chiefs.

The exact day in 1831 that the following events occurred is unknown, but it is a day that changed the lives of many Blackfoot families forever. On that day, warriors from the two tribes were moving through a stream bed when they spied each other near The Natural Fort. The Blackfoot warriors were seriously outnumbered.

They had 160 warriors in their hunting party, while the Apsaalooke Crow, traveling with Jim Beckwourth, had 600 men. Fighting began almost immediately, and the Blackfoot warriors had no choice but to seek shelter in the nearby rocks, The Natural Fort. **[Insert:** Sketch of The Natural Fort from the memoirs of Jim Beckwourth – *[The Life and Adventures of James P. Beckwourth, Mountaineer, Scout, and Pioneer, and Chief of the Crow Nation of Indians]*.



The Natural Fort is a fascinating structure created by nature. It has archways, doorways, hallways and rooms, like a mansion built of rock. There is a problem with this mansion, though - there is no source of water or food. When the Blackfoot chose the fort, they probably thought they were making a wise decision. What they did not realize was that Beckwourth and his 600 warriors would surround The Natural Fort and kill the Blackfoot, one by one, as the warriors starved to death or succumbed to dehydration and stood from their cubbies, wandering around the rocks in their delirium.



When they built I-25 in the 1960's the roadway cut The Natural Fort into two halves, so the full grandeur of this unique formation was forever changed. Over the years many arrowheads have been unearthed in the area...as well as rattlesnakes! It is well worth a short pullover to wander around the rocks and imagine what it was like during those terrifying days in 1831.



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In Our Own Backyard

Jurgens Archaeological Site

The Jurgens Archaeological Site is a Paleo-Indian period (before 6000 BCE) bison processing site that dates to about 7120 BCE and includes the remains of at least sixty-eight bison spread across three separate camps. Located about nine miles east of Greeley near the South Platte River, 1 mile north of Kersey on State Highway 37, the site was named for landowner George Jurgens and excavated in 1968 and 1970 by Joe Ben Wheat and Marie Wormington. Close analysis of the different concentrations of bones and artifacts at the Jurgens site helped provide a more complete understanding of the different techniques Paleo-Indians had for using bison on the High Plains.

Discovery and Excavation

In 1962 George Jurgens leveled part of his land near the South Platte River north of Kersey to make irrigation easier. The land was part of a shelf called the Kersey Terrace, which was once the channel of the ancient South Platte. When the river shifted thousands of years ago to a new channel farther north, it left behind flat land braided by low gravel bars.

Three years after Jurgens leveled the low ridges on his land, geologist Frank Frazier discovered two Paleo-Indian sites in the area while investigating gravel deposits along the river. The first site, known as the Frazier site, was excavated in 1966–67 by Marie Wormington and the Denver Museum of Natural History (now the Denver Museum of Nature & Science). During Wormington's excavation of the Frazier site, she sent Frazier and Henry Irwin to dig test pits at the other site Frazier had discovered, which was named for Jurgens. Working with William Biggs and Robert J. Burton, they soon found a bone bed and concluded that the Jurgens site merited a full excavation.



In late 1967, Frazier invited Joe Ben Wheat of the University of Colorado Museum, who was known for his work at the Olsen-Chubbuck Bison Kill Site a decade earlier, to excavate the Jurgens site in partnership with Wormington. After securing permission from Jurgens and funding from the National Science Foundation, they excavated the site for two months in the summer of 1968 and another two months in the summer of 1970. Laboratory work on the thousands of bones and artifacts recovered from the site took several years, and Wheat published reports of the findings in 1978 and 1979. Because of the site's importance for understanding the Paleo-Indian bison economy on the High Plains, it was listed on the National Register of Historic Places in 1990.

Site Description and Significance

The Jurgens site consisted of three main concentrations of bones and artifacts. The two largest concentrations represented bison butchering and processing sites, which could be distinguished from kill sites because they had few low-priority bones—such as skulls and other bones with little meat—and no unbutchered animals, which were often left at the bottom of mass kill sites because the hunters could not reach them. Large sections of the bison, such as the front and rear quarters, were cut apart at the kill sites and brought to the butchering areas for further processing. Stone artifacts found at the processing sites indicated that projectile points used for killing bison could also be used as knives for carving bison carcasses.



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Area 1, located at the southeast part of the site, represented a long-term camp where at least thirty-one bison from a nearby mass kill were butchered. The presence of at least seventeen other species, including moose, elk, deer, pronghorn, and a variety of smaller animals, suggested that the people butchering bison there also performed daily hunting for subsistence. Area 2, near the center of the site, represented a short-term camp focused on immediate consumption and hide preparation from a few small-scale kills. It included bones from at least two bison and three pronghorns, as well as about seven other animals, with most of the bones smashed for marrow consumption. Area 3, at the northwest corner of the site, represented a camp focused almost entirely on processing at least thirty-five bison from a nearby mass kill. The original kill sites have not been found.



Tools at the site included:



- 63 Kersey lanceolate projectile points, like the Eden projectile points. The raw material for the points was quartzite, found locally, and Alibates from northern Texas.
- 271 utilized and 2,023 debitage flakes
- 84 end scrapers
- 32 knives, some of which appear to have been fashioned from previous projectile points
- 30 ground-stone (anvil, hammerstone, etc.)
- 9 bone tools (atlatl hooks, an engraved unla, antler flaking hammer)
- 55 stone or mineral items

A piece of charcoal from area 3 returned a radiocarbon date of about 7120 BCE, placing the site solidly in the Plano complex of the Paleo-Indian period. When taken together with the Olsen-Chubbuck kill site, the three camps at the Jurgens site suggested that Plano people on the High Plains developed a variety of techniques for dealing with bison, which was their most important resource. The range of responses that Plano people could use to solve problems led to clear functional distinctions between mass kill sites, butchering sites, long-term camps, and short-term camps.