

PASTIMES

A photograph of a lizard, possibly a spiny-tailed lizard, resting on a rocky and vegetated ground. The lizard is the central focus, with its body and tail extending across the frame. The background consists of various rocks, some with reddish and greyish tones, and some dry, brownish vegetation. The lighting is bright, suggesting a sunny day.

The Newsletter of the Panhandle Archaeological Society

Vol. 32, No. 1, January 2012

President
Donna Otto

Vice-President
Jeff Indeck

Secretary
Stacy Brown

Treasurer
Lisa Jackson

Publications
Rolla Shaller

Newsletter Editor
Scott Brosowske

In this issue

Page 2 **January Meeting Guest Speaker ,
January Meeting Information**

Page 3-6 **A Study of Alibates Silicified Dolomite from a
Secondary Gravel Source**

Scott D. Brosowski



Page 7-8 **2011 Floyd V. Studer Banquet**

Stacy L. Brown



Page 9 **Announcements, Updates, Upcoming Events**

On the front cover: A Texas
horned lizard at Alibates
National Park. Photo by Nathalie
Nanayakkara

The Panhandle Archaeological Society will hold its next meeting on Wednesday January 18, 2012, at 7:00 pm, at the Wildcat Bluff Nature Center Science Building, 2301 N. Soncy Road, in Amarillo, Texas. Our program will be presented by Jerry Leatherman.



Jerry Leatherman

The Rock Creek Skirmish: Colonel Ranald S. Mackenzie's Maneuvers in Briscoe County, Texas

Abstract

The climactic battle of the Red River War of 1874 occurred on the morning of September 28 when Colonel R.S. Mackenzie led the 4th Cavalry down a steep trail into Palo Duro Canyon and attacked villages of the Comanche, Kiowa and Cheyenne tribes. He captured a horse herd of around 1,500 and drove them back up on top of the Caprock where he had them killed to prevent the Indians from recapturing the herd as they had done in Mackenzie's 1872 Campaign. The night before this Palo Duro attack the Indians had attacked Mackenzie's camp with the same intent, putting the enemy afoot in late fall in a hostile country. This event is known as the Rock Creek Skirmish. This presentation will discuss this event and recent fieldwork conducted to shed light on this military engagement.

Biography

At the age of 14 G. D. "Jerry" Leatherman moved with his family to San Angelo and then to Hereford two years later in 1963. He graduated from Hereford High School in 1965 and attended West Texas State University in 1965-66. His work history includes nine years with an aerial application company (began at 16 as a pesticide dust loader in Hereford), as assistant manager in Dalhart, and then as manager in Canadian and Wheeler. He farmed for 4 years in Dumas, served as editor of the newspaper, and community relations liaison for the hospital district. He also owned a photography business, real estate business, and a Borden's Milk distributorship. He has worked for a number of years as an independent business consultant and is presently working in Silverton as a project development consultant for Shell WindEnergy, completing a six year contract in January. He has been married to the former Sandra Huckabee for 44 years and they have two sons.

A photograph of a dry, grassy landscape with a dirt path leading through it. The vegetation is sparse and yellowish-brown, typical of an arid or semi-arid environment. The path is made of light-colored gravel and dirt. The background shows a low, rounded hill under a clear sky.

A Study of Alibates Silicified Dolomite from a Secondary Gravel Source

Scott D. Brosowske

Alibates silicified dolomite is one of the most commonly recovered tool stone types at prehistoric sites of the Southern High Plains. While this is most certainly true at most sites, the extent of its geographical distribution and the overall percentage of Alibates in lithic assemblages can vary considerably through time and across space. While this article briefly examines some of these issues, it focuses primarily on character of Alibates cobbles procured from secondary sources. This study provides a description of a sample of Alibates tool stone obtained from a gravel source approximately 80 km downstream from the primary sources near Fritch, Texas. This information helps clarify the potential value and limitations of Alibates tool stone procured from secondary sources.

Bedrock sources of Alibates silicified dolomite are exposed on uplands along tributaries of the Canadian River in the central Texas panhandle. The best known source area is limited to a long, narrow horizontal outcrop approximately 1200 m long by 200 m wide between Turkey and Alibates creeks (see Shaeffer 1958:189-190). Here, within the present boundaries of the Alibates Flint Quarries National Monument,

hundreds of quarry pits and production debris piles demonstrate extensive use of this resource (Figure 1). Bedrock sources are also found north of the river along Plum Creek and Devil's Canyon. These latter areas apparently contain tool stone of poorer quality and lack evidence for quarrying (see Bowers 1975; Shaeffer 1958: 190).

Although Alibates typically dominates lithic assemblages at sites near the quarries, other locally available tool stone, particularly Tecovas jasper and quartzites and cherts procured from the Ogallala formation, were frequently relied upon by groups to the west, north, and northeast of bedrock sources. These materials may comprise up to 20% to 70% of lithic assemblages at these sites. Downstream from the Alibates quarries, high terrace benches overlooking the Canadian River floodplain often contain cobbles of Alibates with stream rolled surfaces (Banks 1990; Wyckoff 1993). As such, these localities also represent sources of locally available knappable tool stone. The following discussion provides a description of Alibates cobbles collected from one of these secondary sources.

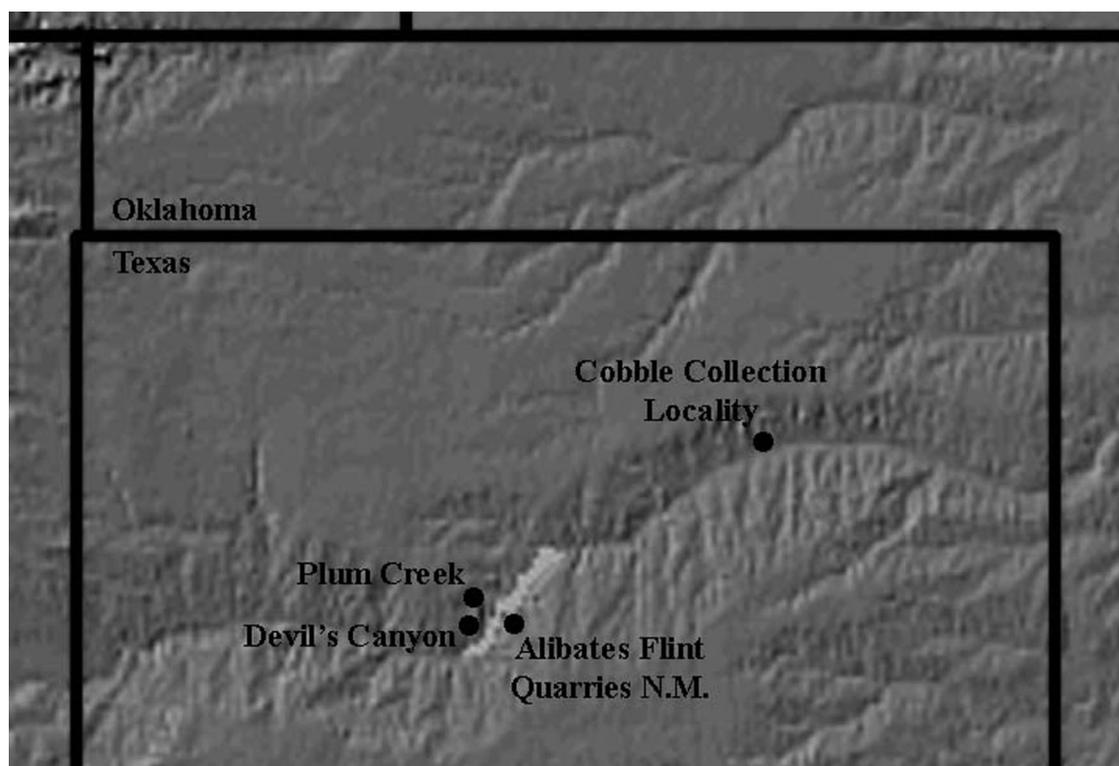


Figure 1 Map Showing Alibates Bedrock Sources and Cobble Collection Locality

In February 2011 a sample of 48 Alibates cobbles were collected on a high upland remnant near the confluence of Couch Creek and the Canadian River in northeastern Roberts County, Texas (Figure 1). This locality is 77.8 km northeast of the Alibates quarries. The collection strategy was random and was biased toward collecting the largest cobbles available at the locality. All of the specimens collected were easily iden-

tified as Alibates by visual inspection. A total of two person hours was spent collecting this small sample. While the frequency of cobbles observed at the locality was lower than expected, they included the full range of color variations known for this tool stone (e.g., gray, maroon, tan, pink, cream, dark brown, and banded combinations of these colors). Metric attributes for the cobbles collected are provided in Table 1.

Table 1 Metric Attributes for Alibates Cobbles in Study Sample

Sample #	ML (mm)	MW (mm)	MTH (mm)	W (g)	Knappable Quality
G9	65.5	64.5	33.7	159.3	Good
G10	68.8	43.9	35.2	121.9	Good
G11	95.1	69.2	36.1	266.4	Good
G12	99.0	59.2	34.8	166.4	Good
G13	90.0	47.2	24.3	99.6	Good
G14	73.7	50.2	22.4	79.1	Good
G15	90.6	55.9	34.7	144.8	Good
G16	68.7	53.3	31.3	103.7	Good
G17	74.8	54.1	27.1	138.1	Good
G18	71.9	52.9	45.5	201.2	Good
B9	95.6	58.8	33.1	254.8	Poor
B10	87.1	69.3	56.7	335.0	Poor
B11	85.0	77.7	38.6	278.5	Poor
B12	81.8	66.6	38.0	256.9	Poor
B13	85.2	59.1	39.7	226.8	Poor
B14	77.8	73.1	32.7	198.8	Poor
B15	75.6	60.8	26.8	156.4	Poor
B16	71.1	68.7	26.9	140.6	Poor

B17	57.0	58.3	46.9	165.3	Poor
B18	79.1	57.3	31.0	141.9	Poor
B19	82.1	47.4	40.8	192.5	Poor
B20	46.3	40.1	31.6	61.8	Poor
B21	66.8	61.5	45.8	172.9	Poor
B22	60.1	41.6	26.5	82.9	Poor
B23	58.3	46.8	37.3	99.4	Poor
B24	67.2	32.8	23.4	57.8	Poor
B25	73.5	29.3	17.8	44.8	Poor
B26	56.2	51.8	26.3	82.7	Poor
B27	60.6	45.1	22.2	52.3	Poor
B28	89.0	46.3	24.7	128.7	Poor
B29	50.0	40.9	22.0	56.0	Poor
B30	58.4	52.0	27.3	90.2	Poor
B31	53.0	38.8	21.4	55.7	Poor
B32	85.4	69.0	16.8	94.0	Poor
B33	62.5	47.2	22.9	76.6	Poor
B34	42.8	33.1	16.1	20.3	Poor
B35	53.9	21.3	20.8	37.8	Poor
B36	44.3	38.9	24.8	67.1	Poor
B37	52.7	40.9	25.3	60.9	Poor
B38	46.0	29.3	24.6	37.3	Poor
B39	65.9	37.9	30.9	76.9	Poor
B40	37.0	28.1	16.7	17.7	Poor
B41	40.0	30.3	18.5	26.4	Poor
B42	104.6	45.0	25.2	126.1	Poor
B43	54.1	51.0	33.2	110.5	Poor
B44	53.4	50.9	28.5	103.3	Poor
B45	65.2	52.5	38.9	110.4	Poor
B46	61.3	46.9	34.3	118.8	Poor

Using the Wentworth scale as a guide, only 28 items in the sample are actually small cobbles; the remainder are coarse gravels (N=20). By definition, gravels range in size from 2 mm to 64 mm (0.079 to 2.5 inches) in diameter and cobbles are 64 to 256 mm (2.5 to 10.1 inches) in diameter. The shapes of the cobbles and gravels within the sample vary considerably with most items being either subangular or subrounded (Figure 2). One cobble (B8) was distinctly tabular. The average size of the specimens are 68.4 mm in maximum length, 49.9 mm in maximum width, 30.0 mm in maximum thickness, and 122.9 g in weight. The maximum length ranged from 37.0 mm to 104.6 mm.

The exterior surfaces of the specimens in the sample are characterized by heavy polishing and weathering and a light to heavy patina. Many specimens exhibit evidence of battering and fracturing caused during transport and deposition. No chalky cortex was observed on any specimens. Each of the cobbles/gravels in the sample was inspected to determine if they were suitable for manufacturing usable flakes or bifaces. Only 10 or 20.8% of the specimens were classified as good quality

(i.e., Specimens G9 through G18). The maximum length of these items ranged from 65.5 mm to 99.0 mm with an average of 79.8 mm. The remaining 38 (79.2%) were marked by frost fractures, inclusions or other flaws (i.e., B9 through B46). These specimens were graded as poor quality as they tended to shatter or crack unpredictably when tested with a hammerstone.



Figure 2 Alibates Specimens from the Study Sample (Note: Scale =15 cm)

This brief study provides some important insights into Alibates tool stone obtained from secondary sources. First, the amount of good quality material from the collection locality was very low; only about one in five specimens were suitable for the production of small bifaces or flakes. Second, the small size of knappable cobbles and gravels would have limited the size and type of tools that could be produced. Considering both good and poor quality specimens in the sample, the largest cobble encountered was only about 105 mm in length with an average of 68.4 mm. Although small, the latter size is well within the range needed for the production of arrowpoints and small dart points common to the region. Lastly, this study emphasizes the superior quality of Alibates tool stone obtained from quarry contexts. In most cases, the quality of specimens obtained from gravel contexts was poor as a result of the effects of weathering and freezing and thawing.

What remains unclear from this study is whether we can assume that larger, better quality cobbles of Alibates tool stone can be found closer to bedrock sources or that cobbles are more numerous upstream from the collection locality. Likewise, can it be expected that fewer cobbles of smaller size and poorer quality are found downstream? While this remains uncertain, several cobbles of Alibates tool stone obtained from secondary sources were recently donated to Courson Archaeological Research for their comparative collection. Unfortunately, the provenience of these items is not known. These specimens represent very high quality tool stone with little or no frost fractures and few inclusions. The maximum length of these items range from 125 mm to 200 mm. I would venture to guess that they were recovered somewhere near the Alibates quarries.

Bibliography

Banks, Larry

1990 *From Mountain Peaks to Alligator Stomachs: A Review of Lithic Sources in the Trans-Mississippian South, the Southern Plains, and Adjacent Southwest*. Oklahoma Anthropological Society Memoir No. 4, Norman.

Wyckoff, Don G.

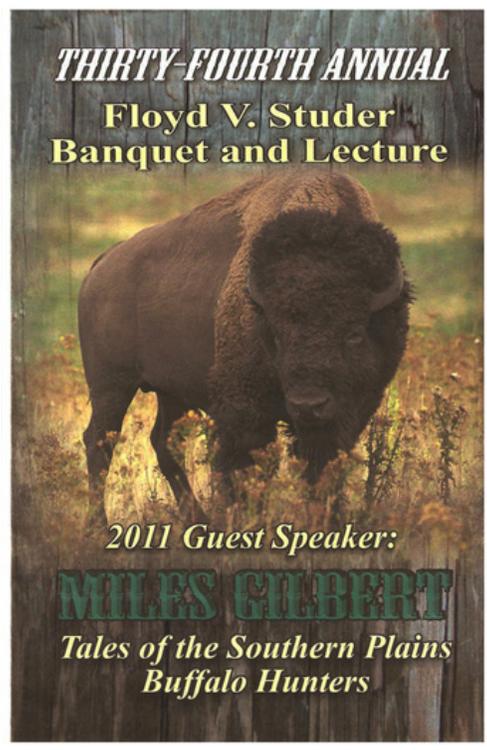
1993 Gravel Sources of Knappable Alibates Silicified Dolomite. *Geoarchaeology* 8:35-58.

Bowers, Roger L.

1975 *Petrography and Petrogenesis of the Alibates Dolomite and Chert (Permian), Northern Texas Panhandle of Texas*. Unpublished M.A. thesis, Department of Geology, University of Texas at Arlington.

Shaeffer, J. B.

1958 The Alibates Flint Quarry, Texas. *American Antiquity* 24:189-191.



2011 Floyd V. Studer Banquet

Stacy L. Brown

The 34th Annual Floyd V. Studer Banquet was held December 17th at the Panhandle-Plains Historical Museum in Canyon, Texas. This is the highlight event for the Panhandle Archaeological Society (PAS) that has been eagerly planned and anticipated throughout the year.

PAS Members and their guests began arriving shortly after 6 p.m. and made their way to the Hazelwood Room located on the second floor of the Panhandle-Plains Historical Museum. The museum was aglow, cheerfully decorated for the holiday season, putting everyone in the mood for a festive evening. Everyone enjoyed the social hour, catching up on the latest events as well as perusing the wide variety of items donated for the auction. The total number of members and guests attending this year's event totaled 43 people.

A benediction was offered by PAS member Dick Carter before the meal was served. This year's fine meal was

catered by Amarillo's Stockyard Restaurant and included a succulent pot roast, roasted vegetables, rolls, green salad, and homemade cobbler. After everyone had eaten, full and happy, the evening program began.

Dr. Miles Gilbert was this year's guest speaker. A native of Pampa, Texas, Miles has worked as an instructor and author around the country. While he has participated extensively in the field of osteology, Miles has always had a passion for the American West and firearms. Following this passion, he has published several books focusing on the subject of buffalo hunters, including *Getting a Stand*, and *Encyclopedia of Buffalo Hunters and Skinners, Volumes I and II*. It was on the subject of Texas Panhandle buffalo hunters that his evening lecture focused on. He entertained the audience with a power point presentation and personal stories of buffalo hunters that plied their trade from Dodge City, Kansas to the Texas Panhandle and Eastern New Mexico.

During his lecture, Miles brought the audience's attention to a nearby cabinet where several weapons were displayed. A .45 Caliber Sharps rifle owned by "Uncle" Dick Wooten of Raton Pass fame, and a 10 gauge shotgun were brought in by Dr. Gilbert. Also on display was a .40-90 Sharps rifle owned by John Wesley Mooar, a sharpening steel and cork-screw bottle opener brought by the Museum of Texas Tech University. Mooar's rifle was particularly interesting due to the fact it is one of a very few rifles that can be documented from the manufacturer to its owner and final destination on the Great Plains in the hands of a very capable buffalo hunter. PAS President Paul Katz presented Miles with a copy of Brett Cruse's book *Red River War* in gratitude for making the trip to give PAS this fine presentation.

Outgoing President Paul Katz introduced the incoming 2012 PAS Officers; President Donna Otto, Vice President Jeff Indeck, Treasurer Lisa Jackson, Publication Committee Chairman Rolla Shaller and Secretary Stacy Brown. In appreciation for his two years of service as PAS President, Donna Otto presented Paul with a plaque from the PAS membership.



Bob Smith and Dempsey Malaney visit with Miles Gilbert after his program



The Firearms that were on display during the program

Wrapping up the evening's event was the raffle and auction. Members had been bidding on a variety of donated items throughout the evening, including books, publications, and posters. Mammoth molar castings, a brass magnifying glass, a beaded spear point, and other items were also donated. Some hand crafted items that were donated this year an alabaster celt and war club head made by James Coverdale. Other hand crafted items included a wooden whimmy diddle made by Dick Carter. Bidding was fast and furious and brought in a total of \$685.52 in funds to the PAS coffers.

Everyone in attendance was in agreement that this year's events was one of the best in recent memory and are eagerly making plans for next year's event. Hope to see you there!



The audience enjoying the speaker and auction



Get those tickets ready folks!

Announcements, Updates, and Upcoming Events

The Society for Historical Archaeology Annual Meeting

Baltimore, Maryland January 4 - 8, 2012

<http://www.sha.org/>

Panhandle Archaeological Society Monthly Meeting

Wildcat Bluff Nature Center

2301 N. Soncy, Amarillo, Texas

January 18, 2012 at 7:00 pm

For more information visit the PAS website at:

<http://txpanhandlearchaeology.org/>

Panhandle Archaeological Society Monthly Meeting

Wildcat Bluff Nature Center

2301 N. Soncy, Amarillo, Texas

February 15, 2012 at 7:00 pm

For more information visit the PAS website at:

<http://txpanhandlearchaeolo>

Society for American Archaeology Annual Meeting

Memphis, Tennessee April, 18 - 22, 2012

<http://www.saa.org/aboutthesociety/annualmeeting/tabid/138/default.aspx>

The 2nd Annual Perryton Stone Age Fair

April 28, 2012 10:00 am - 5:00 pm

at the Museum of the Plains in Perryton, Texas

for additional information please visit the CAR website:

<http://www.coursonarchresearch.com/>