JSM RANCH LLC Collection
Arrow, Dart, and Fragmented Projectile Points
Found Within the Lower Rio Grande Valley

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Community Historical Archaeology Project with Schools

University of Texas Rio Grande Valley

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OUR GOAL

Our goal at CHAPS is to identify evidence for the over 13,000-year occupation of the Rio Grande Valley Region. This entails photographing, describing, and sometimes drawing or casting projectile points and establishing their date within known typologies, identifying the stone or lithic source materials for the points, and locating their place of discovery. With permission of the "finder" and the landowner, we will record sites with the Texas Historical Commission to ensure information on the sites is preserved for future generations. Information gleaned from these descriptive endeavors will be used for scholarly research purposes. All site locations will be kept confidential per the guidelines established by the State of Texas and the larger code of ethics adhered to by the Register of Professional Archaeologists.

PROPERTY LOCATION

JSM RANCH LLC is a large ranch located in Starr County, Texas. It consists of approximately 1800 acres along Las Escobas Road and FM 649. This is an irregularly shaped property, with a smaller section of land of approximately 250 acres isolated just north from the main property. A ranch house, multiple buildings, and a crypt are located on the property.

The historic ranch house at Las Escobas Ranch

Mesquite fence at Las Escobas Ranch

Crypt of Felipe Guerra Hinojosa at Las Escobas Ranch

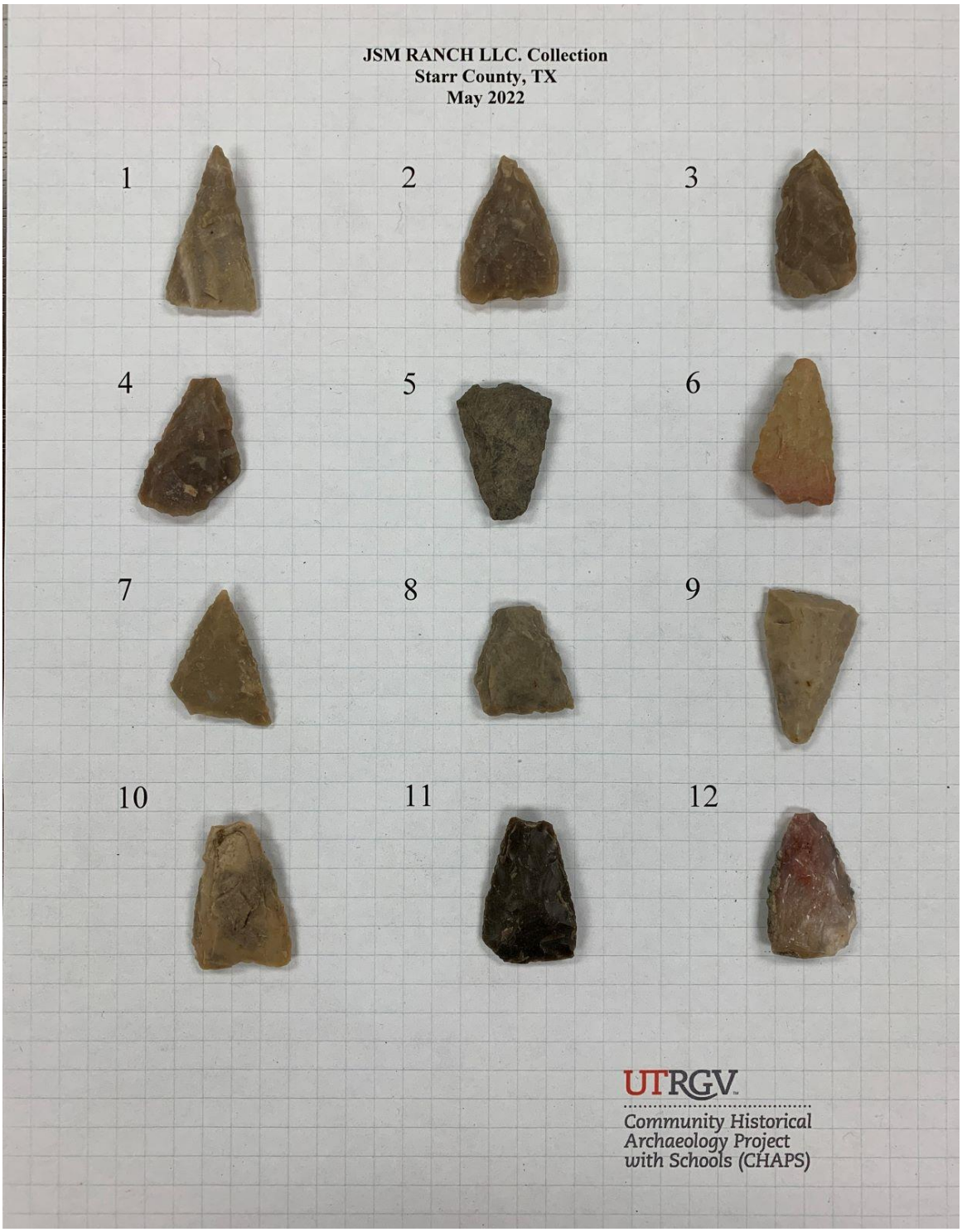
Gulch at Las Escobas Ranch

The grid system used by JSM Ranch LLC

Las Escobas Ranch boundaries shown with red and yellow lines

IMAGES OF ARTIFACTS

Photographed on ¼ inch grid paper



JSM RANCH LLC. Collection
Starr County, TX
May 2022

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UTRGV

Community Historical Archaeology Project with Schools (CHAPS)

JSM RANCH LLC. Collection
Starr County, TX
May 2022

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Community Historical Archaeology Project with Schools (CHAPS)

JSM RANCH LLC. Collection
Starr County, TX
May 2022

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Community Historical Archaeology Project with Schools (CHAPS)

JSM RANCH LLC. Collection
Starr County, TX
May 2022

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Community Historical Archaeology Project with Schools (CHAPS)

JSM RANCH LLC. Collection
Starr County, TX
May 2022

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Community Historical Archaeology Project with Schools (CHAPS)

JSM RANCH LLC. Collection
Starr County, TX
May 2022

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Community Historical Archaeology Project with Schools (CHAPS)

JSM RANCH LLC. Collection
Starr County, TX
May 2022

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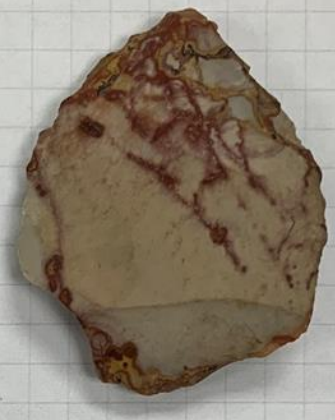

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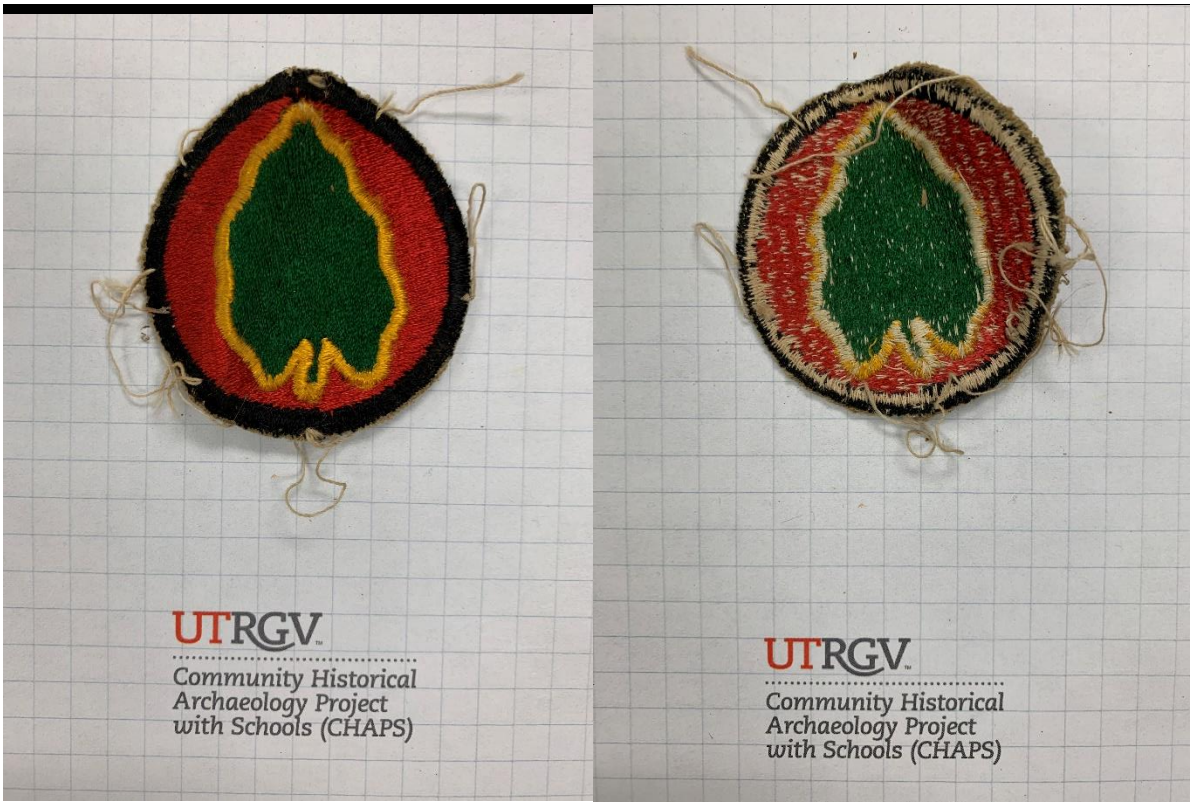
Community Historical Archaeology Project with Schools (CHAPS)



Boy Scouts of America merit badge/patch front and back

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Bucket bottom imprint and inside of bucket showing outlines of lithic artifacts inside

Bullet, Civil War Era

ARTIFACTS

Number	Type	Material	Color	Period
1	Matamoros	Chert	10YR 6/1 & 10YR 7/2 (gray & light gray)	Late Archaic 1000 BCE-300 BCE
2	Matamoros	Chert	10YR 4/1 (dark gray)	Late Archaic 1000 BCE-300 BCE
3	Matamoros	Chert	10YR 5/2 (grayish brown)	Late Archaic 1000 BCE-300 BCE
4	Matamoros	Chert	10YR 4/1 (dark gray)	Late Archaic 1000 BCE-300 BCE
5	Olmos Biface	Black banded metamorphic rock	2.5YR 4/1 (dark gray)	Transitional Archaic 300 BCE-700 CE

6	Matamoros	Quartzite	2.5YR 6/4 & 10YR 7/3 (light reddish brown & very pale brown)	Late Archaic 1000 BCE-300 BCE
7	Matamoros	Chert	10YR 6/2 (light brownish gray)	Late Archaic 1000 BCE-300 BCE
8	Matamoros	Chert	10YR 6/1 (gray)	Late Archaic 1000 BCE-300 BCE
9	Olmos Biface	Chert	2.5YR 7/2 (pale red)	Transitional Archaic 300 BCE-700 CE
10	Matamoros	Chert, mottled pink and gray	10YR 6/3 & 10YR 5/1 (pale brown & gray)	Late Archaic 1000 BCE-300 BCE
11	Matamoros	Chert	10YR 3/1 (very dark gray)	Late Archaic 1000 BCE-300 BCE
12	Catán	Rose quartz	5R 5/1 & 5R 4/3 (reddish gray & weak red)	Late Archaic 1000 BCE-300 BCE
13	Tortugas (heavily reworked)	Quartzite	10YR 5/2 (grayish brown)	Middle Archaic 2500 BCE-1000 BCE
14	Tortugas (heavily reworked)	White Chert	5Y 7/1 (light gray)	Middle Archaic 2500 BCE-1000 BCE
15	Tortugas (heavily reworked)	Heat treated, fine grained, volcanic rock	2.5YR 3/3 & 7.5YR 5/4 (dark reddish brown & brown)	Middle Archaic 2500 BCE-1000 BCE
16	Possible Lerma, reworked with large stack	Chert (waxy pale pink)	2.5YR 6/3 & 7.5YR 6/2 (light yellowish brown & pinkish gray)	Early Archaic 6500 BCE-2500 BCE
17	Lerma (reworked)	Chert (waxy golden brown)	10YR 6/3 (pale brown)	Early Archaic 6500 BCE-2500 BCE

18	Desmuke	Quartz	N 8.5/ (White) (WHITE PAGE)	Late Archaic 1000 BCE-300 BCE
19	Early Triangular	Black Banded Metamorphic Rock	10YR 2/1 (black)	Early Archaic 6500 BCE-2500 BCE
20	Early Triangular	Chert	2.5YR 4/3 (reddish brown)	Early Archaic 6500 BCE-2500 BCE
21	Early Triangular	Chert	10YR 3/2 & 10YR 4/3 (very dark grayish brown & brown)	Early Archaic 6500 BCE-2500 BCE
22	Tortugas	Quartzite	2.5 YR 7/2 (pale red)	Middle Archaic 2500 BCE-1000 BCE
23	Tortugas (possible preform)	Quartzite	10YR 6/2 (light brownish gray)	Middle Archaic 2500 BCE-1000 BCE
24	Tortugas (possible preform)	Chert	10YR 6/4 (light yellowish brown)	Middle Archaic 2500 BCE-1000 BCE
25	Lerma	Black Banded Metamorphic Rock	10YR 2/1 (black)	Early Archaic 6500 BCE-2500 BCE
26	Catán (has horizontal flaking on one side, probably to aid hafting)	Black Banded Metamorphic Rock	10YR 2/1 (black)	Late Archaic 1000 BCE-300 BCE
27	Catán	Quartz	10YR 7/1 (light gray)	Late Archaic 1000 BCE-300 BCE
28	Axtell	Quartzite	2.5YR 7/2 (pale red)	Late Archaic 1000 BCE-300 BCE
29	Catán	Chert	7.5YR 6/3 (light brown)	Late Archaic 1000 BCE-300 BCE
30	Zapata	Rhyolite	7.5YR 4/1 (dark gray)	Late Prehistoric 700 CE-1600 CE
31	Matamoros	Chert	10YR 5/2 (grayish brown)	Late Archaic 1000 BCE-300 BCE

32	Drill (probable Matamoros, reworked)	Quartz	10YR 6/1 (gray)	Late Archaic 1000 BCE-300 BCE
33	Kinney	Heat Treated Chert	10R 7/2 & 10R 6/2 (side 1) 7.5R 5/6 (side 2) (pale red & red)	Middle Archaic 2500 BCE-1000 BCE
34	Bulverde	Heat treated Chert	10R 5/4 (weak red)	Early Archaic 6500 BCE-2500 BCE
35	Unknown	Chert	10YR 6/2 (pinkish gray)	Unknown
36	Broken base	Chert	5YR 7/2 (pinkish gray)	Unknown
37	Unknown, Possible Matamoros	Chert	10YR 6/2 & 10YR 5/4 (light brownish gray & yellowish brown)	Unknown
38	Broken tip (Matamoros)	Rhyolite	10YR 2/1 (black)	Late Archaic 1000 BCE-300 BCE
39	Broken tip (same shape as # 41-pressure flaked on opposite lateral edges)	Very fine grained red chert	10YR 5/6 (bands) 10R 3/4 (base color) (yellowish brown & dusky red)	Unknown
40	Broken tip (reworked base as scraper)	Chert	10YR 7/2 (light gray)	Unknown
41	Broken tip (same as #39-pressure flaked on opposite lateral edges)	Chert	2.5Y 5/1 (gray)	Unknown
42	Broken Base (Langtry)	Chert	10YR 6/2 (pinkish gray)	Middle Archaic 2500 BCE-1000 BCE
43	Broken Base	Very coarse grained chert	10YR 6/4 (side 1) 7.5YR 5/3 (side 2) (light brown & brown)	Unknown

44	Knife-Broken Base	Chert	7.5YR 5/2 (brown)	Unknown
45	Broken Base	Chert	2.5Y 7/2 (light gray)	Unknown
46	Broken Base (heavily reworked	Chert	2.5Y 6/2 (light brownish gray)	Unknown
47	Broken Base (Tortugas)	Chert	10YR 7/2 (light gray)	Middle Archaic 2500 BCE-1000 BCE
48	Knife-Broken Base	Gold Moss Agate	5YR 4/2 (dark reddish gray)	Unknown
49	Broken Base of large piece, reworked	Chert	10YR 5/2 (grayish brown)	Unknown
50	Broken triangular piece reworked as tool	White Chert	2.5Y 8.5/2 (WHITE PAGE) (pale yellow)	Unknown
51	Broken Base, very large-possible 65mm originally	Quartzite	10YR 7/2 (light gray)	Unknown
52	Broken Base	Chert	10YR 5/1 (gray)	Unknown
53	Broken Base	Chert	10YR 5/2 & 10YR 7/4 (grayish brown & very pale brown)	Unknown
54	Broken Base	Chert	10YR 5/1 (gray)	Unknown
55	Broken Base	Agate	7.5YR 6/1 & 5/5PB (GLEY 2) (gray & bluish gray)	Unknown
56	Broken Tip	Chert	10YR 5/2 (black)	Unknown
57	Broken Tip	Chert	10YR 5/2 (grayish brown)	Unknown
58	Broken Tip	Quartzite	N 8/ (WHITE PAGE)	Unknown

59	Broken Tip	Chert	2.5Y 8/2 (pale brown)	Unknown
60	Broken Tip	Chert	10YR 7/2 (light gray)	Unknown
61	Broken Tip	Chert	10YR 7/3 (very pale brown)	Unknown
62	Broken Tip	Black Banded Metamorphic Rock	10YR 2/1 (black)	Unknown
63	Broken Tip	Coarse Grained Chert	2.5YR 4/2 (dark grayish brown)	Unknown
64	Broken Tip	Chert	10YR 4/1 (dark gray)	Unknown
65	Broken Tip	Heat treated, fine grained, volcanic rock	10YR 5/4 & 5R 3/4 (yellowish brown & dusky red)	Unknown
66	Graver	Chert (tan w/ purple veining)	10YR 5/1 (gray)	Unknown
67	Graver	Chert	10YR 6/2 (light brownish gray)	Unknown
68	Graver	Chert	10YR 7/3 & 10YR 5/1 (very pale brown & gray)	Unknown
69	Drill/Perforator	Chert	10YR 4/1 (dark gray)	Unknown
70	Discoidal/Button Scraper (unifacial)	Chert	10YR 7/3 (very pale brown)	Unknown
71	Notched End Scraper	Chert	2.5Y 8/1 (white)	Unknown
72	Scraper	Chert	2.5YR 4/3 (olive brown)	Unknown
73	Scraper (broken)	Chert	10YR 6/2 (light brownish gray)	Unknown
74	Scraper (broken)	Chert	2.5Y 7/1 (light gray)	Unknown

75	Scraper (broken)	Chert	2.5Y 6/2 & 5YR 6/3 (light brownish gray	Unknown
76	Scraper (broken)	Chert	10YR 6/2 (light brownish gray)	Unknown
77	Scraper (broken)	Chert	10YR 6/1 (gray)	Unknown
78	Scraper (broken)	Chert	2.5Y 6/1 (gray)	Unknown
79	End Scraper	Chert	2.5Y 8/1 & 10R 5/6 (white & red)	Unknown
80	End Scraper	Black Banded Metamorphic Rock	10YR 2/1 (black)	Unknown
81	End Scraper (Unifacial)	Coarse grained Chert	10YR 6/3 (pale brown)	Unknown
82	Scraper (Reworked from a very finely made larger piece)	Chert (Waxy, very fine grained)	10YR 5/1 (gray)	Unknown
83	Scraper/tool	Chert	5YR 7/2 (pinkish gray)	Unknown
84	End Scraper	Chert	10YR 7/2 & 10YR 5/2 (light gray & grayish brown)	Unknown
85	Scraper	Petrified Wood	7.5YR 4/4 & 7.5YR 2.5/1 (brown & black)	Unknown
86	Scraper or preform	El Sauz Chert	10YR 7/2 & 7.5R 3/4 (light gray & (dusky red)	Unknown
87	Clear Fork Gouge	Chert	10YR 6/1 (gray)	Paleoindian (9200 BCE-6500 BCE-Middle Archaic 2500 BCE-1000 BCE)

Additional Cultural Materials

Merit Badge/Patch with Green Leaf	Mid-century, year unknown
White pail where lithic items/patch were discovered	Bottom reads, "Roper Plastics Inc. Los Angeles, Calif." "2 Gal" "Made in U.S.A." "NRC-065-1982" "Saturn ® 2"
Bullet	.54 or .58 Civil War

Descriptions for each type of lithic artifact

Axtell This is a fairly thick dart point that usually has a crude appearance. Convex lateral edges are usually serrated. There is variation in the stem which is rounded. It is similar to Palmillas, but the rounding of the stem begins closer to the shoulders. Late Archaic 1000 BCE-300 BCE. (Turner, et al. 2011: 61)

Bulverde Strong shouldered, barbed points. Has a wedge-shaped base, which is finely chipped. Middle Archaic 2500 BCE-1000 BCE. (Turner et al., 1999: 82)

Catán (dart point) is a triangular, unstemmed point that has straight to slightly convex lateral edges -that are sometimes beveled and a convex, well-rounded base that has been thinned by the removal of one or two broad, arc-shaped flakes. The outline is similar to Abasolo, but Catán points are smaller. Late Archaic 1000 BCE-300 BCE. (Turner, et al., 2011: 73)

Clear Fork Gouge Triangular to sub-triangular outline, and sometimes lanceolate, ovate, or rectangular. Steeply beveled on the wide end which is the working end. Most edge angles will be 60-75 degrees. Small unifacial and bifacial forms from the Middle Archaic are found in the area of Abilene, Texas. Larger bifaces have been found in Paleoindian contexts and the Early Archaic. (Turner, et al., 2011: 225)

Desmuke (dart point) is a small, lozenge-shaped point that has a characteristic contraction from the lower part of the body toward the base. The lateral edges are often alternately beveled and may be slightly serrated. Impact fractures are common, as is the use of heat-treated cherts. Late Archaic 1000 BCE-300 BCE. (Turner, et al., 2011: 84)

Early Triangular (dart point) is a triangular point usually characterized by careful parallel-oblique flaking, straight to slightly concave bases, and alternately beveled lateral edges which may also be slightly serrated. Early Archaic 6500 BCE-2500 BCE. (Turner, et al., 2011: -88)

Graver Generally these are flakes or a part of another tool, which have a distinct beak like protrusion. They are thought to be used for carving or engraving. (Turner, et al., 2011: -231)

Kinney This is an unstemmed, elongate, triangular point with a concave base. Some are dart points and others were used as knives. Middle Archaic 2500 BCE-1000 BCE. (Turner, et al., 2011: 121)

Langtry (dart point) is usually a thin and well-made point with straight to slightly concave, lateral edges and strong shoulders. This type is characterized by a tapered stem, sometimes with alternately beveled edges that terminate in a straight or slightly beveled, concave base. Middle Archaic 2500 BCE-1000 BCE. (Turner, et al., 2011: -128)

Lerma (dart point) is a slender and has a bi-pointed outline; longitudinal symmetry, and thus sometimes seems difficult to determine which is the proximal and which is the distal end. Lerma points are generally found in archaic contexts in south Texas and the coastal plain. Early Archaic 6500 BCE-2500 BCE. (Turner, et al., 11: 129)

Matamoros (dart point) is a small, often thick, triangular or sub triangular, unstemmed point that is similar to *Tortugas*, but markedly smaller. The average length of *Tortugas* is 4.9 mm – 6.7 mm and Matamoros ranges from 3.2 mm to 4.7 mm in length. Late Archaic 1000 BCE-300 BCE .(Turner, et al., 2011: 133)

Olmos Biface Small triangular artifacts with a steeply beveled edge, over 60 degrees, at the broad end. The working end usually shows heavy use and dulling. Because sharpening is done on the ventral edge, it is common to find burin spalls. Transitional Archaic 300 BCE-700 CE.(Turner, et al., 2011: 238)

Perforator/Drill This is a tool that is characterized by a long and tapered bit that is diamond-shaped in cross-section. The bit and proximal end are bi-facially flaked and sometimes exhibit retouching; the tips of drills are often blunted or dulled (Turner, et al., 1999: 270)

Scraper Found in a wide range of shapes and forms and categorized by the position of their edge. (Side scraper, end scraper, discoidal scraper, etc.) Unifacial "button scrapers" are found in the Lower Rio Grande Valley. Most scrapers are made on large flakes or blades and are characterized by a steeply flaked working edge. Scrapers are found throughout Texas and across cultural periods. (Turner, et al., 2011: 246-7)

Tortugas (dart point) are large, unstemmed, triangular points that have a slightly straight to concave base and alternately beveled edges. It is often thick and crudely flaked in the midsection and well-thinned basally. Middle Archaic 2500 BCE-1000 BCE. (Turner, et al., 2011: 164)

Zapata (arrow point) are triangular to lanceolate points originally discovered at Falcon Reservoir. They have slightly to markedly convex lateral edges on the base, which is the widest measurement. The basal edges may be slightly concave and may have a "bow legged" appearance. Some were sharpened while hafted, altering the point above where it was hafted. Late Prehistoric 700-1600 CE. (Turner, et al., 2011: 217)

COMMENTS

In the fall of 2021, Gene Garcia, the General Manager of JSM RANCH LLC, contacted the CHAPS program at UTRGV and invited them to visit the property. The intention was to "expand their knowledge of the ranch through an academic relationship that would help them preserve the history and culture of the ranch and provide a resource for students, academia, and the community." In January of 2022, CHAPS program team members Roseann Bacha-Garza, Dr. Christopher Miller, Dr. Russell Skowronek, and Dr. Juan Gonzalez visited the ranch. During this visit, a bucket of projectile points and other lithic materials, found on the property but otherwise without provenance, was shown to the team. **The exact location where each of the artifacts was discovered is unknown, however all of them are believed to have been found on the property.** The bucket and its contents were transported to the CHAPS office of UTRGV where the materials were photographed and identified to the extent possible. Many of the artifacts were fragmentary and unidentifiable.

JSM RANCH LLC has a long history. "Las Escobas" was founded by Joseph Felipe Guerra Hinojosa and Maria Josefa Gonzalez around 1862, following the Texas Revolution and the Homestead Act. It is situated on land that covers three of the Spanish land grants, or porciónes.

Joseph Salvador Garcia was the original grantee. The ranch headquarters is located on porción #109, with the remaining land on porciónes # 110 and #111. At its height in the 1800's, it was 46,000 acres. The remnants of multiple historic structures can be found on the remaining acreage. (Salinas Saldaña 2019: 32-35) (South Texas Heirs Facebook) The Salinas Saldaña family is descended from the founders of Las Escobas Ranch. Irma and Lauro Saldaña Jr. have created a website aimed at the preservation of the cultural heritage of the Guerra-Salinas-Garcia-Gonzalez-Saldaña-Cano families. This contact information is listed under the sources section of this report. (Salinas Saldaña Family Website 2022)

Currently, the JSM RANCH LLC is undergoing restoration to preserve the 140+ year old main house, family crypt, and other features. The University of Texas Austin is conducting an architectural restoration project at the ranch. Historic Preservation students with the School of Architecture conducted a survey of the ranch house and its surroundings following the process used by the Secretary of the Interior for Historic American Building Survey program. The ranch house is unique because it is a surviving example of a vernacular style structure, which was built in the 1850's. JSM RANCH LLC is sponsoring the project. (UT Austin School of Architecture 2022)

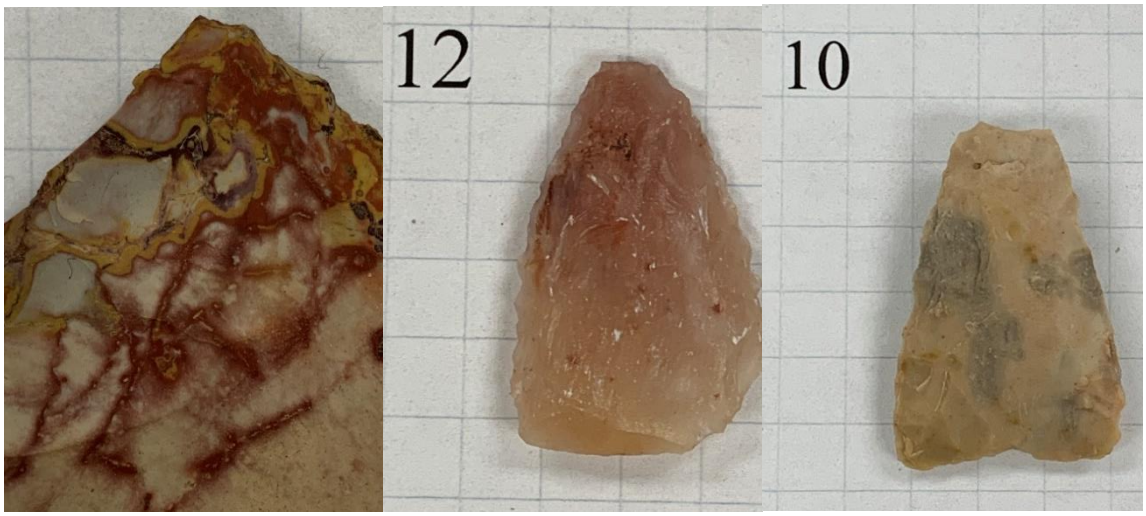
The artifacts in this report were reportedly found in a white bucket in one of the structures on JSM RANCH LLC. The area where it was found had been used as a corporate hunting lodge for people in the oil and gas industry from the 1950's to the 1980's. This was located at a high point on the ranch. There is a gully where flint knapped pieces were found along with debitage and petrified wood. In this area, there is a volcanic ash layer and evidence of a petrified forest. Caliche is found towards the top of the hill. While much of the context of the lithic artifacts has been lost, it is known that they originated from this area, and were left in the bucket by the finders.

The white bucket that contained the artifacts was made by Roper Plastics, Inc. This company was incorporated June 1, 1976 and dissolved in January 9, 1989. Its company number was 0038236400, with a listed address of 1601 Elm Street, Dallas, TX 75201. The California branch of this company began December 28, 1977. (Open Corporates 2022) One of the marks on the bucket's bottom reads, "NRC-065-1982" If the artifacts were all originally placed in the bucket at the site (and not transferred from a prior storage location) it would date the time when the

artifacts were collected after June 1, 1976. One consideration for this time frame would be if Roper Plastics Inc. was producing buckets prior to incorporation, the date could be earlier.

The artifacts represent repeated used of this ranch by indigenous people beginning as early as 9200 BCE. Many of the artifacts date to the Middle Archaic (2500-1000 BCE) and Late Archaic (1000-300 BCE). The youngest artifacts date to the Late Prehistoric (700-1600 CE). No lithic artifacts dating to the Historic period were recovered. Many of the artifacts were fragments and could not be identified. Several pieces showed retouching. The collection consists of artifact types commonly found in the Lower Rio Grande Valley (Turner, et al., 1999; Turner et al., 2011).

There are a variety of lithic materials represented in this collection. Below are close up images of a selection of materials. The first image is # 86, El Sauz Chert. #12 Rose Quartz, #10, 66, & 33 assorted cherts, # 80 Black Banded Metamorphic Rock.



#37 (below) is a yellowish to amber colored chert. The "notch" appears to be a natural feature, with visible cortex on one side.

A piece of El Sauz chert at JSM Ranch LLC

Dr. Juan Gonzalez examining volcanic ash on JSM Ranch LLC

Gulch on JSM Ranch LLC

SOURCES

Open Corporates. Website. Accessed 5/18/2022 https://opencorporates.com/companies/us_tx/0038236400

Munsell Color (2009) *Munsell Soil-Color Charts.* Munsell Color, Grand Rapids, MI.

Salinas Saldaña, Irma. (2019) *Las Escobas Ranch Salinas Family Reunion: October 2017.* ISBN-13:978-1-7291-7743-3.

Salinas Saldaña Family Website. Accessed 5/18/2022. http://salinassaldanafamily.com/

The South Texas Heirs of Las Porciónes. Facebook Page. Accessed 5/18/2022. https://m.facebook.com/PorcionHeirs/photos/las-escobas-ranch-was-founded-around-the-1850s-by-jose-felipe-guerra-hinojosa-an/629478833802328/

Turner, Sue, and Thomas R. Hester. (1999) *A Field Guide to Stone Artifacts of Texas Indians.* Gulf Publishing, New York.

Turner, Ellen Sue, Thomas R. Hester, and Richard McReynolds. (2011) *Stone Artifacts of Texas Indians*. Taylor Trade Publishing, New York.

University of Texas at Austin school of Architecture. Facebook post. January 11, 2022. Accessed May 18, 2022. https://www.facebook.com/UTSOA