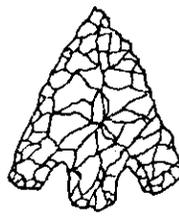
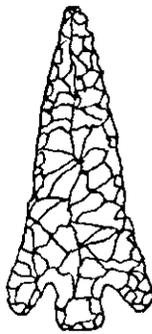
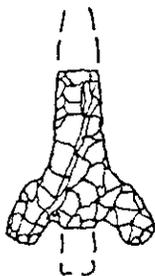
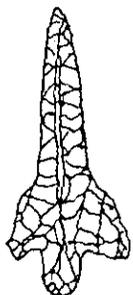




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Test Excavations at Site 41FB37, Fort Bend Co., Texas

L. W. Patterson and J. D. Hudgins

Introduction

This article describes the results of test excavations at Site 41FB37 in Fort Bend County, Texas, done by the Houston Archeological Society on March 14, 1987. The purpose of these excavations was to determine the nature of an undefined prehistoric site as part of a continuing program by the HAS to increase the archeological data base for southeastern Texas. Work was made possible through the courtesy of the landowners, Roger Byrne and Eddie Wright.

Site 41FB37 was originally found and reported by Joe Hudgins on the basis of surface finds of small chert flakes and freshwater shellfish remains. The location is on a high terrace on the bank of the San Bernard River. The general location is a mixture of woodlands and coastal prairie. The prehistoric setting was probably similar to modern conditions.

Excavation work was done under the overall direction of HAS Field Director, Sheldon Kindall. Participants in these excavations included Dave Atherton, Marshall Black, Gregg Dimmick, Josh Dimmick, Kaydi Dimmick, C. R. Ebersole, Dick Gregg, V. O. Hollingsworth, Joe Hudgins, Curt Johnson, Sheldon Kindall, Melissa Marrs, Linda Moorrees, Steve May, Ray McCausland, Mike Marshall, Bernard Naman, Tom Nuckols, Lee Patterson, Deb Phillips, Gary Ryman, Nancy Robertson, Chris Sears, Ann Whitley and Alleta Whitley. Artifacts were later cleaned and sorted in laboratory sessions under the direction of David Pettus.

Results of these excavations provide data on the nature of this site, including approximate chronology and subsistence details. Site 41FB37 appears to be a seasonal campsite that was used over a long time interval during the Late Paleo-Indian and Early Archaic periods, as well as possibly extending later into the Archaic period. One potsherd found near the surface indicates additional use of this site during the post-ceramic period. This site is similar to nearby Sites 41FB32 (Patterson and Hudgins 1987) and 41FB34 (Patterson and Hudgins 1986), which possibly overlap this site in occupation time, but which are more centered on later Middle and Late Archaic periods. The complex of sites along this portion of the San Bernard River shows long-time stable settlement and subsistence patterns, as is common for the inland portion of southeastern Texas (Patterson 1983).

Excavation details

To test the nature of this site, seven 1-meter square test pits were dug as shown in Figure 1. It became apparent during this work that archeological remains were located very deep. To make better use of available manpower, work on Pit A was terminated at 90 cm depth and work on Pit B was terminated at 40 cm depth. The main results presented here are for Pits C to G.

Some test borings were made on the west side of the main excavations on a lower level of the sloping terrace. Although this is a sloping terrace, test borings showed the strata with concentrated cultural materials to be as deep as at the uphill excavation pits, indicating no differential surface erosion on the lower terrace level.

All soil was put through 1/4-inch screens. Some soil samples were saved for fine screening to recover small-size materials such as fish bone. Pits C to G were dug deep enough to reach culturally sterile soil.

Cultural materials in Pit F occurred much deeper than in the other four test pits. Since the surface topography did not appear to be too irregular at the location of Pit F, this depth difference

is possibly due to a surface irregularity at the time of prehistoric occupation. Another possibility is that the cultural materials in Pit F are older than the materials from the other test pits. Judged by soil color changes, the depth difference of Pit F represents a prehistoric surface irregularity. There was a change to lighter-colored sand at 180 cm in Pit G, but the same soil change occurred at 230 cm in Pit F.

Faunal remains

Faunal remains from this site consist of bone, gar scale, shell of freshwater shellfish and snail shell. As at nearby Sites 41FB32 (Patterson and Hudgins 1987) and 41FB34 (Patterson and Hudgins 1986), preservation of bone materials was very good, due to high soil alkalinity maintained by the shell deposits. Remains of deer, turtle and gar seem to be common. W. L. McClure will do a separate, detailed analysis of faunal remains from this site in the same manner as already published for Site 41FB34 (McClure 1986), and Raymond Neck will do the same for shellfish remains from this site as already published for 41FB34 (Neck 1986). A summary of weights of bone materials recovered from each test pit is given in Table 1, and a similar summary for shellfish remains is given in Table 2.

The faunal remains from this site seem to be similar to those from nearby Sites 41FB32 and 41FB34, which have occupations that center on later portions of the Archaic time period. Together, Sites 41FB32, 41FB34 and 41FB37 demonstrate a uniform use of faunal resources over a very long time period in the Late Paleo-Indian and Archaic periods.

This site represents the earliest known use of freshwater shellfish in southeastern Texas. The use of shellfish was not geographically uniform or common in southeastern Texas, as shellfish use depended on local availability.

A marine conch shell was found at a depth of 270 cm in Pit F; this indicates some contact with the coastal margin by early Indians. There may be a few more marine shell specimens in the other shell samples.

Baked clay materials

A number of fired clayballs and other miscellaneous baked clay materials were recovered in these excavations. A summary is given in Table 3 of the weights of these materials for each test pit at the various excavation levels. The use of fired clayballs in cooking operations covers a long time period in this region, from the Paleo-Indian to the Late Prehistoric period (Patterson and Hudgins 1983), but in most cases fired clayballs have not been associated with shellfish remains. This site, along with Sites 41FB32 and 41FB34, seem to have the first reported occurrences of clayballs at freshwater shellfish middens.

Pottery

One Goose Creek Plain potsherd was found at the 10-20 cm level of Pit B. This is the only indication of post-ceramic occupation at this site. There are possibly more post-ceramic time period materials in portions of this site that have not been tested.

Projectile points and chronology

Site 41FB37 appears to occupy some portions of the Late Paleo-Indian and Early Archaic time periods, judged by the projectile point types. The upper levels of the concentrated cultural materials

may also represent later occupations in the Archaic period. As mentioned, there is also a trace of post-ceramic occupation at this location. The Late Paleo-Indian period is from approximately 10,000 to 7000 years ago, and the Early Archaic period in this region is from approximately 7000 to 5000 years ago (Patterson 1979). The Archaic period terminates by definition with the introduction of ceramics about 1900 years ago.

An Early Stemmed dart point (Figure 2A) was found in the 170-180 cm level of Pit D. This point is similar to specimens found in the Late Paleo-Indian period at Sites 41WH19 (Patterson and Hudgins 1985:Figure 3) and 41HR315 (Patterson 1980:Figure 5). A Wells-like contracting stem point (Figure 2B) was found in the 160-170 cm level of Pit C. This is another demonstration of the early occurrence of contracting stem points in southeastern Texas. Prewitt (1981:78) places the Wells point in the Early Archaic in Central Texas with a time range of 7000 to 6000 years ago. Contracting stem dart points may not be very time-diagnostic in southeastern Texas, as Wells and Gary points seem to have been made for long time periods.

There is a possibility of obtaining some radiocarbon dates for this site. One small piece of charcoal was found at the 150-160 cm level of Pit C, and it may be possible to obtain radiocarbon dates from shell samples.

An unclassified dart point blade fragment (Figure 2C) with serrated edges and an impact fracture was found at the 170-180 cm level of Pit C. A dart point preform fragment was found in the 180-200 cm level of Pit E.

General lithic technology

A few small chert flakes were found in the 20-90 cm levels of Pit A and the 10-40 cm levels of Pit B before work was terminated on these test pits. All other test pits had a few chert flakes in the upper levels. Some of these flakes may represent later occupations, but some of this material seems to be the result of gopher activity that has brought up small fragments of shell and small chert flakes from lower levels.

A summary of chert flakes recovered from the various excavation levels of Pits C to G is given in Table 4. A total of 480 flakes were recovered in the excavation levels that contained concentrated cultural materials. Only 185 (38%) of these flakes were larger than 15 mm square. This does not represent a large amount of knapping activity at this site. Most of the chert flakes appear to be from bifacial thinning to manufacture or repair dart points. The flake samples are not large enough to do a good analysis of flake size distributions as related to bifacial reduction activities. The occurrence of only one dart point preform fragment and only one miscellaneous chert core (at 200-210 cm in Pit F) tends to confirm that there was not a high amount of lithic manufacturing activity at this site. Flakes above 15 mm square ranged in size up to 40 mm square, with the largest portion ranging from 15 to 25 mm square.

All of the chert appears to be of fairly local varieties. At all excavation levels there is evidence of heat treating, in the form of reddish coloration, waxy luster or pottid surface fractures on flakes.

For all flakes over 15 mm square, there were 7 (3.8%) primary flakes (covered with cortex), 30 (16.2%) secondary flakes (partially covered with cortex), and 148 (80.0%) interior flakes (with no remaining cortex). The relatively low percentage of flakes with remaining cortex demonstrates that little primary lithic raw material in an untrimmed form was imported to this site.

No formal type of unifacial stone tool was found at this site, which is consistent with the dominant use of utilized flakes as stone tools in this region.

One piece of red ochre was found at the 210-220 cm level of Pit F; it may have been used for decorative purposes.

A significant amount of poorly consolidated sandstone was found in these excavations. It is not known if this is simply a natural occurrence, or represents importation of this material by Indians for some utilitarian purpose. A summary of sandstone recovered from various test pits is given in Table 5. No grooves or other markings that would indicate use of this material for abrading functions were found on the sandstone specimens.

Summary

Site 41FB37 appears to have a main occupation sequence of several thousand years during the Late Paleo-Indian and Early Archaic periods, possibly also continuing somewhat later into the Archaic period. There is also a trace of post-ceramic occupation here. This location represents a seasonal campsite of nomadic hunter-gathers with significant use of freshwater shellfish from the adjacent river. As with nearby Archaic Sites 41FB32 and 41FB34 (Patterson and Hudgins 1986, 1987) there is excellent preservation of faunal remains. These three sites together represent very long, stable subsistence and settlement patterns for this local area, as is common for the inland portions of the upper Texas coast.

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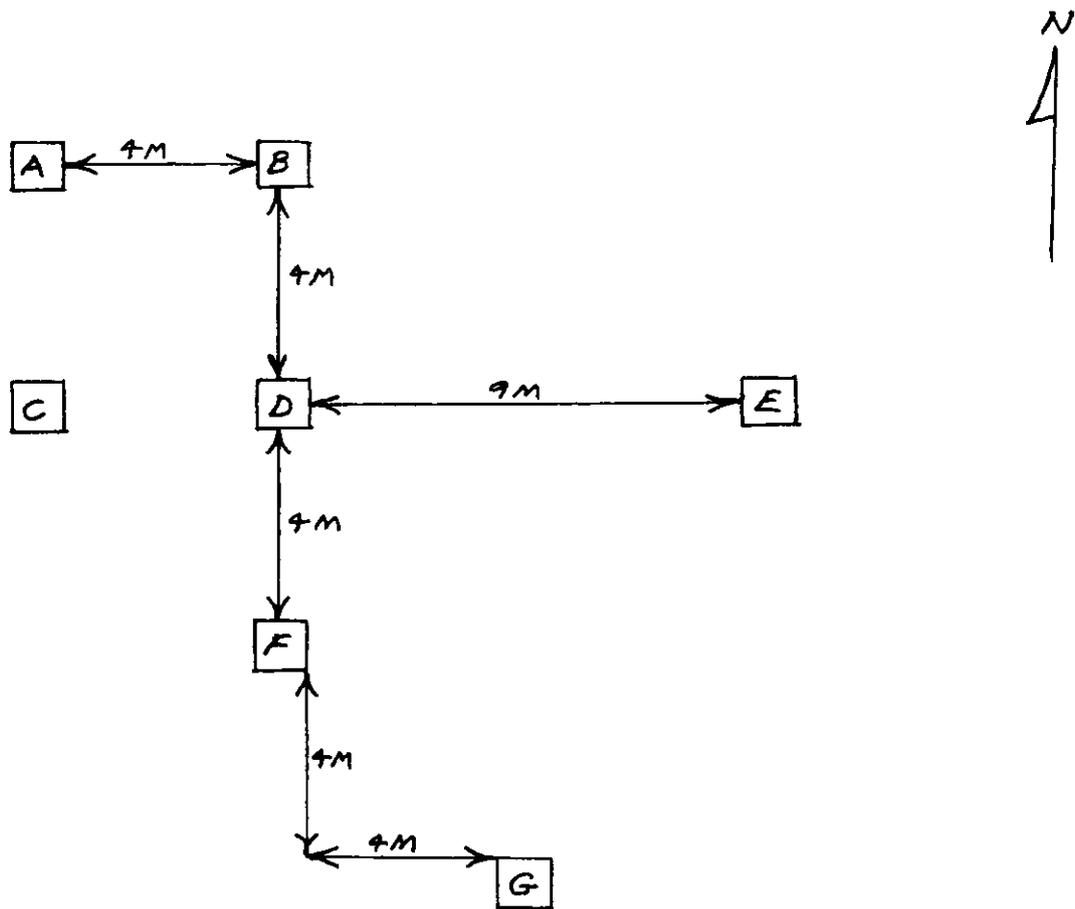
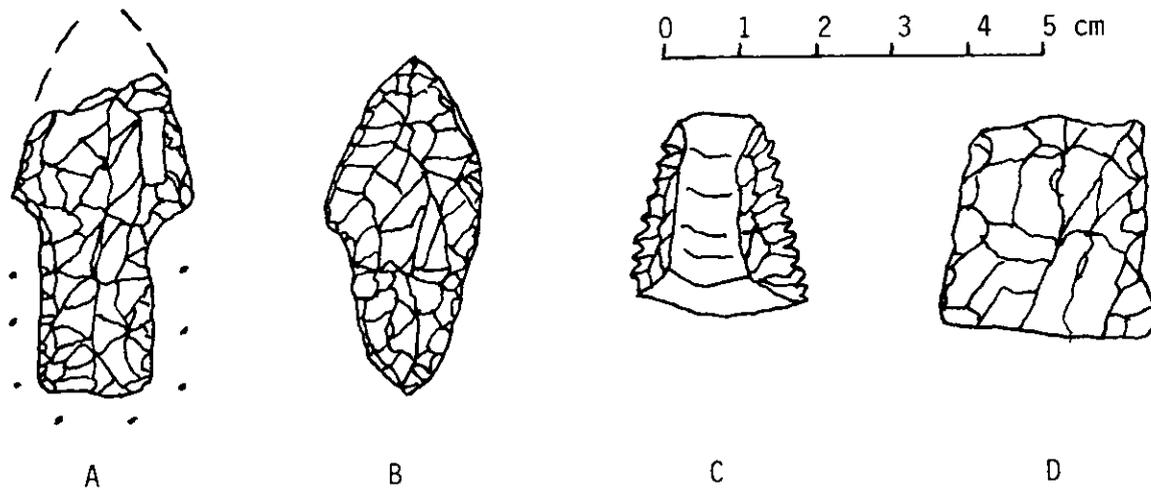


Figure 1. Site 41FB37 excavation layout



A - Early Stemmed, B - Wells-like, C - dart point blade fragment, D - preform fragment; dots show ground edges

Figure 2. Site 41FB37 projectile points

Table 1. Summary of bone remains

level, cm	weight, grams				
	Pit C	Pit D	Pit E	Pit F	Pit G
130-140		5			
140-160			100		
140-150		50			
150-160	100	40			
160-180			50		
160-170	100	10			
170-180	180	55			
180-200			20		
180-190	110	40			50
190-200	70	105			20
200-210		40	40	10	
210-220				50	
220-230				100	
230-240				5	
240-250				60	
250-260				50	
260-270				40	

Table 2. Summary of shellfish remains

level, cm	weight, grams				
	Pit C	Pit D	Pit E	Pit F	Pit G
130-140		200			
140-160			200		
140-150		410			
150-160	1278	770			
160-180			550		
160-170	2272	1310			
170-180	5680	5325			150
180-200			4210		
180-190	6845	2030			880
190-200	3891	3920			650
200-210		1350	2050	350	
210-220				800	
220-230				1220	
230-240				600	
240-250				1650	
250-260				1380	
260-270				1650	

Table 3. Summary of baked clay material

level, cm	weight, grams				
	Pit C	Pit D	Pit E	Pit F	Pit G
130-140		110			
140-160			*700		
140-150		*300			
150-160	*875	*350			
160-180			*480		
160-170	500	*2600			
170-180	*1045	905			
180-200			*600		
180-190	*660	*550			*800
190-200	*150	*660			*250
200-210		250	250	*80	
210-220				*500	
220-230				320	
230-240				100	
240-250				*540	
250-260				*200	
260-270				*300	

* includes some clayballs

Table 4. Summary of lithic flakes

level, cm	total	Pit C	Pit D	Pit E	Pit F	Pit G
130-140	9		9			
140-160	15			15		
140-150	14		14			
150-160	56	34	22			
160-180	8			8		
160-170	60	37	23			
170-180	59	30	28			1
180-200	19			19		
180-190	65	45	12			8
190-200	61	32	26			3
200-210	42		16	19	7	
210-220	0					
220-230	15				15	
230-240	5				5	
240-250	20				20	
250-260	11				11	
260-270	15				15	
270-280	6				6	
total	480	178	150	61	79	12

Table 5. Summary of sandstone recovered

level, cm	weight, grams (pieces)			
	Pit C	Pit D	Pit E	Pit F
140-150		568 (1)		
150-160		341 (4)		
160-180			1193 (9)	
160-170		2158 (14)		
170-180		795 (8)		
180-200			1079 (8)	
180-190	341 (8)			
190-200	426 (7)			
200-210				
210-220				250 (1)

Snakes of Allens Creek Sites

W. L. McClure

Introduction

Intensive excavations of Sites 41AU36, 41AU37 and 41AU38 were conducted during 1974 and 1975. Results of that effort were reported by Grant D. Hall (1981). The sites are near Allens Creek on the west valley wall of the Brazos River in Austin County, Texas. The three sites had been used for habitations and cemeteries from the Middle Archaic through the Late Prehistoric periods. Hall (1981:iii) concluded that "throughout this period, prehistoric peoples lived by hunting and gathering food resources available in nearby river, flood plain, and prairie environments." Thirty-three varieties of vertebrates were reported with the majority being available from the immediate vicinity of the creek and river. The report indicates that 1718 vertebrae of snakes were recovered. This is a report of an effort to determine the varieties of snakes that were used for food.

Methods

Materials recovered from the site are on deposit at the Texas Archeological Research Laboratory (TARL) in Austin, Texas. The bones from each excavation unit are in plastic bags. The bags were examined visually. Those bags that had visible snake vertebrae were separated and subsequently opened. The snake bones were removed and identified. As expected, this method did not yield all of the snake bones. However, 1137 were found and this represents 66% of the number reported by Hall.

The bones were identified by use of the comparative bone collections of the Houston Archeological Society and the author. Auffenberg's (1963) report was of considerable assistance in the identification process. The bones were then tabulated by species and lot numbers. The data was then reviewed relative to vertical and horizontal distribution.

Results

Bones of nine varieties of snakes were identified. These are racer (*Coluber constrictor*), rat snake (*Elaphe* sp.), mud snake (*Farancia abacura*), eastern hognose snake (*Heterodon platyrhinos*), kingsnake (*Lampropeltis* sp.), coachwhip (*Masticophis flagellum*), water snake (*Nerodia* sp.), cottonmouth (*Agkistrodon piscivorus*), and diamondback rattlesnake (*Crotalus atrox*). During the sorting process, bones were identified of three other animals which were not reported by Hall. These are softshell turtle (*Trionyx* sp.), lesser siren (*Siren intermedia*) and eastern mole (*Scalopus aquaticus*).

From 41AU36, 28 bags were examined. They contained 116 snake vertebrae. Nine bones were not complete enough to identify. Of 107 identifiable vertebrae, 50 (47%) are water snake, 26 (24%) are rat snake, 11 (10%) are cottonmouth, 9 (8%) are rattlesnake, 6 (6%) are racer, 3 (3%) are coachwhip, and 2 (2%) are mud snake. The racer bones are partially articulated and appear much fresher than the others. They probably represent a recent intrusion.

From 41AU37, 56 bags were examined. They contained six angular-articular portions of snake mandibles and 725 snake vertebrae. One hundred sixty bones were not complete enough to identify. Of 565 identifiable vertebrae, 210 (37%) are water snake, 163 (29%) are cottonmouth, 160 (28%) are rat snake, 9 (2%) are rattlesnake, 9 (2%) are hognose snake, 8 (1%) are mud snake, and 6 (1%)

are coachwhip. Mandible bones are three of water snake and one each of cottonmouth, mud snake and unknown.

From 41AU38, 24 bags were examined. They contained 296 snake vertebrae. Eighty-two were not complete enough to identify. Of 214 identifiable vertebrae, 105 (49%) are water snake, 47 (22%) are cottonmouth, 37 (13%) are rat snake, 10 (3%) are rattlesnake, 8 (3%) are kingsnake, and 7 (2%) are coachwhip.

Of the total vertebrae, seven are caudal and 1130 are precaudal. Sixteen were burned. Two of the rat snake vertebrae are fused together as are three of an unidentified snake. One vertebra of an unknown snake has an aberrant bony growth of about 4 mm diameter and 2 mm thickness.

The bones came from all depths from units scattered about the sites. For the record, tabulations of bones according to lot numbers will be filed at TARL.

Discussion

The snakes and other animals that were identified in this effort are all found in Austin County today. At least eight of the varieties of snake were recovered within the midden in such numbers and locations that their use for food is highly probable. These eight snakes along with the salamander, the turtle and the mammal add a significant number of animals to the known resources used by the inhabitants and support Hall's (op. cit.) conclusion. Apparently the people consumed nearly any vertebrate that was available throughout the entire occupation of the site from about 3000 BC to AD 1500.

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Additional Data for Site 41HR209, Harris Co., Texas

L. W. Patterson

Introduction

Some additional projectile points have been found on the surface of Site 41HR209 in Harris County that appear to increase the time range for the occupation sequence of this site. A previous publication (Patterson 1976a:5) gave an estimated time range for this site from the Late Archaic through the Late Prehistoric. It now is possible that the occupation sequence here may start as early as the Late Paleo-Indian period.

It has previously been noted (Patterson 1983) that an increasing number of prehistoric sites which have very long occupation sequences are being found on the inland portion of the upper Texas coast. Some of the time ranges are as long as 10,000 to 12,000 years. Examples of the longest occupation sequences are Site 41WH19 (Patterson and Hudgins 1985) and Site 41HR571 (Patterson 1986), which both start in the Early Paleo-Indian period of 10,000 to 12,000 years ago and continue through the Late Prehistoric to approximately A.D. 1500. Additional data demonstrates that Site 41HR209 can be added to the increasing list of sites in this region that have very long occupation sequences.

Projectile points and chronology

Four additional dart point specimens have been found on the surface of Site 41HR209 since the previous publication on this site (Patterson 1976a). One corner-notched point resembles a Williams point (Suhm and Jelks 1962:Plate 130) in outline, but has well-ground basal edges (Figure 1A). A similar specimen has been found on Site 41HR206 (Patterson 1976b:Figure 1A, 1980:Figure 1e). These specimens appear to be related to early notched points of the Late Paleo-Indian period of approximately 10,000 to 8000 B.P., as found in excavations at Site 41WH19 in Wharton County (Patterson and Hudgins 1985:Figures 2,3).

A Bulverde point fragment (Figure 1B) from this site represents the Middle Archaic period. Prewitt (1981:79) gives a time range of 4000 to 3400 B.P. for this point type in central Texas.

A projectile point fragment (Figure 1C) that was previously classified as a thin biface fragment (Patterson 1976a:Figure 1) may be a long barb from a Bell/Andice point. Prewitt (1981:78) places this point type in the Early Archaic in central Texas, with an estimated time range of 6000 to 5000 B.P.

An additional Ellis point specimen (Figure 1D) has also been found on Site 41HR209. This point type occurs in the Late Archaic and Early Ceramic periods (Patterson 1983:Table 1) in this region.

Summary

Additional data from Site 41HR209 seems to indicate a very long occupation sequence for this site, possibly starting as early as the Late Paleo-Indian period. All available data indicates that a broad-based Archaic hunting and gathering lifeway was practiced by Indians of this region for the entire long period of prehistoric occupation.

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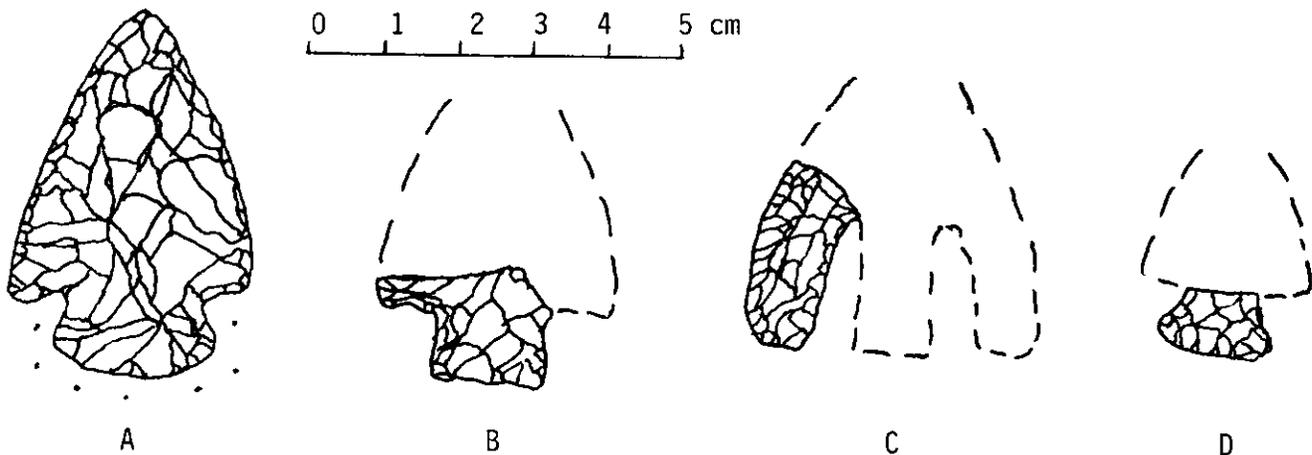
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A - Early Notched, B - Bulverde, C - Bell(?), D - Ellis. Dots show basal grinding.

Figure 1. Site 41HR209 projectile points

Functional Determination and Spatial Analysis of Ceramic Shards From 41JP94, Jasper County, Texas; a Nineteenth Century Plantation Site

Joan Few

Ceramic analysis

Ceramics are among the most durable artifacts found in historic nineteenth century sites in Texas. We must learn to cull from them every perceivable shred of information concerning human behavior and cultural process. This paper proposes the following steps to retrieve information and to encourage site comparisons. Step one in ceramic analysis is classifying ceramics in a taxonomic system as the people of the nineteenth century referred to them, by decoration (Majewski and O'Brien 1984:19-25; Miller 1980:1). The seven categories of decoration which incorporate most of the ceramics found in Texas sites are (1) uncolored white wares; (2) minimally decorated ceramics, usually decorated around the edge; (3) handpainted; (4) transfer printed; (5) porcelain, translucent glaze; (6) colored ceramics, entire vessel colored; and (7) stonewares, highly fired earthenwares which hold water without glazing (Few 1986). Step two in ceramic analysis is the functional identification of ceramic shards, the determination of what these ceramics were designed for and how they were used; step three identifies the spatial distribution of ceramics horizontally over the site to denote patterns of behavior and process; step four addresses the relationship of ceramics to other artifact types; step five is the inter- and intra-regional comparisons of behavioral patterns reflected in ceramics; and step six, the analysis of processes and change taking place.

Steps two and three: functional and spatial analysis

This paper deals with steps two and three, the functional and spatial analysis of ceramic shards from a nineteenth century Texas site. The ceramic assemblage used in this paper is from the Glorianna Site (41JP94) in Jasper County, Texas. Established as an antebellum plantation in 1858, the site survived as a homestead until 1882, when it was abandoned. The ceramic assemblage from this site incorporates all of the decorative categories that we would expect to find at a nineteenth century Texas site (Few 1986). The sampling technique used at this site was selected for the purpose of systematically identifying behavior patterns and structures representing a particular occupation. A rectangular grid system, 70 meters east/west by 50 meters north/south was established to systematically sample the site area. Thirty 2-meter-square units systematically placed over the grid were excavated for a 3.4% coverage of the area. The structures of this site were made of biodegradable materials. Structures and activity areas were identified by artifact distribution, concentration and association.

Establishing original ceramic function

Original function of ceramic shards can be established by measuring those shards large enough to establish clear identity to provide the scale for comparison of small shards. This site assemblage had large pieces of plates, saucers and cups which were used to establish diameters of rims and bases. By tracing existing exterior rims and making pencil rubbings of existing base rims, the circumferences of these rims and bases were established and drawn with the aid of a compass. Circumferences

were then drawn on translucent plastic sheets. A small shard held behind the plastic sheet can be matched to its correct circumference to establish its vessel type and its diameter.

In the Glorianna site assemblage, plates, saucers, and cup rims have the following diameters: plates, 25 cm (9 7/8") and 22 cm (8 5/8"); saucers, 18 cm (7 1/16"), 16 cm (6 1/4") and 15 cm (5 7/8"); cups, 9 cm (3 1/2") and 7.5 cm (3"). The distribution of rim diameters can be seen in Figure 1. Base diameters are: plates, 15 cm (5 7/8"), 14 cm (5 1/2") and 10 cm (4"); saucers, 8 cm (3 1/8"), 7.5 cm (3"), and 6 cm (2 3/8"); cups, 5.3 cm (2 1/8") and 5 cm (2"). The distribution of base diameters is given in Figure 2. The majority of the functional objects with rim remains are of cups and plates (Figure 1). Base diameters (Figure 2) are more evenly distributed among vessel types. Concerning the correlation of base and rim diameters, 15-cm base diameters correspond to 25-cm plate rims, while 14-cm base diameters correspond with 22-cm plate rims. The 10-cm plate base (saucer?) stood alone, without a corresponding rim. The saucer rim and base measurements were 18 cm/8 cm, 16 cm/7.5 cm and 15 cm/6 cm, respectively.

Base shards, easily recognized by the flat base surface, are consistent in form. The bases of large fragments of plates, saucers and cups were measured in millimeters by use of a vernier caliper. Base thicknesses of small shards were measured to help determine vessel type. Those above 6 mm in thickness were designated plates and those below were denoted as cups or saucers. Cups are usually identifiable. The distribution of base thickness is given in Figure 3.

Spatial distribution of functional types

With vessel identity established, the relationship between function and behavior can be studied (Table 1). The horizontal distribution of functional vessels over a site coupled with identification of activities and artifact densities should produce patterns which identify particular occupations during particular time periods. These patterns can then be used in future site testing to identify cultural activities and change, and to explain similarities and differences between sites.

With a classification system based on decoration (Table 1), it can be seen that 72% of the ceramic shards found at the Glorianna site were white undecorated (Decorative Type 1). Following 1850, British manufacturers flooded the world market with white undecorated ironstone (Miller 1980:1). The white ironstone of the 1850s is very heavy and thick (7 mm average thickness) as opposed to the thinner paste (3-4 mm thick) and lighter undecorated wares of the early nineteenth century. Nineteenth century Texas sites occupied after 1850 should have a majority of white undecorated wares as compared with those sites occupied prior to 1850. Sites which span the 1850 transitional period should have a larger percentage of transfer prints and decorated wares than sites settled after 1850. Intersite comparisons of ceramics by decoration should reveal a decorative seriation for site dating.

The wide distribution of ceramic shards throughout the site reflects wide primary and secondary usage patterns as well as disposal patterns. Shards of white undecorated wares were found in all excavation units in structural and activity areas except the fireplace area in the main house. The decorated wares at the site were area- and activity-related. The annular (banded) ironstone and the edged wares (sometimes called feather-edged) included in Decorative Type 2 were common after 1830 (McIntosh 1982). These Decorative Type 2 items were plates found predominantly in the kitchen area. The handpainted shards of Decorative Type 3 were found in the house, trash and yard areas. None were found in the kitchen area. The older ceramics, in terms of decorative type (banded wares and transfer prints), were found more in the kitchen area, indicating utilitarian usage. Transfer prints were found on personal as well as food-related items. The transfer-printed wares of Decorative Type 4 went through a series of design changes which can be dated during the eighteenth and nineteenth century. In the first part of the eighteenth century, early transfer prints

were in cobalt blue and had geometric borders. The geometric borders were replaced by floral borders, or line and stipple prints, around 1840. After 1828, colors other than cobalt blue were also used in transfer prints (McIntosh 1982). Flow blue (included in Decorative Type 4), so-called because of its blurred effect, was developed early in the nineteenth century. It was popular between 1840 and 1870 (McIntosh 1982). The transfer-printed shards were found to be plates, a shaving cup, a jar and a cup or vase. These shards were predominantly in the kitchen area but also in the house, trash and yard areas. The porcelain was widely distributed, in part due to the large portion of shards being parts of children's toys. The porcelain plates, cups and saucers were found in the house area and appeared to be a tea set.

Hypothesis for future site testing

Comparison between sites will contribute to pattern development and behavior identification. Hypothetical questions, drawn from previous excavations and formulated prior to excavation, will aid in synthesizing information and formulating "proofs" of process and change. Following are examples of statements which should be tested in future excavations.

1. Site dating

- (a) Sites occupied and abandoned before 1850 will have no heavy white undecorated ironstone.
- (b) Sites occupied before and after 1850 will have shards of both pre-1850 ceramic types and the heavy white undecorated ironstone of the later nineteenth century. The longer the site was occupied in the later nineteenth century, the higher the percentage of heavy white undecorated ironstone. Sites occupied between 1870 and 1900 will have shards of the Victorian decorative styles.
- (c) Changes in trade patterns caused by railroad expansion in the latter part of the nineteenth century will result in more American ceramics in sites occupied after 1865.

2. Activities

- (a) Decorative styles and functional types will identify activity areas. If there is a behavioral division between food preparation areas and consumption and storage areas, ceramics will clearly define these areas.
- (b) Older decorative styles will be more involved in daily usage, with a concentration in food preparation areas.
- (c) Minimally-decorated wares and stonewares will be concentrated in kitchen areas.
- (d) Porcelain will not be concentrated in food preparation areas.

3. Spatial identification

- (a) Ceramic shards will be spatially distributed as a sheet midden and will define the domestic occupational area of the site. Kitchen middens may be located close to the kitchen area, but most probably, as in general household middens, will be located on the perimeter of the utilized domestic area.

4. Status identification

- (a) Status can be measurable only by comparison. Indicators will be full sets of dishes, tea sets, expensive items (eg. large soup tureens), toys (if children were in residence, and in the nineteenth century they usually were) and personal items (eg. shaving mug).

5. Occupational identification

- (a) The area designated by the occupants for domestic utilization will assist in occupational identification. Example: A rancher with a family but no servants will occupy a smaller domestic space than a yeoman farmer with a family and eight slaves, who will, in turn, utilize a smaller space than a planter with a family, an overseer and 35 slaves.

Conclusions

The distribution of ceramics over the space of the site indicates that ceramics were involved in many daily activities. Comparisons among sites of the distribution, density and association of artifacts will reveal behavioral patterns while identifying occupational systems, time periods and status. Only by explaining similarities and differences among sites can we begin to utilize the full potential of ceramic analysis in identifying and explaining cultural process and change.

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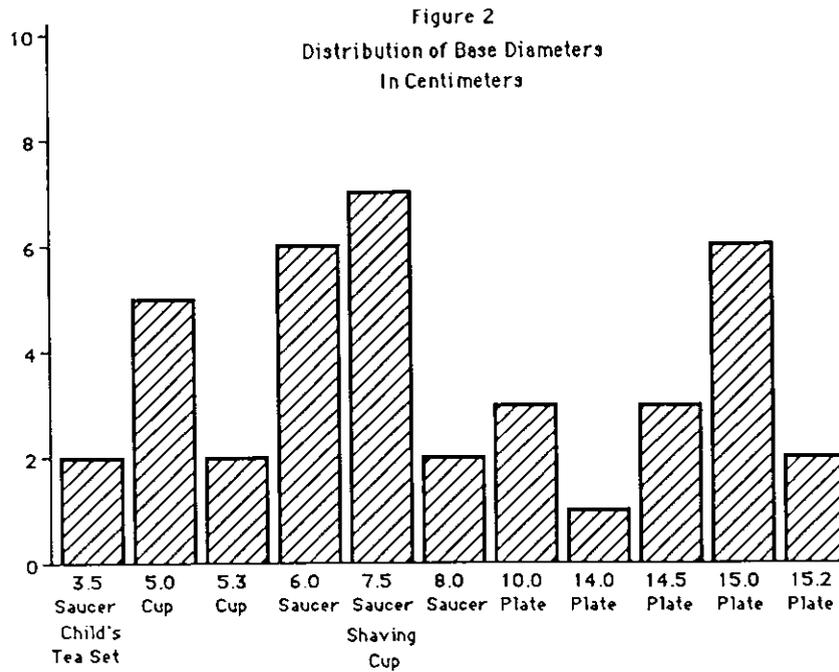
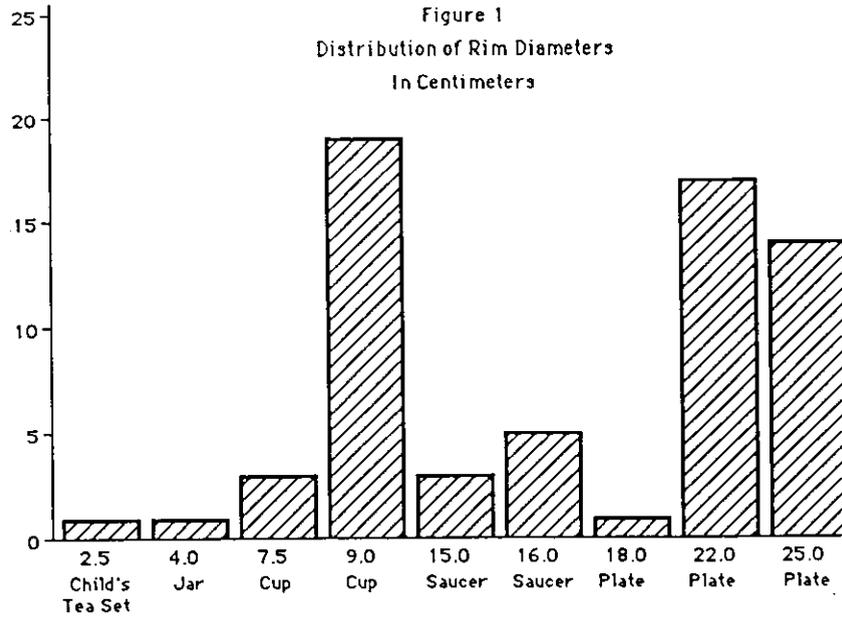
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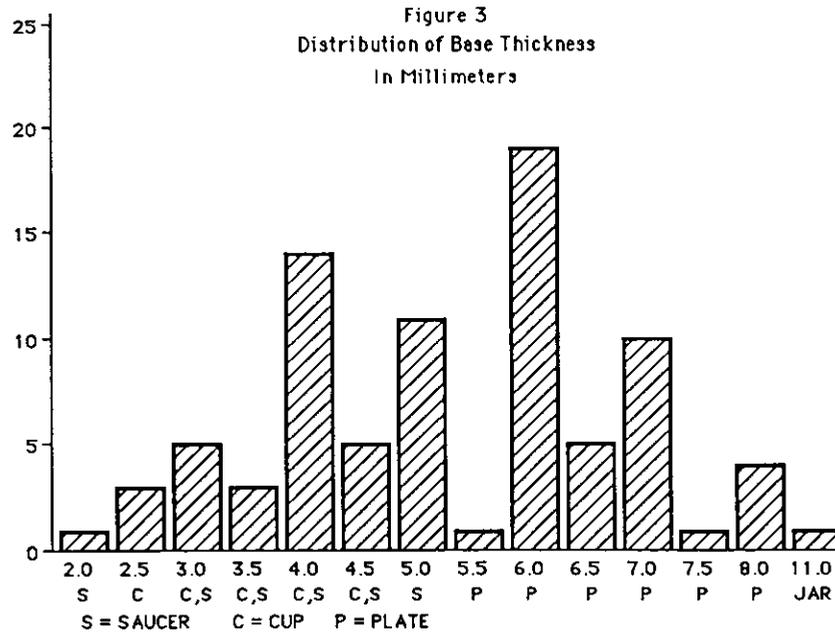


Table 1. Function, decoration and location of ceramics from 41JP94

Decorative Type	I White Undecorated	II White Minimum Decoration	III White Handpainted	IV Transfer Printed	V Porcelain	VI Colored Ceramics	VII Stoneware
Count (Total 338)	244 72%	8 2%	6 2%	16 5%	49 15%	4 1%	11 3%
Identifiable Function	Plates - 47 Cups - 29 Saucers - 11 Bowls - 1	Plates - 3	Plates - 1	Plates - 2 Shaving Cups - 3 Jar - 1 Cup or Vase - 1	Plates - 1 Cups - 10 Saucers - 1 China Doll Parts - 13 Child's Tea Set - 7 Jars - 2	?	?
Proposed Activity Area Where Found	In all units except perimeter units C,F, AE, Q1, AB and AG. Also, not found in house area in units at base of fireplace	Kitchen - 4 Yard - 2 Surface Collection - 2	House - 2 Trash - 1 Yard - 2 Surface Collection - 1	House - 2 Kitchen - 8 Trash - 2 Yard - 2 Under Magnolia Tree - 1 Surface Collection - 1	House - 10 Kitchen - 4 Yard - 9 Trash - 6 Under Magnolia Tree - 2 Surface Collection - 17	House - 1 Yard - 3	House - 5 Trash - 3 Yard - 1 Surface Collection - 2

The Catahoula Perforator, A Possible New Artifact Type

Leland W. Patterson

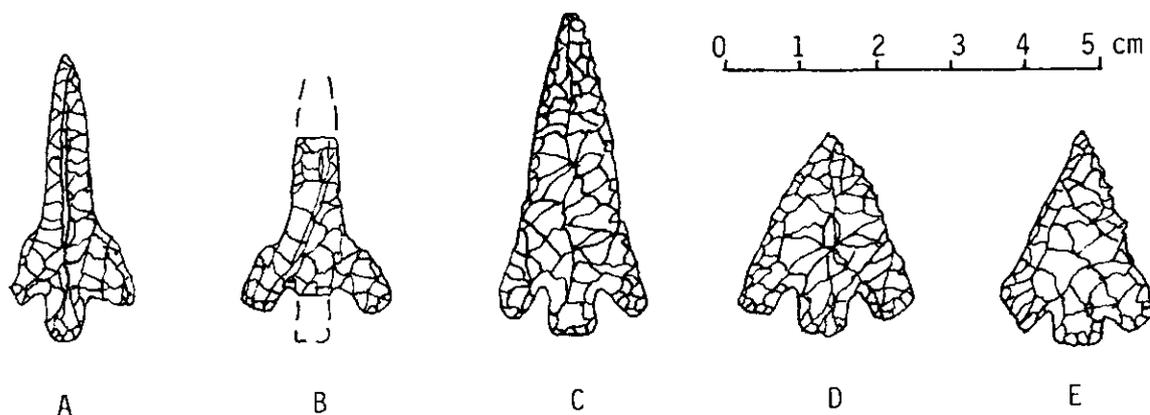
Introduction

The Catahoula arrowpoint is a well-known artifact type from the Late Prehistoric time period in the south-central United States, including Louisiana, Mississippi and East Texas (Patterson 1976). It is found throughout the upper Texas coast and typologically similar specimens are found as far apart as Alabama and the Great Basin (Patterson 1976:219). This point type has been well described for Louisiana by Baker and Webb (1976). Turner and Hester (1985:168) have noted the distribution of the Catahoula point throughout East Texas.

Two specimens have been found on the surface of Site 41HR182 in Harris County, Texas that are drill-like variants of the Catahoula arrowpoint type, as will be discussed in this article. A similar specimen was noted during the classification of the Andy Kyle collection (Kindall and Patterson 1986) for some sites located over 100 km (60 miles) east of Site 41HR182. Since several specimens of this Catahoula variant have now been noted for the upper Texas coast, it is proposed that formal recognition be given to this artifact type.

Catahoula variant

A specimen that appears to be a drill-like variant of the Catahoula arrowpoint has previously been noted in a publication of a surface collection from Site 41HR182 (Patterson 1985:Figure 10J). This specimen is illustrated here in Figure 1A. A similar specimen was found later at this same prehistoric



A,B - Catahoula perforators; C,D,E - Catahoula arrowheads

Figure 1. Catahoula points

site (Figure 1B). These two specimens have been related to the Catahoula arrowpoint because of similar morphology; in particular, the bases have the straight stems and square shoulder barbs

which are distinctively Catahoula. This is similar to the situation at the Davis Site in northeastern Texas, where drill-like specimens have been classified as perforators related to the Alba arrowpoint type (Baskin 1981:282).

The specimen shown in Figure 1A has a maximum thickness of 4.3 mm. At midlength of the long, narrow blade the thickness is 2.8 mm and the width is 4.9 mm. The specimen shown in Figure 1B has a maximum thickness of 3.3 mm. At midlength of the blade the thickness is 2.4 mm and the width is 5.6 mm. As a comparison, specimens of regular Catahoula arrowpoints are shown in Figure 1C to 1E. These have maximum thicknesses of 3.6 mm, 4.2 mm, and 3.6 mm, respectively. All specimens shown in Figure 1 are made from chert of fairly local origin, and are from Site 41HR182.

Comments on function

Traditionally, artifacts with long, narrow tips have been classified as drills or perforators (Turner and Hester 1985:224). In the case of long, narrow blades on arrowpoint forms, however, there is a question as to whether this type of artifact is a drill/perforator or simply an arrowpoint in function.

At the Davis Site in northeastern Texas, 14 specimens of drill-like variants of the Alba arrowpoint type (Baskin 1981:282) were recovered. Of these specimens, only four were identified with positive traces of use wear as a drill or perforator (edge smoothing and/or microflaking). Two of these specimens had torsional snap fractures that could indicate use as a rotary tool. Nine of these specimens had other types of snap fractures that could be more indicative of impact fractures from use as an arrowpoint, although fracture from pushing during use as a perforator cannot be discounted.

The drill-like Catahoula specimens discussed here (Figure 1A,B) were examined under 10- and 20-power magnification. The specimen shown in Figure 1A has tip smoothing and polish that extends about 10 mm onto the lateral edges; this could indicate use as a rotary tool. The specimen shown in Figure 1B has a snap fracture that indicates force application directly into the tip, either from impact during use as an arrowpoint or from pushing action during use as a perforator. Accidental breakage cannot be discounted as an alternative cause of fracture. The remaining portion of the blade of this specimen has little indication of use wear on the lateral edges, but most evidence of wear would have been on the missing tip portion. Regardless of exact function, this type of blade would break rather easily due to its long, thin, narrow shape.

Due to the arrowpoint-like base on this artifact type, it is inferred that this tool was hafted for use as a drill/perforator. Other perforators with irregularly shaped bases (Patterson 1985:Figure 13A to 13C) found at this site (41HR182) were probably not hafted. This artifact type is rather delicate and probably would have been used to drill soft materials such as shell or bone. Drilling holes in pottery is another possible use. Potsherds in this geographic area are sometimes found with drilled lace-holes.

Artifact identification

The specimens discussed here (Figure 1A,B) have been related to the Catahoula arrowpoint type because of similar basal-end morphologies. In use, this artifact type would be easy to break at the location where the narrow blade suddenly expands into the base. For this reason, I suspect that this type of artifact is more common than realized, and that fragments of this artifact type are often not identified correctly. This type of fracture would make identification of the remaining basal fragment more difficult. With little of the long, narrow blade remaining, a casual inspection would lead to incorrect classification as a basal fragment of a normal Catahoula arrowpoint.

HAS Historic Note Number Ten

Alan R. Duke

1971-1972

Officers for 1971-72 were as follows:

- Chairman – William L. McClure
- Sec.-Treas. – Margie Fullen
- Directors – Elaine Burleigh, Frank Hole, Jay Sharp
- Newsletter Editor – Alan Duke

HAS members participated in excavations conducted by Rice University along Armand and Chocolate Bayous.

Twenty members of the Society, under the direction of Alton Briggs, State Salvage Archeologist, made a site survey of Lake Livingston Park located on the east bank of the lake. Two prehistoric sites were located.

Forty new books and reports were added to the growing HAS library.

HAS members participated in the eleventh TAS Field School in Kerr Co., Texas.

Five HAS members, led by David Salzar, conducted a survey in the vicinity of the proposed relocation of State Highway 124 at the Intercoastal Waterway.

Society member Charles Chandler was elected a Regional Vice-President of the TAS.

1972-1973

Officers for 1972-73 were as follows:

- Chairman – David Salzar
- Sec.-Treas. – Barbara Kuether
- Directors – Bill McClure, Elaine Burleigh, Tom Cobb
- Newsletter Editor – Alan Duke

HAS members, under the direction of University of Texas personnel, participated in a site survey at Sealy, Texas in conjunction with proposed plans for nuclear power plant construction and power line right-of-ways. Numerous sites were located.

The HAS participated in the planning stages of Armand Bayou Park, Harris Co., Texas. Jay Sharp was the Society representative on the planning board.

Twenty HAS members attended the TAS Field School at Waco, Texas.

An eight-week seminar on Texas Archeology, sponsored jointly by the Houston Archeological Society and the University of Houston was scheduled at the Houston Museum of Natural Science for late-September through mid-November 1972.

Society member Charles Chandler was elected a Director of the TAS and Jay Sharp was elected Regional Vice-President.

The Society's first Chairman, Wayne Neyland, one of the Society's founders in 1959, passed away. Wayne was also a Past President of the TAS. He found and reported hundreds of sites in the Houston area.

Summary

This article has discussed a possible new artifact type, a variant of the Catahoula arrowpoint. The artifact type has a fairly wide geographic distribution on the upper Texas coast, judged by the few specimens found so far. To be consistent with the classification terminology used by other investigators, I would propose that the tentative name given to this artifact type be the Catahoula Perforator. It remains to be seen if enough specimens will be found to make this an important artifact type.

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