EXCAVATIONS AT 41FB290A AND 41FB290B, FORT BEND COUNTY, TEXAS

Leland W. Patterson
Joe D. Hudgins
Etta Palmer
Tom Palmer

HOUSTON ARCHEOLOGICAL SOCIETY
REPORT NO. 21, 2003

Table of Contents

EXCAVATIONS AT THE GRAND RIVER SITE, 41FB290A, FORT BEND COUNTY, TEXAS

INTRODUCTION

This article gives the results of excavations by the Houston Archeological Society at the Grand River site, 41FB290A, in Fort Bend County. Field work was done in the fall of 2002. This project was possible through the courtesy of the Grand River Home Owners Association.

Individuals who participated in the excavations include Beth Aucoin, Pat Aucoin, Richard Carter, Wanda Carter, Dick Gregg, Joe Hudgins, Anne James, Sheldon Kindall, Tom Palmer, Etta Palmer, Jim Palmer, Lee Patterson, Gary Ryman, Bob Shelby, Jo Ann Stuart, Bob Whitcomb, and John Winkler. Field work was directed by Joe Hudgins. Etta Palmer handled field records, did site measurements, and arranged for access to the site. Tom Palmer prepared the excavation layout drawing. Artifact analysis was done by Lee Patterson. Site 41FB290A had occupation events in the Early Ceramic (AD 100-600), Late Prehistoric (AD 600-1500), Proto-Historic (AD 1500-1700), and Historic Indian (AD 1700-1800+) time periods. Historic Indian components of sites in Southeast Texas are not common (Patterson 1998), because of rapid population decline after AD 1700 (Aten 1983:Figure 17.1; Patterson 1999). Data from excavations show that occupation events in the Late Prehistoric period were for longer time intervals than usual for most sites in this time period, due to good availability of faunal food resources. This site is a campsite of nomadic hunter-gatherers.

Nearby site 41FB290B will be the subject of a separate report.

SITE SETTING

Site 41FB290A is located along the edge of a high terrace on Jones Creek at the junction with the Brazos River. Much of the site has been destroyed by erosion of the steep terrace bank, with erosion still continuing. The entire site will have been destroyed by erosion within a few years. This would have been a good location for terrestrial and aquatic faunal resources. Deer tracks are visible at the creek edge. The general area is a mixture of coastal prairie and woodlands.

EXCAVATION DETAILS

Excavation layout is shown in Figure 1. Five one-meter square pits were excavated to depths where cultural materials were no longer present. Excavation depths were 45 cm for Pit A, 40 cm for Pits B and C, and 30 cm for Pit E. Pit D had no significant cultural remains. The present site dimensions are about 10 meters wide by at least 50 meters in length. As noted above, much of the site area has been destroyed by erosion.

The soil is a dense black clay-loam. Excavations were done in 5 cm depth intervals because no natural stratigraphy was visible. All soil was proceseed through 1/4-inch (6 mm) mesh screens.

PROJECTILE POINTS

Data for arrow points are given in Table 1, and arrow points are illustrated in Figure 2. Fresno triangular points are from the Proto-Historic and Historic Indian periods in an interval of AD 1500-1800+ (Hudgins 1984; Patterson 1998). Perdiz points are from the Late Prehistoric period (AD 600-1500). Some unifacial arrow points were in use at this site concurrently with standardized bifacial arrow point types (Fresno, Perdiz). In Southeast Texas, unifacial arrow points start much earlier than standardized bifacial arrow point types (Patterson 1992). Some unifacial points were made on small prismatic blades, such as the specimen shown in Figure 2F.

After the start of standardized bifacial arrow points at about AD 600 in Southeast Texas, the spear and spear thrower continued to be used in the inland portion of this region (Aten 1983:306; Patterson 1980). Two dart point preform fragments from the Historic Indian period (AD 1700-1800+) were found in Pit A (10-15 cm). A dart point preform fragment from the Late Prehistoric period (AD 600-1500) was found in Pit B (25-30 cm, Figure 2P), and a dart point fragment from the Early Ceramic period (AD 100-600) was found in Pit A (35-40 cm, Figure 2N). A dart point preform fragment was also found in the terrace bank edge (figure 2O).

CERAMICS

Potsherds recovered in the excavations are summarized in Table 2 for each stratum of each pit. A total of 145 sherds were found in the excavations incuding 138 Goose Creek Plain, 1 Goose Creek Incised, 1 O'Neal Plain, and 5 Bone-Tempered. There were also 22 Goose Creek Plain and 2 Bone-Tempered sherds found at the terrace bank edge.

Goose Creek sandy paste pottery was found throughout the excavations. Bone-Tempered pottery was found at depths above 20 cm, in the Proto-Historic and Historic Indian periods. In the inland part of western Southeast Texas, Bone-Tempered pottery occurs after the Early Ceramic period (Patterson and Hudgins 1989; Patterson et al. 1996), and may be related to Leon Plain pottery that is found in the Colorado River Basin (Suhm and Jelks 1962:95).

One O'Neal Plain sherd with coarse sand temper was found at a depth below 40 cm. O'Neal Plain pottery is from the Early Ceramic period (Aten 1983:Figure 14.1).

Site 41FB290A has a relatively large number of potsherds in the Late Prehistoric period compared to many other inland sites of inland Southeast Texas. A high proportion of Late Prehistoric sites of inland Southeast Texas have yielded only a few potsherds. The relatively large number of potsherds at 41FB290A is an indication of longer time intervals of occupation events at this site, compared to short-time occupation events at a high proportion of other Late Prehistoric sites of the inland part of this region. Longer occupation events at 41FB290A are due to good availability of faunal food resources.

Two decorated sherds were found at this site. A Goose Creek rim sherd with two incised horizontal lines was found in Pit A (5-10 cm). A Goose Creek Plain notched rim sherd (Figure 2M) was found in Pit B (35-40 cm). A sherd with a drilled lace hole was found in Pit B (35-40 cm).

LITHIC MATERIALS

Only two formal stone tools were found, a scraper (Figure 2L) in Pit A (10-15 cm) and a perforator (Figure 2K) in Pit C (15-20 cm). The dominant stone tool type at prehistoric sites in Southeast Texas was the unmodified utilized flake.

A total of 782 chert flakes were found in the excavations, as given in Table 3 for each stratum of each pit. An additional 58 flakes were also found at the terrace bank edge. Flake size distributions are given in Table 4. There were 5.2% primary flakes (covered with cortex), 13.1% secondary flakes (Partially covered with cortex), and 81.7% interior flakes (no remaining cortex). The small percentage of flakes with remaining cortex indicates that little primary reduction of chert cobbles was done at this site.

Two small chert cobbles and six small chert cores made on cobbles were found, as given in Table 5. Small chert cobbles were available at the adjacent Brazos River. All but one of the chert cores have only a few scars from flake removals,

and are not high quality for flintknapping. Locally available small chert cobbles had limited use at this site. Most lithic materials used at this site were imported as flake blanks made by primary reduction of chert cobbles at lithic sources farther upstream on the Brazos River, where larger chert cobbles were available. A fragment of a quartzite hammerstone was found in Pit A (30-35 cm).

The flake size distributions in Table 4 indicate a mixture of byproduct flakes from projectile point manufacture and utilized flake tools. Some heat treatment of chert was done to improve knapping quality, as indicated by waxy luster, reddish coloration, and small potlid surface scars on flakes.

FIRED CLAYBALLS

A few fired clayballs were found as given in Table 6. Fired clayballs were used as heating elements for earth ovens (Patterson 1995a). Hudgins (1993) has used fired clayballs experimentally for cooking meat in earth ovens. Earth ovens may have been used to cook floral materials such as roots.

MODERN MATERIALS

Modern materials found in the excavations are given in Table 7. Some stratigraphic mixing is indicated, especially at excavation depths above 15 cm in strata with Historic Indian materials.

FRESHWATER MUSSEL SHELL

Small quantities of mussel shell were found at various excavation depths, as given in Table 8. These small quantities of shell do not indicate a significant food resource. However, there may have been a shell midden in the part of the site destroyed by erosion.

VERTEBRATE REMAINS

Significant quantities of vertebrate remains were found in the excavations, with weights and quantities given in Table 9 for each stratum of each pit. The large quantities of vertebrate remains in the strata representing the Late Prehistoric period are an indication of longer occupation events at this site than at a high proportion of Late Prehistoric sites of inland Southeast Texas.

Identified vertebrate species are given in Table 10 for each

stratum, mainly deer, turtle, and gar. Deer were identified by teeth and bones. Turtle were identified by characteristic shell type. Gar were identified by numerous scales. Some unidentified fish vertebrae may be gar. Some of the smaller bone pieces are probably from small animals that have not been identified. There were only a few specimens of burned bone. Deer and turtle are the most common vertebrate species found at prehistoric sites in Southeast Texas (Patterson 1995b:Table 2, 1996:Tables 16,17).

STRATIGRAPHY AND CHRONOLOGY

It is judged that excavation depths above 20 cm represent the Proto-Historic and Historic Indian periods, an interval of AD 1500-1800+, based on the presence of Fresno arrow points. The Late Prehistoric period (AD 600-1500) might be represented in a depth interval of 20-37 cm. This interpretation is based on Perdiz points at a depth interval of 20-30 cm, and possible bifacial arrow point manufacture as deep as 37 cm, in the form of a concentration of flakes of sizes under 15 mm square in one corner of Pit C at a depth interval of 33-37 cm. An alternate interpretation is that because no bifacial arrow points were found below 30 cm, depths below 30 cm represent the Early Ceramic period. In this case, the concentration of small flakes in the 33-37 cm depth interval of Pit C would indicate pressure flaking to finish dart points instead of arrow points. The Early Ceramic period (AD 100-600) is represented by an O'Neal Plain potsherd at 40-45 cm depth.

CONCLUSIONS

Site 41FB290A is a campsite of nomadic hunter-gatherers with an occupation sequence from the Early Ceramic through the Historic Indian time periods. This was a prosperous location with a good availability of faunal food resources, that resulted in relatively long occupation events. There is a Proto-Historic/Historic Indian component that is not common for sites in Southeast Texas, because of a low population level during this time interval. After European contact, there was a sharp decline in Indian population level due to conflict and disease (Aten 1983:Figure 17.1).

The destruction of much of this site by erosion limits the interpretation of data from excavations. For example, there may have been a shell midden at this site, and more occupation events in the Early Ceramic period. In any event, data from this site are a good addition to the regional archeological data base.

REFERENCES CITED

Aten, L.E.
1983 Indians of the Upper Texas Coast. Academic Press

Hudgins, J.D.
1984 A Historic Indian Site in Wharton County, Texas. Bulletin of the Texas Archeological Society 55:29-51

1993 Cooking with Clay Balls. The Cache 1:47-52, Texas Historical Commission

Patterson, L.W.
1980 The Owen Site, 41HR315: A Long Occupation Sequence in Harris County, Texas. Houston Archeological Society, Report No. 3

1992 Current Data on Early Use of the Bow and Arrow in Southern North America. La Tierra 19(4):6-15

1995a Prehistoric Earth Ovens in Southeast Texas. Houston Archeological Society Journal 111:17-20

1995b The Archeology of Southeast Texas. Bulletin of the Texas Archeological Society 66:239-264

1996 Southeast Texas Archeology. Houston Archeological Society, Report No. 12

1998 Historic Indian Sites in Southeast Texas. Houston Archeological Society Journal 122:10-19

1999 Comments on Population Dynamics in Southeast Texas. La Tierra 26(4):13-17

Patterson, L.W., and J.D. Hudgins
1989 Excavations at Site 41WH12, Wharton Co., Texas. Houston Archeological Society Journal 95:1-11

Patterson, L.W., W.L. McClure, E. Palmer, and T. Palmer
1996 Excavations at 41FB224 and 41FB225, Fort Bend County, Texas. Fort Bend Archeological Society, Report No. 3

Suhm, D.A., and E.B. Jelks
1962 Handbook of Texas Archeology: Type Descriptions. Texas Archeological Society, Special Publication No. 1

Table 1
Arrow Points

type	pit	depth, cm	dimensions, mm L	W	T	Figure
Perdiz	A	20-25		15.6	3.4	2A
Perdiz	B	20-25		13.5	2.6	2B
Perdiz	A	25-30		18.2	2.7	2C
Fresno	B	10-15		18.3	4.4	2D
Fresno	C	15-20		17.7	3.2	2E
unifacial	E	15-20	22.7	10.1	2.4	2F
unifacial	C	20-25	25.8	21.4	4.1	2G
unifacial	B	25-30	15.4	15.9	2.6	2H

Table 2
Ceramics

depth, cm	Pit A GCP	Pit A other	Pit B GCP	Pit C GCP	Pit C BT	Pit E GCP	Pit E BT
5-10		1A	4	5	1		
10-15	2		3	12		1	3
15-20	2		2	9		3	1
20-25	18		4	18		5	
25-30	5		5	8		5	
30-35	9		4	4			
35-40	5		5				
40-45		1B					
	41	2	27	56	1	14	4

1A- Goose Creek Incised 1B- O'Neal Plain
GCP- Goose Creek Plain BT- Bone-Tempered

Table 3
Lithic Flake Quantities

depth, cm	pit A	B	C	E	total
0-5		1			1
5-10		15	33	5	53
10-15	6	15	55	8	84
15-20	3	7	44	7	61
20-25	9	9	72	17	107
25-30	21	11	61	15	108
30-35	16	5	287		308
35-40	4	4	52		60
	59	67	604	52	782

Table 4
Flake Size Distributions

depth, cm	flake size, mm square (% of flakes) under 15	15-20	20-25	25-30	30-35	35-40	40-50
5-10	52.8	34.0	5.7	5.7	1.8		
10-15	56.9	24.7	10.8	4.6	1.5	1.5	
15-20	44.4	30.2	14.3	6.3	1.6	1.6	1.6
20-25	50.5	29.0	10.3	8.4			
25-30	56.8	29.8	9.6	3.8			
30-35	86.6	10.8	1.3	1.3			
35-40	86.7	11.6	1.7				

Table 5
Chert Cores and Cobbles

type	pit	depth, cm	dimensions, mm L	W	T
core	A	10-15	47	37	21
core	A	15-20	43	36	27
core	B	5-10	40	25	20
core	C	5-10	46	27	11
core	C	10-15	46	39	30
core	C	15-20	46	36	15
cobble	B	30-35	56	45	26
cobble	C	5-10	38	24	23

Table 6
Fired Clayballs

pit	depth, cm	no.	wt., gm	size range, mm square
C	15-20	1	4.7	20-25
C	20-25	2	7.9	15-25
B	25-30	5	13.3	15-25
A	30-35	3	7.5	15-20
B	30-35	3	93.9	20-50
A	35-40	4	56.8	20-35
B	35-40	1	14.3	30-35

Table 7
Modern Materials

pit	depth, cm	items
A	0-5	brown Chlorox bottle fragments
A	5-10	brown Chlorox bottle fragments
B	5-10	glass fragments, ironstone sherd
A	10-15	glass fragments, round nail
B	10-15	glass fragments, nail
C	10-15	glass fragments, staple, nail
E	10-15	glass fragment
C	15-20	glass fragment
E	15-20	glass fragments
B	20-25	small ironstone sherd
E	20-25	small glass fragment

Table 8
Mussel Shell

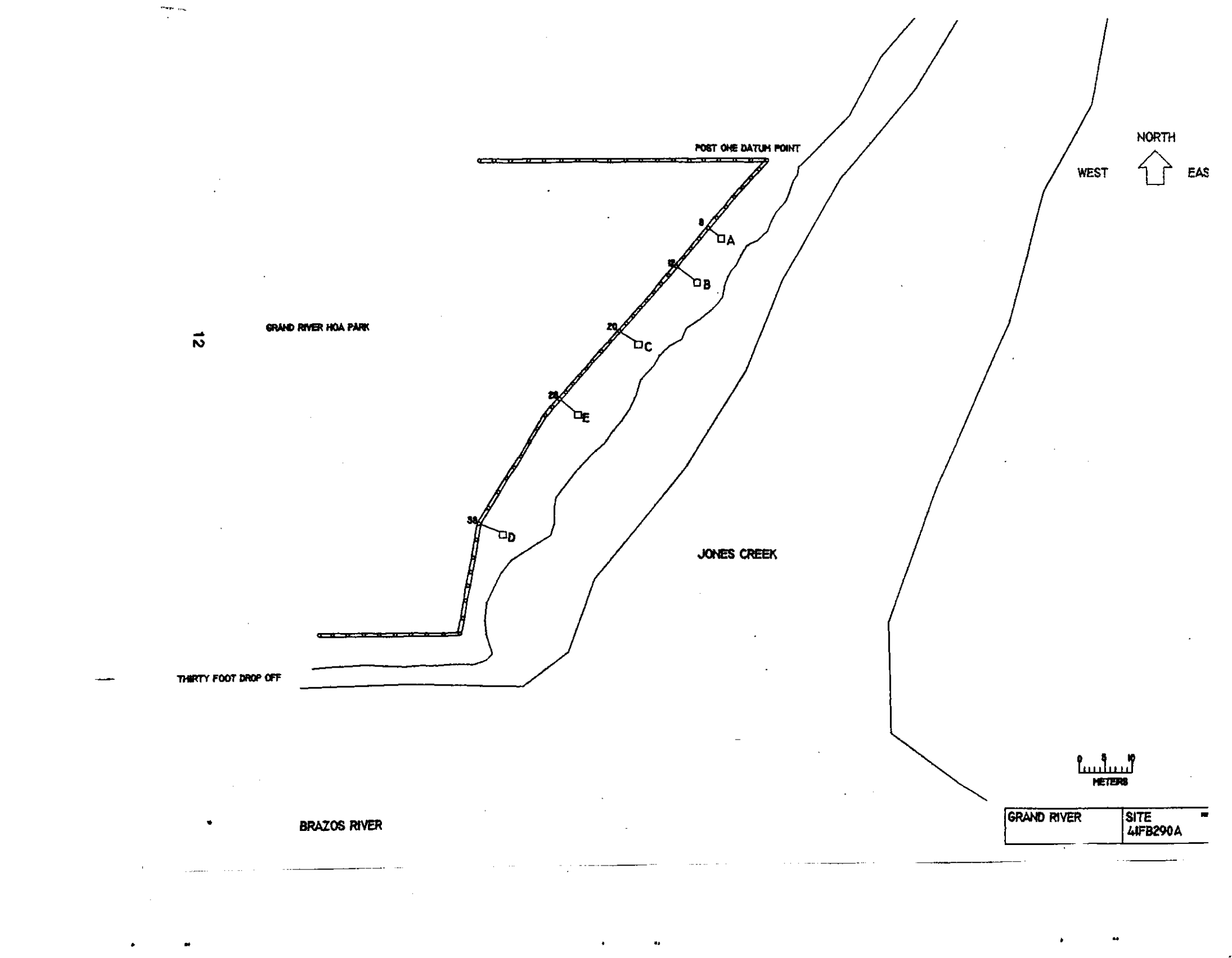
depth, cm	A	B	C
5-10			3.1
10-15			
15-20			4.9
20-25			18.3
25-30	52.0	0.5	50.2
30-35	5.8	76.2	9.5
35-40		133.3	4.4

Table 9
Vertebrate Remains

depth, cm	Pit A		Pit B		Pit C		Pit E	
	no.	wt.,gm	no.	wt.,gm	no.	wt.,gm	no.	wt.,gm
5-10			29	13	25	18	2	1
10-15	5	4	21	10	40	38	34	18
15-20	13	12	18	13	42	37	15	25
20-25	40	99	110	110	39	71	48	62
25-30	21	105	27	132	37	44	65	183
30-35	37	75	49	69	92	47		
35-40	9	14	38	129	26	8		
40-45	12	9						

Table 10
Vertebrate Species

depth, cm	species
5-10	turtle, deer
10-15	deer, turtle, unidentified fish
15-20	deer, turtle
20-25	gar, deer, turtle, unidentified fish
25-30	gar, deer, turtle
30-35	gar, deer, turtle, unidentified fish
35-40	gar, deer, turtle, unidentified fish
40-45	gar, deer, turtle


POST ONE DATUM POINT
NORTH
WEST
EAS
GRAND RIVER HOA PARK
12
A
B
C
D
E
JONES CREEK
THIRTY FOOT DROP OFF
METERS
BRAZOS RIVER
GRAND RIVER
SITE
41FB290A

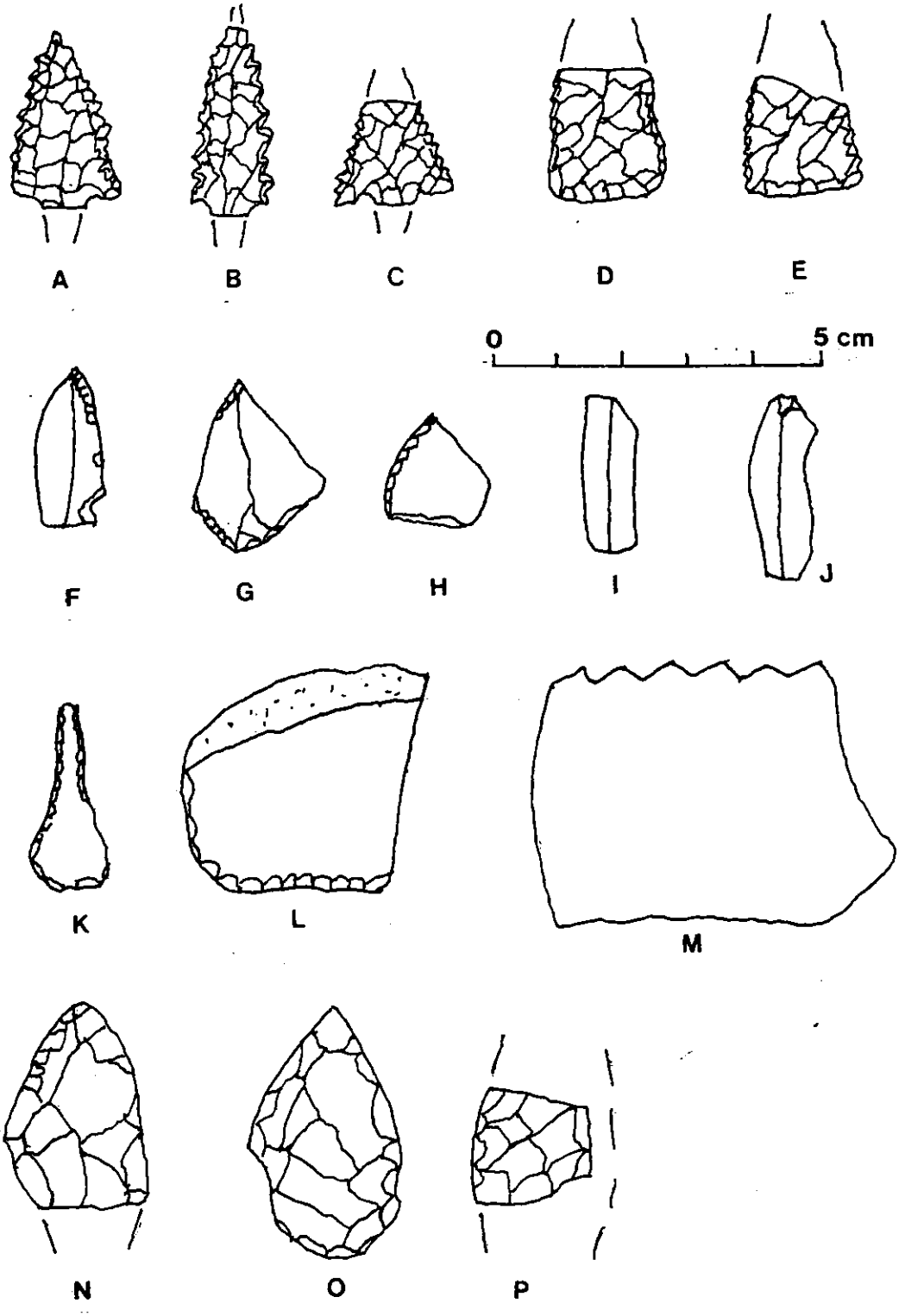


Figure 2: Diagnostic Artifacts

A,B,C- Perdiz points; D,E- Fresno points;
F,G,H- unifacial arrow points; I,J- prismatic blades;
K- perforator; L- scraper; M- notched rim sherd;
N,O,P- dart point preform fragments