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Preliminary Report on the Analysis of Human Skeletal Remains
from the Peikert Site (4LWH14) in Wharton County, Texas

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ABSTRACT

This paper is a preliminary report on the skeletal analysis of nine burials from site 4LWH14 in Wharton County, Texas. The site, also designated as the Peikert Site, was excavated from March through November 1979 by the Houston Archeological Society. The site consisted of a seasonal occupation camp and a small cemetery site containing eleven burials; however, this report deals with nine individuals due to preservation conditions and the apparent mislocation of some of the material. The focus of this project, which was carried out as a term project at Texas A&M in 1983, is the analysis of the burials concerning sex, age, stature, dentition, and pathology.

Editor's Note:

Sheldon Kindall, referring to the studies of the burials and other recovered artifacts, stated in his report on the Peikert Site (HAS Newsletter No. 66, March 1980) that "the current plan calls for publishing individual aspects of the results of these investigations as they become available". This paper by Wes Copas is an important part of that plan.

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I. INTRODUCTION

The Peikert Site (41WH14) is located approximately eight kilometers west of Hungerford, Texas, in Wharton County. Eleven burials were excavated; however, due to the poor preservation of one of the individuals (burial 7, an infant, which was reduced to unrecoverable bone meal), and the apparent loss of burial 10 and portions of burial 8, the burials included in this preliminary analysis are burials 1,2,3,4,5,6,8,9, and 11. This analysis was originally carried out as a term project for an osteology class under Dr. D. Gentry Steele at Texas A&M University during the spring semester of 1983.

The Peikert Site was discovered when the owners of the land (the Peikert family) cleared a previously unused portion of land for use as a cornfield. In the 1978 growing season, a crop of corn was grown over the site; after the season, during deep plowing, three burials (burials 3,4, and 5) were exposed by the plow. The find was reported to Joe Hudgins by the Peikerts, and preliminary investigations by Mr. Hudgins led to the complete excavation of the site by the Houston Archeological Society, which was carried on from March through November of 1979.

The Peikert Site was a combination seasonal occupation and cemetery site, showing signs of occupation for a period possibly exceeding 1000 years, beginning approximately 1500 B.C. Skeletal remains, many of which were charred, of several food animals commonly used by prehistoric Texas Coastal Indians permeated the soil of the site, including burial fill dirt. A few potsherds and one bowl were also found. This indicates that the site served as an occupational site as well as a cemetery.

The remains recovered indicate a population of prehistoric Indians whose cultural affinities remain unknown. The individuals recovered exhibit the traits commonly assigned, loosely, to the category of Texas Coastal Indians; however, due to the apparent pre-contact age of the site, it is not possible to assign definite cultural affinities.

II. MATERIALS AND METHOD

The study sample for this report consists of nine individuals, apparently interred at four stratigraphic levels. Burials 1,8, and 9 are deepest and therefore earliest. Burials 3,4, and 5 were apparently interred simultaneously, and were on approximately the same level as burials 2 and 7. Burial 11 was directly above burial 9 and below burial 7. Burial 6, the most recent burial at the site, was isolated and shallower than all of the other burials. When this individual was interred, an earlier burial (burial 11) was encountered. The legs of burial 11 were removed so that the pit could be completed, and apparently discarded elsewhere. Therefore, the apparent sequence of interment of the burials at this site (from earliest to most recent) is as follows: burials 1,8, and 9, burial 11, burials 3,4,5,2, and 7, and burial 6. The time interval between these interments is not known.

Bone preservation was, as a rule, good; however, differential preservation according to bone type was evident. Flat bones and irregular bones (which are composed mostly of cancellous bone), such as scapulae, pelvic bones, ribs, and vertebrae tended to be poorly preserved. Due to the soft condition of infant bones, burial 7 was completely unrecoverable. Long bones and tabular bones, such as limb bones and crania (composed chiefly of compact bone), tended to be very well preserved, except where damaged by the plow. Burials 3,4, and 5, which were severely disturbed by the plow, were much more fragmentary than the other burials in the sample, with the excep-

tion of burials 2,7,8, and 10. (Burials 8 and 10 were apparently lost in transit). The skulls and mandibles of burials 3,4, and 5 seemed to be the most severely fragmented and mixed bones.

Reconstruction of the material was done by members of the HAS. Due to the highly fragmentary nature of some of the material, reconstruction was impossible in some cases, notably the crania and dentition of burials 3,4, and 5.

Analysis of the materials entailed visual determination of age, sex, and pathology in each individual. Dentition was also examined. Due to the highly fragmented condition of most of the crania, cranial measurements were not possible. The sex of each individual was determined through visual inspection of several portions of the skeleton; notably the morphology of the nuchal lines, mastoid process, gonial angle (the sectioning point was taken to be 125 degrees, with measurement of less than 125 degrees indicating a male) and the sciatic notch. Age was determined principally through examination of dental attrition, especially in the molars. The age of the subadult burial (burial 8) was determined by molar eruption.

Stature estimation was accomplished using Steele's formulae for estimating maximum length of long bones using fragmentary remains (for definitions used and formulae, see Steele, 1970), coupled with Genoves' formulae for estimating stature among Mesoamericans (Genoves, 1967). For bone segments used and estimated stature of each burial, see Tables 1 and 2. Measurement of complete bones was possible in only three cases; these bones were used as a control in testing Steele's formulae. The formulae for White males were used, and in all cases, the bones were well within the range of variation provided with the formulae. Since there is no established formula for estimating stature among coastal populations, Genoves' formulae for Mesoamericans were used.

Visual inspection was used to determine the presence of pathology and to examine dentition. In this report, only a description of pathology is given, except in cases of evident trauma.

III. RESULTS

The material can be divided into several categories: adult males (burials 1,3,4,5, and possibly 10), adult females (burials 9 and 11), old adult female (burial 6), subadult (burial 8), and infants (burials 2 and 7). The adult males were very robust, a trait common among Texas coastal populations. The adult females were also very muscular; in many other samples they could easily have been sexed as males upon first examination; indeed, two of the three females (burials 6 and 9) were tentatively sexed as male in the field. However, upon use of osteometric analysis and after comparing burial 6 with a robust female cranium from another Texas coastal site (Palm Harbor, 4LAS80), the sexual differences in this sample were more evident. Because of the immaturity of burials 2 and 8, assessments of sex and stature were not possible. The only specific age assessments made were burial 8, assessed as being between 7 and 8 years of age due to the stage of permanent tooth eruption, and burial 9, aged 22-24 due to the fusion of the sacral vertebrae (MacPhee and Steele, 1980). The age of burial 2 was estimated to be less than 2 years.

The dentition of the burials tended to be well-preserved, except when disturbed by the plow. Dental attrition showed a common pattern in the adults: The first molars were heavily worn, the second molars moderately

worn, and the third molars were lightly to moderately worn. This wear pattern is typical of the high grit diet associated with Texas Coastal populations. Caries were found in only one individual (burial 11); however, periodontal abscesses and other types of periodontal pathology were more common. Burial 6, the old adult, was an exception to this pattern: at death this individual apparently had only her third molars and some incisors still in place, the rest having been evulsed before death. The third molars were heavily worn, past the alveolar line in some areas. The dentition of burial 6 was difficult to examine due to the amount of resorption and remodeling of the mandible, associated with the loss of teeth and the age of the individual.

One of the most significant characteristics of this sample is the high incidence of skeletal pathology: 100 per cent of the individuals recovered from the site exhibited signs of non-trauma related pathology. Each burial will be briefly discussed below, describing the age, sex, condition of the material, and skeletal pathology found.

Burial 1. Burial 1 was apparently a robust adult male. The material was well-preserved, with most of the dentition present. Skeletal pathology was limited to the right fibula, the proximal end of which showed severe external swelling (periostosis) and internal swelling (endostosis). The tibia appeared to be unaffected.

Burial 2. Burial 2 was one of the two infants (age 0-2) found at the site. Because of the poor preservation of the soft bones, little of burial 2 was recovered. The sex of burial 2 was not determined, due to the immaturity of the individual. Skeletal pathology was present throughout the entire postcranial skeleton, indicating a rampant infection.

Burial 3. Burial 3 was one of the individuals struck by the plow and, consequently, was severely disturbed. Burial 3 was apparently the most robust individual in the sample, an adult male. The crania and dentition of the burials struck by the plow were the worst-affected portions of the skeletons, with little of the dentition preserved. Pathology in burial 3 was very light, with one bent carpal phalanx, indicating a healed traumatic injury, and moderate periostosis and endostosis on the right clavicle.

Burial 4. Burial 4, an adult male, was also struck by the plow. Burial 4 appears to be the worst-affected burial in terms of pathology, both in terms of severity and area affected. The alveolar border had receded approximately 0.4 cm from its original line, and a very large root abscess was present around the root of the second left maxillary incisor. The left malar exhibits periostosis on both lateral and medial aspects, with circumscribed lesions present. The left clavicle exhibited moderate periostosis and endostosis, and the left scapula showed two uncircumscribed lesions, each measuring 1.0 x 0.6 cm (maximum length and width). Several rib fragments exhibited light periostosis. The left ulna was covered with patches of moderate to severe periostosis, with several large circumscribed lesions present. Severe endostosis was also indicated due to the increased bone weight of the left ulna. A fragment of the right femur (distal end of the diaphysis) exhibits moderate periostosis and slight endostosis. Finally, the left tibia shows extremely severe periostosis and endostosis, with numerous circumscribed lesions present. A marked saber-shaped remodeling of the tibia is also evident. (Note: The bones from the right side of burial 4 were severely disturbed by the plow).

Burial 5. Burial 5, like burials 3 and 4, was apparently a robust adult male and was struck by the plow. The left maxillary first molar was

apparently a dead tooth, although not evulsed antemortem. The pulp cavity was exposed, and the roots were atrophied; whether or not this was caused by a carie could not be determined. Skeletal pathology was found in the tibiae, which both exhibited marked sabering; however, no periostosis was evident on the tibiae. The left radius exhibited light periostosis on the distal portion of the diaphysis, while the right radius and ulna exhibited light to moderate periostosis on the proximal ends.

Burial 6. Burial 6 was apparently an old (age 50+) female, differing from other burials at the site. This individual was apparently interred at a later date than the other burials; when the pit was dug for burial 6, the legs of burial 11 were encountered, removed, and discarded elsewhere. Burial 6 also differs in that the individual was buried in a tightly-flexed position, while other burials were usually in semi-flexed positions. The dentition of burial 6 has been mentioned elsewhere. Pathology (non-traumatic) was found on the left scapula, left ulna, right radius, and both tibiae. The left tibia was sabered and extensively remodeled by swelling, while the right tibia was sabered but not swollen. Traumatic pathology was evident on the left chin, where apparently a fracture or a puncture had healed. Several cuts on the popliteal surface of the left tibia indicate that some fleshing was done after death, perhaps to allow the body to fit into the pit.

Burial 8. Burial 8 was apparently a child, aged 7-8. Only the cranium and mandible were available for study. Due to the immaturity of the individual, the sex of burial 8 was not determined. Dental pathology was evident in the maxillary premolars of burial 8. The second premolars were erupting across the roots of the first premolars, on a horizontal plane (pointed towards the front of the mouth). No evaluation of skeletal pathology was possible.

Burial 9. Burial 9, which was the best-preserved burial in the sample, was apparently an adult female. A large Wurmian bone was found in the parietal-occipital region of the cranium (the only such bone found in the sample). Skeletal pathology was found on the right clavicle, the tibiae, and the fibulae. A specific age was estimated for burial 9, due to the fusion of the sacral vertebrae: The first and second sacral vertebrae were not fused, while the second and third were fused, indicating (MacPhee and Steele, 1980) that the individual was aged between 22 and 24 years.

Burial 11. Burial 11 was also nearly complete, except for the legs and feet, which were apparently removed for the pit of burial 6. Burial 11 was also apparently an adult female. Burial 11 was the only burial in the sample with definite caries, which were found in three teeth: The right maxillary first molar and the left mandibular first and second molars. The left mandibular second molar also showed a severe root abscess. No treponemal pathology was found in burial 11. The metacarpals of the right hand were approximately one-half the length of the left hand; however, there was no evidence of atrophy, indicating that the hand was functional. Burial 11 evidenced trauma of a more dramatic sort: a large dart point was found in the costovertebral juncture of the fourth rib and thoracic vertebra, apparently lodged in the bone. The angle of entry of the point, which was preserved in the original matrix for display purposes, indicates that the individual was in a sitting or kneeling position when struck from above and behind.

IV. CONCLUSION

The possibility of aggression-related deaths is evident in this sample. Two of the burials (burials 4 and 11) were found associated with projectile points which may have contributed to their deaths. Also, the three burials which were apparently simultaneously interred were all robust adult males,

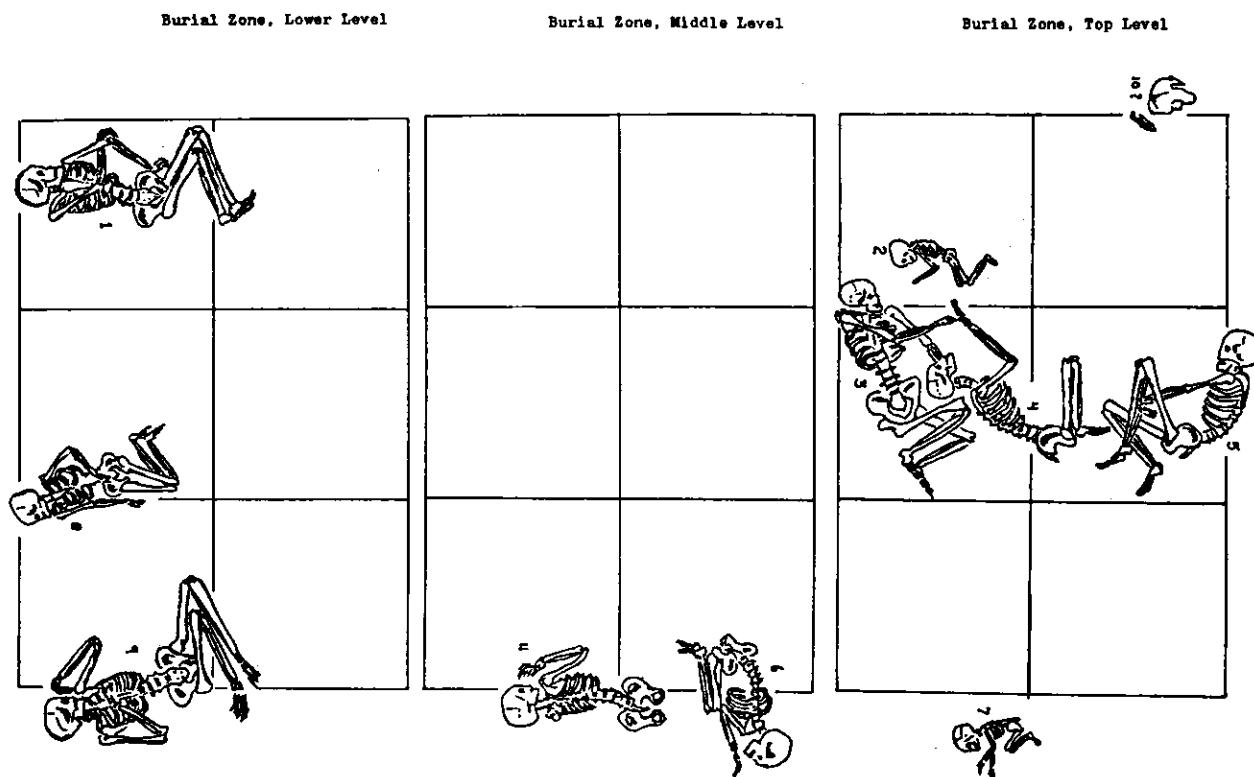
in the prime of their lives; yet they were apparently loosely heaped into a pit, one atop another, with no apparent preparation, while burials 1,2,7, 8,9, and 11 were oriented facing the southeast; also, the above mentioned burials were interred in a semi-flexed position.

The individuals in this sample, when compared to other Texas Coastal populations, such as those of the Jamaica Beach Site, 41GV5 (Ring, 1963), the Ernest Witts Site, 41AU35, and the Leonard K Site 41AU37 (Hall, 1981) are felt to be morphologically representative of the prehistoric group of Indians collectively called Texas Coastal Indians. The robusticity of both males and females is a common occurrence in these populations; stature estimates also fall within the range of variation for these populations. Dental attrition, in the pattern found among the adults in the sample, is associated with a diet high in grit content, as is common among Texas Coastal populations.

Some striking differences are also evident. The demographic category of adult males aged 25 to 50 is grossly overrepresented in this sample relative to other Texas Coastal sites. Children, infants, and old adults are, as a corollary, underrepresented. This observation adds some validity to the speculation that some of the deaths may have been aggression related. Another disproportionate aspect of this sample is the incidence of pathology: 100 per cent. The next highest reported incidence of pathology is the Leonard K Site, where 75 per cent of the sample exhibited pathology.

V. ACKNOWLEDGEMENTS

Thanks to Dr. D. Gentry Steele, members of the Houston Archeological Society, especially Mr. Richard Gregg, and to Mr. A. R. Duke for his undying patience.



Burials - 41WH14

Table 1 - Estimated Age, Sex, and Stature
(Based on Femur and Tibia), 41WH14

<u>Burial Number</u>	<u>Age</u>	<u>Sex</u>	<u>Stature (Femur)</u>	<u>Stature (Tibia)</u>
1	Adult (25-50)	Male	5'3.5"	5'3.75"
2	Infant (0-2)	Indet.	Indet.	Indet.
3	Adult	Male	5'6.5"	5'10"
4	Adult	Male	Indet.	Indet.
5	Adult	Male	5'9"	5'8"
6	Old Adult	Female	5'3.75"	5'3.25"
7	Infant	Indet.	Indet.	Indet.
8	Juvenile (7-8)	Indet.	Indet.	Indet.
9	Adult	Female	5'4.5"	Indet.
10	Adult(?)	Male(?)	Indet.	Indet.
11	Adult	Female	Indet.	Indet.

Table 2 - Estimated Maximum Length of Femur
and Tibia, along with Segment Used
(Only Applicable Burials Listed)

<u>Burial Number</u>	<u>Segment of Femur used</u>	<u>Length of Femur (cm)</u>	<u>Segment of Tibia used</u>	<u>Length of Tibia (cm)</u>
1	F-2	42.00	T-1	37.34
3	F-1	45.59	T-2	42.88
5	Complete	48.40	T-2	40.49
6	Complete	42.30	T-2+T-3	38.71
9	Complete	44.00	Not measured	

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A PREHISTORIC COMPLEX IN WALLER COUNTY, TEXAS

L. W. Patterson

Introduction

Several years ago, the Houston Archeological Society was contacted by John L. Murchison Jr. for interpretation of some Indian artifacts found on a family ranch in Waller County. This led to a survey of the subject area by HAS members, and finally test excavations were conducted on one of the sites.

An initial survey of this area by Lee Patterson, Susan Wilson, Terri Alford, and Mr. & Mrs. John Murchison resulted in the recording of three prehistoric sites, 41WL14,15,16. Two more prehistoric sites, 41WL17 and 18, were later recorded on the day that excavations were done at site 41WL15. Participants in the test excavations in August 1982 included: Sheldon Kindall, Dave Atherton, Dick Gregg, Marcy Grubbs, Mike Johnston, Troy Herndon, Joe Hudgins and Lee Patterson.

This complex of five prehistoric Indian sites is located on a tributary stream of the Brazos River, on high terraces. These sites appear to be out of the main floodplain of the Brazos river. This is a generally wooded area that supports a wide variety of faunal and floral resources that could have been utilized by prehistoric Indians. Freshwater shellfish seem to have been an important food resource in this area.

The sites in this complex appear to include the Late Archaic, Early Ceramic and Late Prehistoric time periods, judging by the types of artifacts recovered. All of these sites are campsites resulting from occupations by nomadic hunter-gatherer types of people. Few archeological sites have been recorded in Waller County, so that each new site represents an important contribution to data on the prehistory of this area (Patterson 1979: Table 1).

Site 41WL14

Site 41WL14 is somewhat over 100 feet in diameter, where surface collecting has been done in an area disturbed by farming operations. Artifacts collected indicate that this was a campsite with some lithic manufacturing activities. The occupation time span indicated by artifacts types is from the Late Archaic though the Late Prehistoric. Some historic materials are also present that appear to post-date A.D. 1900.

Dart points recovered include Yarbrough, Gary and Ellis types, as well as some unclassified fragments. Arrow point types found here include one Scallorn point and one unclassified form. Three preform fragments and an unclassified dart point stem were also found.

The general lithic collection includes many flakes of local types of chert, with indications that heat treating was used. One small bifacial drill was recovered, and one quartzite hammerstone was present. Several large chert pieces were found.

One potsherd was recovered. Faunal materials consisted of deer teeth and freshwater shellfish remains.

Site 41WL16

Site 41WL16 is located at the edge of a plowed field on the high terrace of a stream bank. The total area of occupation has not been accurately determined. Lithic artifacts collected include two dart point preforms and some chert flakes. One bone tempered potsherd was found here. An Early Ceramic period occupation is indicated, and the Late Archaic period could also be represented.

Site 41WL17

Site 41WL17 is a large area, over 300 feet in diameter, in a plowed field. Prehistoric occupations may include the Late Archaic, Early Ceramic, and Late Prehistoric time periods. This was possibly a wooded area during prehistoric occupations.

Projectile points collected include 1 Gary dart point, 6 dart point preform fragments, and an unclassified arrow point fragment. Ceramics found include 3 Goose Creek sandy paste sherds and 1 bone tempered sherd. Lithic tools recovered include 2 large unifacial scrapers and 1 large miscellaneous bifacial tool.

The general lithic collection contains mainly chert flakes, many of which are heat treated. Lithic raw materials are mainly from local alluvial deposits that contain chert cobbles. One piece of black Edwards Plateau flint with chalky cortex was found at this site. Chert flakes include 7% primary flakes, 16% secondary flakes, and 77% interior flakes. Comparison with experimental data from flaking chert cobbles (Patterson 1981) would indicate that trimmed lithic raw materials were being brought to this site, because of the small percentages of flakes with remaining cortex. Several miscellaneous chert cores were observed on this site that did not have much remaining cortex.

Faunal remains recovered here include miscellaneous bone and freshwater shellfish remains.

Site 41WL18

Site 41WL18 is located on a high sandy ridge that may have been previously plowed. Small chert flakes and small bone fragments were observed in an area over 300 feet in diameter. Because most of the chert flake sizes were under 20mm square, this site is judged to be Late Prehistoric. It is characteristic of Late Prehistoric sites to contain only small flakes.

Site 41WL15

Site 41WL15 is located on a high stream terrace. This site is somewhat over 150 feet in diameter. During initial surface survey work, the collection included Gary dart points, chert flakes, miscellaneous animal bone, turtle shell, Goose Creek sherds, a bone tempered sherd, chert cores, freshwater shellfish remains, and deer teeth. Most of the collection was made in a small, deep erosional gully. Since most of this site appeared to be fairly

intact, without deep plow damage, two 1-meter pits were excavated to test a small portion of this site on the east and west ends, along the stream bank.

The results of excavations are summarized in Tables 1 and 2 for the two test pits. Lithic materials recovered consisted mainly of chert flakes, many of which were heat treated. One dart point preform fragment was found at the 25 to 30cm level of Pit "B" and one broken chert cobble was found at the 30 to 35cm level of Pit "B". For flakes over 15mm square, in Pit "A" there were no primary flakes, 27% secondary flakes, and 73% interior flakes. In Pit "B" there were 5% primary flakes, 43% secondary flakes, and 52% interior flakes. It is likely that at least some of the lithic raw materials brought to this site were trimmed prior to transport.

Only 2 Goose Creek sherds were found in the excavated materials, at levels of 20 to 30cm in Pit "B". Both Goose Creek and bone tempered sherds were found here in the surface collection. Although the data base is small, the lowest ceramic level at this site may be at 30cm.

Excavation work was difficult at this site because of very hard soil, caused by very dry conditions. Test Pit "B" was completed only to a level of 45cm, but a test probe showed clam shell to a level of 85cm. Test Pit "A" was sterile below 95cm.

Faunal remains include clam shell, snail, turtle, deer, and miscellaneous bone. Faunal materials from the excavations are being analyzed in more detail by W. L. McClure. There may also be evidence of buffalo and alligator in the surface collection.

Summary

Five prehistoric sites have been recorded in Waller County over a distance of approximately three-quarters of a mile, along a tributary stream of the Brazos River. Artifact types indicate possible occupations in the Late Archaic, Early Ceramic, and Late Prehistoric time periods, spanning a time period of roughly 1500 B.C. to A.D. 1500. Much more research will be required before the archeology of Waller County is well known.

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 1979 A Review of the Prehistory of the Upper Texas Coast. Bulletin of the Texas Archeological Society 50:103-123.
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Editor's Note:

We continue to be impressed with the quality and quantity of Lee Patterson's reports. A frequent contributor to the HAS Journal and to other journals and magazines around the country, he has contributed generously to the archeological knowledge of the Gulf Coast and southeast and south central Texas and to lithic technology in general. Following this article is a resume of his accomplishments in the field of archeology.

TABLE I
PIT "A" EXCAVATION SUMMARY

ITEM	Excavation Level, CM								
	<u>0-15</u>	<u>15-25</u>	<u>25-35</u>	<u>35-45</u>	<u>45-55</u>	<u>55-65</u>	<u>65-75</u>	<u>75-80</u>	<u>85-95</u>
Chert Flake Size, mm sq.	(A)								
Under 15		1		1	3	3	1		
15-20			1	4		1			
20-25		1						2	
25-30						1			
30-35				1					
35-40		1							
Total		3	1	6	3	5	1	2	
Clayballs				2	1				
Faunal Remains									
Clam Shell					X			X	
Turtle			X			X		X	
Misc. Bone		X		X	X	X	X	X	X

(A) - The 0 to 15cm level was sterile

TABLE II
PIT "B" EXCAVATION SUMMARY

ITEM	Excavation Level, CM						
	0-15	15-20	20-25	25-30	30-35	35-40	40-45
Chert Flake Size, mm sq.							
Under 15	2	9	15	7	5	5	4
15-20	6	6	2	3	3	7	3
20-25	1	2	2	2		1	
25-30	2	2					
30-35							1
60-70		1					
Total	11	20	19	12	8	13	8
Clayballs			6	3	5	3	
Goose Creek Sherds			1	1			
Faunal Remains							
Clam Shell	X	X	X	X	X	X	X
Snail			X	X	X	X	X
Deer					X		
Turtle							X
Misc. Bone		X	X	X	X	X	X

ARCHEOLOGICAL ACTIVITIES OF L. W. PATTERSON

Leland W. Patterson has been active for a number of years in several areas of archeological research. Subjects of current interest include general lithic technology, the archeology of southcentral and southeastern Texas, patterns of cultural change, and Asiatic influences on North American lithic technologies. Patterson has published over 170 articles and reports in local state, regional and national journals. Surveys conducted by him have resulted in recording of over 150 prehistoric sites in Texas, Louisiana and Ohio. He has led the Houston Archeological Society in the excavations of major prehistoric sites 41HR315 in Harris Co., Texas and 41WH19 in Wharton Co., Texas, both of which have very long occupation sequences.

Patterson is a past chairman of the Houston Archeological Society. He is a member of the Houston Archeological Society, the Texas Archeological Society, the Southern Texas Archaeological Association, the Louisiana Archaeological Society, the Archaeological Society of Ohio, the Society for American Archaeology, and the American Society for Conservation Archaeology. He has served as a member of the American Institute of Archaeology Committee for American Archaeology, and as a member of the editorial board of Flintknappers Exchange.

The current professional position held by Patterson is Manager of Environmental Affairs, Engineering for Tenneco Inc. This position involves coordination of the technical areas of environmental matters for the wide business interests of Tenneco Inc., including cultural resource studies for environmental impact studies and any subsequent mitigation. This includes the general overview of any archeological work required.

Historic Note Number Two - A. R. Duke

The fledgling Houston Archeological Society hosted its first important meeting on December 6, 1959. The gathering of professionals and amateurs was called The Houston Archeological Society Pottery Symposium and was held at the University of Houston. The purpose of this meeting was to discuss and classify upper Gulf Coast pottery types.

Classification of pottery from the upper Gulf Coast was not well developed at that time and an important contribution to the refinement of the type classification was made by Dick Worthington who was a director of the HAS and a founding member.

Worthington presented a paper stating that stratigraphic testing near the mouth of the San Jacinto River showed a distribution of sand tempered clay and bone tempered ceramics. He suggested that the clay and bone tempered ceramics be separated from the sand tempered ceramics and that the new group be called San Jacinto Plain and San Jacinto Incised. The sand tempered sherds would continue to be called Goose Creek Plain and Incised.

In 1967, Lawrence Aten, former HAS Chairman, refined and formalized further the San Jacinto ware concept and another important step was made in development of the regions' ceramic classification.

For more information on the evolution of the ceramic classification system of the upper Texas Coast chronology, see "Indians of the Upper Texas Coast" by Lawrence E. Aten.

Recent Archaeological Investigations at
the "Maison Rouge" site, Galveston, Tx.

Randolph J. Widmer and Anne Sullivan

The archaeology laboratory of the Department of Anthropology of the University of Houston, with the assistance of the Houston Archeological Society, has been conducting archaeological excavations in Galveston at the supposed location of "Maison Rouge," the former residence of Jean Lafitte. Our research interest was to try and archaeologically uncover the early European settlement of Galveston, which dates to the Aury, Mina, Lafitte era; approximately 1816-1821. Not only were we trying to determine if the early settlement of Galveston occurred in this area, but also to show what kind of lifeways were characteristic of this early occupation of Galveston.

Archaeological investigations are essential for understanding this early era on Galveston since the documentary sources are vague regarding this period. This has resulted in much folklore and speculation regarding the location of Jean Lafitte's "Maison Rouge" and many of the events concerning his stay on the island.

The site of the excavation afforded an ideal look into Galveston's past. Permission to excavate the site was graciously provided by Douglas Zwiener, owner of the site. Prior to our excavations, the site contained the remains of a foundation dating to the late 19th century. This foundation is what remains of the "House of the Twelve Gables", built by sea captain J. W. Hendricks. Therefore, not only did we have an excellent opportunity to investigate the early 19th century occupation of Galveston, but also had a chance to document the material conditions of life associated with the late 19th century structure.

Several situations existed which could interfere with our ability to achieve our goals. Most prominent was the fact the island had been filled after the 1900 Hurricane. We were sensitive to how this would impact our ability to get at the early occupational horizon. Also, historical records suggested that the early 19th century settlement of Jean Lafitte was burned, obscuring if not obliterating this early occupation.

Initially, we mapped the exposed architectural features onto a grid system. This grid system was oriented perpendicular with the east wall foundation of the house. After establishing the grid, a series of sub-surface posthole probes were excavated to determine the stratigraphy of the site. From these tests we could discern four cultural horizons which seem to be uniform across the site. These strata were confirmed by our more extensive 5x5 foot excavation units.

Five distinct stratigraphic zones have been observed in our excavations. These zones are very distinctive and are found in all undisturbed portions of the site. That is, those areas which are not covered by buildings, cisterns or other architectural features. These zones were subdivided into arbitrary 3 inch levels, so that we could distinguish and refine the stratigraphy in the event the zones proved to be of no chronological or cultural significance; or were insufficient for chronological phasing of the site occupation.

ZONE I - This zone consists of a 12 inch layer of grey loose humic-stained sand. The upper 6 inches of this deposit consists

almost exclusively of modern trash, primarily liquor, wine and beer bottles. After recognizing the contemporary nature of this material in the first few pits, the upper 6 inch level was not saved. The lower 6 inches of this zone were void of such contamination and contained staggering quantities of historical artifacts; including bottle glass, pane glass, nails, brick fragments, ceramics and buttons. This material seems to date to the late 19th through the first half of the 20th century.

- ZONE II- Consists of a distinct cultural strata approximately 6 inches in thickness. The upper 3 inches consists primarily of crushed oyster shells which were intentionally deposited on top of a 3 inch layer of brick and oyster which functioned as a macadam surface for the upper crushed shell layer. The density of brick and shell varies throughout the site with the greatest density being observed in the area adjacent to the southwest wall, or rear, of the house. It is clear that this zone served as a pavement, or prepared yard, for the last house built in 1885 on this property.
- ZONE III- This is a variable zone both in terms of thickness, and composition. It extends from a depth of 18 inches to 25-30 inches below the surface, and represents a fill episode to raise the level of the ground for the construction of the 1885 house and the oyster and brick yard. This zone is composed of sand which has numerous pockets and lenses of clay in it, and is tan to reddish brown in color. It is mixed and contorted, and is clearly fill. This zone was the first to be subdivided into the arbitrary 3 inch levels with the fill being screened to determine if there was any temporal differences in these levels.
- ZONE IV- At a depth between 25 and 29 inches below the surface, a distinct color and texture change is observed across the site. The tan to reddish brown mixed clay/sand fill is replaced by a greyish white sand void of clay. In many areas, this soil is extremely hard packed, surely forming a yard or surface. Toward the eastern margin of the site, this soil is yellower in color, but still sand. It appears that the top of this zone is elevated in the central portion of the site, and clearly represents a prepared surface. Originally it was felt that this horizon represented the original intact island surface, and therefore, hopefully dated to the Jean Lafitte era. This proved not to be the case. Instead this zone also represented a fill episode for an occupation dating before the 1885 house, but after the Jean Lafitte era.
- ZONE V - This zone consists of a dense grey, muddy sand, encountered at a depth of 39 to 42 inches below the ground surface. In the central part of the back yard, the surface is very hard packed, but east and west of this area it is much looser. This grey, muddy sand extended as deep as our excavations could take us. This depth was determined to a large part by the water table which continually dropped as our excavation proceeded. We know that this grey, muddy sand horizon extends to a depth of at least 60 inches below the ground surface.

One of the interesting findings of our excavations is the fact that unlike many parts of the Island, this property was not raised or filled after the 1900 Hurricane. This is not all that surprising since two fill episodes—approximately 2 feet thick, were added to the site prior to 1885. A retaining wall built of brick encircles the property, and served to retain the fill used to raise the level of the 1885 house.

The interior foundation of the 1885 house had a concrete floor with two drains that connect to a subfloor pipe which was uncovered during excavation. We wanted to excavate under the "basement" floor of the 1885 house to see if the stratigraphic relationships outlined above still applied. To our surprise, we found a concrete floor located under the 1885 house floor. This is not simply an earlier floor of the 1885 house since a foundation pillar of the 1885 house clearly cuts into the earlier floor. This means that the lower floor goes with a previously unrecognized house; at least one not recorded in the title and deed abstracts of Galveston County. Ule Haller, archivist of the Rosenberg Library, obtained a bird's eye view map of the waterfront for three different periods; one in 1865, one in 1871, and one in 1885. On the 1865 map there is not house or structure at the location of the property; on the 1871 map there is a structure on that property as there is on the 1885 map. The house on the 1871 map, however, is clearly different from that on the 1885 map, clearly indicating that they are different houses! The insurance survey done to provide a map of Galveston in 1886 states explicitly that the house whose remains are not found on that property, was owned by Capt. Hendricks and built in 1885. Therefore, not only is an earlier house documented historically, but also archaeologically, and appears to have been built around 1870.

Our task, then, became to link the various architectural features and out buildings to their respective houses. A large rectangular cistern found on the west side of the back yard was first built during the earlier house phase, but later added on to during the later, or 1885 house phase. This cistern was not excavated because its bottom was well below the water table, and the owner had informed us that he had it filled. A smaller cistern, 6x6 feet, was located on the east side of the backyard, opposite the larger cistern. This cistern dated to the 1885 house since its eastern wall incorporated the east retaining wall. This feature was excavated in its entirety, but contained only clean yellow, culturally sterile sand. A few soft drink cans, a broom handle, a modern flower pot and a shallow aluminum baking pan, all obviously modern, were found on the bottom of the cistern; indicating it was recently filled and had been empty for most of its history. A single mother-of-pearl button imbedded in the asphalt-coated concrete floor was the only in situ artifact recovered from this feature.

Perhaps the most exciting feature associated with this property was a well. This structure was oval in shape, and was constructed of bricks which were plastered with cement on both the outer and inner surfaces. The opening of the well was just visible on the surface. The well was excavated in arbitrary 3 inch levels by Sheldon Kindall to a depth of approximately 11 feet, and a staggering amount of cultural material was recovered. In fact, most of the fill was cultural refuse rather than soil. In the lower levels of the well water was encountered. For a while, this could be bucketed out, but upon proceeding, the water inflow was too rapid and so a pump was used to remove the water. Eventually, even the pump could not keep up with the insurging water and the excavation was terminated.

We have been able to demonstrate stratigraphically that the well was

originally built during the occupation of the earlier, circa 1870, house. This is already seen in that Zone III, the fill for the later 1885 house meets the well and is not interrupted by a builder's trench. This is also supported by the internal stratigraphy of the well itself. In the well, we see at a depth of about 4 feet a large quantity of wood shavings which appear to be from a plane. These are not found in appreciable quantities above, or below one foot at this depth. We are interpreting these shavings as the waste associated with the cabinetry and woodworking which took place during the construction of the later house, built in 1885. This also means, if our interpretation is correct, that the well was abandoned sometime during the occupation of the earlier house; that is, between 1870 and 1885. We hope to have a nice stratigraphic sequence of material to support this interpretation.

Of considerable interest, is that the foundation of the later (1885) house built directly on top of the foundation of the earlier house. We know this because Zone IV and Zone V directly join the house foundation with no discernable interrupting trench. We also ascertained that the base of the wall is in Zone V. The foundation wall was set into Zone V, with its trench being backfilled prior to the deposition of Zone IV. We also now know for certain that the top of Zone IV represents this early (1870) house surface because we found, in the central backyard area south of the existing house, a patio surface composed of square, gritty asphalt at a depth of 25 inches below the surface of the ground. Of greater importance is the fact that a formal sidewalk, intersecting the later 1885 house, was superimposed over this patio. This sidewalk had a low, narrow concrete retaining wall on either side and was filled with crushed oyster and brick, as well as an iron pipe running down the center of it. Also, it is readily apparent that the foundation walls of the 1885 house are made of a different material, a grey crushed shell and sand mortar, or stucco, than the earlier 1870 house foundation which consists of a light, buff colored concrete/plaster without much shell. The earlier foundation wall also has a more uneven surface, indicative of hand plastering, while the later foundation surface is clearly poured into a frame.

Thus far in our excavations we have not found "Maison Rouge", nor are we likely to find this residence. There are several reasons for this. First of all, the house may have originally been built of building materials which perished during the historically recorded burning of the Lafitte settlement. If the building was made of more durable material such as brick or stone, these might have been scavenged by later occupants of Galveston. What this means, is that we cannot conclusively determine that Jean Lafitte's residence was not on this property, only that we found no residence or structure dating to that era.

We have, however, found and isolated the early Mina/Aury, Jean Lafitte occupational horizon; this being Zone V. Furthermore, we have noted that in the area under the central portion of the house interior, and extending south into the backyard, is a very hard packed surface overlaid by a thin crushed shell lens. The cultural material associated with this level dates to the 1818 period. In the area under the house interior, west of this central area, this hard packed surface drops off into a broad shallow trough which extends at least 15 inches to the west. This trough contains quite a bit of cultural material, some of which dates to the Lafitte era, but some of it dating to a later period. Since this material is on top of, and not in the grey matrix, it can actually belong to a later fill episode that became associated with earlier era material as it became incorporated into the fill placed over it.

In the backyard portion of the site, we do not see this trough-like

area. Instead we see distinctive trash, refuse areas. One located to the east, and one to the west of this central area, with virtually no cultural material found in the central area in Zone V. This material all seems to date to the early 19th century, making it contemporary with the earliest known European settlement on the Island.

It is tempting to suggest that the hard packed grey sand with the thin shell layer on top represents the front yard of a Lafitte era residence, with the trash areas in the backyard representing disposal areas behind the house. At present, we can only say that there are distinct differences in the density and location of artifacts found from the Zone V strata; and that these artifacts, as well as this Zone, is not attributable to fill because the artifacts were deposited in situ in this soil horizon. We have, therefore, conclusively determined that a Lafitte era occupation of Galveston occurred on, or near this property.

SUMMARY:

We can summarize our findings to date as having uncovered three chronologically distinct occupational levels. These can be characterized as follows from earliest to latest occupation:

1815 - 1821 Occupation: This occupation consists of an extremely hard packed, prepared, mud-sand strata at a depth of about 40 inches below the present ground surface. The central portion of this horizon seems to be somewhat elevated. This surface has cultural material extending to a depth of 60 inches. This surface appears to be at least 311 sq. feet as determined through our excavation. The trash deposits are located to the south of the 1885 house, on the east and west portions of the property. No architectural remnants other than a single posthole filled with charred material was found associated with this horizon. Archaeologically, this occupational horizon was designated Zone V. Characteristic of this horizon is a large amount of charcoal, perhaps accounting for the dark grey sand. This might indicate the burning of the Lafitte settlement upon its abandonment in 1821.

1870 - House and Yard: Subsequent to the abandonment of the early settlement, a house was built on the property sometime between 1865 and 1871. The foundation was set directly into the Zone V surface. The dimensions of this building, as determined by its foundation are 36 feet by 34 feet, for an area of 1224 sq. feet. The interior of this house and the areas around it were then filled with sand. This sand is either a greyish-white color, or as we noted in the eastern and western margins of the back yard area, a yellowish-orange color. In this color sand numerous BB size iron pellets were noted, and is probable that these are responsible for this. In the interior of the house a concrete floor was constructed on top of this fill. While in the central area south of, and adjacent to the house, the partial remains of a patio constructed of square asphalt tiles 18 by 18 inches in size was discovered. Also associated with this house is a well located 11 feet south of the house along the eastern margin of the property, and a large rectangular cistern 13 by 19 feet, located 23.5 feet from the south wall of the house along the western margin of the property, and both made of brick. This well functioned only during this occupation, and in fact, was abandoned while this house was still in use. It is not known whether this house was destroyed by a storm, or was disassembled for the next construction phase. Zone IV is the archaeological strata for this occupation.

1885 - House and Yard: This is the best known of the three occupational phases. This house was built by Capt. J. W. Hendricks in 1885. It was a two story frame house built on top of 10 foot high walls made of crushed

oyster shell, mud and brick fragments. In the insurance records for 1885 to 1937, this ground floor interior was called the basement. The house was popularly known as the "House of Twelve Gables" because of the three, second-story gabled windows, protruding from each side of the house. Another name given to the house was Hendrick's Castle. By 1894, the house had been divided into three apartments and these rooms rented out. Although the house weathered the 1900 storm, in 1937 it was considered to be "a very poor windstorm risk" (insurance records of 1937). Through lack of repairs and general neglect the frame structure of the house finally collapsed in the 1950's.

Of considerable interest is that the foundations of the house was built on top of the earlier 1870 house foundation, as was an addition to the large rectangular cistern in the western backyard area. In addition, another cistern measuring 6 by 6 feet was built on the east side of the property. A low brick retaining wall was built to enclose the property. This brick wall has post holes placed approximately every 8 feet, indicating a wooden fence existed on top of this low footing wall. A kitchen area was built at the extreme south end of the property, consisting of a L-shaped concrete wall with a concrete floor at, or close to the contemporary ground level; with an earlier floor having existed at the lower level.

This area enclosed by the retaining wall, together with the area inside the house, was filled with a sand/clay deposit some 8 to 12 inches in thickness. In the interior of the house, a concrete drain pipe and a series of pier supports made of brick were set into Zone III, actually cutting into the earlier house floor in a few examples. A crushed brick and oyster shell substrate was then put down, and a smooth concrete floor laid in rectangular sections was poured on top of this substrate.

In the backyard area, a smaller oyster and brick surface was laid over much, but not all of the Zone III horizon. This surface is 6 inches in thickness and was designated Zone II. In the center of the yard running perpendicular to, and intersecting with the south wall of the house, a formal walkway was uncovered. This walkway was approximately 5 feet wide and consisted of a crushed oyster shell bed filled between two narrow low concrete retaining walls. Down the center of this sidewalk, an iron pipe, possibly connecting to the drain system inside the house, was found. We have not as yet followed this pipe out. The sidewalk is elevated 3 inches above the general surface of Zone II of the site. Trash disposal during this occupation was considerable and consisted of sheet refuse in the yard area, and trash disposal into the well. No privy, another favored locale for trash disposal, has been uncovered to date.

Our investigations and analyses are by no means complete. Many of the interpretations we have made to date might be altered, or perhaps confirmed as our research continues. We would like to thank Douglas Zwiener for his help and permission to excavate this property, and all the members of the HAS and other volunteers without whose able and enthusiastic help, we would not have been able to learn what we now know about the early occupancy of Galveston.

Additional Artifacts from 41WH19 Location "A"
Wharton Co., Texas

L. W. Patterson and J. D. Hudgins

Introduction

Prehistoric site 41WH19 in Wharton Co., Texas is a large site with an occupation sequence from the Paleoindian period to the Late Prehistoric. Research is being done on two areas of this site. Location "A" is a large eroded area where surface collecting is continuing. Location "B" is an undisturbed area where two seasons of excavations have been completed. A preliminary report on the first season of excavations has been published (Patterson and Hudgins 1983a).

Several articles have been published on artifacts found during surface collecting on Location "A" (Patterson and Hudgins 1981, 1983b; Hudgins and Patterson 1983). Additional artifacts found at Location "A" since the last publication will be described here.

Now that the second season of excavations at 41WH19 Location "B" has been completed, a detailed report will be written. Surface collections from the eroded area of Location "A" provide valuable additional information on the nature of this site.

Projectile Points

Several more projectile points have been found at 41WH19 Location "A", as shown in Figure 1. Five of these points can be classified as Late Paleoindian. Figure 1A is a reworked Plainview-like lanceolate point. Figures 1B, C are early notched point forms similar to specimens excavated from the Late Paleoindian level of Location "B". Figure 1E is the basal end of a Plainview point. Figure 1F is a small lanceolate Paleoindian point. Figure 1D is a straight stemmed point that may be from the Late Paleoindian period or from the Early Archaic.

Several of these points may be from the Late Archaic and/or Early Ceramic periods. These include Kent (Figures 1G, H, J) and Palmillas (Figure 1K) styles. An unclassified leaf-shaped arrow point (Figure 1I) is from the Late Prehistoric or possibly from the Historic period, since stemless arrow points occur at a historic site in this county (Hudgins 1982).

Other Artifacts

Dart point preforms found at this site demonstrate that projectile points were being manufactured here during all time periods represented. Preforms are shown here in Figure 1L and Figure 2D, E, F.

A side scraper is shown in Figure 2A, made from Edwards Plateau flint with some thick chalky cortex remaining. Figure 2B is another scraper. Angles of the retouched edges of these tools are 60 and 55 degrees, respectively.

Figure 2C is a potsherd of the Rockport asphalt painted variety. The design is similar to specimens illustrated by Suhm and Jelks (1962: Plate 66). This specimen also has some asphalt on the interior side. Rockport pottery can occur in both the Late Prehistoric and Historic periods (Suhm and Jelks 1962:131).

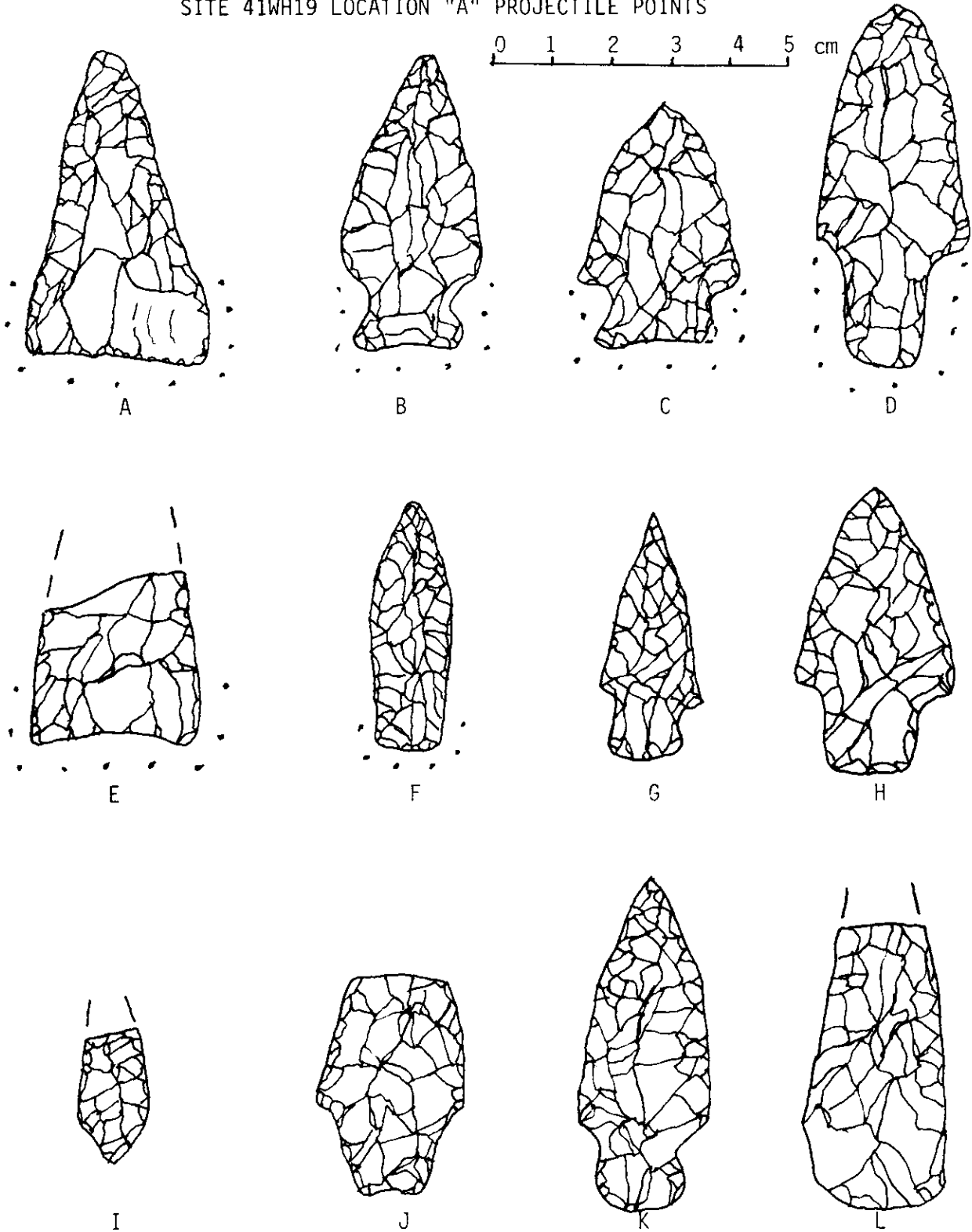
Summary

Continuing surface collection activities at site 41WH19 Location "A" are yielding large amounts of data to supplement data from excavations at Location "B". This site has now become one of the major Indian sites of southeastern Texas.

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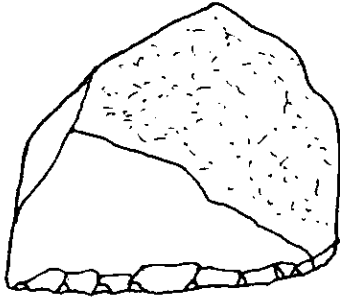
FIGURE 1
SITE 41WH19 LOCATION "A" PROJECTILE POINTS



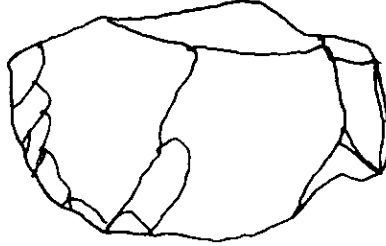
A-reworked Paleo point; B,C- Early Notched; D-Early Straight Stemmed;
E-Plainview; F-Paleo lanceolate; G,H,J- Kent;
I-unclassified arrow point; K- Palmillas; L-preform; dots show ground edges

FIGURE 2
SITE 41WH19 LOCATION "A" ARTIFACTS

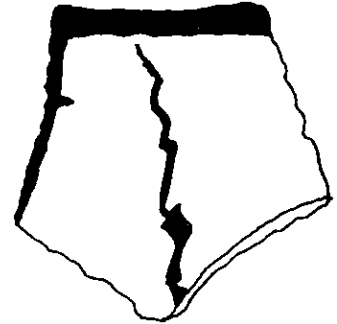
0 1 2 3 4 5 cm



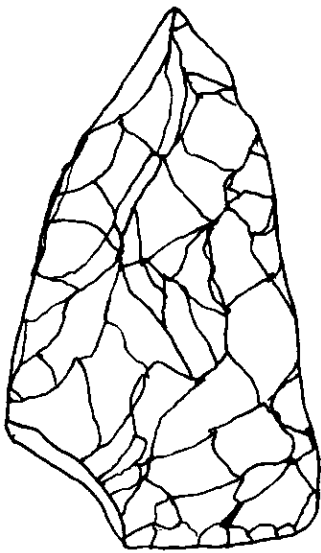
A



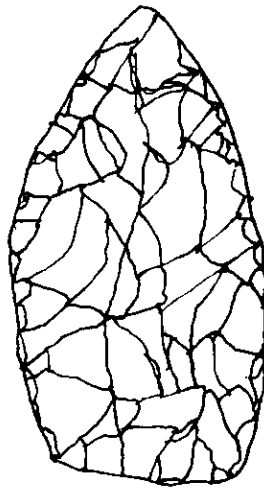
B



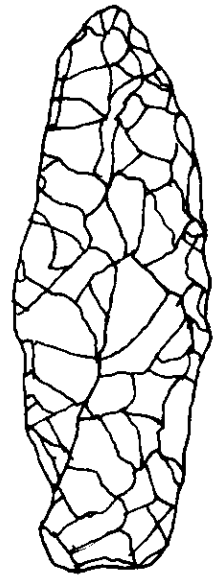
C



D



E



F

A-side scraper (Edwards Plateau flint), B-scraper,
C-Rockport asphalt painted sherd, D to F- preforms

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