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The Archaeology of Sam Rayburn Reservoir

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WE CAN GRASP THE UNIVERSE ONLY BY SIMPLIFYING IT WITH IDEAS OF IDENTITY BY CLASSES, TYPES, AND CATEGORIES AND BY REARRANGING THE INFINITE CONTINUATION OF NON-IDENTICAL EVENTS INTO A FINITE SYSTEM OF SIMILITUDE'S. IT IS THE NATURE OF BEING THAT NO EVENT EVER REPEATS, BUT IT IS IN THE NATURE OF THOUGHT THAT WE UNDERSTAND EVENTS ONLY BY THE IDENTITIES WE IMAGINE AMONG THEM.

GEORGE KUBLER

OUR HEADS ARE ROUND SO THAT THOUGHT CAN CHANGE DIRECTION.

ALLEN GINSBERG

WE MUST NEVER FORGET THAT HUMAN MOTIVES ARE GENERALLY FAR MORE COMPLICATED THAN WE ARE APT TO SUPPOSE, AND THAT WE CAN VERY RARELY ACCURATELY DESCRIBE THE MOTIVES OF ANOTHER.

FYODOR DOSTOYEVSKY

EDWARD B. JELKS

THE ARCHAEOLOGY
OF SAM RAYBURN
RESERVOIR

CENTER FOR REGIONAL HERITAGE RESEARCH

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*Dedicated to the prehistoric peoples of the
Sam Rayburn Reservoir area.*

Preface

Since the McGee Bend report was accepted as my PhD dissertation in 1965, there have been several twists and turns in my professional career. After having directed the Texas River Basin Surveys program for 15 years and having excavated scores of River Basin Surveys sites over much of Texas, I joined the faculty at Southern Methodist University in 1965 to try my hand at teaching. Three years later, when offered a substantial jump in rank and salary to organize an anthropology program at Illinois State University, I moved north to Normal, Illinois, where, much to the surprise of both myself and wife Judy, we stayed on to settle down in retirement here in 1983.

From 1965 until retirement, I maintained a routine of teaching during the school year and digging in the summers, and I continued to dig an occasional site every now and then after retirement. I enjoyed teaching, and helped train a number of students who went on to successful careers in archaeology, but over an active career of more than half a century, digging and interpreting archaeological sites has remained my primary interest. Among the approximately 90 sites I have dug and written reports on were prehistoric and historic Indian sites in Texas and Illinois, Spanish colonial sites in Texas, French colonial sites in Illinois, English colonial sites in Virginia and Newfoundland, and miscellaneous 19th and 20th century sites in Texas, Illinois, Wyoming, and Micronesia. My work at McGee Bend was among the more challenging and productive of my projects, and it is gratifying to see this report published after so many years, for which I am deeply indebted to Zac Selden.

EBJ
Normal, Illinois
March, 2017

Foreword

In addition to serving as primary and foundational literature for archaeological pursuits throughout the East Texas region, at the time of this publication, *The Archaeology of Sam Rayburn Reservoir*, also serves as commentary on the history of archaeological research in the region. Dr. Edward B. Jelks' 1965 dissertation has played a key role in our understanding of the archaeology of the Angelina River basin in East Texas for over 50 years, and its importance to the field cannot be overstated. This monograph represents a substantial contribution to the archaeological record of the region, particularly in the settlement and use of the region by Caddo peoples from as long ago as ca. A.D. 900 to A.D. 1700 or so, especially during the time of the Angelina phase in the Late Caddo period, initially defined by Jelks as the Angelina focus, as well as Woodland, Archaic, and Paleoindian settlements that came earlier. A number of the sites that Jelks excavated now reside beyond the reach of our shovels and trowels, beneath the waves of what is now the largest man-made reservoir in Texas (Figure 1).

Much of the work that has been completed since Jelks' dissertation was completed has consisted of cultural resources surveys for the U.S. Army Corps of Engineers in advance of proposed timber sales along and near the Lake Sam Rayburn shoreline [Bonine et al., 2004, Hubbard, 1998, Jones, 2009, Jones and Trierweiler, 2005, Rose and Jones, 2010, Rose et al., 2015, Skinner, 1999]; both previously recorded, as well as new sites, have been added to the regional inventory. Caddo vessels have become exposed along the shoreline in the past, which were then documented and studied [Middlebrook, 1997, Skinner and Trask, 1996], while other collections have been documented in the U.S. Army Corps of Engineers holdings that are curated at the Texas Archeological Research Laboratory at The University of Texas at Austin [Marceaux, 2011, Perttula, 2016, Perttula et al., 2009, Perttula and Walters, 2016a,b,c,d,e,f,g]. These works have aided archaeologists in improving their understanding of the archaeological record associated with the many prehistoric occupations in the Angelina River basin.



Figure 1: Forest Supervisor Jack W. McElroy (left) and Mr. Belton Muller (right), Executive Secretary of the East Texas Tourist Association, look over the boat launching ramp at the Forest Service's Sandy Creek Recreation Area, on the McGee Bend Reservoir site. In the background is the cleared site for an arm of the new lake, to be filled in 1965. Image 2330.4 courtesy of the United States Forest Service.

The conceptual component of this project began with the introduction of the Dr. James E. Corbin Papers in Archaeology series that is published as a part of the *CRHR Research Reports* at Stephen F. Austin State University. At that time, Selden reached out to Jelks to propose this undertaking, which began in earnest one year later. While digital copies of Jelks' dissertation do exist, the document was never formally published. In the digital copies and reprints of his dissertation, many of the figures were distorted or highly pixelated, and the larger tables were often ripped out. Those same figures were scanned at 1200 dpi for this volume, allowing readers to view—many for the first time—the very rich and substantial archaeological record that now lies beneath Sam Rayburn Reservoir in East Texas. The tables in this volume were built in such a way that they can be read by a variety of statistical packages, providing professional and avocational practitioners with the tools needed to easily incorporate data from this volume into modern archaeological reports like those available from the *Index of Texas Archaeology*.

Robert Z. Selden Jr. and Timothy K. Perttula
Center for Regional Heritage Research

Jelks Acknowledgments

I wish to acknowledge with gratitude the contributions of those who assisted in the McGee Bend (Sam Rayburn Reservoir) archaeological project, both in the field and in the laboratory. Assistant field archaeologists were LeRoy Johnson Jr. (1956 season), W.A Davis (1957 and 1960 seasons), John Allen Graham (1957 season), Curtis D. Tunnell (1957 season), Lathel F. Duffield (1960 seasons), and J. Dan Scurlock (1962 season). Helping process, sort, and tabulate specimens in the laboratory were Lisa Connor, Milburn Lathan, Mark Parsons, Barbara Wood, Roy Hawley, and Miriam Lundy.

I especially wish to thank the kind friends who united in a magnification surge of typing, proofreading, photograph mounting, and other tasks involved in assembling the dissertation, thereby making it possible for me to meet my deadline. They are Barbara Wood, Alice Benfer, Marsha Jackson, Dorris Olds, Margaret Frank, Dessamae Lorraine, and Curtis Tunnell.

Special thanks are due D. T. Kent, Jr., who generously permitted use of his manuscript description of the *Neches River* dart point type.

The drawing of pottery and other artifacts were done by Frank Weir. The reservoir map, site maps, profiles, and graphs were drafted by Vaughn Bryant.

CRHR Acknowledgments

The Center for Regional Heritage Research (CRHR) expresses much gratitude to Dr. Edward B. Jelks for his concerted efforts to assist in translating this conceptual idea into a tangible reality. From checking references and figures, to addressing issues with formatting, Dr. Jelks has been a true pleasure to work with.

The CRHR wishes to thank the Texas Archeological Research Laboratory (TARL) for providing Dr. Robert Z. Selden Jr. with the copy of Jelks' dissertation for the purpose of building this document. Selden also wishes to thank Dr. Timothy K. Perttula, Dr. C. Britt Bousman and Bill Martin for their useful editorial comments throughout this process, and Connor Herterich for assisting with the Overleaf ingest.

Introduction

This is an archeological study of the McGee Bend Reservoir (Sam Rayburn Reservoir) area of eastern Texas as revealed through the analysis of 14 sites that were excavated there between 1956 and 1962. The reservoir, currently under construction on the Angelina River near Jasper, will be some 50 miles long when completed in 1965, with major arms extending up Ayish and Attoyac bayous (Figure 2). The lake will be named for the late Sam Rayburn.

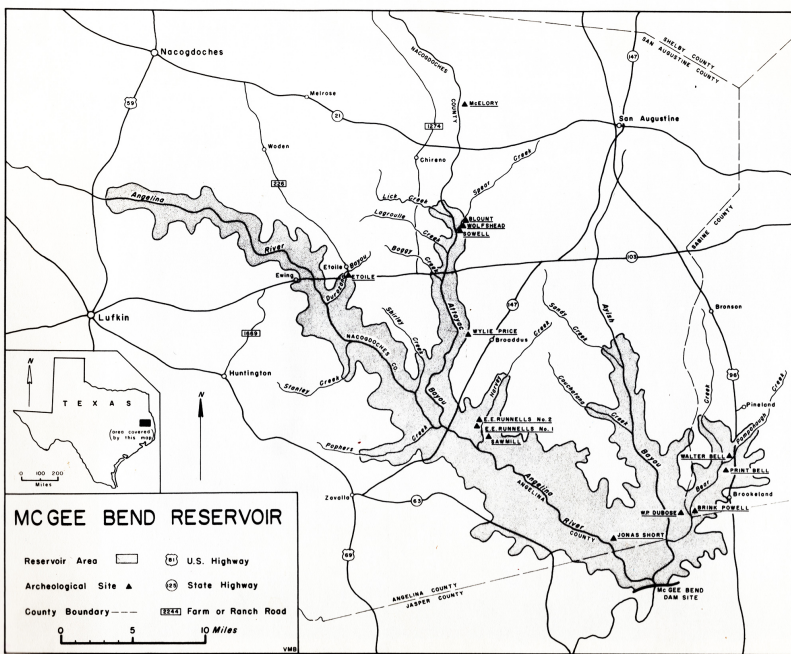


Figure 2: Map of McGee Bend Reservoir (Sam Rayburn Reservoir) showing location of archaeological sites excavated.

Most of the archeological work was done during extended field seasons in the fall months of 1956, 1957, and 1960; a brief season in the fall of 1962 completed the field investigations. The field programs for the first two years were carried out by the National Park Service which maintained an office and laboratory in Austin at the time. Excavations subsequent to 1957 were conducted by the Texas Arche-

ological Salvage Project of the University of Texas. The writer, then an employee of the National Park Service, personally supervised the first two field seasons; field supervisor for the 1960 season was Lathel F. Duffield and, for the brief 1962 season, J. Dan Scurlock. The work at McGee Bend was a project of the nationwide Inter-agency Archeological Salvage Program, a program designed to salvage archaeological data endangered by the construction of dams and reservoirs.

Thirteen sites will be described in the following pages and the results of their analysis will be reported. They are the Jonas Short, Walter Bell, Sawmill, Wylie Price, Print Bell, E. E. Runnells No. 1, E. E. Runnells No. 2, Etoile, Blount, Brink Powell, Sowell, McElroy, and W.P. Dubose sites. Duffield [1963] has already published an excellent report on the fourteenth site, Wolfshead, and it will not be re-described here. Duffield's report will be drawn on as needed, however, for data and interpretations.

Two different site numbering systems were employed at McGee Bend: a quadrangle system used in 1956 and 1957, and a county system used thereafter. In Table 1, the site names are correlated with the two sets of numbers (i.e., 41 stands for Texas, SA for San Augustine County, SB for Sabine County, and NA for Nacogdoches County).

Site Name	Quadrangle System	County System
Jonas Short	41-42D9-5	41SA101
Walter Bell	41-43C4-6	41SB50
Sawmill	41-42D5-9	41SA89
Wylie Price	41-42D5-17	41SA94
Print Bell	41-43C4-1	41SB36
E. E. Runnells No. 1	41-42D5-5	41SA87
E. E. Runnells No. 2	41-42D5-4	41SA86
Etoile	-	41NA11
Blount	-	41SA123
Brink Powell	41-42D9-2	41SB8
Sowell	-	41SA68
McElroy	-	41SA116
W. P. Dubose	41-42D9-4	41SA100
Wolfshead	-	41SA117

Table 1: Correlation of site names with numbering systems.

The primary objectives of the fieldwork at McGee Bend were to salvage a representative sample of the archeological remains in the reservoir area and to describe and evaluate the data recovered. It turned out that the remains had a distinctly local flavor for the most part and did not conform to cultural taxonomic systems adopted in the nearby areas. Therefore cultural classifications were devised specifically for the McGee Bend area, a step that went beyond the minimum requirements of river basin salvage standards. Finally, the local archeology, as reconstructed in the present study, was placed in

regional context through comparison with neighboring archeological areas. These three phases of research— that is, description of the basic data, ordering and interpretation of the basic data, and contextual consideration of the local archeological complexes— will be treated in the following report.

Introductory statements will be given in this section on the field methods employed, on the physiography and biota of the region, on local ethnohistory, and on the archeological setting. Then the sites will be described individually. Included in each site description will be the superficial appearance of the site, its geologic structure, the excavation procedures followed, the occupational features, a general statement on the kinds of artifacts present, and remarks about the position and significance of the site in the McGee Bend area study. Next the artifacts from all the sites will be described together in one section, a procedure adopted in order to present the artifact typology in regional terms. (One exception should be noted: A series of unusual artifacts found in several caches at the Jonas Short mound will be described in the section of Jonas Short Site since they are an essential part of the mound description and are not pertinent, for the most part, to the typology of the other artifacts.) After the site descriptions there will be a general analysis of all the data and a discussion of the processes through which the classification of local archeological complexes was achieved. The complexes will be defined next, and the sites will be reviewed in relation thereto. Finally, a summary of McGee Bend archeology will be presented and some of the major inter-areal problems will be discussed.

Field Methods

When one looks over a typical non-mound site at McGee Bend, he sees only a bit of natural-looking ground with perhaps some stone flakes and other cultural debris strewn about the surface. Therefore if any structural components produced by human beings are present (for example, burials, house patterns, or concentrated midden areas), one must dig to locate them.

The sites at McGee Bend were all explored by means of trenches and individual squares dug in what appeared from surface indications to be the most likely spots for producing occupational features. But, in order that a feature might be recognized when encountered, the first step of exploration was to study the geologic context of the site: only when the composition and extent of the geologic zones have been thoroughly studied can one confidently expect to distinguish the anomalies produced in them by human disturbances. Consequently the first tests dug at a site were placed so that their

profiles might be expected to reveal the general geologic zoning of the site.

At all of the sites there was a basal subsoil of clay or sandy clay, termed Zone 1, that was essentially sterile of cultural material. Overlying Zone 1 and forming the topsoil was a layer of unconsolidated sand (Zone 2) in which were incorporated the archeological remains (Figures 3 and 4). As there ordinarily was no discrete geological stratification within Zone 2 to serve the purposes of archeology, vertical sampling control was effected through digging the exploratory trenches and squares by arbitrary levels, usually of either six or twelve inches. A simple system of coordinates, oriented on the cardinal directions when feasible, was established at each site for controlling data horizontally. Vertical position was measured in relationship to a datum that was assigned an arbitrary elevation.



Standard records were maintained: general site notes describing the topography, the reference system, the geology, the work done, and other pertinent information about a site as a whole; detailed descriptions and sketches of occupational features; measured drawings of profiles; excavation plans; contour maps; photographs; and other appropriate records. Artifacts were sacked by excavation units (levels of squares or trenches, occupational features) and the provenience data were written on the sacks.



Figure 3: Profile showing geologic zoning, Runnels Site No. 2.

Figure 4: Profile showing geologic zoning, Jonas Short site.

Physiography and Biota of the Region

The Angelina River drainage lies in the West Gulf section of the Coastal Plain physiographic province as defined by Fenneman [1938, 100-120]. It is a hilly area of sandy soils with a general slope to the southeast. The surface geology is of Eocene age, comprising various subdivisions of the Claiborne and Jackson groups, mostly sandstones, clays, and unconsolidated sands [Sellards et al., 1932, 606-699].

Located near the western edge of the Austroriparian biotic province, the McGee Bend area supports dense forests of pines and hardwoods, both on the uplands and in the stream valleys, much like those extending eastward all the way to the Atlantic [Blair, 1950, 98-100]. Included locally are sweetgum, pecan, several kinds of oaks, and various pines, predominantly longleaf. Common mammals are deer, opossums, raccoons, skunks, foxes, squirrels, rabbits, gophers, rats, and mice. Many species of birds, reptiles, and fish also abound. The climate is temperate, with an annual rainfall of about 50 inches.

Ethnohistory

From the De Soto expedition of the 1540's until the last Indian tribes of eastern Texas were gathered on reservations in the middle nineteenth century, descriptions of East Texas Indians were written by dozens of different observers. Yet, although descriptions are extant for indigenes on all sides, the McGee Bend Reservoir area itself remains an ethnographic blank. Caddoan peoples lived to the north, northeast, and northwest, and Atakapans lived to the south, southeast, and southwest; but there seem to be no accounts at all of the natives along the lower Ayish and Attoyac bayous and the adjacent section of the Angelina River. Consequently, maps showing the location of native tribes in eastern Texas commonly have a blank area encompassing the McGee Bend locality, with Caddoan tribes to the north and Atakapan tribes to the south (see for example Swanton [1946, Map 1]; Newcomb [1961, Map4]). In lieu of specific information on the reservoir area, brief ethnohistoric sketches of the nearby Caddoan and Atakapan tribes will be given for later comparison with archeological data.

In 1542 survivors of the De Soto expedition under the leadership of Moscoso passed among the Nondacao (Anadarko), Hais (Eyeish), and Animay (Hasinai?) Caddoan tribes who two and a half centuries later were living on the upper Angelina River, Ayish Bayou, and Attoyac Bayou above the present McGee Bend Reservoir [Swanton, 1942, 8]. Although the exact location of these tribes in the sixteenth century is uncertain, Stephenson [Stephenson, 1948a, 6] has sug-

gested that the Moscoso expedition passed through the heart of the McGee Bend area.

In the late seventeenth century and throughout the eighteenth century, tribes of the Hasinai Confederation (Neches, Nacogdoches, Hainai, Nabadache, Nacono) lived along the Neches and upper Angelina rivers immediately north of McGee Bend [Swanton, 1942, 4, Fig. 1]. The Hasinai were visited by two La Salle expeditions out of Fort Saint Louis, respectively in 1686 and 1687 [Swanton, 1942, 38-40]. Records of those expeditions constitute the next reports of Hasinai after the Moscoso entrada of almost a century and a half earlier. The homeland of the Hasinai cannot be located precisely from the records of the La Salle expeditions, but only two or three years later the Spanish began to establish missions among the East Texas tribes, and from that time on the tribal territories, and sometimes exact village locations, can be identified with some accuracy.

In 1689 or 1690 Mission Santismo Nombre de Maria was founded on the Neches River for the Hasinai, but a flood destroyed it in 1692 (Casteneda [1936a, 2]; Swanton [1942, 47-49]). Mission San Francisco de las Tejas, established a short distance west of the Neches in 1691 for the Tejas (Hasinai), was abandoned in 1693 (Casteneda [1936a, 351-354]; Swanton [1942, 44-46]). Both missions were a few miles northwest of McGee Bend Reservoir.

Spanish missionaries returned to eastern Texas after a 23 year absence in 1716, and established missions for the Hasinai tribes on the Neches (San Francisco de las Tejas), on the Angelina (La Purisima Concepcion), and at the site of present day Nacogdoches (Nuestra Señora de Guadalupe) [Casteneda, 1936b, 55-60]. In the same year Mission Dolores de los Ais was founded for the Eyish Indians on Ayish Bayou, at modern San Augustine [Casteneda, 1936b, 67]. The reservoir extends up Ayish Bayou, but does not reach as far north as San Augustine. East of the Sabine at the same latitude as Mission Dolores de los Ais lived the Adai tribe, for whom Mission de San Miguel de Linares was founded in 1716 [Casteneda, 1936b, 66-67].

After a temporary withdrawal from eastern Texas between 1719 and 1721, Spanish missionaries worked among the Hasinai, Eyish, and Adai until the missions were permanently abandoned in 1773. During their tenure in eastern Texas, the Spanish missionaries penned a series of excellent descriptions on the local tribes.¹ After 1773 a few brief descriptions of the Hasinai, Eyish, and Adai were recorded (Bolton [1915, 231-232, 257-232]; Sibley [1832]), and by the time Anglo-Americans began settling the area in the 1820's, the indigenous Indians had been almost entirely superseded by the Cherokee, Alabama, Koasati, and other tribes that had recently moved into Texas from the east.

¹ Fray I. F. de Espinosa and A. M. Hatcher. Descriptions of the Tejas or Asinai Indians, 1691-1722, IV. *Southwestern Historical Quarterly*, 31:150-180, 1927; Fray F. Hidalgo and A. M. Hatcher. Descriptions of the Tejas or Asinai Indians, 1691-1722, III. *Southwestern Historical Quarterly*, 31(1):50-62, 1927; and Fray G. J. de Solis and A. M. Hatcher. Diary of a Visit of Inspection of the Texas Missions Made by Fray Gaspar Jose de Solis in the Year 1767-1768. *Southwestern Historical Quarterly*, 35(1):28-76, 1931

To the south, southeast, and southwest of the McGee Bend area lived tribes that are classed under the general heading Atakapa. Atakapan peoples occupied the Gulf coast region in southwestern Louisiana and the adjacent part of southeastern Texas. The main sources of ethnographic data on the Atakapa are the narrative of Belle-Isle, who was a captive of the Akokisa group from 1719 to 1721,² a description of early nineteenth century Atakapa of the Lake Charles, Louisiana, locality,³ and a study of the Bidai, an inland Atakapan tribe.⁴ Cabeza de Vaca was captured by the Han Indians of the Galveston Bay area in 1528, but the Han, who may have spoken an Atakapan dialect, seemed to have been more closely affiliated culturally with the Karankawa than with the Atakapa [Newcomb, 1961, 317].

Atakapan tribes living near the McGee Bend locality were the Akokisa on the lower Trinity River and along the eastern shores of Galveston Bay, the Atakapa proper in the lower Sabine area, and three inland tribes –the Patiri, Bidai, and Deadose– who lived along the Trinity above the Akokisa (Swanton [1946]; Newcomb [1961, 315-316]). Bolton [1915, 147-148] states that the Agdoca (Deodose?) once lived near the juncture of the Angelina and Neches rivers.

Thus the McGee Bend region was adjoined on the north, northeast, and northwest by Caddoan peoples and on the south, southeast, and southwest by Atakapan peoples. Yet there is no record of the peoples who lived in the reservoir locality itself. Fortunately, however, there is considerable knowledge of Hasinai and, to a lesser extent, of Atakapa culture, knowledge that has been of utility in interpreting archeological finds at McGee Bend.

The peoples of the Hasinai Confederation lived in small hamlets scattered through the forest. They were farmers whose principal crops were maize, beans, squash, sunflower seed, and tobacco. Non-agricultural foods included nuts, fruits, acorns, roots, fish, birds, deer, bear, bison, and various small animals. Their houses were beehive-shaped structures consisting of a pole framework thatched with grass and sometimes plastered with clay (Swanton [1942, 127-132, 148-152]; Newcomb [1961, 292-295]). The Eyish and Adai presumably were agriculturalists also, although this is not entirely clear from the accounts. Both tribes were considered by European observers to be much inferior to the Hasinai, and most descriptions of them consist almost entirely of vilification. De Mezieres, for example, called the Eyeish lazy, insolent, and greedy and stated that the Adai were drunkards [Bolton, 1915, Vol. 2: 257, 173]. Solis [de Solis and Hatcher, 1931, 67] labeled the Eyeish the worst Indians in Texas and commented on their drunkenness, thievery, licentiousness, laziness, and shamelessness. The European scribes, obsessed with

² H. Folmer. De Bellisle on the Texas Coast. *Southwestern Historical Quarterly*, 44(2):204-231, 40

³ J. O. Dyer. *The Lake Charles Atakapas (cannibals) period of 1817 to 1820*. Dr. J.O. Dyer, Galveston, 1917

⁴ A. F. Sjoberg. The Bidai Indians of Southeastern Texas. *Southwestern Journal of Anthropology*, 7(4):391-400, 1951

a compulsion to record the vile character of these uncouth natives, unfortunately never got around to noting details about their everyday life.

Knowledge of the Atakapa is relatively meager. The Bidai, and presumably the closely affiliated Deodose, practiced agriculture but not on the same scale as their neighbors, the Hasinai. Maize was the main crop. Hunting was of great economic importance, deer, bison, bear, and various small animals being the principal game. Other foods included fish, acorns, seeds, and various plants (Sjoberg [1951]; Newcomb [1961, 321-324]).

The Akokisa and Atakapa proper seem to have been non-agricultural. They subsisted by foraging for abundant foods that were available in the littoral environment of the Gulf coastal region. Fish, shellfish, birds eggs, and various plant foods were gathered around the bays and along the seashore. Deer and bison were hunted, sometimes on special inland hunting trips. Dugout canoes were used for travel and for fishing, and fish were speared from them with bone-tipped darts and stone-tipped harpoons (Dyer [1917]; Sjoberg [1951]; Newcomb [1961, 321-325]). Dyer [1917] described a conical hut of poles interwoven with vines that was used by the Lake Charles Atakapa. The Bidai are reported to have used bearskin tents in the winter [Sjoberg, 1951, 396] There is no data on the kinds of dwellings used by the Akokisa.

The Patiri, who occupied a territory just west of the Trinity River between Akokisa and the Bidai, were mentioned in the contemporary records as being related to the Akokisa, Bidai, and Deodose, but there are no descriptions of their culture.

The Archeological Setting

Prior to the salvage work at McGee Bend Reservoir, the only archeological investigation in the Angelina River drainage was a brief reconnaissance in 1940 by Gus Arnold (Arnold, field notes on file at the Balcones Anthropological Laboratories, the University of Texas). To the east, between McGee Bend and the valleys of the Mississippi and lower Red rivers, lies a large section of western and central Louisiana, about 150 miles wide, that is virtually unknown archeologically. Another almost unknown territory, the prairies between the Balcones Escarpment in central Texas and the western edge of the southeastern pine forest, stretches away to the west for some 150 miles. In the coastal region to the south there has been relatively intensive work in the vicinity of Houston, but very little has been done along the coast between Galveston Bay and the Sabine.⁵ A Galveston Bay Focus has been defined for Neo-American remains in the Houston area [Suhm et al., 1954, 128-130]. A survey of the southwestern coast

⁵ J. B. Wheat. *River Basin Surveys Papers, No. 4: Archeological Survey of the Addicks Dam Basin, Southeast Texas*. Bureau of American Ethnology Bulletin 154, Washington D.C., 1953; R. Walley. A Preliminary Report on the Albert George Site in Fort Bend County. *Bulletin of the Texas Archeological Society*, pages 218-234, 1955; and T. N. Campbell. Archeological Investigations at the Caplan Site, Galveston County, Texas. *The Texas Journal of Science*, 9(4): 448-471, 1957

of Louisiana, including the lower Sabine produced potsherds representative of all the prehistoric cultures recognized in the Lower Mississippi Valley, from Tchefuncte to Plaquemine.⁶

To the north of McGee Bend Reservoir lies the Caddoan Area, an archeological region that embraces northeastern Texas, southeastern Oklahoma, southwestern Arkansas, and northwestern Louisiana. Classification of archeological cultures there is well advanced, two Neo-American aspects (Gibson and Fulton) comprising more than 15 different foci having been defined in detail.⁷ Archaic manifestations in northeastern Texas have been grouped, somewhat loosely, under the designation East Texas Aspect [Suhm et al., 1954, 128-151]. The same manifestations have been combined with others in Oklahoma and southeastern Texas into a complex termed the La Harpe Aspect [Johnson, 1962, 268-280].

The Neo-American peoples of the Gibson and Fulton Aspects were agriculturalists who lived in permanent or semi-permanent villages and hamlets. Their archeological remains are usually classed with the Mississippian culture pattern that covers much of the southeastern and midwestern United States [Suhm et al., 1954, 153]. Our concern here with the Caddoan Area will be primarily with those foci that adjoin McGee Bend on the north and northwest, namely the Alto Focus of the earlier Gibson Aspect and the Frankston and Allen foci of the later Fulton Aspect. The latter two are considered the archeological equivalent of the late prehistoric and historic Hasinai [Suhm et al., 1954, 185].

The first inspection of archeological sites in the McGee Bend locality by a competent observer was the previously mentioned reconnaissance of Gus Arnold in 1940, done as part of a general survey of sites over all of eastern Texas. Arnold recorded several of the sites dealt with here.

The only other archeological work in the locality prior to 1956 was a survey of the McGee Bend area by Robert L. Stephenson in 1948. This survey, the preliminary step in the archeological salvage program, was conducted through the offices of the Smithsonian Institution, and the recommendations for salvage in Stephenson's survey reports led to the excavations described in the present study.⁸

On the basis of potsherds and other artifacts collected from the McGee Bend sites during his and Arnold's surveys, Stephenson identified many of the sites with previously defined complexes of the Caddoan area. Of the sites treated in the present paper, he identified Print Bell and Brink Powell as Alto Focus sites and Walter Bell, Sawmill, and Wylie Price as mixed Alto Focus-Bossier Focus sites.

⁶ W. G. McIntire. *Trafficability and Navigability of Louisiana Coastal Marshes*. Technical Report No. 5: Correlation of Prehistoric Settlements and Delta Developments. Louisiana State University, 1954

⁷ A. D. Krieger. *Culture Complexes and Chronology in Northern Texas*. The University of Texas Publication No. 4640, Austin, 1946; C. H. Webb. *Caddoan Prehistory: The Bossier Focus*. *Bulletin of the Texas Archeological and Paleontological Society*, pages 100-147, 1948; C. H. Webb. *The Belcher Mound: A Stratified Caddoan Site in Caddo Parish*. Society for American Archaeology, Salt Lake City, 1959; P. Newell and A. D. Krieger. *The George C. Davis Site, Cherokee County, Texas*. *Memoirs of the Society for American Archaeology*, No. 5, Menasha, Wisconsin, 1949; and D. A. Suhm, A. D. Krieger, and E. B. Jelks. *An Introductory Handbook of Texas Archeology*. Texas Archeological Society, Austin, vol. 25 edition, 1954

⁸ R. L. Stephenson. *Archeological Survey of the McGee Bend Reservoir, Jasper, Sabine, San Augustine, Angelina, and Nacogdoches Counties, Texas: A Preliminary Report*. Mimeographed report of the River Basin Surveys, Smithsonian Institution, 1948a; and

The cultural sequences, as shown by this survey, indicate that the area of the McGee Bend Reservoir was occupied at some time by a non-pottery people; that the major occupation of the area was by Alto Focus peoples; and that later some of these same villages, as well as some new ones, were occupied by Bossier Focus peoples [Stephenson, 1948b, 70-71].

Stephenson was correct about a nonpottery occupation of the area. However, although a few sherds of Alto and Bossier Focus pottery types were subsequently found at some of the sites during excavation, the McGee Bend sites clearly are neither of Alto nor Bossier affiliation, as will be shown later.

Stephenson's identifications were undoubtedly occasioned in large part by the similarity of some local pottery decorations to those of Caddoan Area types, for example, some zoned-punctured sherds of the Angelina Punctated-Incised type (described below) could easily be mistaken for Alto Focus types Crockett Curvilinear Incised or Pennington Punctated-incised (Newell and Krieger [1949, 99-108, Figs. 35-39]; Suhm and Jelks [1962, 31-33, 121, Pls. 16, 17, 61]). His observation that plain sand-tempered pottery is relatively old [Stephenson, 1948a, 70] has been supported by more recent research.

Curtis D. Tunnell used some of the data from three sites dug in 1957 (the Sawmill Site and the two Runnells sites) as the basis for an M.A thesis at the University of Texas⁹ which was later published.¹⁰ This study focused on the classification and description of pre-ceramic Archaic artifacts, notably dart points and blades (termed knives in the present paper). Tunnell concluded that there was a late Archaic occupation at all three sites.

...characterized by rather crude dart points with parallel-sided or expanding stems... A distinctive type of blade was commonly manufactured from a thin slab of silicified wood...Harvey type, described below.

To the basic late Archaic culture at McGee Bend a sand-tempered plain pottery was added. this was accompanied by a new type of blade with an unworked base /Bronson type, described below/... in more recent time, clay-tempered pottery, bone-tempered pottery, and arrow points appeared [Tunnell, 1961b, 155-157].

In a narrow belt running along the western edge of the eastern woodlands, from east-central Oklahoma on the north to the Texas coast on the south, is a series of archeological sites that has recently been grouped into a complex named the La Harpe Aspect.¹¹ This aspect is predicated largely on what is thought to be a rather uniform sequence of changes in dart point forms, over a long period of time, throughout the area. Specifically, the sequence of changes runs from a prevalence of expanding stem dart points in the early Archaic Stage

⁹ C. D. Tunnell. *Evidence of a Late Archaic Horizon at Three Sites in the McGee Bend Reservoir, San Augustine County, Texas*. The University of Texas. Unpublished MA Thesis, 1961a

¹⁰ C. D. Tunnell. Evidence of a Late Archaic Horizon at Three Sites in the McGee Bend Reservoir, San Augustine County, Texas. *Bulletin of the Texas Archeological Society*, pages 123-158, 1961b

¹¹ L. Johnson. The Yarbrough and Miller Sites of Northeastern Texas, with a Preliminary Definition of the La Harpe Aspect. *Bulletin of the Texas Archeological Society*, pages 141-284, 1962

to a prevalence of contracting stem forms in the late Archaic. Another distinguishing feature is the appearance of plain, often crude pottery near the end of the Archaic. Tunnell's distribution studies at the Sawmill Site and the two Runnells sites suggested that contracting dart points were later than dart points with expanding and parallel-sided stems in the McGee Bend region [Tunnell, 1961b, Figs. 9, 13], and Johnson [1962, 269, 277-278] identified those three sites with the La Harpe Aspect. Subsequent work at the other McGee bend sites, however, has cast some doubt on the priority of expanding and parallel-sided stem forms in the area, as will be discussed later in this report. Contracting stem dart points, in any event, are not one of the common forms at McGee Bend.

Duffield [1963], who excavated, analyzed, and published a full report on the Wolfshead Site at McGee Bend, found an Archaic complex there much like that described by Tunnell [1961a] at the Sawmill and Runnells sites. Furthermore, there was an earlier occupation at Wolfshead characterized by San Patrice and concave-base, lanceolate dart points in the Paleo-Indian tradition. By combining Tunnell's data with that from the Wolfshead Site, Duffield [1963, 138-140] presented evidence for a hypothetical culture sequence for the McGee Bend area, beginning with a transitional "Paleo-Archaic" complex that included San Patrice and lanceolate dart points, and probably grinding slabs, a variety of bifaces, and a wide range of scrapers. A basic local Archaic complex with expanding and rectangular stem dart points, Albany spokeshaves, Tunnell's blade types I and II, and other traits was thought to have occupied the area subsequently. Still later, it was hypothesized, sand tempered pottery was introduced, apparently without affecting the Archaic stone complex appreciably. Finally, a full-blown Neo-American or Formative complex appeared, with clay-tempered and bone-tempered pottery, arrow points, and Gary dart points as some of its most diagnostic traits.

A synthesis of the data from all 14 sites excavated at McGee Bend is attempted in the following pages. The results tend to confirm, in general, the sequential outlines of Tunnell and Duffield, although some of the details must be modified in the light of the additional data. Their "basic Archaic" complex is amplified and defined in considerable detail under the name Brookeland Focus, and the Neo-American complex emerges as the Angelina Focus. Little further information about the earlier complex reported at the Wolfshead Site came to light, San Patrice and lanceolate dart points being very scarce at all sites except Wolfshead. Therefore, because of the meager data, a detailed definition of this hypothetical early complex was not possible. While the distribution pattern of plain sand-tempered pottery indicates that it preceded clay-tempered pottery at McGee

Bend, no other traits with similar distribution patterns were noted, and therefore no particular complex of traits sandwiched between the Brookeland and Angelina foci has been proposed. The plain sand-tempered ware (Bear Creek Plain type, described in a later section) occupies an intermediate temporal position with respect to the two foci nonetheless.

The Jonas Short Site

This, the only mound site known in the McGee Bend Reservoir area, was on the north bank of the Angelina River in the extreme southeastern corner of San Augustine County. It was excavated by the writer in the fall of 1956 with a National Park Service field crew. Artifacts recovered from the mound are quite different, by and large, from those found at other sites, some of them being remarkably similar to Adena and Hopewell forms.

Superficial Appearance

The principal features of the Jonas Short Site was an earthen mound (Figures 5 and 6). It measured some 95 feet in diameter at the base and rose to a maximum height of seven to eight feet above the surface of the alluvial terrace on which it stood. When first examined by the writer in 1956, the top of the mound was flattened so that the general appearance was that of a low, truncated cone. A shallow depression about two feet deep in the flattened surface marked the location of a large pit, evidently dug by treasure hunters at some unknown time in the past, and two neatly excavated and partially refilled trenches were visible, one in the north, the other in the south side of the mound. A shallow depression— apparently the borrow pit for the earth from which the mound was built— encircled the mound base, but plowing and erosion had altered and softened its original contours.



Figure 5: Jonas Short mound before excavation, looking west; exploratory trench in foreground.



Figure 6: Jonas Short mound before excavation looking north.

The mound was about 900 feet northeast of the Angelina River, its base approximately 25 feet above the stream channel. (Figure 7). The edge of the terrace upon which the mound stood dropped off to the Angelina flood plain about 150 feet to the south of the mound, and an oxbow slough in the flood plain— a former channel of the river— followed along the edge of the terrace at that spot. It is possible that at the time the site was occupied, the river flowed in that channel, only 150 ft from the mound.

The river valley in the vicinity of the Short Site is approximately two miles wide and is forested with a dense stand of pine, oak, gum, and cypress. On the adjacent uplands, pine constitutes the principal timber, the hardwoods that are common in the valley being virtually absent.

Gus Arnold (field notes, on file at the Balcones Anthropological Laboratories, The University of Texas) visited the Short Site in 1940, at which time the mound stood in the middle of an 11 acre cultivated field. Stephenson (Stephenson [1948a, 20]; Stephenson [1948b, 62]) also visited the site during his preliminary survey of the reservoir areas in 1948. Both Arnold and Stephenson observed surface indications of occupation in the plowed field, but the field was not farmed after 1949, and by 1956 it had been taken over by a heavy growth of young timber with the result that the surface of the ground was completely obscured by a cover of leaves and pine needles.

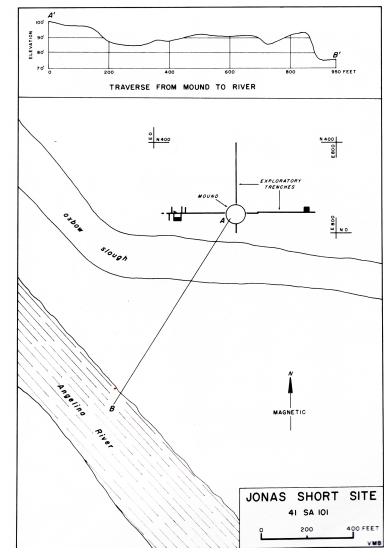


Figure 7: Sketch map of Jonas Short Site, showing location of mound and exploratory trenches.

Although the mound itself was not being cultivated at the time of the Arnold and Stephenson inspections, a local informant told the writer that it was farmed along with the rest of the field for some years prior to 1940 and that the borrow pit around the mound base was formerly about five foot deep. The trenches observed in the north and south sides of the mounds, in 1956 were dug after Stephenson's visit of 1948.

Geologic Context

The surface of the alluvial terrace at the Short Site was at an elevation of approximately 25 feet above the river channel. The upper part of the terrace (i.e, the portion in which the archeological excavations were made) consisted of two zones: Zone 1, a basal member of reddish and blueish clays containing numerous lenses of whitish sand, and Zone 2, a superficial layer of gray sand. The surface of Zone 1 undulated erratically where exposed by excavations, rising to within less than a foot of the surface at some spots and dipping to as much as five feet at others.

The terrace is presumably a stream-laid feature of the Angelina River, although this was not confirmed in the field by a geologist. It is not clear whether Zone 2 is a residual sand deriving from a Zone 1-like deposit through leaching out of the clays near the surface, or whether it and Zone 1 are separate and distinct features produced by different depositional cycles of the river.

Excavation Procedures

Since Stephenson (Stephenson [1948a, 20]; Stephenson [1948b, 62]), on the evidence of surface finds, had inferred the presence of a village area in the field surrounding the mound, it was decided to explore that area thoroughly. Accordingly, three-foot wide exploratory trenches were extended outward from the mound in the four cardinal directions as indicated in Figure 7. Areas lying between the four major trenches were tested by digging small holes with a shovel or post hole digger. A light scattering of artifacts and cultural debris was encountered in most sections of the trenches, and in some spots where the incidence of this material was somewhat higher than ordinary, trenches or squares adjacent to the original test trenches were opened.

It was decided to begin excavating the mound by removing its southwest quadrant down to a level completely below the mound and into undisturbed soil. This would provide two radial profiles at 90 degrees to one another and would reveal any major stratification.

Stratigraphic and other information acquired in removing the southwest quadrant could then be used for guidance in determining how best to excavate the remaining three-quarters of the mound.

Beginning at the top of the mound, the earth was removed from the southwest quadrant by stripping horizontally in six-inch levels. Thus the initial step was to level all portions of the quadrant down to an even elevation of 108 feet (the highest point of the mound stood just over 108 feet in the arbitrary vertical reference system employed), an alidade and leveling rod being used for leveling. The next six-inch layer was then removed and the excavation floor leveled at 107.5 feet, and so on. When removal of each layer had been completed, the floor was cleaned and a measured drawing prepared that showed all stratigraphic details and any structural features or disturbances that were present. The vertical profile walls were also cleaned and examined on the completion of each level, but the profiles were not actually drawn, in most cases, until each was fully exposed from top to bottom. A grid of five-foot squares was maintained during this process (the same grid used in testing around the mound), and all specimens collected were sacked and recorded by square as well as by quadrant and elevation. Specimens exposed in situ were sacked individually and their exact location recorded by the coordinates and elevation of the spot where found. Whenever it was possible to relate a particular specimen to a particular structural unit of the mound, this information was also recorded. Representative samples of mound fill were screened at intervals.

It was soon discovered that the mound was composed in large part of a compact sandy clay which was virtually impossible to dig with shovels; therefore it was attacked with picks and mattocks. Progress was slow, and it shortly became apparent that complete excavation of the quadrant would require a major portion of the field season. Since plans for excavation of other sites in the area had been included in the seasonal schedule, modification of the original approach became imperative. Therefore, instead of removing the entire quadrant, two 20-foot wide trenches along the straight sides of the quadrant were carried down to undisturbed soil, and the remaining portion of the quadrant was only partially excavated.

The two radial profiles (which were extended across the borrow pit area and tied into the major south and west exploratory trenches radiating from the mound), the two profiles on the opposite sides of the two 20-foot trenches, and several profiles along grid lines in the partially excavated area of the southwest quadrant were recorded by photography and measured drawings (Figure 8). The faces of the two radial profiles, which had a maximum height of about 15 feet, were sloped at a slight angle to lessen the danger of slumping.

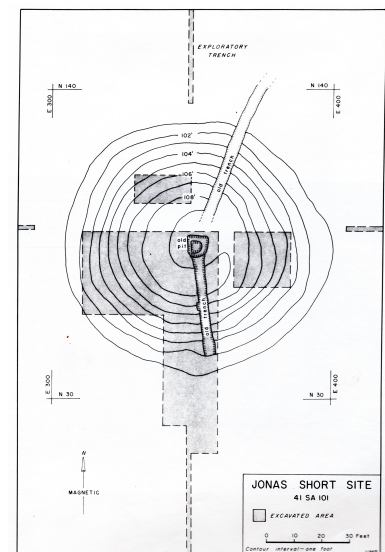


Figure 8: Contour map of Jonas Short, showing area.

Except for a cremation in the submound zone, all features found in the southwest quadrant were well above elevation 100 feet, the approximate level of the surface terrace. Therefore the limited time available after the two radial profiles were completed was devoted to excavating a major portion of the remaining three-quarters of the mound down to elevation 100 feet. This procedure seemed to promise a return of maximum data for a limited investment of time. Even though it was not possible to excavate the mound completely, it is unlikely that any of its major elements were missed.

Occupational Features

The occupational features at the Jonas Short Site were: Burial 1 (an Angelina Focus interment west of the mound), Burial 2 (a cremation beneath the mound), the mound structure itself together with the borrow pit around its base, and five caches of artifacts and other objects within the body of the mound.

Burials

BURIAL 1 Burial 1 (Figure 9) was encountered about 200 feet due west of the mound in one of the exploratory trenches. It was a semi-flexed inhumation in an oval grave. The grave outline was dim but could be traced in section from the bottom of the grave (depth 4.25 feet below the surface) upward for about 2 feet where it gradually faded from view. The grave dimensions were 4.4 feet by 2.75 feet with the long axis running east-northeast and west-southwest. On the bottom of the grave was a thin layer (1 to 2 inches) of clean, yellow-white sand upon which the body had been placed.

The skeleton lay on its right side with the head to the west-southwest, and the knees were drawn up so that the femurs formed an angle of approximately 100 degrees with the spine. The lower legs were parallel to the femur and the feet were immediately posterior to the pelvis. The arms were bent sharply at the elbows and the hands were near the face. Although the bones were in a deteriorated condition, the portions of all the major ones were present. The person was an adult, probably male.

The only associations were two Perdiz arrow points which rested on the right fibula a few inches below the knee and a small flint chip, beneath the right femur, showing evidence of light retouching along one edge. Since similar chips occurred occasionally in the nearby trenches, it is possible that the proximity of the latter object to the skeleton was accidental. A third Perdiz point from the Burial 1 area



Figure 9: Jonas Short Site, Burial 1.

was not found in place, but its similarity in material and workmanship to the others indicates that it was probably a burial offering also. The Perdiz arrow points and the semi-flexed position indicate Angelina Focus affiliation for Burial 1.



Figure 10: Jonas Short Site, cremation beneath mound (Burial 2), with copper bracelets in place.

BURIAL 2 Burial 2 (Figure 10) is the previously mentioned cremation found beneath the mound. It consisted of burned bone scraps, among which lay two copper bracelets (Figure 11 a-a, b-b), distributed over an area approximately six feet long by two feet wide. Bits of charcoal

were present too, and patches of black substance which appeared to be burned organic material adhered to many of the bone scraps. Since the soil had a burned appearance, it is possible that the bodies were cremated on the spot.

The cremation was in the lower part of the mound fill just above the submound soil. Most of the bone scraps were too fragmentary for positive identification, but human teeth representing two different individuals and one fragment of a human mandible could be recognized.

One of the bracelets (Figure 11 b-b') consists of a strip of copper bent into a circular shape with a gap of 1.6 cm. left between the two ends. The strip is rectangular in cross section; its total length is 18 cm., its maximum width is 1.3 cm., and the strip is 2 mm. thick. There is a slight tapering toward each end, and the ends themselves are rounded. The average diameter of the bracelet is 5.8 cm.

The second bracelet (Figure 11 a-a') is multiple and consists of four separate elements—each made of a copper bar that is square to sub-rectangular in cross section—stacked on top of one another. The bars were bent into individual bracelets, three of them having gaps 4 to 5 mm. wide between the ends of the bars, the other with its ends meeting to form a complete circle. The diameter of the multiple bracelets is approximately 6.3 cm.

Since a depression was excavated in the surface of the ground prior to construction of the mound and Burial 2 was placed in it, the specific purpose of the depression must have been to contain the cremation. One purpose of the mound, too, must have been to cover and protect Burial 2.

Cremations are rare in eastern Texas,¹² and no previous instances of certain cremations associated with mounds in Texas are on record.

¹² A. T. Jackson. Fire in East Texas Burial Rites. *Bulletin of the Texas Archeological and Paleontological Society*, 10:77-113, 1938

The Mound

The superficial appearance of the Jonas Short mound in 1956 (Figure 8) was that of a roughly circular, truncated cone with a basal diameter at ground level of approximately 95 feet, and a maximum height of about 8 feet. The top was flattened across an area some 30 feet in diameter. Evidence of prior disturbances consisted in a shallow depression, about eight feet in diameter and two feet deep, in the top of the mound and two partially filled trenches on the side slopes. One of these trenches, between four and five feet wide and more than 50 feet long, was in the north side of the mound while the other, about four feet wide and 35 feet long, was in the south side. Inquiries produced no information on who had dug into the mound or what they found. Subsequent excavations revealed that the intrusive hole

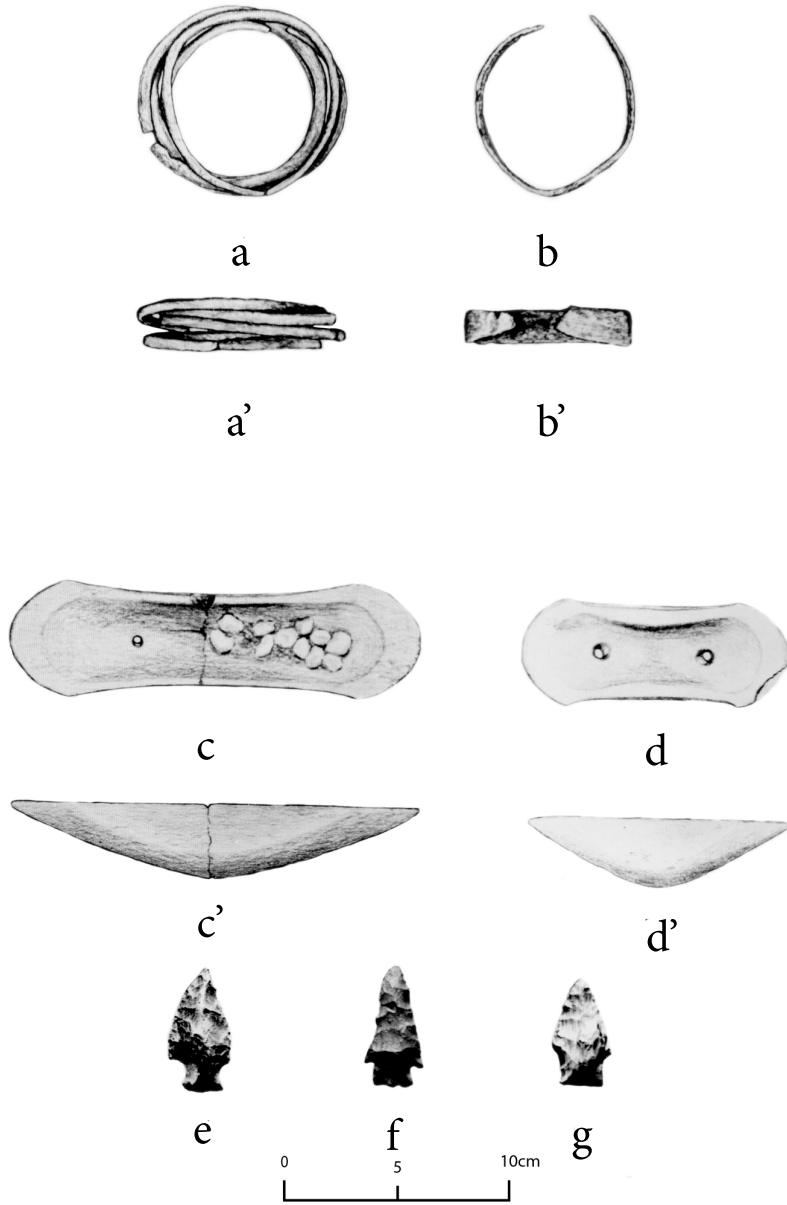


Figure 11: Jonas Short Site, top and side view of artifacts. a-a', b-b', copper bracelets from Burial 2; c-c', boatstone from Cache 1; d-d', boatstone from Cache 3; e, Kent dart point from Cache 4; f-g, Kent dart points from Cache 5.

in the top of the mound had originally extended to a depth of eleven feet and had been almost completely refilled. A third intrusive trench which had been completely refilled and was therefore not visible superficially was discovered during an excavation of the east side of the mound. A shallow ditch encircling the base of the mound was barely visible. It was 10 to 15 feet wide.

Excavation revealed the following facts regarding the structure of the mound:

1) A shallow, saucer-shaped depression had been dug into the top of the alluvial terrace, the cremated remains of two or more persons had been placed within the depression, and the mound had then been erected over the cremation.

2) There were two principal structural members making up the body of the mound: a basal member, Zone A, composed largely of light gray sand, and an overlying mantle of compact, reddish, sandy clay, Zone B, (Figure 12). While the dividing line between Zones A and B was relatively clear at most points, there was no indication of an appreciable time interval between the two. The surface of Zone A did not exhibit a humus line, nor was it hard packed from occupation; there was no accumulation of debris on it, and there was no evidence that a structure had been built on it. Consequently it appears that Zone B was added shortly after Zone A had been laid down. Zone B was very compact—too hard to dig with shovels—and it may well be that construction of the mound was a continuous operation, with the mantle of sandy clay (Zone B) being added purposely as a protective veneer. Lensing was present in both zones, but color variations between the lenses within each zone were not pronounced. The general integrity of each major zone was maintained throughout. Zone A averaged around six feet thick in the middle; Zone B had a maximum thickness of about six feet.

3) The original shape of the mound had been altered somewhat by cultivation, by erosion, and by dump material from the large treasure hole in the top of the mound. The extent to which each of these factors had affected the shape at the time of excavation could not be determined accurately, but certainly the mound originally stood higher and its sides sloped at a steeper angle than in 1956. The flattening of the top may have resulted from one or more of the three disrupting factors, and therefore the top of the mound could originally have been either flattened or convex.

4) The surface of the terrace at the time the mound was built was most likely within a few inches of its present elevation. This is demonstrated by the borrow pit on the west side of the mound, where there was a clear distinction between the borrow pit fill and the soil of geologic Zone I, into which it intruded. Zone 1 at that

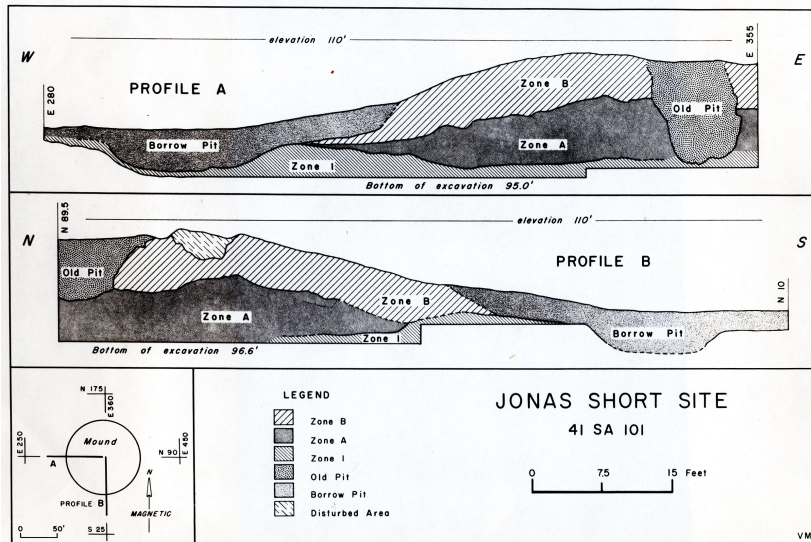


Figure 12: Profiles of mound, Jonas Short Site.

spot rises to within one and one-half feet of the modern surface, and the edge of the borrow pit could be clearly traced to that elevation. Allowing a minimum of six inches for the topsoil which must have overlain the sterile Zone 1, the terrace surface when the mound was built must, therefore, have been at an elevation of 99.5 feet or higher, i.e., no more than a foot below the present surface. It is possible that a few inches of soil have been deposited on the terrace surface since the mound was erected—or, conversely, that a few inches have eroded away. Certainly any such changes have been very slight.

5) The borrow pit around the mound was originally about four feet deep and some 15 feet wide where trenched, and it extended completely through geologic Zone 2 and well into Zone 1.

6) Cultural material was present in both Zone A and Zone B of the mound. A large portion occurred as apparently random inclusions in the mound fill, but several concentrations of artifacts (here termed caches) were placed purposely. The caches were evidently made during construction of the mound, as no intrusive pits were discernible by which they could have been introduced once the mound had been completed.

Caches

CACHE 1 This cache was a concentration of artifacts (Figures 13, 14, 11 c-c', and 15 a-e) encountered in the southwest quadrant of the mound at an elevation of 106 feet. No indication of an intrusive pit was de-

tected during the stripping process above that level nor was any pit outline discernible at the level of the artifact concentration. It appeared, therefore, that the artifacts of Cache 1 were placed in position during the construction of the mound rather than having been deposited in a pit after the mound was built.



Figure 13: Jonas Short Site, recording Cache 1.



Figure 14: Jonas Short Site, close-up view of Cache 1.

The artifacts comprise: a hornblende syenite boatstone (Figure 11 c-c'), a shaped and perforated quartz pendant (Figure 15 b), and 9 quartz crystals (Figure 15 a, c-e), three of which are slightly grooved at one end, presumably for suspension.

The boatstone measures 16 cm. long, 3.5 cm. wide at midpoint, and is 3.1 cm. thick. The concavity is 1.8 cm. deep, 11 cm. long, and 2.2 cm. wide, and two small, round holes have been drilled through the bottom along the median line. The specimen is symmetrical and is well finished. It was found in two pieces, one of which was taken up in a shovelful of earth and was not observed in place. Upon discovery of the first half, the surrounding area was carefully troweled, and the second half was soon discovered in situ with the convex side up. The concavity on the reverse side held 22 tiny quartzite pebbles 7 to 10 mm. in diameter, all worn smooth by stream abrasion. The concavity in the first half was packed tightly with the red sandy clay of the Zone B matrix and no pebbles were present. The broken edges of the two halves were encrusted with earth indicating an old break.

This specimen was examined by J.T Lonsdale of the Texas Bureau of Economic Geology and identified by him as being made of a distinctive hornblende syenite from deposits near Little Rock, Arkansas.

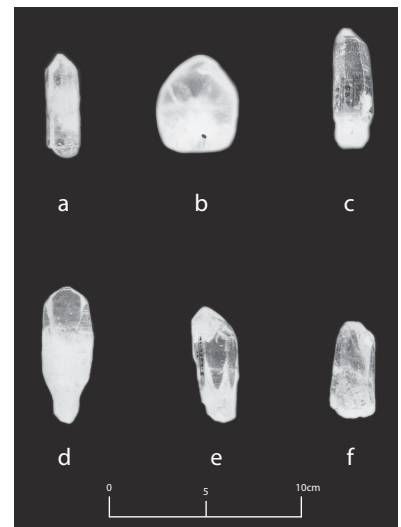


Figure 15: Jonas Short Site, quartz artifacts from caches. a, c-f, grooved crystals (a, c-e from Cache 1; F from Cache 5); b, perforated Pendant (from Cache 1).

The perforated quartz pendant is pentagonal in shape, has a maximum length of 3.6 cm., a maximum width of 3.1 cm., and a maximum thickness of 1.3 cm.

Two of the 9 quartz crystals are fragments which have been chipped from streamworn quartz crystals, small portions of the streamworn surfaces remaining in both cases. Of the 7 complete crystals (which range from 3.9 cm. to 6.3 cm. long), 3 have shallow grooves at one end, the other 4 are unaltered. The 3 grooved ones were certainly designed for suspension and it appears likely that the perforated pendant and the 9 crystals were part of a single necklace or similar ornament.

The reason for the presence of these artifacts in the mound fill is uncertain. They may represent a cache placed in the mound for some unknown purpose, but there is also the bare possibility that the objects are burial offerings and that the skeletal material that may have originally accompanied them has completely decomposed, leaving no traces. However, the soil was carefully troweled in the vicinity of Cache 1, and not the faintest sign of bone scraps, organic staining, or other indication of skeletal material was found. A similar problem in connection with Cache 2 is described below.



Figure 16: Jonas Short Site, Cache 2, showing location of stemmed knives.



Figure 17: Jonas Short Site, Cache 2, showing location of reel-shaped copper gorget.

CACHE 2 While excavating in the southwest quadrant between elevations 104 and 105 feet, a large flint blade was taken up in a shovelful of earth. Shoveling was discontinued and the surrounding area troweled. Other objects began to appear and soon a concentration of artifacts, Cache 2, was exposed within Zone B of the mound fill.

The Cache 2 specimens (Figures 16, 17, 18) are: a large oval, percussion-chipped knife or blade with one end pointed; a Gary dart point; 4 large, expertly chipped stemmed knives or spear points; 1 reel-shaped gorget made of cold hammered sheet copper; a small skull fragment which from the curvature seems to be human, but which can not be positively identified; and a number of perforated elk teeth. Eleven of the elk teeth were saved by treatment with preservative, but several others were in such an advanced state of decomposition that they could not be salvaged. As in the case of Cache 1, no evidence of an intrusive pit was discernible, and consequently it is most likely that the Cache 2 artifacts were placed in position during construction of the mound.

The large oval blade (Figure 18 a) is percussion chipped from gray flint. It is 16.7 cm. long, 10 cm. wide at the broadest point, and has a maximum thickness of 3.2 cm. The edges are sinuous and sharp except for three short sections which have been ground or worn smooth. Its exact position could only be approximated since it was accidentally dislodged before it was discovered.

The copper gorget, the elk teeth, the piece of skull, and two of the stemmed knives lay in a heap just inside the southwest corner of Square N80-E340. The reel-shaped copper gorget (Figure 18 b) has four projecting arms of equal length at the corners, and there are two small, round holes symmetrically spaced on the long axis. The body (discounting the arms) is 8.9 cm. long by 6.3 cm. wide and the average thickness of the sheet copper is 1 mm. The arms are all approximately 4.5 cm. long. The sheet was cold hammered, presumably from small piece of native copper; the inter-leavings were insecurely welded in several places and the leaf edges had separated slightly from the body of the sheet. Except at the ends of the arms the edges of the gorget were turned under and hammered flat, resulting in thickening along the edges.

The elk teeth (Figure 18 c) are unaltered except for the perforations, which average about 3 or 4 mm. in diameter. They were resting against the under side of the copper gorget when found, and several of them were stacked together with the holes in perfect alignment, showing that they had been strung, although no traces of the string remained. The position of the gorget with respect to the elk-tooth beads suggests that it was strung on the same string with the teeth. Two of the stemmed knives also lay against the gorget in positions suggesting that they, too, may have been strung along with the elk teeth.

The fragment of skull is badly deteriorated and would undoubtedly have been completely decomposed were it not for its proximity to the gorget, which provided copper salts that impregnated and

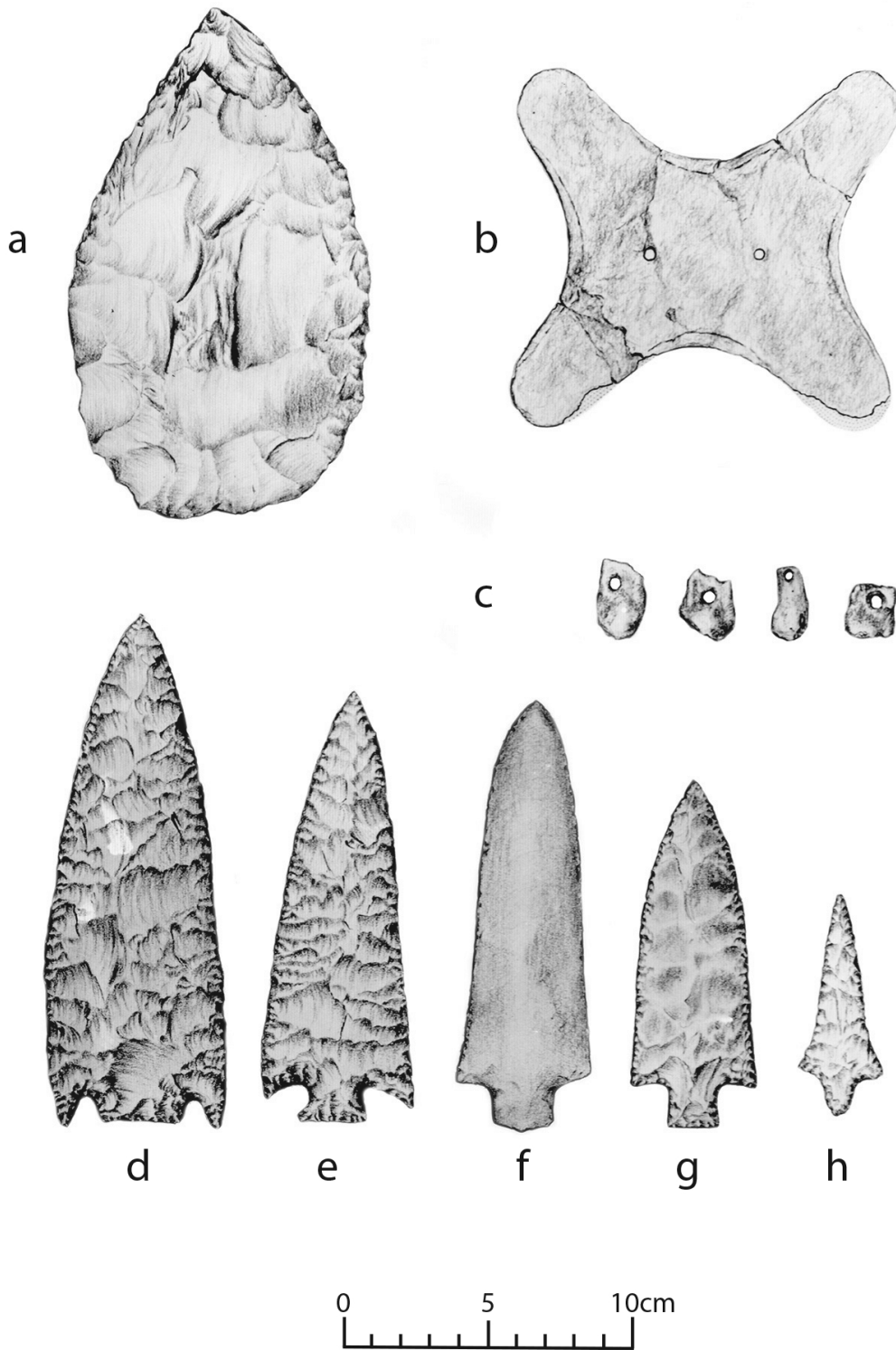


Figure 18: Jonas Short Site, artifacts from Cache 2. a, oval blade; b, copper reel-shaped gorget; c, elk tooth beads; d-g, stemmed knives or spear points; h, Gary dart points.

preserved the bone. Measuring about 7 cm. across, the fragment is probably from a human skull. there are no tool marks or other indications that it is a bone artifact, and the question of whether it is the sole surviving remnant of a burial, or just another object placed in the cache, remains unanswered.

Two of the stemmed knives (Figure 18 f-g) lay against the copper gorget in almost upright position with the points down. Both have rectangular stems and approximately square shoulders. The longer one, 14.5 cm. long, is made of an unidentified red and tan banded stone while the shorter one is 11.7 cm. long and is of light gray chalcidony. The longer one has been polished all over to such an extent that the flake scars are virtually eliminated except for slight traces of fine retouching along the blade edges. The smaller one has also been smoothed on both faces, but to a lesser degree.

The largest of the stemmed knives (Figure 18 d) is made of dark gray flint and is 17.3 cm. long. It lay 2.6 feet northeast of the copper gorget. Two notches in the base resulted in sharp barbs at the shoulders and left a short, approximately rectangular stem.

The fourth stemmed knife (Figure 18 e) which was 2.9 feet north of the gorget, is made of an unidentified greenish-gray stone. It is 14.7 cm. long and has a strongly expanding stem. Like the other stemmed knives, it is thin and well made with fine retouching along the blade edges. Neither it nor the largest knife exhibits polishing like the other two.

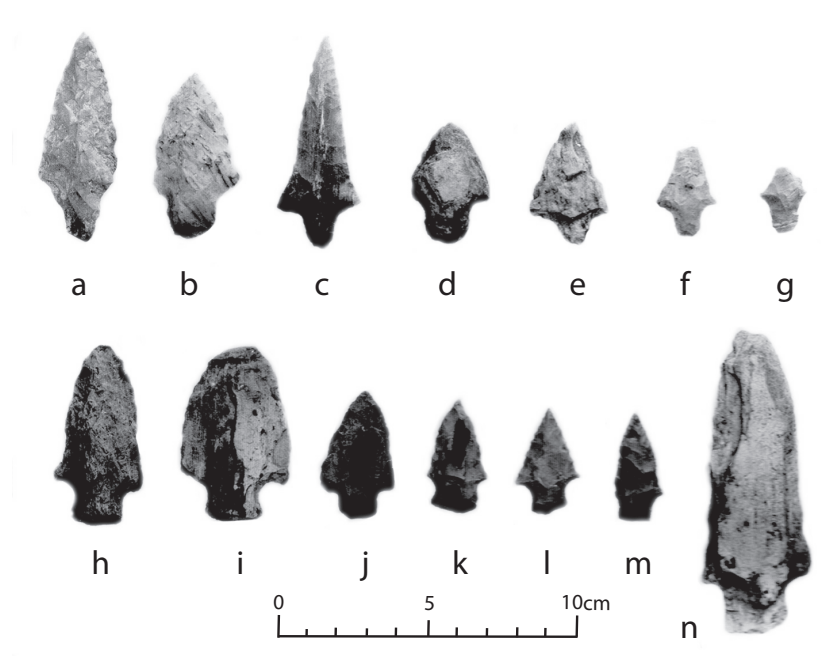


Figure 19: Dart points. a-g, Gary; h-n, Kent.

The Gary dart point (Figure 18 h; 19 c) found 0.3 feet west of the gorget, is of petrified wood and measures 7.3 cm. in length. While several other dart points made of petrified wood occurred as apparently accidental inclusions in the mound fill, none is of the Gary type, nor do any exhibit the excellent workmanship of this specimen. Since it is different in type and workmanship from the random projectile points, and since it lay in near proximity to the other objects of Cache 2, it is virtually certain that it was intentionally deposited with the other objects.

As in the case of Cache 1, no evidence of an intrusive pit could be detected in connection with Cache 2, and thus it appears to be another instance of a group of objects left in the mound fill during construction. The small piece of skull and the elk-tooth beads were badly deteriorated in spite of the preservation effects of the copper salts. It seems possible, therefore, that a human burial could have accompanied Cache 2 but that it subsequently decomposed completely. This possibility is strengthened in particular by the presence of the skull fragment which appears to be human. However, the entire vicinity of Cache 2 was carefully trowelled and no organic stains or bone scraps were discovered. An alternative explanation of the skull fragment is that it is a portion of a bowl or other artifact. Thus the question of whether the artifacts are burial offering or simply a cache remains unanswered.

CACHE 3 This cache was a concentration of stone chips, bone scraps, and pebbles. among which were 2 fragments of petrified wood knives and a boatstone made of hornblende syenite (Figures 11 d-d; 20). The location was in the southwest quadrant of the mound at elevation 102.5 to 103 feet, in the upper few inches of Zone A. The few bone scraps were too fragmentary for identification and, as in the case of Cache 1 and 2, no evidence of an intrusive pit was detected.

The boatstone is similar in shape to the one from Cache 1 except that it is considerably shorter (10.1 cm.as compared to 16 cm). There are two small holes symmetrically spaced along the long axis.

The knife fragments of petrified wood are similar to others found scattered at random through the mound fill and in the trenches around the mound. Consequently there is a possibility that their proximity to the boatstone is purely fortuitous.



Figure 20: Jonas Short Site, Cache 3.

CACHE 4 This cache consisted of a small heap of waterworn pebbles, stone flakes, and one dart point made of petrified wood. The area of concentration was 1.4 feet long by 0.75 feet wide and its maximum thickness was 0.4 feet. The location was in the southwest quadrant of the mound in the upper part of Zone A. There was no indication of an associated pit.

The dart point, 4.2 cm. long, is made of petrified wood and has a rectangular stem and squared shoulders (Figure 11 e). It is classified as a Kent point.

CACHE 5 Cache 5 was a concentration of objects scattered over an area some six feet across in the southwest quadrant of the mound in upper Zone A. Included were 61 small streamworn pebbles, 8 petrified wood chips, 1 quartz crystal with one end grooved (Figure 15 f), and two dart points made of petrified wood. Like the other caches, this one appears to have been deposited purposely during construction of the mound.

The Artifacts

The artifacts from the caches in the mound and from the cremation beneath the mound have already been described. Except for the Gary and Kent dart points, they are quite different from the artifacts found elsewhere at McGee Bend. However, artifacts of forms that occur commonly in the region were found scattered through the mound fill and in the upper part of the alluvium surrounding the mound. As those in the mound fill are similar to those from the terrace, they probably were included fortuitously in the earth from which the mound was constructed. The occurrence of artifacts by level in the mound fill and in the terrace is given in Table 2.

Included are Brookeland Focus dart point types Kent, Woden, Form X, and Form Z. Other traits attributable to the Brookeland Focus are Bronson, Harvey, subtriangular, and ovate knives, and Perkin pikes. Angelina Focus traits comprise a series of plain and decorated clay-tempered pottery (including a sherd of Pineland Punctated-Incised), a Form I drill, and (from Burial 1) 2 Perdiz arrow points. Also present were 100 sherds of Bear Creek plain, 5 sherds diagnostic of the Alto Focus (2 Weches Fingernail-Imprinted and 1 Holly Fine Engraved), and 1 sherd identified as Coles Creek Incised, a lower Mississippi type.

Artifact Groups	0.0-1.0	1.0-2.0	2.0-3.0	3.0-4.0	Mound	Surface, disturbed areas etc.	Total
Pottery							
Bear Creek Plain	17	38	18	1	8	18	100
Sand-tempered decorated	-	1	-	1	-	-	2
Pineland-Punctc.-Incised	-	1	-	-	-	-	1
Misc. punctated	4	13	5	1	-	1	24
Misc. engraved	-	3	-	-	-	3	6
Misc. incised	12	15	6	2	-	-	35
Misc. decorated	4	14	-	-	1	2	21
Misc. plain	20	67	15	2	12	16	132
Weches Fing-Impr.	1	1	-	1	-	-	3
Holly Fine Engraved	-	1	-	-	-	1	2
Coles Creek Incised	-	1	-	-	-	-	1
Dart Points							
Gary	1	1	1	-	1	-	4
Kent	-	-	3	-	1	1	5
Woden	-	1	3	1	2	-	7
Form X	-	1	1	1	2	1	6
Form Z	-	-	1	-	-	1	2
Wells	-	1	-	-	-	-	1
Bunts	-	-	-	-	1	-	1
Broad rectangular stems	-	1	-	-	-	-	1
Miscellaneous	-	-	2	-	3	-	5
Knives							
Bronson	-	-	-	-	2	3	5
Harvey	3	3	1	-	-	-	7
Subtriangular	1	1	2	-	4	-	8
Ovate	-	-	-	-	1	-	1
Miscellaneous	1	-	-	-	-	-	1
Drills							
Form I	-	-	1	-	-	-	1
Fragments	-	1	1	-	-	-	2
Perkin Pikes	-	-	3	-	3	1	7
Misc. Scrapers	-	-	-	-	1	-	1
Small Bifacial Implements	-	-	1	-	1	2	4
Pebble Cores	-	-	1	1	-	-	2
Misc. Chipped Stone	3	10	8	1	7	5	35
Grinding Implements	-	-	-	-	-	-	-
Seed slabs	-	1	-	-	1	-	2

Table 2: Distribution of artifacts by one-foot levels at the Jonas Short Site (excluding caches and burial furniture).

Discussion

The Jonas Short Site had as its principal features a mound in the shape of a cone—possibly truncated in its original form—measuring approximately 95 feet in diameter at the base. It consisted of two major members, a basal one of gray to red sand (Zone A) and a superficial mantle of tough, red clay with some admixture of sand (Zone B). The earth making up the mound fill appeared to have been taken from a borrow area encircling the base of the mound. There was no indication of an appreciable time interval between the two mound members. A large, shallow depression had been dug before the mound was built, and at least two individuals (Burial 2) had been cremated in the depression. The mound was then erected over the

cremations. In the cremation area were two copper bracelets.

During construction of the mound, five caches of artifacts, mixed with pebbles and stone chips in some cases, were incorporated in the mound fill. Artifacts in the caches included boatstones, grooved and ungrooved quartz crystals, elk-tooth beads, projectile points, large stemmed knives, a copper reel-shaped gorget, and a perforated quartz pendant. All these objects, as well as the cremation and its copper bracelets, are in primary association with the mound and may be related with certainty to the people who erected it.

Both Brookeland Focus and Angelina Focus peoples must have occupied the site before the mound was built as artifacts representative of both foci were found in the mound fill. The Coles Creek Incised sherd and all of the Alto Focus sherds were found in the terrace. The sample of artifacts, though small, was distributed in a significant way, the Brookeland Focus remains being deeper in general than those of the Angelina Focus.

The area around the mound was probably occupied after the mound was built as well as before, but there is no way of being certain. The mound was a prominent topographic feature in any event and undoubtedly was a well-known landmark long after all knowledge of its builders had passed from memory. The question of who built the mound, and when, can best be pursued through a comparison of the mound and its culturally associated artifacts to known prehistoric complexes.

The Mound

Burial mounds are widespread in the eastern United States, occurring from the Gulf of Mexico to the Great Lakes and from the Atlantic seaboard westward to the heart of the Great Plains.¹³ They are common in the Caddoan Area, especially in the Gibson Aspect (Suhm et al. [1954, 151-216]; Webb [1959, 40-42]). Sub-floor burials (that is, dug below the original ground level) have not been reported from the Caddoan Area but are common in Adena,¹⁴ Hopewell,¹⁵ Marksville,¹⁶ and Copena sites.¹⁷ Cremations are frequently found in Adena mounds but are of relatively rare occurrence in Hopewell and Copena mounds. No cremations have been reported for the Marksville culture.

Copper Bracelets

Copper bracelets occur frequently in the Adena sites, often being found with burials, including cremations.¹⁸ Webb [1942, 323-324, Fig. 12-1] describes and illustrates a submound cremation from the C and O Mound Site in Kentucky that is much like that at the Jonas Short

¹³ H. C. Shetrone. *The Mound Builders*. D. Appleton and Company, New York, 1936

¹⁴ E. F. Greenman. Excavation of the Coon Mound and an Analysis of the Adena Culture. *Ohio Archeological and Historical Quarterly*, 41(3):367-523, 1932; and W. S. Webb and C. E. Snow. *The Adena People*. The University of Kentucky Reports in Anthropology and Archeology, Lexington, Kentucky, 1945

¹⁵ F. C. Cole and T. Deuel. *Rediscovering Illinois: Archaeological Explorations in and Around Fulton County*. The University of Chicago Press, Chicago, 1937

¹⁶ J. A. Ford and G. R. Willey. Crooks Site, A Marksville Period Burial Mound in La Salle Parish, Louisiana. Louisiana Department of Conservation, Anthropological Study No. 3, 1940

¹⁷ W. S. Webb. *An Archeological Survey of Wheeler Basin on the Tennessee River in northern Alabama*. Smithsonian Institution, Washington D.C., 1939; and D. L. DeJarnette and W. S. Webb. *An Archeological Survey of Pickwick Basin*. Bureau of American Ethnology, Bulletin 129, 1942

¹⁸ E. F. Greenman. Excavation of the Coon Mound and an Analysis of the Adena Culture. *Ohio Archeological and Historical Quarterly*, 41(3):367-523, 1932; and W. S. Webb and C. E. Snow. *The Adena People*. The University of Kentucky Reports in Anthropology and Archeology, Lexington, Kentucky, 1945

Site. It contained two copper bracelets. A multiple copper bracelet with three elements from the same site [Webb, 1942, 334, Fig. 15-1] resembles closely the multiple bracelet from the Jonas Short Mound.

Copper bracelets occur in Hopewell and Copena sites, but with relative rarity. Hopewell sites that have yielded copper bracelets include the Hopewell and Turner mound groups of Ohio [Shetrone, 1936, 211, 221-222]. Two copper bracelets were found at a Copena site in the Pickwick basin on the Tennessee River [DeJarnette and Webb, 1942, 172, 189, Pls. 196, 229].

Copper Reel-shaped Gorgets

Subrectangular and reel-shaped gorgets of polished stone are of wide distribution in the eastern United States, especially in Archaic contexts.¹⁹ Webb [1941, 192-215] traces the development of copper reel-shaped gorgets from the earlier stone ones, pointing out that the earliest copper forms have less concave edges—and consequently shorter arms—than Hopewell and Copena forms. The specimen from Jonas Short has short arms and matches the earlier forms, identified with Adena, of Webb's classification [Webb, 1941, Fig. 29]. Most copper reel-shaped gorgets from Copena sites have comparatively long, slender arms (DeJarnette and Webb [1942, 31-1, 184-1, 186-3, 195-2, 196-2]; Webb [1939, Pls. 40, 52b]).

¹⁹ W. K. Moorehead. *Stone Ornaments Used by Indians in the United States and Canada*. Andover Press, Andover, Massachusetts, 1917

Boatstones

Boatstones occur over most of the eastern United States but seldom are found in burials or caches [Moorehead, 1917, 71-80]. They appear to have been made by both Archaic and post-Archaic peoples. Boat-shaped stones, not hollowed out, have been reported from Adena sites, but they are apparently rare. Boatstones are not included in the trait list for the Copena Focus [DeJarnette and Webb, 1942, Table 41]. They are fairly common, however, in Hopewell sites, and a most striking parallel to the Jonas Short boatstones is a series of three boat-shaped objects of copper from the Tremper Mound in Ohio, two of them containing small pebbles of pink and white quartzite [Mills, 1916, Figs. 94-96]. The Tremper Mound is considered to be early Hopewell [Webb and Snow, 1945, 196].

Patterson [1937, 14, Fig. 2] reports a circular boatstone found in Pike County, Arkansas, that contained two small particles of quartz and two diamonds. The Pike County diamond mines are less than 10 miles away.

In a survey of the literature, illustrations of many boatstones were examined, but specimens shaped like those from the Jonas Short Site are not only rare, but they are all from Texas, Arkansas, and

Louisiana. Walley [1955, 220-233, Pls. 36, K; 37, C] reports a boatstone that is almost identical to the one from Cache 3 at Jonas Short. It even appears to be made of a similar material. This specimen was found at the Albert George Site in Fort Bend County, Texas, in a small area that also produced four human skeletons and a cache of incised bone artifacts. It probably had been a burial offering, although this was not determined with absolute certainty, and it had evidently been "killed" as it was in several pieces. Potsherds from the site are of Galveston Bay Focus affinity.²⁰

Patterson [1937, Figs. 133, 135, 148, 149] illustrates three boatstones that are somewhat similar to the Jonas Short specimens. Two of them are from Arkansas, the other from western Louisiana, and no cultural data are given for them.

Stemmed Knives and Oval Blade

Caches of bifacially chipped artifacts, both stemmed and unstemmed, that are usually termed knives, blades, spear points, or projectile points occur in Adena sites [Webb and Snow, 1945, 82-83] and in Hopewell sites,²¹ as well as in Caddoan Area sites of the Gibson and Fulton aspects [Suhm et al., 1954, 161-227]. No specimens like the stemmed knives from Jonas Short have been found, but the oval blade is reminiscent of some of the Adena blades (see, for example, Webb and Baby [1957, Fig. 14]).

Quartz Crystals and Pendant

Quartz crystals are of no particular typological value as they are found in archeological sites in most regions where they are easily attainable. However, the quartz pendant from Jonas Short is unique so far as I can determine. The only known specimens even approaching it in design are several polished quartz cones from the early Hopewellian Tremper Mound in Ohio [Mills, 1916, 376, Fig. 10].

Elk-tooth Beads

Perforated animal teeth are of frequent occurrence in Hopewell sites,²² but no examples of perforated elk teeth were found in a survey of the literature. Animal teeth are found rarely in Adena sites.²³

Summary Statement

The artifacts from the submound cremation and the caches in the Jonas Short mound differ from the usual artifacts of the McGee Bend area. Similarities to the Adena culture are suggested by the

²⁰ R. Walley. A Preliminary Report on the Albert George Site in Fort Bend County. *Bulletin of the Texas Archeological Society*, pages 218-234, 1955

²¹ H. C. Shetrone. *The Mound Builders*. D. Appleton and Company, New York, 1936

²² H. C. Shetrone. *The Mound Builders*. D. Appleton and Company, New York, 1936

²³ W. S. Webb and C. E. Snow. *The Adena People*. The University of Kentucky Reports in Anthropology and Archeology, Lexington, Kentucky, 1945

submound cremation with the associated copper bracelets. The reel-shaped copper gorget is most like early Hopewellian forms. The boatstones are similar in shape to several others reported from Texas, Arkansas, and Louisiana; pebbles have been found inside boatstones at the Tremper Mound (early Hopewell) in Ohio and in a Pike County, Arkansas, find of unknown cultural affiliation. The dart points (Gary and Kent) from the caches are of local types. The stemmed knives or spear points, the quartz crystals, the quartz pendant, and the elk-tooth beads are not diagnostic of any particular archeological complex.

The Walter Bell Site

The Walter Bell Site was on the west bank of the Pompanaugh Creek, approximately three miles south of the small town of Brookeland and some 400 yards west of U.S Highway 96. It was discovered and recorded by Robert E. Stephenson in 1948 during his survey of the McGee Bend Reservoir area; it was excavated in the fall of 1956 by a National Park Service field crew under the supervision of the writer.

Superficial Appearance

Surface evidence of human occupation consisted in abundant cultural debris (potsherds, stone artifacts, mussel shells, bone scraps, and stone spalls) scattered over approximately an acre of open pastureland on a low, sandy ridge overlooking Pompanaugh Creek to the east (Figures 21, 22). The ridge was cultivated for some 40 years by the former landowner, Walter Bell, but by about 1950 was allowed to revert to pasture. At the time of the excavation, light woods of gum oak, pine, and other trees surrounded the ridge on all sides.

Geologic Structure

Two major structural members were recognized: Zone 1, a basal clay subsoil ranging from yellow to red in color, and Zone 2, a superficial stratum of yellow-tan sand, its upper levels stained dark gray by culturally derived organic substances. (Figure 23). Zone 1, lacking in cultural material, constituted a sterile base upon which the sandy, artifact-bearing Zone 2 rested. The lower part of Zone 2 contained a small quantity of artifacts and stone flakes (attributable, by and large, to the Brookeland Focus), but no concentration of cultural materials were present. Within the dark gray midden soil of upper Zone 2 were numerous potsherds, stone implements, and other artifacts, as well as animal bones, mussel shells, stone flakes, charcoal, and other residue resulting from human occupation.

Since the site occupied an elevated spot that was farmed for a period of 40 years, it is likely that the ground surface had eroded to



Figure 21: View of the Walter Bell Site during excavation.

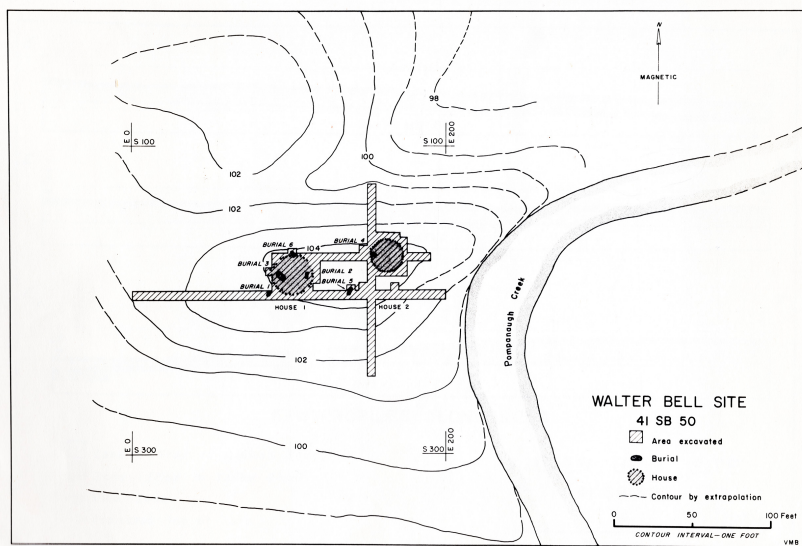


Figure 22: Map of the Walter Bell Site, showing contours, area excavated, and occupational features.

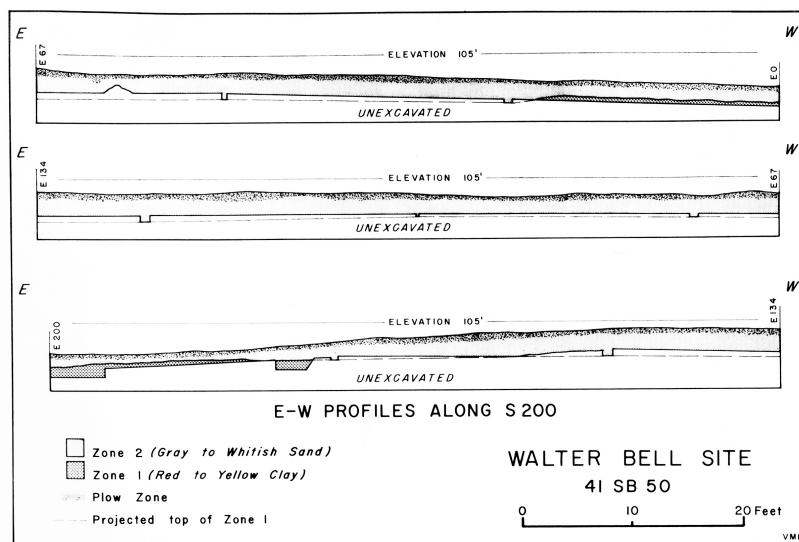


Figure 23: Walter Bell Site, profiles.

some extent, although the midden soil was still deepest along the top of the ridge. Because the midden soil was a very dark gray and its upper six inches was disturbed by plowing, it was almost impossible to discern post molds (which ordinarily are gray also) in the upper part of Zone 2. In the lower portions of Zone 2, however, the reverse was true: the homogeneous color and texture of the yellowish tan sand provided a background against which post molds—and grave outlines as well—stood out conspicuously. Thus it was in the lower part of Zone 2 that the house post molds and most of the graves were first detected, even though most of them probably extended upward into the dark midden soil where they could not be seen.

Excavation Procedures

Excavation of the Walter Bell Site was begun in October, 1956 and continued through December. To begin with, a 5-foot wide exploratory trench, running east-west, was dug across the long axis of the ridge. This trench was subsequently expanded in the midden area on the top and slopes of the ridge, and it is from this expanded area that most of the artifacts came and in which the main occupational features, including houses and burials, were located. The excavated areas are shown in Figure 22.

Occupational Features

Occupational features at the Walter Bell Site comprised three houses and six burials.

Houses

HOUSE 1 The post molds of House 1 were encountered in the western part of the site immediately beneath the dark midden soil of upper Zone 2, and the entire house pattern was bared at that level. The house was a circular structure some 26 feet in diameter, with an exterior wall framed with vertical poles spaced from 1.8 to 3.1 feet apart. The diameter of the post molds varied from 0.3 to 0.5 feet. No definite indication of an entranceway was found, but on the west side a gap of 6.9 feet between two post molds may have been an entrance. Opposite each other on the southeast and northwest sides were two smaller gaps, respectively 4.8 and 4.2 feet wide, which could also represent entrances. The exact number of poles in the original wall is not certain since some of the gaps possibly had poles in them despite the absence of discernible post molds. The total number, however, must have been between 30 and 40.

Despite a careful search, no floor was found, nor could the post molds, which were dark gray in color, be identified in the dark midden soil of upper Zone 2. However, judging from the shallowness of the post molds (none extended more than six inches or so below the dark midden soil), the floor level was undoubtedly somewhere in the upper Zone 2, probably not far from the modern surface of the ground.

In addition to the post molds marking the exterior wall, 7 larger post molds appeared in the house interior. Although not symmetrically arranged, at least some of them probably represent interior support poles. There was no fire pit inside the house.

Burial 3 was within House 1 near the west wall, but it could not be determined whether the burial was earlier, later, or the same age as the house. Burial 6, however, which lay beneath the north exterior wall, was definitely antecedent to the house since one of the post molds showed plainly in the grave fill.

Bits of wattle-impressed daub were found in the upper part of Zone 2 in the vicinity of House 1. From these, and from the known architecture of other circular houses in the Caddoan Area to the north, it appears certain that the house was of wattle-and-daub construction.

HOUSE 2 About 60 feet east-northeast of House 1 (measuring between centers) was House 2 (Figure 24). Like the first house this one had a circular wall of vertical poles and was probably of wattle-and-daub construction. The diameter of 21 feet was slightly less than that of House 1.

The 39 post molds of the wall were 0.4 to 0.7 feet in diameter and they extended to an average depth of 1.5 feet below the surface. On the northwest side of the house was a gap of 5 feet between two of the post molds and on the northeast side were two adjacent gaps of 5.5 feet each. Otherwise the vertical poles of the wall were from 1 to 2 feet apart. Non-structural entrance ways were visible, but any or all of the 3 gaps may mark entrances.



Figure 24: House 2, Walter Bell Site.

The floor of House 2 was probably at or above the modern surface of the ground as no hard-packed zone or other definite indication of

a floor was found. Perhaps the original floor was disrupted by the plow.

There were two large interior post molds, each about a foot in diameter. One was at the exact center of the house, the other about 2 feet northwest of the center. Probably one or both served as structural supports.

In the southeast part of House 2 was an elongated fire pit 4.5 feet long by 3.2 feet wide. The bottom of the fire pit was 2 feet below the surface of the ground, but at one end a secondary pit about 2 feet in diameter extended below the main floor of the pit to a depth of 3.5 feet below the surface. A thin layer (0.2 feet thick) of white ash with tiny flecks of charcoal lay in the bottom of the secondary pit. The upper part of the secondary pit was filled with gray ash and large pieces of charcoal. A charcoal sample from the secondary pit was analyzed for radiocarbon content by the Humble Oil and Refining Company and was found to be too recent for dating (less than 100 years old). Since the house itself must be much older than that, it appears that the fire pit (or the secondary portion of it at least) is a modern intrusive feature.

Adjacent to the fire pit, on the southeast side, were 2 small post molds set at such an angle that the posts or poles originally set in them must have projected directly over the fire pit. Perhaps these were used in cooking or in preserving food by smoking.

Near the southwest edge of House 2 were 3 small irregular-shaped pits (average diameter about a foot) containing lumps of burned clay. The purpose of the pits was not determined.

Burial 4 lay just within the wall of House 2 on the east side. It could not be ascertained whether the burial was earlier or later than the house or if the association between the two was accidental or intentional. The arc of post molds representing House 3 cut across the southwest side of House 2, but there was no evidence to show which house was precedent.

HOUSE 3 While exposing House 2, an arc of 6 post molds cutting across the southwest side of the house was encountered. The molds were comparable in size, depth, and spacing to those of House 1 and 2; therefore, they probably represent a third house. Judging from the curvature of the arc, House 3 was larger than the others, perhaps being 40 feet or more in diameter. As time did not permit excavation of House 3, no further description can be given.

Burials

BURIAL 1 This burial is the inhumation of an infant estimated to have been no more than a year old at the time of death. The oval grave had been dug from an undetermined level in upper Zone 2 to a maximum depth of 1.3 feet below the surface of the ground. Thus Burial 1 dates from upper Zone 2, or Angelina Focus, times.

The skeleton lay in supine, extended position with the head to the north and the arms at the sides. The bones were badly deteriorated, and rodent activity had caused considerable damage. Sex could not be determined and there were no associated objects.

Burial 1 was about 5 feet southwest of House No. 1, but there was no evidence indicative of any historical relationship between the burial and the house.

BURIAL 2 This burial, located within the walls of House 1, contained the remains of a child, age 2 to 4 years (Figure 25).²⁴ The skeleton was extended on the back with the head to the south and the arms at the sides. The grave, which was oval in shape with the north end slightly flattened, had been dug from the upper Zone 2 level and is therefore related to the Angelina Focus occupation.

Portions of all major bones were present, but most were decomposed and incomplete, and some had been displaced by gophers. The skull was crushed and the upper teeth were missing. Sex could not be determined.

Associated with Burial 2 were a cylindrical conch columella bead at the neck and a small pottery jar (Figure 26 b) classed as Broaddus Brushed at the right side of the skull. House 1 was about 10 feet west of the burial, but there was no indication that the two features were related.

BURIAL 3 This burial (Figure 27) is the inhumation of a late middle-aged male of the Angelina Focus. The grave was within the confines of House 1, near the west exterior wall, and was dug from near the modern surface completely through Zone 2 into the upper part of Zone 1. Oval in shape with undercut sides, it extended to a maximum depth of 4.6 feet.



Figure 25: Burial 2, Walter Bell Site.

²⁴ Age and sex of the human skeletal remains were determined by Erik K. Reed.

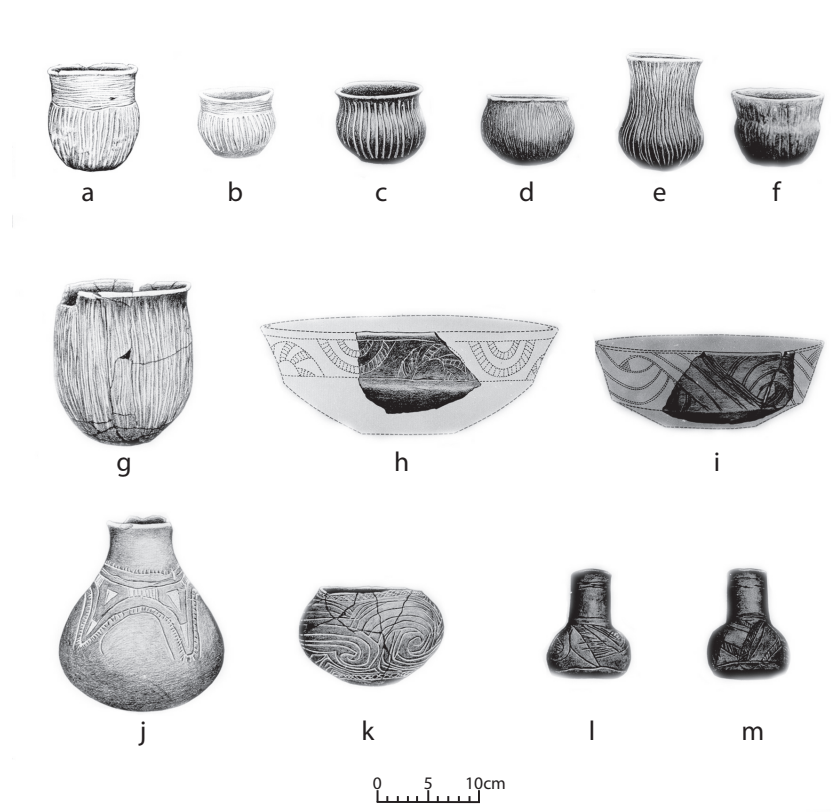


Figure 26: Pottery. a-b, Broaddus Brushed; c-e, miscellaneous incised; f, vertically brushed vessel; g, Belcher Ridged-like; h-m, miscellaneous engraved.

The skeleton lay in an extended, supine position and the hands were at the sides. The long axis of the burial was oriented in a northwest-southeast direction with the head to the southeast. All major bones were present, but some were incomplete; preservation varied from fair to poor. The bones of both feet were displaced to the left, probably the work of a gopher.

Six pottery vessels had been placed in the grave (Figure 27). Included were a plain, black, carinated bowl (Figure 28 f) on the right knee; a red-filmed carinated bowl of type Glassell Engraved (Figure 28 d) on the lower left femur; two jars similar in shape to the type Belcher Ridged but with vertical brushing instead of ridging on the body (26 g), one below the pelvis, the other by the left hand; a small vertically incised jar (Figure 26 d) at the left side of the skull; and a deep bowl of type Pineland Punctated-Incised (Figure 29 g) above the right shoulder. Other offerings were 30 Perdiz arrow points (Figure 30 a-h), a one-hole bird-bone flageolet (Figure 31 a), and the humerus, radius, ulna, and scapula of a deer. The deer humerus and radius were still articulated, and the arrangement of the deer bones indicated that an intact foreleg, including the scapula, had been placed in the grave as a food offering. Twenty of the arrow

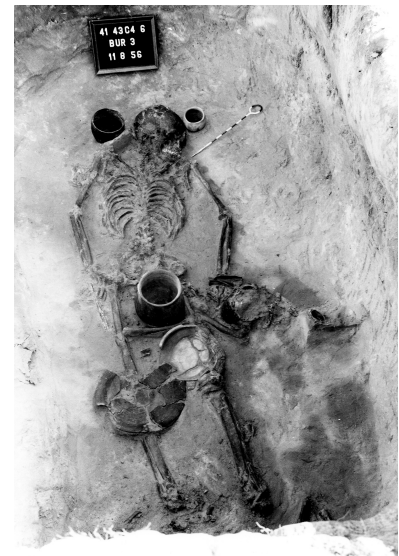


Figure 27: Burial 3, Walter Bell Site.

points lay in a pile alongside the right humerus of the skeleton in such position as to suggest that a quiver or bundle of arrows had been placed there, the arrows pointing toward the proximal end of the humerus. Eight arrow points lay on, under, and around the right femur, all pointing towards the feet, while the other two arrow points were alongside the left fibula, their tips also pointing toward the feet. The flageolet had been placed in the right hand.

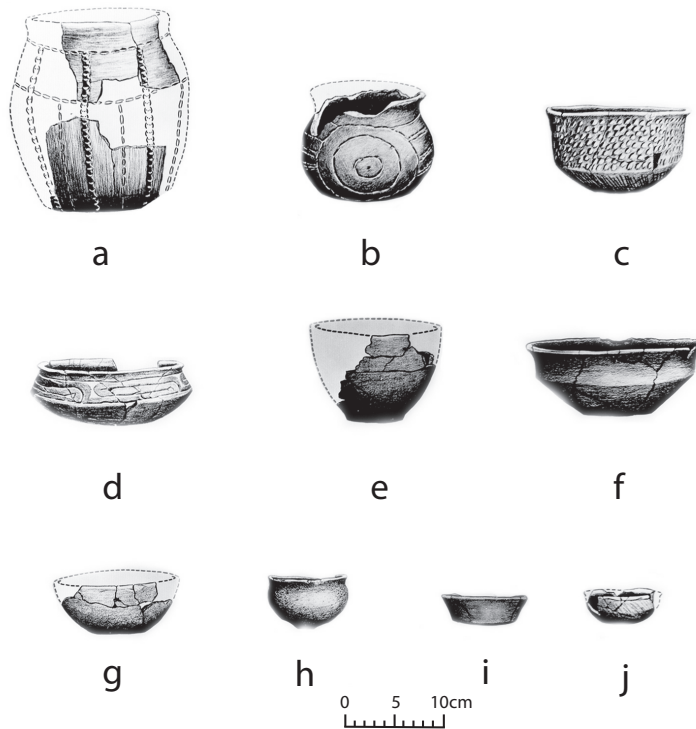


Figure 28: Pottery. a-c, miscellaneous decorated; d, Glassell Engraved, e-j, miscellaneous plain.

BURIAL 4 This inhumation of a middle-aged male lay just inside the west wall of House 2 at a spot where the wall of House 3 passed over one end of the grave. The bottom of the oval grave was at a depth of 1.2 feet below the surface; its top was not distinct, but the grave had clearly been dug from a level within the dark midden soil of upper Zone 2. Cultural affiliation, therefore, is with the Angelina Focus.

The skeleton was in a semi-flexed position. The legs were tightly flexed at the knees so that the feet rested against the posterior region of the pelvis, and the femur, which were partially flexed, formed an angle with the spine of slightly less than 90 degrees. The skull lay on its left side, as did that portion of the body posterior to the thoracic region. But the right shoulder was twisted dorsally in such a manner that the shoulders were in a nearly horizontal plane. The

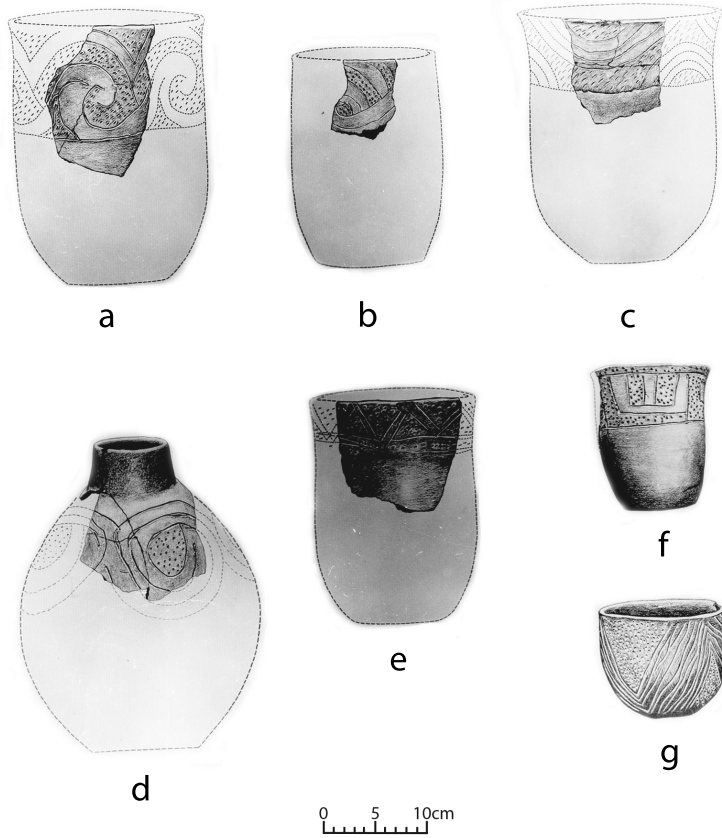


Figure 29: Pineland Punctated-Incised pottery.

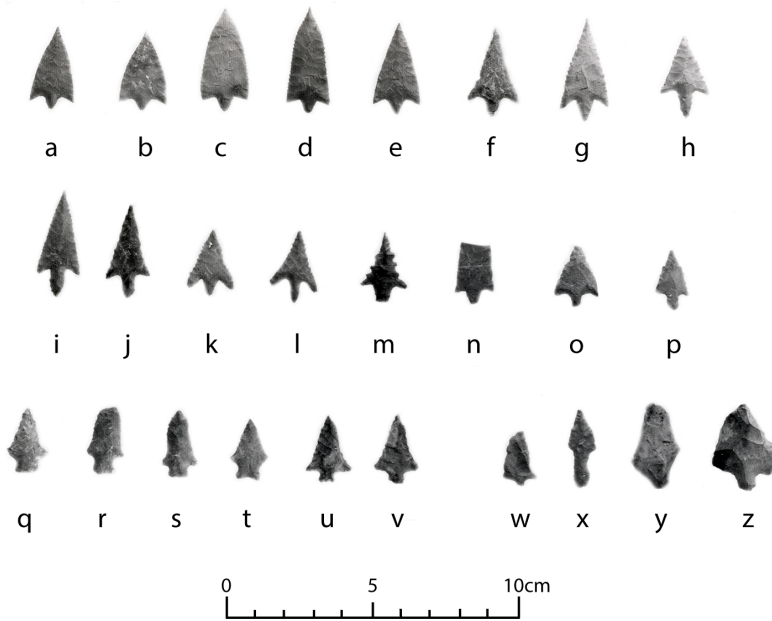


Figure 30: Arrow points. a-p, Perdiz; q-v, miscellaneous straight to expanding stem arrow points; w-z, miscellaneous arrow points.



a



b



c



d



e

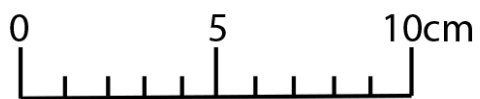


Figure 31: Bird bone flageolets.

left arm was extended with the hand thrust between the legs. The right humerus lay parallel to the spine, and the arm was bent to a right angle at the elbow, the right forearm resting across the body just anterior to the pelvis. There were no associations with Burial No. 4.

BURIAL 5 This burial of a young adult female was about midway between House 1 and 2. The grave had a lozenge-shaped outline with the long axis running north-northeast and south-southwest; it had been dug from a level within the dark midden soil of upper Zone 2 (Angelina Focus). The bottom of the grave was 2.6 feet below the surface of the ground.

The skeleton lay on its left side with the arms bent at the elbows and the hands in front of the face. The legs were loosely flexed at the knees, and the femurs formed an angle of approximately 90 degrees with the spine. The head was to the south-southwest. All major bones were present and in good condition, but some of the tarsals, metatarsals, and pedal phalanges were missing.

Offerings consisted of an engraved pottery bottle of no recognized type (Figure 26 j) at the rear of the skull, a deep carinated bowl with punctated rim (Figure 28 c) between the forearms, a one-hole bird-bone flageolet bearing an engraved design beside the left hand (Figure 31 c), three deer ulna implements lying adjacent to the flageolet (Figure 90 j), a Perdiz arrow point resting on top of the uppermost deer ulna, and two mussel shells beneath the deer ulnas.

BURIAL 6 This inhumation of a middle-aged adult (Figure 32), probably male, was in an oval-shaped grave beneath the north exterior wall of House 1. Like the other five burials, the grave was dug from a level near the present surface in upper Zone 2, and the burial can therefore be related to the Angelina Focus occupation of the site. The bottom of the grave was at a depth of 2.3 feet below the surface.

The bones were incomplete and had been somewhat scattered partly by gophers and partly by a workman who thrust a shovel into the grave before recognizing it as a burial. The skeleton was flexed and lay on its right side with the head to the northwest. The arms were flexed at the elbows and the hands were in front of the face.

The only associated artifact was a one-hole bird-bone flageolet (Figure 31 b) with an engraved design on the upper surface. It was in the region of the hands and one end lay beneath the mandible.

Burial 6 was intersected by the row of post molds delineating the north wall of House 1. One post mold showed plainly in the grave fill, certain proof that the house was more recent than the burial.

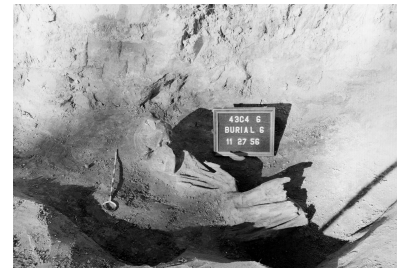


Figure 32: Burial 6, Walter Bell Site.

Remarks

The positions of the six graves indicate that they all were dug from levels within the dark midden soil of upper Zone 2. Since Zone 2 is attributed to the Angelina Focus, and since Brookeland Focus remains are restricted almost entirely to the lower, submidden portions of Zone 2, the stratigraphic data indicate that all the burials are affiliated with the Angelina Focus.

Three of the burials, including the two infant ones, were extended on the back with the hands at the sides. One of the infant graves (Burial 1) was devoid of furniture, but the other (Burial 2) contained a small Broadus Brushed vessel, a type represented by numerous sherds from the midden deposit. With the extended adult burial (Burial 3) were vessels of types Broadus Brushed and Pineland Punctated-Incised, both considered resident types of the Angelina Focus. The Perdiz arrow points with Burial 3 also relate it to the Angelina Focus. Thus two of the three extended burials are clearly affiliated with the Angelina Focus through the evidence of mortuary offerings, and to the same complex despite the absence of associated artifacts.

Of the 3 flexed burials, two (Numbers 5 and 6) contained artifacts while the third (Number 4) was without offerings. Burial 5 and 6 both contained one-hole bird-bone flageolets which are quite similar to those in Burial 3. The two pottery vessels with Burial 5 are different in design from those with the extended burials, but one of them—the carinated bowl with the punctated rim—is of a design which is duplicated by several sherds from the midden soil of upper Zone 2. Therefore all the evidence points toward the probability that the three flexed burials, as well as the three extended ones, are of Angelina Focus affinity. The people of the Angelina Focus, then, appear to have buried in both extended and flexed (or semi-flexed) positions at the Walter Bell Site. Orientation is inconsistent: one extended and one flexed burial had their heads toward the north; the heads of the other four burials were oriented southerly.

Artifacts

In addition to those associated with the burials, numerous artifacts were found in the various trenches and squares. A complete tabulation by six-inch levels is given in Table 3.

Potsherds constituted a large majority of the artifacts found at Walter Bell, with the clay-tempered pottery characteristic of the Angelina Focus—both decorated and plain—far more common than Bear Creek Plain. Arrow points outnumbered dart points by a ratio of

more than eight to one, while the relatively heavy Archaic knives found in quantity at some of the other McGee Bend sites were quite scarce.

Remarks

The Walter Bell Site was the closest thing to a "pure" Angelina Focus site found at McGee Bend, and therefore it might be appropriate to consider it the type site for the focus. Walter Bell produced a wide range of clay-tempered pottery and a large sample of arrow points. The burials provided important data on burial types of the Angelina Focus. The few dart points and knives, attributed to a light occupation by peoples of the Brookeland Focus, have distribution patterns indicating a relatively early temporal position in comparison to the distribution of arrow points and pottery (Figure 95). Bear Creek Plain pottery is evidently somewhat earlier at the site than the clay-tempered wares.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	Surface, disturbed areas etc.	Total
Pottery sherds						
Bear Creek Plain	187	261	212	8	138	806
Pineland-Punct.-Incised	67	81	24	-	31	203
Broadus Brushed	744	590	236	42	500	2112
Dunkin Incised	34	5	3	-	3	45
Belcher Ridged	2	3	2	-	1	8
Davis Incised	2	2	1	-	2	7
Misc. punctated	101	42	19	-	4	166
Misc. engraved.	79	45	26	9	41	200
Misc. incised	640	564	190	33	313	1740
Misc. decorated	31	22	6	6	6	71
Misc. plain	1521	1320	527	299	1019	4686
Elbow pipes	1	1	-	-	1	3
Dart points						
Gary	-	1	1	-	1	3
Kent	5	2	2	-	2	11
Neches River	1	-	-	-	-	1
Woden	-	-	1	-	-	1
Form X	-	-	1	-	-	1
Miscellaneous	-	-	3	-	1	4
Bunts	-	-	1	-	1	2
Bunts	-	-	1	-	1	2
Arrow points						
Alba	3	4	-	-	1	8
Clifton	8	4	-	-	8	20
Fresno	2	-	-	-	-	2
Friley	9	6	2	-	-	17
Perdiz	33	13	5	-	17	86
Straight to exp. stems	7	9	4	-	6	26
Miscellaneous	-	1	-	-	-	1
Fragments	19	13	4	-	4	40
Knives						
Harvey	1	2	-	-	1	4
Subtriangular	-	-	-	2	2	4
Drills						
Form I	1	-	-	-	-	1
Form II	-	-	-	-	1	1
Form III	-	1	-	-	-	1
Scrapers						
Spall scrapers	3	1	1	1	3	9
Misc. scrapers	1	2	-	-	1	4
Perkin pikes	2	1	-	-	2	5
Lufkin implements	1	1	-	-	-	2
Small bifacial implements	15	11	5	2	12	45
Chipped stone fragments	19	15	5	-	5	44
Polished stone celts	2	-	-	-	-	2
Grinding implements						
Seed slabs	-	1	-	-	1	2
Manos	1	3	1	2	1	8
Pitted stones	1	-	-	1	3	5
Bone and antler						
Awls	-	2	-	1	1	4
Deer ulna tools	2	2	-	-	9	13
Fish hook	1	-	-	-	-	1
Cut long bone	1	-	-	-	-	1
Worked beaver tooth	-	-	-	-	1	1
Chisel	-	1	-	-	-	1
Perforated turtle shell	-	1	-	-	-	1
Antler segments	-	1	-	-	-	1
Antler tips	1	1	-	-	2	4
Perforated mussel shell	-	-	1	-	-	1

Table 3: Distribution of artifacts by six-inch levels at the Walter Bell Site (burial furniture excluded).

The Sawmill Site

The Sawmill Site, one of the most informative sites excavated at McGee Bend, occupied a low knoll on the east side of Harvey Creek about a mile above its confluence with the Angelina River. Excavated in 1957 by a National Park Services crew under the supervision of the writer, this site comprised components of both the Brookeland and Angelina foci and produced especially significant data on the temporal distribution of artifact types and classes.

Superficial Appearance

From its elevated position, the Sawmill Site commanded the broad Angelina River flood plain stretching away to the south (Figures 33 and 34). An old wagon road running across the knoll had eroded through the years until, by 1957, it had become entrenched to a depth of some six feet. This provided a ready-made profile for studying the geologic structure of the site. A sawmill which operated at the site during the 1920's and 1930's had left a conspicuous tailing of saw-dust spilled down the slope of the knoll on its northwest side. Much of the site was farmed during the late nineteenth and early twentieth centuries, and a vacant farmhouse still stood on the crest of the knoll at the time of the archeological excavation. Aboriginal cultural debris littered the surface of the ground over the top and (more sparsely) down the slopes of the knoll; debris was also exposed in the road cut.

Geologic Context

A subsurface clay member (Zone 1) and two overlaying layers of sand (Zones 2 and 3) constituted the major zones (Figures 35 and 36). Zone 1 was of yellow to reddish clay, completely sterile of cultural remains. It graded into an overlying layer of sand (Zone 2) some 18 inches thick that consisted of two distinct components: a humus-stained upper part averaging around eight inches thick (Zone 2b) and a lower component of tan, unstained sand (Zone 2a).



Figure 33: View of the Sawmill Site, looking north from flood plain of the Angelina River. Site is on low knoll.

The top of Zone 2 appears to be an old land surface which, at some time in the past, had been stabilized long enough for a mature soil profile to develop, then was buried under another deposit of sand (Zone 3) several feet thick. Zone 3 rested unconformably on Zone 2; whether it was deposited by alluviation, by wind action, or by other means has not been determined. Zone 3 is the archeological equivalent of the superficial sand designated Zone 2 at the other McGee Bend sites.

Zone 2 was sterile except for a light scattering of debris along the unconformity representing the old land surface and extending down into the upper inch or two of Zone 2b. Thus human occupation of the site seems to have begun at a time when the ground surface was at the level of the unconformity. Above the unconformity archeological materials occurred throughout the three-to four-foot average depth of Zone 3. The heaviest concentration of cultural remains was in the upper levels of Zone 3, which consisted of typical rich midden soil, stained dark with decayed organic matter and greasy to the touch. The organic content of Zone 3 decreased gradually with depth.

For record purposes Zone 3 was separated into three components (Figure 36): the lower levels where organic staining was light (Zone 3a); the upper component of dark, rich midden soil (Zone 3b); and the disturbed plow zone at the surface (Zone 3c).

Zone 3 was appreciably thicker (maximum, five feet) than the equivalent zones at the other McGee Bend sites, a factor that un-

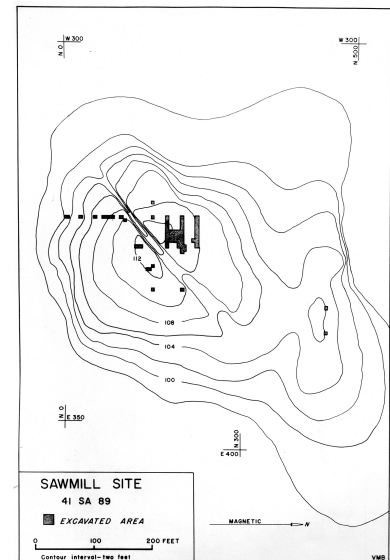


Figure 34: Map of the Sawmill Site, showing contours and area excavated.

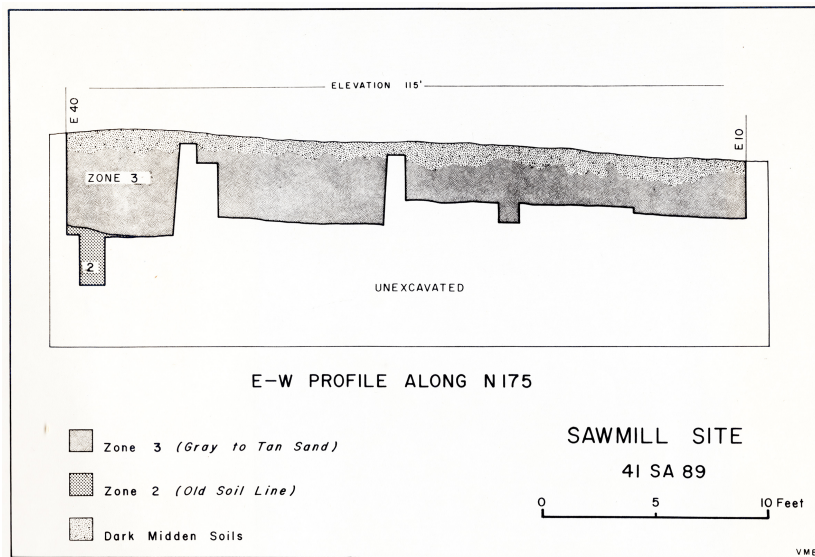


Figure 35: Sawmill Site, typical profile.



Figure 36: Sawmill Site, profile showing soil zones. Note buried humus zone, labelled 2B.

doubtedly facilitated the detection of differences in the vertical distribution patterns of artifact groups. That is, the greater thickness of the artifact-bearing zone stretched out, in effect, the scale of the time dimension, making temporal differences in artifact distributions stand out in relative clarity. Most Angelina Focus artifacts were in Zones 3b and 3c, most Brookeland Focus material in Zones 3a and lower 3b.

Excavation Procedures

Preliminary exploration to determine the general physical structure of the site and to locate the most promising areas for concentrated digging was achieved by (1) cleaning vertical sections along the edges of the road cut and studying the strata exposed there, and (2) digging test squares at intervals along the EO and N150 grid lines as indicated in Figure 34. The most prolific area located by the tests was on top of the knoll north of the road cut, and it was there that the most intensive digging was carried out. All areas excavated are shown in Figure 34. The standard techniques of digging and recording, as described in the introduction were followed.

Occupational Features

Occupational features found at the Sawmill Site were two burials and four pits. Several isolated post molds were recorded here and there about the site, but they formed no patterns.

Burial 1

This burial, located on the crest of the knoll on the southeast side of the road cut, was of an elderly woman. The skeleton lay in a supine position with the arms at the sides and was oriented roughly north-south, with the head to the south (Figure 37). The right fibula, the bones of the right lower arm, and the left foot bones were missing; the other major bones were present although in badly deteriorated condition. There was pronounced frontal-occipital deformation of the skull.

The grave was oval and slightly wider at the head than at the foot. Its outline could be traced to within less than six inches of the surface; its bottom was intruded into the upper part of Zone 2b at a depth of 3.1 feet below the surface. The stratigraphic context indicated Angelina Focus affiliation.



Figure 37: Burial 1, Sawmill Site

Burial 2

On top of the knoll, on the northwest side of the road cut, a second burial was found, that of a middle-aged man (Figure 38). The legs were flexed and turned to the right, but the shoulders were twisted around so that they lay almost flat. The head was turned to the right. The right arm was extended through the flexed legs, the right hand laying in the vicinity of the feet; the left arm was loosely flexed with the hand just anterior to the knees. Orientation was northwest-southeast, with the head to the northwest. Preservation was good, and all the major bones were present.

The grave was oval. Unfortunately its stratigraphic position could not be determined precisely because the grave was truncated by the excavators at a level of 3 feet below the surface of the ground before being detected. Angelina Focus provenance is clearly indicated, however, by associated artifacts. The bottom of the grave was in Zone 3a at a maximum depth of 3.5 feet below the surface.

Included in the grave were these offering:

- 1) Three Perdiz arrow points. These were laying at the posterior end of the grave with their tips pointing to the southeast (that is, posteriorly with respect to the burial).
- 2) Fifteen pieces of marine shell cut into various geometric shapes, lying near the feet.

Pit 1

This shallow, irregular pit was found in the main excavation area in Squares N175-E15 and N175-E20. Averaging slightly less than four feet in diameter and having a maximum depth of about a foot, the pit was filled with dark midden soil that contained a high proportion of garbage bones, stone chips, potsherds, and other trash. It appears to have been dug from a level within Zone 3b some 18 inches below the modern surface of the ground. The pit's stratigraphic position and the presence of pottery in the fill indicate that it was dug by peoples of the Angelina Focus. Its purpose is uncertain, but it may have been for garbage disposal.

Pit 2

This feature—a small, oval pit measuring 1.6 feet long by 0.9 feet wide by 0.4 feet deep—was in Square N205-E50, its top in Zone 3b at a depth of 1 foot below the surface. The dark fill which contained ash, calcined bone, charcoal fragments, and several potsherds, was very soft and loose, a circumstance suggesting that the pit may be a modern intrusion. If of Indian origin, its purpose is unknown.



Figure 38: Burial 2, Sawmill Site.

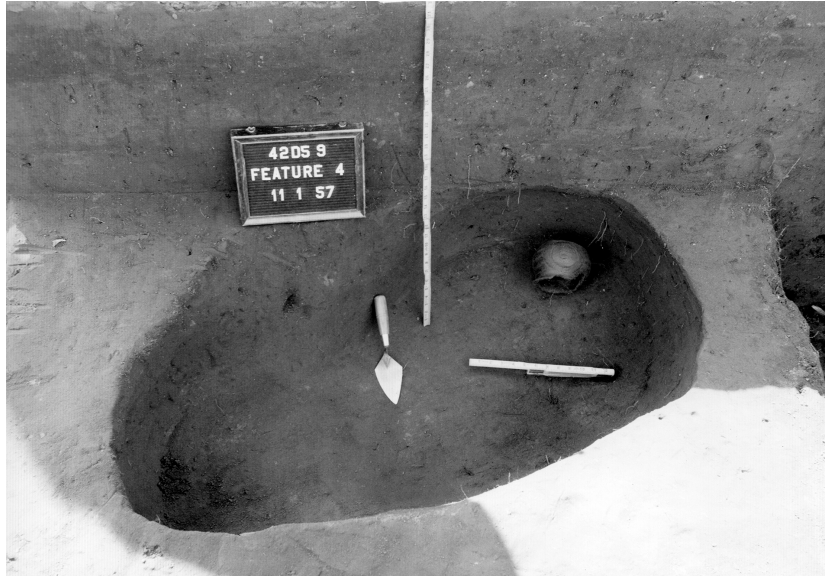
Pit 3

Figure 39: Pit 3, Sawmill Site

This was a pit roughly four feet long, two feet wide, and 1.5 feet deep that was filled with dark midden soil containing specks of charcoal, garbage bones, mussel shells, snail shells, stone flakes, potsherds, arrow points, and the major portion of an incised pottery vessel with the rim area missing (Figures 39, 28 b). Situated in Square N180-E35, the pit had been dug from a level within Zone 3b at a depth of 1.6 feet below the surface. This feature, possibly used for disposal of trash, can confidently be attributed to the Angelina Focus.

Pit 4

A shallow, concave-bottomed pit that was evidently used for cooking was found in Square N185-E40. It was filled with gray ash, and its sandy bottom was hardened and discolored by fire. Scattered through the ash were fragments of bone and mussel shell. The pit was oval in shape and measured 2 feet long, 1.65 feet wide, and 0.4 feet in maximum depth. It was in Zone 3b, its top about six inches below the surface—a position indicating Angelina Focus association.

Artifacts

More Brookeland Focus artifacts were found at the Sawmill Site than at any other site excavated. Dart points, including excellent samples of Kent, Woden, Form X, and Form Y, totaled 226 specimens. Rela-

tively large samples of knives, Perkin pikes, and Lufkin implements were also collected.

The Angelina Focus was well represented also. Several thousand clay-tempered sherds, including Pineland Punctated-Incised and Broadus Brushed were found, as well as a number of Perdiz, Clifton, Alba, and other arrow points. Distributional data on the Sawmill artifacts are given in Table 4.

Remarks

The unusual thickness of the artifact-bearing sand zone permitted vertical distribution studies that are especially illuminating (Figure 95). Brookeland Focus and Angelina Focus artifacts cluster nicely in their proper respective levels, those of the Brookeland Focus trending significantly deeper than those of the Angelina Focus. Bear Creek Plain pottery has a distribution intermediate between the two focus clusters, and the two San Patrice dart points both lay deep in the sand, adding a bit of support to Duffield's conclusion that San Patrice dates from early in the Archaic Stage.²⁵ All in all, the Sawmill Site demonstrated better than any other single site the temporal relationship between the Brookeland and Angelina foci.

²⁵ L. F. Duffield. The Wolfshead Site: An Archaic-Neo-American Site in San Augustine County, Texas. *Bulletin of the Texas Archeological Society*, pages 83-141, 1963

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5	Surface, disturbed areas etc.	Total
Pottery									
Bear Creek Plain	132	150	101	43	22	10	-	26	494
Pineland-Punct.-Incised	136	105	43	11	3	-	1	1	300
Broadus Brushed	534	246	118	35	16	2	1	3	955
Misc. punctated	368	201	81	24	10	3	1	1	689
Misc. engraved.	209	131	48	16	12	4	5	-	425
Misc. incised	494	250	117	47	18	8	-	5	939
Misc. decorated	46	26	14	5	1	-	9	-	101
Misc. plain	2791	1427	637	186	134	42	3	21	5241
Goose Creek incised	-	2	1	1	-	-	-	-	4
Rocker and dentate stamped	-	2	2	-	-	-	-	-	4
Long-stem pipes	4	13	-	-	-	-	-	1	18
Elbow pipes	1	1	2	-	-	-	-	-	4
Ceramic cylinder segments	1	1	1	-	-	-	-	-	3
Dart points									
Gary	6	5	2	-	1	1	1	-	16
Kent	6	8	15	27	9	9	4	6	84
Neches River	-	-	-	-	-	1	-	-	1
San Patrice	-	-	-	-	2	-	-	-	2
Woden	-	2	6	2	4	3	1	3	21
Form X	4	4	11	9	9	5	1	4	47
Form Y	2	1	5	5	4	-	-	3	20
Form Z	-	2	2	3	1	1	-	-	9
Broad rectangular stems	-	2	3	3	1	-	-	1	10
Miscellaneous	3	1	2	5	2	2	-	1	16
Fragments	1	6	1	4	1	4	1	-	18
ARROW POINTS									
Alba	8	3	1	1	1	-	-	1	15
Clifton	7	2	-	-	-	-	-	-	9
Friley	2	1	1	-	-	-	-	-	4
Perdiz	14	7	1	1	1	1	-	3	28
Straight to exp. stems	3	-	1	-	-	-	-	-	4
Miscellaneous	1	-	-	1	-	-	-	-	2
Fragments	9	5	-	1	-	-	-	-	15
Knives									
Bronson	4	8	3	4	3	8	2	3	35
Harvey	6	13	14	19	13	3	2	2	73
Subtriangular	8	19	23	29	26	10	3	7	125
Ovate	-	1	4	-	5	1	1	-	12
Miscellaneous	-	2	2	-	-	-	-	-	4
Drills									
Form I	1	-	1	-	-	-	-	-	2
Form II	-	2	1	-	-	-	-	2	5
Fragments	-	1	-	-	-	-	-	-	1
Scrapers									
Small end scrapers	5	1	-	-	-	-	-	-	6
Spall scrapers	18	16	5	2	4	-	-	4	49
Albany	-	-	1	-	1	-	-	2	4
Misc. scrapers	-	2	1	-	3	1	1	-	8
Perkin pikes	3	5	9	11	6	2	1	6	33
Lufkin implements	1	5	-	5	4	2	-	1	18
Small bifacial implements	11	9	8	15	8	7	-	-	58
Gouges	-	-	-	-	-	-	-	1	1
Pebble cores	16	7	12	14	10	5	1	3	68
Chipped stone fragments	103	100	93	96	100	45	7	31	575
Polished stone celts	2	1	1	-	-	-	-	-	4
Grinding implements									
Manos	2	4	1	2	3	-	-	-	12
Pitted stones	1	2	3	6	3	2	-	-	17
Bone and antler									
Deer ulna tools	-	1	-	-	-	-	-	-	1
Antler segments	1	-	-	-	-	-	-	-	1
Antler tips	-	-	-	1	-	-	-	-	1

Table 4: Distribution of artifacts by six-inch levels at the Sawmill Site (burial furniture excluded).

The Wylie Price Site

About 2.5 miles west of Broaddus, at the headwater springs of a small creek that runs into Attoyac Bayou a mile or so to the west, was the Wylie Price Site, a site containing components of both the Brookeland and Angelina foci. The site was tested during the 1957 field season by a National Park Service crew. The writer supervised the excavation; John Allen Graham and W. A. Davis served as assistant archeologists.

Superficial Appearance

The Wylie Price Site was on a low ridge at the base of a high hill which rose above the site on the north (Figure 40). The small creek ran along the southern border of the ridge, flowing westward. There was an unusually heavy concentration of broken stones and other trash of human origin showing on the surface over an area of perhaps half an acre. The field had been cultivated for years up to 1957.

Geologic Context

Geologically, the Wylie Price Site parallels the other McGee Bend sites in having a sterile bedrock of Zone 1 clay–yellow sandy clay in this instance—overlain by rather loose sand, Zone 2, that reached a maximum thickness of nearly 5 feet (Figure 41). Mixed with the sand were numerous small, iron concentrations, a condition that did not prevail at any of the other sites. Most of the cultural material was concentrated in the upper part of the Zone 2 sand, but some was found all the way down to the top of Zone 1.

Excavation procedures

A north-south trench was dug along the crest of the ridge, and two east-west trenches were extended athwart it as shown in Figure 40. The two cross trenches were connected by a north-south trench, and

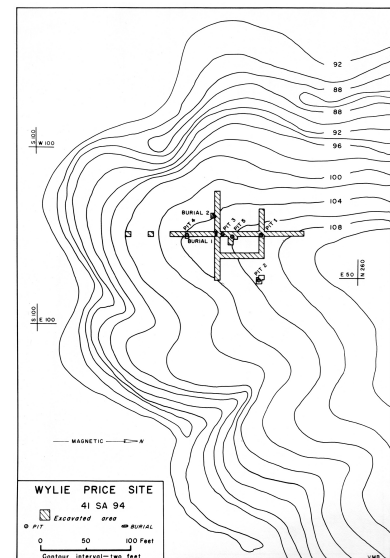


Figure 40: Map of the Wylie Price Site, showing contours, area excavated, and occupational features

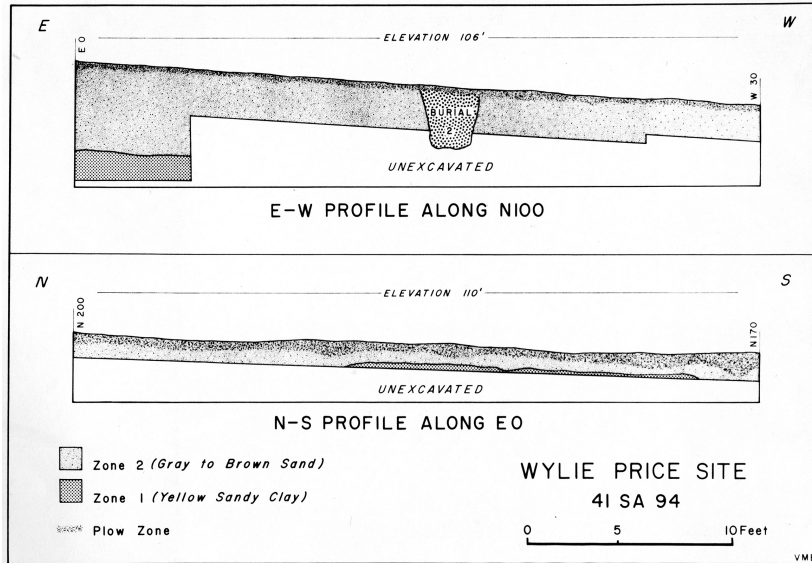


Figure 41: Wylie Price Site. Typical profiles.

several individual test squares were also dug. The occupational features located by the trenches were excavated.

Occupational Features

The occupational features encountered at the Wylie Price Site were two burials and five pits. The skeletal remains were examined by Thomas W. McKern, who furnished the age and sex identifications.

Burials

BURIAL 1 Burial 1 was an adult female in extended position, with the head to the west (Figure 42). The bones were in extremely poor condition; they also had been disturbed considerably, evidently by gophers whose runs were observed in great profusion in and about the grave. The grave outline was not discernible, and consequently the level from which the grave was dug could not be determined. Its bottom lay 2.9 feet below the surface of the ground.

Placed in the vicinity of the head and shoulders were three pottery vessels: two small jars with vertical incised lines covering their exterior surfaces (Figure 26 c, e) and a small, plain bowl. None of the vessels belong to any particular recognized type, although they are similar to the clay-tempered ware of the Angelina Focus. A necklace of simple, blue glass beads encircled the neck. Except for a glass



Figure 42: Burial 1, Wylie Price Site.

bead found in general digging at the McElroy Site, the glass beads in Burial 2 were the only European trade items found at McGee bend Sites.

BURIAL 2 This semiflexed burial lay on its back, the legs tightly flexed at the knees and twisted to the right, the right arm tightly flexed at the elbows with the hand near the face, and the left arm bent so that the forearm and hand rested across the waist (Figure 43). Orientation was northeast-southwest, with the head to the southwest. The outline of the grave could not be identified. Although preservation of the post-cranial skeleton was very poor, the skull was in fair condition.

Near the left shoulder were two pottery vessels and a large piece of a third, and two bird-bone flageolets (Figure 31 d-e) were present, one in the vicinity of each hand. A pitted stone, an ovate knife, and two crude knife-like implements lay at various places among the bones, but some or all of them could have been accidentally included in the grave fill, which did contain cultural debris throughout.

One of the pottery vessels (Figure 26 k) consists of the engraved body of what appears originally to have been a small-necked bottle, but the neck is missing and the edge where it broke off has been smoothed. The paste is clay-tempered. Another vessel (Figure 44) has a globular body, a vertical rim with a simple punctated-incised design, and a sharply everted lip. This is the only shell-tempered burial pot found at McGee Bend. The large pottery fragment almost certainly came from an entirely plain vessel, but no part of the rim is present and the design of the original vessel could not be determined.

Pits

Five pits were found at the Wylie Price Site, four of them shallow, oval depressions filled with soil containing cultural detritus. Ranging from slightly less than 3 to a bit more than 5 feet long, these four pits were from 0.6 to 1.6 feet deep. Possibly they were used for trash disposal.

The other pit was probably a well dug by some early settler. Circular in outline and about three feet in diameter, it was followed downward for about 4.5 feet without its bottom being reached. Lenses of soil that clearly had washed in revealed that the well (or whatever it was) had been left open and had become filled with rain-washed earth.



Figure 43: Burial 2, Wylie Price Site.



Figure 44: Shell-tempered vessel from Burial 2, Wylie Price Site.

Artifacts

The artifacts from Wylie Price are more representative of the entire McGee bend sequence than those of any other site. Neches River dart points (thought to be early Archaic) are more numerous here than at any other McGee Bend site, and even a probable Plainview point was found. The full range of Brookeland and Angelina focus artifacts is present as well as a good sample of Bear Creek Plain sherds. The glass beads and pottery in Burial 2 constituted the only association of Indian and European objects found in the area. Table 5 lists the artifacts by levels.

Remarks

Despite the relatively great depth of Zone 2 and the apparent long time span represented by the archeological remains, almost all of the artifact groups at the Wylie Price Site had similar vertical distribution patterns (Figure 95). Thus the site did not furnish much data that could be used for chronological ordering of traits. The only explanation that might explain the homogeneity of the distribution patterns is that the Zone 2 sand had been badly disturbed by some unknown agency that vertical trends like those discerned at other sites could not be detected.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5	Surface, disturbed areas etc.	Total
Pottery									
Bear Creek Plain	182	50	27	2	2	-	-	50	313
Pineland-Punct.-Incised	28	3	1	1	-	-	-	40	73
Broadus Brushed	374	58	24	3	1	-	-	110	570
Misc. punctated	57	7	5	-	-	-	-	18	87
Misc. engraved.	103	11	3	-	-	-	-	35	152
Misc. incised	73	9	8	1	-	-	-	28	119
Misc. decorated	65	6	-	1	-	-	-	10	82
Misc. plain	589	66	25	6	4	-	-	187	877
Long-stem pipes	2	-	-	-	-	-	-	-	2
Elbow pipes	2	-	-	-	-	-	-	-	2
Dart points									
Gary	1	1	1	-	-	-	-	-	3
Kent	10	6	1	-	-	1	1	-	19
Neches River	2	5	1	-	1	-	-	2	11
Woden	11	3	2	-	-	-	-	-	16
Form X	2	3	1	1	-	-	-	-	7
Form Y	3	1	2	3	-	-	-	-	9
Form Z	1	2	-	-	-	-	-	-	3
Darl?	-	-	-	1	-	-	-	-	1
Plainview?	-	1	-	-	-	-	-	-	1
Miscellaneous	1	1	1	-	-	1	-	-	4
Fragments	3	2	-	-	-	-	-	-	5
Arrow points									
Clifton	2	-	-	-	-	-	-	1	3
Friley	1	-	-	-	-	-	-	-	1
Perdiz	12	-	-	-	-	-	-	3	15
Straight to exp. stems	1	-	-	-	-	-	-	-	1
Miscellaneous	2	-	-	-	-	-	-	-	2
Fragments	8	2	1	-	-	-	-	2	13
Knives									
Bronson	19	5	13	7	1	1	-	8	54
Harvey	28	15	21	10	6	1	2	19	102
Subtriangular	10	6	6	4	2	6	-	10	44
Ovate	7	2	1	-	-	-	-	4	14
Miscellaneous	2	3	1	2	-	1	-	-	9
Drills									
Form I	1	-	-	1	-	-	-	1	2
Form II	1	-	-	-	-	-	-	-	1
Form III	1	1	-	-	-	-	-	-	2
Scrapers									
Small end scrapers	1	-	-	-	-	-	-	-	1
Spall scrapers	3	-	1	1	-	-	-	1	6
Misc. scrapers	3	-	1	1	-	-	-	1	6
Perkin pikes	16	8	5	2	1	-	-	5	37
Lufkin implements	4	2	1	-	1	-	-	3	11
Small bifacial implements	11	5	5	-	-	-	-	5	26
Gouges	1	-	-	-	-	-	-	2	3
Pebble cores	9	7	3	1	-	1	1	2	24
Miscellaneous chipped stone	184	77	60	29	15	12	-	71	448
Polished stone celts	-	-	-	-	-	-	-	1	1
Grinding implements									
Manos	1	-	-	2	-	-	-	-	3
Pitted stones	-	1	-	-	-	-	-	4	5
Hammer stones	1	1	1	3	-	-	-	2	8

Table 5: Distribution of artifacts by six-inch levels at the Wylie Price Site (burial furniture excluded).

The E. E. Runnels Sites

The Runnels Sites (Nos. 1 and 2), situated on the west side of Harvey Creek some six miles south of Broaddus, were tested in the fall of 1957 by a National Park Service crew. The sites yielded important data on the Brookeland Focus and, to a lesser extent, on the Angelina Focus. The excavations were conducted by the writer with John Allen Graham and LeRoy Johnson, Jr., as assistants.

Superficial Appearance

The Runnels Sites occupied adjacent ridges overlooking the flood plain of Harvey Creek a little less than a mile above the creek's confluence with the Angelina River (Figures 45, 46, 47, 48). Site No. 1 was planted in corn at the time of excavation; Site No. 2, formerly cultivated, was in grass pasture. Both sites appeared to be rather heavily eroded with fairly heavy accumulations of cultural debris showing on the surface.

Geologic Context

The geology of the Runnels Sites was typical: sterile clay subsoil (Zone 1) underlying unconsolidated sand (Zone 2), the latter containing the archeological remains (Figures 49, 50). The clays were especially variable in color and texture at both sites, shades of blue, orange, and brown being noted. For archeological purposes, however, a detailed study of the clays would serve no purpose as they contained no cultural materials. Zone 2, the surface sand, varied from a few inches to several feet thick at both sites. Conditions at Runnels No. 2, as it turned out, were most suitable for artifact distribution studies than at Runnels No. 1.

Excavation Procedures

The standard practice of testing a site by trenching was followed. Trenches were dug across the higher ground at each site: a straight



Figure 45: View looking northwest from Runnells Site No. 2. Runnells Site No. 1 is in cornfield across swale.



Figure 46: Runnells Site No. 2, looking south down exploratory trench.

trench 350 feet long with two side trenches at Runnells No. 1 (Figure 47), an angled trench at Runnells No. 2 with a total length of 400 feet (Figures 49, 50). The digging was conducted for the most part by arbitrary six-inch levels. No occupational features were encountered at either site, but important samples of artifacts and distributional data were recovered.

Artifacts

The artifacts from the two Runnells Sites contain a high proportion of dart points and knives in comparison to potsherds (Tables 6, 7). A few clay-tempered potsherds are present, indicating light occupation by peoples of the Angelina Focus, but both sites primarily comprise Brookeland Focus remains. Sherds of Bear Creek Plain outnumber clay-tempered sherds by more than three to one at both sites.

Remarks

Because neither contained very many artifacts of old Angelina Focus affiliation, the two Runnells sites provided samples of Archaic artifacts that were relatively unmixed with Neo-American remains. The occurrence of Bear Creek Plain as the dominant kind of pottery helped sharpen the distinction between it and the clay-tempered ware of the Angelina Focus.

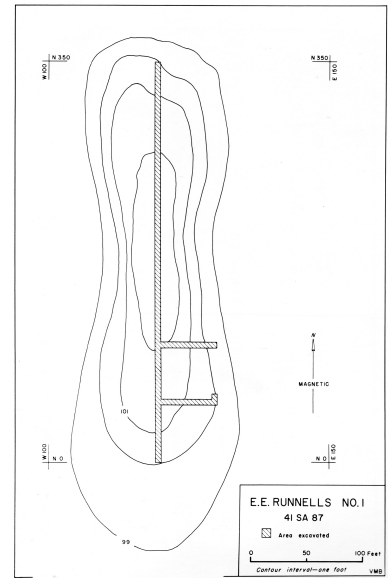


Figure 47: Map of Runnells Site No. 1, showing contours and area excavated.

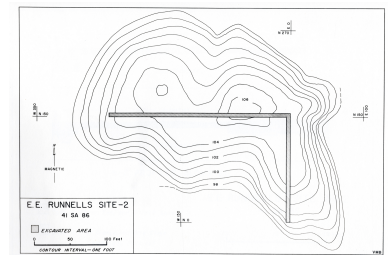


Figure 48: Map of Runnells Site No. 2, showing contours and area excavated.

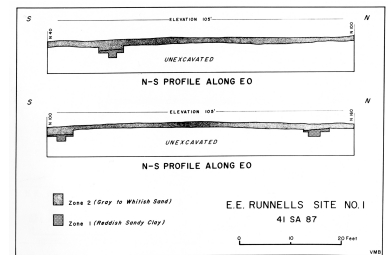


Figure 49: Runnells Site No. 1, typical profiles.

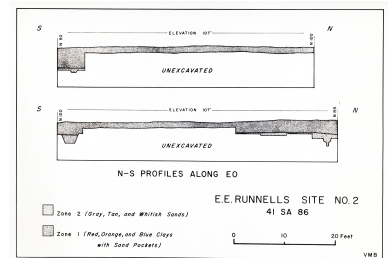


Figure 50: Runnells Site No. 2, typical profiles.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	Random depth	Total
Pottery								
Bear Creek Plain	48	37	11	5	-	-	25	126
Pineland-Punc.-Incised	-	-	-	-	-	-	1	1
Coles Creek Incised	-	-	-	-	-	-	6	6
Sand-tempered, decorated	2	3	-	-	-	-	-	5
Misc. incised	1	2	1	-	-	-	2	6
Misc. decorated	4	14	-	-	1	2	21	
Misc. plain	8	9	2	-	-	-	11	30
Dart Points								
Gary	-	1	-	-	-	-	-	1
Kent	3	-	2	-	-	1	1	7
Woden	-	1	-	-	-	-	1	2
Form X	2	6	-	-	-	-	1	9
Form Z	-	1	-	1	-	-	-	2
Bunts	-	-	-	-	1	-	1	1
Miscellaneous	1	3	1	-	-	-	-	5
Fragments	-	1	-	-	-	-	-	1
ARROW POINTS								
Straight to exp. stems	-	-	-	-	-	-	1	1
Fragments	1	-	-	-	-	-	-	1
Knives								
Bronson	1	-	-	-	-	-	1	2
Harvey	1	2	3	-	-	-	-	6
Subtriangular	2	3	-	-	-	-	1	6
Ovate	-	1	-	-	-	-	1	2
Scrapers								
Small end scrapers	-	-	1	-	-	-	-	1
Spall scrapers	-	1	-	-	-	-	-	1
Albany	-	1	-	-	-	-	-	1
Misc. scrapers	-	1	-	-	-	-	-	1
Perkin pikes	1	2	1	-	-	-	-	4
Small bifacial implements	-	3	-	-	-	-	1	4
Pebble cores	2	4	1	-	-	1	-	8
Chipped stone fragments	11	9	2	-	-	-	6	28
Bannerstones	-	1	-	-	-	-	-	1

Table 6: Distribution of artifacts by six-inch levels at the Runnells Site No. 1.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	Random depth	Total
Pottery								
Bear Creek Plain	36	68	67	8	3	-	3	185
Misc. punctated	-	1	-	-	-	-	-	1
Misc. incised	1	-	1	-	-	-	1	3
Misc. plain	8	9	10	1	-	-	-	28
Dart Points								
Gary	1	2	1	1	-	-	-	5
Kent	5	7	14	4	4	-	-	34
Woden	1	1	5	1	-	-	-	8
Form X	2	-	1	1	-	-	-	4
Pogo	-	-	1	-	-	-	-	1
Miscellaneous	-	1	1	1	3	1	-	7
Bunts	-	-	1	-	-	-	-	1
Fragments	1	1	-	1	1	-	-	4
Arrow points								
Frisley	-	-	2	1	-	-	-	3
Straight to exp. stems	1	-	-	-	-	-	-	1
Knives								
Bronson	4	7	3	2	1	-	-	17
Harvey	1	5	1	2	1	-	1	11
Subtriangular	3	3	3	-	3	2	-	14
Ovate	-	-	3	-	1	-	1	5
Drills								
Form I	4	1	-	1	1	-	-	7
Form II	-	1	1	-	-	-	-	2
Fragments	-	-	1	-	-	-	-	1
Scrapers								
Small end scrapers	-	-	1	-	-	1	-	1
Spall scrapers	-	-	5	2	2	1	-	10
Albany	-	-	1	-	-	-	-	1
Misc. scrapers	-	1	-	-	-	-	-	1
Perkin pikes	2	6	4	2	1	-	-	15
Small bifacial implements	3	1	1	-	2	-	-	7
Pebble cores	2	4	7	3	-	-	-	17
Chipped stone fragments	12	8	19	9	6	1	2	57
Hammerstones	1	-	2	-	1	-	-	4

Table 7: Distribution of artifacts by six-inch levels at the Runnels Site No. 2.

The Print Bell Site

One of the sites found by Arnold during his survey of eastern Texas in 1940 was the Print Bell Site, which was about 1.5 miles north of Brookeland. It was re-examined by Stephenson in 1948 and, in conformance with his recommendation,²⁶ was tested by the National Park service crew that worked at McGee Bend in the fall of 1956. The testing, supervised by the writer, produced significant information about both the Brookeland and Angelina foci.

²⁶ R. L. Stephenson. *Archeological Survey of the McGee Bend Reservoir, Jasper, Sabine, San Augustine, Angelina, and Nacogdoches Counties, Texas: A Preliminary Report*. Mimeographed report of the River Basin Surveys, Smithsonian Institution, 1948a

Superficial Appearance

The Print Bell Site occupied a long, low ridge on the north side of a small cut-off slough that was evidently an abandoned channel of Bear Creek (Figure 51). The ridge, together with several nearby ones, stood out as conspicuous topographical features in a level plain extending northward from Brookeland. The site was marked by a rather sparse scattering of bone scraps, stone spalls, potsherds, and other refuse along the top and down the slopes of the ridge.

Formerly in continuous cultivation for many years, the ridge was converted to grassland and pasture in the 1940's. Altogether, surface indications of occupation were observed over an area of some eight acres; but there was one relatively heavy surface concentration covering about an acre, and it was there that the principal excavations were carried out.

Geologic Context

The same general geologic situation prevailed at Print Bell as at most sites of the region. There was a superficial layer of sand (Zone 2) containing cultural materials that rested on an essentially sterile clay member (Zone 1). Fortunately Zone 2 was relatively thick and had cultural materials distributed throughout its depth: thus conditions were favorable for the detection of vertical differences in the distribution patterns of artifact categories, and chronologically significant typological data were, in fact, recovered.

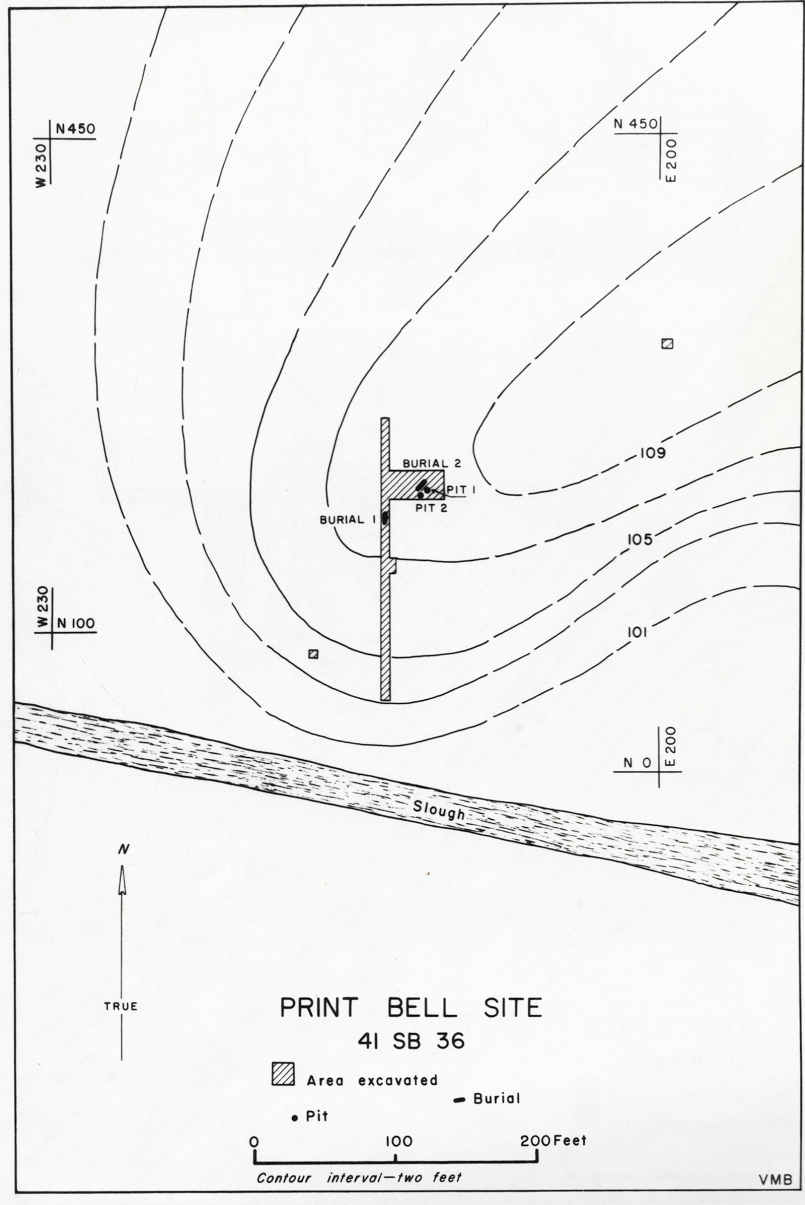


Figure 51: Map of the Print Bell Site, showing contours, area excavated, and occupational features.

Excavation Procedure

The first step in testing the site was to dig a five-foot wide trench along the crest of the ridge, across the area of greatest surface concentration. This trench, which was 200 feet long, disclosed two areas where cultural refuse was relatively abundant, and the trench was expanded at both places for the purpose of securing larger samples of specimens than could be obtained from the trench itself. Several small test squares around the main trench produced little. Locations of the trenches and squares are shown in Figure 51.

Occupational Features

Two burials and two pits of uncertain purpose constitute the occupational features found at Print Bell. Age and sex determinations of the skeletons were made by Erik K. Reed.

Burial 1

Burial 1, that of a young adult, probably male, was encountered near the northern end of the main trench. The grave outline was observed only at the level of the skeleton, about six to twelve inches below the surface of the ground, and consequently the level from which it had been dug was not determined. Probably the ground surface had eroded to a lower elevation since the grave was dug. In any case, the grave was oval in shape at the level of the skeleton and was no larger than necessary to accommodate the body.

The skeleton was in an extended, supine position, with the left arm extended along the side and the right arm flexed at the elbow, the right humerus parallel to the spine and the right hand in the pelvic region. Orientation was north-south with the head to the north. The bones were badly decayed and had been disturbed by burrowing rodents, but traces of all the major bones were noted.

The only associated artifact was a pottery bowl which lay about six inches to the right of the pelvis. The bowl (Figure 28 e) is plain, clay-tempered, and of no recognized type.

Burial 2

In the northern part of the excavated area a second burial was found. Like the first, the upper part of the grave outline was indistinct, but it apparently extended upward at least as high as the bottom of the plow zone. The bottom of the grave, which reached a maximum depth of 1.3 feet below the surface, was oval.

The body had been placed on its left side with the legs flexed tightly at the knees and the femurs approximately at right angles to the spine. The bones were very badly deteriorated. Some components of the skull, the right femur, the right tibia, and the right humerus were intact; the rest of the bones had been reduced to tiny unidentifiable fragments and powder. Age and sex were indeterminate.

There were no associations.

Pit 1

This was an approximately circular depression averaging about 2.2 feet in diameter, with a concave bottom. It was in the northern part of the excavated area. The bottom of the pit contained a three-inch-thick layer of light gray, ashy material; above that the fill was organically stained sand like that of upper Zone 2.

The pit was first noticed at a depth of 1.7 feet below the surface, after the overlying earth had been removed to that level. The bottom of the pit reached a maximum depth of 2.4 feet below the surface. The ashy material in the bottom suggests that this may have been a fire pit, but there was no other evidence of burning. The purpose of this feature remains uncertain.

Pit 2

This asymmetrical depression was situated some seven feet southwest of Pit 1 and, like Pit 1, contained about three inches of light gray ashy soil in the bottom below the fill of sandy composition like that of upper Zone 2.

Artifacts

The Print Bell Site yielded both Brookeland and Angelina Focus materials as well as a relatively high percentage of Bear Creek Plain pottery. Brookeland Focus dart points and knives, although not numerous, include a good range of the major forms of the focus. Arrow points and clay-tempered sherds of Angelina Focus provenience also cover a wide range. The artifacts are tabulated by levels in Table 8.

Remarks

Despite comparatively small samples, the respective distribution patterns of Brookeland and Angelina foci remains tend to cluster separately, the Brookeland Focus materials being generally deeper

than those of the Angelina Focus. Thus the Print Bell Site provides significant data bearing on the integrity of the two foci and on their relative temporal positions.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	Random depth	Test trenches and random	Total
Pottery							
Bear Creek Plain	101	308	98	103	61	120	791
Pineland Punct.-Incised	5	8	2	6	5	14	40
Broaddus Brushed	10	12	2	4	13	12	53
Sand-tempered decorated	-	1	-	2	-	1	4
Misc. punctated	10	9	1	3	4	19	46
Misc. engraved	10	8	1	3	8	31	61
Misc. incised	52	56	17	17	22	173	337
Misc. decorated	2	3	1	-	-	3	9
Misc. plain	203	188	58	86	97	319	951
Goose Creek Incised	-	1	-	1	-	1	3
Rocker and dentate stamped	-	1	1	-	-	-	2
Shell-tempered sherds	1	3	-	1	-	2	7
Elbow pipes	2	1	-	-	-	-	3
Ceramic bead?	-	-	-	-	-	1	1
Dart Points							
Gary	-	2	2	5	2	1	12
Kent	1	4	6	3	2	4	20
Neches River	-	-	-	-	-	2	2
Woden	2	2	2	4	-	1	11
Form X	2	-	2	4	1	3	12
Form Y	1	-	-	3	1	1	6
Miscellaneous	3	6	6	1	-	-	16
Bunts	1	-	-	-	-	-	1
Fragments	-	-	1	-	-	-	1
Arrow points							
Alba	-	-	-	-	1	1	2
Cliffton	-	-	-	-	-	2	2
Fresno	-	1	-	-	2	1	4
Friley	-	1	-	1	-	2	4
Perdiz	2	-	1	-	2	-	5
Straight to exp. stems	-	-	-	-	2	-	2
Miscellaneous	-	1	-	-	-	-	1
Fragments	-	1	-	-	1	2	4
Knives							
Bronson	-	-	-	1	-	-	1
Harvey	2	-	-	3	1	3	9
Subtriangular	1	1	-	6	1	-	9
Ovate	1	2	-	-	-	1	4
Drills							
Form I	1	-	-	1	-	-	2
Form II	-	1	-	-	1	-	2
Scrapers							
Spall scrapers	-	-	-	-	-	1	1
Perkin pikes	-	-	-	-	-	1	1
Small bifacial implements	3	2	3	4	3	5	20
Pebble cores	1	3	-	1	-	3	8
Chipped stone fragments	5	9	4	11	6	11	46
Boatstones	-	-	1	-	-	-	1
Grinding implements							
Manos	1	-	-	-	-	-	1
Pitted stones	2	-	-	-	-	1	3
Hammerstones	-	-	-	-	-	1	1
Bone and Antler							
Antler tips	-	-	-	-	-	1	1

Table 8: Distribution of artifacts by six-inch levels at the Print Bell Site (burial furniture excluded).

The Etoile Site

The Etoile Site was located at the south edge of the small town of Etoile, some two miles northeast of the Angelina River. The major occupation of the site was by Angelina Focus peoples, but there is also evidence of light earlier occupation by peoples of the Brookeland Focus.

The site was first recorded by the writer in 1956 when he investigated a report that Keith Lowery, then a schoolboy at Etoile, had dug into the site and found a number of artifacts. In 1958 Sherman P. Lawton of the University of Oklahoma, who was spending the summer in Nacogdoches, dug several test trenches there (Figure 52). Lawton kindly let me borrow his material from the site, and it was used to supplement the material found there subsequently by the Texas Archeological Salvage Project.

Extensive testing of the Etoile Site was carried out by the Texas Archeological Salvage Project between October 26 and November 17, 1960. Lathel F. Duffield, working under the general direction of the writer, supervised the excavation. Little was learned about house types or other structural features, but the artifacts recovered provided a significant body of data that have been of much utility in our efforts to reconstruct the prehistoric cultures of the McGee Bend area.

Superficial Appearance

The Etoile Site occupied a low hill on the west side of a small creek that emptied into the Angelina River approximately two miles to the south (Figure 52). Although formerly cultivated, the site had been in pasture for several years prior to 1960. A branch of the Angelina and Neches Railroad passed across the southeast part of the site through a shallow cut which had removed a sizable portion of the occupational deposits. Earth excavated from the railroad cut was piled along either side of the tracks.

Two trenches (Figure 52), dug through the railroad cut backdirt by Sherman Lawton in 1958, were open when excavation was begun by the Texas Archeological Salvage Project in 1960. The only other

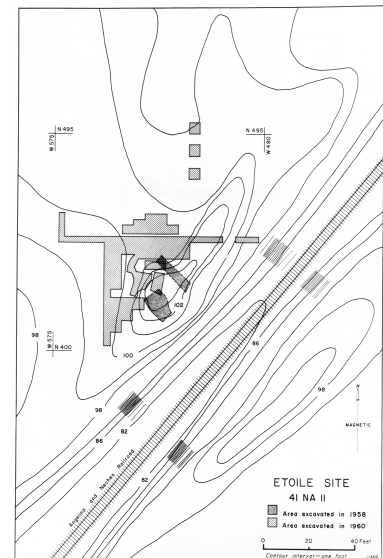


Figure 52: Map of Etoile Site, showing contours and area excavated.

evidence of disturbances was at several places along the face of the railroad cut where various persons had done some small-scale digging.

Geologic Context

The sandy soil exhibited a mature profile: dark humus-stained sand at the top grading into yellow-orange sandy soil beneath (Figure 53). A bedrock deposit of red clay (Zone 1) underlay the sandy soil (Zone 2) at a depth of some five or six feet below the surface. Cultural materials occurred in both the humic and the upper part of the subhumic zones of the sandy soil, but the basal clay was sterile.

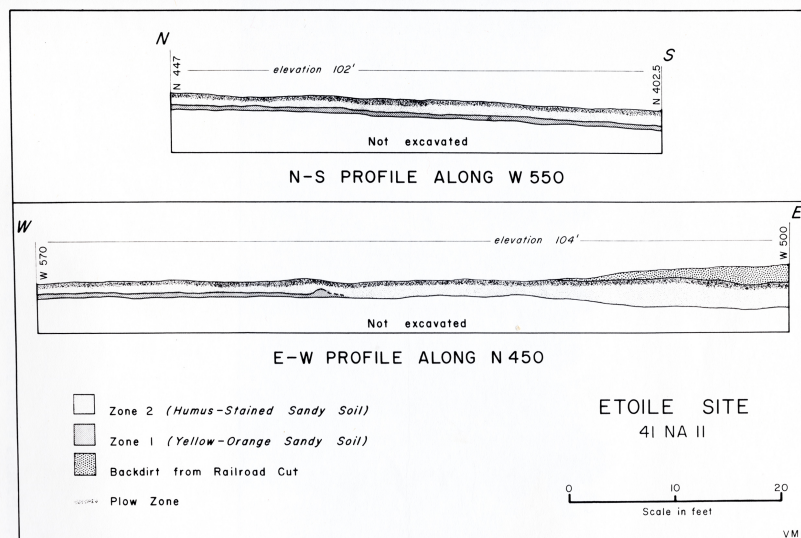


Figure 53: Etoile Site, typical profile.

Excavation Procedures

Preliminary testing was carried out by means of several trenches and squares. These revealed what appeared to be the richest part of the site, and subsequent work was concentrated there (Figure 52). Five-foot squares and arbitrary levels (usually six inches each) were employed in the main part of the site. These squares were carried down to sterile or semi-sterile soil, generally 1.5 to 2 feet below the surface. Except during some of the preliminary trenching, all the excavated soil was screened.

Occupational Features

A trash pit and a multitude of post molds constituted the sole evidence of structural features related to Indian occupation of the site. Unfortunately, no definite patterns could be recognized in the arrangement of the post molds (Figure 54), probably because a series of structures had been built, each structure contributing a share to the disorderly maze of post molds that ultimately resulted.

The trash pit was a circular affair, about two feet deep, and slightly more than three feet in diameter, that had evidently been dug from a living level coincident with the present surface (Figure 54). It contained a large quantity of garbage bones together with a few potsherds and other cultural detritus.

Artifacts

The Etoile Site yielded artifacts predominantly of the Angelina Focus, although a few examples of Brookeland Focus dart points and knives were found. The quantitative contrast between Bear Creek plain and local clay-tempered pottery is particularly striking: more than 4,000 clay-tempered sherds were collected but only 52 of Bear Creek Plain. The artifacts are tabulated by levels in Table 9.

Remarks

The Etoile Site, like the Walter Bell Site, provided a relatively good sample of Angelina Focus artifacts, especially pottery. Unfortunately, however, no burials or house patterns were found for comparison with other Angelina Focus components.

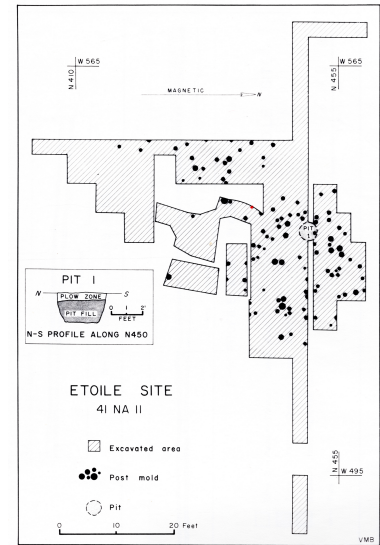


Figure 54: Etoile Site, showing location of Pit 1 and post molds.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	Surface, disturbed areas etc.	Total
Pottery						
Bear Creek Plain	11	11	12	6	12	52
Pineland-Punc.-Incised	30	34	35	-	77	176
Broadus Brushed	278	272	213	21	390	1174
Misc. punctated	69	90	119	-	112	390
Misc. engraved	96	97	92	1	92	378
Misc. incised	82	89	52	1	92	316
Misc. decorated	9	19	17	-	25	70
Misc. plain	610	543	403	25	433	2014
Shell-tempered sherds	2	4	-	-	6	12
Long-stem pipes	-	-	-	-	2	2
Elbow pipes	2	-	1	-	1	4
Dart Points						
Gary	2	-	1	-	1	4
Woden	2	1	4	1	-	8
Miscellaneous	-	-	-	1	-	1
Arrow Points						
Clifton	-	-	-	-	1	1
Fresno	1	-	1	-	-	2
Perdiz	2	7	2	-	2	13
Straight to exp. stem	1	-	-	-	1	2
Fragments	2	-	1	-	-	3
Knives						
Bronson	-	-	2	1	2	5
Harvey	-	1	1	1	4	7
Subtriangular	-	2	-	1	1	4
Ovate	-	-	1	1	-	2
Scrapers						
Small end scrapers	1	-	-	-	-	1
Spall scrapers	-	-	-	1	1	2
Misc. Scrapers	-	-	1	-	-	1
Small bifacial implements	-	1	5	1	1	8
Pebble cores	-	-	-	1	-	1
Chipped stone fragments	7	9	8	2	8	34
Polished stone celts	-	-	-	-	1	1
Pitted stones	-	-	-	-	1	1
Bone and Antler						
Deer ulna tools	-	1	-	-	-	1
Antler segments	1	-	-	-	-	1
Antler tips	-	1	-	-	-	1
Perforated mussel shells	-	-	-	-	1	1

Table 9: Distribution of artifacts by six-inch levels at the Etoile Site.

The Blount Site

The Blount Site was located in west-central San Augustine County, Texas, atop a knoll on the south bank of Spear Creek, about half a mile above the spot where Spear Creek emptied into Attoyac Bayou. It lay only a few hundred feet from the Wolfshead Site (they occupied adjacent knolls); in fact, it was discovered by one of the crew excavating at Wolfshead in 1960.

Potsherds and arrow points found on the surface indicated the presence of an Angelina Focus component; so, in the hope that a full range of Archaic occupations like that at Wolfshead might underlie the late prehistoric material, three small test pits were dug in the site in 1960. The results were encouraging: therefore when funds became available for the purpose two years later, the Texas Archeological Salvage Project undertook more extensive tests. J. Dan Scurlock supervised the field work.



Figure 55: Blount Site, view looking northeast before excavation.

Superficial Appearance

The knoll on which the Blount Site was situated overlooked the Spear Creek bottom from the south. Formerly cultivated, it was turned back to pasture in 1953 and supported a heavy cover of grass in 1962 (Figure 55). Although there had been some erosion on the slopes, the principal archeological element—a midden on the crest of the knoll—showed no evidence of appreciable erosion at the time of excavation.

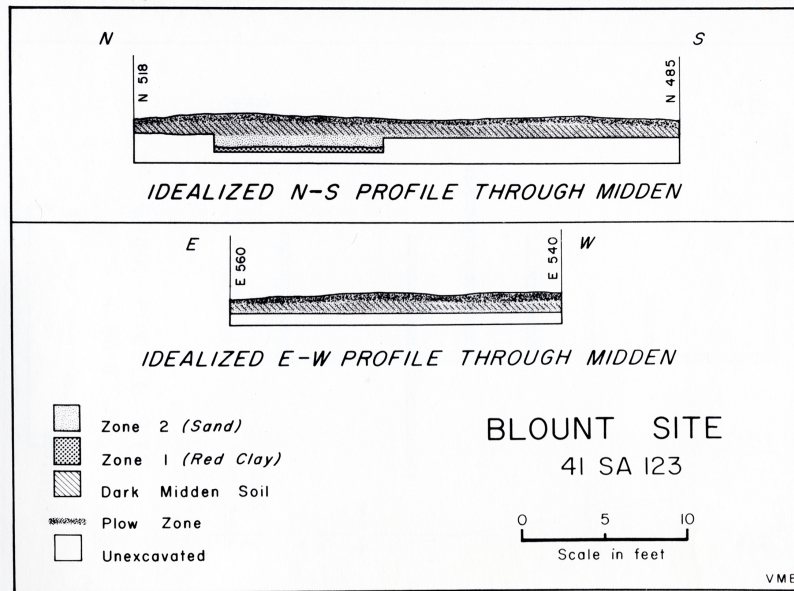


Figure 56: Blount Site profiles.

Geologic Context

Geologically, the site exhibited the usual soil profile of eastern Texas (Figure 56): superficial zone of sand (Zone 2) overlying and grading into, a red clay bedrock (Zone 1). The sand zone, where tested, was generally between 1.5 and 2.5 feet thick, and the upper six inches or so was disturbed by plowing.

Cultural refuse was concentrated in the sand zone. A few stone chips were observed in the upper few inches of the clay subsoil, but they could have been intruded downward by burrowing rodents or tree roots.

Excavation Procedures

The initial tests at the Blount Site consisted of three five-foot squares dug in December, 1960, while the adjacent Wolfshead Site was being

excavated. When the major testing began in November, 1962, a standard coordinate-type grid oriented on magnetic north was set up. A zone 3 feet wide and 50 feet long was staked off along the N500 line, and two 10-foot sections, one at each end of the zone, were excavated. At the east end, a layer of dark midden soil was encountered just below the disturbed plow zone, but there was no sign of midden soil at the other end. By scooping off the plow-zone in a series of small spot checks along the N500 line, the western edge of the midden soil was located in a short time; then the eastern, northern, and southern edges were established by the same technique. The midden contained predominantly artifacts of Angelina Focus provenience.

After the extent of the midden had been determined, a section in the central portion of the midden was excavated as the main effort at the site (Figure 57). Since the principal objective was to determine whether or not Archaic materials like that at the adjoining Wolfshead Site extended beneath the Angelina Focus midden, attention was focused on digging what were in effect three stratigraphic appraisal units: a main one in the central part of the midden and two others (each consisting of a cluster of small tests) northeast and southwest of the midden. Unfortunately, time and resources did not permit thorough excavation and study of the midden itself, but it clearly was similar to extensively excavated Angelina Focus components at the Walter Bell, Sawmill, Wylie Price, and Etoile sites.

While no San Patrice dart points or other early Archaic forms were found as had been hoped, important evidence was recovered at Blount bearing on chronological problems in mid-Archaic to late prehistoric times.

Occupational Features

Structural features resulting from the Indian occupation are the midden area itself, a probable house, and a possible trash pit.

The midden (Figure 57) was a typical one for the region. It evidently accumulated around a small cluster of buildings over a period of several decades—or possibly several centuries. It was oval, about 90 feet long by 50 feet wide, and its average thickness was between 12 and 18 inches. Probably a sequence of different buildings stood on the spot through time, new ones being built to replace those that burned or fell into disrepair. In any case, several post molds encountered in the midden area formed a partial oval pattern suggestive of a house outline, in which were a fire pit and a mold that probably represented an interior roof-support post (Figure 57). Although the molds did not form a complete enclosure, projection of the arc suggests an oval floor plan measuring about 17 feet long by 11 feet

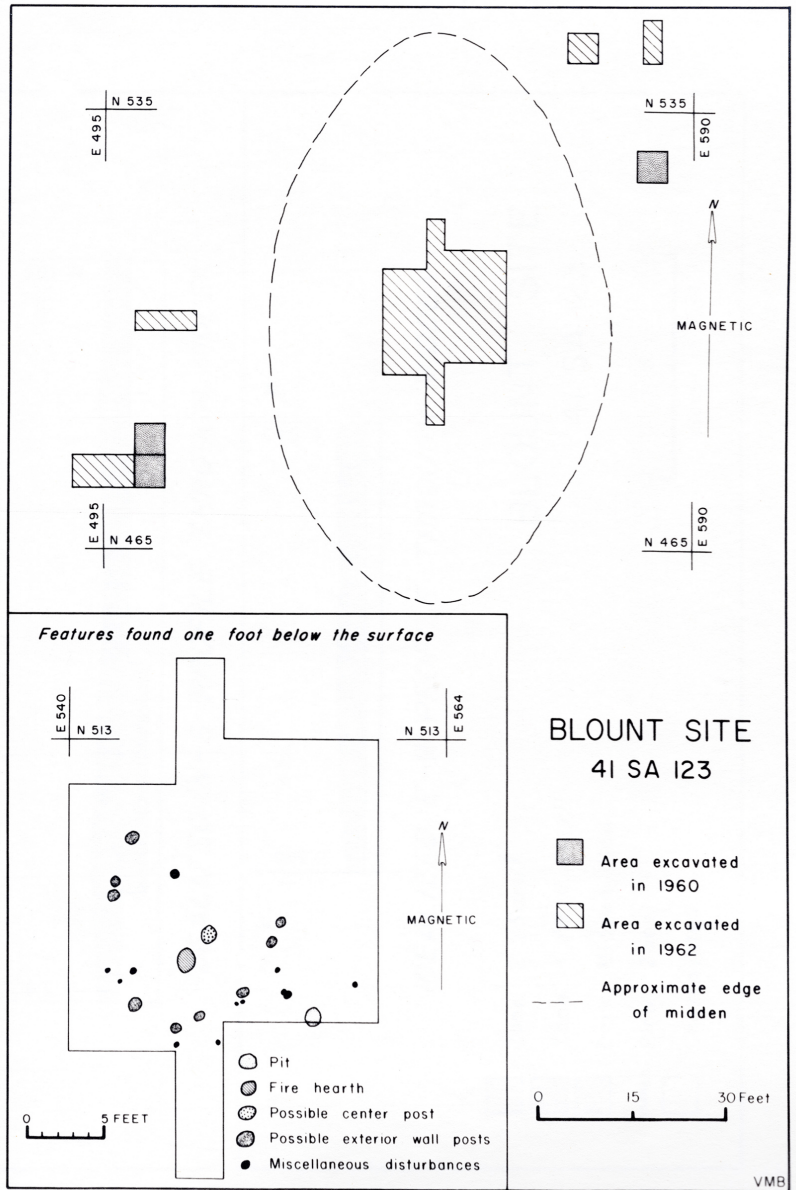


Figure 57: Blount Site, sketches showing location of midden area and occupational features.

wide, with a small fire pit near the southern end. No entrance was detected.

A small oval pit containing bone scraps, charcoal, potsherds, and other debris was found 4 feet southeast of the presumed house. Possibly for trash disposal, it averaged 18 inches in diameter and was 18 inches deep.

Artifacts

The artifacts from the Blount Site are mostly of Angelina Focus derivation, a full range of clay-tempered pottery—both decorated and plain—being represented as well as pipes and arrow points. A small quantity of Brookeland Focus material was also present. The artifacts are tabulated by levels in Table 10.

Remarks

A difference in the vertical distribution patterns of dart points and knives on the one hand and pottery and arrow points on the other (Table 10), helped demonstrate the temporal priority of Archaic material in the McGee Bend area relative to Neo-American material. Definition of the Angelina Focus was benefited by the pottery and arrow point samples from the Blount Site.

Artifact Groups	0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	Surface, disturbed areas etc.	Total
Pottery							
Bear Creek Plain	7	7	3	1	1	1	30
Pineland-Punct.-Incised	25	54	15	6	-	21	121
Broadus Brushed	132	114	25	8	1	52	332
Misc. punctated	49	88	26	7	1	37	208
Misc. engraved	27	46	17	5	-	18	113
Misc. incised	97	73	34	5	4	42	255
Misc. decorated	1	1	2	-	-	-	4
Misc. plain	603	703	212	94	21	229	1892
Shell-tempered sherds	1	1	-	-	-	1	3
Vessel appendages	-	1	2	-	-	-	3
Long-stem pipes	-	4	1	1	-	1	7
Elbow pipes	-	-	-	-	-	1	1
Dart Points							
Kent	-	-	-	-	1	-	1
Neches River	-	-	-	1	1	-	2
Woden	1	-	-	-	-	-	1
Form X	-	-	1	-	-	-	1
Miscellaneous	-	-	-	1	1	-	2
Fragments	-	1	-	1	-	-	2
Arrow points							
Perdiz	-	2	-	-	-	2	4
Straight to exp. stem	-	2	-	-	-	-	2
Fragments	2	1	-	-	-	-	3
Knives							
Bronson	-	-	2	-	-	2	4
Harvey	1	-	2	-	-	2	5
Subtriangular	-	-	-	3	2	1	6
Scrapers							
Small end scrapers	-	-	-	-	1	-	1
Spall scrapers	1	1	1	-	2	-	5
Misc. scrapers	1	-	-	-	1	-	2
Perkin pikes	-	-	1	-	1	-	2
Lufkin implements	-	-	-	-	-	1	1
Small bifacial implements	3	1	1	-	-	-	5
Pebble cores	-	1	-	-	-	1	2
Chipped stone fragments	3	6	2	6	6	11	34
Grinding implements							
Manos	-	1	-	-	-	-	1
Pitted stones	-	1	1	-	-	-	1
Bone and antler							
Deer ulna tools	-	1	-	-	-	-	1

Table 10: Distribution of artifacts by six-inch levels at the Blount Site.

The Brink Powell Site

On the north side of Bear Creek approximately 1,000 feet northeast of the point where Sabine, Jasper, and San Augustine counties come together was the Brink Powell Site, one of the sites excavated by the National Park Service during the 1956 field season at McGee Bend. Originally recorded by Gus Arnold in 1940, it was also visited by Stephenson in 1948 during his preliminary survey of the reservoir area. Occupation was predominantly by the Angelina Focus.

Superficial Appearance

The site was on an undulating ridge at the edge of the upland just above the flood plain of Bear Creek, a tributary of Ayish Bayou. A small branch fed by several springs ran along the base of the ridge on its northeast side and emptied into Bear Creek below the nose of the ridge. Cultural debris littered the surface over an area of some three or four acres. According to Brink Powell, the landowner, the ridge has been farmed continuously for more than a century. It was planted in oats at the time of excavation.

Geologic Context

Structurally the site consisted of a basal formation of sandy clay (Zone 1) that varied in color from red to yellow to gray and an overlying cap of tan sand (Zone 2), humus-stained in its upper few inches (Figure 58). Zone 2 was not very thick in most places—and even absent at some spots—evidently as a result of recent erosion accelerated by cultivation. Cultural materials were restricted to Zone 2, the basal clay being sterile. The maximum thickness of Zone 2 was approximately two feet.

Excavation Procedures

As an initial test, a five-foot wide trench was dug along the central axis of the ridge for a distance of 450 feet. Several lateral trenches

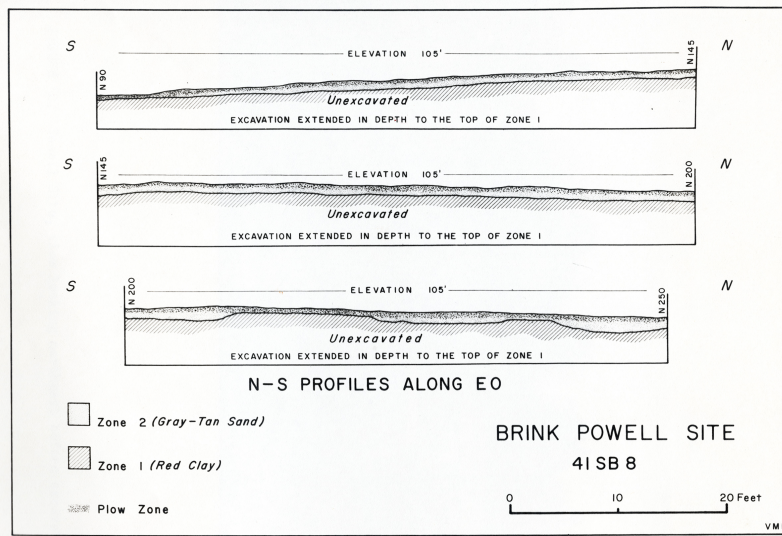


Figure 58: Brink Powell Site, typical profiles.

were extended off of the main one, and a 20-foot square was dug as the major stratigraphic test at a spot where Zone 2 was relatively thick and productive of cultural materials. The locations of the trenches and the 20-foot squares are shown in Figure 59. Of the 377 artifacts found, all but three came from the upper 12 inches. Although the shallowness of the deposits did not permit meaningful vertical distribution studies, the sample of artifacts is of utility for general comparative purposes.

Occupational Features

No houses, pits, post molds, burials, or other structures related to the Indian occupation were found.

Artifacts

The small sample of artifacts collected from the Brink Powell Site includes a few dart points, knives, and other Archaic items referable chiefly to the Brookeland Focus. The majority of the artifacts, however, are of Angelina Focus derivation. The artifacts are listed in Table 11.

Remarks

A combination of shallow, plow-disturbed deposits and a relative paucity of artifacts rendered the Brink Powell Site virtually useless

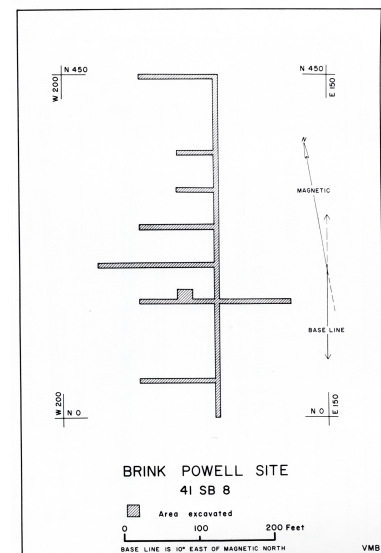


Figure 59: Brink Powell Site, sketch showing area excavated.

for intrasite distribution studies. But it did supplement the sample of Angelina Focus—and to a lesser extent, Brookeland Focus—artifacts from the area.

Artifact Groups	0.0-1.0	1.0-2.0	Surface, disturbed areas etc.	Total
Pottery				
Bear Creek Plain	7	-	2	9
Pineland-Punct.-Incised	6	-	-	6
Broaddus Brushed	91	2	11	104
Belcher Ridged	4	-	-	4
Misc. punctated	7	-	-	7
Misc. engraved	5	-	1	7
Misc. incised	35	-	8	43
Misc. decorated	8	-	1	9
Misc. plain	123	-	31	154
Dart points				
Kent	1	-	1	2
Neches River	-	-	1	1
Woden	1	-	-	1
Form X	1	-	-	1
Miscellaneous	2	-	3	5
Arrow points				
Perdiz	1	-	-	1
Fragments	1	-	-	1
Knives				
Bronson	1	-	-	1
Harvey	1	-	-	1
Subtriangular	2	-	-	2
Scrapers				
Misc. scrapers	1	-	1	2
Drills				
Form III	-	-	1	1
Small bifacial implements	1	-	-	1
Pebble cores	3	-	-	3
Chipped stone fragments	5	-	2	7
Polished stone celts	-	-	1	1
Pitted stones	1	-	-	1

Table 11: Distribution of artifacts by one-foot levels at the Brink Powell Site.

The Sowell, McElroy, and W.P. Dubose Sites

These three sites were tested briefly—Dubose by the writer in 1956, the others by Lathel Duffield in 1960—and each was abandoned when it was discovered that Zone 2 was too thin to produce any significant vertical distribution data. All three had the usual geologic sequence: Zone 2 sand containing archeological materials overlying sterile Zone 1 clay. They were tested in routine fashion by digging trenches and individual squares. The test patterns at the different sites are shown in Figures 60, 61, and 62. No occupational features were found. Although of no value for vertical distribution studies, the samples of artifacts obtained were useful for site-to-site comparisons.

The Sowell Site was on a hill in west-central San Augustine County, about a quarter of a mile west of the Wolfshead Site (Figure 63). Cultural debris was scattered over an area of some 175 feet across, but an exploratory trench and several test pits produced little. The artifacts recovered are topologically of Angelina Focus affinity for the most part.

Located near the northern limit of the reservoir area on a small tributary of Attoyac Bayou, the McElroy Site (Figure 64) was briefly tested in the hope of finding Indian artifacts associated with European trade goods. Local informants had reported finding glass beads on the surface of the site. More than 2,000 native artifacts—potsherds, projectile points, and the like—were found, but the only trade item was half of a glass bead, and that was not in any kind of close association with any of the native materials. The site seems to have been primarily of Angelina Focus affinities.

The Dubose Site (Figure 61) was on an elliptical knoll of natural origin rising some 15 feet above the west flood plain of Bear Creek, about four miles southwest of Brookeland. Known locally as Roebuck Mound, the knoll was approximately 500 feet long (north-south) by 200 feet wide (east-west) at its base. Cultural material proved to be very sparse, and the site was abandoned after exploratory trenching.

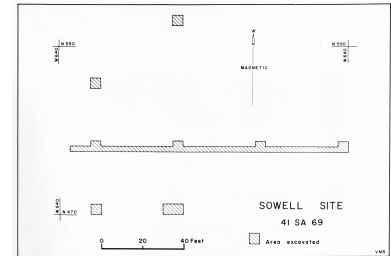


Figure 60: Sowell Site, sketch showing area excavated.

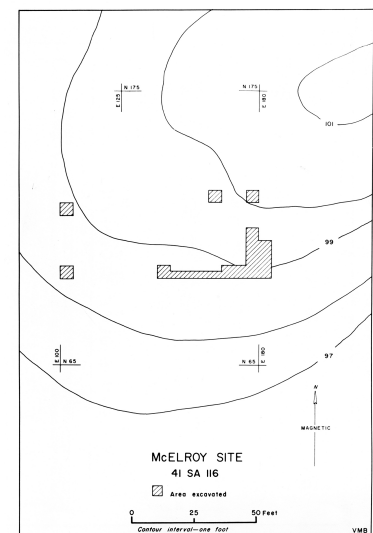


Figure 61: McElroy Site, map showing contours and area excavated.

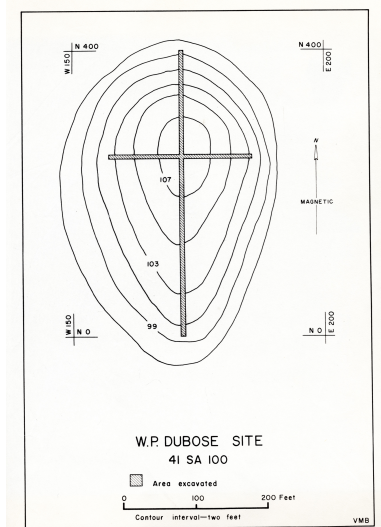


Figure 62: Map of Dubose Site, showing contours and area excavated.



Figure 63: Sowell Site, view looking northeast before excavation.



Figure 64: McElroy Site, view looking northwest during excavation.

Artifact Groups	0.0-0.5	0.5-1.0	Surface, disturbed areas etc.	Total
Pottery				
Bear Creek Plain	8	3	16	27
Pineland-Punct.-Incised	-	-	3	3
Broaddus Brushed	2	2	7	11
Dunkin Incised	1	-	2	3
Misc. punctated	4	-	19	23
Misc. incised	4	-	25	29
Misc. decorated	-	-	1	1
Misc. plain	91	8	213	312
Shell-tempered sherds	-	1	1	2
Dart points				
Gary	-	-	3	3
Kent	-	-	2	2
Woden	-	-	2	2
Miscellaneous	1	-	2	3
Arrow points				
Cliffton	-	-	2	2
Friley	1	-	-	1
Perdiz	-	-	2	2
Straight to exp. stems	-	-	3	3
Miscellaneous	-	-	1	1
Fragments	1	-	4	4
Knives				
Bronson	-	-	6	6
Harvey	3	-	13	16
Subtriangular	1	1	4	6
Ovate	-	-	1	1
Miscellaneous	-	-	1	1
Scrapers				
Flake scrapers	4	-	3	7
Perkin pikes	-	-	6	6
Small bifacial implements	-	-	5	5
Pebble cores	1	-	6	7
Grinding implements				
Seed slabs	-	-	1	1
Manos	-	-	2	2
Hammerstones	-	-	2	2

Table 12: Distribution of artifacts by six-inch levels at the Sowell Site.

Artifact Groups	0.0-5.0	0.5-1.0	1.0-1.5	Surface, disturbed areas etc.	Total
Pottery					
Bear Creek Plain	11	1	-	-	12
Pineland-Punct.-Incised	35	17	-	2	54
Broadus Brushed	269	28	-	28	325
Belcher Ridged	1	-	-	-	1
Misc. punctated	99	28	-	13	140
Misc. engraved	110	39	1	16	166
Misc. incised	414	59	3	21	497
Misc. decorated	9	1	-	-	10
Misc. plain	802	86	1	19	908
Shell-tempered sherds	3	-	-	1	4
Long-stem pipes	1	1	-	-	2
Elbow pipes	1	-	-	-	1
Dart points					
Kent	-	2	-	1	3
Form X	1	-	-	-	1
Arrow points					
Clifton	2	-	-	-	2
Perdiz	2	1	-	-	3
Straight to exp. stems	1	-	-	-	1
Knives					
Bronson	1	1	-	-	2
Subtriangular	1	-	-	-	1
Drills					
Form I	-	1	-	-	1
Scrapers					
Spall scrapers	30	3	-	-	33
Misc. scrapers	3	1	-	-	4
Small bifacial implements	3	3	-	-	6
Pebble cores	12	16	-	-	18
Grinding implements					
Manos	2	-	-	-	2
Hammerstones	1	-	-	-	1
Glass beads	-	-	-	1	1

Table 13: Distribution of artifacts by six-inch levels at the McElroy Site.

Artifact Groups	0.0-1.0	1.0-2.0	Surface, disturbed areas etc.	Total
Pottery				
Bear Creek Plain	7	10	3	20
Misc. incised	-	1	-	1
Misc. decorated	-	1	2	3
Misc. plain	-	2	-	2
Dart points				
Kent	-	-	1	1
Miscellaneous	-	2	1	3
Arrow points				
Friley	1	-	-	1
Knives				
Bronson	2	-	-	2
Misc. chipped stone	1	5	-	6

Table 14: Distribution of artifacts by one-foot levels at the Dubose Site.

Table 15: Distribution of Artifacts by sites (caches and burial furniture excluded).

Artifact Groups	JS	WB	SW	WP	Rn1	Rn2	PB	E	B	BP	Sow	ME	WPD	Totals
Pottery														
Bear Creek Plain	92	806	484	313	126	185	791	52	30	9	27	12	20	2947
Pineland-Punctc.-Incised	1	203	300	73	1	-	40	176	121	6	3	54	-	978
Broaddus Brushed	-	2112	955	570	-	-	53	1174	332	104	11	325	-	5636
Dunkin Incised	-	45	-	-	-	-	-	-	-	-	3	-	-	48
Belcher Ridged	-	8	-	-	-	-	-	-	-	4	-	1	-	13
Davis Incised	-	7	-	-	-	-	-	-	-	-	-	-	-	7
Misc. punctated	23	166	689	87	-	1	46	390	208	7	23	140	-	1780
Misc. engraved	3	200	425	152	-	-	61	378	113	7	-	166	-	1505
Misc. incised	35	1740	939	119	6	3	337	316	255	43	29	497	1	4320
Misc. decorated	19	71	101	82	-	-	9	70	4	9	1	10	3	379
Misc. plain	120	4687	5241	877	30	28	951	2014	1892	154	312	908	2	17216
Goose Creek Incised	-	-	4	-	-	-	3	-	-	-	-	-	-	7
Rocker and dentate stamped	-	-	4	-	-	-	2	-	-	-	-	-	-	6
Weches finger impressed	3	-	-	-	-	-	-	-	-	-	-	-	-	3
Holly fine engraved	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Cole Creek Incised	1	-	-	-	6	-	-	-	-	-	-	-	-	7
Sand-tempered decorated	2	-	-	-	5	-	4	-	-	-	-	-	-	11
Shell-tempered decorated	-	-	-	-	-	-	7	12	3	-	2	4	-	28
Vessel appendages	-	-	-	-	-	-	-	-	3	-	-	-	-	3
Long-stem pipes	-	-	18	2	-	-	-	2	7	-	-	2	-	31
Elbow pipes	-	3	4	2	-	-	3	4	1	-	-	1	18	-
Ceramic cylinder segment	-	-	3	-	-	-	-	-	-	-	-	-	-	3
Ceramic bead	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Dart points														
Gary	4	3	16	3	1	5	12	4	-	-	3	-	-	51
Kent	4	11	84	19	7	34	20	-	1	2	2	3	1	188
Neches River	-	1	1	11	-	-	2	-	2	1	-	-	-	18
San Patrice	-	-	2	-	-	-	-	-	-	-	-	-	-	2
Woden	5	1	21	16	2	8	11	8	1	1	2	-	-	76
Form X	4	1	47	7	9	4	12	-	1	-	-	-	-	85
Form Y	-	-	20	9	-	-	6	-	-	-	-	1	36	-
Form Z	1	-	9	3	2	-	-	-	-	-	-	-	-	15
Dar?	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Plainview?	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Pogo	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Wells	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Broad rectangular stem	1	-	10	-	-	-	-	-	-	-	-	-	-	11
Miscellaneous	2	4	16	4	5	7	16	1	2	5	3	-	3	68
Bunts	-	2	-	-	1	1	1	-	-	-	-	-	-	5
Fragments	-	-	18	5	1	4	1	-	2	1	-	-	-	32
Arrow points														
Alba	-	8	15	-	-	-	2	-	-	-	-	-	-	25
Clifton	-	20	9	3	-	-	2	1	-	-	2	2	-	39
Fresno	-	2	-	-	-	-	4	2	-	-	-	-	-	8
Friley	-	17	4	1	-	3	4	-	-	-	1	-	1	31
Perdiz	-	116	28	15	-	-	5	13	4	1	2	3	-	157
Straight to exp. stems	-	26	4	1	1	1	2	2	2	-	3	1	-	43
Miscellaneous	-	1	2	2	-	-	1	-	1	-	1	-	-	8
Fragments	-	40	15	13	1	-	4	3	3	1	4	2	-	86
Knives														
Bronson	-	-	35	54	2	17	1	5	4	1	6	2	2	129
Harvey	7	4	73	102	6	11	9	7	5	1	16	-	-	241
Subtriangular	4	4	125	44	6	14	9	4	6	2	6	1	-	225
Ovate	-	-	12	14	2	5	4	2	-	-	1	-	-	40

Continued on next page.

Table 15 – continued from previous page

Artifact Groups	JS	WB	SW	WP	Rn1	Rn2	PB	E	B	BP	Sow	ME	WPD	Totals
Miscellaneous	1	-	4	9	-	-	-	-	-	-	1	-	-	15
Drills														
Form I	1	1	2	2	-	7	2	-	-	-	-	1	-	16
Form II	-	1	-	1	2	2	-	-	-	-	-	-	6	
Form III	-	1	5	2	-	-	-	-	-	1	-	-	-	9
Fragments	2	-	1	-	-	1	-	-	-	-	-	-	-	4
Scrapers														
Small-end scrapers	-	-	6	1	1	1	-	1	1	-	-	-	-	11
Spall scrapers	-	9	49	1	1	10	1	2	5	-	-	33	-	111
Albany	-	-	2	-	1	1	-	-	-	-	-	-	-	4
Flake scrapers	-	-	-	-	-	-	-	-	-	-	7	-	-	7
Miscellaneous	1	4	8	6	1	1	-	1	2	2	-	4	-	30
Perkin pikes	4	5	43	37	4	15	1	-	2	1	6	-	-	118
Lufkin implements	-	2	18	11	-	-	2	-	1	-	-	-	-	34
Small bifacials	3	45	58	26	4	7	20	8	5	1	5	6	-	188
Gouges	-	-	1	3	-	-	-	-	-	-	-	-	-	4
Pebble cores	2	-	68	24	8	17	8	1	2	3	7	18	-	158
Chipped stone	27	44	575	448	28	57	46	34	34	7	62	24	6	1392
Polished stone celts	-	2	4	1	-	-	-	1	-	1	-	-	-	9
Bannerstones	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Boatstones	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Grinding implements														
Manos	-	12	3	-	-	1	1	-	-	2	2	-	29	
Seed slabs	1	2	-	-	-	-	-	-	-	-	1	-	-	4
Pitted Stones	-	5	17	5	-	-	3	1	2	1	-	3	-	37
Hammerstones	-	-	3	8	-	4	1	-	-	-	2	1	-	19
Bone and antler														
Awls	-	4	-	-	-	-	-	-	-	-	-	-	-	4
Deer and ulna tools	-	13	1	-	-	-	-	1	1	-	-	-	-	16
Fishhooks	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Cut long bones	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Worked beaver tooth	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Chisel	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Perforated turtle shell	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Antler segments	1	1	-	-	-	-	-	1	-	-	-	-	-	3
Antler tips	4	1	-	-	-	-	1	1	-	-	-	-	-	7
Perforated mussel shells	1	-	-	-	-	-	-	1	-	-	-	-	-	2

JS:Jonas Short (non-mound); WB: Walter Bell; SW: Sawmill; WP: Wylie Price; Rn1: Runnells No. 1; Rn2: Runnells No. 2; PB: Print Bell; BP: Brink Powell; ME: McElroy; WPD: W.P. Dubose

Artifact Descriptions

More than 38,000 artifacts were recovered from the 13 sites. Initially they were sorted into ten major categories: ceramics; chipped stone artifacts; ground and polished stone artifacts; use-ground stone artifacts; miscellaneous stone artifacts; antler and bone artifacts; shell artifacts; metal artifacts; glass artifacts; miscellaneous objects. Each major category was further subdivided into smaller and smaller groups on the basis of functional and stylistic criteria until the final classification consisting of many small typological groups emerged. Each of the final groups was composed of individual artifacts that shared the same basic characteristics, and each group was treated as a typological unit, its physical attributes described and its range of variation defined on the basis of the McGee Bend sample. If a group conformed closely to the definition of a previously defined type it was assigned to that type. In some instances a group formed a cohesive unit, both in terms of its attributes and its distribution, yet did not fall within the range of any known type. Such groups were defined as new types.

Ceramics

The locally made pottery at McGee Bend can conveniently be classed into three wares on the basis of paste characteristics: (1) sand-tempered ware, usually plain but occasionally decorated with incised or incised-punctated designs; (2) clay-tempered ware, occurring with a variety of decorations made by brushing, incising, punctating, engraving, and other techniques; (3) shell-tempered ware, plain or decorated, of very rare occurrence in the area.

Sand-Tempered Ware

Virtually all of the sand-tempered pottery is plain, only 11 of the 2,978 total sherds being decorated. No complete or reconstructable vessels were found, but study of the sherds revealed what many of the original vessels must have looked like. All of the plain sherds

were classed as type Bear Creek Plain, a new type defined here for the first time; the few decorated sherds are not identified with any specific types.

Bear Creek Plain (Figure 65)

METHOD OF MANUFACTURE

Coiling.

PASTE

–TEMPER: Sand. Microscopic examination reveals that the sand particles, which are present in great abundance, are rounded rather than angular and therefore are evidently derived from waterlaid deposits. The particles are all quartzitic except for an occasional one resembling feldspar, and their size is small and rather uniform. Large grains are totally absent. The rounded surfaces of the sand grains result in a paste with low tensile strength, a factor which caused the vessels to fracture easily, especially along coil lines.

The high sand content produced a paste with the texture of friable sandstone, and in many instances sand particles come off readily when a sherd is rubbed between the fingers. While the abundant use of sand as a tempering agent is a characteristic feature of the paste, rarely a sherd can be found that contains a small quantity of pulverized bone in addition.

–COLOR: Surface colors are mostly dark shades of gray and brown ranging to black, but lighter shades, principally tan and buff, also occur as well as a few sherds of reddish-brown. Core colors are similar to surface colors, but they frequently run somewhat darker.

–SURFACE FINISH: Surfaces are typically undulating or bumpy and are usually poorly smoothed. Some sherds, however, have been well smoothed. Because of the friable paste, the surfaces have been frequently eroded, and sherds without the original surface, or retaining only patches of it, are not uncommon.

FORM

–WALL THICKNESS: 5 to 10 mm., with the average between 6 and 8 mm.

–LIP: Typically, the vessel wall thins, sometimes quite drastically, at the upper part of the rim and tapers to a sharp, narrow lip. Occa-

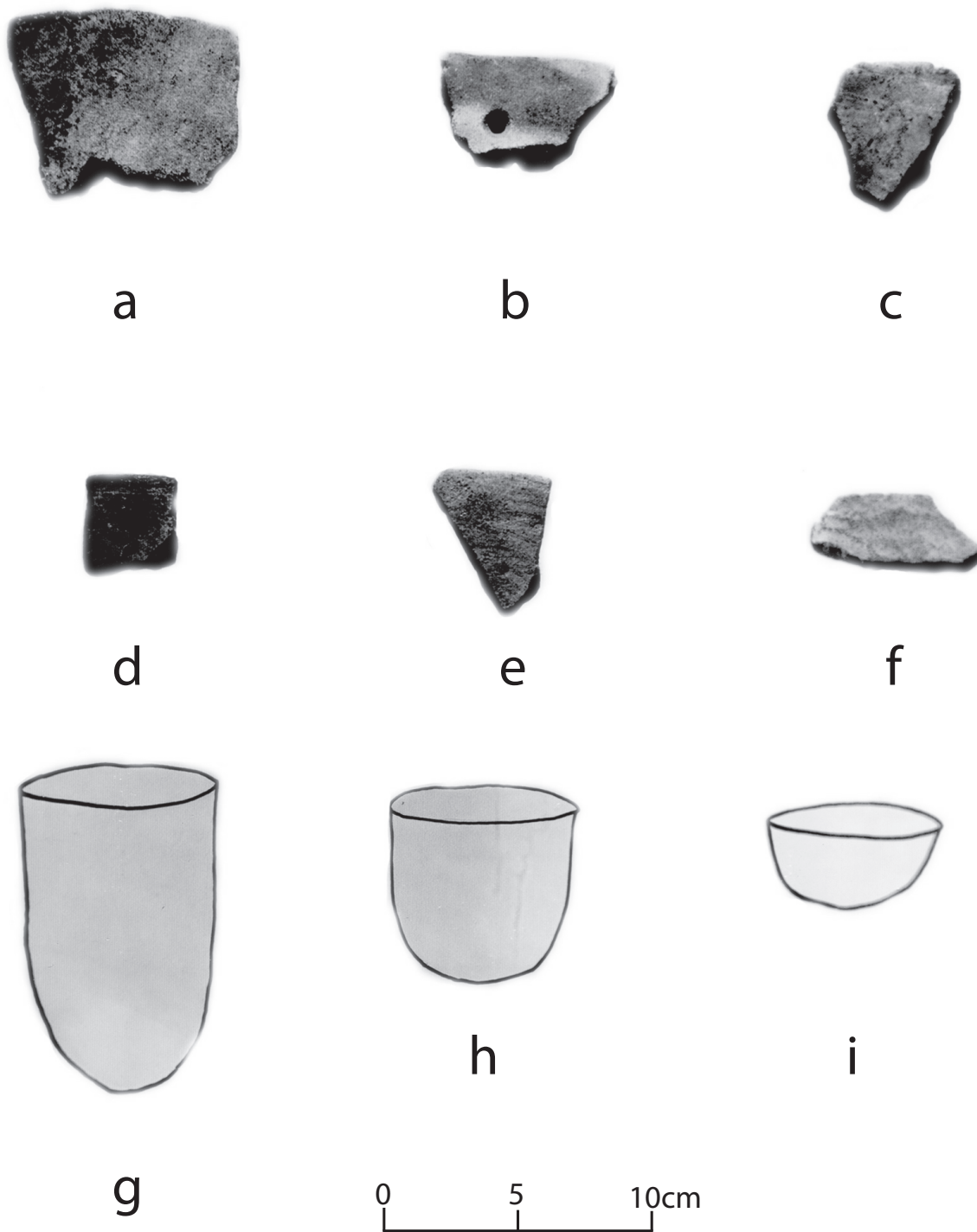


Figure 65: Bear Creek Plain pottery. a-f, rim sherds; g-i, vessel shapes inferred from sherds.

sionally the lip is rounded or, rarely, it is flattened and flush with the vessel walls. No thickened, inverted, or everted lips have been noted.

–BASE: Convex, sometimes conoidal; possibly flat, rarely.

–VESSEL SHAPE AND SIZE: Although no complete or reconstructable vessels have been found, the sherds indicate that Bear Creek Plain vessels were characteristically simple bowls and jars with cylindrical to somewhat globular bodies and convex or conoidal bases. There is no evidence for the occurrence of carinated bowls, shouldered vessels, or other complex forms. Occasionally a flat base of sand-tempered paste is found, but the question of whether such sherds are from Bear Creek Plain vessels or from rare sand-tempered vessels with incised decorations has not been answered.

Vessel size could not be determined with complete accuracy, but the curvature of rim sherds indicates that the oral diameter of some vessels fell between 15 and 20 cm. As a rough estimate, based on sherd curvature and size, most of the vessels stood between 10 and 25 cm. high.

DECORATION

None, except for rare lip notching.

DISTRIBUTION

Walter Bell (829); Print Bell (791); Sawmill (484); Wylie Price (313); Runnells No. 2 (185); Runnells No. 1 (126); Jonas Short (100); Etoile (52); Blount (30); Sowell (27); Dubose (20); McElroy (12); Brink Powell (9).

REMARKS

Crack-lacing holes are quite common, usually drilled from the exterior of the vessel but occasionally from both sides.

At the George C. Davis Site, type site for the Alto Focus, 139 sherds of a plain sand-tempered ware were reported in association with Alto Focus Phase I.²⁷ The Davis Site sherds were compared at first hand to those from McGee Bend, and, since they are virtually identical in paste and form, it was readily apparent that all represent the same basic ware. The sharp lip of most McGee Bend specimens was noted in the Davis Site collection, as well as convex and conoidal bases, frequent crack-lacing holes, and—judging from the sherds—comparable vessel shapes and sizes. The only readily noticeable difference is that several of the rim sherds from the Davis Site have notched lips while only one notched rim sherd (from the Print Bell Site) was found at McGee Bend. Also in the Alto Focus Phase I lev-

²⁷ P. Newell and A. D. Krieger. *The George C. Davis Site, Cherokee County, Texas*. *Memoirs of the Society for American Archaeology*, No. 5, Menasha, Wisconsin, 1949

els at the Davis Site were an estimated seven vessels that had sandy paste like Bear Creek Plain, but which occurred in the form of complex vessels with shoulders, everted rims, flat bases, and intricate incised and engraved designs. A few sand-tempered sherds with similar designs found at McGee Bend are not included in the Bear Creek Plain category.

There are certain similarities between Bear Creek Plain pottery of the McGee Bend area and certain types in other regions. In discussing possible affiliations of the sand-tempered pottery at the Davis Site, [Newell and Krieger \[1949, 130\]](#) noted resemblances to Mandeville Plain of the Tchefuncte Culture in the Lower Mississippi area and to types O'Neal Plain and Alexander Incised of the Pickwick Basin area in northern Alabama. Actually, the major point of resemblance to those types lies in the abundant use of sand as a tempering agent, the vessel forms of all three being markedly different from those of Bear Creek Plain. Also, embossing, incising, pinching, and punctating occur on some or all of the three types, traits which are absent from Bear Creek Plain. The possibility that Bear Creek Plain bears some typological relationship to the Mandeville Plain–O'Neal Plain–Alexander Incised group cannot be ruled out, but certainly such a relationship, if it does exist, must reflect indirect or long-range cultural contacts.

There is one type of pottery, however, which is strikingly similar to Bear Creek Plain and which, furthermore, occupies an adjacent geographical position and apparently overlaps the temporal distribution of Bear Creek Plain. This is the Goose Creek Plain type of the Galveston Bay Focus, described by [Wheat²⁸](#) and by [Suhm et al. \[1954, 378-80, Pl. 71\]](#). The Galveston Bay Focus is centered in the coastal plain southwest of McGee Bend and represents a hunting-gathering culture of the Neo-American Stage. Selected sherds of Goose Creek Plain from Galveston Bay Focus sites duplicate the Bear Creek Plain of McGee Bend and the Davis Site in all particulars. The paste is identical in texture, in color, and in the abundant presence of quartzitic sand; the same vessel shapes, distinctive rim profiles, and base forms are present. Crack-lacing holes are likewise frequent. There are three principal differences between Bear Creek Plain and Goose Creek Plain: (1) while Goose Creek Plain usually is sand-tempered to greater or less degree, it also occurs with clay-lump (grog?) temper; (2) a related decorated form, Goose Creek Incised, is found at most, or all, of the Galveston Bay Focus sites. Vessel shapes and sized of Goose Creek Incised are identical to those of Goose Creek Plain, but the upper part of the rim bears from one to six narrow, horizontal, closely-spaced, incised lines, or, occasionally, incised patterns made up of hachured, cross-hatched, punctated, or ticked

²⁸ J. B. Wheat. *River Basin Surveys Papers, No. 4: Archeological Survey of the Addicks Dam Basin, Southeast Texas*. Bureau of American Ethnology Bulletin 154, Washington D.C., 1953

lines, or of various combinations of those decorative techniques; (2) lip notching is common in the Galveston Bay Focus, both on Goose Creek Plain and on Goose Creek incised vessels, but is extremely rare for Bear Creek Plain.

Wheat [1953, 194-195] has observed that there is stratigraphic evidence in sites at Addicks Reservoir to support the hypothesis that sand tempering is earlier than clay tempering in the Galveston Bay Focus. His estimate beginning date for the focus is A.D 600 to 700, the estimate being based largely on the apparent association, in early Galveston Bay deposits at the Kobs Site, of five sherds from a single vessel identified as Tchefuncte Stamped of the Lower Mississippi area [Wheat, 1953, 193, 244]. Since sherds of Goose Creek Plain and Goose Creek Incised have been found in protohistoric and historic sites of the Rockport Focus (a coastal complex adjoining the Galveston Bay Focus area on the west), it appears likely that the Galveston Bay Focus survived until the early historic period, perhaps until the 17th century (Wheat [1953, 244] and Suhm et al. [1954, 130]). No historic trade material, however, has been reported to date from components of the Galveston Bay Focus itself.

Both Bear Creek Plain and the Goose Creek series are probably representatives of the same basic ware, a ware which may also include the plain, incised, and asphalt-decorated pottery of the Rockport Focus. Examination of collections on file at The University of Texas reveals a distribution of this basic kind of pottery extending from the vicinity of Galveston Bay inland at least as far north as Cherokee County. It occurs as far east as the Sabine River (and probably continues for some distance eastward of that stream), and, to the west, it extends to the drainage of the lower Brazos River. Chronologically a rather lengthy tenure is indicated, from Phase I, Alto Focus—or possibly from Tchefuncte times—to the protohistoric period. The present evidence suggests that the heavily sand-tempered forms of this basic ware, including Bear Creek Plain, occupy a relatively early position in its history.

Decorated Sand-Tempered Pottery (Figure 66)

Several sherds with sandy paste like that of Bear Creek Plain have incised lines and/or punctations on their exterior surfaces. They are too small to permit reconstruction of the complete designs. Similar sherds and one reconstructable vessel have been reported from the George C. Davis Site, where they were found in the same levels with Alto Focus types, especially Phase 1 levels [Newell and Krieger, 1949, 130-131, Fig. 49, A-A'].

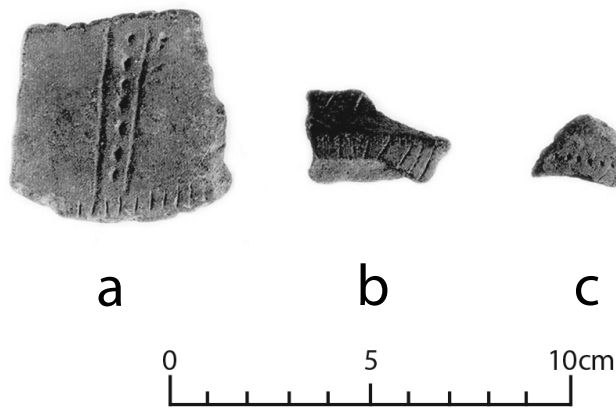


Figure 66: Sand-tempered decorated pottery.

DISTRIBUTION: Runnells No. 1 (5); Print Bell (4); Jonas Short (2).

Clay-Tempered Ware

This ware is characterized by the clayey quality of its paste and by the usual presence of small clay lumps which are probably, in most cases, bits of grog (crushed potsherds). Some sherds also have crushed bone or varying quantities of sand as additional tempering agents.

Techniques of decoration include incising, punctating, brushing, engraving, and (rarely) appliquing. Some vessels were evidently decorated entirely by a single technique, but in many cases two—or even three—techniques were combined in decorating the same vessel. Engraving is the only technique that does not occur in combination with any other technique on the same vessel.

Vessel forms include jars, bowls, and ollas. The long-necked bottle is very rare. Carinated bowls, generally with engraved designs on their rims, are present but are not common; other bowls are hemispherical or shallow and round. Jar walls may recurve gently so that the rim slants outward, or they may have a vertical to outwardly slanting rim that is set at a definite angle to a more or less barrel-shaped body. Apparently the bases of all these forms are ordinarily flat and round.

While there is general similarity to Caddoan Area pottery (the previously defined complexes of the Caddoan Area begin just north of McGee Bend Reservoir), less than a hundred sherds were identified as Caddoan types; perhaps most of them were traded into the region from the north.

Two kinds of clay-tempered, decorated, locally-made pottery not previously recognized are defined here for the first time under the type names Pineland Punctated-Incised and Broaddus Brushed.

Pineland Punctated-Incised

METHOD OF MANUFACTURE

Coiling.

PASTE

–TEMPER: Usually both clay lumps (grog?) and sand are present, with considerable variation in the relative proportions of the two. At all sites investigated crushed bone was present as an additional tempering agent in one-quarter to one-half of the sherds.

–COLOR: Surface colors vary from creams to dark browns and grays, ranging to black. Dark colors predominate. Cores are frequently black or darker than exteriors, but a few sherds with light surfaces have oxidized, light colored cores.

–SURFACE FINISH: The exterior surface was usually smoothed lightly before the decoration was applied; rarely, there was additional smoothing over the decoration. The interior surface was smoothed.

FORM

–WALL THICKNESS: 4 to 10 mm., most sherds being in the 6 to 9 mm. range.

–LIP: Flattened or rounded. The lip is usually thinned somewhat (generally from the inside), but on specimens with flattened lips, the lip is often squared across the full width of the vessel wall.

–BASE: Bases are usually (perhaps always) disk-shaped.

–VESSEL SHAPE AND SIZE: Pineland occurs primarily in the form of beaker-shaped jars with mildly out-curving rims (Figure 29 a, c, e, f). A few sherds from ollas with short, broad, tapering necks are also known (Figure 29 d) as well as small, deep bowls with convex walls (Figure 29 g). The beaker-shaped jar, however, is the most distinctive form of the type. An almost complete jar from the Etoile Site (Figure 29 f) is 14.7 cm. tall and has an oral diameter of 12.1 cm.

By projecting the curvature of rimsherds, it can be estimated that most jars were between 12 and 20 cm. in oral diameter. Examination of sherds and one partial reconstruction indicates that the ollas stood 15 to 30 cm. high with a maximum diameter of perhaps 15 to 25 cm.; oral diameters ran between 5 and 8 cm., and the short necks were 3 to 5 cm. long.

DECORATION

–TREATMENT: Incising and punctating.

–DESIGN: Jars are usually decorated in the rim area by both incising and punctating. Designs are made up of punctation-filled elements (typically outlined by incised lines) and/or of elements filled with parallel, or concentric, incised lines. The designs themselves feature triangular, rectangular, and curvilinear elements combined to form various patterns. Some of the most characteristic designs are shown in Figure 29. The punctations of Pineland are, in all instances, of the instrument varieties, fingernail punctations being completely absent.

DISTRIBUTION

Sawmill (300); Walter Bell (203); Etoile (176); Blount (121); Wylie Price (73); McElroy (54); Print Bell (40); Brink Powell (6); Sowell (3); Runnells No. 1 (1); Jonas Short (1).

REMARKS

Similarities between some varieties of Pineland Punctated-Incised and certain pottery types that have been recognized in the Caddoan Area are quite obvious. The typical beaker-shaped jar, for example, is similar in shape to many examples of Gibson Aspect types Canton Incised, Dunkin Incised, and Weches Fingernail Impressed (see, for example, [Suhm and Jelks \[1962, Pl. 12 D, E, H; Pl. 19 A, C; Pl. 77 B, G\]](#) as well as to Fulton Aspect types Bullard Brushed and Maydelle Incised [[Suhm and Jelks, 1962, Pl. 11 A-D; Pl. 52 D, E](#)]. The designs that go with Pineland, however, are distinct from those of all the Caddoan types listed above except that some Pineland vessels have a design of triangular panels that is close to the design on many examples of Canton incised. In fact, some vessels of Canton are remarkably similar, both in form and in decoration, to some of the Pineland vessels with triangular-panel designs. (Compare, for example, Figure 29 e, herein to [Suhm and Jelks \[1962, Pl. 12 D, H\]](#)). Nevertheless, a representative sample of Pineland, with its many curvilinear and rectilinear designs, could never be confused with Canton.

Many of the Pineland designs are similar to designs on Crockett Curvilinear Incised and Pennington Punctated-Incised of the Alto Focus (Newell and Krieger [1949, 99-108, Figs 35-39] and Suhm and Jelks [1962, 31-32, 121, Pls. 16, 78, 61]). The vessel shapes of Crockett and Pennington, however, are quite different from those of Pineland; furthermore, the incising and punctating of Pineland were done in a careless manner in contrast to the neatly executed patterns characteristic of Pennington and Crockett.

Broaddus Brushed (Figure 26 a-b)

METHOD OF MANUFACTURE

Coiling.

PASTE

–TEMPER: Same as Pineland Punctated-Incised.

–COLOR: Same as Pineland Punctated-Incised.

–SURFACE FINISH: The entire vessel exterior is usually roughened by brushing except for the base and the extreme lower part of the body. The interior surface is smoothed.

FORM

–WALL THICKNESS: 4 to 10 mm., most sherds falling in the 6 to 8 mm. range.

–LIP: Lips are usually rounded and are either flush with the rim or bent outward. Occasionally they are flattened.

–BASE: Bases are disk-shaped in most, or possibly, all cases.

–VESSEL SHAPE AND SIZE: Broaddus Brushed seems to occur exclusively as jars with prominent, weakly everted rims that either curve gently into the body or meet it at a slight angle. Bodies bulge somewhat so that the maximum diameter is approximately the same as the oral diameter. Rim profiles curve outward mildly to moderately on some specimens. Size is hard to estimate with accuracy because only two complete vessels have been found, both small jars (Figure 26 a-b). One is 9.7 cm. high, has a maximum body diameter of 9.2 cm., and has an oral diameter of 9 cm.; the other measures 5.6, 7.7, and

7 cm. in the same respective dimensions. They are clearly much smaller than most vessels represented by the Broaddus Brushed sherds. It was possible to determine some oral diameters approximately by projecting rim sherd arcs into complete circles. Results indicate that the average jar mouth was between 15 and 20 cm. wide. The probable height range was from 10 to as much as 25 or 30 cm., with an average near 20 cm. Thus Broaddus Brushed vessels were relatively large, holding up to two gallons of more.

DECORATION

–TREATMENT: Brushing; punctating.

–DESIGNS: In an overwhelming majority of cases the rims are brushed horizontally and the bodies are brushed vertically. Sometimes the "brushing" on the body consists of closely-spaced, but separate, lines made with the frayed end of a stick (Figure 26 a-b). Technically this treatment might be classed as incising, but it created the effect of brushing nonetheless. Rarely there is diagonal brushing on the rim or the body. The line of demarcation between horizontal brushing on the rim and the vertical brushing on the body is often accentuated by a row of punctations encircling the neck. There is frequently another row of punctations around the top of the rim, and sometimes there is a third row encircling the middle of the rim. Although rows of punctations are not uncommon, a large majority of rims were brushed only.

DISTRIBUTION

Walter Bell (2,112); Etoile (1,174); Sawmill (955); Wylie Price (570); Blount (332); McElroy (325); Brink Powell (104); Print Bell (53); Sowell (11).

REMARKS

Since only two complete vessels have been found, it has been necessary to reconstruct this type almost entirely from the approximately 6,000 brushed sherds recovered from the McGee Bend sites. By examining body sherds that had broken along coil lines, it was determined that the bodies were generally brushed vertically. A number of sherds also retained portions of both rim and body, showing how both areas were treated.

A series of typologically related utility vessels occurs over a large part of the Fulton Aspect area. The series comprises medium-to large-sized jars with bodies roughened by brushing or incising and rims that are brushed, incised, corrugated, pinched, or punctated.

Applique lugs and/or strap handles are present on some forms. In addition to Broaddus Brushed, recognized types included in this broad category are Bullard Brushed [Suhm and Jelks, 1962, 21, Pl. 11], Karnack Brushed-Incised [Suhm and Jelks, 1962, 85, Pl. 43], and Pease Brushed-incised [Suhm and Jelks, 1962, 87, Pl. 44]. In one form or another, representatives of this group are commonly associated with components of the Frankston, Titus, Belcher, and/or Bossier foci. Since Broaddus Brushed shares some characteristics of form and decoration with each of those types, it is of some importance to point out specifically how Broaddus Brushed differs from them.

Broaddus Brushed differs from Bullard Brushed in these respects: (1) most Bullard rims have pinched, punctated, or incised decoration instead of brushing; (2) the rim decoration, however applied, of Bullard is almost always vertically oriented; (3) Bullard frequently has lugs and strap handles, elements, which are absent on Broaddus Brushed; (4) vertical brushing from lip to base is common for Bullard, but vertical brushing does not occur at all on rims of Broaddus vessels.

There are broad similarities in the general design of Broaddus Brushed and Karnack Brushed-Incised and they are virtually identical in paste characteristics. Nevertheless, the following significant differences are noted: (1) the body shape of Karnack tends to be more globular than that of Broaddus, is more constricted in the upper part of the body, and approaches the drop-like shape of Belcher Ridged; (2) the rim of Karnack is quite different from that of Broaddus, being extremely narrow and turned out at quite a sharp angle from the vessel wall; (3) vertical incised or stamped lines are the most common rim decoration on Karnack, while those techniques do not appear on Broaddus.

Some specimens of Pease Brushed-Incised have horizontally brushed rims with one, two, or three rows of punctations; these are identical to the punctated Broaddus Brushed rims. However, Broaddus as a type is clearly distinguishable from Pease because: (1) most Broaddus rims do not have punctations, whereas Pease rims almost always do; (2) Broaddus bodies are not divided into panels like those of Pease. Pease and Broaddus are closely related types anyhow, the vessel shapes being almost identical. In fact, many sherds of Pease and Broaddus from both rim and body could not be identified as to type if examined individually out of context.

Miscellaneous Incised Pottery (Figures 26 c-e; g)

Incising was one of the most popular techniques of applying decorations in the clay-tempered series. Two small incised jars from Burial 1

at the Wylie Price Site have vertical, parallel lines covering the entire body (Figure 26 c, e). Another incised vessel (Figure 26 d) was found in Burial 3 at the Walter Bell Site.

Some of the smaller incised sherds are probably from Pineland Punctated-Incised vessels, the sherds bearing by chance part of the incising, but none of the punctating, that made up the complete decoration. However, some of the incised sherds are large enough to indicate that their original decorations were different from those of Pineland. Study of the sherds indicated that most of the incised vessels had combinations of parallel lines or cross-hatching, usually on the rim of the vessel.

DISTRIBUTION: Walter Bell (1,740); Sawmill (939); McElroy (497); Print Bell (337); Etoile (316); Blount (255); Wylie Price (119); Brink Powell (43); Jonas Short (35); Sowell (29); Runnells no. 1 (6); Runnells No. 2(3); Dubose (1).

Miscellaneous Engraved Pottery (Figure 26 h-m)

The engraved pottery is of characteristic clay-tempered paste, with surface colors ranging from dark grays and browns to light reds and creams. Occasionally the surface is coated with a light-hued tan or reddish film. The only complete or reconstructable vessels are a short-necked bottle from Burial 5 at Walter Bell Site (Figure 26 j), the body of what appears originally to have been some form of bottle from Burial 2 at the Wylie Price Site (Figure 26 k), and a small bottle found at the Etoile Site by a local collector (Figure 26 l-m). Sherds indicate that carinated bowls, small cylindrical beakers, and ollas were some of the most common vessel forms that were decorated by engraving.

Design elements include hachured and cross-hatched bands; interlocking scrolls; fat, S-shaped, negative scrolls; cross-hatched-filled circles; and circles with a single dot in the middle. These occur in various combinations on the sherds, but, because of the paucity of complete or reconstructable vessels, the over-all designs are not known.

Webb [1948] illustrates several sherds with engraved designs resembling some of those at McGee Bend. These are from the Smithport Landing Site near Mansfield, Louisiana, a site of Alto Focus affiliation, and they are identified as specimens of the Carmel Engraved type.

DISTRIBUTION: Sawmill (425); Etoile (378); Walter Bell (200); McElroy (166); Wylie Price (152); Blount (113); Print Bell (61); Brink Powell (7); Jonas Short (6).

Miscellaneous Punctated Pottery

One of the more popular techniques of ceramic decoration at McGee Bend is punctating. In addition to sherds of the Pineland Punctated-Incised type, which has punctating as one technique of decoration, there are many punctated sherds of clay-tempered paste that do not fit any recognized type.

Two basic categories of punctation are distinguished: (1) those made with the fingernails and (2) those made with small sticks, canes, or similar instruments. Fingernail punctations made in several different ways appear on both body and rim portions of vessels, and they occur predominately—perhaps entirely—as free punctations (that is, they are not patterned in panels or zones). Punctations arranged into zoned patterns, on the other hand, were almost invariably made by punching the plastic surface of the vessel with the tip of a stick-like instrument. Instruments with different shaped tips produced punctations of different kinds, and additional variations were achieved by varying the angle at which the instrument was held. Variations in fingernail punctations were produced by mounding the clay on either the concave or the convex side of the fingernail. Examples of characteristic instrument and fingernail punctations are illustrated in Figure 67.

Free (usually fingernail) punctations have been reported by [Newell and Krieger \[1949, 108-110\]](#) at the Davis Site, mostly in Phase 2 of the Alto Focus. In the Lower Mississippi area, free punctations appear as an over-all surface treatment in types Evansville Punctated and Parkin Punctated [[Ford et al., 1951, 90-91, 110-114](#)], but the vessel shapes of those two related types are different from the free punctated forms both at McGee Bend and at the Davis Site. Included here within the fingernail-punctated category are designs made by pinching the plastic clay between the nails of the thumb and forefinger (Figure 67 e, g).

Comparison with specimens stored at the Texas Archeological Research Center, The University of Texas, revealed that most forms of instrument punctations found at McGee Bend are fairly common in components of the Texarkana, Titus, Frankston, Bossier, and Belcher foci, usually in combination with brushing or incising, and most frequently confined to the rim. Instrument punctations also occur on several types affiliated with the Alto and Haley foci, generally in combination with incising. In the Lower Mississippi Valley, in-

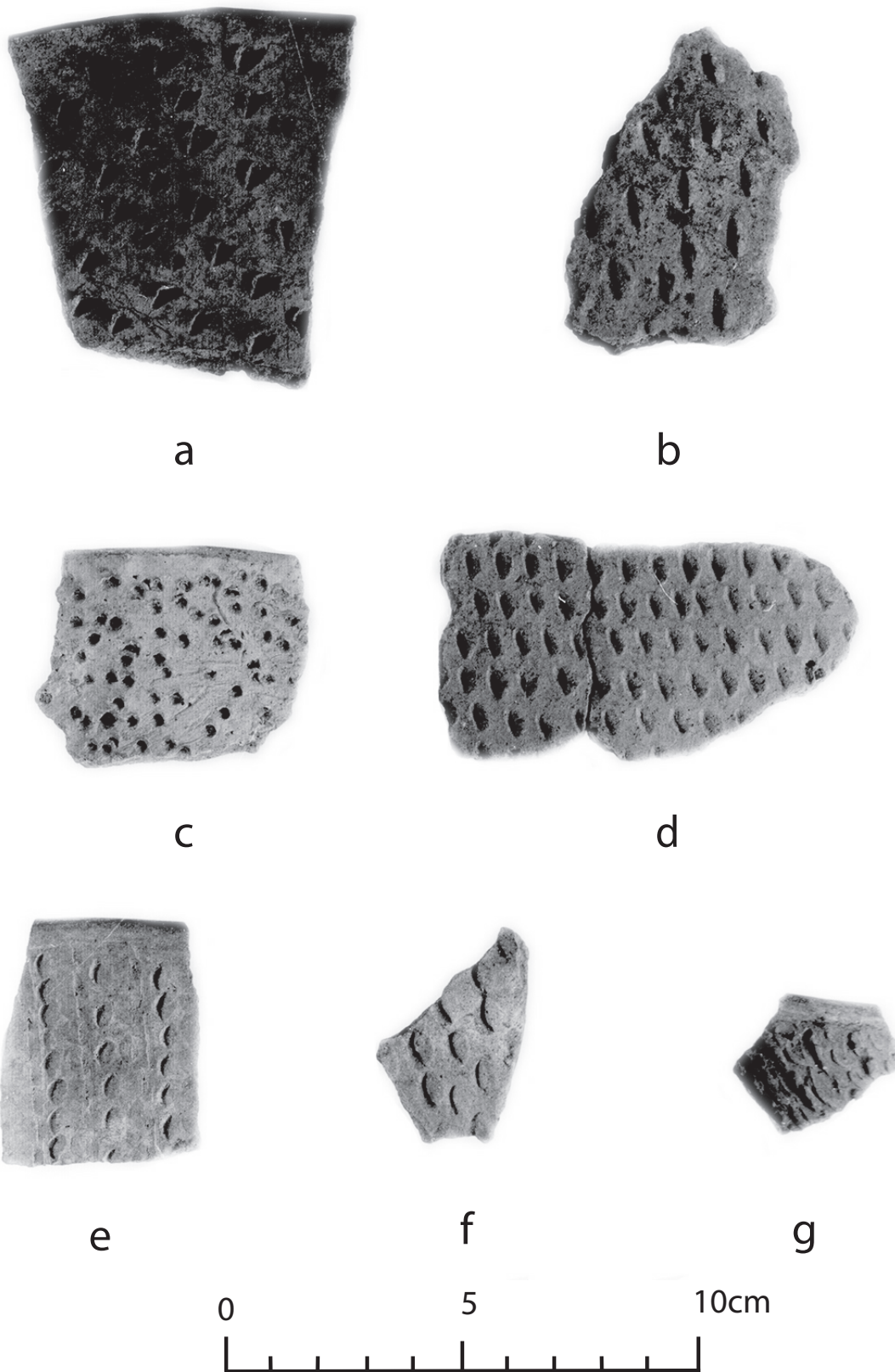


Figure 67: Miscellaneous punctated potsherds.

strument punctating is common in a number of types, both in the Baytown and in the Mississippi periods.²⁹

Because the punctating techniques employed at McGee Bend are of such widespread distribution, it would be difficult to prove a specific relationship with any of the punctated ceramics of nearby complexes. In general, however, it can be said that the free punctating is perhaps most similar to that of the Alto Focus, while the instrument punctating appears, by and large, closest to Fulton Aspect treatment.

DISTRIBUTION Sawmill (101); Wylie Price (82); Walter Bell (71); Etoile (70); Jonas Short (21); McElroy (10); Print Bell (9); Brink Powell (9); Blount (4); Dubose (3); Sowell (1).

Miscellaneous Decorated Pottery (Figure 28 a-c)

This is a residual category that compromises the pottery decorated with various combinations of incising, punctating, and brushing which does not fit any recognized types, as well as a few unusual applied and corrugated sherds. One vessel from general digging at the Etoile Site with brushed, punctated, and applied decoration (Figure 28 a) has been reconstructed, and a carinated bowl from Burial 5 at the Walter Bell Site has a fingernail-punctated rim and a brushed body (Figure 28 c).

DISTRIBUTION: Sawmill (101); Wylie Price (82); Walter Bell (71); Etoile (70); Jonas Short (21); McElroy (10); Print Bell (9); Brink Powell (9); Blount (4); Dubose (3); Sowell (1).

Miscellaneous Plain Pottery (Figure 28 e-j)

Most of the clay-tempered sherds are plain. This is not surprising in view of the fact that—except for the Broadus Brushed type—the designs on most decorated vessels were confined to the rim area, leaving considerably more than half the total vessel surface undecorated. Also, there are six complete or restored vessels that are wholly plain (Figure 28 e-j), as well as numerous plain rim sherds that seem to have come from plain vessels, the forms duplicating, by and large, those of the common decorated types.

DISTRIBUTION: Sawmill (5,241); Walter Bell (4,686); Etoile (2,014); Blount (1,892); Print Bell (951); McElroy (908); Wylie Price (877); Sowell (312); Brink Powell (154); Jonas Short (132); Runnells No. 1 (30); Runnells No. 2 (28); Dubose (2).

²⁹ J. Ford, P. Phillips, and J. B. Griffen. *Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940-1947*. Peabody Museum Papers, vol. 60, Harvard University, 1951

Shell-Tempered Ware

Shell-tempered pottery is very scarce at McGee Bend, only one vessel (Figure 44) and 28 sherds having been found. The vessel, from Burial 2 at the Wylie Price Site, is a jar with a globular body, a convex base, and a narrow, vertical rim bearing a rectilinear, punctated-incised design. The lip turns outward very sharply. This vessel is not of a recognized type.

Most of the shell-tempered sherds are thin. In many instances the particles of shell have leached out, leaving the paste light and soft. Most sherds are plain, but some have incised lines on them. They are too small, however, to permit accurate reconstruction of the original designs.

DISTRIBUTION

Print Bell (7); Etoile (12); McElroy (4); Blount (3); Sowell (2).

Trade Pottery

Three vessels and several sherds are identified as types or forms that belong to ceramic traditions of nearby areas rather than to the tradition of the McGee Bend region itself. They are therefore classed as trade pottery. The three vessels—all from Burial 3 at the Walter Bell Site—are presumably of Belcher Focus affiliation: one Glassell Engraved bowl (Figure 28 d) and two jars (Figure 26 g) that resemble Belcher Ridged. Other specimens of Caddoan Area types are two sherds of Holly Fine Engraved (Figure 68 a-b) and three of Weches Fingernail Impressed (Figure 68 c-d) from the Jonas Short Site; 48 sherds of Dunkin Incised (Figure 68 e-f), of which 45 sherds are from the Walter Bell Site and 3 from the Sowell Site; 13 Belcher Ridged sherds (Figure 69 c-e), 8 from Walter Bell, 4 from Brink Powell, and 1 from McElroy; and seven sherds from Walter Bell that are probably Davis Incised.

Seven rim sherds of Goose Creek Incised (Figure 69 a-b) probably originated in the Galveston bay Focus area in the coastal region to the southwest of McGee Bend. Three vessels are represented, one having a single faint, horizontal line just below the lip, the other two having several horizontal, equally-spaced lines on the rim. These sherds are quite thin (between 3 and 5 mm.), a characteristic attribute of much of the Galveston Bay Focus pottery. Four of the Goose Creek Incised sherds are from the Sawmill Site; three are from the Print Bell Site.

A few sherds are of styles native to the Lower Mississippi Area to the east. Included are six sherds with rocker-stamped or dentate-stamped designs (4 from Sawmill, 2 from Print Bell) that unquestionably are of Marksville or Troyville provenience (Figure 70 a, c), and

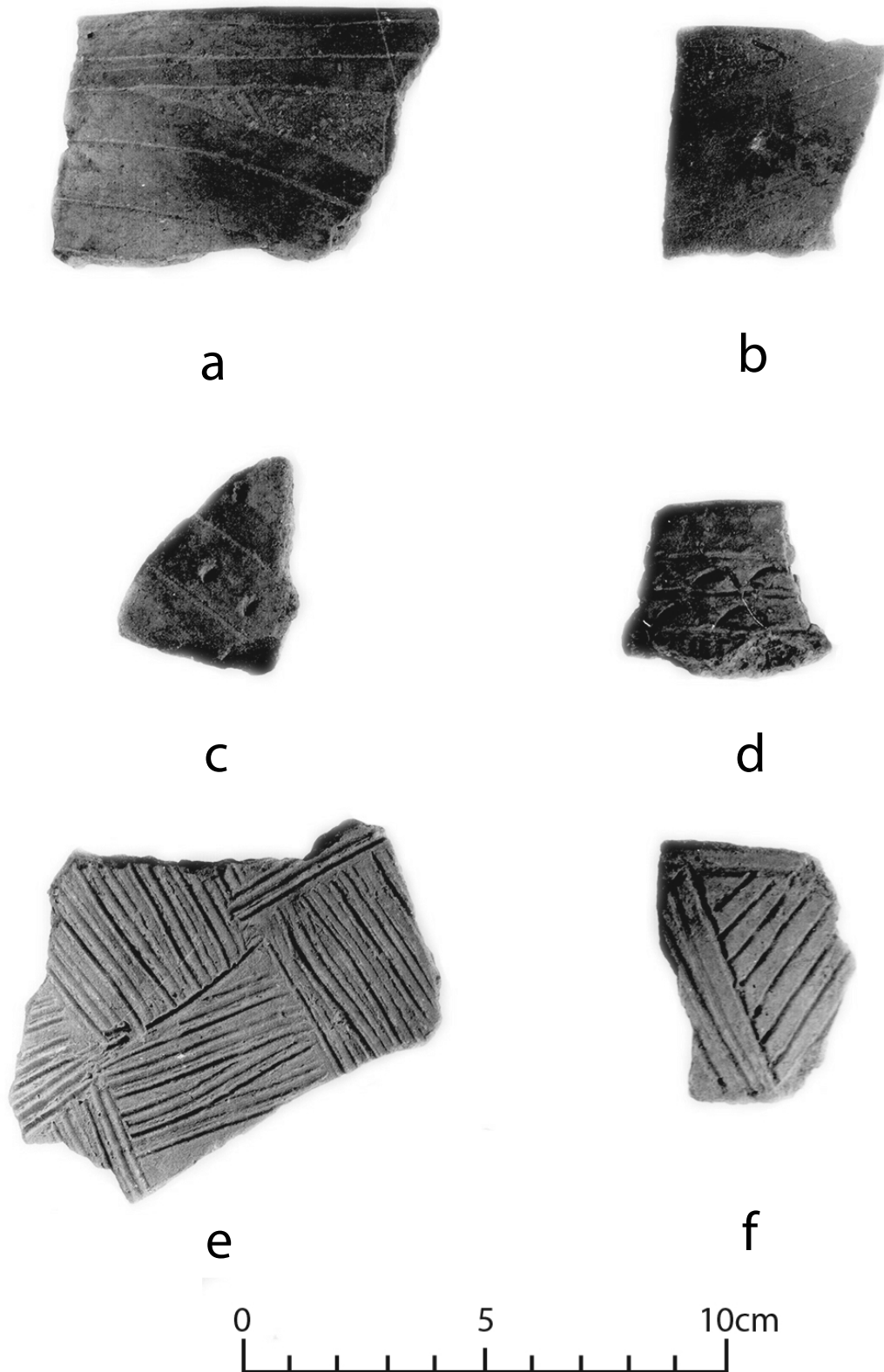


Figure 68: a-b, Holly Fine Engraved; c-d, Weches Fingernail Impressed; e-f, Dunkin Incised.

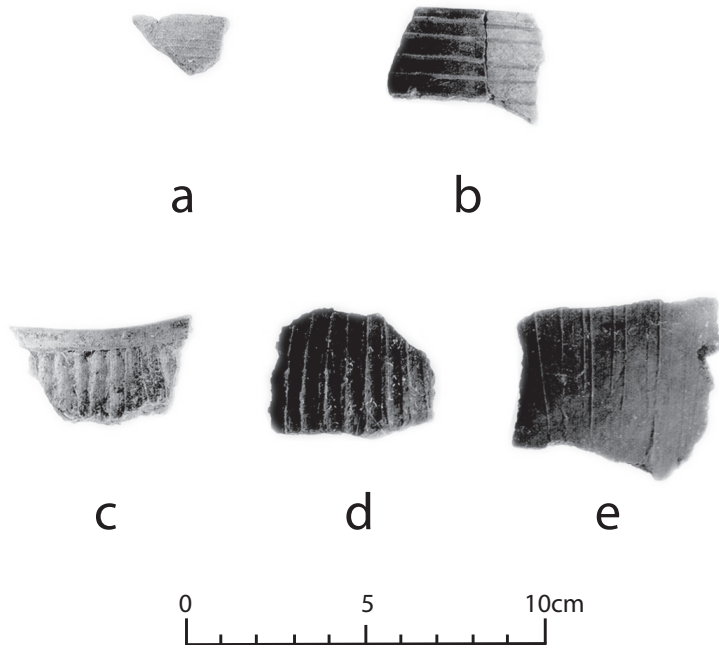


Figure 69: Potsherds. a-b, Goose Creek Incised; c-e, Belcher Ridged.

seven sherds (6 from Runnells No. 1, the other from Jonas Short) that are tentatively identified as Coles Creek Incised (Figure 70 b, d-f). Some of the latter have overhanging lines, a feature usually considered diagnostic of the Coles Creek Incised type.

Miscellaneous Ceramic Objects

A teardrop-shaped object of fired clay (Figure 71 c) found at the Print Bell Site is perforated at the small end and was evidently used as a bead or small pendant. The paste is similar to that of the clay-tempered pottery. It is 2.3 cm. long and its maximum diameter is 2.2 cm.

Three small fragments of fired clay from the Blount Site seem to be parts of appendages, probably from effigy vessels. They are not large enough, however, to permit description of the vessels from which they came. In paste characteristics they resemble the clay-tempered ware.

At the Sawmill Site were found three segments of fired-clay cylinders that appear to have been formed by rolling pieces of plastic clay between the hands as in preparing a coil for pottery manufacture. They range from 2.1 to 2.9 cm. in length and have diameters of 1.1, 1.4, and 1.7 cm. respectively.

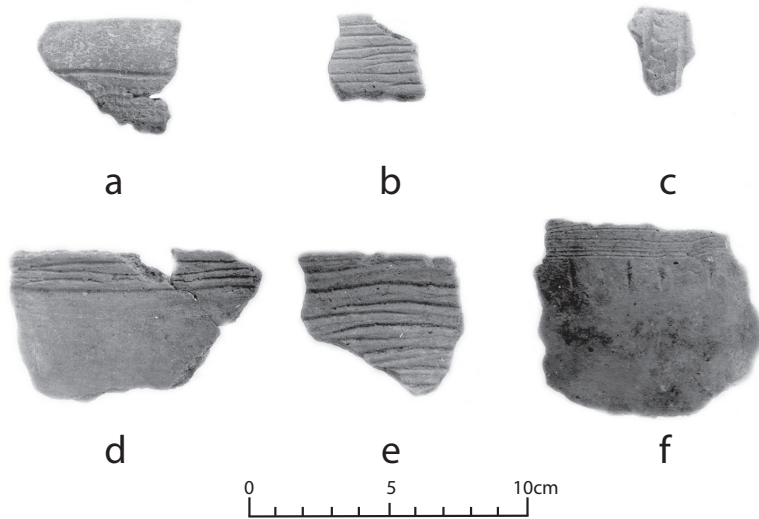


Figure 70: Lower Mississippi Area trade pottery. a, dentate stamped; b, d-f, Coles Creek Incised; c, rocker stamped.

Clay Pipes

Clay pipe fragments were found at several of the sites. Two basic forms are represented: (1) long-stemmed pipes with small, thin-walled bowls, a form usually considered to be of Gibson Aspect affinity [Krieger, 1946, 215], and (2) short-stemmed elbow pipes of a general style that, in the Caddoan Area, is usually ascribed to foci of the Fulton Aspect. A reconstruction of the long-stemmed form is shown in Figure 71 a; a complete elbow pipe is illustrated in Figure 71 b.

DISTRIBUTION: Long-stem–Sawmill (18); Blount (7), Etoile (2); Wylie Price (2); McElroy (2); elbow–Sawmill (4); Etoile (4); Walter Bell (3); Print Bell (3); Wylie Price (2); Blount (1); McElroy (1).

Chipped Stone Artifacts

The main local resources employed by the peoples of the McGee Bend area for the manufacture of chipped stone implements are petrified wood and chert, the latter occurring in various hues of brown, red, and yellow. Most of the petrified wood tends to cleave into thin, flat strips and is rather crumbly and poorly adapted to chipping. Some, however, is heavily silicified and may be chipped to a sharp, durable edge. The local cherts are usually fine-textured and quite suitable for chipped artifacts, but their use was restricted to small implements because the chert pebbles are seldom more than two or three inches in maximum diameter. Most of the better

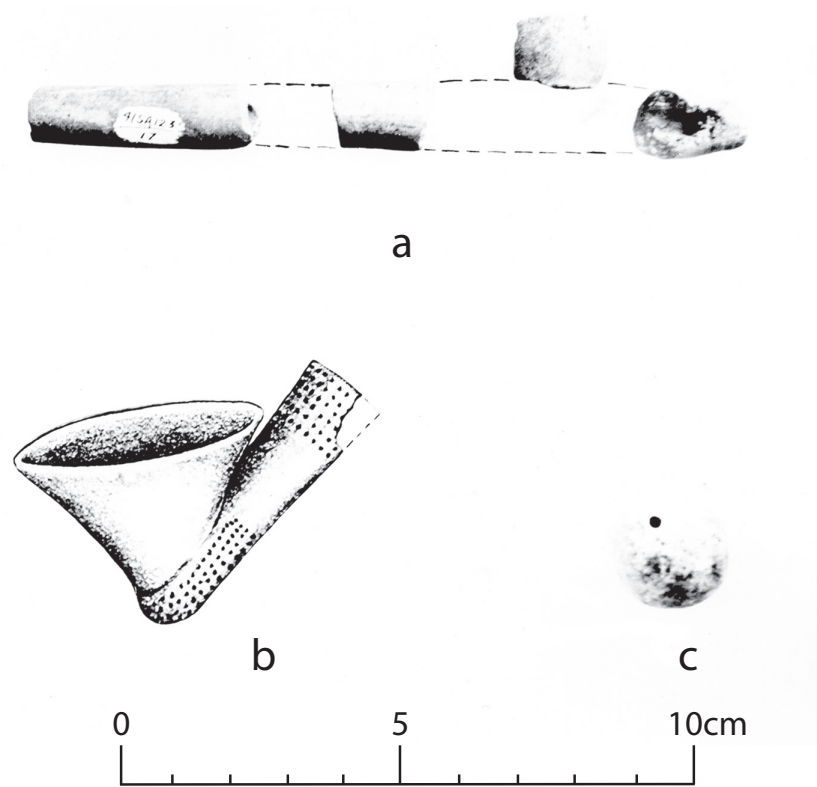


Figure 71: Ceramic objects. a, long stem pipe; b, elbow pipe; c, bead.

made projectile points and other chipped stone implements were made from the cherts, but an occasional well-chipped specimen is of heavily silicified wood. The cruder implements are often of poor quality petrified wood.

Rarely, dart points and other kinds of artifacts were chipped from a distinctive kind of sandstone composed of transparent grains of quartz cemented together with a white substance. Some artifacts made of this material are so friable that they could be quickly disintegrated by rubbing them between the fingers; others, in contrast, are firm and hard.

Dart Points

Gary Type (48 specimens, Figure 19 a-g)

The Gary points from McGee Bend conform to the standard descriptions of the type (Newell and Krieger [1949, 164-165, Fig. 57], Bell [1958, 28, Pl. 14] and Suhm and Jelks [1962, 197, Pl. 99]), with the small varieties predominating. The range of size and form may be seen in the illustrations.

DISTRIBUTION: Sawmill (13); Print Bell (12); Runnells No. 2 (5); Etoile (4); Jonas Short (4); Wylie Price (3); Walter Bell (3); Sowell (3); Runnells No. 1 (1).

Kent Type (191 specimens, Figure 19 h-n)

This is one of the most numerous of the dart point types found in the McGee Bend area. Although in general the present sample fits the type definition of Suhm and Jelks [1962, 199, Pl. 100] quite well, that definition is here extended slightly in order to fit the full range of the sample. Specifically, the size range is enlarged and somewhat greater variation in form is included within the type limits.

–DIMENSION: Length, 2.8 to 10.2 cm.; maximum width (at the shoulders), 1.8 to 3.7 cm.; maximum thickness, 0.5 to 1.5 cm.

–BLADE: Triangular, with straight, mildly convex or (very rarely) slightly concave edges; sometimes asymmetrical. Shoulders vary from weak and sloping to prominent and squared; occasionally they are weakly barbed.

–STEM: Stems are all approximately parallel-sided, although some are slightly expanding or contracting. Many specimens are crudely

chipped, and sometimes it is difficult to decide whether mild contraction or expansion of the stem was intentional on the part of the knapper, or whether such variation is a function of refractory material or indifferent craftsmanship. In any case, no dart points with conspicuously expanding or contracting stems are included within the Kent type here. Bases are straight or convex. Stem length is 0.6 to 1.6 cm.; maximum stem width is 1.0 to 2.1 cm.

–DISTRIBUTION: Sawmill (84); Runnells No. 2 (34); Wylie Price (20); Print Bell (18); Walter Bell (11); Jonas Short (11); Runnells No. 1 (7); Sowell (2); Brink Powell (2); Blount (1).

–REFERENCES: [Tunnell \[1961b, 127-128, Fig. 2\]](#); [Suhm and Jelks \[1962, 199, Pl. 100\]](#); [Bell \[1960, 60, Pl. 30\]](#).

–REMARKS: Tunnell's Type I dart points [[Tunnell, 1961b, 127-28, Fig. 2](#)] are included here in the Kent type except for those specimens that have moderately to strongly expanding stems. The latter are classed with the expanding stem dart point group, described below. In his report on the Wolfshead Site, [Duffield \[1963, 97, Fig. 6 K-M\]](#) described a group of dart points under the designation "corner-notched points with convex bases" which are included within the Kent type in this report. Some of the dart points illustrated by [Wheat \[1953, Pls. 36-40, various specimens\]](#) in his study of Addicks Reservoir archeology probably fall within the limits of Kent as here defined, as do points from the Kent-Crane Site.

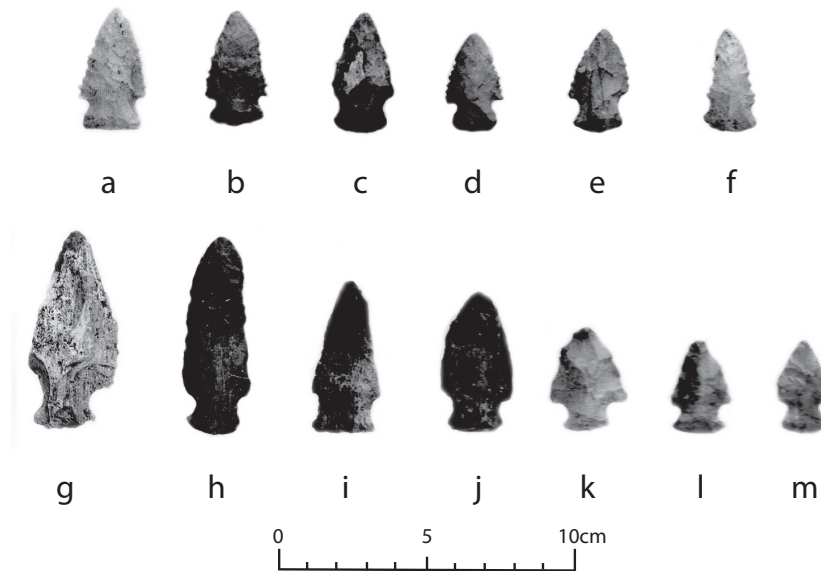
Neches River Type (24 specimens, Figure 72 a-f)

This is a new provisional type not previously described in print. The type was recognized and named by D.T Kent, Jr., of Kirbyville, Texas, who has written a type description—based on extensive collections from eastern Texas—that is awaiting publication at the present time. The description presented here is based entirely on the sample from salvage excavations at McGee Bend. Kent's description will amplify the one that follows.

–DIMENSIONS: Length, 3.2 to 4.6 cm., maximum width (at the shoulders on some specimens, at the base on other), 1.8 to 2.5 cm.; thickness, 0.6 to 1.0 cm.

–BLADE: Triangular, with straight to slightly convex edges that frequently have steep bifacial beveling. Occasionally a specimen is alternately beveled unifacially at approximately right angles to the long

Figure 72: Dart points. a-f, Neches River; g-m, Form X.



axis of the point. The blade edges are commonly serrated at the proximal end for about one-half to two-thirds the length of the blade, and the tip of the blade is usually well-rounded—or sometimes chipped straight across like a chisel bit—rather than pointed. Specimens with pointed tips do occur, however. Long, narrow, very delicate flake scars are a characteristic feature.

–STEM: Strongly expanding, with straight or convex base. The edges of the stem usually are lightly smoothed down the sides and across the base. The basal corners of most specimens are rounded. Stem dimensions are length, 0.8 to 1.1 cm.; maximum width, 1.3 to 2.3 cm.

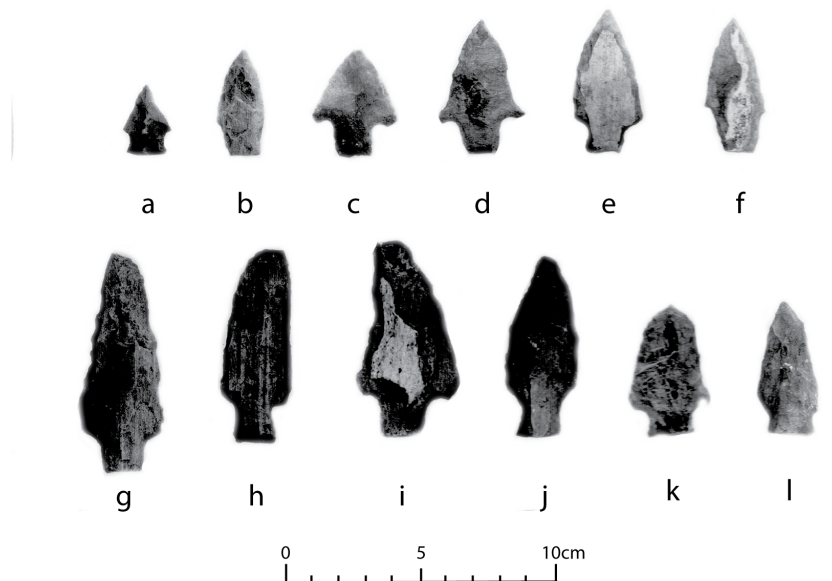
–DISTRIBUTION: Wylie Price (17); Print Bell (2); Blount (2); Brink Powell (1); Sawmill (1); Walter Bell (1).

–REFERENCES: None.

Woden Type (81 specimens, Figure 73)

This kind of dart point had not been recognized as a type before the McGee Bend excavations. Its most distinctive characteristics is a flat, unworked base.

Figure 73: Dart points. Woden.



–DIMENSIONS: Length, 2.5 to 8.3 cm.; width, 1.5 to 3.9 cm.; thickness, 0.3 to 1.2 cm.

–BLADE: Length, with straight, convex, or (very rarely) recurved edges; sometimes asymmetrical. Shoulders may be rounded or squared, and occasionally there are pointed shoulders that project laterally. But there are no truly barbed shoulders (that is, shoulders with sharp points projecting downward toward the base).

–STEM: Approximately rectangular, moderately contracting, or (occasionally) weakly expanding. The most conspicuous attribute of the stem—and the most diagnostic criterion for identifying the type—is the flat, often thick, unworked base. In most cases, the bases are flat striking platforms where cores were struck in producing the flakes from which the points were fashioned. Prepared striking platforms evidently were seldom if ever used, so that a base usually consists of a patch of nodular cortex from the weathered surface of the chert pebble or piece of petrified wood that served as a core. Stem dimensions are: length, 0.8 to 1.8 cm.; maximum width, 1.0 to 2.2 cm.; maximum thickness (ordinarily at the base), 3 to 9 mm.

–DISTRIBUTION: Sawmill (21); Wiley Price (19); Print Bell (11); Runnels No. 2 (8); Etoile (9); Jonas Short (6); Runnels No. 1 (2); Sowell (2); Walter Bell (1); Blount (1); Brink Powell (1).

–REFERENCES: None.

–REMARKS: A specimen from the Runnells Site No. 2 designated Type II by Tunnell [1961b, 137-38, Fig. 3 I] is included here within the Woden type. Some of the points classed as Gary by Duffield [1963, Fig. 7 C, E, P] are here identified as Woden.

It would have been possible to classify the Woden dart points from McGee Bend differently than I have done in this report. The contracting stem Woden points could have been classed as a form of the Gary type, the rectangular and expanding stem ones as variations within the Kent type. This possibility was considered at some length, and the distribution patterns of all these forms were plotted and compared to see if there were any distributional differences that might help point the way to the most meaningful typological organization. No significant distributional differences were noted, however, and in the end it was decided to set up Woden as a separate type in order to emphasize the distinctive treatment of the base, an attribute that seems to be a singularly characteristic feature of McGee Bend dart point typology that, so far as I can determine, is uncommon in other areas.

Form X (89 specimens, Figure 72 g-m)

–DIMENSIONS: Length, 2.7 to 8.5 cm.; maximum width (at or just above the shoulders), 1.7 to 3.3 cm.; maximum thickness, 0.6 to 1.5 cm.

–BLADE: Triangular with convex edges. Shoulders are prominent and squared. There are no barbs.

–STEM: Moderately to strongly expanding with convex or (rarely) straight base. Maximum stem width is generally less than maximum blade width. Stem dimensions are: length, 0.7 to 1.8 cm.; maximum width, 1.4 to 2.3 cm.

–DISTRIBUTION: Sawmill (47); Runnells No. 1 (10); Print Bell (10); Wylie Price (8); Jonas Short (7); Walter Bell (1); Runnells No. 2 (4); Brink Powell (1); Blount (1).

–REFERENCES: None.

–REMARKS: When viewed against the entire sample of dart points from McGee bend, the specimens of Form X hang together quite

well. However, they do grade into the Kent type as defined in this report as well as into the related expanding stem group, Form Y; some of them also closely approach forms of the Ellis, Palmillas, and Yarbrough types. Several examples of the Form X group could, in fact, be classed with one or another of the latter types without taxing one's imagination in the least. Yet, considered as a group within the McGee Bend context, Form X appears to be a valid typological grouping that is morphologically discrete and has a significant distribution. Because of the similarities to other types, however, it is thought prudent to defer the assignment of a formal type name for the present. Additional data respecting the spatial and temporal distributions of the types in question are needed to clarify not only their relationships to Form X, but also to each other. Once that has been done, the definition of formal types can proceed with more accuracy than now.

Some of the specimens called Type I dart points by [Tunnell \[1961b, 127-28, Pl. 2 A, B\]](#) are here designated as Form X. Several dart points from the Addicks Basin that are similar to Form X are also illustrated by [Wheat \[1953, Pl. 37 f, k; Pl. 38 g\]](#).

Form Y (40 specimens, Figure 74 a-f)

–DIMENSIONS: Length, 3.2 to 7.0 cm.; maximum width (at or just above the shoulders), 2.2 to 3.2 cm.; maximum thickness, 0.7 to 1.1 cm.

–BLADE: Triangular with convex or (rarely) straight edges. Shoulders are weakly to strongly barbed.

–STEM: Moderately to strongly expanding with a convex or occasionally straight base. Maximum stem width is generally less than maximum blade width. Stem length is 0.8 to 1.1 cm., stem width 1.5 to 2.2 cm.

–DISTRIBUTION: Sawmill (23); Wylie Price (11); Print Bell (6).

–REFERENCES: None.

–REMARKS: Form Y, like its nonbarbed cousin Form X, has some similarities to other types, especially Kent and, to a lesser extent, Marshall, Ellis, and Palmillas. It constitutes, nonetheless, a distinctive group in the McGee Bend context, being less variable morphologically than Form X.

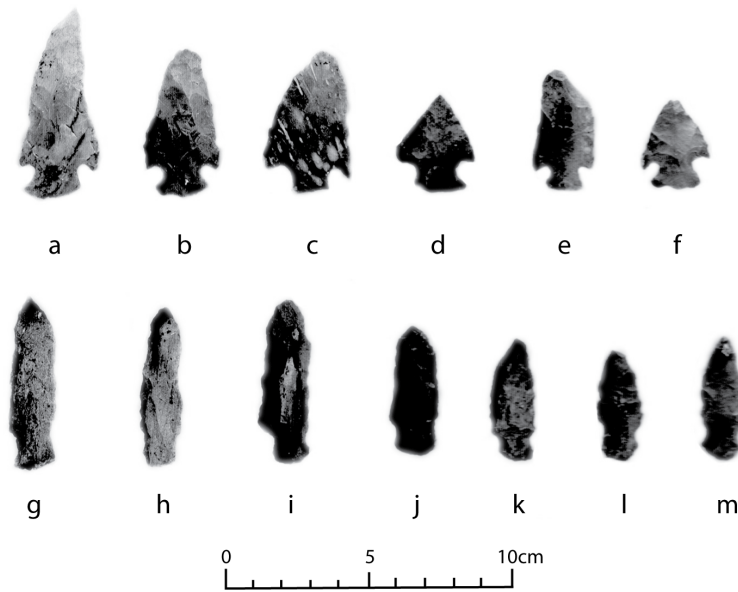


Figure 74: Dart points. a-f, Form Y; g-m, Form Z

Duffield [1963, 97, Fig. 6 A, B] describes a group of dart points from the Wolfshead Site that he calls "corner-notched points with straight bases." Several of them are here included in the Form Y category.

Form Z (18 specimens, Figure 74 g-m)

–DIMENSIONS: Length, 3.8 to 7.0 cm.; maximum width, 1.6 to 2.1 cm.; maximum thickness, 0.6 to 1.3 cm.

–BLADE: Very slender with edges that are approximately parallel for most of the length of the blade before curving together to form the tip. Shoulders are very weak; often one shoulder is distinct, although very narrow, while the other is barely distinguishable.

–STEM: Straight to mildly expanding with a concave base. The stem, like the blade, is quite slender. Stem length ranges from 0.8 to 1.3 cm.; maximum stem width is 1.1 to 1.9 cm.

–DISTRIBUTION: Sawmill (9); Wylie Price (5); Runnells No.1 (2); Jonas Short (2).

–REMARKS: While the sample is too small for the definition of a formal type, Form Z appears to be a distinctive kind of dart point that

will probably merit type status when its total distribution becomes better known.

Broad Points with Broad rectangular Stems (11 specimens, Figure 75 a-f)

All the specimens of this group are from the Sawmill Site save one that was found in the nonmound area at Jonas Short. As a group they stand apart rather well from the other dart point forms in the McGee Bend area and therefore are described separately. The stems tend to be broad and short, and most of them form almost perfect rectangles. The poorly developed shoulders usually form an approximate right angle. The blades are short and typically have mildly convex edges. Representative specimens are illustrated in Figure 75 a-f, where the size range and general proportions may be seen.

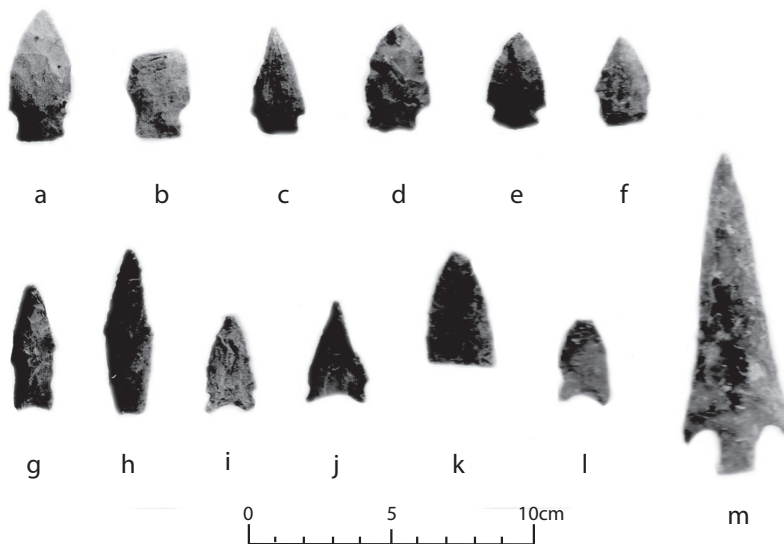


Figure 75: a-f, dart points with broad rectangular stems; g, Darl; h, Wells; i-j, San Patrice; k-l, Plainview (l with burin facets); m, Pogo.

San Patrice Type (38 specimens, Figure 75 i-j)

Thirty-six of the 38 San Patrice points were found at the Wolfshead Site, the other two at Sawmill. The Wolfshead specimens have been described by Duffield [1963, 91-93].

The San Patrice group can be recognized by 1) their slightly to strongly concave bases, 2) smoothing of the base and stem edges, 3) corner notching, 4) their slight to prominent shoulders, and 5) their short, subtriangular, sometimes stubby blades. Other characteristics that occur frequently, but not always, are basal thinning and alternate beveling of the blade edges.

The San Patrice points from the Wolfshead Site fall rather readily into three subgroups which are here assigned the tentative variety names; Hope, St. Johns, and Goodwin. The system of type-variety nomenclature devised by Johnson (1962) and Jelks (1962: 23) is employed, wherein the initial letter of a type name is capitalized, all letters of a variety name are lower case, and all names—both type and variety—are italicized....

The St. Johns variety of the San Patrice type differs from the Hope variety in the manner in which the stem is differentiated from the blade. The St. Johns group has small, but usually prominent, oblique side notches, situated immediately above the base, which define the shoulders and the stem. (Prominent notching was not included as a major attribute of San Patrice in previous definitions of the type.). The blades are short, subtriangular in shape, and have edges which vary from concave to convex. Fifteen of the Wolfshead specimens are made of petrified wood, the others are of jasper and chert. In length, all are between 20 and 34 mm. except for two abnormally long specimens which are 39 and 40mm. long respectively. Widths range from 17 to 26 mm, the average length is 28 mm., and the average width is 21mm.

Eleven of the St. Johns points have alternately beveled blades, usually in conjunction with concave blade edges. The base of 15 specimens were thinned by the removal of longitudinal flakes from both faces; another was thinned on one side only....

Specimens of the Hope variety have—instead of the prominent side notches characteristic of the St. Johns variety—slightly concave sides which define the stem. All the bases have been thinned and the short blades have slightly concave to slightly convex edges. These specimens closely resemble the San Patrice points illustrated by Webb (1946: 11, Pl. 1, 7-10, 15-19) and by Bell (1958: 84-85). Four of the Hope points are made of a fine-grained sandstone (Possibly Catahoula sandstone, Sellards, et al., 1932: 723-726), two were manufactured from petrified wood, and the remainder from chert. They have the following dimensions: length 26 to 37 mm.; width 22 to 30mm., average 24mm. Two of the Hope points have alternately beveled blades, four lack beveling, and three are so fragmentary that the blade characteristics cannot be determined....

One large San Patrice point (of the Goodwin variety) has concave stem edges and a subtriangular blade with one straight edge and one convex edge. Made of petrified wood, it measures 54mm. long by 32 mm. wide. There is a concavity or broad notch in the base which is 8 mm. deep [Duffield, 1963, 91-93].

One of the San Patrice points from the Sawmill Site (Figure 75 j) is a good example of Duffield's St. Johns variety; the other (Figure 75 i) does not fit any of Duffield's varieties but falls within the general range of San Patrice nonetheless.

Wells Type (1 specimen, Figure 75 h)

The one Wells point, found in the nonmound area at the Jonas Short Site, is a good example of the type. The triangular blade area has approximately straight sides that are lightly serrated. The stem contracts slightly toward the base, and its lateral edges are smoothed. The base is faintly concave. There are no shoulders, the division between blade and stem being marked by an angle in each edge. Total length is 5.9 cm. (equally divided between blade and stem), maximum width (at midpoint) is 1.8 cm., basal width is 1.0 cm., and maximum thickness is 0.8 cm.

Darl Type (1 specimen, Figure 75 g)

A small dart point from the Wylie Price Site appears to be of the Darl type [Suhm and Jelks, 1962, 179, Pl. 90]. Although McGee Bend is farther east than the normal occurrence of the type, this particular specimen was probably imported from central Texas as it is made of gray central Texas flint. The point is 4.6 cm. long and 1.7 cm. wide at the shoulders; the stem is 1.0 cm. long by 1.5 cm. wide at the base; maximum thickness is 8 mm.

Plainview Type (2 specimens, Figure 75 k-l)

Two broken fragments of dart points, both of them from the Wylie Price Site, are complete enough to reveal attributes suggestive of the Plainview type. One (Figure 75 k), consisting of the distal portion of a point, has an outline and chipping characteristic of Plainview; furthermore, the lateral edges have been smoothed at the proximal end for a few millimeters above the transverse break. Length of the complete point was probably between 5 and 6 cm.; the surviving portion is 4.2 cm. long. Width is 2.3 cm., and thickness 5 mm., at the break.

The second specimen (Figure 75 l) is the proximal part of a dart point that has had both basal corners and one lateral edge completely removed by burin blows. A portion of one lateral edge remains, however, and it has been lightly smoothed toward the proximal end. A high incidence of burin blows on the basal portions of Paleo-Indian dart points—including the Plainview type—have recently been reported by Epstein [1963]. This specimen, when complete, was probably about the same size as the other one.

Pogo Type (1 specimen, Figure 75 m)

This large dart or spear point from Runnells No. 2 has a long, slender, triangular blade with heavy barbs at the shoulders and a straight-based, straight-sided stem that is somewhat askew. The stone is a chert of better quality than most local materials, and the chipping has been executed with care. Total length is 11.4 cm., maximum width (at the shoulders) is 3.9 cm., and maximum thickness is 1.0 cm. The stem is 1.6 cm. long and 1.6 cm. wide at the base. This specimen has been illustrated previously by [Tunnell \[1961b, Fig. 3 G\]](#).

Miscellaneous Dart Points (71 specimens, Figure 76)

In this category are included a number of dart points, no two of them alike, that do not fit well into any of the type groups described above. Probably most of them are simply erratic specimens made by local peoples, but some perhaps were forms that, although scarce at McGee Bend, may have been used commonly by people of neighboring localities. It is not practical to illustrate all 71 specimens, but a range is pictured in [Figure 76](#).

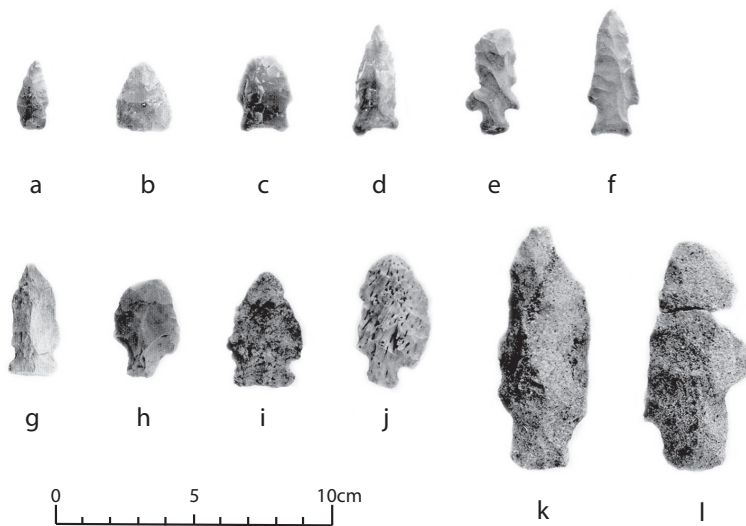


Figure 76: Miscellaneous dart points.

—DISTRIBUTION: Sawmill (16); Print Bell (16); Runnells No. 2 (7); Jonas Short (5); Runnells No. 1 (5); Brink Powell (5); Walter Bell (4); Wylie Price (4); Sowell (3); Dubose (3); Blount (2); Etoile (1).

Dart Point Fragments (32 specimens, none illustrated)

These are broken pieces that are too incomplete for detailed type studies but which are useful in distributional analyses of dart points as a group.

Bunts (6 specimens, Figure 77 a-c)

The bunts are like the proximal end of a dart point that has had its blade truncated above the shoulders and a convex, chisel-like bit chipped from both faces along the truncated edge. The stems are all rectangular, the bases are straight and unworked (like the bases of Woden points), and the shoulders are square but unbarbed. One specimen is made of the local whitish sandstone; the others are of petrified wood.

Length is 2.0 to 5.1 cm., maximum width (at or above the shoulders) 2.5 to 3.0 cm., and maximum thickness 6 to 9 mm.

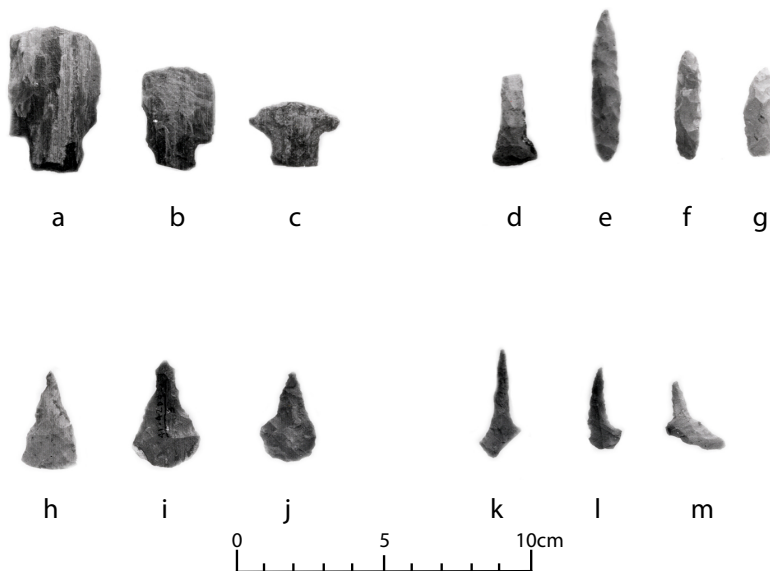


Figure 77: a-c, bunts; d-g, Form I drills; h-j, Form II drills; k-m, Form III drills.

–DISTRIBUTION: Walter Bell (2); Jonas Short (1); Print Bell (1); Runnells No. 1 (1); Runnells No. 2 (1).

Arrow Points

Arrow points, found at all the McGee Bend sites in greater or lesser quantities, include a variety of forms. They are described and tabulated here under five general headings: triangular, contracting stem

forms, forms with straight to expanding stems, miscellaneous forms, and unidentifiable fragments. Within the general form categories are the specific types Fresno, Perdiz, Clifton, Friley, and Alba.

Triangular Arrow Points

Only 8 triangular arrow points, all classed as Fresno, were found at the McGee Bend sites.

Fresno Type (8 specimens, Figure 78 l-o)

These triangular arrow points have slightly convex lateral edges and straight to mildly convex bases. Two of them are rather crude, but the others are carefully chipped and have sharp, even edges.

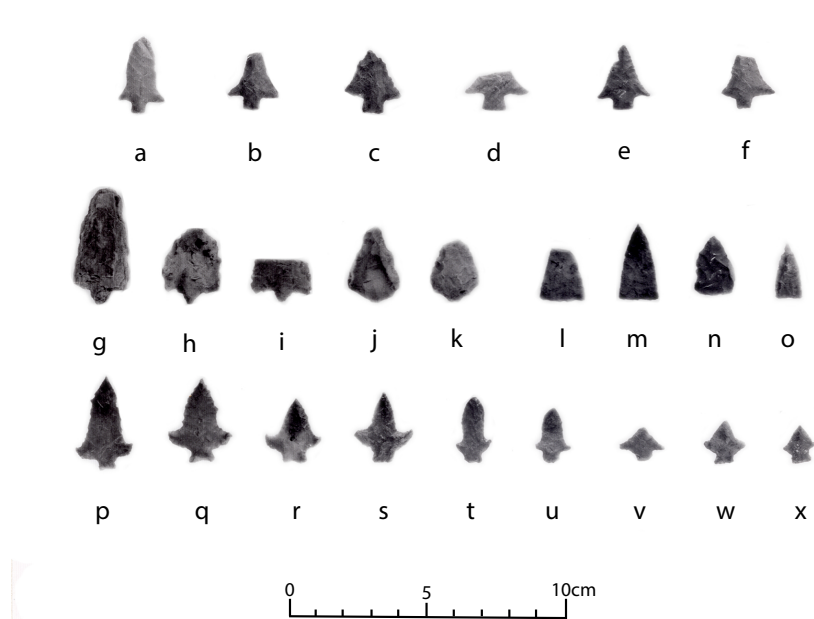


Figure 78: Arrow points, a-f, Alba; g-k, Clifton; l-m, Fresno, p-x, Friley.

–DIMENSIONS: Length, 1.6 to 2.8 cm., maximum width (at or near the base), 1.0 to 1.7 cm., maximum thickness, 2 to 6 mm.

–DISTRIBUTION: Print Bell (4); Walter Bell (2); Etoile (2).

–REFERENCES: [Suhm and Jelks \[1962, 273, Pl. 187\]](#).

–REMARKS: McGee Bend is a few miles east of the previously reported range of Fresno (see [Suhm and Jelks, 1962: 273](#)), but these

specimens have all the attributes of Fresno and there is no hesitation in assigning them to that type.

Contracting Stem Arrow Points

There are two types of contracting stem arrow points from McGee Bend, Clifton and Perdiz.

Clifton Type (33 specimens, Figure 78 g-k)

–DIMENSIONS: Length, 2.3 to 3.8 cm. (except for one over-sized specimen made of laminated, petrified wood (Figure 78 g, which is 4.5 cm. long); maximum thickness, 3 to 8 mm.

–BLADE: The lateral edges are usually convex to straight, but occasionally they may be concave, perhaps as a result of re-sharpening. The shoulders are rounded on some specimens, but some shoulders are squared. Chipping tends to be rather haphazard, and some specimens have been more extensively chipped on one face than on the other.

–STEM: The stem edges may slope evenly from the corners of the blade to a rounded base (Figure 78 j-k), or there may be more or less squared shoulders which serve to set the stem off more distinctly from the blade (Figure 78 g-i). Stems of the latter form are short and contracting with rounded bases. Some stems are off center.

–DISTRIBUTIONS: Walter Bell (20); Sawmill (4); Wylie Price (3); Print Bell (2); Sowell (2); Etoile (1); Blount (1).

–REFERENCES: [Suhm and Jelks \[1962, 269, Pl. 135\]](#).

–REMARKS: The occurrence of Clifton at McGee Bend is east of its previously known range [[Suhm and Jelks, 1962, 269](#)].

Perdiz Type (189 specimens, Figure 30 a-p)

–DIMENSIONS: Length, 1.7 to 4.1 cm., maximum width (at or near the shoulders), 0.9 to 2.1 cm., maximum thickness, 1 to 6 mm.

–BLADE: While there is considerable variation in detail, the blades are all basically triangular in shape, the lateral edges being straight,

mildly convex, or (rarely) slightly concave. Some specimens (Figure 30 a-d) are recurved at the distal end so as to produce a needle-sharp tip. Serrated lateral edges are common, the serrations most often being small and sometimes very delicate, although on occasion they may be rather coarse (Figure 30 m). The shoulders usually have barbs, varying from small to prominent, that slant downward and outward; some specimens, however, have unbarbed shoulders that project laterally at approximately right angles to the long axis of the blade.

–STEM: All the Perdiz points have contracting stems, but there is much variation in stem proportion and form. Some are quite short while others are relatively long; some have sharply pointed bases, others have rounded bases, and still others have straight bases. Some of the straight-based forms have basal retouching on one or both faces; others have straight bases that consist simply of small, unmodified segments of striking platform.

Stem dimensions range from about 2 to 10 mm. in length by about 3 to 6 mm. in maximum width.

–DISTRIBUTION: Walter Bell (116); Sawmill (28); Wylie Price (16); Etoile (14); Print Bell (5); Blount (4); Jonas Short (3); Brink Powell (1); Sowell (2).

–REFERENCES: [Suhm and Jelks \[1962, 283, Pl. 142\]](#); [Jelks \[1962, 24-26, Fig. 12 A-L\]](#).

–REMARKS: Many of the Perdiz points at McGee Bend are closely similar to forms that are common in the Frankston, Toyah, Galveston Bay, and Rockport foci. Others have recurved blades, short stems, and fine flaking akin to attributes of the Bassett, Maud, and/or Talco types of the Fulton Aspect. While a few specimens are much like the Whitney and Morgan varieties of Perdiz reported from central Texas [[Jelks, 1962, 24-26](#)], most specimens do not fit the definitions of those varieties.

Perdiz was the only kind of projectile point found as burial furniture at McGee Bend. Perdiz points were associated with Angelina Focus burials at the Walter Bell, Sawmill, and Jonas Short sites.

Arrow Points with Straight to Expanding Stems

A rather numerous category of arrow points from McGee Bend is characterized by prominent shoulders and straight-sided to weakly expanding stems. Although there is considerable variation between

specimens, these arrow points seem to fall readily into two principal type groups, Friley and Alba. As is to be expected in typological analysis, a few specimens with straight or expanding stems do not fit comfortably into either type; these will be described as miscellaneous specimens of the general category. Also, there is a more or less gradual transition from one type to the other so that a line of demarcation between the two had to be selected somewhat subjectively.

Friley Type (41 specimens, Figure 78 p-x)

–DIMENSIONS: Length, 1.3 to 4.0 cm., maximum width (at the shoulders), 1.3 to 2.7 cm.; maximum thickness, 2.5 to 5 mm.

–BLADE: The distinguishing feature of the Friley type is its spurred shoulders, which may either project laterally (Figure 78 u-x) or turn upward toward the tip of the blade (Figure 78 p-t). Some blade edges are irregularly serrated (Figure 78 p-q), and some are recurved (Figure 78 p-s) like many arrow points of various types in the Caddoan Area. There is much variation in blade properties, some blades being very broad and short, others long and slender. Chipping, in general, is rather good.

–STEM: Stems are parallel-sided to weakly expanding; bases are straight, slightly concave, or (rarely) mildly convex.

–DISTRIBUTION: Walter Bell (17); Wolfshead (7); Sawmill (4); Wylie Price (4); Print Bell (4); Runnells No. 2 (3); Sowell (1); Blount (1).

–REFERENCES: Bell [1960, 46, Pl. 23]; Duffield [1963, 103, Fig. 8]; Tunnell [1961b, Fig. 4 A-D]. (The latter are called Alba points by Tunnell, but are here included in the Friley type.)

Alba Type (25 specimens, Figure 78 a-f)

–DIMENSIONS: Length, 2.0 to 3.3 cm.; maximum width (at the shoulders), 1.3 to 2.1 cm.; maximum thickness, 3 to 6 mm.

–BLADE: The blade edges are usually convex, but sometimes they are recurved in characteristic Caddoan Area style. Shoulders are broad with outflaring barbs.

–STEM: The stems are rectangular to very slightly expanding; bases are straight or (rarely) convex.

–DISTRIBUTION: Sawmill (15); Walter bell (8); Print Bell (2).

–REFERENCES: [Newell and Krieger \[1949, 161, Fig. 56 A-H\]](#); [Suhm and Jelks \[1962, 263, Pl. 132\]](#); [Bell \[1958, 8, Pl. 4\]](#).

–REMARKS: Alba is distributed widely in the Caddoan Area as well as in other parts of the southeastern United States, and has been reported in components of the Alto, Gahagan, Haley, Spiro, Wylie, Henrietta, Austin, and Galveston Bay Foci among others. Although all have been classified as Alba, there is actually a considerable amount of variation between the points of several of those foci.

The Alba points at the George C. Davis Site (type site for the Alto Focus) all have relatively long stems which are either rectangular or bulb-shaped, but which always extend well below the barbs [[Newell and Krieger, 1949, Fig. 56 A-H](#)]. Alba points reported from typical Galveston Bay Focus sites, on the other hand, have very short stems which seldom extend much if any below the barbs, and which—because of their stubbiness—do not have the same outline shape as the Davis Site specimens [[Wheat, 1953, Pl. 35 a-h](#)]. The Alba points found at the Hogge Bridge Site (type site for the Wylie Focus) come in still different varieties, a majority being much shorter than those of the Alto and Galveston Bay Foci, and many having strongly expanding stems [[Stephenson, 1952, Fig. 95](#)].

Because of the variation in form of arrow points classified as Alba in these different cultural contexts, it appears likely that several subtypes of Alba will eventually be recognized; and some specimens that have been called Alba might more appropriately be classed with other types. But, in any event, a detailed study of the total distribution of the Alba type is far beyond the scope of the present paper. Included in the Alba group here are only those specimens that correspond closely to the "classic" Alba points from the George C. Davis Site. The form with a bulb-shaped stem reported by [Newell and Krieger \[1949, 161\]](#) from the Davis Site and by [Bell \[1958, 8\]](#) from the Craig Mound in Oklahoma is not present at any of the McGee bend sites.

Miscellaneous Straight to Expanding Stem Arrow Points (48 specimens, Figure 30 q-v)

–DIMENSIONS: Length, 1.3 to 3.7 cm.; maximum width (at the shoulders), 1.1 to 2.1 cm.; maximum thickness, 3 to 8 mm.

–**BLADE:** Most blades have concave edges, but some edges are straight, recurved, or (rarely) convex. Some blade edges are lightly serrated. Shoulders are prominent, often with barbs that may project laterally or downward.

–**STEM:** Stems have parallel to slightly expanding edges; bases are usually straight but sometimes are concave or convex. Most stems resemble to a greater or lesser degree the stems of Friley and Alba.

–**DISTRIBUTION:** Walter Bell (26); Wylie Price (5); Blount (3); Sowell (3); Print Bell (2); Etoile (2); Sawmill (2); Runnells No. 1 (2); Runnells No. 2 (2); Jonas Short (1).

–**REFERENCES:** [Tunnell \[1961b, Fig. 4 N-O\]](#); [Duffield \[1963, Fig. 8, G-J\]](#).

–**REMARKS:** This is the residual group left in the general category of straight to expanding stem arrow points after the specimens of Friley and Alba had been taken out. A fairly large range of forms is included. Some specimens have stems like Friley points but lack the spurred shoulders of Friley; others resemble Alba but are too divergent for inclusion in that type. Until a comprehensive study has been made of arrow point typology in the East Texas area, the significance of the observed variations in form cannot be established. Therefore, no attempt is made here to classify this group into smaller typological categories: the variations in form are simply described in general terms.

Miscellaneous Arrow Points

These eight specimens do not fit well into any of the preceding arrow point groups because of various irregularities. Several of them are illustrated in [Figure 30 w-z](#).

Arrow Point Fragments

Fragments of arrow points that are too incomplete for typological classification were found at most of the sites. Quantitative and distributional data on these specimens are included in the tabulations that accompany the site descriptions.

Knives

Most of the knives are quite crude (some of them absurdly so), owing in large measure to the poor chipping qualities of the stones—mostly

petrified woods—from which they were made. The general absence of fine chipping and careful shaping permitted only a rather gross approach to knife classification. It was ultimately decided, after considerable study of various groupings, to classify the knives into four groups. Two of the groups are so numerous and so distinctive that they appear to merit status as formal types; accordingly they are defined below as tentative new types under the names Harvey and Bronson. The other two groups are designated by the descriptive terms ovate and subtriangular.

Harvey Type (241 specimens, Figure 79)

Petrified wood is abundant locally, and much of it occurs in elongated chunks that are roughly rectangular in cross section. The grain of this material, following that of the original wood, runs lengthwise through the chunks; it tends to cleave, consequently, into flat, thin slabs when a core is struck at one end, near the edge, with a percussor. Harvey knives were made from these thin slabs simply by sharpening one, or sometimes both, of their long edges. Occasionally an end was sharpened too.

The cutting edges are often rough and uneven, owing largely, it would seem, to the poor chipping quality of the stone. Some specimens, however, have sharp, carefully chipped edges. Cutting edges are most commonly straight or convex, but rarely they are concave.

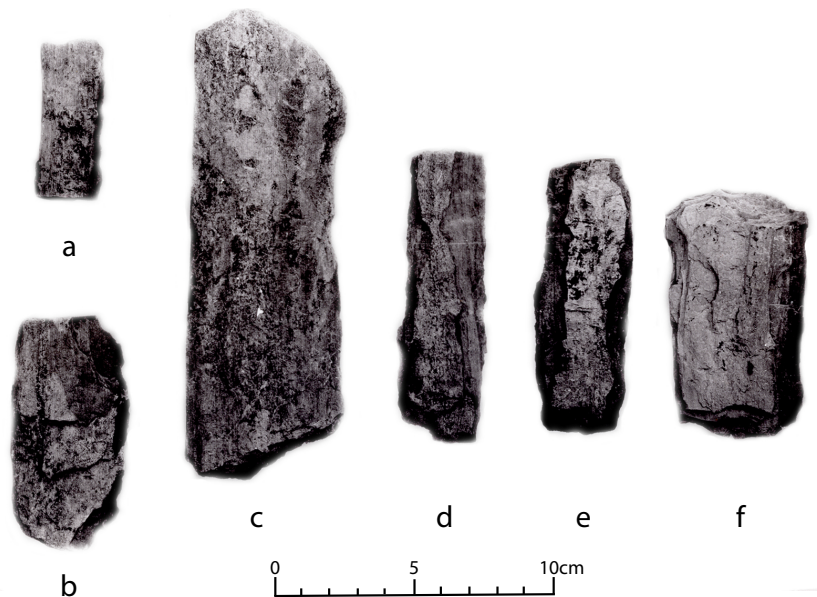


Figure 79: Knives. Harvey.

In the single-edged forms, the edge opposite the cutting edge is straight and ordinarily thick and unworked. The cross section is,

therefore, wedge-shaped. The double-edged form, because both long edges are sharpened, has a lens-shaped cross section. There is considerable size range, length varying from less than 4 to 17 cm., width from about 2 to about 8 cm., and thickness from 0.5 to 2.4 cm.

Tunnell's Type I blade [Tunnell, 1961b, 130-131, Fig. 5 E-H] is the same as the single-edged form of Harvey. Johnson [1962, 186, Fig. 9 T-U] has reported Harvey knives (Johnson's Group VII) from the Yarbrough Site in Van Zandt County, Texas.

–DISTRIBUTION: Wylie Price (102); Sawmill (73); Sowell (16); Runnells No. 2 (11); Print Bell (9); Jonas Short (7); Etoile (7); Runnells No. 1 (6); Blount (5); Walter Bell (4); Brink Powell (1).

Bronson (134 specimens, Figure 81)

Bronson is the name assigned to a newly recognized type of knife that is of frequent occurrence in the McGee Bend area.

Bronson knives were made from flat, approximately rectangular pieces of stone by sharpening the two long edges of the rectangle and tapering them together so as to form a rounded or pointed tip at one end. The opposite end—the base of the knife—was left unaltered: it usually consists of the weathered cortex that covered the original core from which the knife was made. Most Bronson knives were fashioned from flat slabs of petrified wood like those used in making Harvey knives, but an occasional one was made from a small chert pebble (Figure 80 a).

There is considerable variation in size and proportions. A common form is short and broad with a dull, rounded tip; some specimens are short and relatively narrow with sharp tips; some are long and slender; others are long and broad. The cutting edges tend to be convex. Sometimes the proximal part of one long edge is unmodified.

Length ranges from 4.0 to 10.2 cm., maximum width from 2.2 to 5.2 cm., and maximum thickness from 0.7 to 2.2 cm.

Tunnell [1961b] describes Bronson knives from McGee Bend under the label Type I Knives. Johnson [1962] has reported Bronson knives from the Yarbrough Site in Van Zandt County, Texas.

–DISTRIBUTION: Wylie Price (54); Sawmill (35); Runnells No. 2 (17); Sowell (6); Jonas Short (5); Etoile (5); Blount (4); Runnells No. 1 (2); McElroy (2); Dubose (2); Print Bell (1); Brink Powell (1).

Subtriangular Knives (229 specimens, Figure 81)

This common knife form is trianguloid and—in contrast to the Harvey and Bronson types—is chipped along the base as well as along

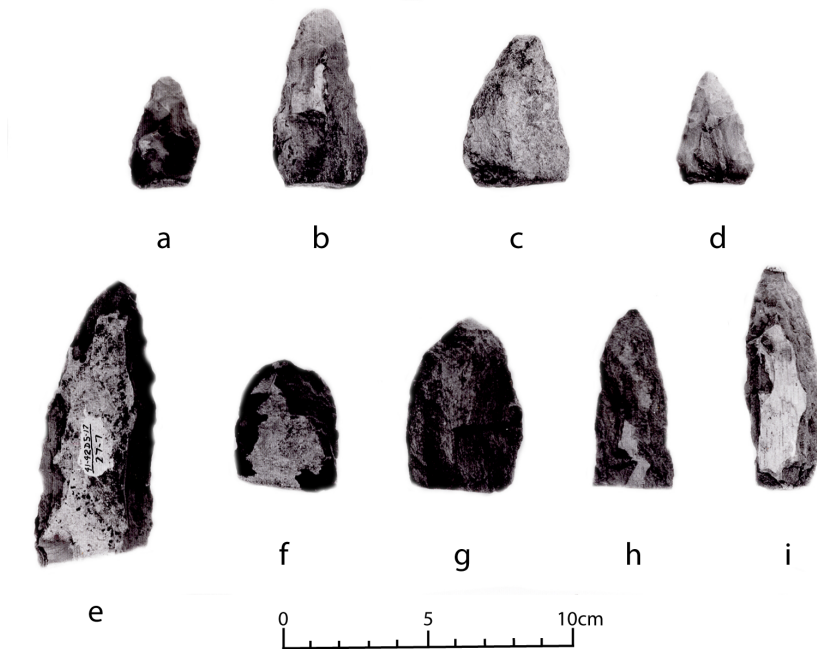


Figure 80: Knives. Bronson.

the lateral edges. Most examples of the type, too, are flaked all the way across both faces. The lateral edges, which are convex, meet at the distal end to form a tip that usually is rounded and dull but occasionally is worked to a sharp point. Bases, rarely straight, exhibit some degree of convexity as a rule; basal corners are almost invariably rounded rather than sharply squared. No concave-based knives were noted in the collections from McGee Bend.

Workmanship on the subtriangular knives, although variable, tends to be somewhat better than on most Harvey and Bronson knives, but the workers, by and large, obviously had little regard for symmetry.

Those specimens with more convex bases grade into another knife group that is distinguished by markedly convex bases. Specimens of the latter group (described below as ovate knives) have lateral contours that blend evenly with the convex curve of the base so that there are no discernible basal corners. Although rarely an intermediate specimen might be classified with either the subtriangular or the ovate group (depending on where a particular classifier might draw the line between the two), an overwhelming majority readily fall into one group or the other.

The dimensions of the subtriangular knives from McGee Bend are: length, 3.0 to 9.7 cm.; maximum width (at or above the base), 2.0 to 4.7 cm.; maximum thickness, 0.6 to 2.5 cm.

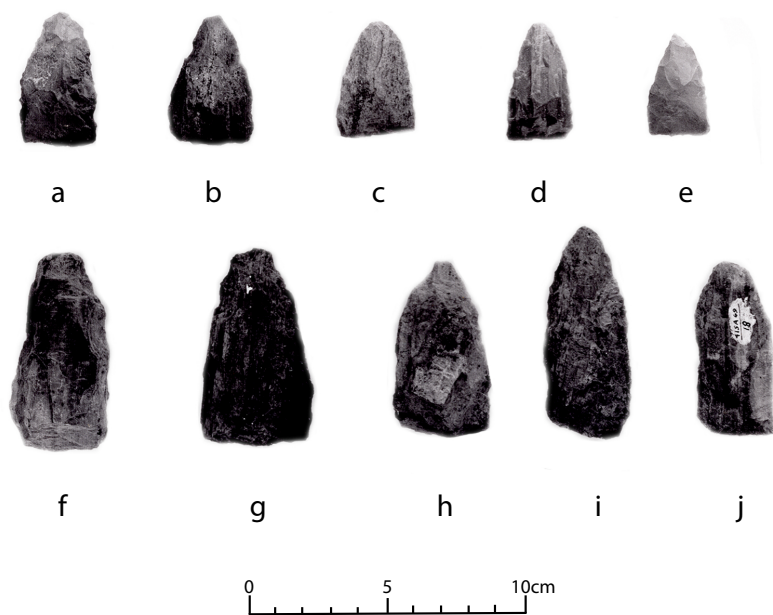


Figure 81: Subtriangular knives.

This group of knives appears to coincide with Tunnell's Type II knife [Tunnell, 1961b, 132, Fig. 6 A-C].

–DISTRIBUTION: Sawmill (125); Wylie Price (44); Runnells No. 2 (14); Print Bell (9); Jonas Short (8); Runnells No. 1 (6); Sowell (6); Blount (6); Walter Bell (4); Etoile (4); Brink Powell (2); McElroy (1).

Ovate Knives (39 specimens, Figure 82 a-e)

These are bifacially chipped knives with rounded bases and more or less pointed distal ends. The lateral edges are usually convex, but an occasional specimen may have straight, or even slightly concave, edges. Proportions vary: some are broad, some are slender; some are thick, some are thin. Workmanship ranges from crude to careful. Dimensions are: length, 3.8 to 9.2 cm.; maximum width, 2.1 to 5.1 cm.; maximum thickness, 0.8 to 2.1 cm.

The ovate knives are similar in size and general execution to the subtriangular knives: in fact they grade into those examples of the subtriangular group that have relatively high degree of basal convexity. But the ovate knives do not have distinguishable basal corners, the feature that gives the latter group their characteristic trianguloid outline.

Some of the knives included in Tunnell's Type IV Tunnell [1961b, 132, Fig. 6 D-F] are here classed in the ovate group.

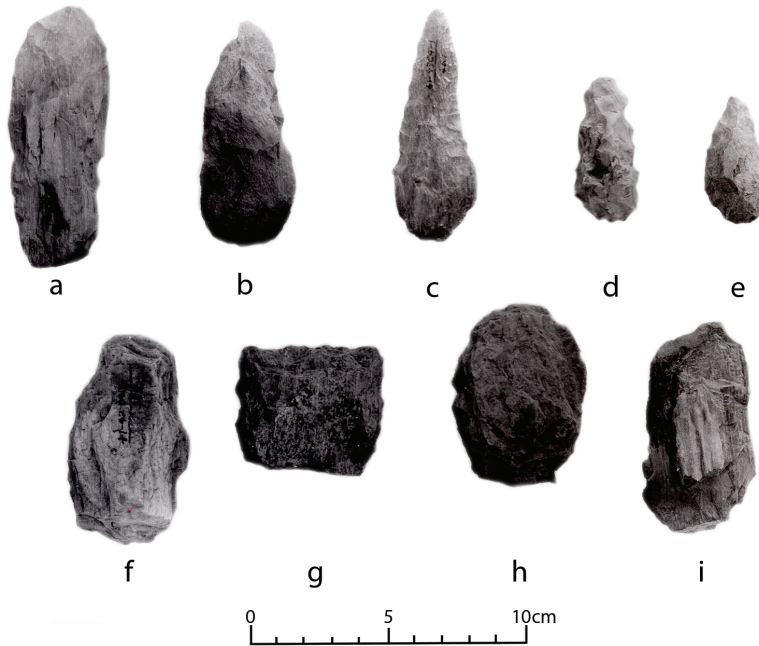


Figure 82: Knives, a-e, ovate; f-i, miscellaneous.

–DISTRIBUTION: Wylie Price (14); Sawmill (12); Runnells No. 2 (5); Print Bell (4); Etoile (2); Jonas Short (1); Sowell (1).

Scrapers

Artifacts that are chipped along one or more edges from one face only, and that appear suitable for scraping uses, are classed as scrapers. Three styles of scrapers were recognized at McGee bend: spall scrapers, small end scrapers, and Albany spokeshaves. An amorphous residual group was termed miscellaneous scrapers.

Spall Scrapers (117 specimens, Figure 83 a-d)

These are stone spalls that are lightly flaked along one or more edges. They show little if any evidence of intentional shaping. Although exact usage must be conjectural, it is believed that most of them were produced when a workman selected a suitable spall from the camp debris and used its sharp edge briefly, without any preliminary modification, as a scraper. Experiments have shown that sharp-edged spalls are especially effective for dressing down wooden surfaces and that spalls so used become worn in the same manner as the spall scrapers described here. Shapes of the spall scrapers are erratic—and evidently fortuitous to a large degree. Size is also quite variable. Measurements will not be given, but a general idea of the size ranges

can be gained by examination of the illustrations.

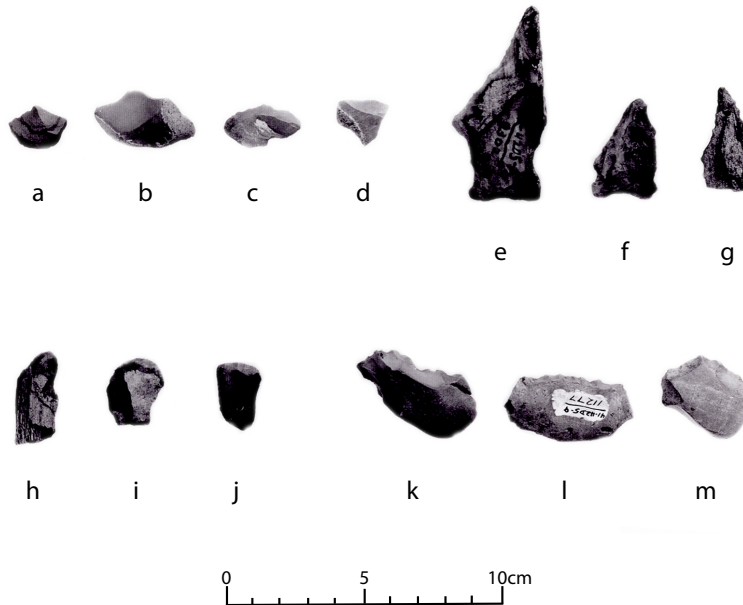


Figure 83: Scrapers. a-d, spall scrapers; e-g, Albany spokeshaves; h-j, small end scrapers; k-m, miscellaneous scrapers.

–DISTRIBUTION: Sawmill (49); McElroy (33); Runnells No. 2 (10); Walter Bell (9); Sowell (7); Blount (5); Etoile (2); Print Bell (1); Runnells No. 1 (1).

Small End Scrapers (10 specimens, Figure 83 h-j)

This group comprises a series of tiny snub-nose end scrapers. The bits, or scraping edges—mildly to strongly convex in outline—are steeply beveled on the dorsal, or upper, face, the ventral face being smooth and unworked. The ventral face is not only smooth, it is also slightly concave in most cases, and the bit is so placed that it coincides with the zone of maximum curvature: this produces a hollow-ground effect like that on modern razors and knives. The bodies of these implements, behind the bit, appear to have seldom if ever been deliberately shaped, although there is occasional desultory flaking along the lateral edges. There is, perhaps, a weak tendency toward triangularity, but no consistent over-all form appears.

The small end scrapers measure 2.1 to 3.5 cm. long; maximum width is 1.1 to 2.6 cm., maximum thickness (usually, but not always, at the bit) 0.4 to 1.1 cm.

–DISTRIBUTION: Sawmill (6); Wiley Price (1); Runnells No. 1 (1); Runnells No. 2 (1); Blount (1); Etoile (1).

Albany Spokeshaves (4 specimens, Figure 83 e-g)

These fit quite well the original definition of Albany spokeshaves, second subtype [Webb, 1946, 10-13, Pl. 1 4-6]. They are made like stemmed dart points except that there is a uniaxially chipped scraping edge along one side of the blade. The "dart" point stems are expanding, and all but one have concave bases, the exception being convex. The scraping edges are concave on five specimens, straight on the other; and they angle across the blade obliquely, imparting to it a markedly asymmetrical appearance. These implements are bifacially chipped everywhere save at the scraping edge, which is uniaxially beveled in scraper fashion. The scraping edges are all on the left side of the blade (when the specimens are oriented with the stem downward and the beveled side of the scraping edge facing up).

The Albany spokeshaves range from 3.5 to 7.3 cm. in length, 2.0 to 3.5 cm. in maximum width (at the shoulders), and 0.6 to 1.0 cm. in maximum thickness.

–DISTRIBUTION: Sawmill (2); Runnells No. 1 (1); Runnells No. 2 (1).

Miscellaneous Scrapers (29 specimens, Figure 83 k-m)

This is a residual category wherein are lumped a number of specimens that qualify as scrapers through the presence of uniaxially chipped working edges, but which do not fit any of the scraper classes described above. All in all, they are a motley group: no reasonable subgrouping of mutually similar specimens was discerned, and therefore the group is treated as a unit, albeit a loose-knit one, for descriptive purposes. Neither detailed descriptions nor precise measurements will be given, but an impression of the variation within the group can be obtained from the illustrations, which are of specimens selected to show the range of the form and size.

–DISTRIBUTION: Sawmill (8); Wylie Price (6); Walter Bell (4); McElroy (4); Brink Powell (2); Jonas Short (1); Runnells No. 1 (1); Runnells No. 2 (1); Blount (1); Etoile (1).

Drills

The drills are classified into three groups on the basis of form.

Form I Drills (16 specimens, Figure 77 d-g)

These are small, slender, bifacially chipped tools with a pointed tip at the distal end and a rounded base at the proximal end. They are

widest at the base or just above the base, and from the place of maximum width the lateral edges taper gradually until meeting at the tip. The lateral edges are usually convex, but one specimen (Figure 77 d) has edges that are concave for a short distance immediately above the proximal end. The basal areas are not markedly expanded.

–DIMENSIONS: Length, 2.4 to 8.1 cm.; maximum width, 0.7 to 1.7 cm.; maximum thickness, 4 to 9 mm.

–REMARKS: Form I drills as here defined are the same as the Type I drills of [Tunnell \[1961b, 129, Fig. 4 L-M\]](#).

–DISTRIBUTION: Runnells No. 2 (7); Sawmill (2); Wylie Price (2); Print Bell (2); Jonas Short (1); Walter Bell (1); McElroy (1).

Form II Drills (6 specimens, Figure 77 h-j)

These are small, bifacially worked drills that have strongly expanded bases. The bases vary somewhat in form—some are carefully shaped, others rather amorphous—but all of them are thoroughly chipped across both faces, a characteristic that helps distinguish them from the Form III drills, described below. The bits of the Form II drills are usually quite wide at the proximal end where they join the base; their lateral edges converge to form a tip that is relatively sharp on most specimens. The bit edges may be mildly concave or convex, but the majority are approximately straight.

–DIMENSIONS: Length ranges from 2.5 to 4.5 cm., maximum width from 1.3 to 2.3 cm., and maximum thickness from 4 to 9 mm.

–REMARKS: [Tunnell \[1961b, 139, Fig. 4 P-Q\]](#) describes a Type II drill that is essentially the same as the Form II drill herein.

–DISTRIBUTION: Runnells No. 2 (2); Print Bell (2); Walter Bell (1); Wylie Price (1).

Form III Drills (9 specimens, Figure 77 k-m)

Drills of this group were made by chipping part of an unworked stone spall into a drilled bit, the unchipped part of the spall being retained as an expanding base. The bits vary from short and sturdy to long and delicate; some bits are plano-convex in section, others are double convex. The edges of the bit taper evenly from the base to the tip which is relatively sharp as a rule. The bases, which are

not shaped or otherwise modified, cover a broad size range in all dimensions.

–DIMENSIONS: Bit length is from 0.8 to 2.6 cm., maximum bit width from 0.6 to 1.1 cm., and maximum bit thickness from 2 to 6 mm. Bases are 0.6 to 1.9 cm. long, 1.2 to 2.3 cm. wide, and 0.2 to 1.0 cm. thick.

–DISTRIBUTION: Sawmill (5); Wylie Price (2); Walter Bell (1); Brink Powell (1).

Perkin Pikes (121 specimens, Figure 84)

A common form of artifact at McGee Bend was made from a small, elongated chert pebble or piece of petrified wood by chipping a pointed or rounded bit at one end, the other end being left unmodified. The chipping is bifacially executed. These tools look for all the world like miniature fist axes and choppers but are much too small for inclusion in those categories.

Since they are numerous and distinctive in form and size; it is thought appropriate that they be accorded type status: therefore the tentative type name Perkin is here applied to them. An accurate functional tag (such as scraper, chopper, knife, etc) is difficult to assign inasmuch as the way in which they were actually used is unknown; consequently they will be referred to here as pikes, a term intended to denote nothing more than that they are more or less pointed at one end.

The Perkin pikes made of chert pebbles were studied separately from those made of petrified wood because the former are smaller, on the average, than the latter. The chert specimens range from 2.8 to 7.2 cm. in length, 1.9 to 4.1 cm. in maximum width, and 1.0 to 2.3 cm. in maximum thickness. Those of petrified wood measure 3.7 to 12.0, 2.5 to 6.2, and 1.0 to 2.5 cm. in the same respective dimensions.

Artifacts that appear to fall within the Perkin group have been reported from Addicks Reservoir [Wheat, 1953, Pl. 32 a], from Texarkana Reservoir [Jelks, 1962, Pl. 13 a-c], and previously from McGee Bend Reservoir by Tunnell [1961b, 133, Fig. 6 G-I], who called them Type V blades, and by Duffield [1963, 114, Fig. 14 C] who classed them as choppers.

–DISTRIBUTION: Sawmill (43); Wylie Price (37); Runnells No. 2 (15); Jonas Short (7); Sowell (6); Walter Bell (5); Runnells No. 1 (4); Blount (2); Print Bell (1); Brink Powell (1).

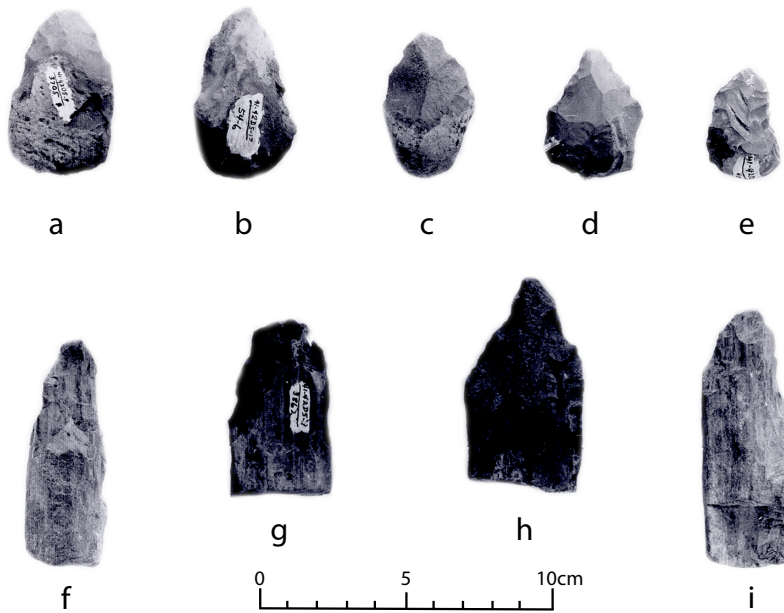


Figure 84: Perkin pikes.

Lufkin Implements (34 specimens, Figure 85 a-d.

Lufkin is the name assigned here to a group of small tools with a specialized kind of bit or working edge. The bit is formed by intersection of two surfaces—one usually flat or slightly concave and unchipped (ventral face), the other convex with secondary flaking (dorsal face). These two surfaces meet at an acute angle to create a convex edge. On most specimens the edge has been sharpened by the removal of narrow flakes from the dorsal face, the flake scars always being at approximately right angles to the bit edge. Since it is not known how these tools were used, they are referred to simply as implements in order to avoid a name that might be functionally inaccurate.

Lufkin implements, as a rule, were fashioned from chert pebbles, although rarely one of petrified wood is found. The body behind the two intersecting surfaces is quite variable in form: some are totally unworked, others are carefully shaped by chipping (generally to a trianguloid shape), others fall somewhere between those extremes. The sample is quite variable with respect to shape and size, and exact measurements would be of no particular value. However, all specimens are between 3 and 10—and a large majority between 4 and 7—cm. long, and the bits all fall between one and three centimeters in width.

Lufkin implements are clearly related typologically to the Guadalupe adzes of central Texas—a type named by T. N. Campbell but not yet

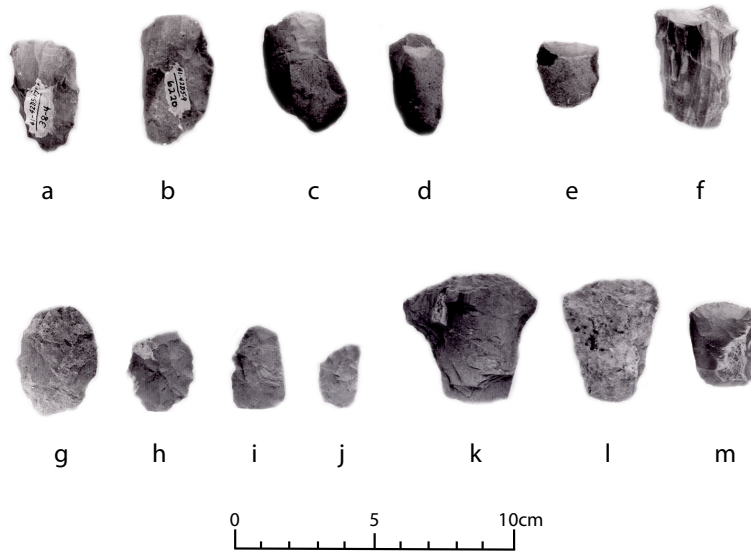


Figure 85: Chipped stone tools. a-d, Lufkin implements; e-f, gouges; g-j, small bifacial implements; k-m, chipped stone celts.

described in print—and both types were probably used for the same purposes. Lufkin, however, is smaller and evidently much more variable in form than Guadalupe.

—DISTRIBUTION: Sawmill (18); Wylie Price (11); Walter Bell (2); Print Bell (2); Blount 91).

Small Bifacial Implements (189 specimens, Figure 85 g-j)

One of the more numerous kinds of chipped stone artifacts found at McGee Bend sites is a group of bifacially chipped implements that are too small for what one usually thinks of as knives, yet do not have the appearance of projectile points, drills, or any other particular functional class. Most are made of the local chert, but a few are of petrified wood; workmanship ranges from crude to excellent. Shape is quite variable: circular, rectanguloid, and trianguloid. The different sizes and shapes perhaps reflect functional or temporal differences, but these possibilities cannot be adequately explored until an extended study of similar specimens from other localities can be made and more precise distributional data of the various forms acquired.

Most of the small bifacial implements measure three to four centimeters in their longest dimension, but many are less than three, and a few less than two, centimeters across. In their upper size range, they grade into the lower limits of the knife categories. Similar artifacts have been reported from north-central Texas.³⁰

³⁰ L. Johnson. The Yarbrough and Miller Sites of Northeastern Texas, with a Preliminary Definition of the La Harpe Aspect. *Bulletin of the Texas Archeological Society*, pages 141–284, 1962

–DISTRIBUTION: Sawmill (58); Walter Bell (45); Wylie Price (26); Print Bell (20); Etoile (8); Runnells No. 2 (7); McElroy (6); Sowell (5); Blount (5); Jonas Short (4); Runnells No. 1 (4); Brink Powell (1).

Chipped Stone Celts (13 specimens, Figure 85 k-m)

Twelve of the specimens in this group are bifacially chipped implements of chert and petrified wood in the form of isosceles trapezoids or, less commonly, rectangles that have a mildly convex bit at one end. The bit is sharp and is beveled from both faces. The base and the lateral edges are carefully worked, and both faces are usually flaked all the way across. The two largest ones have broad notches in their lateral edges, probably to facilitate hafting. One of the latter has been chipped from the local whitish sandstone.

These tools are termed celts because—except for being chipped instead of ground—they are of the same basic form as ground and polished stone celts.

The unnotched specimens are 3.0 to 5.0 cm. long, have a maximum width (usually at the bit) of 2.2 to 3.6 cm., and have a maximum thickness of 1.0 to 1.3 cm. The two notched celts are respectively 4.8 and 6.6 cm. long, 4.9 and 5.5 cm. wide (at the bit), and 1.3 and 1.7 cm. thick.

–DISTRIBUTION: The notched sandstone celt is from the non-mound area at the Jonas Short Site; the others are all from the Sawmill Site.

The remaining celt was made from a small slab of hematite by chipping a convex, asymmetrical bit at one end. Some scratches on one edge and on one face were possibly produced by grating off the hematite for use as pigment. This celt is 7.8 cm. long, its maximum width is 4.2 cm., and its maximum thickness is 1.5 cm. It is possible that this specimen was chipped to shape preparatory to being ground and polished but was lost or discarded before completion. It is from the Blount Site.

Gouges (4 specimens, Figure 85 e-f)

Only four implements classed as gouges were found, three at Wylie Price, the other at Sawmill. There is no consistency in shape or size.

Ground and Polished Stone Artifacts

Celts (9 specimens, Figure 86 a-g)

Most of the celts were shaped from a gray-green, fine grained stone by pecking and grinding. These specimens are smoothed all over,

and their bits—which have straight to mildly convex cutting edges—are well polished. Several celts, however, are made of petrified wood, one (Figure 86 e) having been smoothed over its entire body, others (Figure 86 f-g), having roughly chipped bodies but polished bits.

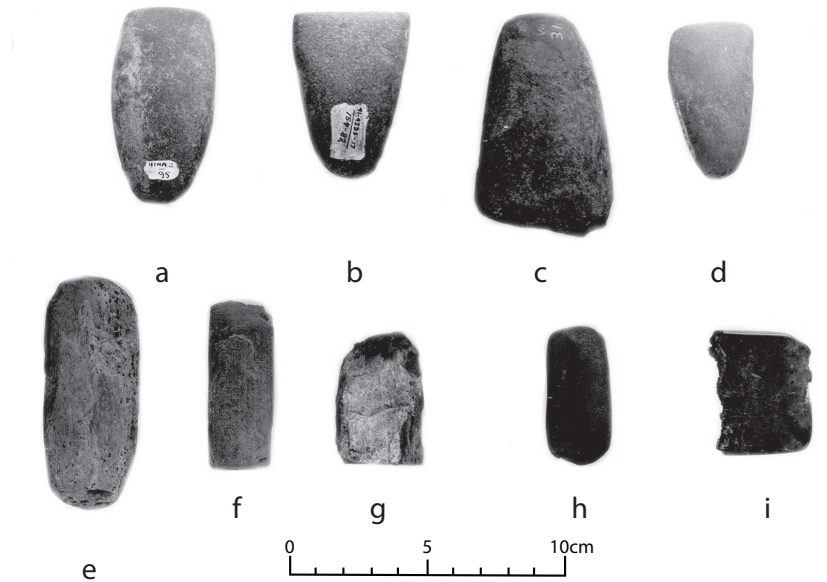


Figure 86: Ground stone artifacts. a-g, celts; h, boatstone; i, bannerstone.

—DISTRIBUTION: Sawmill (4); Walter Bell (2); Wylie Price (1); Etoile (1); Brink Powell (1).

Bannerstones (1 specimen, Figure 86 i)

Half of a hematite bannerstone was found at the Runnells No. 1 Site. The original artifact, highly polished all over, was rectangular in outline, and its longitudinal section was of an elongated diamond shape. A perforation about 1 cm. in diameter ran transversely through the middle at the thickest place. The complete artifact was about 7 cm. long, 4.5 cm. wide, and 1.8 cm. thick.

Boatstones (3 specimens, Figures 86 h; 15 c-c, d-d)

A small boatstone made of hematite was found at the Print Bell Site. It is keeled on one side and flat (not hollowed out) on the other. It is 5.1 cm. long, 2.3 cm. wide, and reaches a maximum thickness of 1.8 cm. Two boatstones from caches in the Jonas Short mound (Figure 11 c-c, d-d) are described on pages 36 and 43. They are quite different in shape from the specimen found at Print Bell.

Quartz Artifacts (5 specimens, Figure 15)

In Cache 1 at the Jonas Short mound were 9 quartz crystals, 3 of them grooved at one end, and a polished, pentagonal quartz pendant with a suspension hole near one edge. Another grooved crystal was found in Cache 5. Descriptions are given in the section on the Jonas Short Site.

Use-ground Artifacts

Milling Slabs (5 specimens, Figure 87)

A complete milling slab from the Wiley Price Site (Figure 87) is made of a thick piece of sandstone. On the upper surface is a shallow, circular grinding area averaging about 14 cm. across. The entire stone is 24 cm. long, 19 cm. wide, and 10 cm. thick. The other specimens are all tiny fragments.

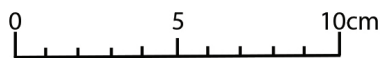


Figure 87: Milling slab.

–DISTRIBUTION: Walter Bell (2); Jonas Short (2); Sowell (1).

Manos (29 specimens, Figure 88 e-f)

These are small hand grinding stones that are rectanguloid or circular. Most are of sandstone, but a few are made of quartzite. Both one-faced and two-faced forms are present, and the faces are flat or convex. On the two-faced specimens the faces are in approximately parallel planes. Some have a shallow pit in one or both faces.

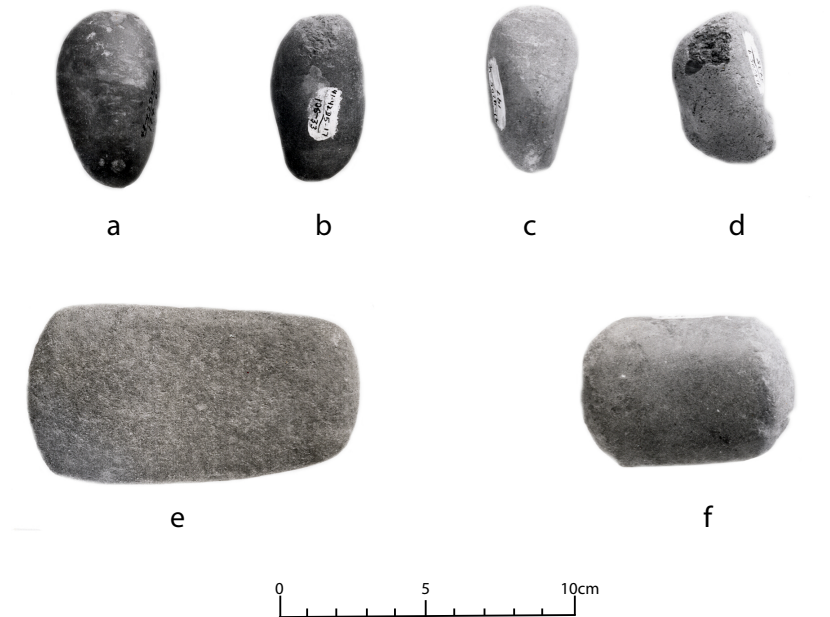


Figure 88: Stone implements. a-d, hammerstone; e-f, manos.

–DISTRIBUTION: Sawmill (12); Walter Bell (8); Wylie Price (3); Sowell (2); McElroy (2) Print Bell (1); Blount (1).

Miscellaneous Stone Artifacts

Pitted Stones (36 specimens, Figure 89)

Most sites produced irregular-shaped pieces of stone (usually sandstone, sometimes limestone or hematite) bearing small, shallow, circular depressions some two or three centimeters in diameter and a few millimeters deep. The stones are of variable size, from about 6 to 7 to nearly 20 cm. across. Some of the pits are worked into the grinding surface of manos, others are on flat surfaces that appear to have occurred naturally on the pieces of stone used.

Pitted stones such as these are quite common over much of the southeastern United States, and it has been conjectured that they were for cracking nuts, for drill bases, or for anvils used in knapping. Their actual use, however, is still unknown.

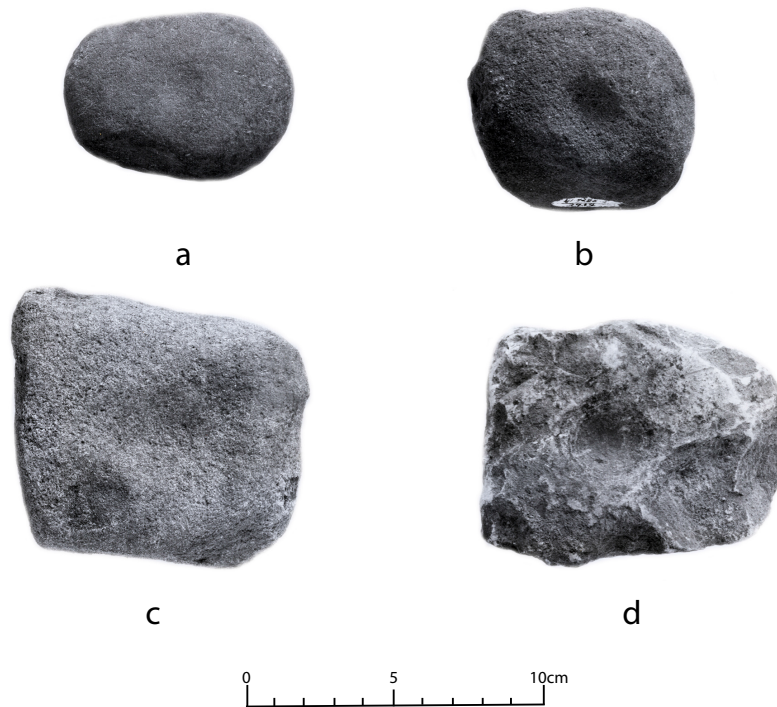


Figure 89: Pitted stones.

–DISTRIBUTION: Sawmill (14); Walter Bell (5); Wylie Price (5); McElroy (4); Print Bell (3); Blount (3); Brink Powell (1); Etoile (1).

Hammerstones (20 specimens, Figure 88 a-d)

The hammerstones are small, egg-shaped pebbles of quartzite or chert that have evidence of battering at one or both ends. The majority are between 6 and 8 cm. long, the maximum range being 4 to 10 cm.

–DISTRIBUTION: Wylie Price (9); Runnells No. 2 (4); Sawmill (3); Sowell (2); Print Bell (1); McElroy (1).

Antler and Bone Tools

Antler Segments (3 specimens, Figure 90 a-b)

Three segments of antler, 5 to 7 cm. long, have been cut across squarely at both ends. Their purpose has not been ascertained.

Antler Tines (8 specimens)

Several tips of deer antlers were found that are somewhat abraded. Whether these are artifacts, or whether they became abraded while the deer were still wearing them is not clear.

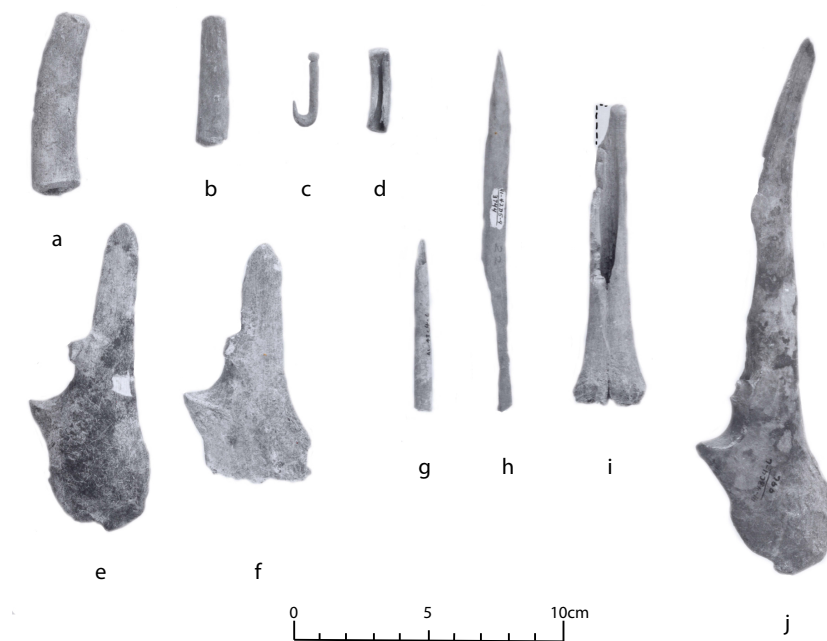


Figure 90: Antler and bone tools. a-b, antler segments; c, fishhook; d, worked beaver tooth; e, f, j, deer ulna tools; g-h, awls, i, chisel.

–DISTRIBUTION: Walter Bell (5); Sawmill (1); Print Bell (1); Etoile (1).

Deer Ulna Tools (16 specimens, Figure 90 e-f, j)

Most of these tools were made by cutting off the distal end of a deer ulna so as to form a rounded or peaked tip. The tool thus created was probably used for knapping stone by pressure. Some specimens that bear smoothed spots or scratches indicative of use are fragmentary, however, and their original form is uncertain. Three deer ulnas from Burial 5 at the Walter Bell Site (Figure 90 j) show evidence of use without prior modification of the bone.

–DISTRIBUTION: Walter Bell (13); Sawmill (1); Etoile (1); Blount (1).

Awls (4 specimens, Figure 90 g-h)

Four bone awls were found, all at the Walter Bell Site. Three of them (Figure 92, H) are made from bone splinters which probably came from deer long bones; the other (Figure 90 g) was made from a long bone of some small animal. The interior canal of the latter bone is intact. The tip of each awl has been smoothed to a sharp point suitable for piercing holes in hides or leather. Since all specimens are incomplete, the original lengths could not be determined.

Flageolets (5 specimens, Figure 31)

Included as mortuary offerings in Burial 2 at Wiley Price and in Burial 3, 5, and 6 at Walter Bell were bird bone flageolets. In each case the flageolet was in or beside one of the hands of the deceased (Burial 2 at Wiley Price had a flageolet in each hand). All were made from long bones (tibias?) of large birds, probably cranes or turkeys, and each has a single stop hole near one end. They are all about 25 cm. long. Three of them have an incised design on the upper side; and the others are undecorated.

Fishhook (1 specimen, Figure 90 c)

A bone fishhook from the Walter Bell Site has a sharp point, but no barbs, and a shallow groove around the upper end of the shank is apparently for the attachment of a line. The hook is 2.9 cm. long.

Worked Beaver Tooth (1 specimen, Figure 90 d)

An implement made from a beaver tooth was found at the Walter Bell Site. The tooth has been cut off and lightly smoothed at the proximal end, and the inside wall has been cut away. It is polished toward the distal end, perhaps from use.

Chisel (1 specimen, Figure 90 i)

What appears to have been a chisel, or possibly a flint-knapping tool, is made from a deer cannon bone. It is from the Walter Bell Site. The bone is tapered from one side so as to form a chisel-like bit at one end. The bit, which is 5 mm. wide, has been sharpened by beveling from both sides. Part of the tip appears to have broken off, however, and the bit was probably about a centimeter wide when intact. Total length of this artifact is 11.3 cm.

Perforated Turtle Shell (1 specimen)

A turtle carapace from the Walter Bell Site has two small perforations 2.2 cm. apart at the posterior end. It is probably part of a rattle, or possibly it was suspended as a pendant or gorget.

Elk-tooth Beads (11 specimens, Figure 18 c)

A string of perforated elk-tooth beads, found in Cache 2 at the Jonas Short mound, is described on pages 39-40.

Shell Artifacts

The only shell artifacts found at McGee Bend were a cylindrical conch columella bead (associated with Burial 2 at Walter Bell but lost before reaching the laboratory), several pieces of marine shell cut into geometric shapes (with Burial 2 at Sawmill Figures 94, A-I; 31), and two perforated mussel shells (one each from Walter Bell and Etoile).

*Metal Artifacts**Copper Gorgets (1 specimen, Figure 18 b)*

The only metal artifact found at McGee bend in association with Indian cultural remains was a gorget made of cold-hammered, native copper. It was in Cache 2 at the Jonas Short mound and is described on page 39.

*Glass Artifacts**Glass Beads (22 specimens)*

Around the neck of Burial 1 at the Wylie Price Site was a necklace of 21 glass beads. Simple seed beads of a blue, bubbly, translucent glass, they are 4 to 6 mm. long and 5 to 7 mm. in diameter. The perforations are between 1 and 3 mm. in diameter.

A fragment of a bead picked up on the surface of the McElroy Site is made of opaque, milky glass and is of prolate spheroid (football-like) shape. The original bead is estimated to have been 13 or 14 mm. long with a diameter near 9 mm. The perforation diameter was between 2 and 3 mm.

Miscellaneous Objects

Small pieces of ocher, both red and yellow, were fairly common at all sites. Some of them bear scratch marks, presumably produced when the ocher was grated into powder for use as pigment. The pigments possibly served as body paint as well as for filling engraved lines on pottery vessels and other purposes.

Bits of clay daub, some having impressions of sticks, reeds, or grass, were found at most sites. These evidently are fragments of clay daubing with which houses were weather-proofed.

Analysis of the Data

Once the field data have been collected, the first step in conducting an archeological study is the very necessary one of ordering the data into culturally significant units. That is, to study a particular prehistoric culture, one must first of all isolate the archeological remains of that culture from the remains of any other cultures that may have shared the same region, or as was often the case, the same site. Other cultures could have existed in the same locality, either coevally with the culture being studied or at some other time, earlier or later.

There are several basic concepts that underlie the techniques employed by archeologists in factoring out of a mass of data those elements that can be ascribed to one particular culture. The concepts that apply to the circumstances at McGee Bend will be defined under the headings association, disjunction (infinitive form: disjoin), and typology.

Association is the relationship that exists between two things by virtue of their being included within a single physical context* This principle is used in showing that a positive relationship exists between two things. There are different kinds of association in archeology and there are varying degrees of association. The kinds of association that pertain to the studies at McGee Bend are (a) cultural association, and (b) geologic association. These refer, of course, to association within cultural and geologic contexts respectively. Neither a precise way of measuring nor a standard terminology for expressing degree of association has been established; consequently degree here will be conveyed through the use of such phrases as "close cultural association," "general geologic association," and similar terms.

Disjunction is the relationship that exists between two things by virtue of their belonging respectively to separate physical contexts. This, the converse of the principle of association, is used to demonstrate a negative relationship between elements.

In the broadest sense, typology is the analysis of artifacts in all their aspects: their physical attributes, stylistic motifs, functional implications, temporal and spatial distributions, and so on. The principle of typology, as it applies to the problem of the cultural ordering

*To my knowledge, no one has formally defined the concept of association as applied in archeology, nor has the distinction between association and disjunction, as treated below, been discussed in print.

of data, is based on the premise (which is supported by numerous observations) that the composition, form, style, and other observable attributes of artifacts reflect specific technological and artistic traditions of the people who made them. Thus a type, viewed historically, is an index to the culture that produced it (Krieger [1944, 272-273]; Rouse [1960, 319-320]; Gifford [1960, 342-343]). When an archeologist looks at a spear point and says, "That is a Clovis point," he is giving the point a cultural as well as descriptive identity. And he is doing it solely on the basis of typology.

The following discussion of efforts to order the data from McGee Bend into significant cultural units is carried on in terms of the three general principles—association, disjunction, and typology—as they are defined above.

Cultural Association

The only examples of cultural association involving more than one specimen* at McGee bend are those burials in which articles were placed as mortuary furniture. There were eight such burials altogether; the articles that were associated in them are as follows:

*A single specimen can serve as a context wherein two or more elements are associated. For example, the different attributes of a pottery vessel (its temper, form, decoration, etc.) are in as tight a cultural association with one another as is possible.

Walter Bell Site

Burial 2:

- 1 Broadus Brushed vessel
- 1 cylindrical, conch columella bead

Burial 3:

- 1 Pineland Punctated-Incised vessel
- 1 Glassell Engraved vessel
- 2 Belcher Ridged-like vessels
- 1 vertically incised vessel
- 1 clay-tempered, plain vessel
- 30 Perdiz arrow points
- 1 one-hole, birdbone flageolet

Wylie Price Site

Burial 1:

- 1 clay-tempered, plain vessel
- 2 clay-tempered, incised vessels
- 21 glass trade beads

Burial 2:

- 1 shell-tempered, incised vessel
- 1 clay-tempered, engraved vessel
- 2 one-hole, birdbone flageolets

Sawmill Site

Burial 2:

- 3 Perdiz arrow points
- 15 geometrically shaped, shell ornaments

Jonas Short Site

Burial 1:

- 3 Perdiz arrow points

Burial 2:

- 2 copper bracelets

Although the examples of cultural association through burial contexts are not numerous, they provide nonetheless a cluster of closely associated traits representative of a specific cultural entity. One local arrow point type (Perdiz) is in tight cultural association with a local pottery type (Pineland Punctated-Incised). Associated with one or more of those types in one or more burials are these traits: engraved, incised, punctated, and brushed pottery of clay-tempered paste; Belcher Focus pottery type Glassell Engraved and a kind of vessel that is similar, but not identical, to Belcher Ridged; one-hole bird bone flageolets; deer ulna implements; several pieces of marine shell cut into geometrical shapes. Linked to this cluster of traits through association with bird bone flageolets is the only mortuary shell-tempered vessel, that was found in Burial 2 at Wylie Price.

Burial 1 at the Wylie Price Site contained a necklace of blue glass beads—the only European trade items found anywhere in the area—together with three clay-tempered vessels. One of the latter was a plain, nondescript bowl, and the others were jars—one of unusual elongated shape—decorated with vertical incised lines. The vessels are typologically similar in a general way to some of the plain and incised forms that occurred commonly at the McGee bend sites, yet they are not quite the same. So, while this burial is undoubtedly related to the cluster of firmly associated traits, it has no direct associational link with it. Considering the presence of the glass beads, an obvious hypothesis is that Burial 1 at Wylie Price is somewhat later than the other burials containing offerings; but this hypothesis cannot be tested properly until additional data have been secured.

Absent from the burials were several kinds of artifacts that were numerous at most sites, notably dart points, arrow points with straight to expanding stems, sand-tempered pottery, and several of the knife forms. These absences do not necessarily signify cultural disjunction of course, but they do leave open the possibility that some of the absent traits may be of different cultural provenance than

the cluster of associated burial traits. This possibility will be explored later through the analysis of nonburial data.

Geologic Association and Disjunction

Excepting mounds, most archeological sites in eastern Texas—and all of those investigated at McGee Bend—unhappily are lacking those ingredients that permit easy, accurate ordering of field data into chronological columns: namely discrete, stratified geologic deposits containing cultural remains. At most sites cultural material, far from being stratified, is restricted to a single geologic stratum, the layer of sand that constitutes the topsoil over virtually the entire region.

All of the McGee Bend sites (except Jonas Short, which occupied the flood plain of the Angelina River) were on ridges fingering into the edges of stream valleys, or in knolls—erosional remnants of the dissected upland—down in the valleys proper. The bodies of the ridges and knolls invariably were composed of clay or sandy clay, in diverse shades of red, yellow, and gray, designated Zone 1 in the site descriptions herein. Overlaying the clay at each site was a thin mantle of sand ranging up to a maximum thickness of some five or six feet. As a general rule, the sand varied considerably in thickness within a particular site and was usually thicker on the crest of a ridge than on its sloping sides. At some sites there were small low-lying swags where it was also relatively thick. The variable thickness of the sand may be seen in the profile drawings for the sites.

Although a few items of cultural refuse sometimes occurred within the upper few inches of the Zone 1 clay, the zone was, for all practical purposes, sterile. It was the surface layer of sand that contained the archeological remains.

The general configurations of the sand—thin on slopes, thick in low spots and on more or less level ground—suggests that it had been shaped in large degrees by erosion. Surface runoff would tend to carry away the sand (which is rather loose) from the slopes and to deposit it in low spots; the relatively level ridge crests would not be subject to erosion as extensive as that on the hillsides. Erosion at most of the McGee Bend sites undoubtedly has been accelerated over the past century or so by farming activities.

But however they may have been affected by erosion, where did the clays and sands in question come from in the first place? It is my opinion that the culturally sterile clay members at most or all of the McGee Bend sites are elements of the local bedrock formations, modified perhaps by leaching or other subsurface processes. Locally, the surface geology compromises various Eocene formations of the Claiborne and Jackson series [Sellards et al., 1932, 606-699]. An alternate

possibility is that the clays are stream-deposited: if so, the ridges and knolls where the archeological sites are located would be eroded remnants of alluvial terraces that were formed earlier than the flood plain deposits of the present streams. Duffield [1963, 86] considered the basal clay at the Wolfshead Site to be of riverine origin. In any case, the clay is of little or no value for archeological analysis as it appears to have been formed, by whatever means, before there were humans living in the region.

There seems to be no reasonable source for the surface layer of sand except from the local Eocene formations of the Jackson and Claiborne series. Undoubtedly the land surfaces of the region have, by and large, been steadily lowered by erosion since long before humans appeared there, the residual mantle of sand simply remaining behind as the lighter clay particles on and near the surface washed or leached away. However, there must have been some accretion of the superficial sands at most sites during the period of human occupancy since some kinds of artifacts (notably dart points and certain knife forms, as will be shown below) consistently tended to cluster at subsurface levels. How the sand was deposited over the earlier artifacts on the crests and slopes of ridges remains a mystery that I cannot explain and therefore will simply report.

Many of the geologic problems relative to archeology in the McGee Bend area undoubtedly will not be solved until they have been thoroughly investigated by specialists. But even though the geologic processes that produced the clays and sands are not fully understood, the zones themselves are physical realities which can be observed and described, and distributional analyses of cultural forms within the geologic contexts can be fruitfully pursued.

Save for the tiny quantity of artifacts and refuse found in the upper part of the Zone 1 clay—and it is probably intrusive for the most part anyhow—the cultural remains at McGee Bend were restricted to the unstratified sands. This is a clear case of geologic association, but one which reveals only that all the cultural remains are more recent than Zone 1 (that is, more recent than the Eocene if Zone 1 is, indeed, of Eocene age).

Distributional Analysis of Typological Categories

Although discrete geologic strata suitable for meaningful ordering of data were lacking, two major avenues of approach to the distributional analysis of traits at McGee Bend were still open: (1) site-to-site comparison of the total inventory of traits at each site, and (2) statistical analysis of intrasite trait distribution. Both were investigated in an attempt to answer these questions: How does the cluster of traits

established through burial association stand up to intersite and intra-site statistical studies? Can traits not found in the burials but present elsewhere in the sites be correlated with the burial traits? Can disjunction between the burial cluster and other traits be demonstrated? Apart from the burial cluster, what associations and disjunctions, if any, are demonstrable? Can the distributional analysis produce results reliable enough for the establishment of an accurate classificatory system for ordering the data into trait clusters representative of particular time-space segments?

Intersite Comparisons

The cluster of traits established through burial associations was tested by comparing it to the total trait inventory of each site. The major elements of the cluster are Perdiz arrow points, Pineland Punctated-Incised, and the various categories of miscellaneous clay-tempered pottery. And there does seem to be a site-to-site correlation between those traits. Reference to Table 15 will help the reader keep up with the discussion that follows.

In sites where Pineland Punctated-Incised occurs in some quantity (Walter Bell, Etoile, Sawmill, Wylie Price, McElroy, Print Bell, Blount) Broaddus Brushed also occurs in greater quantities—three to ten times as many sherds of Broaddus as of Pineland except at Print Bell. (But Pineland vessels are decorated only on the rim, Broaddus over the entire body.) The miscellaneous clay-tempered sherds (plain, punctated, incised, engraved, etc.) are more numerous, collectively, than Pineland and Broaddus combined at each site. There are some differences in the relative quantities of the subgroups (incised, engraved, etc.) within the miscellaneous clay-tempered series; perhaps these reflect relatively small time differences, or possibly other variables, from one site to another.

The distribution of Bear Creek Plain does not seem to have any correlation with that of the clay-tempered pottery. The proportion of Bear Creek Plain sherds to clay-tempered sherds (and especially to Broaddus Brushed and Pineland Punctated-Incised) varies from extremely low at some sites (Blount, Etoile, McElroy) to moderate at others (Sawmill, Walter Bell, Wiley Price), to quite high at Print Bell. Particularly striking is the contrast between Etoile (52 Bear Creek Plain sherds to 2,504 decorated clay-tempered sherds and Print Bell (791 Bear Creek Plain to 546 decorated clay-tempered). And although the samples are small, the presence of Bear Creek plain at Runnels No. 1 (126 sherds), Runnels No. 2 (185 sherds), and Dubose (20 sherds), where clay-tempered sherds are extremely rare, is probably significant.

A site-to-site comparison of the pottery, then, reveals that the different groups of clay-tempered sherds have distribution patterns that are rather similar to one another. But the distribution of the sand-tempered ware Bear Creek Plain suggests that some degree of disjunction between it and the clay-tempered pottery obtains.

Turning to chipped stone artifacts, Perdiz arrow points are distributed similarly to the clay-tempered sherds. Perdiz was most numerous at Walter Bell, Sawmill, Wiley Price, and Etoile, the same sites where the clay-tempered ware was most common. The three sites where no Perdiz points were found—Runnels No. 1, Runnels No. 2, and Dubose—are the sites where clay-tempered sherds were most rare.

Other arrow point types occur from site to site in patterns rather like that of Perdiz. Although the sample is small, Clifton points, especially, tend to occur in the same sites as Perdiz and to be absent at the same sites where Perdiz is absent. Friley points, on the other hand, do not follow the Perdiz distribution pattern so well. The three sites where Perdiz and Clifton were absent—and where clay-tempered sherds were most scarce (that is, Dubose and the two Runnels sites)—did produce four Friley points between them; furthermore, no Friley points were found at Etoile, Blount, or McElroy, sites where clay-tempered ware was common and the two contracting stem arrow points—Perdiz and Clifton—accounted for the majority of arrow points present. Thus the distributional data suggest some degree of disjunction between Friley arrow points and the Perdiz-Clifton-clay-tempered pottery cluster. Friley appears, in fact, to correspond more closely in its site-to-site distribution with Bear Creek Plain than with the clay-tempered ware. With respect to dart point distribution, no similarities to pottery or arrow point distribution patterns were observed; indeed, exactly the opposite—that is, a good case for disjunction—is indicated between clay-tempered pottery and arrow points on the one hand and dart points on the other. Walter Bell, for example, the site most productive of clay-tempered pottery (8,967 sherds), yielded only 21 dart points, while the two Runnels sites produced 72 dart points, but only 69 clay-tempered sherds, between them. But not only does the dart point distribution differ from that of clay-tempered pottery, it also exhibits no particular similarity to that of Bear Creek Plain.

The knife groups seem to be distributed, by and large, like the dart points. Especially striking is the low yield of knives at Walter Bell, the site that produced the largest sample of clay-tempered sherds.

The remaining artifact groups comprise samples that are too small for really significant results in a site-to-site comparison. Therefore, conclusions regarding any possible associations of disjunctions will

be deferred until the vertical data have been considered.

To summarize the analysis to this point, the site-to-site comparisons indicate that (1) the distribution patterns of clay-tempered sherds, Perdiz arrow points, and Cliffton arrow points are similar; (2) the distribution patterns of dart points and knives as classes are similar to one another but different from those of pottery and arrow points; (3) Bear Creek Plain pottery appears to be disjoined in some degree from both the clay-tempered pottery-Perdiz-Cliffton cluster and dart point-knife cluster.

Intrasite Distributional Analysis

Before the intrasite distribution studies were begun, each site was divided into several areas. There were from four to twelve areas to a site, depending on the extent of excavation and on how much the artifact-bearing sand zone varied in thickness from one area to another within a site. The purpose of setting off these intrasite areas was twofold: (1) to provide units for horizontal distribution analysis and (2) to increase the internal consistency of the samples used for vertical distribution studies.

Both horizontal and vertical distribution studies were carried out in an effort to determine any associations or disjunctions that might exist between various artifact categories. The horizontal studies produced nothing of particular significance, but the vertical studies were much more fruitful, certainly characteristic patterns recurring with consistency from site-site, as well as from area to area within individual sites.

The artifacts were separated into many small trial groups in the beginning, and the distribution of each group was plotted in each area of each site. When groups that were closely similar typologically were found to have similar distributions, they were combined into a larger group. And when two or more areas within a site were found to contain similar artifacts with similar vertical distributions, the areas were combined into one. Because there turned out to be a more or less homogeneous horizontal distribution of artifact groups at most sites, and because there were consistent vertical distribution patterns of the different groups from area to area within the sites, in the end the areas at each site were all combined and the sites themselves treated as units for the vertical distribution studies.

Since there is no relevant stratigraphy, the only possibility for ordering data temporarily on the basis of geologic context lay in vertical distribution studies of artifact forms within the single, more or less homogeneous body of unconsolidated sand that constituted the artifact-bearing zone at each site. This kind of analysis was carried

out by studying the vertical distribution patterns of various artifact categories at each individual site, a technique that had produced significant results in previous studies of McGee Bend data.³¹

The vertical distribution studies were done by plotting the provenience, by levels, of each separate artifact category being studied at each site. The levels were the six-inch (or rarely, one-foot) intervals by which the sites were dug, expressed as depth below the surface. At each site there was some material for which the provenience data were not precise enough for inclusion in the analysis; and at several sites, where small tests were made at some distance from the main excavations, material from some of the tests was excluded as a safeguard to insure as uniform a sample as possible. Distributional data on the artifact groups at each site are given in Tables 2-14.

Several striking trends in the vertical distributions of certain artifact types and forms have been discerned. These are described verbally below, and some of the data that demonstrate the statistical validity of the trends are presented in graphic form in Figure 95. The distribution patterns of all artifact categories at all of the sites have been studied in detail, and most of them have been plotted graphically. To have included all of the graphs in this report would have entailed dozens of figures: Since this was impractical—and unnecessary—representative graphs only are shown. The occurrence of all the artifact groups by levels within the sites are given in the tables that accompany the respective site descriptions, and the the vertical distribution of any group at any site can be plotted, if anyone should so desire, from the data in the tables.

Significant observations arising from the vertical distribution studies are as follows:

1. Dart points and knives, as classes, together with Perkin pikes and Lufkin implements, consistently tended to occur deeper than pottery and arrow points.
2. Clay-tempered pottery, Perdiz arrow points, and Clifton arrow points tended to occur higher than the dart point-knife cluster.
3. Bear Creek plain pottery tended to be most heavily distributed in levels that were intermediate between the dart point clusters below and the clay-tempered pottery-arrow point cluster above.
4. None of the distribution patterns noted are completely separate from the others: the three major patterns all overlap each other to greater or lesser extent.
5. Tendencies that—because of small samples—are suggestive but not conclusive are: (1) the few San Patrice dart points tended to

³¹ ; C. D. Tunnell. *Evidence of a Late Archaic Horizon at Three Sites in the McGee Bend Reservoir, San Augustine County, Texas*. The University of Texas. Unpublished MA Thesis, 1961a; and L. F. Duffield. *The Wolfshead Site: An Archaic-Neo-American Site in San Augustine County, Texas*. *Bulletin of the Texas Archeological Society*, pages 83-141, 1963

occur in the deeper levels, giving additional substance to the conclusion reached by Duffield [1963, 139] that San Patrice is one of the earliest dart point forms in the McGee Bend area; (b) Neches River dart points occurred deeper than most dart points; (c) drills tended to go with the pottery-arrow point levels; (d) small end scrapers occurred relatively deep (an early temporal alignment with San Patrice dart points was indicated for small end scrapers at the Wolfshead Site) [Duffield, 1963, 138]; (e) polished stone celts probably go with the ceramic-arrow point cluster.

6. The suggestion advanced by Duffield [1963, 139-140] that Gary is later than most other dart point forms in the McGee Bend region is supported by the data from Sawmill but not by that from Print Bell. More data will be required before the temporal placement of Gary can be determined accurately.

In seeking to interpret the vertical distribution patterns, there are two possibilities: (1) that those traits which are relatively abundant in the deeper levels of the sites are older than those which are relatively abundant in the upper levels, or (2) that all the artifacts found in a particular excavation level represent a single cultural inventory that dates from a specific interval in the overall time span during which a site was occupied. In the former case, the overlapping of the distribution patterns would have to result from mechanical mixing; in the latter, the overlapping would indicate the relative popularity of the various artifact types within the same general culture at different times. Undoubtedly both possibilities are partly true, and the question of which one carries more weight must remain conjectural for the time being. But because of the physical structure of the McGee Bend sites—a single geologic zone of sand that is observably disturbed by gopher runs, root molds, and holes dug by the Indians—subterranean mixing of the cultural residue must have been appreciable in most cases. I believe it possible, therefore, that the overlapping distribution patterns resulted in large part from mechanical mixing.

In any event, once all the data on artifact associations and disjunctions have been thrown together and examined, a rather definite pattern emerges. This pattern has pointed the way to what is thought to be an accurate, although necessarily somewhat gross, classificatory system for the archeology of the McGee Bend area. Following current practices, the two major clusters of traits limned by the foregoing analysis are assigned focus names—Brookeland Focus for the earlier Archaic cluster of dart points, knives, and other implements, Angelina Focus for the later Neo-American cluster that includes the burial furniture and other materials.

The Brookeland Focus

The Brookeland Focus is typical of the Archaic cultures of the southeastern United States. It probably had a band-type social organization and an economy based on seasonal transhumance that exploited both the flora and the fauna of the region for staple food products. The settlement pattern in such an economy would be one of semi-nomadic movements from one site to another, no particular spots being occupied continuously, although favored camping places may have been used over and over seasonally as the hunting-gathering cycle continued through the years.

The Brookeland Focus components at McGee Bend are just what one would expect to remain from such a mode of existence: camp debris scattered about thinly, with no heavy midden accumulations and no evidence of permanent structures.

Traits of the Brookeland Focus

Dart Points

Major Forms

Kent Type

Woden Type

Form X

Minor Forms

Form Y

Form Z

Points with broad expanding stems

Knives

Major Forms

Bronson Type

Harvey Type

Subtriangular

Minor Forms

Ovate

Miscellaneous Tools

Perkin Pikes

Lufkin Implements

Some of the other kinds of artifacts found at McGee bend probably go with the Brookeland Focus, but only those with relatively large samples and convincingly consistent distributions were included. Thus the above trait list is believed to be accurate as far as it goes; additions to it must await future research.

The Angelina Focus

The Angelina Focus is an archeological complex derived from a Neo-American culture of late prehistoric times. This culture is thought to have had an agricultural economic base and a social structure organized around village life. There is no direct archeological evidence of agriculture, but configurational similarities to agricultural complexes in the neighboring Caddoan and Lower Mississippi archeological areas make it virtually certain that the Angelina Focus peoples were farmers. Components of this focus, with relatively rich midden areas and permanent wattle-and-daub houses, indicate continuous rather than seasonal occupation.

The following trait list, like that given for the Brookeland Focus, includes only elements that can be grouped together with assurance by virtue of their congruent distribution patterns. Some traits of uncertain provenience may properly belong on the list, but if there was any serious doubt about whether a trait should be included or not it was left off.

Traits of the Angelina Focus

Ceramics

Broaddus Brushed

Pineland Punctated-Incised

Various forms of clay-tempered pottery, plain or decorated by brushing, incising, punctating, engraving, and appliqueing.

Clay pipes of two forms: (1) long-stemmed, thin-bowled pipes of the style usually identified with the Gibson Aspect in the Caddoan area: (2) elbow pipes similar to those of Fulton Aspect provenience in the Caddoan area.

Arrow Points

Perdiz

Cliffton

Alba

Small Chipped Stone Drills (Forms I, II, and III)

Bird Bone Flageolets (known only as burial offerings)

Architecture

Circular houses, some with a central fireplace; no extended entranceways noted.

Deer Ulna Flaking (?) Tools

Cylindrical Conch Shell Beads (known from one burial only)

Geometric Inlays (?) of Marine Shell (known from one burial only)

The above are not intended as complete lists of culture traits for the two foci but as the major diagnostic traits that differentiate them in the McGee Bend area.

Summary, Conclusions, and Conjectures

Through a study of cultural associations in burials, of site-to-site comparisons of trait inventories, and of vertical distribution analysis within the individual sites, it has been possible to work out in broad outline the beginnings of an archeological classification system for the McGee Bend region of eastern Texas. The major elements of the classification are two clusters of archeological traits, the Brookeland Focus of Archaic affiliation and the Angelina Focus of the Neo-American Stage.

Johnson [1962] has recently defined a La Harpe Aspect in which were included Archaic manifestations of the McGee Bend locality, specifically the data reported by Tunnell [1961b] from the two Runnel sites. The Brookeland Focus would seem to fit into the La Harpe Aspect rather comfortably, although there is some question as to whether or not the shift from expanding stem to contracting stem dart points that Johnson considers characteristic of the aspect actually took place at McGee Bend.

The Brookeland Focus, in any case, appears to be a local variant of a broad Archaic pattern that encompasses much of eastern Texas, from the Gulf coast to the Red River. Its closest cultural ties are clearly to the east. The area immediately west of McGee Bend is essentially unknown archeologically; but a distinctively western Archaic pattern, comprising local configurations of the so-called Desert Cultures, is manifest through the arid lands extending westward from central Texas, beginning no more than 150 miles from McGee Bend (Kelley [1959, 288]; Johnson [1962, 270]).

Duffield [1963] has presented evidence from the Wolfshead Site that San Patrice dart points are earlier than the dart point forms that go with the Brookeland Focus. Although the sample is small, the distribution of Neches River dart points at McGee Bend suggests that they also predate the Brookeland Focus proper.

The matter of equating the Angelina Focus with existing archeological classifications poses difficult problems. Although the closest cultural affiliations are patently with the Caddoan Area, no close correlation can be made with either of the two Caddoan aspects, much

less with any specific foci. That is to say, the Angelina Focus possesses traits that are usually considered diagnostic of the Gibson Aspect (free finger-nail punctated pottery that appears identical to that of the Alto Focus, zoned-punctated pottery, Alba arrow points, long-stem pipes, and the absence of shell-tempered pottery); but it also has traits characteristic of the Fulton Aspect (brushed pottery, Perdiz arrow points, and elbow pipes). An obvious hypothesis –and one that should be tested by additional fieldwork– is that the Angelina Focus spans the time period encompassed by the entire Caddoan sequence. If so, future research may result in fragmenting the Angelina Focus, as it is defined here, into several smaller units. Another possibility is that the Angelina Focus, in its entirety, is approximately coeval with the Fulton Aspect. If so, the Gibson Aspect traits that occur in the focus must be survivals. That the Angelina Focus is at least partly contemporaneous with the Fulton Aspect is amply proven by the very firm cultural association in Burial 3 at the Walter Bell Site of the Belcher Focus pottery (Glassell Engraved and Belcher Ridged-like vessels) with typical Angelina Focus pottery, flageolets, and arrow points.

The Angelina Focus must represent a prehistoric culture that is ancestral to some of the historic Indian tribes of the region. This prehistoric culture, as it has been revealed through its archeological remains, was evidently more closely related in material traits to the Hasinai than to the Atakapa. The Frankston and Allen foci are thought to represent the late prehistoric and historic Hasinai tribes respectively [Suhm et al., 1954, 185]. The Angelina Focus is sufficiently different from the Frankston and Allen foci to suggest that, in terms of material culture, it is not typical Hasinai.

Another possibility is that the Angelina Focus is the prehistoric equivalent of the Bidai, or possibly the closely related Deadose, who from ethnographic accounts seem to have had fairly close relationships with the Hasinai, although linguistically they were Atakapan.³² Of possible significance in this regard is a report that the Deadose lived at one time near the juncture of the Angelina and Neches Rivers [Bolton, 1915, 147-148]. A third possibility is that the Angelina Focus represents either the Eyeish or the Adai tribes, both of which have been described as atypical relatives of the Hasinai.

The distributional studies of the present report indicate that Bear Creek Plain is disjoined in some degree from the clay-tempered ceramics that are characteristic of the Angelina Focus. Furthermore, Bear Creek Plain is earlier than the clay-tempered Angelina Focus ceramics. Typologically, two separate ceramic traditions certainly must be represented by these two kinds of pottery: they reflect, respectively, two different conceptions of pottery styling and manufacture.

³² A. F. Sjöberg. The Bidai Indians of Southeastern Texas. *Southwestern Journal of Anthropology*, 7(4):391–400, 1951

If the inspiration for Angelina Focus ceramics lies with Caddoan traditions, Bear Creek Plain is surely a product of the same stylistic tradition that produced the ceramics of the Galveston Bay and Rockport foci. Considering that Bear Creek Plain is distributed over approximately the same territory that was occupied by Atakapan peoples in the eighteenth century, it appears probable that Bear Creek Plain is a kind of prehistoric Atakapan pottery. Since it predates the Angelina Focus in the McGee Bend locality, there is a strong possibility that similar plain pottery found in Galveston Bay Focus sites and constituting a sand-tempered form of Goose Creek Plain (Wheat [1953]; Suhm et al. [1954, 128-129, 378-380, Pl. 71]) is also relatively early there. If future research should prove this to be the case, then the Angelina Focus, which followed Bear Creek plain at McGee bend, probably equates in time with the later part of the Galveston Bay Focus when incised pottery would have been in vogue. Extending this possibility further, the tentative conclusion is unavoidable that the Galveston Bay Focus was coastal Atakapan and the Angelina Focus representative of a marginal prehistoric Hasinai group (Eye-ish? Adai?) or possibly Bidai or Deadose. In any event, the plain and decorated pottery of the Galveston Bay and Rockport foci together with Bear Creek Plain constitute a single ceramic tradition typified by simple jars and bowls with convex and conoidal bases. It appears likely that these distinctive vessel shapes derived from the convex-conoidal-based pottery that is distributed over much of the eastern United States (Griffen, 1952). But it would have been difficult for this vessel form to have diffused into south-eastern Texas once the elaborately decorated ceramics of the Caddoan Area to the north and of the Lower Mississippi Area to the east became firmly established. Thus it is reasonable to conclude that the tradition reached south-eastern Texas before Caddoan and Lower Mississippi area ceramics became entrenched. If that hypothesis is correct, the incised and clay-tempered pottery of the Galveston Bay Focus must have developed out of the basic sand-tempered plain ware, Bear Creek Plain, with inspiration for the incised decorations, and perhaps for clay tempering also, probably coming from Lower Mississippi and/or Caddoan area peoples.

The asphalt-painted pottery of the Rockport Focus could well have grown out of the hypothetical Bear Creek Plain base, but the idea of painted decorations could hardly have been borrowed from the Caddoan or Lower Mississippi area traditions. Probably it came from the Huasteca region down the Gulf Coast in Tamaulipas or possibly it was of strictly local origin.

The hypothesis that Bear Creek Plain is a relatively early kind of pottery along the Texas coast cannot be adequately tested with

present data. Intensive excavation and close dating of the different kinds of pottery in question must be achieved before the final answer can be known.

One of the most intriguing problems that has arisen out of the salvage work at McGee bend is that of determining who were the people that built the Jonas Short mound and what relationship they had to local and nonlocal peoples and cultures. The mound must date from some time after the introduction of clay-tempered pottery to the area because clay-tempered sherds were included in the mound fill.

Typological similarities of artifacts found in the mound to Caddoan Area complexes and to the Adena, Hopewell, Copena, and Marksville cultures have been discussed in an earlier section. The strongest relationships seem to be: (1) to the late Adena-early Hopewell transition through the copper bracelets, the reel-shaped gorget, and the cremation; (2) to the Caddoan-coastal Texas region through the somewhat meager data on the distribution of boatstone forms; (3) to the local McGee Bend complexes through the Kent and Gary dart points found in caches.

Three possible theories may be advanced to explain the Jonas Short mound.

1. The mound was built by some essentially nonlocal culture (Adena? Hopewell? Copena?) which occupied the area briefly but left little imprint on the material culture of the local people.
2. The mound and its contents constitute a burial complex of the Alto Focus. Suggestions of stylistic relationships between Alto Focus artifacts and those of the Adena, Hopewell, and Copena cultures have been pointed out by [Newell and Krieger \[1949, 218-224\]](#).
3. The mound represents a ceremonial aspect of the Angelina Focus that did not find expression in ordinary habitation sites. This appears the least likely of the three theories.

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