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Historical Archaeological Resources of the Choke Canyon Reservoir Area in McMullen and Live Oak Counties, Texas

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PART II

HISTORICAL ARCHAEOLOGICAL RESOURCES OF THE CHOKE CANYON RESERVOIR AREA IN McMULLEN AND LIVE OAK COUNTIES, TEXAS

Ву

Philip A. Bandy

Report of a project carried out by the Cultural Resources Institute Texas Tech University

ABSTRACT

During previous surveys of the Choke Canyon Reservoir area in Live Oak and McMullen Counties, Texas, 17 historic sites (structures, refuse areas, cemeteries) had been located and examined. Further work in this area is described in this report and is summarized as follows:

Most of the above sites and 5 newly located ones underwent surface collection and test excavation. Sites were recorded and the collected artifacts described and classified. Suggested chronology and occupation are correlated with the findings of the historical research study (Everett, Part I of this report).

Evidence indicates that the area was most intensively occupied during the second half of the nineteenth century and that the inhabitants were Anglo-American, Black, Mexican, and possibly Mexican-American families. They were dependent on stock raising and strongly affected by the regional economy.

ACKNOWLEDGMENTS

Daniel E. Fox directed the field work for this project; he was assisted by Paul D. Lukowski, William F. Fritts and J. Robert Lee. They wish to thank Max Quintanilla of Tilden, Texas, and his family for their help and hospitality. T. Jeffrey Campbell and George C. Knight assisted the author with the lab studies. Drafting was done by Brook Bowman and Ernest Macher, using the facilities of the Civil Engineering Department, Texas Tech University. Alice W. Portnoy served as project manager during the period of project activity. She also served as editor during the report writing and revising period. As editor she was especially helpful, drastically revising and improving initial draft manuscript prepared by the author. She also prepared the summary and conclusion section. The author is grateful to all of these persons and also to the many others who gave help and encouragement.

INTRODUCTION

This study of the historic archeological site resources of a portion of the Nueces River project is one part of a three-part subcontract project between Texas Tech University and the University of Texas at San Antonio. The subcontract project was carried out during the period from July 1, 1977 to September 1, 1978 by TTU's Cultural Resources Institute. As are the other two parts of the project (history and prehistoric survey), the historic archeology part is based on the Scope of Work requirements of Bureau of Reclamation RFP #50-V0897 and the subsequent proposal and research design submitted to UTSA by CRI (Mayer-Oakes 1977).

Previous archeological and historical research in the Nueces River project area has been very limited until recently. The first reported archeological investigations were conducted by Wakefield in 1968. His investigations were preliminary in nature and scope but reported the historic archeological sites 41MC15 and 41MC17. In 1974, the Texas Historical Commission and Texas Water Development Board collaborated and began surveying the reservoir area (Sorrow, O'Malley and Fox 1974 as cited in Lynn, Fox and O'Malley 1977:1). This field effort was resumed in 1976 by the Texas Historical Commission under contract with the Bureau of Reclamation. A result of that contract was a report (Lynn, Fox and O'Malley 1977) which included findings, initial evaluation and a summary of 17 historic sites. The historic sites comprised 11 historic structures or refuse areas and 6 cemeteries (Fig. 5). In addition, the land ownership history was checked to determine the identity of early inhabitants. It was on the basis of the THC work and recommendations that the Scope of Work for the CRI project (1977-1978) was determined.

Daniel Fox, part of the first (1974) and second (1976) THC teams, directed and carried out the field work for this investigation. Fox worked on 15 historic sites; ten were specified in the Scope of Work, five were newly located. While site 41LK73 on the Johnston ranch was scheduled by the RFP and proposal for a surface collection, access to the site was denied by the owner at the time of field work. Fox test-excavated 7 sites and surface collected 8; Philip Bandy surface collected 1 new historic site (Table 2). Results of their field work are presented in this report. The 6 new historic sites have been added to the THC map (Fig. 5). Study of these data gathered by Fox was carried out by Bandy who also prepared this report. The oral histories, land ownerships, historic records, and government documents were investigated by Dianna Everett and Stephen Head of the TTU-CRI history sub-project. Everett has prepared a separate report dealing with these aspects of the historical record. 2-5 summarize TTU Historic Sites Archeology and Historical Research field work.

Figure 5. Project Area Map with Sites Located.

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TABLE 2. HISTORIC SITES STUDIED, TTU-CRI PROJECT 1977-78.

New sites located	Mapped and surface collected	Tested and sur- face collected	Covered b	y historian
* 41LK123	* 41LK159	41LK66 "Nichols House"	41LK15	41MC71
* 41LK140	41MC46	41MC15	41LK53	41MC72
* 41LK159	41MC91	41MC17	41LK66	41MC74
* 41LK163	41MC166 "Dump Site"	41MC72	41LK73	41MC91
41LK168	41MC168 "Teal Site"	41MC74	41LK159	41MC166
* 41LK197	41MC175	41MC185	41LK168	41MC168
* 41LK199	41MC185	41MC192	41LK197	41MC175
41MC72 "New Site"	41MC193		41LK199	41MC185
41MC192 "Dusek Site"	41MC194		41MC4	41MC192
41MC193 "Bracken Site"	41MC195 (surf. coll. only)		41MC6	41MC193
41MC194 "Horton Site"	* 41MC214		41MC15	41MC194
41MC195 "Teal House"			41MC17	41MC195
* 41MC214			41MC46	41MC214
* Historic component of	site located by survey project	·	41MC55	Yarbrough Bend Cem.
(Thoms and Montgomery)			41MC66	(no number)

							•
SITE NUMBER AND NAME	PHYSIOGRAPHIC SITUATION	UNDERLYING GEOLOGIC OUTCROP	NEAREST STREAM CHANNEL	DISTANCE SITE TO		PROBABLE WATER SOURCE	NEAREST CONTEMPORANEOUS SITES OR
			311 WILLE	horiz .	vert		CULTURAL FEATURES
41LK66 Nichols House	valley wall, Frio River	Catahoula formation	Frio R.	244	13	cistern	41LK15, 73, poss. sites on Schwartz Ranch
41MC15	fossil flood plain margin	Lipan member, Fayette form.	Frio R.	12	9	Frio R.	41MC17, 71 cem., Yarbrough Bend Cem.
41MC17	fossil flood plain margin	Lipan member, Fayette form.	Frio R.	34	11	Frio R.	41MC15, 71 cem., 72, 74, Yarbrough Bend Cem.
41MC46	valley wall, Opossum Creek	Whitsett mem., Fayette form.	Opossum Ck.	. 91	4	dug well	41MC175, 185, poss. sites on Opossum Creek
41MC72 "New" Site	fossil flood plain margin	NA .	Frio R.	40	7	Frio R.	41MC15, 17, 71 cem., 74
41MC74	fossil flood plain margin	Lipan member Fayette form.	Frio R.	46	10	Frio R.	41MC15, 17, 71 cem.,

TABLE 3. (continued)

SITE NUMBER AND NAME	PHYSIOGRAPHIC SITUATION	UNDERLYING GEOLOGIC OUTCROP	NEAREST STREAM CHANNEL	DISTANCE SITE TO S		PROBABLE WATER SOURCE	NEAREST CONTEMPORANEOUS SITES OR			
			·	horiz	vert		CULTURAL FEATURES			
41MC91	valley wall, Frio R.	Lipan mem., Fayette form.	cut-off channel of San Miguel Frio R.		NA	cistern or well	41MC166, 185, Yarbrough Bend sites and cem.			
41MC166 "Dump" Site	Pleistocene terrace margin	Lipan member, Fayette form.	San Miguel Creek	20	NA	San Miguel Ck.	41MC15, 91, 168, Yarbrough Bend cem.			
41MC168 Teal Site	Pleistocene terrace margin	NA 4.	San Miguel Creek	70	NA	San Miguel Ck.	41MC15, 91, 166			
41MC175	Pleistocene terrace remnant	Whitsett member, Fayette form.	Frio R.	716	10	cistern	41MC46, 185			
41MC185	valley wall, Frio R.	Whitsett and Lipan members, Fayette form.	Frio R.	128	11	Frio R.	41MC46, 175 Byrne cem.			
41MC192 Dusek Site	fossil flood plain margin or valley wall		Frio R.	110	19	Frio R. Blackhill H.	41MC17, 71 cem., 72, 74, 193, 194			

^{* 30}m old bed, 700m present (S.M.Ck.)

TABLE 3. (continued)

SITE NUMBER AND NAME	PHYSIOGRAPHIC SITUATION	UNDERLYING GEOLOGIC OUTCROP	NEAREST STREAM CHANNEL	DISTANCE (m) SITE TO STREAM		PROBABLE WATER SOURCE	NEAREST CONTEMPORANEOUS SITES OR		
			CHANNEL	horiz	vert		CULTURAL FEATURES		
41MC193 Bracken Site	valley wall (upland margin)	NA .	Frio R.	155	11	Frio R.	41MC192, 194 poss. sites toward Tilden		
41MC194 Horton Site	valley wall (upland margin)	NA	Frio R.	119	NA	Frio R.	41MC71 cem., 74, 192, 193, poss. sites toward Tilden		
41MC195 Teal House	NA	NA	Frio R.	NA	NA	Frio R.	ΝA		

NA -- Not Available

TABLE 4. CRI-TTU 1977 FIELD WORK.

SITE NUMBER AND NAME	HORIZONTAL EXTENT (sq m)	CONDITION	TYPE OF WORK DONE	DATES (1977)	AMOUNT OF TIME SPENT (days) by 4-man crew	RECOMMENDATIONS FOR FURTHER FIELD WORK
41LK66 Nichols House	1200	A	1	7/06-7/15	9.5	10 more days
41MC15	500	В.	1	8/15-8/18	4.0	6-10 more days
41MC17	1000	C	1	8/01-8/10, 8/17	10.5	6-10 more days
41MC46	1200	D	2	7/19	1.0	0
41MC72 "New" Site	3000	D	1	8/23	0.8	1 more day
41MC74	700	E	1	8/10-8/12	2.5	3 more days
41MC91	800	E ::	2	7/27	1.0	0
41MC166 "Dump" Site	40	E (2	8/29	0.5	0 .

TABLE 4. (continued)

SITE NUMBER AND NAME	HORIZONTAL EXTENT (sq m)	CONDITION	TYPE OF WORK DONE	DATES (1977)	AMOUNT OF TIME SPENT (days)	RECOMMENDATIONS FOR FURTHER FIELD WORK
41MC168 Teal Site		D (*)	2	8/29	0.3	1 more day
41MC175	1000	$\mathbf{A}_{i}^{(j)}$.	2	7/20-7/22	3.0	0
41MC185	1800	E	. 1	7/25-7/26	2.0	0 .
41MC192 Dusek Site	1200	C *.	1	8/19-8/22, 8/24	3.0	10-20 more days
41MC193 Bracken Site	2400	C	2	8/25	0.5	6-10 more days
41MC194 Horton Site	900	C (2	8/25	0.2	1 more day
41MC195 Teal House	1200	E	3	10/26	0.2 (1 man)	0 :
				KEY		
B some a C partia D distur	vely well-pres reas preserved lly disturbed bed by clearin disturbed by c	l by clearing/e ng/erosion			testing	ollection and intensive ollection and mapping ollection

TABLE 5. SUGGESTED CULTURE/CHRONOLOGY.

SITE NUMBER AND NAME	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY ARCHEOLOGICAL FIELD WORK AT SITE	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY HISTORICAL RESEARCH	DIAGNOSTIC SPECIMENS DETERMINED BY LAB ANALYSIS
41LK66 Nichols House	1870s-1930s, poss. to present Anglo-Amer	1858-1954 Anglo-Amer	glass pre-1880 1860-90 nails pre-1900 many, varied 1900-60
41MC15	1850s-70s (80s(?) Anglo/Mex-Amer	1870s & 80s Anglo-Amer Mex	ceramic 1850-70 1860-1900 nails pre-1900
41MC17	1870s & 80s Anglo/Mex-Amer	1870s & 80s Anglo-Amer Mex	ceramic 1860-1900 pre-1900 1880-1910 glass 1880-1910 nails pre-1900 cartridges 1860-1920
41 MC46	late 1860s or early 70s to 1890s Anglo/Mex-Amer	1880(?) tow? Control of the large	ceramic 1860-90 glass post-1910 tin can post-1880
41MC72 "New" Site	1870s-90s Anglo/Mex-Amer	1870s & 80s Anglo-Amer Mex	ceramics 1850-1880 1860-1900 glass 1860-1900 1880-1915 nails pre-1900

TABLE 5. (continued)

SITE NUMBER AND NAME	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY ARCHEOLOGICAL FIELD WORK AT SITE	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY HISTORICAL RESEARCH	DIAGNOSTIC SPECIMENS DETERMINED BY LAB ANALYSIS
41MC74	1850s-80s Anglo/Mex-Amer		ceramics 1840-70 1850-70 1855 1860-70 1860-1900 pre-1900 glass 1860-1900 1880-1910 nails pre-1900 post-1900
41MC91	1870s-1930s (possibly to present 3 occupations(?) Anglo/Mex-Amer	1860s - recent 1860s Anglo-Amer 1880s Mex,Black	glass 1880-1910 post-1910 nails pre-1900 post-1900 cartridges 1870 to present
41MC166 "Dump" Site	1880s-90s	1882 - (see MC168)	glass 1860-present 1880-1910 nails pre-1900
41MC168 Teal Site	1880s-1910	1882 - 1882-88 Anglo/Amer 1888 Black	ceramics post-1880 glass pre-1880 1880-1900 cartridges 1880 to present

present

TABLE 5. (continued)

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SITE NUMBER AND NAME	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY ARCHEOLOGICAL FIELD WORK AT SITE	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY HISTORICAL RESEARCH	DIAGNOSTIC SPECIMENS DETERMINED BY LAB ANALYSIS
41MC175	1880(?)-		glass 1890-1910 nails pre-1900 many, varied 1910 to present
41MC185	late 1860s-80s Anglo/Mex-Amer	1870(?)-	ceramics 1850-1900 1860-1870 glass 1860-1900 1880-1910 nails pre-1900 post-1900 tin cans 1870-90 1870-1900
			pre-1920 Mexican ceramics present
41MC192 Dusek Site	1850s-80s Anglo/Mex-Amer	1860s-80s Anglo-Amer	ceramics 1850-70 1850-1900 1860-70 1860-1900 glass 1860-1900 nails pre-1900 post-1900 tin cans pre-1920 gun part 1830-70 coin (Mex) 1870 Mexican ceramics

TABLE 5. (continued)

SITE NUMBER AND NAME	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY ARCHEOLOGICAL FIELD WORK AT SITE	CULTURAL/CHRONOLOGICAL AFFILIATIONS SUGGESTED BY HISTORICAL RESEARCH	DIAGNOSTIC SPECIMENS DETERMINED BY LAB ANALYSIS
41MC193 Bracken Site	late 1860s or early 1870s-1880s Anglo/Mex-Amer	1860s-80s Anglo-Amer	ceramics 1850-1900 glass 1860-1900 1880-1900 nails pre-1900 tin can pre-1900 gun part 1860-1890
41MC194	late 1860s-80s Anglo/Mex-Amer	1860s-80s Anglo-Amer	
41MC195 Teal House		1878 - Anglo-Amer	ceramics 1860-90 nails pre-1900 cartridge 1870-90

The surveying of previously unsurveyed Nueces River project land by the Texas Tech survey team (directed by Alston Thoms and John Montgomery) recorded 7 more new sites with historic components (Table 2), 2 of which were surface collected and are described in their report. The intensive mapping, testing, and evaluation team from UTSA also encountered several more previously unreported historic sites.

The research design for the project was spelled out by Fox in the Texas Tech University proposal (later modified). The project may be viewed as a problem in frontier economy. Everett has in her report a discussion of theories on frontier economy operation, development, and structure. She demonstrates that the project area fits one theory or model which describes first, the development of towns or economic centers in a regional network, then second, the "filling-in" of the local economic matrix.

Frontier economy has been considered in a regional context, but details of local economy need further study. Based on what we know of the regional and local economy, the local people were bound by the regional and national economic system and were a primary resource base utilized, manipulated, and controlled by this system. We know that several major shifts in the regional economy had marked influence on the project area in terms of the way resources were utilized and what products were produced. For example, when the cattle market went bad, people shifted to raising turkeys and sheep, and then shifted back to cattle when the market improved.

Collection, analysis and interpretation of data, both historical and archeological, are resulting in increased understanding of regional history and of frontier economy generally.

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FIELD WORK

The field work, during summer of 1977, was a Phase I investigation of the historic structure/artifact scatter sites. The activities were directed toward a systematic evaluation of these sites by using both surface and subsurface recovery procedures. The intensity of examination was determined in part by the nature of each site, expecially its potential to be chronologically dated. In general, each site was examined for the presence and nature of architectural features, and the time period of occupation based on datable artifacts. These data were recorded on detailed plane table/alidade-produced contour maps and diagrams or floor plans, when applicable.

Surface Collections

The artifacts scattered on the surface were collected by several procedures. The larger, more intact, and intensively examined sites were collected with more rigorous controls than smaller, more disturbed sites. Many marginally significant sites were sampled by a "grab sample" procedure of picking up items which might give clues to age of the site. The exact provenience of these specimens was not recorded other than being from a particular site. The sites which were systematically surface collected were either divided into areas or sections and all artifacts collected by these general proveniences, or each artifact or cluster of artifacts was individually plotted on the site map. Sites which were divided into sub-areas were done so mostly by utilizing existing features such as plant or topographic zones, roads, fences, architecture, etc. Some sites were collected using a combination of techniques, by collecting all the "general type" artifacts (e.g., glass sherds, nails) and mapping in specific "important" specimens (e.g., gun parts and diagnostic ceramics). Artifacts with exact locational information are shown on the site maps when possible and are tabulated by collection units for each site when possible. All surface evidence of architecture could, of course, not be collected, but was recorded (i.e., drawn, measured, and photographed) and then plotted on the site maps.

Excavations

The excavations of historic sites were directed primarily toward the recovery of architectural data. The location of excavation units was determined by surface evidence concentrations, suggesting where subsurface features might be found. For example, rock alignments exposed on the surface may be parts of buried walls. The hypothesized

buried walls were then "checked for" by excavation or sweeping away vegetation and debris with a broom to determine if these features were there. Most of the structures probably had earth floors which are usually poorly preserved. It was hoped that some sections of floor might be preserved. Since such floors are generally best preserved in room corners, some of the suggested or observed corners were excavated to find the floor. Areas that were suspected to be structures or where wall locations were not fully detectable were tested by trenching across the area. Where there was evidence of architecture such as walls or chimney foundations, these features were sectioned to disclose methods and details of construction.

Supra-surface Investigations

Some historic structures are still standing in the project area and warranted special consideration. Two extant houses, 41LK66 and 41MC175, were measured, photographed, and floor plans drawn. Site 41MC17 has an extant chimney of sandstone block masonry. Stone chimneys were probably common in the project area. Most sites were marked by mounds of sandstone blocks and upon close examination have chimney foundations associated. To fully document these features above ground, considerable brush clearing usually had to be done. The project area has heavy brush; this has occurred since the original Yarbrough Bend settlement period and is primarily the result of grazing practices. In some cases, a relatively thin layer of dead vegetation and foliage masked features and was raked up or swept from the ground surface. All exposed artifacts and architecture were then recorded. As each site is slightly different, field techniques were used in various combinations.

LABORATORY ACTIVITIES

The temporal placement of sites is of paramount importance and it was toward this end that the bulk of lab activity was directed. Major activities are listed below:

- 1. Identify and tally (by lot) all nail types to gain clues as to the specific details and possible time period of construction of each site, using a nail typology developed and used by Fontana and Greenleaf (1962).
- 2. Identify and date all metal containers (tin cans) by the chronology of manufacturing processes. Various types of cans might also help determine the economic function of the site and its occupants.
- 3. Identify and photograph all ceramics with maker's marks. Manufacturers of English ceramics (which comprises the majority of the assemblage) often had short existences; the identification of a manufacturer can therefore help to indicate the time period of manufacture and hence of earliest possible occupation.
- 4. Classify all ceramics by material type. Some types have restricted time occurrence and so are temporally definitive. Some types were more costly and can serve as an index of socio-economic status.
- 5. Identify and tabulate personal household items such as toys, clothing and toiletry remains; such items are often age and/or sex specific.
- 6. Identify all machinery parts (cast or wrought metal); their function is indicative of economic activity.
- 7. Classify and count glass sherds, evaluate intra-site and inter-site distributions. Glass is of two types, windowpane, and container. Window glass indicates the presence of architecture and possibly economic affluence. Shapes of glass containers are sometimes diagnostic of contents and may give clues to site function or social stratification. Such items as perfume bottles may indicate sex; historic census records might be matched to such archeological data. Manufacturing techniques of bottles are also temporally diagnostic and can be determined.

Here we can note that both population and agricultural censuses have occupational information. Some persons were called "cowboys,"

some "shepherds," some "share croppers." Historically we have conceptions of social status and economic affluence associated with certain occupations. These conceptions may or may not be correct. Lab analyses may help provide data which will serve as a gauge of the accuracy of these conceptions.

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ARTIFACT DESCRIPTION AND CLASSIFICATION

The previous work on artifacts from the Choke Canyon sites by Lynn, Fox and O'Malley (1977) was used as a model for artifact classes where possible to allow for comparability between studies, but some modifications were made to meet the needs of this project. Artifacts were cleaned and catalogued and then segregated into general categories of material, e.g., ceramic, glass, metal. Where possible, analytical categories were determined by some function that could be diagnostic of time period. Most materials were subdivided into these use categories, the balance into descriptive categories. Table 6 outlines the artifact classification and Table 7 lists the artifact inventory.

Ceramic

The most numerous artifacts are ceramic. There are three major groups of ceramics present: earthenware, stoneware, and porcelain. Some ceramic specimens were difficult to classify within these types. Each of these categories was subdivided further, based upon observed differences in paste, glaze, decoration, manufacture, and vessel shape and/or function. Only a few sherds displayed maker's marks (Fig. 6, h-j).

Earthenware

White paste, clear glaze

This class of artifacts is of two types, decorated and undecorated. The undecorated sherds are probably the most frequently found artifacts in the entire assemblage with the possible exception of square cut nails. The volume of undecorated earthenware is reflective of a preference by the 19th century inhabitants for such wares probably by default (economic restrictions).

The decorated wares are of two main types: 1) those with decorations applied to the surface and 2) those with decorations molded in the paste. These wares are made with a raised design which is accentuated by the glaze having a slight green tint flowing in differential thickness around the raised design making the design visible (Fig. 6, p). These embossed designs are restricted to the rims of vessels (mainly plates) and represent a style of decoration popular mainly through the last half of the 19th century. The balance of the decorated white paste wares are colored designs applied to the vessel by various techniques. The following descriptions pertain to each decorated (non-embossed) ware type, some of which are semidiagnostic of particular time periods and can be used as chronological indicators.

Blue transfer printed ware

The most abundant decorated ware type, this has various floral, geometric, and scenic designs in blue on a white background (Fig. 6, n). The design is put on vessels from a master copper plate. The copper plate is embossed with the design and is dressed with a thin coat of linseed oil. The excess oil is wiped off leaving the embossed or imprinted design concavities filled with oil. This oil pattern is then picked up with a paper sheet by pressing it against the plate and then against the vessel. This process effectively and quickly transfers the design from the copper plate to the vessel. The still wet oil droplets on the vessel are then carefully dusted with powdered pigment which sticks to the oil areas. Firing of the vessel then fixes the design permanently to the vessel. The designs are typically composed of multiple stipples, many of which fuse (Godden 1964:113).

Variations of wares were created by firing in a chlorine kiln atmosphere (flown blue), using purple pigments (purple transfer printed ware), or using black pigments (no examples found).

The transfer print technique was developed in the 1750s but was used mainly on porcelain until the early 1800s. Between the years 1800 and 1825 over 50% of all English earthenware produced was decorated with this underglaze blue. During the first half of the 19th century, America was a primary market for English potteries. Blue transfer printed ware is still manufactured today.

Flown blue transfer printed

Similar to regular blue transfer printed ware, flown blue is manufactured the same way except for the final firing. The firing atmosphere has chlorine (Godden 1964). The visible difference is in the sharpness of the colored image (Fig. 6, k). The chlorine atmosphere causes the blue coloring to diffuse into the covering glaze and on the vessel paste, making the image fuzzy or blurred. The exact temporal span of the ware is not known but is assumed to be contemporary with regular blue transfer printed ware (late 18th century to present).

Purple transfer printed

This is thought to be the same as the blue transfer printed ware, only the color being different (Fig. 6, 1).

Polychrome transfer printed ware

Only one example of this ware was recovered, being a transfer printed butterfly design of purple, yellow and blue.

TABLE 6. ARTIFACT CLASSIFICATION OUTLINE.

I. Ceramic

A. Earthenware

- 1. white paste
 - a. clear glaze
 - (1) undecorated
 - (2) decorated
 - a. embossed
 - blue transfer-printed
 - flown blue transfer-printed
 - d. purple transfer-printed
 - polychrome transfer-printed
 - f. lined
 - g. feathered edge
 - h. sponged
 - i. hand painted floral
 - mocha
 - k. unclassified
 - (3) maker marked
 - colored glaze
 - (1) solid colored
 - (2) embossed brown glazed
 - (3) maker marked
- 2. colored paste
 - a. clear glazed
 - tin-enameled ware

Stoneware

- Albany glaze interior
 - a. Albany glazed exteriorb. Bristol glaze exterior

 - c. gray or tan salt glazed exterior
 - d. gold glazed exterior
- Bristol glazed interior
 - Bristol glazed exterior
 - b. yellow glazed exterior, red paste
- alkaline glazed interior
 - a. clear glazed exterior
 - b. red paste
- 4. unglazed red paste
- 5. orange glazed interior and salt glazed exterior
- 6. buff-orange slipped
- 7. salt glazed rims and handles
- 8. green alkaline glazed interior and exterior
- 9. white glazed with blue speckles
- C. Brick
- D. Porcelain
- E. Miscellaneous

TABLE 6. (continued)

II. Glass

- A. Clear
 - 1. bottles
 - 2. jars
 - 3. special
- B. Aqua
 - 1. bottles
 - 2. window
- C. Amber
 - 1. bottle
- D. Green
 - 1. bottle
- E. Miscellaneous

III. Metal

- A. Farming and ranching implements
- B. Construction materials
- C. Household items
 - 1. general house and garden
 - 2. kitchen implements
- D. Personal items
- E. Cast metal
- F. Gun parts and ammunition

IV. Other Objects

V. Prehistoric Artifacts

TABLE 7. ARTIFACT INVENTORY.

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
CERAMIC															
Earthenware															
white paste				,											
clear glaze															
undecorated	59	49	65	42	14	49	22	18	15	15	35	54	8	7	3
decorated															
embossed rim	**************************************	1	1		2	12					1	3	2		
blue transfer-printed	1	4				2									
flown blue transfer- printed		2		1		15					٠	1			
purple transfer- printed				•							1	9			
polychrome transfer- printed						2						4	7	1	
lined	2	2	1			5						1		•	
feathered edge	- (-) - (-) - (-)	2				4						5			
sponged		8				7				2		1			

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
hand painted floral		22			1	4						6		1	
mocha	1	1	1			3	1			*		1	2		
unclassified	2	5	1	1						3					
maker marked	1		2	2	1		1		1	1	2	8	1		2
colored glaze												•			
solid colored	ing. A	2				4	1			3		1			
embossed brown glazed												4			
maker marked	T T					8				1					
colored paste															
clear glazed		2				8									
tin-enameled ware	** **: ***					•					1	1	ń.		
Stoneware															
Albany glaze interior															
Albany glazed exterior	12			1	1	6	2		1						
Bristol glaze exterior	1														
gray or tan salt glazed exterior	14		6	2			4	3	1	8	2	3			

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
gold glazed exterior	1	1			4		4		2			1			
Bristol glazed interior															
Bristol glazed exterior	j. 1					•				4		. 2			
yellow glazed exterior, red paste							,				. *	2			
alkaline glazed interior															
clear glazed exterior	1				2										
red paste		1													
unglazed red paste									2	1					
orange glazed interior and salt glazed exterior			6	-											
buff-orange slipped	2. 2. 3.			2						-					
salt glazed rims and handles			•				1			1					
green alkaline glazed interior and exterior							2			2			, .		
white glazed with blue speckles	3														

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74.	91	166	168	175	185	192	193	194	195
Brick	1														
Porcelain	6		1				2			7		6			
.door knob															1
Miscellaneous	2														
Glass	4 - 1														
clear															
bottle	: 2 2														
complete, machine made										3					
rim	4			1		7				1		4			
rim, machine made	3						2			1					
rim, applied lip											1				
rim, applied lip, bead finish							1								
rim, applied lip, extract finish										2					
base	8	, ,				4	2		1	8	1	1			1

95

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
base, machine made	5			1						3					
body, cylindrical	39	2	8	9	3	24	9	1	1	5	2	8	3	1	
body, panel	9		3	3	2	3	· 1			5		1		1	
body, embossed	9					6	2	7	2	9		3			1
jar															
rim	5		1			1		3		3			1		1
special															
goblet base										1					
mug handle						•				1					
aqua											. /		•		
bottle															
complete, cup mold, applied lip												1			
rim, machine made	2														
rim, applied lip					2										
rim, applied lip, oil finish	\$ 1														

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
rim, applied lip, extract finish	: : :		2												
rim, applied lip, champagne finish						1						•			
rim, applied lip, bead finish												1	1		
rim							3		1		1			1	
base	1		1	1	1		2	4		4	2	5	4		
base, bottom-hinged mold									4			·			
body, cylindrical	4				3	9	11	6	1	2	21	15	3	3	
body, panel	9	3			4	22	2	2	1	1	13	12	3		
body, embossed															
window	241	13	8			5	1	1		14	5	6			
amber													* •		
bottle															
complete, machine made	, 1														

TABLE 7. (continued)

	41LK6	6 MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
snuff	; ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								1		2	1			
complete, machine made										2					
fragment										1					
fragment, machine made	3									2	٠				
rim	4							2				4			
rim, machine made	2														
rim, applied lip	1														
rim, applied packer finish	1						•								
rim, applied lip, oil finish						1						1	2		
base	4					2	1	1			. 1	12			
base, machine made	, 1									1			٠.		
base, bottom hinged mold	1														
body, cylindrical	6		13	2		6	2	2	3	2	6	6		1	

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193.	194	195
body, panel	10		1.	5	*	8	4			1	9	28	7	2	
body, embossed															
green							,								
bottle															
complete, machine made	• • • •									1					
rim	1				1				1			1		1	
rim, applied lip	1.4					2									
rim, applied lip, extract finish								1				٠			
base	1					3				1		1			
base, kickup	1						1				1	2	1	1	
body, cylindrical	4	9		12	6	26	3	1	2		1	16	3		
body, panel		1		1.		2						4	1.		
miscellaneous														•	
clear	±* √*.	1													

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
patinated clear	1					1									
clear body, decal	3														
patinated, embossed ridges		1													
clear, Royal Crown Cola										2					
aqua	` -	1													
aqua body	2			•											
aqua body, embossed letters	1										•				
amber body	2							"							
green body, patinated	1														
green, 7- Up	2											1			
light green base	2														
green, embossed ridges						1									
milk glass						2	•								

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195	
milk glass rim	2	•					1			2						
milk glass base										1		• .				
milk glass body	1									1						
milk glass panel, embossed	1															
milk glass, embossed	: :	1														
light blue rim, embossed	1															
dark blue base, embossed	1	·												•		
dark blue (fragment)	1															
dark blue body	1															
blue rim							1									
blue body							2									
dark blue base										1			•••			
light blue body										2						
purple (fragment)	1															

TABLE 7. (continued)

	41LK	66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
red body	1								•							
red rim	• •	•	`					1		•						
dark red body	\$ ** ***										1					
yellow							1									
blue and white marble	1															
clear and white marble	**										1					
Metal	*															
farming and ranching implements	4				r											
horseshoe	1				1			1								
ring	1	•	,				2						1			
tub handle	1										2					
wagon hardware	1					1	2		1		1	3	2	,		
strapping	3			2			2					, 3	3			1
galyanized strapping	2															
flat wire													1			

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
baling wire	5						•				2				
heavy wire	2		1	1		2	3				3				
galvanized wire	2														
railroad-type spike	· 1														
brass fitting	1														
roller	1														
hammer wedge	1														
wrought spike		1													
nuts and bolts, miscellaneous			3			1									
chain link					2		1			2					
wrought material	in the second se				1	3					1				
wrought anchor device												1			
wrought hook and eye anchoring device							2					1	٠.		
copper tubing and fitting							1								

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
bolt and washer	5 5						2								
rivet							2								
buck1e	# 3 **									2					
buckle with leather strap										1					
chain and ring										1					
bicycle chain										1					
decorative hinge										1					
"6" strap hinge										2					
wing nut										1					
washer	i. N									3		1			
gas cap										1					
spark plug	•									1					
heavy machinery chain										1					
slotted eye lag bolt										1					
grommet										1	1				

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	1 95
threaded rod										1					
harness buckle	**************************************						•				1				
unidentified	1					2			1	2	· 1				
construction materials	•														
square cut nails	126	75	174		24	37	20	2	3	5	38	39	9	3	1
wire nails	164	1	1		1	2	11			24	2	2			
wood screws	2						1			2.					
tacks	5													· ·	
masonry screw nails	3														
staples	1												٠		
household items															
general house and garden	No.														
clock part	1					2							••		
mop head	1.11											* .			
door plate	1							,							
key	2														

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
battery post	1						1			2					
window screen fragments	3														
lantern base	1										•			•	
decorative copper or brass	1					•									
coat hook	Ž					1									
furniture hardware							1								
hoe										1					
heavy spring	7 5									1					
file										1					
suitcase hinge										1					
keyhole plate										1					
fish hook												1			
upholstery tack	10 10 10										-	1	٠.		
lamp part												1			
bell clapper assembly												1			

TABLE 7. (continued)

	1.0														
	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
chamber pot cover	**		1												
foil packet			2							•					
tin cans-identifiable	1		1	1		1	•				2	5	. 1		
tin can fragments	3	11	3	2	2	11		1			19	9			
tin can lids	1									1			•		
flat tin container	1										٠				
jar lid	1									2			1		
Crown bottle caps	22									2					
foil bottle cap liners	2										•				
Pearl bottle caps	2														
Teem bottle caps	1													•	
non-ferrous white metal		24													
tubular copper			1				•						84		
unidentified	3		1		1	7				•				t t	

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
kitchen implements															
coffee pot	1														
coffee or tea pot lid	1														
tea pot spout	1					•									
metal plate	1														
pot	1														
decorative spoon	1	٠													
knife handle	1														
small pan				1							,				
serying spoon						1				1			,		
ice tray divider	•									1					
coffee percolator part										1					
can/bottle opener	*									2					
butcher knife blade	* * * * * * * * * * * * * * * * * * *									1					
table spoon										1					
stove pipe elbow										1					

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
fork handle											1				
pickle fork handle												1			
utensil handle	À.											3			
scissors handle												1	1		
personal items		•													
clothing rivet	2					1	1					1			
toy gun	1														
pencil lead	1														
buckle	* * :	1	1				3			1					1
button			1				1			1			·		
gold flaked bead			1										•		
needle			2									1			
slate blackboard	10. 10. 10. 10.				2										
knife blade						1	•						***		
snap							1								
S-hook	e A An						1								

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
pencil end										1					
latch type fastener	÷.									1					
coin												1			
pocket knife handle												2			
unidentified decorative			1				1					1			
unidentified		4	i.							2					
cast metal	:														
stove parts	3	3	4	3	1	2	6	1		1		4			
vessel fragment	· .			1		2				1	2	2	1		
coffee grinder part					1		1	1							
handle										1					
roller	**************************************	-									1				
unidentified	7	2					1					1	٠.		1
gun parts and ammunition											•			•	
tumbler												1			

TABLE 7. (continued)

	111 VCC	MC1E	17	ħ.c	70	71	01	1.00	1.00	175	105	100	100	104	105
	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
trigger assembly	e Je			•									1		
lead balls and bullets) 														
.36 cal (?)			2												
.44 cal (?)			1												
lead ball	1											2	1		
fragment s												3			
unidentifiable	4.		1			1				2					,
percussion cap			2			ě									
cartridges			1												
shotgun shell		•										1			
.22 cal	11	4					1			6	1				
.45 cal	1														
.16 gauge shotgun	1												•		
.12 gauge shotgun	1														
.44 Henry flat			3				1	,			1	٠			1
.44 short	A Service A														

TII

TABLE 7. (continued)

	41LK 6 6	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
.44 cal	:		1												
.44-40															
.41 short	\$17 12 2		1												
.45 Colt	. 1 . v						1		1	1					
.3030	; ;						1			1					
.38							1								
.32	**						3								
.20 gauge shotgun	e. Ne						1								
7 mm	:									1					
.3006										2		,			
.222										2					
Other objects	- 13 											•	·		
plastic or rubber													•.		
buttons, white plastic	2	1	3	1		1						6	1		
spoon (fragments)	2			•											

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
button, black plastic	5. 5.							1							
toy wheels										2					
bottle caps										1					
dart shaft										1					
syringe	* . 1									1					
bead												1			
unidentified	1									4					
wallpaper (fragments)	5														
wood (fragments)	3		2												
snail	2	68	72		10	6						32			
she11	33	47	150	1	3	16				1		20			
bone	X	X	Х		Χ	Х						Χ			
Prehistoric artifacts	i de la companya de l												٠.		
chipping debris	50	100	1601		4	61						103	1		
pottery			1										1		

TABLE 7. (continued)

	41LK66	MC15	17	46	72	74	91	166	168	175	185	192	193	194	195
finished artifacts													. •		
point- <u>Tortugas</u>		-	.1												
point- <u>Bulverde</u>					1	1									
point- <u>Catan</u>									1						
point- <u>Scallorn</u>	. - 		-						1						
point-thin triangular	·				1										
lanceolate stemmed dart point									1						
thinned biface		1				1			1				1		
triangular unifacial scraper													1		
gouge	:											2			
fragment			2										2		

Lined

This type has colored lines near the lip on rim sherds. The colors are varied, as are the widths. The lines occur mostly on cups. This type encompasses the entirety of the chronology chart from the 18th century to the present, and therefore cannot be used as a distinct time indicator. Lines are mostly of dark brown color near the lip of the vessel rim and often are in an interior—exterior set (Fig. 6, d). One lined cup rim sherd is decorated with a floral sponged design in green underglaze. Two sherds are gilded in a single band.

Feathered edge

The decoration motif of this type is a blue band on the edge of plate rims with the interior edge of the blue band painted to a "feathered edge" (Fig. 6, a, c). The surface treatment of the paste is usually molded, with linear or curvilinear indentations oriented perpendicular to the interior face of the plate rim. Some plates are not molded. All rims are smooth. This type ware was apparently manufactured in England during the first three-fourths of the 19th century and was a popular ware in Texas during the mid-19th century (Davis and Corbin 1967).

Sponged

Sponged ware has a decoration application using a stamp made of sponge stem (Godden 1964:111). A design is carved in the cross-cut end section of a sponge stem or root, and after being dipped in the color solution is applied repeatedly to the vessel surface (Fig. 6, m). One specimen (Fig. 6, o) is a cup stamped with semi-floral patterns of red (lower) and green (upper) colors which are fairly detailed.

Hand painted floral design

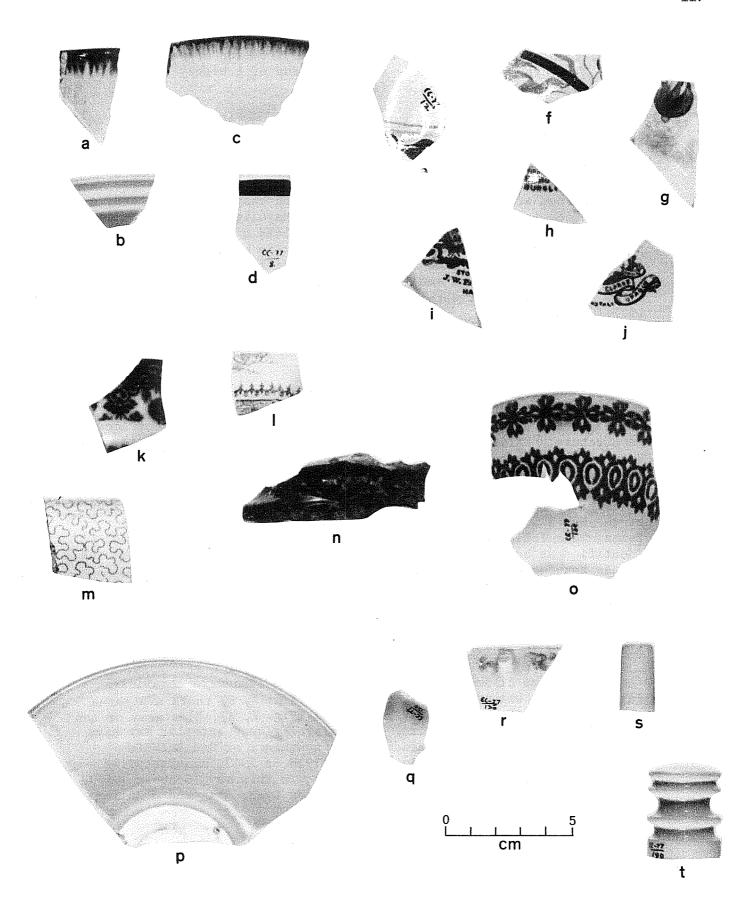
This ware is characterized by colored flower blossoms, leaves, stems, and related plant-like decorative motifs in underglaze colorings hand painted onto the vessel (Fig. 6, e-g). The chronological position of this ware cannot be closely delineated as it was manufactured widely throughout the 19th century.

Mocha

This ware type is the same as banded ware (Lynn, Fox and O'Malley 1977:187). Mocha ware has a manufacturing time range of 1799 to the present day (Godden 1964:109). Typical mocha ware often contains tree-like patterns but none was present in this assemblage. Colors present include blue and white; blue, gray/green and white; and yellow, white and dark brown. All bands are on exterior surfaces (Fig. 6, b).

Figure 6. Various Ceramics: earthenware, stoneware and porcelain.

- a. feathered edge ware
- b. mocha "banded" ware
- c. feathered edge ware
- d. lined earthenware
- e-g. hand painted floral design earthenware
- h. earthenware sherd with maker marks, Bridgewood & Clarke, Burslem, England, 1857-1864
- i. earthenware sherd with maker marks, J. W. Pankhurst & Co., Hanley, England, 1850-1882
- j. earthenware sherd with maker marks, Bridgewood & Clarke, Burslem, England, 1857-1864
- k. flown blue printed earthenware
- 1. purple transfer printed earthenware
- m. sponged earthenware
- n. blue transfer printed earthenware
- o. sponged decorated cup with top patterns green and bottom patterns red
- p. stoneware larged mouthed vessel
- q-r. porcelain objects
- s. unidentified tubular piece
- t. insulator



White paste, colored glaze

The class of artifacts is of 2 sub-groups: solid colored and embossed brown glazed. The age of both these types is unknown. The solid colored glazed wares have an evenly covered monochromatic glaze. The brown glazed pieces are all sherds of a highly decorated (embossed) vessel or perhaps of figurines.

Colored paste earthenware

Colored paste wares recovered were of two types, clear glazed and tin enameled ware. Several small sherds with clear glaze were recovered and are of an unknown type. The tin enameled ware sherd from 41MC185 is probably Mexican majolica. Majolica is characterized by an opaque white enamel of tin oxide in a lead glaze and a soft paste body (Goggin 1968:3). It dates from quite early (1650) but is made up to the present time and is datable mainly by design components and motifs. None of the small pieces recovered is complete enough to allow such dating (for detailed discussion see Lynn, Fox and O'Malley 1977:188-189, 216).

Stoneware

The numerous types of this class of ceramics are designated by various colors, types, and combinations of glazes and pastes. The manufacturers of this ware are unknown but some are possibly of local manufacture. Kilns are known to have been in operation at San Antonio, Seguin, and Texana, Texas during the mid to late 19th century, and some tentative matches are proposed. Comparative specimens from these kilns were not available at the time of this analysis, but written descriptions indicate some of the wares may be the same. The balance of the wares are probably from manufacturers outside the state of Texas. The following glazes labeled as Bristol and Albany are not identified as being manufactured in Bristol or Albany but are like the glazes manufactured there. Albany is a dark brown, highly glossy semi-opaque glaze and Bristol is a glossy white to cream colored opaque glaze.

Albany glaze interior

This group of wares is the largest of the stoneware ceramics. Besides sherds with Albany glaze exterior (Fig. 7, a) there are three other types of exterior glaze, 1) Bristol (Fig. 7, b), 2) a gray or tan salt glaze and 3) a gold glaze. The Bristol glazed exterior may have been manufactured at the Elmendorf kiln southeast of San Antonio which was in operation between 1885 and 1916 or 1917, manufacturing crockery vessels of local clays and glazed in this way (Schuetz 1969: 23-24). The previous work at these sites by Lynn, Fox and O'Malley

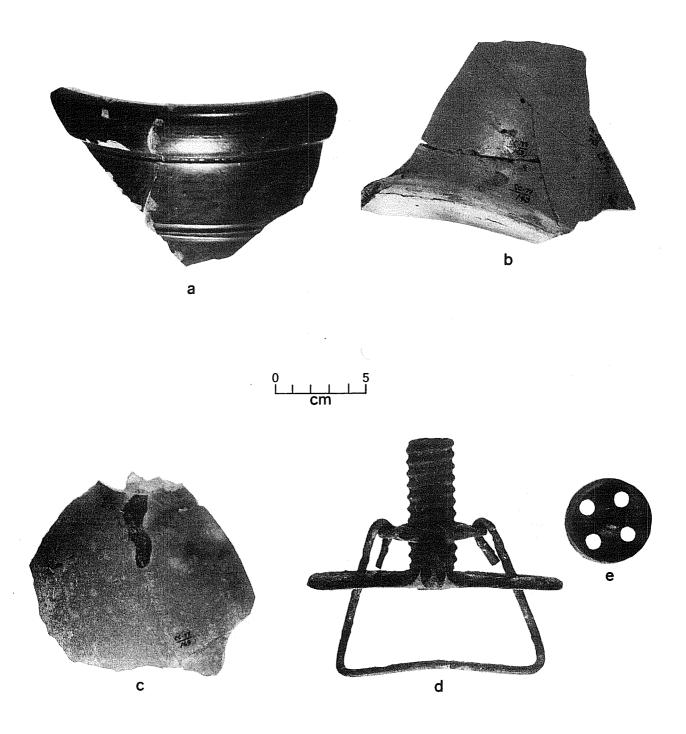


Figure 7. Stoneware veramics and Metal Artifacts. a, stoneware large mouthed vessel rim sherd, Albany glazed interior and exterior; b, stoneware vessel, base sherd, Albany glazed interior, Bristol glazed exterior; c, stoneware, jug body sherd with olive green salt glazed exterior and orange glazed interior; d-e, mop head fragments.

(1977:194) recovered one specimen of this type from site 41MC166 which was manufactured by the Western Stoneware Company of Monmouth, Illinois, after the turn of the century. No recovered specimens have maker marks.

The gray or tan salt glazed exterior sherds are similar to those recovered in 1976 with various gray to tan colors, the shade partly dependent on the color of the sherd paste caused by the kiln firing environment. The color configuration of light colored glaze on the lower exterior body of jugs and jars seems to be fairly common. Manufacturers are unknown, as are the dates of manufacture.

Specimens with the gold glazed exterior may have been turned this color by clay iron content used in making the glaze mix. No age or manufacturer information is known.

The last type of sherd within this stoneware class is that with Albany glaze on both surfaces. Only a few sherds were recovered in this study which had both Albany and Bristol glaze on the exterior surface. The previously mentioned vessel made by the Western Stoneware Company was covered in Bristol glaze on the jug body exterior and Albany glaze on the neck, mouth, handle and interior of the jug in a style popular in the 19th century. Some small sherds in this group are from the upper parts of jugs (Fig. 8, g), but some are straight sided vessel walls, and one specimen included the rim of a large open jar (Fig. 7, a). Except for possible jugs, no known locally manufactured wares have Albany glazed exteriors.

Bristol glazed interiors

A few sherds were recovered with Bristol glaze on the interior and the exterior. These are apparently from large open top jars and similar to wares made at the Elmendorf kiln. Another variation is represented by several sherds with a yellow exterior glaze and red paste. These sherds are relatively thin and are portions of smaller containers for liquids such as ink (Fig. 9, a) or ginger beer.

Alkaline glazed interior

Two types of wares so glazed were analyzed, one with a clear exterior overglaze and one unglazed with red paste. Similar wares were recovered in 1974-76 (Lynn, Fox and O'Malley 1977:195) and are generally nondescript, greenish color glazed crockery.

Unglazed red paste

This ware, known otherwise as "bisque" ware, is generally used for such functions as flooring and roofing and is not generally used for food or fluid storage (the common use of crockery) due to its porosity. Unglazed ware will not contain liquids without seeping

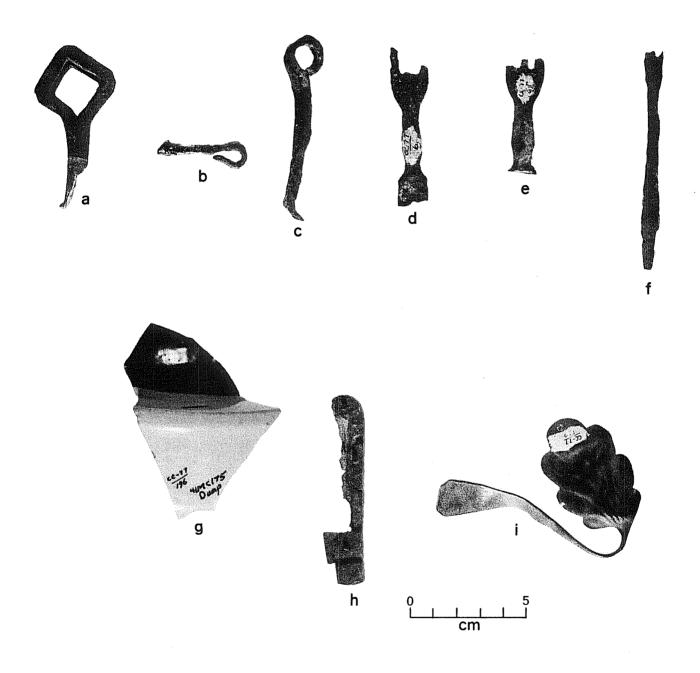


Figure 8. Wrought Metal, Stoneware and Household Artifacts. a-c, wrought metal pieces; d-f, cast iron forks; g, upper part of stoneware jug; h-i, pocket knife and brass relish spoon.

and leaking. Kilns at San Juan and Texana both produced unglazed wares (Schuetz 1969:25) but neither is considered to be the actual source for these recovered specimens. The Texana kiln was operated between 1854 and 1865, perhaps too early for the Yarbrough Bend community and too distant. The kiln at San Juan was in operation between 1928 and the 1930s and may be too late. It was founded by James Richter, "the last working pottery of those German settlers who founded at least half a dozen kilns...near San Antonio" (Schuetz 1969:25). This phrase implies there were numerous other kilns (some unnamed) which were earlier and are candidates for being the origin of many of the project wares.

Orange_glazed_interior and salt glazed exterior

This ware (Fig. 7, c) has poorly fired orange glaze on the vessel interior and an olive green salt glazed exterior. Exterior glaze has a grainy and mottled surface characteristic of poorly fired salt glaze. The sherd paste is a yellow buff.

Buff-orange slipped

This unusual ware is identical to that recovered in 1974-76 (Lynn, Fox and O'Malley 1977:195) and is identified by the distinct orange colored interior. The orange color permeates deep into the paste and numerous sand grains are visible through the slip and throughout the paste. One sherd, a base, shows these sherds to be from a flaring-sided bowl; the orange color soaked entirely through to the bottom exterior surface of the vessel. Both recovered sherds are exteriorly glazed with a thin yellow matte surface material.

Salt glazed rims and handles

Represented by one sherd of each, these vessels are covered with a thin gray salt glaze. Coming from different sites, they are not from the same vessel and there are no other similarly glazed body sherds from this type of vessel.

Green alkaline glazed interior and exterior

This ware, glazed on both surfaces with a thick even glaze, is a dark olive green on the interior and a lighter yellowish green on the exterior. The interior and exterior glazes are probably the same material but are different colors due to the difference of firing atmosphere in the interior of the jug.

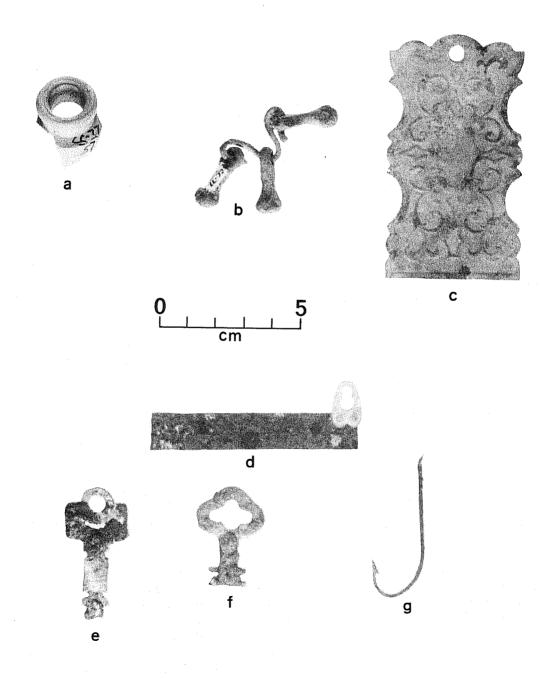


Figure 9. Stoneware and Household Items. a, stoneware, ink bottle rim and sherd; b, metal bell clapper assembly; c, decorative brass plate; d, door plate; e-f, metal keys; g, fish hook.

White glazed with blue speckles

This ware is of an unknown make and age, consisting of three sherds (same vessel) of a ware with light yellow hard paste, opaque white underglaze, blue speckled or sprayed-on color on one edge, and clear overglaze. There is some faint crazing of the underglaze and the glaze surface is a smooth shiny metallic-like finish. Vessel is a large open bowl with an outward flaring embossed rim.

Porcelain

Objects of porcelain were various but included vessels, insulators and unidentified pieces (Fig. 6, q-t). Descriptions of individual pieces are included under each site section.

Miscellaneous

Several unique, nondescript, and unknown wares were recovered and put in a general catchall category, if represented by only one sherd. They will not be further described.

Glass.

Glass material was segregated into four groups based on color:
1) clear, 2) aqua, 3) amber, and 4) green. The overall research
design requires information on age and function of objects, neither
of which is obtainable from glass color directly. Color was used in
order to be consistent with previous analyses and will segregate some
functional categories such as snuff bottles or window glass from the
general assemblage. The vast majority of the glass sherds are from
bottles of various types, some of which bear characteristic manufacturing
attributes which are of specific temporal distribution. Some other
more complete specimens are identifiable as to function (what they
contained or were used for).

Several distinct patterns are of note concerning function vs. glass color. In the clear glass category are the only recognizable glass food preservation or fruit jars. These are of the screw top, external ribbed, and bail latch or lightning closure types. Initiated in 1815, the jar business began to boom with plain cork closures. In 1855 Robert Arthur invented and began manufacture of a tin lid closure. This closure consisted of a saucer-shaped tin lid, the edge of which inserted into a groove in the lip of the jar. It was sealed by pouring melted wax in the groove. Threaded bottles were made as early as the 17th century in Germany and later in England. The use of threads on wide mouthed jars was adopted in 1858 to accept the famous Mason lids. Mason didn't invent the threaded fruit jar or manufacture jars, only the zinc lids. Glass lids were adopted in the 1870s, and in 1875 the bail latch or lightning stopper was fitted to fruit

jars. Most early jars were manufactured in light aqua or green colors but other colors were used also (Munsey 1970:146).

Window glass is all aqua colored. Flat glass sherds are, of course, indicative of window panes and reflect the use of windows in buildings. They were expensive and may reflect the affluence of the house owner.

Snuff bottles, being quite distinct in shape, are generally identifiable from any large rim or base sherds.

The categories within the glass material are otherwise self explanatory. The glass items presented in the chronology charts in Table 8 are wares which have restricted temporal distribution and are identifiable from distinct attributes such as manufacturer's mark or method of manufacture.

Metal

Many objects in the frontier home and ranch were made of metal and some, being specialized items, are indicative of some specific use or set of uses. The metal materials were segregated into categories that reflected in part these uses. Agricultural and ranching materials (Fig. 10, d, g-o) are generally recognizable as such and could usually be thought of as being used outside the family living area. Although many frontier families would include the horse and cow as family members and perhaps even keep them in the house, the harnesses and wagon would not be kept with the linen and dishes. Specific items listed in this category were classed into groups of common items.

Construction Materials

of all types of hardware, nails are the most diagnostic. Wires, bolts, screws, hinges and wrought pieces (Fig. 8, a-c) were also used in house construction, but their presence is not necessarily indicative of such. Within each site assemblage, the nails (Fig. 11, a) were identified as to type and size (see Table 9 for each site) and frequencies determined. Each of the different sizes and types of nails may be indicative of a general time range or a feature of architecture. The square machine cut nail was not in regular use until 1830, and although it is still made and sold today for special purposes such as roofing and flooring, was not continued in general use much past 1900. The wire nail was invented in the 1700s but was not in general use until 1890. Wire nails were used for most purposes after 1900 (Nelson 1968:8-10).

TABLE 8. SITE CHRONOLOGY CHART.

8a. 4	LK66			Si	te Chron	ology Ch	art				:		
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
ilass				1			• •				1		
Applied lip											1		
Mold lip(ABM)				1									
Bottom hinged mold				1 1							1		
letal	· · · · · ·		······································	- ;					•				
Sq. cut nails			. 										
Wire nails											,		
Tin can				1									
Crown bottle				1		10.1 - 10.7 The sale of the sa					<u>'</u>		
Cartridges .22 cal. .45 cal. .22 mag.				1 1 1 4 2					· · · · · · · · · · · · · · · · · · ·		1 1 1		<u> </u>
ilass				1							1		
Maker mark				1 2							l i		
Maker mark						· · · · · ·					1		
Maker mark				8 8							1		
Maker mark				1							i	_	
Maker mark				; 							l a		
Maker mark				i							1		
1				1							<u>,</u>		
Maker mark				1					•		<u>: </u>		
Marked panel				1 .	***************************************				. – – –				

8b.	418	1C15		Si	te Chron	ology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic				•									
Feathered edgeware											1	a	
Embossed rim				· 	,			· .			· !		
											<u>'</u>		
Metal				,									
Sq. cut nail			·			· · · · · · · · · · · · · · · · · · ·	····				· :		
:													
				t t							1		
				•							,		

TABLE 8. (continued)

8c.	41MC17			Si	te Chron	ology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic										:	,		
Embossed rim				<u>.</u>									
Lined				!		-							
Orange glaze intSalt glaze ext.				1									
Glass				;							1		
Applied lip				, '							:		
				1							1 ,		
				1							1		
				1							1		
Metal				1							1		
Sq. cut nails				1							1	•	
Cartridges .44 Henry .41 Short) : !				?			1		
.44-40 .44 Short													
				1							1		
ļ											•		

8d.	41MC46			Si	te Chron	ology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Glass									•		1		
Clear, base (ABM)*				· ·									
				1 1				·			† 1 1		
			N 1 1 1 4	1 1 1 1	, , , , , , , , , , , , , , , , , , , 				<u> </u>		1 .		
Ceramic				1							l į		
Maker mark				1							1		
				•		÷							
Metal				•							1		
Tin can				1					?		1	. • .	
				1							1		
											1		
				į									
						· · · · · · · · · · · · · · · · · · ·							
				1							1		
				1							i.		
*Automatic Bott	le Machi	ne		:							1		
1				1									

TABLE 8. (continued)

8e.	41MC72	!		Si	te Chron	nology Ch	nart						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic				,						:	,		
Embossed rim				, _!							<u>-</u> -		
Maker mark				1							1		
				1 3 1						•	,		
Meta1											ı		
Sq. cut nail											, !_		_
				1							,		
				1							,		
				1							1		
Glass				1							ţ		
Applied lip				! 									
Marked panel sherd				1							1 1		
				1							1		
											1		
											t .		
				,							ı		

8f.	41MC7	4		Si	te Chron	ology Ch	nart						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic				;									
Embossed rim				<u> </u>							.		
Lined													
Feather edgeware	٠			<u>1</u>							1		
Maker mark			1.4.4.4.		<u> </u>		5 p. 144		11.24	a de servicio de la compansión de la compa			n galan.
Maker mark						_					,		
Maker mark				! !		_					;		
Glass				1							1		
Applied lip											_ :		
Marked pane sherd				-									
Metal				i 1							1		
Sq. cut nails		- -								. _ _	'		
Wire nails				1							· · · · · · · · · · · · · · · · · · ·		
											1		
				1							,		
				1							4		

TABLE 8. (continued)

8g.		41MC91		Si	te Chron	ology Ci	nart						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Glass				,			116				,		1340
Applied lip										·	1 .		
Molded lip				1							1		
				1					_				
				<u>'</u>									
Metal				1							1		
Sq. cut nails				1							1		
Wire nails				1									
Cartridges				1			•				t i		
.45 Colt .44 Henry				1						·····	1		
Flat .32 Long	****			1				?			1		
.32 Auto .30-30													
.22				,									
											i		
				•							i		
				1					·				
				;							•		

1920	1930	1940
; ;		
- 1		
1		
· 1		
1 457 1		
,		
1		
1		
1		

TABLE 8. (continued)

8i.	4	1MC168		Si	te Chron	ology Cn	art						
atable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
alass				;						:			
Hinged bot- tom mold				,							·		
tom mold											1		
Maker mark				1							1		
Maker mark				1							ı		
1etal				1							1,		
.45 cal.				1		•					1		
Colt cart- ridge				1									
1 1090				1							1		
				1							1		
Ceramic				1							1		
Maker mark											, ?		
naker mark				1		-							
											4		
•				;									
				1							'		
Datable Items	41M0	1830	1840	Si 1850	te Chron 1860	ology Ch 1870	1880	1890	1900	1910	1920	1930	194(
Datable Items			1840					1890	1900	1910	1920	1930	1940
Datable Items lass Molded lip			1840					1890	1900	1910 —	1920	1930	1940
Datable Items lass Molded lip (ABM) Applied lip			1840					1890	1900	1910	1920	1930	1940
Datable Items lass Molded lip (ABM) Applied lip			1840					1890		_	1		1940
Datable Items lass Molded lip (ABM) Applied lip etal Gas tank cap	1820		1840					1890		1910	1		1940
(ABM) Applied lip etal Gas tank cap Spark plug	1820		1840					1890		_	1		1940
Datable Items lass Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part	1820		1840					1890		_	1		1940
Matable Items lass Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails	1820		1840					1890		_	1		1940
Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7mm	1820		1840					1890		_	1		
Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7mm .222 cal30-06 cal22 cal.	1820		1840					1890		_	1		
Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7mm .222 cal30-06 cal22 cal30-30 cal.	1820		1840					1890		_	1		
atable Items ass Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7nmm .222 cal30-06 cal22 cal30-30 cal.	1820		1840					1890		_	1		1
Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7mm .222 cal30-06 cal22 cal30-30 cal. ilass Bottle	1820		1840					1890		_	1		1
Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7mm .222 cal30-06 cal22 cal30-30 cal. ilass Bottle Maker mark Maker mark	1820		1840					1890		_	1		1
Molded lip (ABM) Applied lip etal Gas tank cap Spark plug Sq. cut nails Wire nails Ice tray part Crown bottle Cartridges .45 cal. Col 7mm .222 cal30-06 cal22 cal30-30 cal. Glass Bottle	1820		1840					1890		_	1		1 1

TABLE 8. (continued)

8k.	41MC18	35		Si	ite Chron	nology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic				1									
Embossed rim													
Tin-enameled											,		
Maker mark				1							1		
				1		_					4		
Glass	*									· · · · · · · · · · · · · · · · · · ·			
Applied lip			-	ì				·			'		
Marked panel				1									
Metal				t E							1		
Sq. cut mails		_									÷		
Fence staple		······································											
Tin can													
Tin can				1					?		1		
.44 Henry				ı				?			1		
				1									
											<u> </u>		
				1							1		
			•	•							t I		

81.	41MC192			S1	te Chron	ology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic	i			1							ı		
Embossed rim			_						· 	- 			
Feathered edgeware							_				1		
Maker mark				. 1	<u> </u>					1	. ;		4
Maker mark													
Metal													
Sq. cut mail	s										'		
Wire nail				1				_			'		
Coin						1870					1		
Gun part tumbler				! !		?	V · 				t t		,
Tin can													
Tin											<u>'</u>		
Glass Marked panel				1	···								
Cup mold- applied li	Р									_	1		
				ı			•						
				1									
	1.			1							1		

TABLE 8. (continued)

8m.	41MC193	3		Si	te Chror	ology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic				1						7			
Embossed rim				<u> </u>									
				1									
				1 1 1							1		
Metal			····	1									
Sq. cut mails													
Gun trigger assembly											1 1		-
Tin can											! !		
Glass				1									
Applied lip jar				- - -!							1		
Marked panel				1							!		
				· .			_				1		
				1							1		
											ı		

8n.	41MC195			Si	te Chron	ology Ch	art						
Datable Items	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940
Ceramic				1							1	···-	****************
Maker mark				i	** ***						1		
	j			÷							1		
				ı							1		
<u> </u>	ļ			<u> </u>							1		
Metal		e Personal	A Park and a	100			i dan a s			11 11 11	San ya Amerika T	i i i i i	
Sq cut nail							·					. — — _	
Cartridge .44 Henry				1 1					?		t t		
				1							,		
				1 1					· · · · · · · · · · · · · · · · · · ·				

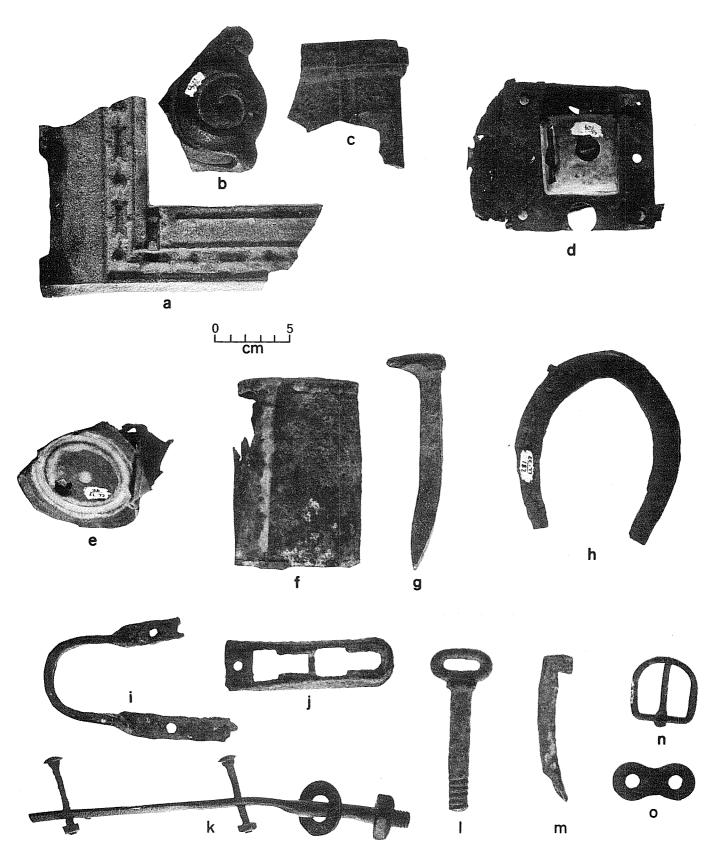


Figure 10. Household and Metal Artifacts. a-c, cast iron stove fragments; d, metal, probably harness piece; e, tin can top showing the soldered "hole in the top" and a center vent hole also soldered; f, soldered side seams and lap seam ends; g, metal railroad spike; h, metal horse shoe; i-k, metal wagon parts; l, thread slotted bolt; m, unidentified cast iron object; n, harness buckle; o, chain link piece.

FIGURE 11. Metal Items, Gun Parts and Ammunition.

- a. square cut nails
- b. guntrigger assembly from 41MC193
- c. molded bottle lip, made in automatic bottle machine, 41MC46
- d. coin, silver 5 centavos piece, Mexican dated 1870
- e. chamber pot cover (?), 41MC17
- f-k. ammunition cartridges
- f. percussion cap
- g. .41 caliber short
- h. .44 caliber Henry short
- i. .44 caliber Henry (medium length)
- j-k. .44 caliber Henry long made by Union Metallic Cartridge Company, (41MC17)
- 1-p. ammunition cartridges head stamps
- 1. .41 caliber short fired in a pistol
- m. .44 caliber short fired in a pistol
- n. .44 caliber fired in Henry rifle. Paired firing pin indentations, indicative of the Henry rifle, show this cartridge to have been misfired twice before finally firing
- o-p. .44 caliber Henry made by Union Metallic Cartridge Company

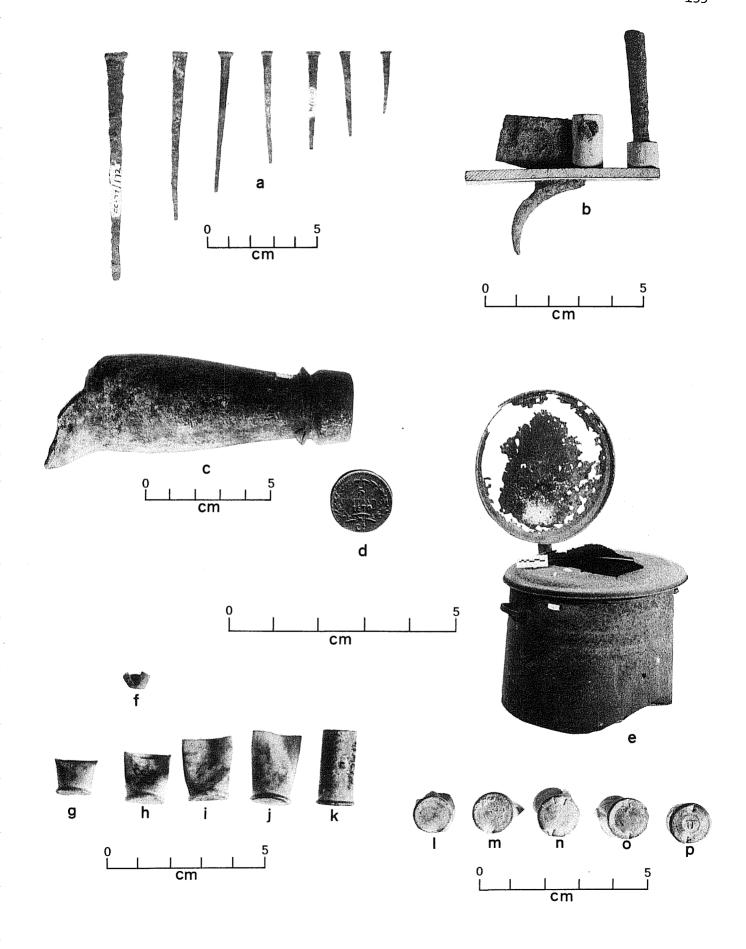


TABLE 9. NAIL TOTALS FROM EACH SITE.

	Squar	e Cut		Wire							
	ID	FR	Common	Finish	Fencing	Roofing	FR				
Site Number											
41LK66	93	33	.93	6	18	1	46				
41MC15	51	24	1								
41MC17	97	62	1								
41MC72	15	9			1						
41MC74	33	, 3	1	1							
41MC91	18	2	8		3						
41MC166	1	1									
41MC168	3										
41MC175	5	3	16		4	3	1				
41MC185	31	7			2						
41MC192	29	10	2								
41MC193	7	2									
41MC194	3										
41MC195	. 1										

ID=identifiable FR=fragment

Household Items

The items generally associated with homemaking and housekeeping are of three general groups: 1) general house and garden, 2) kitchen implements, and 3) miscellaneous household. General house and garden items found include a garden hoe head, mop head (Fig. 7, d, e), oil lamp and items of general furniture or housekeeping nature. Kitchen implements (Fig. 8, d-f, i) include such items. Miscellaneous household items (Fig. 8, h; 9, b-g) are on the same list. The use of metal food storage canisters (tin cans) is a relatively recent phenomenon, being invented by Heine and Durand in 1810. The general use of cans did not occur until later in the 1800s (Fontana and Greenleaf 1962:67). Numerous innovations occurred in the canning industry, and in general they are summarized as follows:

hole in the top (Fig. 10, e)	1815-1900
tapered meat can	1875-?
fold locked seam	1900-present, not popular until 1920s
soldered seam (Fig. 10, f)	1815-1920, fading after 1900, continued to present in milk cans

Crown bottle caps, which were crimped onto the bottle top, came into use in 1907 (Fontana and Greenleaf 1962:73). Not only is this cap readily identifiable, but the bottles were designed specifically to accept such a cap.

Personal Items

Personal items are those articles associated, at least temporarily, with a specific individual. Clothing parts, jewelry, toys, and other metal items are simply listed under the outline heading. The purpose of listing a series of functionally dissimilar items under a common heading is to compile in one specific area (of the table) items which might be indicative of a specific individual by sex or age. Any particularly diagnostic items in this category are discussed in specific site sections. The first criterion of division in the assemblage is by material; such items as buttons appear in numerous places in the inventory, depending upon what material they are made of, i.e., glass, plastic, or metal.

Cast Iron

The cast iron material is a break in the function categorization and was used mainly because of the difficulty in identifying specific items. Most recovered cast iron items were fragments of flat objects,

probably stove parts (Fig. 10, a-c) or cookware. The stove could also fit into the general household or kitchen category.

Gun Parts and Ammunition

Various ammunition cartridges and a few gun parts which are easily dated were recovered. Guns and ammunition probably have better documentation available than that of any other class of artifacts, due mainly to their extreme popularity with collectors and the voluminous manufacturers' records associated with military work and patents. Specific items are discussed in the particular site descriptions.

Other Objects

The last category is an accumulation of various materials that are either rare, very late, or perhaps of natural origin (ecofacts). Objects of plastic date to the recent 20th century as do most objects of readily perishable material. The exposed nature of most of the sites does not facilitate good material preservation (except in association with extant structures). Rubber objects are not common (probably due to poor preservation), although objects were commonly made of hard rubber during the late 19th century. Numbers of shells and presence of bone were recorded in the materials inventory.

Prehistoric Artifacts

Most historic habitation sites in the project area are situated on terraces or other localities previously inhabited by prehistoric people. These prehistoric materials most probably have no temporal association at all with the historic Anglo or Mexican inhabitants and are included here as a matter of record. Several sites such as 41MC15 and 41MC17 have extensive prehistoric components which have been tested and evaluated by the UTSA field crews and will be fully reported and analyzed in their work. Lithic artifacts and chipping debris were recorded and, where possible, identified in the materials inventory.

SITE DESCRIPTIONS

41LK66 Nichols House (Surface Collection and Intensive Testing)

Description

Consisting primarily of an extant structure ("Nichols House") and some associated features, the site was investigated and documented with a plane table map (Fig. 12), three test pits, plan maps of architectural details, and controlled surface collections. The specific remains associated with the structure include scattered historic occupational debris, a water cistern and several outbuilding structural remains. One outbuilding (Fig. 13) is located 25.9m north of the house. At a point midway between the two structures a demarcation line was established separating the two and designating area A associated with the extant house, and area B associated with the northern outbuilding. Surface collections were then carried out separately.

The front of the house apparently once had a porch (see side elevation, Fig. 14, a). Test pit #1 (see floor plan, Fig. 15) was situated outside the front door extending 2.5m to slightly past the outer foundation wall of the front porch. This test pit was 1m wide and subdivided into two parts, the western, inside the porch foundation and the eastern, outside the foundation. The interior portion of the pit was excavated to a depth of 65cm. Most of the artifacts recovered here were from the surface and included some very recently introduced materials, such as modern bottle caps. However, some items were found at deeper levels. The matrix within the foundations is fill dirt in the upper 30-35cm, with a thin (2cm) layer of light gray sandy loam soil on top, possibly representing dirt which had settled through the porch floor while the house was occupied. The fill is a light to dark (mottled and mixed) sandy clay loam with gravels, rootlets, and rodent burrows. This fill grades into a zone with yellow-tan sandy clay soil and mixed chert gravels which is probably the original ground surface at the time of the house construction. Below this is a basal soil zone of mottled yellow-tan calcareous clay with a few white calcareous (?) nodules and chert gravels. The eastern part (about one-fourth) of the pit, outside the porch wall, was excavated to a depth of 35cm and contained the largest number and types of artifacts (see artifact inventory, Table 7). Artifacts were restricted to the upper 15cm outside the foundation. The porch wall construction used rather small rounded cobbles, with generous amounts of mortar in lumps, to build a foundation about 30-40cm wide, set in a narrow trench no more than 20-25cm deep. No evidence of the extent of the footing trench was found, so it is assumed to have been nearly filled with

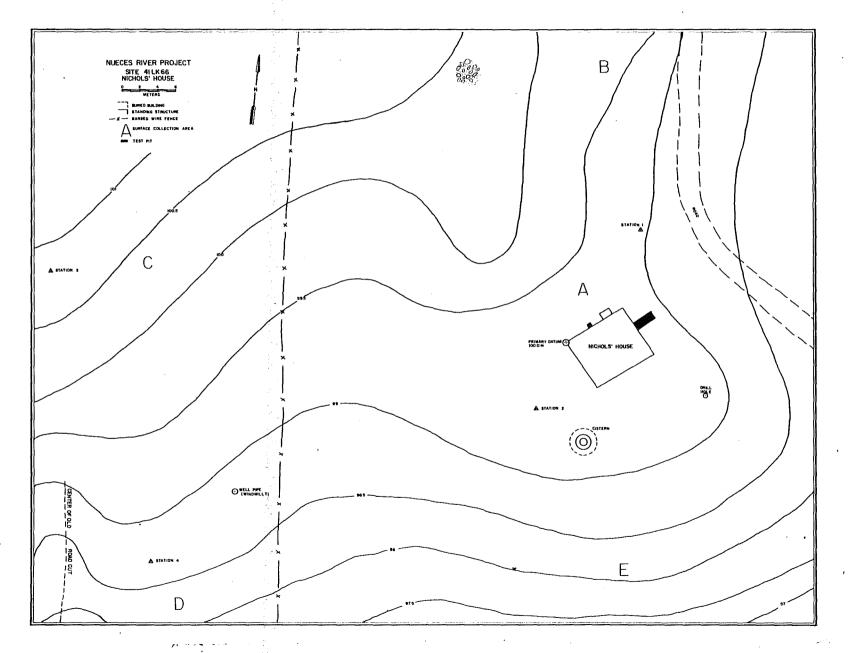


Figure 12. Map of Site 41LK66-Nichols House.

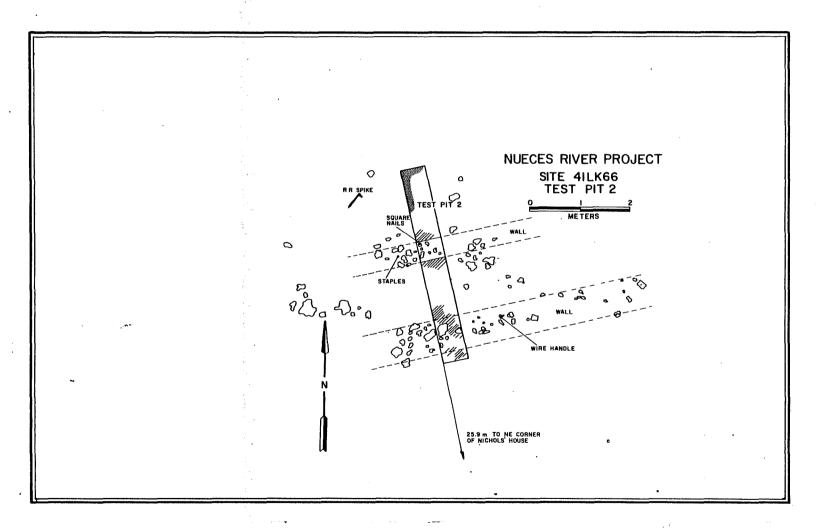
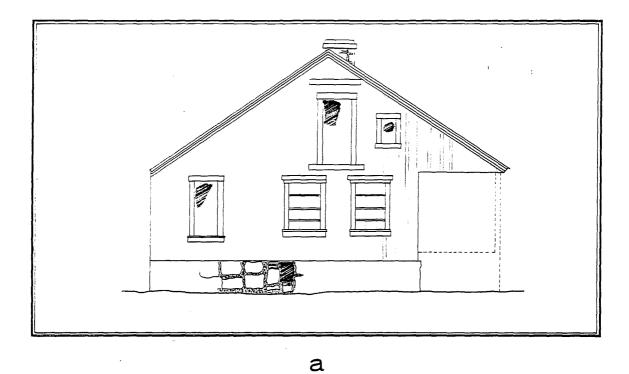


Figure 13. Test Pit 2 and North Outbuilding, 41LK66.



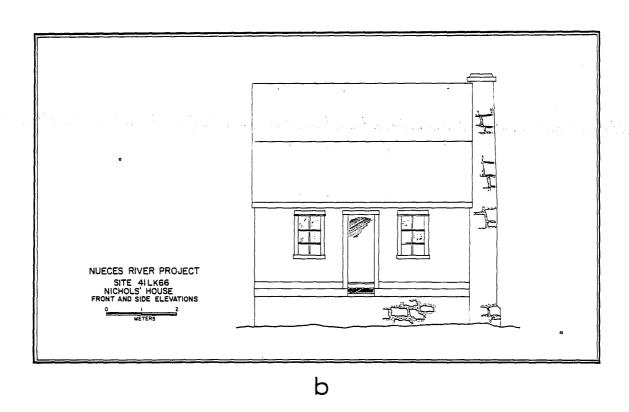


Figure 14. Elevations of Extant House 41LK66. a, side; b, front.

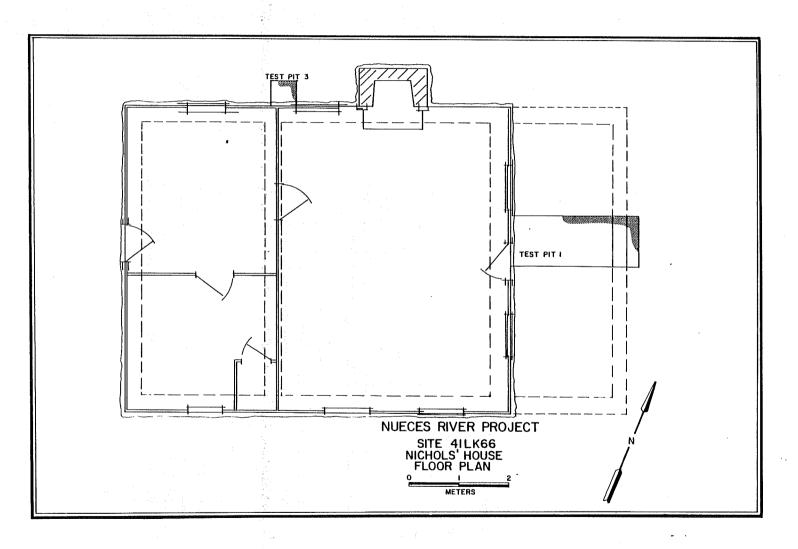


Figure 15. Floor Plan of Nichols House, 41LK66.

the foundation materials. The western 50cm of the pit (against the house foundation) revealed this foundation to be very similar to that made for the porch. There is a distinctly different selection of materials used in the upper as opposed to the lower parts of the house foundation. As described above, small rounded cobbles with generous amounts of mortar were used to cap the lower parts of the foundation. On top of this is a layer of mortar with a series of semi-shaped blocky sandstone rocks set in mortar for the balance of the foundation wall (see elevations, Fig. 14). There has been a noticeable amount of deterioration of the lower part of the foundation, due mainly to the heavy usage of mortar, which is becoming crumbly.

Test pit #3 was excavated against the north wall of the house (see floor plan, Fig. 15). This pit is $50\,\mathrm{cm}^2$, excavated as one level to a depth of 35cm below the ground surface, with the same results as test pit #1 except no occupational debris was recovered.

Test pit #2 was a 0.5x4m trench 10cm deep which transected the foundation of the northern outbuilding (Fig. 13). This structure was originally located by a concentration of small rocks scattered on the ground surface. As brush, grass and humus were removed by shovel scraping and a broom, historic cultural materials were encountered (square cut nails, bottle glass, wire, etc.). An area of about 4mx7m was cleared with some items mapped in, and pit #2 was put in to transect the apparent concentration. The full dimensions of the structure could not be obtained, but the two exposed foundations are about 2.25m from outside edge to outside edge. The northern wall, much more well defined and preserved than the southern wall, is about 40cm wide. The wall footing is constructed mainly of rocks and gravels with no mortar, and is only about 5cm thick.

Additional associated features include the fully collapsed and scattered remains of a barn and set of stock pens in an area about 65m west of the house and an outbuilding locality at mapping station #3. South of these buildings is an erosion gully that is situated and shaped such that it may be an old road. Recent disturbance and damage have been inflicted in this area by brush clearing and road building activities. The cistern is located 6m south from the southwest corner of the house. It is constructed of mortared rocks with about 5cm thick concrete plaster interior and exterior. The cistern is 3.21m deep with a bell shaped interior, and the mouth extends 0.71m above the ground surface. The slope to the south of the house is strewn with occupational debris and trash.

The extant house is $10m \times 6.2m$ with three rooms measuring $4.5m \times 6.2m$, $3m \times 2.6m$, and $3m \times 3.4m$. One room, the smallest, has a $1m^2$ closet. A front porch, 2.3m deep, went across the entire front of the house. The exterior and interior walls of the house are set on a masonry foundation. The construction shows both wire and square cut nails with many of the wire nails from relatively recent repairs. The house interior walls are finished with a pressed fiber wallboard under which is a wall covered with at least three and perhaps more layers of wallpaper

under which is newspaper against the lumber planks. One piece of recovered newspaper bears the date 1908. This particular piece of newspaper was found on the east wall of the northwest room, between the door and the north wall. This room had been covered with wall-board. The association of this newspaper to that on the walls in the rest of the house is not known. As far as is known, only the largest room had printed wallpaper over the newspaper.

Artifacts

The artifacts (Table 7) are of the types common at other project historic sites and indicate habitation at the site from the late 19th century until perhaps as late as the 1960s. Some artifact classes have differential distributions which may be a function of activity areas or behavior patterns. The most common occurrences of plain undecorated earthenware sherds are in areas A and the downhill dump. The decorated earthenware sherds are found only in the hillside dump, and no earthenware at all is found associated with the northern structure (test pit #2).

Chronology

Datable artifacts (Table 8a) indicate occupation at the site since the late 19th century. The proportion of wire to square cut nails is relatively high (Table 9).

Of the identifiable tin cans at LK66, one is of open top, locked seam manufacture of the "tobacco can" type, with a wire hinge around the top for opening and closing. The development of the open top, locked seam can depended upon the development of suitable machinery for forming and rolling a hermetic double seam. The diagnostic feature of this type of can is the locked and lapped seam on the side and the absence of solder for the sealer (Fontana and Greenleaf 1962: The locked seam can came into use about 1900 with general acceptance about 1922 (Fontana and Greenleaf 1962:72-73). Another locked seam can could be described as a "baking powder" can. variety of locked seam manufacture present at this site is something like a "boot polish" can. Two marked panel glass sherds are present and indicate production after 1860. Of the bottle maker marks identified, two were made by the Owens Bottle Co. of Toledo, Ohio. The use of the "O in a square" trademark was used from 1911 until 1929 when the Owens Bottle Co. with its subsidiary, the American Bottle Co., merged with the Illinois Glass Co. to form the Owens-Illinois Glass Co. (Toulouse 1971:397).

Three bottle sherds indicate they were produced by the Owens-Illinois Glass Co. The particular symbol shown by all three examples was used from 1929 through 1954 (Toulouse 1971:403). Two of these sherds have numbers to the side of the maker mark which indicate plant

number and year of production. A chart on page 395 of Toulouse's Bottle Makers and their Marks refers to the plant number, where it was located, and when it was operated. The plant number is to the left of the mark and the year of production after the beginning of the plant is to the right of the mark. On one specimen the plant number is not identifiable, but the year of production shows a number one. Assuming the plant began production in 1929, the date for this piece would be 1930. The second specimen from the Owens-Illinois Glass Co. shows a seven for the plant number and a four for the year of production. The number seven refers to the plant at Alton, Illinois which started in 1929. The fourth year of production would date this piece at 1933. One bottle sherd exhibits the mark used by the Hazel-Atlas Glass Co. of Wheeling, W. Virginia, which operated from 1920 through 1964 using this particular symbol (Toulouse 1971:239-242). One sherd shows the Ball Bros. maker mark which has been used in several variations of design of the lettering of the word "Ball" from 1888 until the present (Toulouse 1971:66-68). Another glass sherd has the Heinz Co. trademark with the "57". This piece probably dates after 1896 since the "57" was not adopted until that time (Toulouse 1971:236-238).

Several ammunition cartridges were identified and dated. A .45 Colt, introduced in 1873, is present. Three .22 long or long rifles which were introduced in 1887 are among the collection for this site. A .22 magnum Winchester Super X which was not produced until 1959 is also in the collection.

41MC15 (Surface Collection and Intensive Testing)

Description

The remains evident at this site are scattered sandstone and historic occupational debris and at least one architectural feature. The site, much larger at one time, presently covers an area about 15m x 30m. The site is situated on the western margin of a fossil flood plain overlooking the Frio River 10m to the west. Erosion from the Frio River has removed parts of the site on the western edge, the lower slopes below the site being strewn with sandstone blocks and historic occupational debris. A gully to the south of the site (Fig. 16) has removed a segment of that end of the site. A distribution map of the scattered sandstone (Fig. 17) discloses two relatively distinct groups of stones: 1) those to the north near test pit #4, and 2) a southern group. Six test pits were excavated, encountering historic occupational debris down to 30cm below the surface.

To search further for architectural remains, the ground surface was swept with a broom in suspected areas to clear the ground of vegetational debris and expose any features. An area of ground was swept revealing the only known intact architectural remains at the site, in the southeast corner of the site. These remains (Fig. 18) are a single course of aligned sandstone slabs which are buried only a few

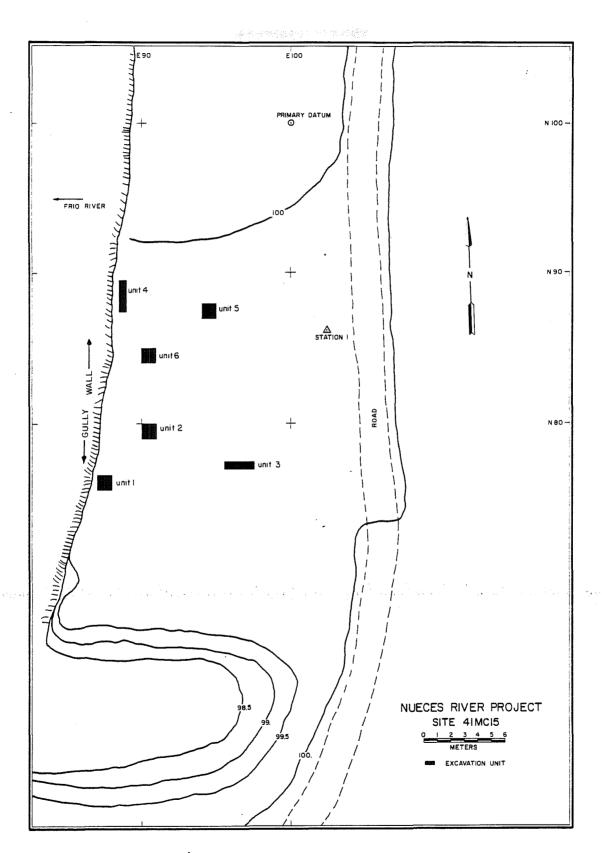


Figure 16. Site Map of 41MC15.

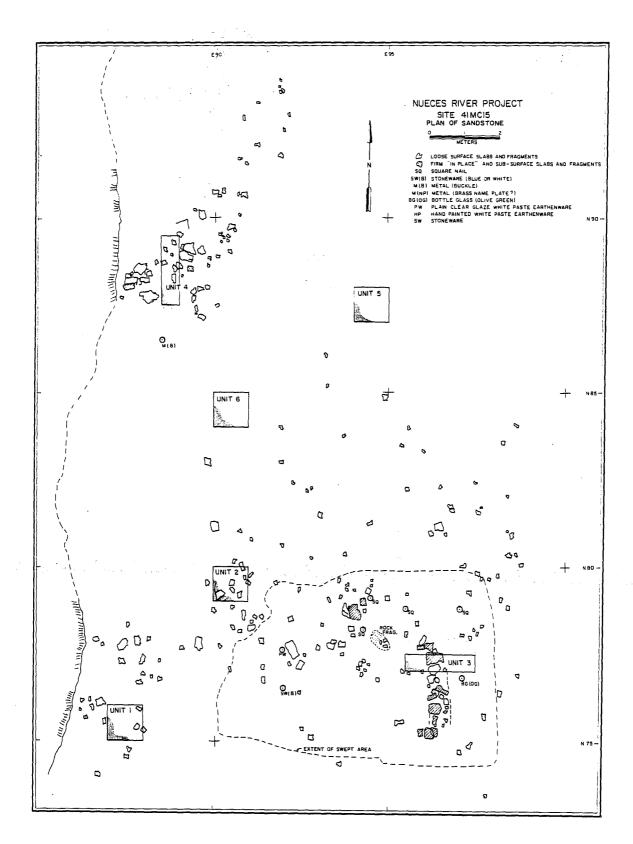


Figure 17. Plan Map of Sandstone, 41MC15.

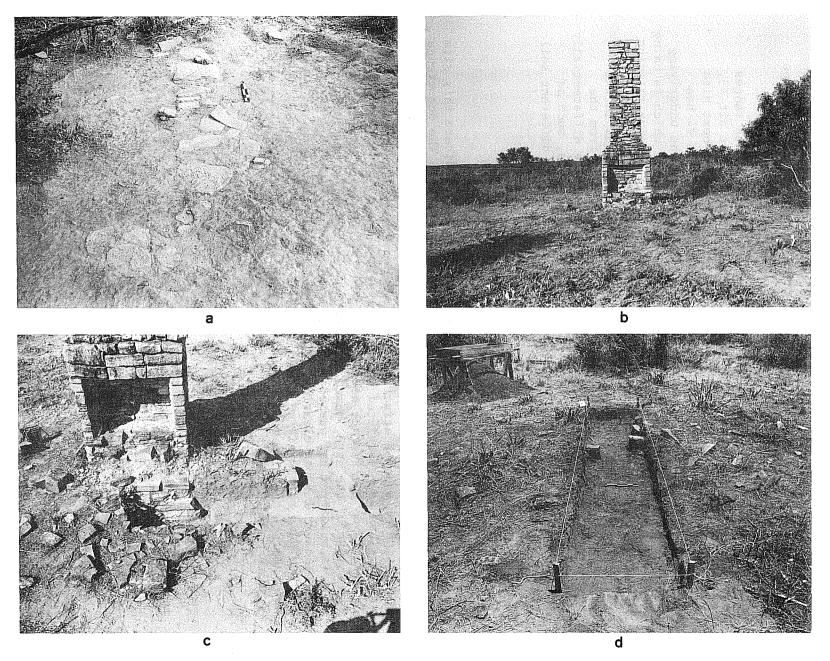


Figure 18. Photographs of Various Features. a, sandstone slab alignment, 41MC15; b, sandstone house chimney, 41MC17; c, scattered sandstone rocks and test pits #1 and #3 in front of chimney; d, test trench #1, 41MC74.

centimeters below the surface. Test pit #3 confirmed the shallow nature of the relatively undisturbed feature. Artifacts encountered during sweeping were carefully plotted on the plane table map. There are no associated architectural remains, and the occurrence of historic debris is restricted to the upper 10cm of soil. The exact function of this slab alignment is unknown, but it is assumed to be some type of wall footing or foundation.

The distribution of historic artifacts in the test pits ranges from the surface down to 10cm-30cm below the surface. Test pit #3, as did test pit #1, encountered debris only to 10cm. The next pits to the north encountered thicker deposits of 20cm, and pit #4 has nearly 30cm of historic material-bearing soil. Most of the underlying soils contain prehistoric, aboriginal occupational debris which is being tested and evaluated by the UTSA field crews. The progressive thinning of deposits to the south is due most probably to surface erosion being more extensive to the south end of the site and the material in the northern end actually being filled in, perhaps with soil from the southern end of the site. The historic deposits could be differentially deposited, but there is no discernible indication of this, such as soil color change or texture difference; only a slightly different soil compaction was noted.

Artifacts

The recovered archeological materials (Table 7) indicate this site to be a habitation site of mid-19th century occupation. The occurrence of ceramic dishes, glass bottles, and tin can fragments indicates the use of the site for habitation. Nails are relatively common and are indicative of a house structure, as is window glass. The occurrence of window glass was restricted mostly to the first level of test pit #4. The debris on the surface near test pit #4 is thought to be from some other part of the site, based on its appearance as a "site." It looks as if a bulldozer had pushed this debris along the ground surface in the process of brush clearing and left the pile by backing up to make another pass or by raising the blade. The occurrence of window glass may indicate the pile to be associated with the location of a (second?) structure.

Chronology

The datable artifacts (Tables 8b, 9) indicate the site to date between the 1850s and 1900.

41MC17 (Surface Collection and Intensive Testing)

Description

This site (Fig. 19) has the most complete older architectural remains in the western part of the reservoir. A well-preserved sandstone chimney (Fig. 18, b), scattered sandstone rocks and various historic occupational debris are evident on the surface in an area about 25m x 30m. Situated about 100m south of the Frio River on a high terrace and slight rise, the site has been damaged by brush clearing except adjacent to and including the chimney. No definite architectural remains were found in association with the chimney. On the north side of the chimney was a group of sandstone slabs (Fig. 18, c) one course thick (on the surface), which could have been a feature similar to that in site 41MC15 (Fig. 18, a). It was not tested.

Four test pits (Fig. 20) were placed in positions where walls, post molds, footing trenches, or other architectural features could be expected, but except for some disturbances which are probably rodent burrows, no such features were encountered. All historic artifacts were buried shallowly. The area around the chimney has been cleared several times, and one large pile of dirt and debris is the result of bulldozing. Test pit #4, situated in an area of scattered sandstone blocks, revealed that these rocks are all surface scatter. This evidence all indicates that the site, except for the chimney itself, has been extensively disturbed by clearing and most if not all other architecture destroyed.

Excavations encountered prehistoric debris in all areas. This site component was sampled and extensively tested by the UTSA field crew.

The stone chimney is constructed of shaped sandstone blocks mortared with lime mortar. The foundation (Fig. 21) extends about 36m below what may have been the ground surface at time of construction and is set on a 4cm thick layer of lime mortar. If the chimney foundation was constructed symmetrically with the stack, the total dimensions would be about $2\mathrm{m}^2$. The chimney (Fig. 18, b) stands 5.25m tall and is braced in the top or mantel of the hearth with a flat piece of iron which is apparently a straightened piece of wagon wheel rim. This metal piece is beveled on both edges of one side, is perforated with a hole every 62cm along its length, and measures 1.5cm x 6cm in cross section. Part of the metal brace is visible in the upper left corner of the hearth opening as shown in Figure 18, c.

Artifacts

An extensively controlled artifact collection was made at this site (Table 7). Items recovered indicate the site to be a mid-19th

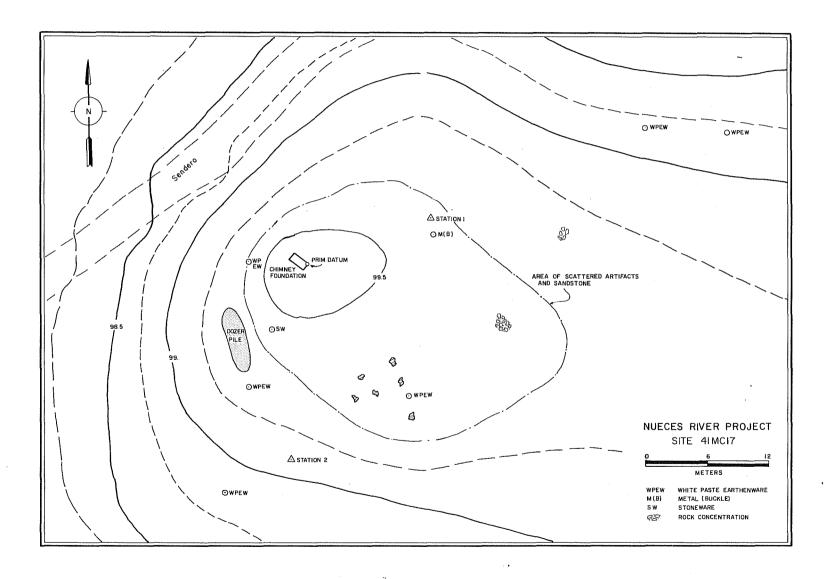


Figure 19. Site Map of 41MC17.

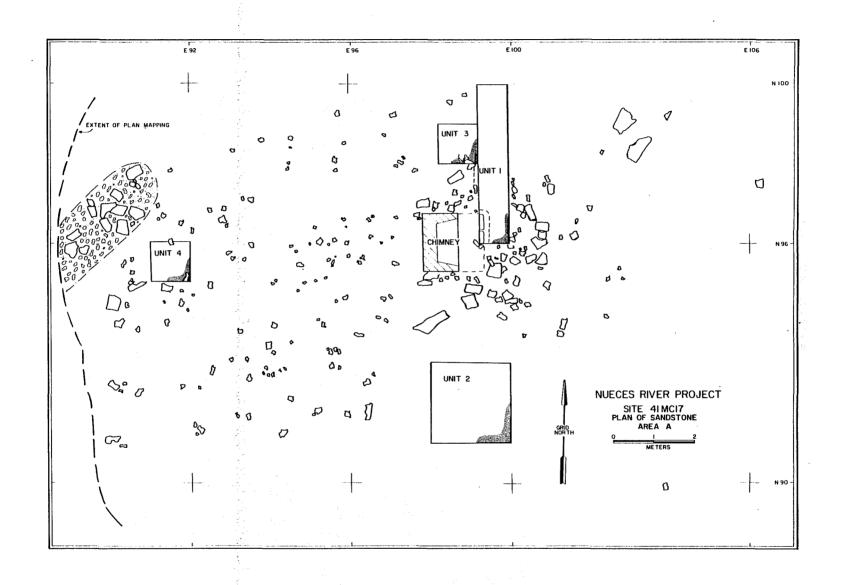


Figure 20. Plan of Sandstone and Excavation Units, Area A, 41MC17.

century habitation. The presence of nails (Table 9), some of which are relatively large, indicate a habitation structure with large-sized lumber construction. Window glass was recovered in two test pits, also indicating the presence of a house. The ceramics and glass are, in general, like that found in the other project sites. One unique metal artifact was thought to be a chamber pot cover (Fig. 11, e). Constructed from molded sheet metal, the can has two hinged tops that fit one on top of the other; the top one is solid and the second one has a large pear-shaped hole in it. The article is made without a bottom.

Chronology

The artifacts in general date from the last half of the 19th century (Table 8c). The exclusive occurrence (except for one fragmentary specimen of what might have been a wire nail) of square cut nails dates the site to pre-1890-1900. Although several maker marked sherds were recovered, these were not identifiable. The manufacture of bottles went through several distinct stages which allow for relatively accurate dating of specimens, particularly bottle rims (Lynn, Fox and O'Malley 1977:197), but the incompleteness of nearly all specimens prohibits more accurate dating. One bottle with applied lip (Fig. 11, c) is dated in the mid to late 19th century. Several items are of recent age, such as the Schlitz beer can and the foil packets; because the chimney is still standing, the locality attracts picnickers and visitors.

MC17 exhibited several ammunition cartridges (Fig. 11, f-p) which were produced primarily in the late 1800s. Two .44 Henry Flats, introduced in the late 1860s (Logan 1959:68), are probably the oldest cartridges examined. A .41 Short, introduced with the National Arms Co. breech-loading Derringer in 1863, was another of the older cartridges. Several pocket revolvers were chambered for the .41 Short, but it has been obsolete since World War II. A .44 caliber W.C.F., commonly called the .44-40, was introduced in 1873. This specimen used the balloon head primer which was not made after 1930 (Logan 1959:137). The latest cartridge for this site is a .44 Short. This cartridge, chambered in many popular pistols and revolvers, was well established by 1870, but obsolete by 1920 (Barnes 1972:279).

41MC46 (Surface Collection and Mapping)

Description

Site 41MC46 (Fig. 22), situated on a small knoll about 30m from Opossum Creek, is a scattering of sandstone blocks, under which are wall alignments, a chimney foundation and associated historic occupational debris. The outline shape of the house is discernible from a single course of aligned slabs. The slabs are clearly visible along the west edge of the structure and up to the chimney, which is set slightly into

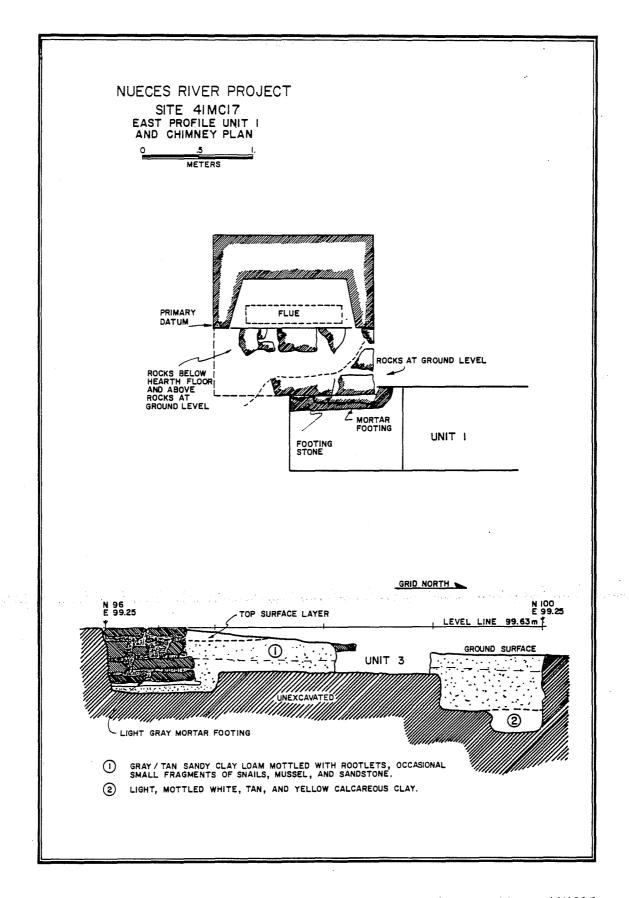


Figure 21. Details of East Profile Unit 1 and Chimney Plan, 41MC17.

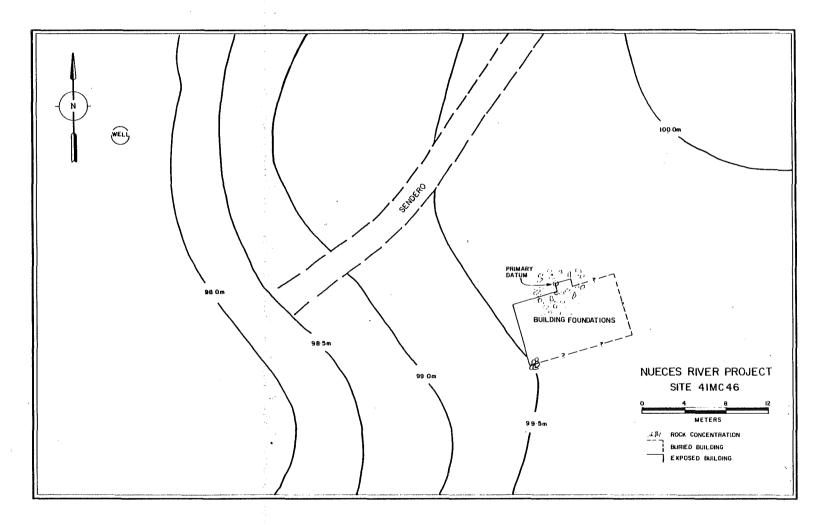


Figure 22. Site Map of 41MC46.

the house. The chimney was apparently all of sandstone and collapsed into the interior of the house. There are scattered slabs and rocks over the entire house area, some of which are remnants displaced from the other walls of the structure. The site may be damaged from clearing, but subsurface excavations were not conducted to confirm the extent of damage and what portions of the structure remain.

Associated architectural remains include the collapsed chimney, chimney foundation, wall footing slabs, and a well. The well is located 44m west-northwest from the center of the chimney foundation and is about 1.6m in diameter and of an undetermined (3+m?) depth. The well is cut into a sandstone formation and had standing water in it at the time of the field work. The shaped stone and mortar chimney with a single course of very shallow to ground surface sandstone slab alignment are consistent elements of the Yarbrough Bend architecture. The presence of the wall footing slabs may explain in part why no foot trenches have been encountered to date, but the exact relationship of these slabs to the rest of the walls is still unknown.

Artifacts

The artifacts from this site (Table 7) were gathered as a general sample and indicate the site to be probably a late 19th century habitation site (Table 8d). There is an absence of square cut nails, but there was clearly a house at the site. The collecting methodology and the thick grass cover at the site may be responsible for this absence. The absence of many decorated ceramic sherds is perhaps indicative of "no frills" subsistence. The relative abundance of ceramic dishes and stove parts, and absence of bottle glass and tin cans, indicates that the house was not lived in for a very long period of time, and that it was abandoned with its contents, which were perhaps vandalized or discarded, but not moved and used later.

Chronology

One clear glass bottle base has the distinct circular scar indicative of manufacture by an Owens automatic bottle making machine, which dates the bottle after 1913 (Munsey 1970:249). Another attribute of the automatic machine made bottle is the extension of the side seams all the way to the top of the bottle and around the lip (Fig. 11, c). These molded lip specimens also date post-1913.

A rectangular top portion of a tin can suggests it is possibly the tapered "corned beef" type which started about 1875 (Fontana and Greenleaf 1962:73). Also, a ceramic sherd with a partial maker mark has two possibilities. It is probably Bridgewood and Clarke, since other marks by this maker have been examined. This would date 1857 to 1864 (Godden 1964:101). The alternate possibility is Edward Clarke, formerly Bridgewood and Clarke, which operated from 1865 through 1887 (Godden 1964:147).

41MC72, "New" Site (Surface Collection and Intensive Testing)

Description

This site (Fig. 23) is composed of mainly a sandstone block concentration, and thinly scattered historic occupational debris. The rock concentration is apparently a collapsed chimney; no foundation was located. A test pit encountered a soil change at about 15cm below the surface and a marked decrease of historic artifacts. The site has been extensively disturbed by clearing, is relatively shallow, and has no distinct architectural features visible from the surface. The site, discovered by the Texas Tech field crew in 1977, has not been previously reported. Located on the extreme edge of the terrace overlooking the Frio River, behind a barbed wire fence, the heavily overgrown site is hard to see even when immediately adjacent to it. There is virtually no artifactual material visible in the road and fence area, and heavy grass and brush growth beyond the fence on the site mask the other materials.

Artifacts

The site, based upon the artifact types recovered (Table 7), is a mid or late 19th century habitation locality. There was a structure, as indicated by the nails (Table 9) and window glass. The area immediately downhill from the structure is heavily eroded and is the area where most of the habitation trash was probably discarded, thereby removing much of this particular class of debris. There were not very many items recovered, making relative frequencies of items less significant, but there is a distinctly low frequency of decorated ceramics. Similar to other sites (specifically 41MC46), the site occupants may have had a "no frills" family economy.

Chronology

The temporal placement of the site is late 19th century. The datable items in Table 8e are various and cover a broad time period.

One fragmented ceramic sherd with maker mark (Fig. 6, i) probably represents J. W. Pankhurst and Co. of Hanley, England, which operated from 1850 through 1882 (Godden 1964:481). Also, a marked glass sherd is present indicating post-1860 manufacture.

41MC74 (Surface Collection and Intensive Testing)

Description

This site (Fig. 24) represents what was probably another typical late 19th century house structure, but extensive brush clearing and

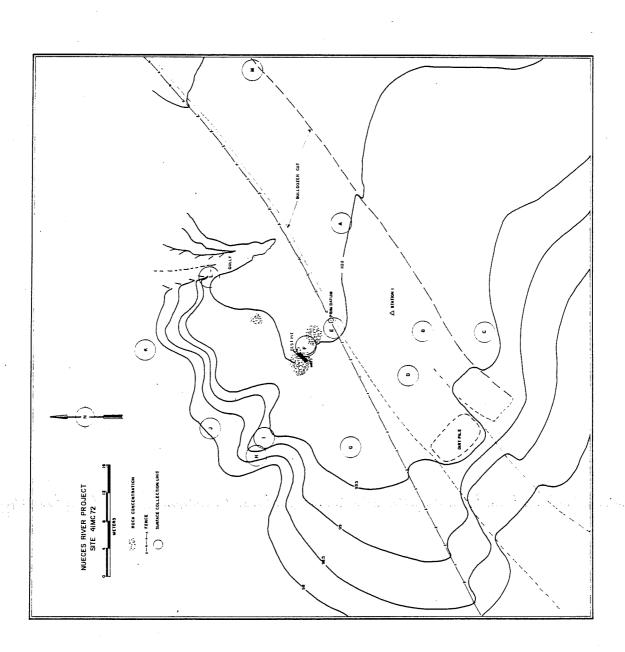


Figure 23. Site Map of 41MC72.

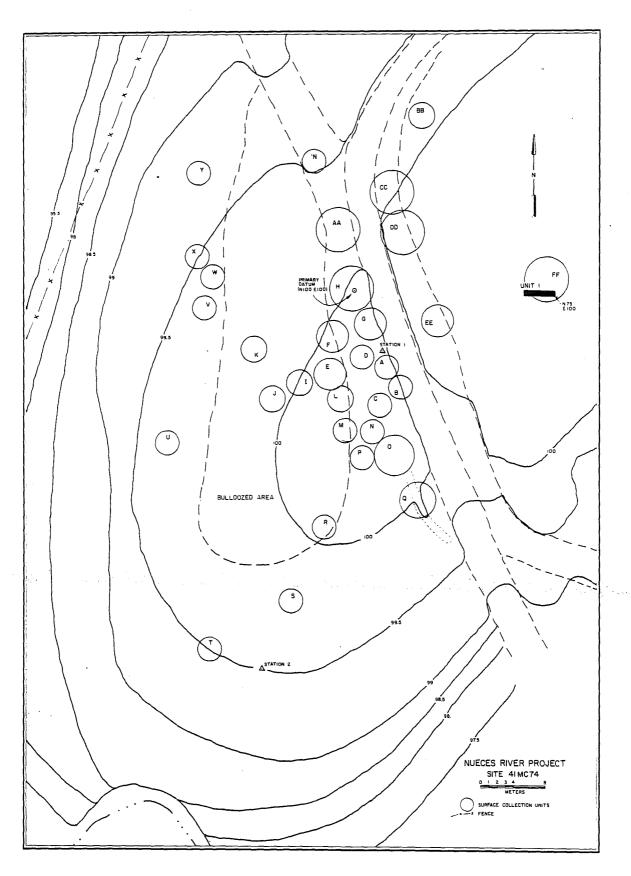


Figure 24. Site Map of 41MC74.

a road cutting through the middle of the site have destroyed most if not all of the structural remains. Scattered sandstone and historic occupational debris cover an area $40\text{m} \times 60\text{m}$ on a hill near the Frio River, with concentrations of materials eroding from numerous dirt ridges and piles pushed up by bulldozers. Test pit #1 (Fig. 18, d) was put in an area where possible house remains were located. The .75m x 4m pit was excavated to 10cm below the ground surface at the southwest corner stake, and allowed the recovery of various historic artifacts, mostly in the upper 3cm of the level.

The historic artifacts scattered on the surface were fairly profuse, due mainly to the recently "filled" nature of the disturbances. These artifacts were collected in a series of collection circles of various sizes ranging from 1.5m to 2.5m in diameter, and situated where artifact concentrations were found. The central point of each surface collection circle was mapped with the plane table/alidade and drawn on a site overlay. The overlay was joined with the topographic map as shown in Fig. 24, and each was designated alphabetically by a letter.

Artifacts

The recovered artifacts (Table 7) indicate the site to be a mid-19th century habitation site. The wide variety and great quantity of material is due probably to the highly disturbed nature of the site. The common occurrence of square cut nails (Table 9), some of which are fairly large (3"), indicates a fairly large structure with heavy lumber construction. There are a few window glass sherds scattered over the site as well. The amount of materials that could be associated with habitation (trash) relative to the amount of material associated with a structure (construction and architecture) appears to be rather high in comparison to other sites. An in-depth and quantitative comparison is not possible within the scope of this project, but apparently some sites such as 41MC74 were inhabited for much longer periods of time than other sites such as 41MC46. It may be possible to construct a habitation index based upon some quantifiable criterion such as food container vs. shelter debris.

Chronology

Numerous artifacts were recovered with a distinct temporal significance (Table 8f). In ceramic ware there are embossed rims dating to the mid to late 19th century. Glass items include applied lips on bottles and fruit jars. A few wire nails were recovered, but the vast majority are square cut, indicating abandonment of the site by the 20th century.

The dates for MC74 are indicated by several ceramic sherds with maker marks. One sherd with the impressed Davenport mark of the

Staffordshire Potteries in England includes the last two numerals of the year, which are placed on each side of the anchor insignia (Godden 1964:189). These numerals indicate that this piece was made in 1856. A second ceramic sherd shows the W. Baker and Co. mark of Fenton, England (Godden 1964:51). This mark includes a diamond-shaped symbol which occurs on Victorian ceramics from 1842 to 1883. This was used to date the registration of the maker mark at the Patent Office in The letters and numbers were arranged in two different ways around the diamond symbol. From 1842 to 1867 the year letter appears in the top panel. From 1868 to 1883 the year letter appears in the right-hand panel (Godden 1964:526-7). Although the top panel of the specimen is obscure, the bottom panel is identifiable. The bottom panel, according to the two identification schemes, can have either a number representing the parcel or a letter representing the month. This specimen shows the number in the bottom panel, representing the parcel number, and indicating this piece was of 1842-1867 registration design. The third ceramic sherd with a maker mark (Fig. 6, h) is one produced by Bridgewood and Clarke of Burslem, England from 1857 to 1864 (Godden 1964:101). One glass marked panel sherd which was produced after 1860 is present in the collection.

41MC91 (Surface Collection and Mapping)

Description

This site (Fig. 25) has an extant frame house (Fig. 26, a) with associated scatter of historic occupational debris, water cistern or tank (Figs. 26, b; 27). The site is situated on a ridge top on the edge of the valley wall. The site is 30m from the old river bed of San Miguel Creek, which is presently about 700m to the south. Original investigations by THC questioned the antiquity of the extant house and noted the incongruence of its suspected post-1900 age relative to the late 19th century age of the site as suggested by the artifacts. A chimney foundation remnant, feature 1, was discovered eroding in the road bed in front of the extant structure, indicating the presence of an earlier structure and explaining the earlier incongruence problem. A second sandstone block concentration was noted to the NE of the extant house but is of an undetermined nature. Square cut nails were found in association with this concentration (on the south side), indicating perhaps an outbuilding in association with the earlier 19th century occupation.

A circular stone tank or cistern (Fig. 26, b) was found between the extant house and an associated shed, but the exact relationship of this feature is unknown. The feature is 1.8m in diameter, is filled with rocks and dirt, and is flush with the ground surface. The location of this feature is next to the corner of the extant house and could conceivably be associated with this house, but it is also close enough to the chimney foundation that it could be associated with the earlier structure.

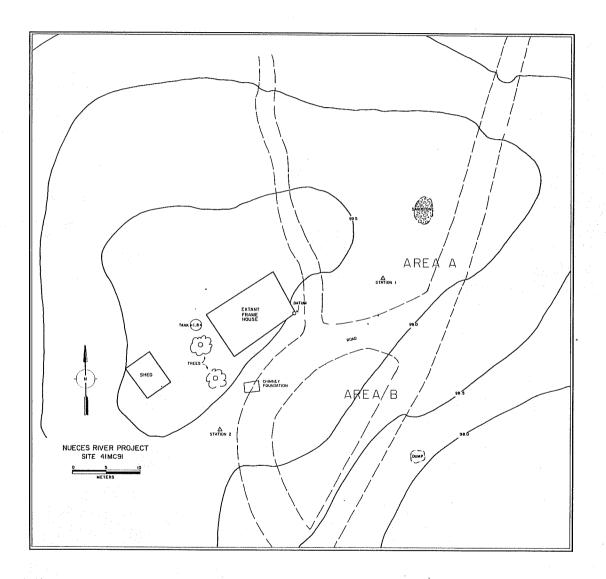


Figure 25. Site Map of 41MC91.

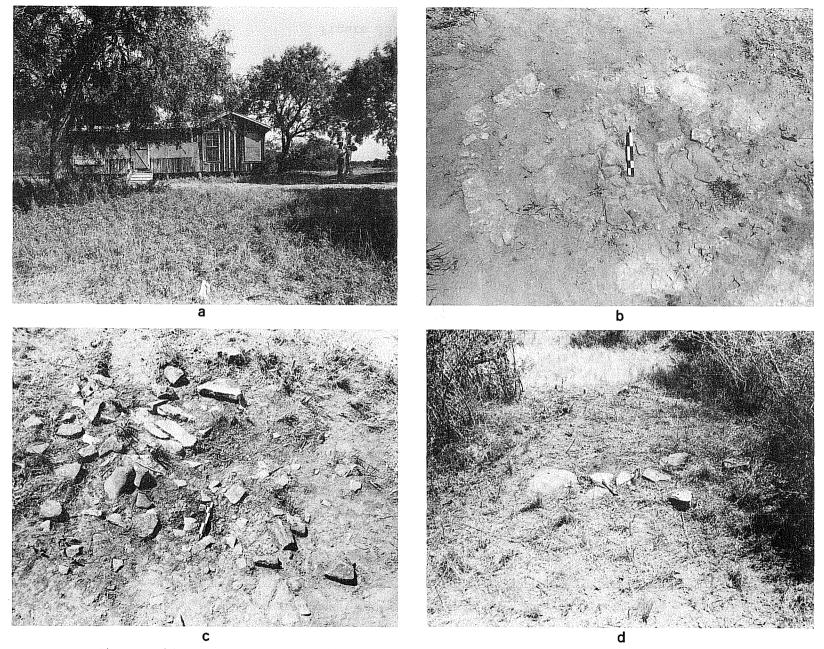


Figure 26. Photographic Views of 41MC91 and 41MC185. a, extant house, 41MC91; b, cistern or tank top west of extant house, 41MC91; c, feature 1, badly disturbed chimney foundation, 41MC185; d, feature 2, 41MC185.

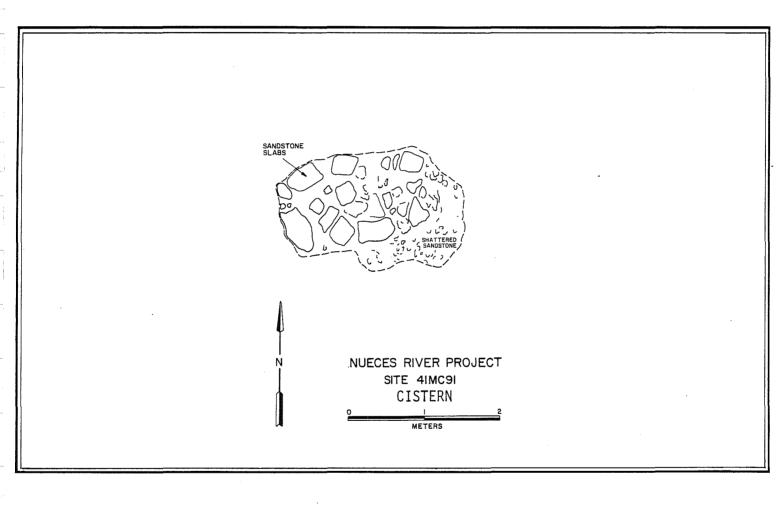


Figure 27. Cistern Plan, 41MC91.

For the collection of surface artifacts, the site was bisected with a line running east from the SE corner of the extant house; the area to the north of this line and east from the house was designated as area A, and the area to the south of this line and the house designated as area B.

Artifacts

Artifacts (Table 7) include a small amount of decorated ceramic ware, and a high occurrence of cartridges. The cartridges are recent items which are the result of the extant structure being used as a hunting cabin. The absence of decorated ceramics may be a function of the late chronological placement of the site.

Chronology

The site, based on datable artifacts (Table 8g), is probably no older than about 70-80 years. Built around the turn of the century, there is a high proportion of wire nails (Table 9), recent cartridges, such items as a battery post, copper tubing with a brass ferrule fitting, bright colored glass, and machine made bottles with molded lips. The applied bottle lips and square cut nails indicate a possible pre-1900 habitation of the site, possibly associated with an earlier structure. The exact age of the house itself cannot be ascertained at present.

Of the datable items from MC91, ammunition cartridges were quite prevalent. All cartridges are expended unless otherwise indicated. One .45 Colt, made by Western, was introduced in 1873 and is still popular today (Barnes 1972:172). The oldest cartridge from this site appears to be .44 caliber commonly referred to as a .44 Henry Flat. The .44 Henry Flat refers to the flat nose bullet, which is not present, but the case is of the same cartridge. F. Tyler Henry developed this large caliber for the 10,000 Henry repeating rifles produced from 1860-1866 (Logan 1959:68).

Two .32 caliber Smith and Wesson Longs, introduced in 1903, are present along with a .32 caliber auto, also introduced in 1903 (Barnes 1972:154). The .30-30 caliber Winchester found at the site was first marketed in 1895 for the Model 94 lever action rifle produced by Winchester (Barnes 1972:34). Also present is a .22 caliber long or long rifle cartridge which was developed in 1887 and is still very popular today (Barnes 1972:274). The distinction between the long and long rifle cartridge cannot be made since the case length is the same for each.

41MC166, "Dump" Site (Surface Collection and Mapping)

Description

The site consists of scattered historic age artifacts and refuse. There is no evidence of structural remains, and the evident refuse may be the result of dumping. The site is situated about 20m north of San Miguel Creek and covers an area of about 20m x 40m. The western portion of the site is heavily eroded by extensive gullying, and all the site is heavily overgrown with brush and grass. A general surface collection of specimens was accumulated, and no test excavations or maps were attempted.

Artifacts

The artifacts collected (Table 7) from this site indicated the site was probably a dump area. There is no evidence of a structure, and there is a low frequency of building related materials. Originally identified as a dump site by Lynn, Fox and O'Malley (1977, Table 21), the site, if it is a dump, is somewhat of an anomaly; it is the only "dump" site in an era when each habitation site had its own dump immediately adjacent to the structure. The site is very heavily eroded, and it can be suggested that the site may be a habitation locality with the associated structure completely obliterated. The occurrence of nails and window glass tends to support this possibility.

Chronology

The items dated from MC166 (Table 8h) indicated a wide time span through the mid to late 19th century. A single marked glass panel sherd appears in the collection, representing a date post-1860. Square cut nails (Table 9) represent mid to late 1800s, and glass material into the late 1800s and early 1900s.

41MC168, Teal Site (Surface Collection and Mapping)

Description

Discovered in the last few days of the field study, this site is reported after only a brief surface examination. The site covers a small area approximately 70m south of San Miguel Creek in the NW part of the previously reported prehistoric component of 41MCl68. Consisting primarily of scattered historic occupational debris and sandstone, there is one probable rock house foundation, with a second rock concentration about 25-30m to the north and about 30m from San Miguel Creek. The site is disturbed by brush clearing, erosion, and animal burrowing, and is thickly overgrown with brush, grass, and cactus. No maps were made.

Artifacts

The ceramics are all undecorated earthenware or stoneware. No window pane sherds were present, but four bottle bases made in a bottom hinged mold were recovered. The site is a habitation site, probably dating in the late 19th century. The occupants of the site were probably of lower socio-economic status based on the lack of decorated wares. More extensive investigations may corroborate this view. As can be seen in the inventory (Table 7), there is a prehistoric site component.

Chronology

The items encountered at this site (Tables 7, 8i, 9) seem to represent the late 19th century even though the glass bottle bottom hinged mold pattern spans from 1810 to 1880 (Fig. 28, b).

One ceramic sherd with a maker mark has two possibilities. Its fragmentary condition prevents any exact identification. The first possible maker is Clementson Bros. of the Staffordshire Potteries in Hanley, England which operated from 1865-1916 (Godden 1964:149). The second possible maker is Johnson Bros. also of Hanley, England who operated from 1883 (Godden 1964:355). Three agua glass sherds show the Frederick Hampton Glass Works maker mark (Fig. 28, a). "FHGW" mark appears on several types of handmade beer bottles-amber, and finished for corks, as found in western ghost towns (Toulouse 1971:202). This mark was used circa 1880 to 1900. A fourth glass sherd with maker marks represents Burlington Glass Company. One of the oldest glass companies in Ontario, Burlington used its initials and sometimes its name in full on fruit jars (Toulouse 1971:85-86). The mark, "BGC2," was used from 1877 until 1909 when the company was taken over by the Diamond Glass Co. of Montreal. One ammunition cartridge, a .45 Colt which has been in production since 1873, is also present in the collection.

41MC175 (Surface Collection and Mapping)

Description

The site (Fig. 29) is an extant wooden frame house structure with associated barn, outbuildings, corrals, fences, and scattered historic occupational debris. The site is situated on a point on the valley wall overlooking the Frio River 750m to the west. Extant buildings include the house, a barn to the north of the house, a water tank/shed, and an outhouse or latrine. There is a dump area to the west of the house down the slope of the valley wall, and several remaining (standing) sections of fencing scattered in the area. One area fenced on the east side of the house and another to the south contain discarded wine bottles and trash. To the southwest of the house is a building foundation

A. A. C. Ballon C. M. A. Ballon

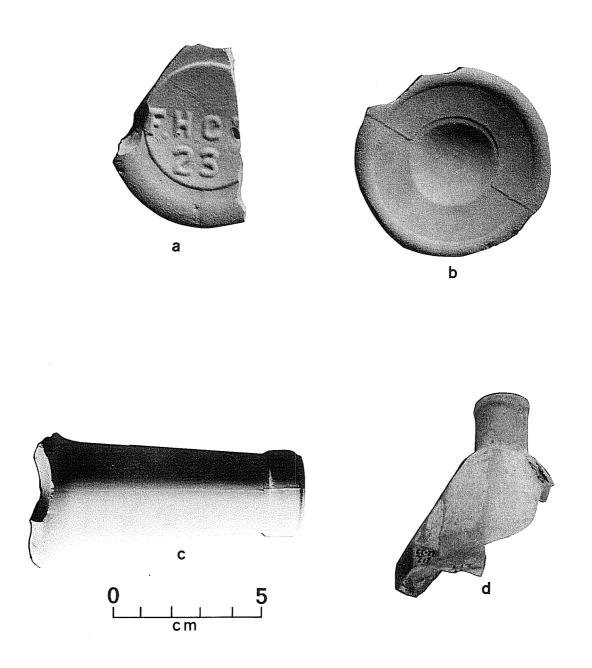


Figure 28. Artifacts from 41MC168 and 41MC192. a, bottle bottom with maker's mark and bottom hinged mold, 41MC168; b, bottle bottom with bottom hinged mold (unmarked), 41MC168; c, unidentified top of a bottle; d, ink bottle from 41MC192, has applied lip and made in a cup bottom mold.

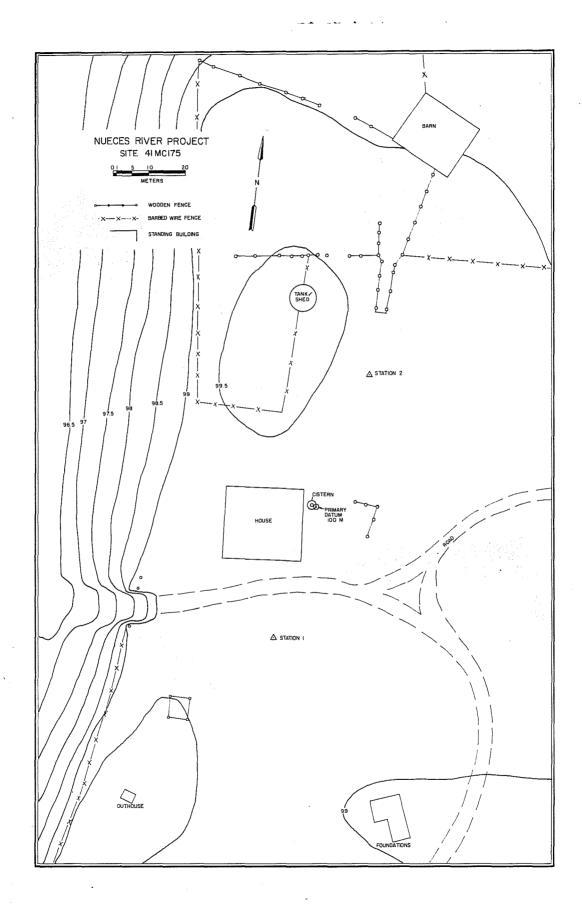


Figure 29. Site Map of 41MC175.

of concrete which could have been a shop or garage. On the south side of the barn is a wooden (pole, log and plank) fence with a cattle loading chute.

The house (Figs. 30, 31) is partially collapsed and is constructed on wooden piers. There are five rooms and a screened-in front porch with the middle two room sections of the house apparently having been built before the other three rooms and porch. The end elevation of the house contains a view of a seam in the wall which was probably the roof for the original smaller house, a new and larger roof being installed at the same time that the extra rooms were added on. The temporal separation between the two constructions is unknown. (The elevations and the floor plan do not exactly coincide in detail. The present drawings are made from field sketches. A photograph of the house appearing in Lynn, Fox and O'Malley (1977:181) suggests that the gable line, east windows, or the northern interior wall may be slightly mislocated in the drawing.)

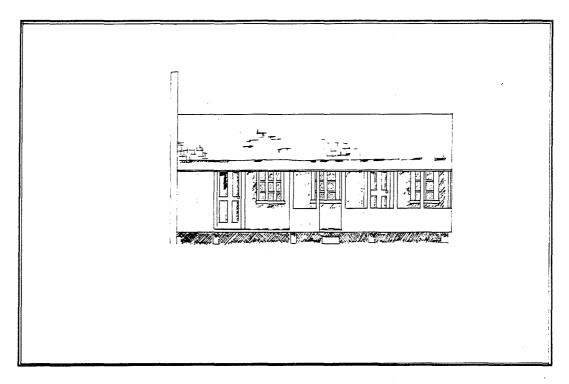
Surface collections were made of the area by extending a diagonal line out from each corner of the house and dividing the site into quadrants. Each quadrant included one specific house corner to the next corner, and from the house out to an arbitrary point at which the artifact density was significantly lower and collecting was not attempted. A dump area on the hillside to the west of the house, and areas around the barn and near the outhouse were collected separately. No areas were tested with excavation.

Artifacts

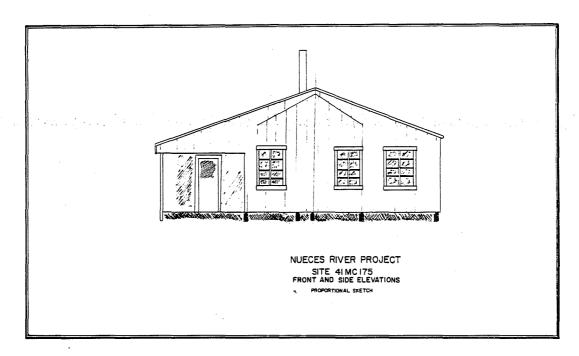
The artifacts (Table 7) indicate this house to have been a habitation since the early 20th century. There is a distinct lack of decorated ceramics, a trend pointed out at other sites also. The glass items include a "special" class of wares not recovered at other sites, specifically a mug and a goblet. There is an occurrence of brightly colored bottle and vessel glass, and a plethora of kitchen gadgets and other miscellaneous hardware items. There are several recent vintage cartridges, particularly the 7mm and the .222, which indicate the house to have been used most recently as a hunting camp, an activity which is a temporary habitation in the real sense of the term and probably is associated with some of the other household and hardware items. Plastic toys indicate a family may have lived in the house recently.

Chronology

Only a few artifacts can be dated (Table 8j): an applied bottle lip and some square cut nails (Table 9). Both of these items, however, date well into the 20th century. The balance of the items date the house as occupied as a regular family residence since the early 20th century until perhaps the 1960s, when it was apparently converted into hunting quarters.



а



b

Figure 30. Elevations of Extant House, 41MC175. a, front view; b, side view.

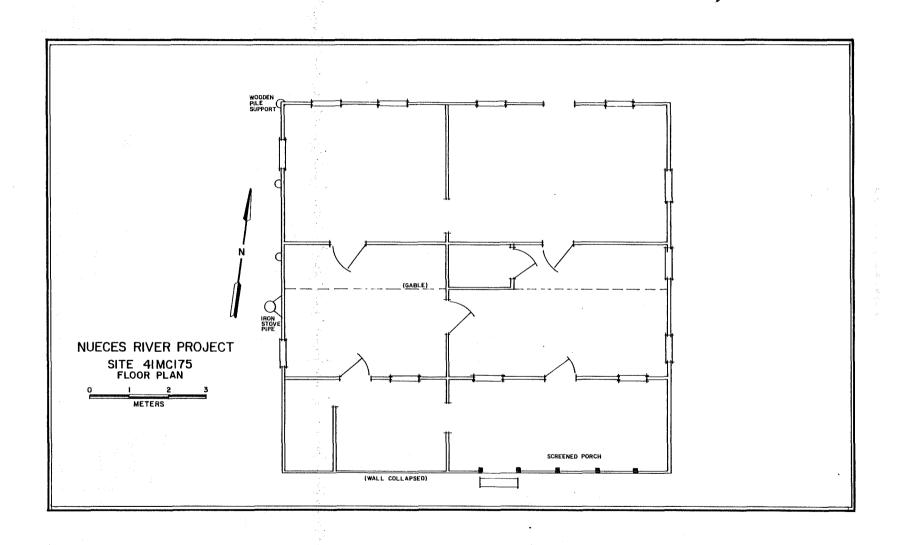


Figure 31. Floor Plan of 41MC175.

Eight bottle sherds with maker marks were examined from MC175. One sherd exhibits the Ball Bros. mark which was used in various styles from 1888 until the present (Toulouse 1971:66-68). Two glass sherds show the Hazel-Atlas Glass Co. mark which was used from 1920 through 1964 (Toulouse 1971:239-242). One sherd has the maker mark of Brockway Glass Co. of Brockway, Pennsylvania. This company started operations in 1925 (Toulouse 1971:5962). Four sherds have the Owens-Illinois Glass Co. mark. Of these sherds, two show the number of the plant at Alton, Illinois for 1929-1954; one shows the number of the plant at Newark, Ohio, and the production date of 1932; and the last refers to the plant at Bridgeton, New Jersey from 1929 through 1954 (Toulouse 1971:403, 405-8, 395). Seven ammunition cartridges from MC175 were examined and dated. A .45 Colt made by Union Metallic Co. exhibits a balloon head primer, thus dating between 1873 and 1930 (Barnes 1972:172). Two .222 caliber Remington Super X cartridges, introduced in 1950 (Barnes 1972:34), are among the variations of the cartridges. Two .30-06 Springfields make up the remainder of the collection from this site. This cartridge was adopted in 1906 for the model 1903 Springfield service rifle. The .30-06 is actually a slightly modified version of the original 1903 cartridge. This improved round was designated the "Ball Cartridge, caliber .30, Model of 1906, but in practice the nomenclature was shortened to .30-06" (Barnes 1972:38).

41MC185 (Surface Collection and Intensive Testing)

Description

The site (Fig. 32) has four sandstone rock concentrations and associated scattered historic occupational debris. The site is situated on a prominent point or ridge overlooking the Frio River, which is about 90m to the west. Covering an area of 60m x 120m, the site materials are concentrated mostly in the northern end of the site, where the two largest rock concentrations are located. The site has been disturbed by bulldozed senderos (local term for linear clearances) and perhaps some root plowing. Close examination and one test pit indicate that probably no architectural remains are intact enough for fruitful study.

The largest of the sandstone concentrations, feature #1, is a possible chimney foundation. This feature is situated in the northern part of the site and is very badly disturbed by a road cut ("sendero"), which goes right through where the house itself probably was, and possibly by root plowing too. Figure 26, c, shows feature #1 as an accumulation of sandstone rocks about 4m x 5m, many of which are semi-shaped and therefore similar to rocks used in other area site chimney foundations. There is enough rock present to indicate that robbery of stones was probably not the primary cause of the disturbance. The rocks appear to be still present, only jumbled. This evidence as well as the relatively uniform small size of the brush on the site indicates the area may have been chained and then root plowed.

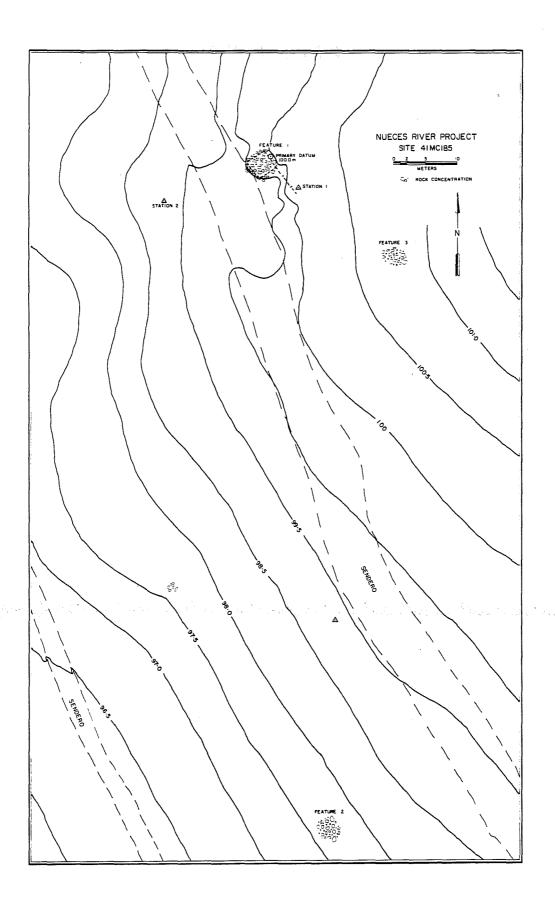


Figure 32. Site Map of 41MC185.

Feature #3 is a sandstone rock concentration 24m southwest from feature #1 which is of unknown function. The rocks in this feature, unlike feature #1, are not buried or embedded, but are scattered on the ground surface. Feature #2 (Fig. 26, d), in the south end, is shallow, as is a very small and unlabeled rock concentration 45m northwest from feature #2. Feature #2 is a group of slabs 0.5m x 2m in size. There are numerous scattered rocks nearby which indicate that it is also disturbed and was probably much larger than the present concentration would indicate. All rock concentrations except feature #1 are of unknown function. They could be pieces of the original chimney that have been pushed or pulled from feature #1 to their respective locations by bulldozing and chaining activity, or they could represent outbuilding structures of some type that are associated with the original house structure represented by feature #1. These concentrations probably do not represent other habitation structures due not only to their dissimilarity of structure (or lack of it), but also due to a distinct absence of occupational debris compared to the feature #1 area.

Artifacts

This site is a habitation locality with evidence (Table 7) of a structure and associated outbuildings. There are a few decorated ceramic sherds and some majolica tin enameled ware indicating some type of ties with Mexico. Most artifacts, including all "habitation" type debris and nails (Table 9), are associated with the house location.

Chronology

The items indicated on the chronology chart (Table 8k) place the probable period of occupation in the late 19th century. The chronological significance of majolica ware is discussed extensively by others (e.g., Lynn, Fox and O'Malley 1977:188, 191) but will be considered here only as a broad time indicator.

The temporal span for MC185 was indicated by several factors. The .44 caliber Henry Flat was again present, indicating a date post-1860. A ceramic maker mark, probably that of Bridgewood and Clarke of Burslem, England, was produced between 1857 and 1865 (Godden 1964: 101). Of two identifiable tin cans from this site, one is a body portion with a soldered side seam which was produced from 1815 to 1920 when fold locked seams started replacing the soldered seam (Fontana and Greenleaf 1962:73). The other example is a body portion of the tapered "corned beef type" can which started about 1875 (Fontana and Greenleaf 1962:73). Two marked panel glass sherds, which were not produced until the 1860s, are present in the collection.

41MC192, Dusek Site (Surface Collection and Intensive Testing)

Description

This site (Fig. 33), named the Dusek site after Melvin Dusek, foreman for the ranch on which the site is located, is situated on a point of land about 120m south of the Frio River. Remains at the site include scattered sandstone blocks, a rectangular house foundation, chimney foundation (Fig. 34, a) and scattered historic occupational debris. A total of three test pits was excavated, recovering occupational debris and encountering architectural remains. In addition, controlled surface collections were made.

The sandstone rubble is scattered broadly over the site; much of it is surface scatter, but there is some aligned distribution pattern (Fig. 34, a). The chimney foundation is situated in a central part of the east edge of the stone rubble and oriented with a long axis aligned with the rubble. The hearth is about $2m \times 3m$ in size and has two or perhaps three courses of slabs remaining (Fig. 35). If the rectangular stone rubble is representative of the original house dimensions, the chimney would be situated in the middle of the east wall of a rectangular structure measuring about $5m \times 15m$.

The degree to which the surface rubble represents the actual house architecture is not known except in one test pit, #3, (Fig. 34, b). Situated on the west side of the structure opposite the chimney foundation, the $lm \times .75m$ pit encountered a feature at about 8cmbelow the ground surface which is apparently some type of wall footing or other architectural feature. The ground surface in this area was littered with sandstone blocks, as can be seen in Figure 34, c. Stone blocks like those outside pit #3 were present within the pit, but were not buried to any depth and were removed prior to the photograph. In the same Figure (34, b), there is visible a clustering of small sandstone rocks in the northwest floor corner of the pit. This is the footing feature which extends outside the pit to the north and west, is relatively circular in outline on the edge excavated, and is about 8-10cm thick. The top surface of the gravel feature increases in height to the NW, which is toward the central area of an extensive sandstone block concentration. The floor of test pit #3, subsequent to excavating to 20cm level, was brushed, troweled, and dampened with water spray, revealing several soil stains which may also be architectural features. One linear dark stain was oriented northwest/southeast across the floor of the pit, parallel in axis to the chimney foundation. Another stain (10-15cm, circular) was located to the west of the linear stain under the edge of the overlying gravel lens feature (Fig. 34, d). These stains may represent a post and wall trench associated with the structure or may be merely a rodent burrow with a fortuitous orientation. The stone scattered on the surface of the site could also have been fortuitously aligned by a bulldozer cut, but the surface features in test pit #3 indicate that this is not the case. More testing should disclose the correct answer.

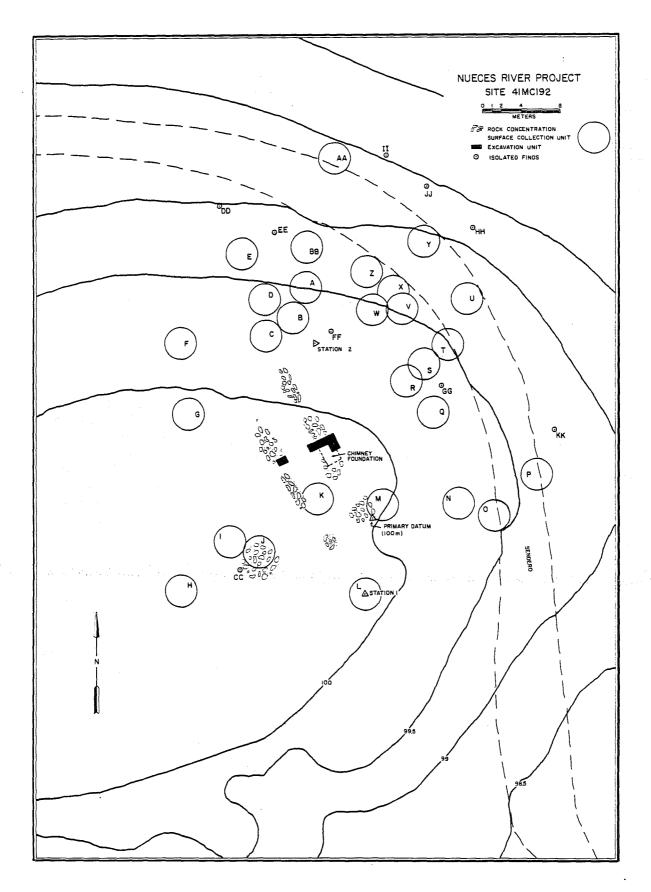


Figure 33. Site Map of 41MC192 (the Dusek Site).

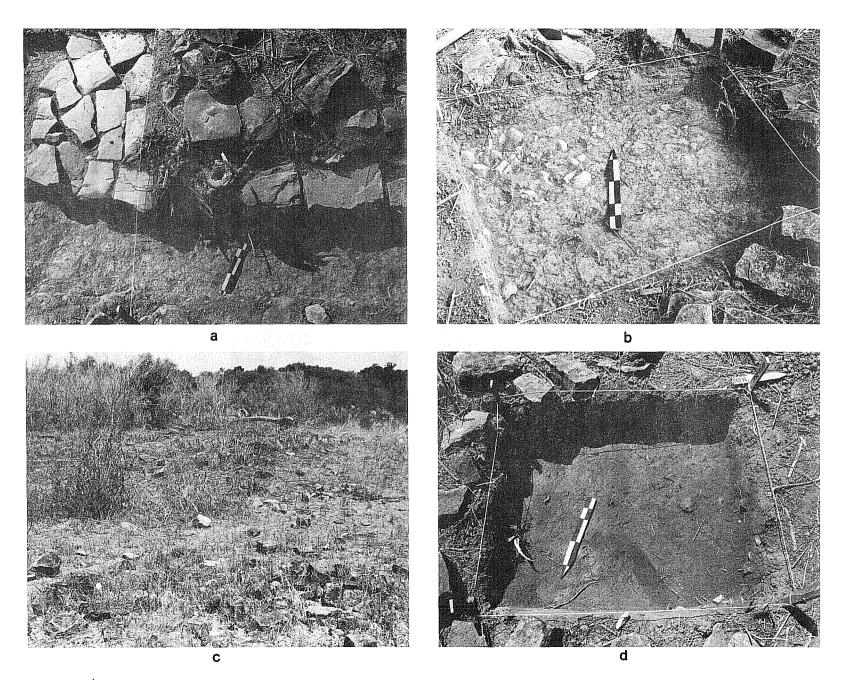


Figure 34. Photographs of 41MC192. a, chimney foundation; b, test pit #3, level 1, showing lens feature; c, general view of site; d, test pit #3, level 2, showing stain in floor.

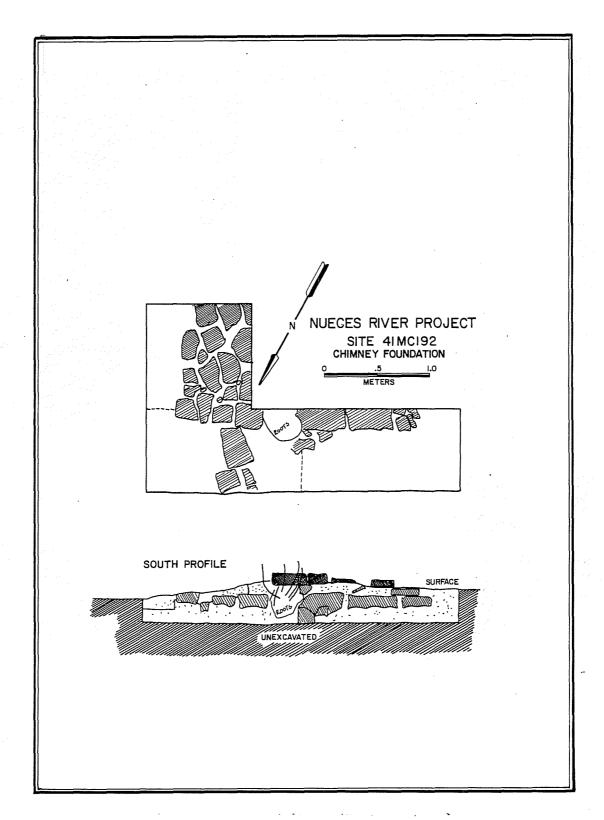


Figure 35. Chimney Foundation and South Profile, 41MC192.

Another architectural detail of note is the northward extension of slabs adjacent to the chimney foundation. Having only one course of flat aligned slabs, this feature was not delineated enough to warrant calling it a wall, but it may be a wall feature comparable to those at 41MC15 and 41MC46. The position of this wall feature indicated that the chimney extended into the room over one meter. The presence of a wall trench inside the structure from a layer of gravel may indicate an interior jacal or picket wall and an external rock wall (the gravel being a footing for the stone wall).

An isolated concentration of stone in surface collection unit J, to the southwest of the main structure, may represent an outbuilding, but the structure of this feature was not investigated. Other stones were scattered over the entire area, but these are due mainly to the disturbance of the site by brush clearing. Sheet erosion is evidenced over the whole site area, but is most pronounced in the northeastern part of the site where the majority of occupational debris is found. The prolific occurrence of this material in such a restricted area may be due to having been the original dumping area or may be a function of differential exposure by erosion. If the concentration is due to actual material distribution, the location of the house doorway is suggested as being on the northeast part of the structure. South (1977:47) has reported the Brunswick refuse disposal pattern in North Carolina which reflects elements of site structure, content, context and function. One element of this phenomenon is the association of certain classes of refuse with structure doorways or gates. The applicability of this British-American pattern to the south Texas frontier is rather tenuous, but the idea should certainly be further explored. As the door location is presently unknown, resolution of this problem must await subsurface archaeological investigations.

In October, Bandy visited the site, and because recent rains had exposed more artifacts, a few of the more significant items were collected. Each collected item was mapped relative to the still-exposed chimney foundation and plotted on the site map. The exact positions were determined by standing a ranging pole at the exposed corner of the chimney foundation and then standing over the artifact to be mapped in. The distance back to the ranging pole was measured with a range finder optical instrument and an azimuth reading made with navigational compass. Items which were located in original surface collecting circles were included with those previously collected items, and items collected outside of original circles were mapped as isolated finds (Fig. 33).

Artifacts

The wide variety and quantity of items recovered at this site (Tables 7, 9) are unusual for the project sites and are apparently the result of the economic affluence of the inhabitants. The occurrence of many decorated ceramics has certainly the highest frequency at any of the project sites. The scarcity of window glass is interesting

because it indicates that the assumption that windows are a status commodity may not be a valid concept in this mid-19th century setting. Noteworthy in the metal class is the fish hook (Fig. 9, g). This is the only evidence in the project area to date of any inhabitants exploiting the Frio River for other than water. Note also the metal kitchen utensils.

Chronology

The abundance of materials at this site allows for a much better date estimate (Table 81) than is possible at most of the project sites. The most notable item is the coin (Fig. 11, d), which is a Mexican five centavos piece dated 1870. Not only is this date useful, but the fact that it is Mexican in origin confirms the Mexican contact indicated by the presence of majolica at 41MC185 and indicates that this contact may be more than just a casual association or "tourist visit." Another unusual item is the tumbler part of a muzzle loading percussion rifle which has been suggested to date post-1830 (personal communication, Guy Wilson).

Two ceramic sherds with maker marks are present from this site. The first (Fig. 6, j) represents Bridgewood and Clarke of Burslem, England which operated from 1857 through 1864 (Godden 1964:101). The second example has two possibilities: first, Alfred Meakin of Tunstall, England which operated from 1875 through 1897 (Godden 1964:425), and second, J. and G. Meakin of Hanley, England which has operated since 1851 (Godden 1964:427). Three marked glass panel sherds represent post-1860 manufacture. An ink bottle (Fig. 28, d) has an applied lip and was made in a cup bottom mold.

Three top portions of tin cans show hole-in-the-top manufacture which was used from approximately 1815 to 1900. The can, at this early period, was laboriously cut from tinplated sheet iron by hand or footpowered scissors; the body then was formed around cylinders and the seam soldered. Separate pieces for the top and bottom were cut and soldered. A hole was left in the top through which the food was forced. A smaller cap was finally soldered in place after filling. A pin hole in the cap allowed gases to vent. One last drop of solder sealed the job. This type of can became known as the "hole in top" or "hole and cap" (Fontana and Greenleaf 1962:68-69). Two body portions of tin cans show soldered side seams which were used from 1815 to about 1920 (Fontana and Greenleaf 1962:68-69, 73).

41MC193, Bracken Site (Surface Collection and Mapping)

Description

This site (Fig. 36), named after Sam Bracken, the landowner, is located on a hill overlooking the Frio River which is about 150m to the north. The site has two main parts: 1) a habitation locality

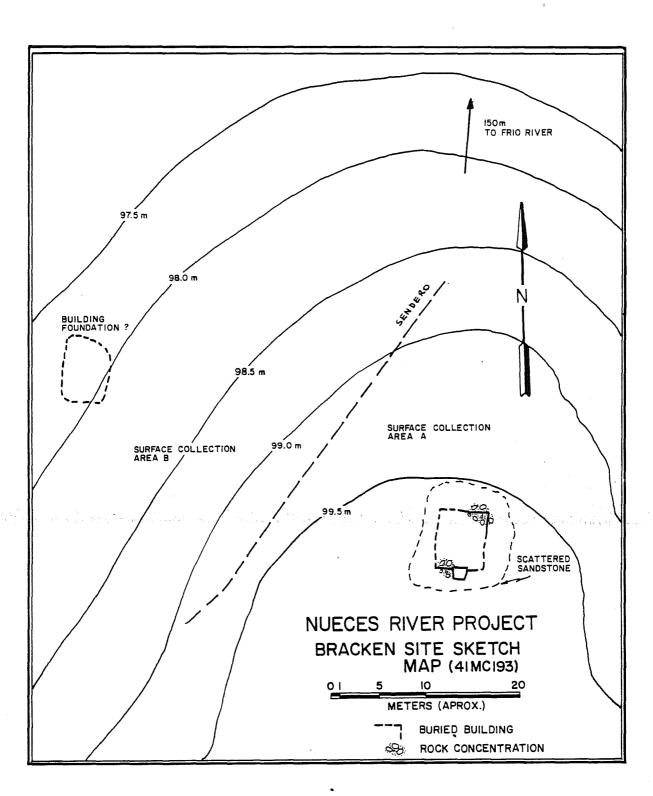


Figure 36. Bracken Site Sketch Map, 41MC193.

(Fig. 37, a) with sandstone chimney foundation (Fig. 37, b), scattered sandstone, and historic occupational debris, and 2) a small scattering of sandstone which may represent an outbuilding foundation to the west of the house. The habitation structure is rectangular in outline, with remnants of slab alignments. Sheet erosion has been moderate, with probable past disturbance by brush clearing and much recent damage by hog rooting. A sendero crossing the site between the outbuilding and the house was used as a demarcation line to surface collect the site in two areas, A and B. Area B is associated with the outbuilding foundation, and area A is on the south side of the sendero and associated with the habitation site. As at site 41MC192, surface collections were made subsequent to the summer field season, with the collected items incorporated with those previously collected by areas. No test excavations were made, but animal burrow profiles and backdirt indicate this site to be very similar to 41MC192, which is only about 390m to the west.

Artifacts

The artifact assemblage (Table 7) is very similar to that of 41MC192 except that there are not as many decorated ceramics nor such a wide variety of items. This site is a habitation structure dating in the mid-19th century. There is a prehistoric site component.

Chronology .

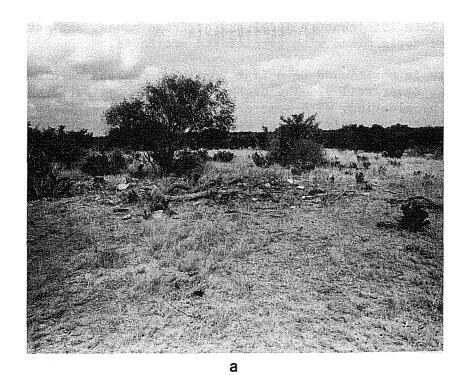
Datable objects (Table 8m) include the common ceramic and glass types of the late 19th century, square cut nails (Table 9), tin cans, and a gun part. This particular gun part (Fig. 11, b) is a trigger assembly of a muzzle loading type rifle which was probably mass produced from a stock pattern. The exact type of gun is unknown, except that it is not a Sharp's rifle; it is probably a Civil War era piece, dating from perhaps as early as 1850 but most probably later. This type of gun part is still made today, but is not commonly used except as a novelty (Guy Wilson, personal communication).

A single top portion of a hole in top tin can appears at this site suggesting a manufacture date for this specimen circa 1815 to 1900 (Fontana and Greenleaf 1962:68). A marked panel glass sherd, produced after 1860, is also present.

41MC194, Horton Site (Surface Collection and Mapping)

Description

The Horton site, 41MC194, is approximately 120m south of the Frio River and 630m west of Black Hill Hollow (approximately 110m west of Horton/Bracken fence line). Roughly round, the



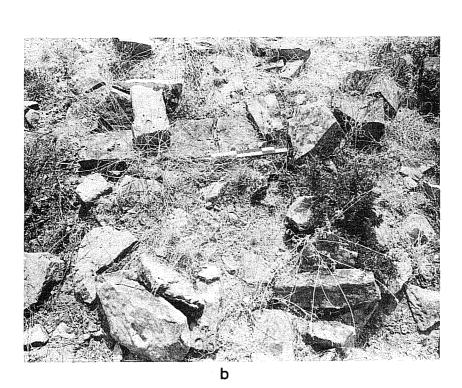


Figure 37. Site 41MC193. a, general view of site; b, chimney foundation.

site has a 30m diameter. Features are indicated by the foundation stones of a late 19th century jacal and/or frame house, and surface scatter of historic mixed with prehistoric artifacts.

The site is positioned on a flat portion of upland margin sloping into the Frio River valley. The present condition indicated possible disturbance by clearing, with some erosion and animal activity. Due to time restrictions, only limited work (sketch map and surface collection) was carried out.

Artifacts and Chronology

The materials (Table 7) reported on the survey form seem much the same as for the other sites of the project area, consisting of 19th century glass, ceramics, and metal (square nails). The absence of wire nails (Table 9) along with the other material indicate a general date during the late 19th century for this site.

41MC195, Teal House (Surface Collection)

Description

This site, known as the Teal House, appears to be a late 19th century habitation and ranch house. All that remains above surface are the scattered sandstone blocks of the now destroyed house foundation and the usual remains of cultural debris, including ceramics, glass and metal. The site, with a sandy clay surrounding soil, is situated in the Frio River drainage system.

Artifacts

Although the limited amount of material (Tables 7, 9) makes it difficult to elaborate on the functions carried on at the Teal House, the artifacts represent the typical late 19th century (Table 8n) homestead assemblage. A unique item recovered was a porcelain door knob. This was the only one found in the entire project area.

Chronology

The Teal House collection exhibits a .44 caliber Henry Flat which was used after 1860 with the Henry repeating rifle (Logan 1959:68). Also, a ceramic sherd with the E. and C. Challinor maker mark of Fenton, England is present. The Fenton Pottery operated from 1862 through 1891 (Godden 1964:137-8).

SUMMARY AND CONCLUSIONS

The historic sites investigated during this project recall a way of life during American frontier expansion and development that has almost been forgotten in its "nitty-gritty" details, although it has been romanticized in popular memory and lore. Such details are recovered through both archeological and historical research, each contributing information to be used in answering questions about "who lived here and when?" and "how did they live?"

Attempts to answer such questions about the inhabitants of these sites were made by three independent investigators during this project. Daniel E. Fox, with his considerable experience in south Texas historic archeology, directed the field work and, while he and his crew worked at the sites, suggested cultural and chronological possibilities. Dianna Everett, working in libraries, county court houses and other archives, visiting cemeteries, and interviewing descendents of frontier families, contributed her answers (see Part I of this report). Philip A. Bandy, directing the lab work on collected specimens from the sites, tried to enable these material culture remains to "speak for themselves." The three sets of "answers" are presented side by side for each site in Table 5.

It is interesting to note which sets of data answered which questions in this project. Actual ways of everyday life were evidenced in the archeological record. The locations, sizes and construction details of the houses and the amounts and types of household goods remaining indicate a "life style" pretty "near the bone," even for those times. Differences in standards of living between urban and rural dwellers are suggested; we know (see South 1977:232) that many people in even the earlier frontier towns had some of the material luxuries of the time. People living directly on the outlying farms and ranches probably could not afford them.

None of the archeological data suggested "ethnicity." So far as can be told at this stage of analysis and interpretation, nothing in the archeological record says "an Anglo-American family lived here" or "a Black family lived here" or "a Mexican family lived here," although we know from historical sources that these statements can be made about most of the sites at particular times (Table 5 and as reported in Part I). As far as material culture goes, environmental requirements, subsistence activities and levels of affluence were greater factors than ethnic identities and customs. Being a rather poor south Texas stockraiser dependent on regional and even national market demands was a common experience for persons of various origins, languages, religions and traditions; this common experience is reflected in the material remains of their homes.

In summary, archeological research is valuable for answering questions about how people really lived in this area (and roughly when), but historical research is necessary to tell us who they were, both as individuals and as members of cultural groups. This is probably true of all archeology and leads us to hazard several generalizations. First, from the historical point of view, studies of material culture (of any time period) are necessary to "flesh out" our knowledge of any people's actual way of life. Second, from the archeological point of view, when historical sources are available, they can offer information not preserved or only faintly detectable in the archeological record. Third, also from the archeological point of view, when historical sources are not available, we must remember that great diversity in ethnic identity, language, politics, religion and in other realms may be reflected very poorly or not at all in the archeological record. This project suggests two major reasons for this last generalization: the ordinary household does not contain much preservable evidence within those realms just mentioned, and, the demands of subsistence may override much of the diversity and help produce a relatively uniform economic way of life for people who are quite different in other important ways.

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