

AN ARCHAEOLOGICAL RECONNAISSANCE OF
PETRUCHA FARM,
ON THE LOWER COLORADO RIVER DRAINAGE,
MATAGORDA COUNTY, TEXAS

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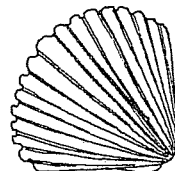
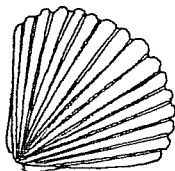


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INTRODUCTION

During August 15-17, 1980, archaeologists from the Center for Archaeological Research (CAR), The University of Texas at San Antonio (UTSA), under contract with Pilko & Associates, Inc., of Houston, conducted an archaeological reconnaissance of land on the Petrucha Farm located west of Wadsworth in Matagorda County, Texas. The area surveyed is the locality for a proposed petrochemical plant site. Field work was accomplished by Eric C. Gibson and Elizabeth G. Gibson, CAR archaeologists. Dr. Thomas R. Hester, Principal Investigator, and Jack D. Eaton, Center Acting Director, provided overall supervision of the project.

PREVIOUS ARCHAEOLOGICAL RESEARCH

This section briefly summarizes the few archaeological investigations of Matagorda County during the past 50 years. The earliest reported archaeological study was conducted by Woolsey (1932). His research included the Battle Island site (41 MG 1) approximately four miles east of Matagorda.

The most extensive archaeological survey in Matagorda County was by Fritz (1975). Ninety-four sites were located during this survey in the Matagorda Bay area (Calhoun, Jackson, Victoria and Matagorda Counties). Part of the area covered by Fritz's survey included the Colorado River drainage from approximately three miles south of the Petrucha Farm to Matagorda Bay. However, no sites were found in this area (*ibid.*). Sites similar to the shell midden (41 MG 49) described in this report were found by Fritz (1975:95).

Another recent study of the cultural resources of the area was completed by Hall, Grombacher and Dibble (1974). They did not find any sites in a portion of their study area approximately three miles south of Wadsworth in southern Matagorda County. In nearby Jackson County, Story (1968) found seven archaeological sites between the Lavaca and Navidad Rivers.

In 1941 Arnold reported finding one large prehistoric campsite and three shell middens in Matagorda County (Arnold 1941).

These reports comprise all of the published archaeological investigations in Matagorda County, and none cover the immediate area of the current survey. The prehistory of this county is poorly understood at present.

ENVIRONMENTAL SETTING

The Petrucha Farm is located in the Texan Biotic Province of the Coastal Lowland subdivision of the West Gulf Coastal Plain (Blair 1950). Its features include Pleistocene uplands traversed by abundant streams and rivers. The land adjacent to the Colorado River is entrenched to a depth of 8-12 m below the nearby Holocene floodplain. The soils are characterized by a fertile, dark gray, silty clay derived mainly from alluvium. A small amount of isolated chert pebbles and sandstone fragments was observed in the study area.

The climate is humid-subtropical with an average rainfall of 45 inches (114 cm). Rainfall distribution graphs indicate two peak months, June and September, which coincide with thunderstorms and hurricanes, respectively (McGowan and Brewton 1975:3).

The Matagorda County ecosystem supports the following communities: point bar grasslands; riparian; stunted riparian; floodplain; bluff top and mixed hardwood forests; and freshwater, transitional and saltwater marshes.

Blair (1950:98-100) lists 47 species of mammals, 41 species of reptiles and 35 species of amphibians within this physiographic region. An indeterminate number of fish species also inhabit the waterways. Shellfish, particularly the oyster (*Crassostrea virginica*) and clam (*Rangia cuneata*), are the most abundant aquatic species. Archaeological data indicate that these shellfish were heavily exploited by aboriginal groups during prehistoric times (Dillehay 1975; Fritz 1975). *Rangia cuneata* are commonly found in shallow fresh or brackish water where there are slight currents, while oysters are saltwater or estuary inhabitants.

In Matagorda County and the surrounding region there were few natural barriers to inhibit travel and communication between the aboriginal inhabitants. Numerous streams, rivers, estuaries, floral and faunal resources were available, and raw materials such as wood, shell and cane were plentiful. The abundance and distribution of these resources in this region supported numerous populations since Late Pleistocene times. Chert, however, was probably a scarce resource.

THE RECONNAISSANCE

The areas sampled during the field reconnaissance lie east of the Colorado River (Fig. 1). The objective of the reconnaissance was to make a cultural resource assessment in portions of the Petrucha Farm selected for representative coverage of the different vegetational zones.

Section A

This area is in the northeastern quadrant of the farm which lies adjacent to FM 2668 on the east. It is currently being cultivated in corn, ryegrass and soybeans. Ground visibility was poor in some sections. The soil in this area was a loose, moist, dark gray clayey silt. Three shovel tests excavated to a depth of 80 cm below surface showed no change in this soil horizon.

The reconnaissance of Section A was conducted by two individuals walking approximately 10 m apart in a series of transects which traversed the cultivated rows.

A late 19th or early 20th-century artifact surface scatter (site 41 MG 48) was located in this area. Local informants described the area as being the site of an old homestead that was erected in the 1890s and torn down in 1946. Historic ceramic, glass and metal artifacts were collected at the site. The majority of these artifacts appear to have been manufactured between 1890-1910. Shovel tests did not reveal any subsurface features. This severely disturbed late

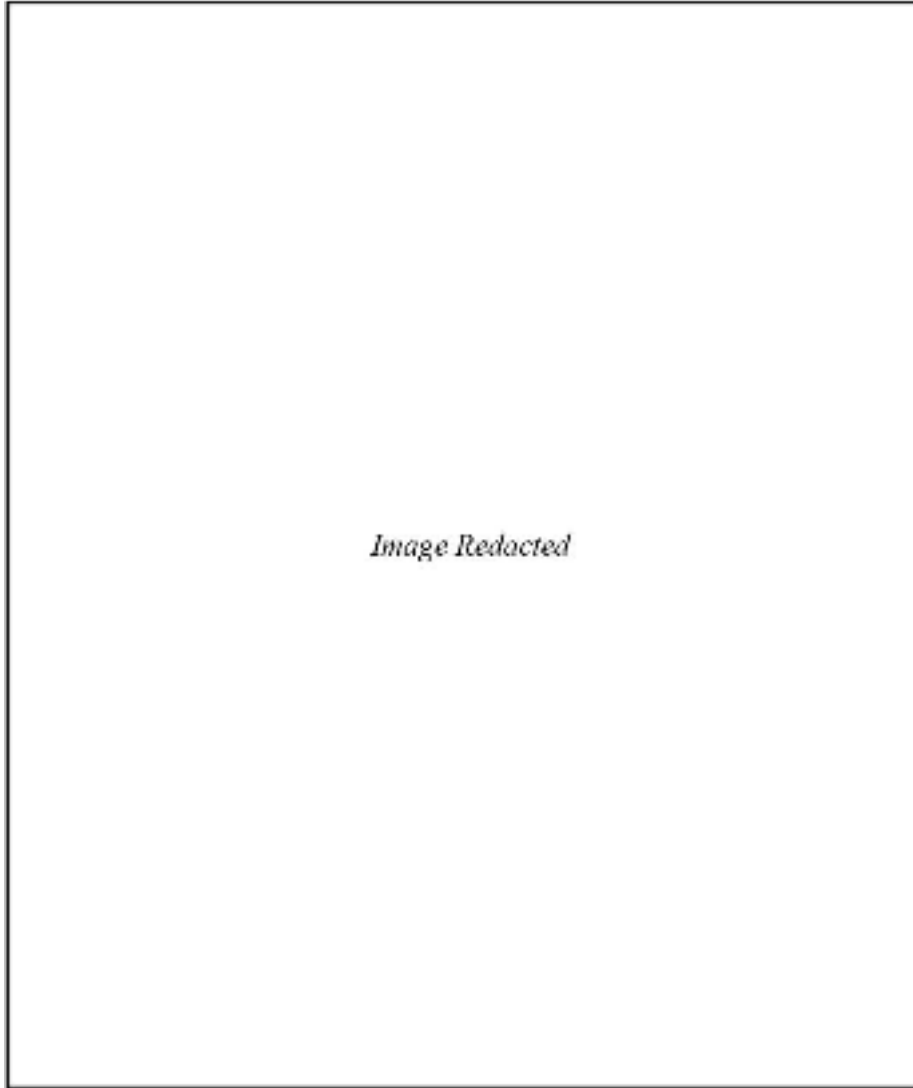


Figure 1. *Petrucha Farm Survey Area*. Shown are locations of areas surveyed and archaeological sites.

historic artifact scatter is not considered to represent a significant cultural resource, and no further work is recommended.

Section B

This area is centrally located in the Petrucha Farm on its northern boundary and extends to the southern limit of the property (see Fig. 1). The reconnaissance methodology was the same as that used for Section A previously described. The area is presently cultivated in ryegrass. However, ground visibility was better than that in Section A because the crop had been recently harvested. No cultural resources were found within this area. No further archaeological field work is indicated.

Section C

Reconnaissance in this area was confined to the north and east branches of the unnamed creek which drains into the Colorado River in the southwest corner of the property (see Fig. 1). The ground surface (pasture area) between the confluence of these creeks was also examined. Section C reconnaissance was conducted by two individuals walking along both sides of the creek bank in a zigzag pattern up to ca. 30 m from the edge of the creek. Ground visibility was extremely poor in most of this area. Along the creek edge, cane, grasses and weeds grew to a height of 1.5 m in numerous patches. Overall, the ground surface was densely vegetated throughout the creek bank area; this condition extended to the edge of the woods.

One shell midden was found in Section C (site 41 MG 49). This site is located where a dirt road crosses the eastern creek branch, on the east bank of the creek. Oyster (*Crassostrea virginica*) and unidentified freshwater clam shells were found eroding from the bank. This shell midden extends approximately 6 m on either side of the road. The most abundant surface scatter of shells occurred on the northeastern side of the farm road.

A series of shovel tests was executed throughout the site area in order to establish the vertical and horizontal dimensions of the shell midden. It extended from a depth of 5-10 cm to 25-30 cm below surface. Ninety-five percent of the shells were oyster (*Crassostrea virginica*). No chert or other artifacts were recovered; however, this is not an uncommon characteristic of prehistoric shell middens along the Gulf Coast (Fritz 1975; Dillehay 1975). A few of the shells display modified edges which could have resulted from either cultural activities or natural processes. In summary, the localized horizontal and vertical concentrations of these shellfish, combined with a high frequency of one species, indicate that their accumulation was culturally influenced. Further work is recommended if this site cannot be avoided by construction activities.

Section D

This area comprises the western edge of the Petrucha Farm. The vegetation in the northwest corner east of the levee is pasture. The rest of Section D is characterized by a dense, mixed hardwood forest. This area was surveyed by two individuals walking parallel transects across the pasture zone. In the forested areas which had less solid ground cover, reconnaissance followed natural corridors through the woods. No cultural resources were found in Section D.

SUMMARY AND RECOMMENDATIONS

The Petrucha Farm archaeological reconnaissance was a preliminary, three-day project which included walking transects through a densely vegetated area. Two sites were discovered, both of which were located in the Pleistocene deposit described by McGowen and Brewton (1975:5) as ". . . interdistributary mud, includes bay and floodbasin facies." The shell midden was located on the creek which marks the transition zone between the Pleistocene and the modern Holocene floodplain (*ibid.*). The presence of a saltwater species of shellfish in an area that is now a freshwater stream might suggest the bay area's proximity during the site's occupation.

Due to the compact vegetation along the creek banks, it is recommended that archaeologists re-examine the creek drainage zones for additional cultural resources if disturbance is planned. The areas on the Petrucha Farm not previously traversed during the reconnaissance described in this report should also be examined, preferably in early winter when vegetation is less dense.

Site 41 MG 48, the historic artifact surface scatter, is assessed to be insignificant due to severe disturbance. Further work is not necessary.

Site 41 MG 49, the oyster shell midden, is potentially significant archaeologically. Further work is recommended before any construction is undertaken if this site cannot be avoided. Test pits should be hand-excavated in this site area because it is possible that other buried cultural deposits are present under the alluvial strata.

In summary, the reconnaissance project described in this report was preliminary and does not fully satisfy federal environmental impact study requirements. If the Petrucha Farm area is selected for the Celanese plant site, a more intensive assessment of adverse impacts to cultural resources located within the boundaries of a federally funded or licensed project must be performed. The completion of such an assessment is necessary for compliance with provisions contained in the National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969 and Executive Order 11593 of May 13, 1971.

Additional Texas statutes require similar provisions. For example, if any archaeological materials such as stone tools, pottery, shell or bone are exposed during construction in the project area, a qualified archaeologist must be consulted immediately. Questions regarding these provisions should be directed to the Texas State Historic Preservation Office in Austin.

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