

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

Contract No. DACW29-84-D-0029

Report No. COELMN/PD-85/05

CULTURAL RESOURCES SURVEY OF THE MORGAN CITY AND VICINITY HURRICANE PROTECTION PROJECT

FINAL REPORT

December 30, 1985

R. Christopher Goodwin and Associates, Inc.
1306 Burdette Street
New Orleans, Louisiana 70118
(504) 866-7867

AD-A163 637

This document has been approved for public release and sale; its distribution is unlimited.

DTIC

FEB 3 1986

Handwritten initials and a bold letter 'B'.

DTIC FILE COPY

Prepared for:
Department of the Army
New Orleans District
Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160

86 2 3 0 00

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER COELMN/PD-85/05	2. GOVT ACCESSION NO. AD-A163637	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Cultural Resources Survey of the Morgan City and Vicinity Hurricane Protection Project		5. TYPE OF REPORT & PERIOD COVERED Final Report
7. AUTHOR(s) Goodwin, R. Christopher, Jill-Karen Yakubik, Galloway W. Selby, Kenneth R. Jones		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS R. Christopher Goodwin & Associates, Inc. 1306 Burdette Street New Orleans, Louisiana 70118		8. CONTRACT OR GRANT NUMBER(s) DACW-84-29-0029 Delivery Order 003
11. CONTROLLING OFFICE NAME AND ADDRESS Department of the Army, New Orleans District, Corps of Engineers, P.O. Box 60267 New Orleans, Louisiana 70160		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Same as 11		12. REPORT DATE December 30, 1985
		13. NUMBER OF PAGES 122
		15. SECURITY CLASS. (of this report)
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for Public Release		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Acadian Brashear City Historic Settlement Archeology Chitimacha Lake Palourde Attakapas Coles Creek Lower Atchafalaya Basin Bayou Boeuf Early Farmsteads Louisiana Bayou Ramos Goat Island Site Lumbering		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report presents the results of cultural resources survey of the Morgan City and Vicinity Hurricane Protection Project area in St. Mary Parish, Louisiana. The prehistory of the Lower Atchafalaya Basin is reviewed, with attention given to evaluation of existing models of site distributions and settlement parameters within the region. The historic period is reconstructed subsequently, and land tenure in the project area is described from		

TABLE OF CONTENTS

	LIST OF FIGURES.....	5
	LIST OF TABLES.....	8
1	INTRODUCTION.....	9
2	PROJECT AREA DESCRIPTION.....	10
3	THE NATURAL SETTING.....	14
4	THE ARCHEOLOGICAL SETTING.....	18
	Introduction.....	18
	Aboriginal Culture History.....	18
	Previous Investigations.....	22
5	RESEARCH DESIGN.....	26
	Introduction.....	26
	Theoretical Prospective and Hypothesis Formulation.....	26
	Constructing an Archeological Record: Additional Problems.....	29
	Site Location and the Historic Period.....	30
6	HISTORIC SETTING.....	32
	Introduction.....	32
	The Colonial Period (1699-1803).....	32
	The Ante Bellum Period (1803-1861).....	35
	The War Between the States (1861-1865).....	60
	The Post Bellum Period (1865-1899).....	64
	The Modern Period (1899-1985).....	82
	Summary of Historic Themes Significant to the Region.....	95
7	FIELD INVESTIGATIONS.....	98
	Survey Methodology.....	97
	Coles Creek Chronology in the Morgan City Area.....	108
8	CONCLUSIONS AND RECOMMENDATIONS.....	111
	The Prehistoric Period.....	111
	The Historic Period.....	112
	BIBLIOGRAPHY.....	114

LIST OF FIGURES

- Figure 1. Morgan City and Vicinity Hurricane Protection Project Areas.....11
- Figure 2. Excerpt from H.S. Tanner's 1820 map of Louisiana and Mississippi, showing undeveloped lands around the project area (Louisiana Collection, Tulane University Library).....42
- Figure 3. Excerpt from La Tourette's 1845 Reference Map of the State of Louisiana, showing William Collins' land ownership in Section 8, T16S, R13E (Map Division, Library of Congress).....50
- Figure 4. Undated map of Edwin Stansbury's holdings in Sections 5, 6, 7, 8, and 9 of T16S, R13E.....51
- Figure 5. Plat of 1902 partition of part of the Stansbury holdings, showing the Stansbury family cemetery on Bayou Bouef (COB NN, Folio 227, St. Mary Parish).....52
- Figure 6. Excerpt from Bayley's 1853 New and Improved Map of Louisiana showing the proposed route of the New Orleans, Opelousas, and Great Western Railroad (Map Division, Library of Congress)....57
- Figure 7. Excerpt of A.L. Field's 1853 subdivision of the Town of Brashear (Morgan City Archives).....59
- Figure 8. Excerpt from Holle's 1861 Hydrographical and Topographical Map of Parts of the States of Louisiana, Mississippi, and Alabama, showing Brashear City (Louisiana Collection, Tulane University Library).....61
- Figure 9. The gunboat battle at Cornay's Bridge, showing the configuration of the Union gunboats (Raphael 1976).....63
- Figure 10. Frequency polygons of the number of sugar houses, steam powered mills, and vacuum pan apparatuses in use in St. Mary Parish, 1844-1917 (Champomier 1844-1861; Bouchereau 1869-1917).....69
- Figure 11. Schematic of post bellum development of the Central Factory System in St. Mary Parish.....71

LIST OF FIGURES, CONTINUED

Figure 12. The Larroque Model of industrial development along Bayou Teche after the Civil War (Pierre Larroque, personal communication 1984).....74

Figure 13. Excerpt from Colton's 1871 Map of the State of Louisiana and Eastern Part of Texas, showing Morgan's Railroad (Map Division, Library of Congress).....79

Figure 14. Excerpt from Asher and Adams' 1874 Map of Louisiana and Mississippi, showing Morgan's Railroad (Map Division, Library of Congress)....79

Figure 15. Excerpt from Nicholson's 1874 Preliminary Post Route Map of the State of Louisiana, showing Morgan's Railroad (Map Division, Library of Congress).....81

Figure 16. Excerpt from Rand McNally and Company's 1895 Louisiana Railroads Map, showing the continuation of the railroads to the west of Morgan City (Map Division, Library of Congress).....83

Figure 17. Excerpt from the Railroad Commission of Louisiana's 1914 Map of the State of Louisiana, showing the location of one of Ditch's landholdings (Map Division, Library of Congress).....84

Figure 18. Undated plat showing the northern half of the northern half of Section 8 in T16S, R13E.....86

Figure 19. Excerpt from Von Haake's 1902 Post Route Map of the State of Louisiana, showing Ramos (Louisiana Collection, Tulane University Library).....89

Figure 20. Excerpt from Cram's 1905 Map of Louisiana, showing Ramos (Map Division, Library of Congress).....90

Figure 21. 1913 plat showing land owned by Sam Siracusa and later by A.F. Storm (COB 3-I, Folio 181, St. Mary Parish).....92

LIST OF FIGURES, CONTINUED

Figure 22. 1913 plat showing land sold to A.F. Storm in 1913. Note the location of the Cattle Pen Tract in the southern portion of Section 7 (COB 3-I, Folio 109, St. Mary Parish).....94

Figure 23. 16 SMY 1 Site Plan.....100

Figure 24. East wall profile of Excavation Unit No. 1, 16 SMY 1. Surface is .28 m NGVD.....102

Figure 25. South wall profile of Excavation Unit No. 2, 16 SMY 1. Surface is .30 m NGVD.....103

Figure 26. East wall profile of Excavation Unit No. 3, 16 SMY 1. Surface is .28 m NGVD.....104

Figure 27. East wall profile of Excavation Unit No. 4, 16 SMY 1. Surface is .25 m NGVD.....105

LIST OF TABLES

Table 1. Prices of Land, Stock and Slaves in the Attakapas Region in 1819 as recorded by Landreth (Gibson 1979:107, sic throughout).....37

Table 2. Average Crop Yields per Arpent of Sugar, Cotton and Corn in 1819 as recorded by Landreth (Gibson 1979:106, sic throughout).....44

Table 3. Slaves Included in Brashear's Tiger Island Plantation Donation of 1842 (COB 11, Folio 532, St. Mary Parish).....46

Table 4. Sugar Production on the Stansbury Plantation, 1844-1861 (Champomier 1844-1862, sic throughout).....54

Table 5. Slaves and Movables Inventoried in the Succession of Edwin Stansbury (#657, Filed 13 February 1849, St. Mary Parish).....55

Table 6. Sugar Production in St. Mary Parish (Champomier 1844-1861; Bouchereau 1869-1917).....72

Table 7. Classification of Prehistoric Ceramics from the Goat Island Site (16 SMY 1).....107

Table 8. Radiocarbon Dates from the Goat Island Site (16 SMY 1).....109

CHAPTER 1

INTRODUCTION

The Morgan City and Vicinity Hurricane Protection Project was authorized by Public Law 89-298, approved October 27, 1965, House Document No. 167, 89th Congress. It was designed to enable the construction or enlargement of protective levees and drainage structures for both the Franklin and Morgan City areas, in St. Mary Parish, Louisiana. Pursuant to Contract No. DACW29-84-D-0029, an intensive cultural resources survey of the Morgan City and Vicinity component of the larger project area was conducted during May-July, 1985, by R. Christopher Goodwin and Associates, Inc. The research design for this study provided a thematic and problem-oriented framework for the testing and evaluation of prehistoric and historic cultural resources in the project area. This survey was designed to locate and identify all prehistoric and historic archeological sites in the impact area.

Archival and historical research addressed locational aspects of historic period occupation of the Lower Atchafalaya Basin. Dominant patterns of historic activities and adaptations investigated included subsistence-oriented economic exploitation of the streams, lakes, and backwater swamps of the Lower Basin, and industrial utilization of the region, especially by the lumber industry. Archeological survey focused on the identification of high probability areas for prehistoric sites, such as access points to subsistence resources, including ecotones and Rangia beds. The subsistence and settlement pattern model utilized during this study was based on previous studies in the Atchafalaya by Jon Gibson (1978, 1982). Because of limited chronological control and understanding of the Lower Atchafalaya region, stratigraphic study of prehistoric sites recovered during survey and radiocarbon sampling both were incorporated into subsequent site testing programs. Testing at the Goat Island site (16 SMY 1) included topographic mapping, excavation of four 1 x 2 m test units, and the collection of radiocarbon samples.

The following sections of this report summarize the results of archeological and historic study of the Morgan City and Vicinity Hurricane Protection Project area. Following detailed description of the project area, its environmental and archeological settings are reviewed. Land tenure in the project area and historic themes important to understanding of the Lower Atchafalaya Basin are discussed subsequently in the historic setting section. The results of pedestrian survey and test excavation are summarized in the section of this report on field investigations. Finally, the significance of cultural resources located in the study area is evaluated, and recommendations concerning those resources are presented.

CHAPTER 2

PROJECT AREA DESCRIPTION

The Morgan City and Vicinity Hurricane Protection Project area is located in the low-lying coastal region of southern Louisiana. The project area lies wholly within St. Mary Parish; all of its segments adjoin or are near to the incorporated community of Morgan City, although no land within the municipal boundaries will be impacted by the project (Figure 1). The project area is located on Tiger Island. This "island" is delimited by Berwick Bay to the west, Flat Lake to the northwest, Lake Palourde to the north, and by Bayou Boeuf to the south and east. A navigable channel leads from the southeastern corner of Lake Palourde to Bayou Boeuf. The course of the bayou east of this confluence is known as Bayou L'Ourse. Tiger Island is bisected by Bayou Ramos, a narrow waterway which flows south from Lake Palourde to Bayou Boeuf. Morgan City occupies the western end of Tiger Island; it fronts the head of Berwick Bay (Figure 1). The former mouth of Bayou Teche, which now is occupied by an inactive course of the Lower Atchafalaya River, and the outlets of the interconnected lakes fed by the Atchafalaya and Grand Rivers, from the head of Berwick Bay. The first white inhabitants of this area settled near the head of Berwick Bay and along the course of Bayou Boeuf. The broad channel of Bayou Boeuf provided a navigable waterway for settlers on Tiger Island, and on Bateman and Avoca Islands southeast of Morgan City (Figure 1).

A low natural levee which reaches a mile in width forms the western and southern edge of Tiger Island. This levee is composed of Baldwin silt loam, silty clay, and very fine sandy loam; the level overflow through gently sloping phases of the Buxin-Portland-Perry soils (USDA 1959) also are present. Behind the natural levee, cypress swamps extend to the edge of Lake Palourde. This low swampy area is composed of Sharkey-Alligator clays and mucky clays (USDA 1959). Several small meandering channels in this poorly drained area flow northeast into Lake Palourde (Figure 1).

Historic settlement areas and transportation routes on Tiger Island were located on or near the elevated natural levee. Significant development of the lower-lying terrain near Lake Palourde was undertaken only during the twentieth century; artificial levees, drainage pumps, and the filling of low tracts of land with dredge spoil have increased elevation in these areas. The current project area is comprised of low-lying tracts of land near Lake Palourde. The only significant early transportation route from Morgan City to the vicinity of Lake Palourde followed the low ridge of a minor distributary. This distributary, marked by deposits of Sharkey-Alligator Clay, terminates in a small alluvial fan at Duck Bayou, near the western end of Lake Palourde (USDA 1959:Plates 28 & 35). Louisiana Highway 70 runs northeast

from Morgan City along this natural ridge. The slightly higher and better drained area formed by this distributary's alluvial fan is known as Goat Island.

Several small, low distributary ridges, composed of Baldwin silty clay and very fine sandy loam, lead northward from Bayou Boeuf to Lake Palourde (USDA 1959:Plate 35). These ridges terminate in the southern end of the Lakeside Subdivision, a recent development constructed on drained and filled land. Bayou Ramos, which delimits the eastern boundary of the project area, is a minor channel between Bayou Boeuf and Lake Palourde. It now acts as a tidal channel between the two larger bodies of water (Weinstein et al. 1978:16). This waterway traverses undeveloped cypress swamps. The soil between Bayou Boeuf and Bayou Ramos consists primarily of Sharkey-Alligator clay; the soil between Bayou Ramos and Lake Palourde is Sharkey-Alligator mucky clay (USDA 1959:Plate 36).

The entire project area either lies within or adjoins tracts of land protected by artificial levees (Figure 1). Except for a tract (Area C) on the natural levee of Bayou Boeuf, the project area largely consists of swamp that drains into Lake Palourde or into Bayou Ramos.

The present survey area may be divided into three sub-areas (Figure 1), each bounded by the proposed levee rights-of-way and by adjacent borrow areas. Area A is formed by the lakefront segment of the protection levee, and adjacent borrow areas. This subarea consists entirely of low-lying land, formerly occupied by cypress swamp, that drains into Lake Palourde. This irregular segment of proposed levee construction is bounded by Lake Palourde to the east, by the existing levee in the rear of Morgan City to the west and south, and by an existing levee adjacent to the Lakeside Subdivision to the east. The western and southern edge of this impact area is formed by a 200-foot wide strip along the levee which marks the boundary of Morgan City (Figure 1). A residential subdivision within the corporate limits of Morgan City and adjacent to Highway 70 is bordered on its northern and southern limits by drainage canals leading northeast from the city limits to Lake Palourde. The project area includes a 400-foot wide impact corridor adjacent to the drainage canal along the northern boundary of the subdivision, and a 500-foot wide impact corridor adjacent to the drainage canal along the southern boundary of the subdivision. In addition, a 150-foot wide impact corridor lies west of and adjacent to Highway 70 in the vicinity of Lake End Park, a recreational area on the shore of Lake Palourde. This impact corridor extends north to the East Atchafalaya Basin Protection Levee. Other impact corridors include two 700-foot wide segments adjacent and parallel to a drainage canal in the center of Section 1 of T16S, R12E. This canal leads northeast from the city limits to Lake Palourde. Another 700-foot wide corridor will be impacted along the western boundary of Lakeside Subdivision. The lakefront impact area consists of two corridors parallel to the existing lakeshore levee. The northern corridor, which is 1300

feet wide, extends from a drainage canal delimiting the southern boundary of Lake End Park to the aforementioned drainage canal in the center of Section 1. The southern corridor, which is 800 feet wide, extends from the drainage canal in the center of Section 1 to the northwestern corner of the Lakeside Subdivision.

Area B is the segment of the proposed protection levee that extends southeast from the shore of Lake Palourde to the tracks of the Southern Pacific Railway east of Morgan City; this segment is set back from the shore of Lake Palourde. Area B consists of low-lying land, formerly occupied by cypress swamp, that drains into Lake Palourde and into Bayou Ramos. It is bounded by Bayou Ramos to the east, by the canal delimiting the city limit of Morgan City (the Lakeside Subdivision) to the northwest, and by the railroad tracks to the southeast. The corridor roughly follows the alignment of an existing levee between the Lakeside Subdivision and the railroad tracks, and it includes that levee and an adjacent strip of land. The proposed levee alignment skirts the eastern edge of the unincorporated community of Siracusaville near the Southern Pacific tracks. The width of the impact corridor following the existing levee between 100 and 550 feet. One segment of Area B consists of a 700-foot wide corridor along the eastern boundary of the Lakeside Subdivision.

Area C is an irregular block of land located between the tracks of the Southern Pacific Railway to the north and the Bayou Boeuf channel to the south. It is located on the low natural levee of Bayou Boeuf, and it drains into that bayou. This survey area is bounded by a drainage canal and embankment which delimits partially developed property to the east, and by the line of a road which delimits a bankside industrial area to the west. A cleared area within the southwestern corner of Area C presently is utilized as a refuse dump; this plot formerly contained the radio tower of Station KMRC. The tower and equipment have been removed, but a small cement building and the concrete slab foundations of adjacent small structures mark the former location of the radio tower. The proposed alignment of the hurricane protection levee in Area C extends from railroad tracks at the northeastern corner of the tract to the existing Morgan City Floodwall (East Atchafalaya Basin Protection Levee) at the southwestern corner of the area, adjacent to the Bayou Boeuf Lock. Area C lies southeast of Morgan City and southwest of the community of Wyandotte (Figure 1).

CHAPTER 3

THE NATURAL SETTING

The Atchafalaya Basin is the largest overflow swamp in North America. The geological evolution of the Basin, its geomorphology, and its complex ecology have attracted the attention of a variety of natural scientists. However, study of past human occupation of the Basin is in its infancy, and little is known concerning initial colonization and subsequent cultural adaptation to the swamp. Nevertheless, the unique environmental characteristics of the region clearly have had a tremendous impact on human adaptations; these adaptations should be reflected in the archeological record of the Lower Atchafalaya Basin. Few attempts have been made to integrate the ecology and geomorphology of the Basin with its prehistoric and historic archeology. Most of those attempts have been perfunctory or theoretically and methodologically unsound. Of the various archeological studies conducted in the region, two reports by Jon Gibson (1978, 1982) are the most comprehensive; those two reports present a basic outline of the geomorphology and ecology of the Basin, with special reference to their implications for human adaptations.

The Lower Atchafalaya Basin is bounded to the west by the relict Teche-Mississippi meander belt, now occupied by Bayou Teche. Teche-Mississippi natural levees extend southeast to form the southern boundary of the Basin. Bayous Black, l'Ourse, and Boeuf presently occupy this relict meander belt system. Bayou Lafourche, a main channel of another relict deltaic distributary system of the Mississippi River, forms the eastern boundary of the Lower Basin.

The Atchafalaya and Grand Rivers occupy the lower portion of the Basin, and form a system of dividing and rejoining distributaries that empty into Lake Fausse Pointe, Grand Lake (including Six Mile Lake and Lake Palourde), and Lake Verret. These lakes constitute collection basins for surface waters of the Lower Atchafalaya area, which subsequently drain into Atchafalaya Bay. Backswamps occur near the natural levees in lower, poorly drained areas.

The formation and subsequent modification of the Lower Atchafalaya Basin has been the result of the interaction of several geological processes. Foremost among these processes was periodic overbank flooding of the Mississippi River, which has resulted in the formation of natural levees, swamps, and deltaic masses. Additional processes that have effected the morphology of the Basin include regional subsidence and sediment compaction, which have contributed to the formation of numerous lakes within the Basin. Subsequent lake filling has resulted from delta construction, a process that has accelerated during the historic period. Ephemeral overflow channels, or crevasses, develop at favorable low areas in natural levees and carry flood waters down the levee slope into backswamps. Crevassing frequently results

in channel formation. However, meander migration has prohibited ideal geomorphic conditions for deep scour, and the net result has been sediment deposition in low areas.

Smith (et al. 1985) recognize five phases of deposition in the Atchafalaya Basin. These are, from oldest to youngest, (1) the Pleistocene Mississippi River, (2) the Pre-Maringouin, Early Holocene, (3) the Maringouin, (4) the Teche, and (5) the Modern, Lafourche, and Teche. The upper 9.0 meters (30 feet) of most basin deposits relate to the Teche and later courses, and many current drainage patterns probably are related to the active Teche system.

At approximately 1500 to 2000 years BP, closure of the Atchafalaya Basin was achieved by the Lafourche deltaic network, when the Little Bayou Black - Bayou du Large distributary course intersected the former Mississippi-Teche course (Black Bayou). Closure of the Atchafalaya Basin caused an extensive lake system to develop within the southern portion of the floodway. Ponding occurred when the Teche alluvial ridge prevented flow of accumulated surface drainage to the Gulf. Local subsidence and wind-wave generated erosion contributed to development of the lake system over a period of at least several hundred years. Eventually, either ponded drainage became high enough to overtop the natural levee of the Teche course, or drainage began via former Teche crevasse channels at Patterson and Morgan City. Initially, drainage followed the old Bayou Teche - Black course into the Lafourche distributary, Bayou du Large (Smith et al. 1985).

The Atchafalaya River at Morgan City was formed by crevassing subsequent to establishment of basin drainage through the Teche course. Formation occurred when floodwaters flowing into the Little Bayou Black and Bayou du Large distributary backed up drainage in the Bayou Teche - Black course (Smith et al. 1985).

Approximately 500 BP, the Old River - Turnbull Island Mississippi River meander loop intersected Bayou DeGlaze and Lettsworth, a former Mississippi River course. Flow of the Red River, which had been using an older abandoned Mississippi River course to empty into the Mississippi River further south, was captured. Formation of the Atchafalaya River followed when flood flow from the Mississippi River flowed upstream in the Bayou DeGlaze - Lettsworth course and crevassed the natural levee bordering the northern edge of the basin near Simmsport. The Atchafalaya River and Basin were established as a Mississippi River distributary and modern Red River course by continued Mississippi River flow through the Simmsport crevasse (Smith et al. 1985).

Human activity in the recent historic period affected the formation of the modern Atchafalaya Basin. Completion of Shreve's cutoff in 1831 divided the Atchafalaya River from primary Mississippi River flow. By 1861, an immense log jam blocking the head of the Atchafalaya had been removed in order to facilitate steamship navigation between the Atchafalaya and Mississippi

Rivers. Dredging of Old River was conducted between 1855 and 1940 to maintain a ship's channel. As larger volumes of Mississippi and Red River flow passed through the Atchafalaya River, levee construction was required to prevent flooding. Following the 1927 flood, the U.S. Congress declared the Atchafalaya Basin a major floodway. The Old River Control Structure was completed in 1963 to regulate flow into the basin at 30 percent of the Mississippi River discharge in order to prevent capture of Mississippi River flow by the Atchafalaya because of the more favorable gradient down the Atchafalaya Basin (Smith et al. 1985). The Atchafalaya River presently is creating an extensive alluvial delta in Atchafalaya Bay.

The project area under consideration here is located on the low levee formed by the Teche-Mississippi course, along a section of the channel now occupied by Bayou Boeuf, and in the backswamp between Bayou Boeuf and Lake Palourde. The undisturbed soils of the natural levee ridge formerly supported dense stands of sweetgum, water oak, red oak, live oak, and hackberry trees. Species present in the bottom land backswamps include dense stands of cypress and tupelo-gum, and smaller numbers of swampbay, swamp maple, willow, sycamore, and cottonwood (USDA 1959:4). The vast forests of cypress throughout the swampy bottom lands of South Louisiana supported a thriving lumber industry at the turn of the century.

The Morgan City area offers access to a wide range of environmental zones, which can be classified on the basis of drainage condition, seasonal water coverage, and the gradient of water salinity. One recent study of the region (Jon Gibson 1978) identified seven ecological zones present in the coastal area that support overlapping but distinctive biological communities. Following the general order of progression from active bayous to coastal marshland, these zones are the aquatic, natural levee, wet-hardwood interarea, backswamp, fresh-water marsh, brackish-water marsh, and salt-marsh (Jon Gibson 1978:81-116). The zones represented in the actual project area are the natural levee, the wet hardwood interarea, and backswamp. The significant game animals found in these zones include white-tailed deer, swamp rabbit, eastern cottontail rabbit, raccoon, and black bear. A wide variety of fish, shellfish, crustaceans, and migratory water fowl also offer abundant food resources.

The Morgan City area is characterized by a subtropical marine climate. Weather records kept in Franklin, Louisiana indicate that the heaviest rainfall occurs from June through August; the lightest rainfall occurs from December through February. The average annual rainfall is 66.84 inches (USDA 1959:3). The moderating influence of the Gulf of Mexico serves to reduce extremes in both summer and winter temperatures. However, proximity to the Gulf also exposes the area to wind and flood damage caused by hurricanes and tropical storms. Flood tides, exacerbated by high winds and heavy rains, represent the greatest natural danger to the area. It was the threat of such hurricane

flood damage that prompted the implementation of the Morgan City and Vicinity Hurricane Protection Project.

CHAPTER 4

THE ARCHEOLOGICAL SETTING

Introduction

The following chapter describes the aboriginal culture history of the Lower Atchafalaya Region; it also evaluates previous archeological studies and cultural resources surveys conducted proximal to the Morgan City and Vicinity Hurricane Protection project area. No regional or subregional chronological sequence has been constructed using data recovered solely from the Atchafalaya Basin. Sequences identified elsewhere, such as the "Red River Mouth" (Ford 1951) and "Yazoo Basin Area" (Phillips 1970) chronologies, have been applied to the Lower Atchafalaya with limited success (Gibson 1978). Gibson believes that such an application has resulted in inaccurate interpretations and biases, due to the inadequacy of preconceived models drawn from outside the Basin. The lack of a region-specific culture history for the Lower Atchafalaya reflects limited knowledge of the nature and sequence of prehistoric cultures there.

Aboriginal Culture History

The earliest documented prehistoric period in the Lower Atchafalaya is the Tchefuncte period, which dates approximately from ca. 500 B.C. to A.D. 200 (Neuman 1984:113-136; cf., Shenkel 1984:44). During the Tchefuncte period, pottery became important in prehistoric Louisiana, and increasing amounts of pottery with rocker stamped decoration and with tetrapodal supports were made. The soft Tchefuncte pottery had poorly compacted paste, and common vessel forms included bowls and cylindrical and shouldered jars. Decoration included fingernail and tool punctation, incision, simple stamping, drag and jab, parallel and zoned banding, and stippled triangles. Tchefuncte pottery apparently derived from and was genetically related to earlier ceramic complexes at Stallings Island, Georgia, to Orange in North Florida, and to the Poverty Point culture. Ford (1969:193) speculated that commonalities in ceramics across the Gulf South states during this period reflected the breakdown of ethnic barriers due to the powerful influence of the arrival of maize (corn) agriculture. However, Gibson (1978) argues strongly against the presence of maize throughout the Lower Atchafalaya Basin prehistoric sequence, leaving the reasons for the diffusion of Tchefuncte culture into this area unexplained.

The Tchefuncte artifact assemblage includes boatstones, grooved plummets, mortars, sandstone saws, barweights, scrapers, and chipped celts. Socketed antler points, bone awls and fish hooks, and bone ornaments also have been found. Projectile point types found in Tchefuncte contexts are Gary, Ellis, Delhi, Motley, Pontchartrain, Macon and Epps.

The population of the Tchefuncte period appears to have been a melange of long-headed Archaic peoples with a new subpopulation of broad-headed people who practiced cranial deformation, and who are thought to have entered the Southeast from Mexico. The presence of rocker stamped pottery, zone and panel decorations, and of some other individual traits (*viz* Shenkel 1984:64-65), also shows similarities to the Hopewellian development (500 B.C. to A.D. 300). Mound groups may be associated with the relict Teche - Mississippi river course on the west side of the Atchafalaya Basin, although the prior assignment of mound building to Tchefuncte period occupations recently has been challenged by Neuman (1984:134-135), and by Shenkel (1984:64-65). Tchefuncte shell middens are located around Grand Lake (Weinstein *et al.* 1978:7); the Charenton Beach site (16 SMY 21), located on the western shore of Grand Lake, has been associated with the Tchefuncte culture (Gibson 1982:450-458).

The subsequent Marksville period (100 B.C. - 300 A.D.) to a large degree was a localized hybrid manifestation of the Hopewellian culture climax that preceded it in the Midwest. The type site is located at Marksville, in Avoyelles Parish, Louisiana. Elsewhere in the state, smaller sites occur which display both Marksville pottery types and a modified form of the Marksville mortuary complex. Marksville houses appear to have been circular, fairly permanent, and possibly earth covered. A fairly high level of social organization is indicated by the construction of geometric earthworks and of burial mounds for the elite, as well as by a unique mortuary ritual system. Although large quantities of burial furniture are not recovered from Marksville sites, some items, such as elaborately decorated ceramics, were manufactured especially for inclusion in burials.

Marksville ceramics were well-made, with decorations that included u-stamped incised lines, zoned dentate stamping, zoned rocker stamping (both plain and dentate), the raptorial bird motif, and, flower-like designs (Toth 1977; Phillips 1970; Ford and Willey 1940). The cross-hatched rim is particularly characteristic of Marksville pottery, and may relate this complex to other early cultural climaxes in the Circum-Caribbean area. Plain utilitarian wares also were produced. Perforated pearl beads, bracelets, and celts have been recovered from Marksville contexts.

Both Weinstein *et al.* (1978:7) and Gibson (1978:41-2) have argued that environmental constraints in the Lower Atchafalaya Basin posed a natural barrier to intensive agriculture, limiting the influence of Marksville period cultural influences in the area. This hypothesis has not been tested adequately. Neuman (1984:167) views Marksville subsistence patterns as a continuation of the earlier Tchefuncte hunting, fishing, and gathering economy; since excavation of Marksville period sites has emphasized burial mounds, in fact the economy of this period is very poorly understood.

Marksville period phase designations for the broader area containing the Lower Atchafalaya region include Mandalay (Phillips 1970:899-900), and Jefferson Island (Toth 1977:470). Although such phase designations are widely employed in Louisiana archeology, they often are extremely reductive of archeological variability, especially for a poorly understood archeological culture like Marksville in a poorly documented area such as the Lower Atchafalaya.

The next cultural period identified for South Louisiana is Troyville or Baytown (A.D. 300-700). This transitional period followed the decline of the Hopewellian Marksville culture, and it is poorly understood. In his recent book on Louisiana archeology, Neuman (1984) combines the Troyville period and culture with the better understood Coles Creek period; similarly, Davis (1984) contains chapters on early woodland period prehistory and on late (Coles Creek period) prehistory, while failing to address substantively the transitional Troyville-Baytown period. Knowledge of the Troyville culture is based on the type site at Jonesville, Louisiana, and on the discovery of Troyville ceramics in other sites. Among the pottery types clustering in the Troyville period are: Mulberry Creek Cord Marked, Marksville Incised (Yokena), Churupa Punctated, Troyville Stamped, Larto Red Filmed, Landon Red-on-Buff, and Woodville Red Filmed. However, these pottery types and most other traits are not confined solely to this period. Troyville is thought to represent the period when maize agriculture and the bow and arrow were adopted. Evidence for agriculture includes shell hoes and grinding stones.

Population growth during this period may be indicated by an increase in the number of sites in the Lower Atchafalaya Basin. This increase, however, also may reflect survey methodology. Troyville or Baytown period sites at Oak Chenier (16 SMY 49) and at Bone Point (16 SMY 139) suggest that subsistence included the capture of large fish, aquatic reptiles, deer, and small mammals (Gibson 1978:35). The Whitehall phase (Phillips 1970:911-12) has been defined for this period, but the validity of this proposed phase has been questioned (Weinstein et al. 1978:22).

The subsequent Coles Creek period (A.D. 700 - 1200) developed out of Troyville. Coles Creek was a dynamic and widespread manifestation throughout the Lower Mississippi Valley. Coles Creek may be viewed as the local early or pre-classic variant of the Mississippian tradition, and its emphasis on temple mound and plaza construction suggests Mesoamerican influences. Population growth and areal expansion were made possible by increasing reliance on productive maize agriculture. The seasonal exploitation of coastal areas supplemented the maize economy of large inland sites, and small non-mound farmsteads were present. A stratified social organization with a dominant priestly social class continued.

The construction of platform mounds became important during this period. These were intended primarily as bases for temples

or other buildings, but they also contained burials. Smaller circular mounds were still present. A common motif of Coles Creek ceramics is a series of incised lines parallel to the rim. Pottery types include: Coles Creek Incised, Pontchartrain Check Stamped, and Mazique Incised.

Coles Creek period sites located in and adjacent to the study area include: Goat Island (16 SMY 1), Bayou Ramos I (16 SMY 133), Bayou Ramos II (16 SMY 136), and Bayou Ramos VII (16 SMY 140) (Weinstein et al. 1978:213-215). Coles Creek phases previously defined include the successive Bayou Cutler (Phillips 1970:920-22) and Bayou Ramos phases (Weinstein et al. 1978:22-23). The definition of this latter phase was based on test excavation of the Bayou Ramos I (16 SMY 133) site; only two small test units were excavated there, and sample obtained was small (Weinstein et al. 1978:88). The Bayou Ramos phase designation should not be adopted in regional studies until it is clarified by systematic research in this area. The ceramic typology of Coles Creek phases recently has been summarized by Brown (1984).

In the southern part of the Lower Mississippi Valley, the Plaquemine culture developed out of a Coles Creek background. Ceremonial sites of this period consisted of several mounds arranged about a plaza area. Associated small sites were dispersed about such centers. Social organization and maize agriculture were highly developed. The most widespread decorated ceramic type of the Plaquemine period was Plaquemine Brushed. Other types include Harrison Bayou Incised, Hardy Incised, L'Eau Noir Incised, Manchac Incised, Mazique Incised, Leland Incised, and Evansville Punctate. Both decorated types and plain wares, such as Anna Burnished Plain and Addis Plain, were well made. Diagnostic Plaquemine projectile points are small and stemmed with incurved sides.

Late in the prehistoric period, the indigenous Plaquemine culture came under the influence of Mississippian cultures from the Middle Mississippi River Valley. Mississippian culture was characterized by large mound groups, a widespread distribution of sites, and by shell tempered pottery. A distinctive mortuary cult or complex, referred to as the "Southern Cult," that made use of copper, stone, shell, and mica was introduced, and elaborate ceremonialism reflected in animal motifs and deities pervaded Mississippian culture. Trade networks were well established during this period, and raw materials and specialty objects were traded across large areas of the central and southern United States. The Medora phase (Phillips 1970:950-1) has been defined for this period in the area. Medora components have been described for Bayou Ramos II (16 SMY 135) and Bayou Ramos VI (16 SMY 139) (Weinstein et al. 1978:213-14).

After European contact, several historic tribes or enclaves were reported in the Lower Atchafalaya area. The Chitimacha were recorded as living on Bayou Lafourche and along Grand Lake in the Lower Atchafalaya Basin area (Gibson 1982:84-88). The Lafourche

Chitimacha vacated their villages after fighting the French in 1706 (Gibson 1982:86); they migrated to the Charenton area on the lower Bayou Teche (Gibson 1982:249). The archeology of Chitimacha sites in the lower Teche recently has been discussed in detail by Goodwin et al. (1985).

This review of aboriginal culture history in the Lower Atchafalaya Basin has been extrapolated in large part from the archeological literature on the Lower Mississippi Valley. In reality, the Lower Atchafalaya Basin region remains little known archeologically, and any synthesis of its prehistory should be recognized as a tentative or largely hypothetical reconstruction.

Previous Investigations

Intensive archeological surveys within or in the immediate vicinity of the Morgan City and Vicinity Hurricane Protection Project area primarily have taken the form of recent cultural resources investigations. Therefore, archeological research in the Lower Atchafalaya Basin has emphasized the identification and evaluation of cultural resources as mandated by federal statutes and regulations. Additional research objectives sometimes have been addressed within the context of these survey efforts. As will be seen, the investigation of these additional research problems has met with limited success.

In general, previous research in the Lower Atchafalaya region has taken the form of pedestrian and/or water-borne survey, occasionally augmented by limited subsurface testing using shovel, auger, and solid core techniques. Hand test excavation within this region has been infrequent. Consequently, the nature of the data base generated by these surveys has constrained the formulation of scientific research designs that address important archeological issues and which exceed basic compliance requirements. The archeological record of the Atchafalaya Basin is largely incomplete. Previous research has focused on the empirical determination of site locations and on the description, and less frequently on the explanation, of site locational parameters. These formal and informal investigations of settlement systems provide the requisite framework for the evaluation of previous methodological and theoretical inquiries within the subject area.

It should be noted that several archeological research and survey efforts predate modern cultural resources investigations. These earlier surveys (e.g., Moore 1912, 1913; Collins 1927; McIntire 1958), produced data on site locations; however, they provide little information germane to the evaluation of methodological approaches. Consequently, these survey results lack statistical validity and defy critical analysis (Gibson 1982).

Gagliano et al. (1975) have reported on a cultural resources survey of the Gulf Intracoastal Waterway, which runs transversely

across the southern portion of the Atchafalaya Basin and which constitutes the southern boundary of the Morgan City and Vicinity Hurricane Protection Project area. Field research within this project area was conducted using a small boat; all known and probable site areas were visually inspected and evaluated. The determination of the locations of probable site areas was based on existing site locational data; on visual inspection of air photographs; and, on the location of zones with distinctive vegetation. Additional data on known or suspected site locations were provided by local informants. Although data on site locations were biased due to the application of an a priori high probability site locational model which served to guide field work, coverage of the project impact corridor appears to have been relatively complete. No explicit theoretical approaches or research problems were addressed during the course of this survey.

Neuman and Servello (1976) conducted an extensive survey of the Atchafalaya Basin within construction zones identified by the U.S. Army Corps of Engineers, New Orleans District, in advance of dredging or widening operations and of additional levee construction along existing navigable waterways. Helicopter and boat searches were used in the survey of the southern basin area. Previously known sites were visited, and one hundred per cent survey coverage was attempted in certain areas, although sampling areas were not described. As Gibson (1982:320) noted, the "locations and the procedures utilized to give one hundred percent coverage remain mysterious." This cultural resources survey was designed to determine the primary and secondary impact of construction on archeological deposits within the basin (Neuman and Servello 1976:2). Additional research objectives or theoretical approaches were not defined. The site locational information produced by this survey effort is a relict of the methodology employed, and must be treated with caution (viz Gibson 1982:320).

The University of Southwestern Louisiana conducted an intensive cultural resources survey of the Lower Atchafalaya region, including the bank lines of Bayous Chene and Shaffer, Avoca Island Cut-Off, and the Lower Atchafalaya River, between Morgan City and Atchafalaya Bay (Gibson 1978). This survey area lies immediately to the south of the Morgan City and Vicinity Hurricane Protection Project area. Two primary goals were delineated as part of an overall research design for this survey: the location of cultural resources within the project area relative to proposed channel improvements, and the explanation of prehistoric site variability emphasizing relative site locations (Gibson 1978:2-4). Other research problems identified included culture history, man-land relationships, and cultural change. The survey methodology consisted of bank line inspections at 50 m or 100 m intervals; one to three shovel tests also were placed at each inspection locus. Solid coring was undertaken at selected spots within the survey area. On the basis of archeological, sedimentological, and paleofaunal data, Gibson (1978:225-234) attempted to characterize and to explain the patterns of

settlement delineated by the survey. This exercise produced a meaningful data base, although the survey, and hence its results, necessarily pertained only to bankline corridors. Unlike many previous investigations, the survey methodology did not apply an a priori model of high probability areas. Information relevant to cultural chronology, subsistence, and culture change nonetheless was limited due to both the lack of extensive subsurface testing and to an absence of data from primary contexts. Despite shortcomings in the data, Gibson (1978:235-260) attempted to reconstruct the prehistoric settlement and subsistence system of the Lower Atchafalaya region. This reconstruction, then, may be regarded as a testable hypothesis.

In 1976 and 1977, Coastal Environments, Inc., conducted a cultural resources survey of the proposed relocation route of U.S. 90 (LA 3052) in Assumption, St. Mary, and Terrebonne Parishes (Weinstein et al. 1978). A portion of this survey corridor passed through what is now the Morgan City and Vicinity Hurricane Protection Project area. The stated research goal was the identification of cultural resources within the right-of-way of the proposed highway relocation project. Prior to field investigations, "high probability areas" were identified to guide intensive survey efforts. Survey methodology was not discussed in detail; therefore, the nature and adequacy of coverage of the survey area is uncertain. Similarly, patterns of settlement identified in the survey cannot be evaluated. As Gibson (1982:321-322) noted,

if the [survey] coverage was uniform throughout the search corridor, the evident restriction of sites to points where streams intersected the corridor may speak toward a real settlement phenomenon in the region or perhaps just discoverability.

During the course of this survey, several prehistoric sites were located or relocated that lie adjacent to the project area under consideration. Four of these sites are located on the west bank of Bayou Ramos (16 SMY 135, 136, 139, and 140); another (16 SMY 1) is located within the project area along the former bank of Duck Bayou.

The most recent intensive archeological survey undertaken within the Atchafalaya Basin was a cultural resources survey of the Atchafalaya protection levees by the University of Southwestern Louisiana (Gibson 1982). The survey was conducted within 460 m wide linear corridors along the protection levees. Pedestrian survey and surface collection, shovel and probe testing, and solid coring were undertaken in order to locate and evaluate cultural resources within the area. Initially, a research design was formulated in order to test general hypotheses associated with lowland adaptations, with particular emphasis placed on settlement pattern models. However, as the field investigations progressed, it became apparent that an appropriate data base with

which to test these settlement-related propositions could not be obtained (Gibson 1982:325). A number of specific problems led to this realization. These included: (1) significant alterations of the natural landscape present within the levee corridors that comprised the project area; (2) contractual modifications that interrupted the continuity of fieldwork; and, (3) non-random location of survey corridors that biased the sampling universe from which site locational data was acquired. As a result, the research design subsequently was modified, and a new set of research objectives was identified. While the "reconstituted" research design lacked a rigorous hypothetico-deductive framework, it identified archeological and anthropological research problems that could be addressed utilizing the data base generated during the course of the survey.

CHAPTER 5

RESEARCH DESIGN

Introduction

Intensive archeological survey of the Morgan City and Vicinity Hurricane Protection Project area was designed to locate and to evaluate cultural resources within the impact area. Given the nature of the data base expected to be generated by an intensive pedestrian survey and subsurface test regime in the Lower Atchafalaya Basin, research goals focused on the testing of settlement pattern models in the Lower Atchafalaya Basin. In addition, important gaps in our present understanding of the prehistory and history of the region were identified. The evaluation of the significance of cultural resources identified during the survey effort thus was based on the ability of those resources to provide information relevant to the research objectives described below.

Theoretical Perspective and Hypothesis Formulation

A regional approach (Binford 1964) to prehistoric and historic human adaptation, founded in the method of human ecology, offers a useful and practicable method for understanding cultural continuity and change. Following Struever (1969) and Flannery (1976), several general questions or problems may be posed that provide an orientation for regional studies of human ecology. These are:

1. Delimiting chronological and environmental boundaries of a region;
2. The reconstruction of the settlement system and its articulation with subsistence resources in the region;
3. The estimation of populational and demographic parameters for the region; and,
4. The inference of social and perhaps ideological aspects of the organization and adaptation of human groups.

These four goals may serve as a guide to problem formulation. The previously summarized archeological and ecological investigations of the Lower Atchafalaya Basin illustrate a present lack of understanding of human adaptation to the Atchafalaya swamp. The resolution of such basic questions for the Lower Atchafalaya Basin is contingent upon the development of appropriate research strategies, and upon the ability to locate and to document archeological resources, many of which already have been affected adversely by both natural and cultural destructive agents and

events. Indeed, it is probable that a tremendous loss of sites due to the combined forces of erosion, inundation, and subsidence, already has compromised our ability to achieve fully these goals (Gibson 1982).

The Atchafalaya swamp posed unique challenges to human adaptation throughout its occupation history. Important questions regarding human adaptation in the Lower Atchafalaya Basin include the initial colonization and utilization of the swamp; the (apparent) stability of economic and subsistence activities; and, the nature of economic and stylistic ties to areas outside of the region. It is unlikely that any one survey will generate an appropriate data base with which to address adequately these questions. Nevertheless, it is possible to direct attention to more specific problems framed in terms of lower-level or mid-range hypotheses concerning human adaptations in the Lower Atchafalaya region. Such a procedure, coupled with the identification of significant gaps in the archeological record, would enhance our ability to understand human adaptation and cultural change in this region.

As noted previously, archeological research in the region has focused on the determination of site locations, on the investigation of site locational parameters, and on the possible articulation of site types within a subsistence system (e.g., Gibson 1978, 1982). It is not possible presently to characterize site locations and settlement systems in the Atchafalaya Basin with any reliability. Despite the fact that intensive archeological surveys have been conducted in the region, uneven data acquisition, recordation, and reportage, have resulted in an amalgam of non-comparable research results from which no reliable statements of settlement location can be drawn or synthesized (Gibson 1982). Furthermore, project and survey areas for the most part have been dictated by compliance or mitigation needs, and not selected for their potential to generate an appropriate data base. According to Gibson (1982:317-18),

Other than quite general and often naive questions, current site information from the Atchafalaya Basin is not amenable to hypothesis formulation or testing.

Based upon a survey performed along the bank lines of Bayous Chene and Shaffer, Avoca Island Cut-Off, and the Lower Atchafalaya River between Morgan City and Atchafalaya Bay, Gibson (1978) defined a linear pattern of prehistoric settlement along stream bank lines. Examination of site locational and environmental data indicated that all known prehistoric sites were located on stream banks, though no particular association existed between site location and stream channel features (e.g., point bar, cut bank, or reach). Apparently, the location of shellfish concentrations, which occur independently of bankline positions, dictated the location of these gathering stations. Finally, a significant correlation was found between tributary-distributary

junctions and site location. It appears that these localities afford a special ecological situation, comparable to an ecotone, where mixing of waters of varying velocity and salinity create a biotically diverse and productive environment (Gibson 1978:78). Gibson (1978:234) notes:

There is a decided preference for sites to be located along natural levees where secondary streams enter and/or exit main channels within a boundary zone (ecotone), one kilometer wide, between swamp and marsh environments.... Spacing between sites is not uniform nor is site density within major environments. Natural levees provide the highest site densities, with swamps second, and marsh ranking a distant last.

These data lead us to hypothesize that proximity or access to economically productive locales is a primary determinant of site location in the Lower Atchafalaya Basin. These locales include ecotonal settings (between swamp and marsh environments, or tributary-distributary junctions) and locations adjacent to Rangia beds. If this is correct, then a linear settlement pattern along stream courses, concentrations of sites in the vicinity of tributary-distributary junctions, and, a random association between site location and stream bankline position, should be found. Intensive archeological survey of the Morgan City and Vicinity Hurricane Protection Project area was designed to permit at least a partial test of this hypothesis, since the survey area encompassed a relict stream bankline and intervening areas between water courses. One archeological site, the prehistoric Rangia midden 16 SMY 1 on the levee of Duck Bayou, previously was identified within the survey area, and a number of sites are recorded along Bayou Ramos outside of the eastern boundary of this study zone. These sites were recorded during a cultural resources survey of the proposed relocation route of U.S. 90 (Weinstein et al. 1978). Intervening areas between water courses apparently were not included in that survey effort.

Clearly, the nature of plant and animal exploitation was intimately intertwined with prehistoric settlement strategies. The settlement model outlined above (Gibson 1978), while having an empirical base, presupposes a subsistence strategy based upon the procurement of wild plant and animal species. The model does not consider diachronic changes in subsistence and settlement patterns, since at present there are insufficient data with which to do so. Important unanswered questions involve the manner in which prehistoric occupants of the Atchafalaya Basin responded to general shifts in subsistence practices occurring in areas outside of the region or to geomorphic changes within the region. Gibson (1978) has attempted to reconstruct a subsistence system for the Lower Atchafalaya region after A.D. 700, and suggests a seasonal cycle of activities involving hunting, fishing, and foraging of wild plant and animal species. Gibson (1978) argues against the

importance of maize horticulture at any time within the prehistory of the Lower Atchafalaya region. This is an important hypothesis that remains to be tested.

Except for limited testing at two localities, the present scope of work is inconsistent with an archeological testing regime that could provide a sufficient data base to test these propositions about the nature of changing subsistence practices. Clearly, major gaps exist in the archeological record of the Lower Atchafalaya region. And, these are not limited to the subsistence data mentioned above.

Constructing an Archeological Record: Additional Problems

The establishment of chronological control for a region represents a first step in the investigation of prehistoric human ecology. Refinement of both absolute and relative chronologies for the Atchafalaya Basin is prerequisite to research intended to explain cultural change and continuity. The absence of such control represents a significant gap in our knowledge of the region. According to Gibson (1982:312), "improvement in the radiocarbon framework is one of the greatest needs in Atchafalaya archaeology." As of 1980, only thirteen radiocarbon dates from four sites in the Basin had been reported:

not only is this radiocarbon series woefully inadequate for putting absolute chronological parameters on cultural periods and local phases, it is entirely useless in determining intersite contemporaneity inside and outside the Atchafalaya Basin (Gibson 1982:312).

Relative control over cultural stages in the Lower Atchafalaya area is equally inadequate. Stratigraphic controls are virtually non-existent, and there is no sound basis with which to correlate ceramic styles with sequences established outside of the Lower Atchafalaya Basin, such as the "Red River Mouth" chronology (Ford 1951). According to Gibson (1982:314), it is entirely possible that the cultural sequence in the Lower Atchafalaya may be "out of phase" with surrounding regions, and that it may be characterized by independent ceramic trajectories. Clearly, the procurement of reliable information regarding temporal patterning in the Lower Atchafalaya area is a research priority. Absolute, stratigraphic, and stylistic indications of age and duration of occupation or of cultural periods or stages should be considered in the evaluation of site significance.

As noted above, understanding native economic and subsistence strategies also is indispensable to the study of the prehistoric human ecology of the Lower Atchafalaya. Therefore, the recovery of ecofactual remains represents an additional priority in Atchafalaya archeology. At present, thirty-three sites within the basin have produced faunal inventories.

Nevertheless, very little substantive interpretation of resource utilization has been undertaken (Gibson 1982:315). The most comprehensive analytical treatment of faunal remains has been presented by Byrd (1978) and by Gibson (1978) as part of the Lower Atchafalaya cultural resources survey. The majority of the subsistence data derived from surface collections; test excavations at the Oak Chenier site (16 SMY 49) also yielded faunal remains.

The results of this research indicated that, by volume, Rangia, and to a lesser extent oyster, were the primary dietary constituents. In declining order of importance, relative frequencies of exploited animal species (based on minimum number of individuals) included shellfish, muskrat, deer, turtles, porgy, alligator, and gar-catfish-bowfin (Gibson 1978:254). However, both Byrd (1978) and Gibson (1978) caution that reliable quantitative data (adequate sample sizes) do not exist. As Byrd (1978:224) remarks:

future excavation at some of these sites could supply much needed data on subsistence patterns and practices in the coastal zone of Louisiana.

Despite limitations in available subsistence data, Gibson (1978) has used the above faunal information, along with data on economically useful plant resources, to suggest a persistent and stable subsistence system along the Lower Atchafalaya River. According to Gibson (1982:315), this subsistence strategy "may have effectively precluded the assimilation of maize horticulture along the Atchafalaya River delta." Unfortunately, information related to the economic exploitation of plant resources in the region is virtually nil, amounting to "less than three grams of material from [one site]" (Gibson 1982:315). Clearly, the recovery of adequate samples of ecofactual data is of utmost importance in documenting subsistence practices in the Lower Atchafalaya region. Without such data, generalizations concerning the nature and presumed stability of subsistence systems in the region must remain speculative. As a result, archeological testing was designed to obtain or to establish the potential of the sites to yield ecofactual data. In particular, the acquisition of flotation samples was designed to recover plant and microfaunal remains.

Site Location and the Historic Period

In addition to investigation of prehistoric settlement patterns, the cultural resources survey of the Morgan City and Vicinity Hurricane Protection Project area was designed to address locational aspects of historic period occupation of the Lower Atchafalaya Basin. It previously has been hypothesized that prehistoric site locations were dictated by certain environmental constraints. It is possible that similar constraints determined the nature and spatial patterning of historic occupation in the

region. Archival and historic research undertaken to date indicated a bipartite pattern of historic activities and adaptations. These include a subsistence-oriented economic adaptation to the streams, lakes, and backwater swamps of the Lower Basin, and an industrial utilization of the region, in which lumbering was a primary activity.

The lifeways of the settlers, frequently referred to as "swampers," in the Lower Atchafalaya area, have been well documented by contemporary accounts. However, only brief descriptions exist in the historic literature. It commonly is assumed that the swamp pattern of settlement and subsistence has not changed substantially in the past two hundred years. Nevertheless, it is probable that technological advances have modified the original pattern. For example, while similar species of fish and shellfish continue to be exploited, the introduction of boat engines has extended the range of aquatic resource exploitation.

Despite technological innovation and change, it is suggested that environmental constraints, such as availability of and access to subsistence resources, and the location of terra firma were primary determinants of site location. Therefore, it was anticipated that evidence of permanent habitation would occur along the natural levees of water courses. Indeed, it is likely that prehistoric and historic habitation areas frequently overlapped. In particular, prehistoric Rangia middens may have provided ideal locations for permanent dwellings or for trappers' cabins.

Industrial activities, primarily lumbering, constituted a second pattern of utilization of the region during the historic period. Lumber processing mills were located adjacent to the railroad, and a radiating or centrifugal pattern of settlement and activity around these focal areas was hypothesized. The vast majority of structural remains and industrial refuse associated with the lumbering industry would be found in the vicinity of these focal areas. Closer to Bayou Boeuf, where the trees were felled but not processed, fewer structural and artifactual remains were expected.

CHAPTER 6

HISTORIC SETTING

Introduction

The history of St. Mary Parish and of the Morgan City Hurricane Protection Project area may be divided into five major periods: the Colonial Period (1699-1803), the Ante Bellum Period (1803-1861), the War Between the States (1861-1865), the Post Bellum Period (1865-1899), and the Modern Period (1899-present).

During the Colonial Period, St. Mary Parish formed a portion of the Attakapas District. The District first was settled by traders during French colonial rule. Later, under the Spanish, the population of the region expanded. The economy of the area was based on stock raising, with some diversified agriculture. However, settlement throughout the Colonial Period was concentrated along Bayou Teche; occupation of the Morgan City area did not occur until the 1790s.

The Ante Bellum Period, dating from the Louisiana Purchase to the War Between the States, was a time of rapid population growth and economic growth in the Morgan City area and throughout St. Mary Parish. Although cane cultivation was adopted relatively late, St. Mary Parish rapidly became the leading sugar producer in the state. Lumbering in the Parish also began during the Ante Bellum Period, although on a relatively small scale. Immediately prior to the Civil War, the New Orleans, Opelousas and Great Western Railroad was completed as far as Berwick Bay, and the town of Brashear was founded. Both of these events assured the continued growth of the area.

Morgan City, then the town of Brashear, was of critical strategic importance during the period of the War Between the States, both as the western terminus of the railway and as a port on a major water transportation artery. The immediate Post Bellum Period found the parish economically devastated. The sugar industry soon recovered under reorganization and the consolidation of sugar processing. The expansion of the railroad under Charles Morgan also proved to be an economic boon. Finally, lumbering in the parish rapidly accelerated after 1880. Virgin timber stands within the project area were exploited; this was the first significant use of the undeveloped swamp lands that comprise the majority of the survey area. By 1930, the timber in the region was depleted. However, Morgan City saw another period of growth during the twentieth century with the development of oil and oil-related industries in the area, the Modern Period.

The Colonial Period (1699-1803)

The Morgan City Hurricane Protection Project is located in the area that was known as the Attakapas District during the Colonial Period. This region was relatively isolated from the

Mississippi River, where initial French settlement was concentrated. The Attakapas District had a significant protohistoric Native American (Indian) population. It also contained numerous natural resources that were desired by France. Initial French settlement of the Attakapas District was undertaken by traders. As elsewhere in the New World, the French colonial pattern emphasized the establishment of trade relations with the indigenous population (Goodwin, et al. 1985).

The original Attakapas District comprised present day St. Martin, Iberia, St. Mary, Lafayette, and Vermilion Parishes. Its name derives from the little known Attakapas Indians who inhabited parts of the western part of the region; it means "man-eater" in Choctaw. Contemporary reports state that the Attakapas practiced some form of cannibalism (Cassidy and Allain 1967:32). In 1703, Penicaut recorded that

there arrived two Frenchmen of the three that M. de Bienville had sent up the Riviere de la Madelaine (the Sabine) to discover the nations that were in that area... at the last nation, one of their comrades had been killed and eaten by those savages, who are cannibals. That nation is named Atacapas (McWilliams 1953:79).

Closer to the project area under consideration here, along Bayou Teche, the Chitimacha Indians lived in permanent settlements at the time of French entry to the area. The Chitimacha had a ranked society with a noble class similar to that of the Natchez of Mississippi (Goodwin et al. 1985). In 1699, the Chitimacha, along with several other tribes, formed an alliance with Iberville. The following year the French missionary Father du Ru was visited by a Chitimacha Chief during construction of a church near Bayou Goula. Du Ru wrote that "next to Ouachilla of the Natchez, he (the Chitimacha Chief) is the most dignified chief I have ever met" (Taylor 1981:65).

After 1702, when a group of French conducted a slaving raid on a Chitimacha village and the Chitimacha retaliated, relations between French settlers and these Indians were hostile. By 1718, when Bienville decided to negotiate a truce, the tribe had been reduced from 600 to 100 warriors. Trade relations were not established with the Attakapas Indians until 1738.

In addition to the small number of European traders who worked within the Attakapas District, a few European settlers established vacheries, or cattle ranches. Edward Masse, who had been a trader in the region, and Jean Antoine D'Hauterie established one east of Bayou Teche by the middle of the eighteenth century. At that time, European settlement was sparse in locations other than Le Poste des Attakapas at the site of present day St. Martinville. Generally, French involvement in the Attakapas District was unprofitable for both private and public interests in France. In the late 1750s Acadians began to arrive in the region.

In 1762, Louis XV ceded the Louisiana colony to Spain in the secret Treaty of Fontainebleau; the cession was made public in 1764. Spain took formal control in 1769, when Don Alexandro O'Reilly was installed as military governor. The first census of the Attakapas District recorded 166 whites and 33 slaves in 1770; the area remained sparsely settled, and the low ratio of slaves to whites suggests that inhabitants were not particularly prosperous. The census demonstrated that subsistence farming and stock raising were the basis for the region's economy; cash crop agriculture was not well developed. Cattle were the principal livestock; some hogs were raised, but the settlers, like those on the contemporary Acadian Coast farmsteads (present day St. James and Ascension Parishes), produced few sheep.

A census in 1774 showed the population had increased to 323 whites, 155 slaves, and 19 free people of color. Wealth was concentrated; only 19 of 73 households owned slaves, and one-third of the slaves in the district were owned by two families, the de la Houssayes and the Fuseliers. The Spanish government encouraged tobacco production (Allain 1968:18); indigo production, which also was encouraged, increased during the late eighteenth century (Goodwin, Yakubik, and Gendel 1983; Goodwin, Gendel, and Yakubik 1983c). Rice, corn, buckwheat, sugar cane, and cotton also were grown. Stock raising continued to be more important than agriculture.

In 1778, Governor Don Bernardo de Galvez sent 499 Frenchmen to settle in the Attakapas District; they founded the town of New Iberia. Settlers from Malaga, Spain, and from the Canary Islands also settled at New Iberia. By 1785, there were 2,408 settlers in the Attakapas and Opelousas Districts.

Initial Settlement of the Morgan City Area

Settlement in the vicinity of the Morgan City Hurricane Protection Project area did not occur until the 1790s. Thomas Berwick, a surveyor in the Opelousas District, explored the Attakapas District during the final decade of the eighteenth century in an effort to find a route between Bayou Teche and the Gulf of Mexico. It is believed that during this expedition, Berwick discovered and named Berwick's Bay, and that he subsequently became the first settler on Tiger Island (Morgan City Historical Society 1960:11). Berwick and his wife, Eleanor Wallace, had eight children. Their son, Joseph Berwick, was the de facto founder of the town of Berwick, which lies across Berwick Bay from the present site of Morgan City.

Historic documentation of land tenure in the project area begins with a Spanish land grant received by Joseph and Eleanor Wallace Berwick, the son and the wife of Thomas Berwick. Signed by the Baron de Carondelet on July 3, 1797, six years before the acquisition of the Louisiana Territory by the United States, this grant conveyed to the Berwicks a tract of land described as "seventy arpents (front) of Tiger Island facing the east bank of

the river Teche" (COB B-A, Folio 91, St. Mary Parish, Morgan City Historical Society 1960:11). In fact, generous land grants were being made throughout the Attakapas District at this date. The same year the Berwicks' patent was issued, the Governor instructed the Commandant of the Attakapas post to give two hundred acres of land to each approved colonist, plus another fifty acres for each child and twenty acres for each slave owned. Ten acres of the land given each household had to be cultivated within one year, or title would revert to the crown (Bergerie 1962:8).

By the end of the Spanish Colonial Period, the Attakapas District was becoming increasingly prosperous. Stock raising continued to be the most important industry in the region. A visitor to the District in 1799 remarked:

We met a herd of cattle of about a thousand head, among which were about a hundred head of horses of the half-wild Mexican race. Our cattle in Attakapas differ from those in France very materially by their extraordinary fine horns, which are generally about two and a half feet long, so that with these and their long shanks and feet, when seen from a distance, they look more like deer than like cows and oxen - their usual red-brown color heightens the illusion (Post 1957:49).

Nevertheless, the Louisiana colony proved as unprofitable for Spain as it had for France previously. With the signing of the secret Treaty of San Ildefonso in 1800, Louisiana retroceded to France. Napoleon, who had been unable to establish a naval base in the Caribbean, became fearful that the colony would be captured by the British. Therefore, he agreed to sell the Louisiana Territory to the United States in 1803. The price for this vital extension of American holdings was fifteen million dollars.

The Ante Bellum Period (1803-1861)

The United States of America took formal possession of the Louisiana Territory on December 20, 1803. After initial surveys, the territory was divided into the Louisiana and Orleans Territories; the latter comprised that portion of the territory south of the thirty-third parallel. In 1805, the territorial Legislature divided Orleans into twelve counties; the former Attakapas District became Attakapas County. Popular preference for the earlier administrative system, which was based on ecclesiastical parishes, soon led to the abolition of the county system in Louisiana. On May 31, 1807, the Legislature passed an act dividing the Territory of Orleans into nineteen parishes. The newly created St. Martin Parish continued to include all of the former Attakapas District. Officers of the parish government included a judge with civil, criminal, and police jurisdiction; a sheriff; twelve jurors; and justices of the peace. The judge,

jurors, and, justices of the peace were charged with parish administration and with improving public facilities. In 1811, St. Mary Parish was carved from St. Martin Parish; Franklin, the only town in the new parish, became the parish seat.

In September, 1805, Lt. Enoch Humphrey, of the United States Army, undertook a short exploration of the Atchafalaya Basin. Humphrey's 1805 letter report to Lt. Col. Constant Freeman, contained in "Letters Received by the Secretary of War, Unregistered Series, 1789-1861," briefly refers to families that already had settled in the area:

From the confluence of the Teche to the sea, the River has been named the Chafalia (sic), or Berwick's Bay; from the mouth of the Teche to Negro Island (Bateman Island) the distance is 2 (and) 1/8 miles. There are two families settled on the upper end of this island, and four below the mouth of the Teche (Comeaux 1976:153-154).

Malcolm Comeaux (1976:154) noted that the absence of names in this passage makes it difficult to identify the four families who lived near the present project area. Comeaux (1976:154) believes that two of these families were those of Thomas Berwick and Luke Bryan; the latter was married to Berwick's daughter, Rebecca. In 1811, Luke Bryan was appointed the first sheriff of St. Mary Parish by Governor Claiborne.

The Development of Agriculture in St. Mary Parish

In addition to the political changes which occurred during the early nineteenth century, major economic changes occurred during the 1790s and early 1800s throughout Louisiana. One initial impetus to these changes was the economic failure of indigo production, which was the major cash crop during the colonial period. Louisiana's indigo could not compete in the world market with indigo produced in India, due to higher production costs. Indigo also was susceptible to insect blights and it was sensitive to weather. Consequently, crop losses could be severe. Furthermore, the crop exhausted the soil. An increase in the price of slaves in Louisiana made it difficult to obtain the labor necessary for indigo production on the plantations. Finally, the terrible smell of indigo production attracted disease-carrying insects, and the production of indigo polluted streams (Holmes 1967:346-348). During the 1790s, the cotton gin was invented and Etienne de Bore developed a commercially successful process for the extraction of sugar from Louisiana cane. In 1795, the Haitian sugar maker Morin introduced refining processes and equipment that further increased the profitability of Louisiana sugar industry. As a result of these technological advancements, cotton and sugar rapidly became Louisiana's two major cash crops. Berguin-Duvallon's 1802 narrative remarked on the status of agriculture in Louisiana. The manuscript stated:

Sugar and cotton are the staple commodities of the colony. Scarcely any indigo is raised (Davis 1806:131).

Although indigo had been raised as a commercial staple in the Attakapas District during the colonial period, its importance was secondary to stock raising. Consequently, the late eighteenth century collapse of the indigo market did not have as great an impact in the Attakapas District as it did elsewhere in the state. Although stock raising continued to be a profitable industry, cotton production became more widespread in the Attakapas region in the late eighteenth and early nineteenth centuries. As noted previously, cotton was grown in the Attakapas District earlier during the colonial period, but its cultivation increased rapidly following introduction of the cotton gin. Nevertheless, neither indigo nor cotton surpassed animal husbandry in economic importance. The economics and crop scheduling of cotton production are discussed in detail elsewhere (Goodwin, Gendel and Yakubik 1983c).

Despite the continued importance of the cattle industry and the addition of profitable cotton cultivation, the tremendous success of sugar growing in southeastern Louisiana during the early nineteenth century attracted the interest of the Attakapas planters. Sugar cane was grown in the district during the late eighteenth and early nineteenth centuries, but sugar monocrop agriculture was not established during that period. The Berwicks' Tiger Island plantation was one of the earliest sugar cane plantations in St. Mary Parish. Four other early sugar planters in St. Mary Parish were David Smith, Lyman Harding, Lewis Sterling, and Henry Sterling. These latter gentlemen owned plantations on Bayou Teche in the vicinity of Franklin. Their surnames suggest that they were Americans. In fact, the acquisition of Louisiana by the United States and the opportunities afforded by the nascent sugar industry clearly stimulated American immigration into the area. Some incoming Americans brought large amounts of capital to finance sugar plantations, which required substantial capital outlays for mills, levees, and slaves. The majority of American immigrants, however, were ambitious men who saw an opportunity to advance themselves through the newly developing sugar industry. Land was inexpensive; undeveloped lands could be had for as little as \$4.00 to \$10.00 per arpent in St. Mary Parish (Table 1).

The influx of Anglo-Americans into Louisiana during the first two decades of the nineteenth century was evident on Tiger Island. Following the acquisition of the Louisiana Territory, the U.S. Government recognized the need for territorial surveys and for legal ratification of land ownership. Local land owners and occupants were required to register formal claims to their land. Legal ownership of claimed land was based on proof of French or Spanish grants, patents, concessions, or orders of survey. In the

Table 1. Prices of Land, Stock, Commodities, and Slaves in the Attakapas Region in 1819 as recorded by Landreth (Gibson 1979:107, sic throughout).

Prices of Lands on the Teche Attakapas

First quality of Lands per arpent or acre improved	16 dollars
Some from superior improvements and situations high as	30 & 40 dollars
First quality unimproved generally	10 dols
Second quality improved from	5 to 10 dols
Second quality unimproved	4 dols
Government Lands of course unimproved government price	2 dols

Prices current of Stock etc. in the Attakapas generally

Good American Saddle or Carriage Horse	200 dols
Good Criol work Horse	from 80 to 120 dols
Mule unbroke 60 dols and broke	80 dols
Cow and calf	20 dols
Oxen per yoke well broke to work	65 dols
A good beef cow or Steer common size	15 to 25 dols
Pork green in the fall or winter	6 dols per C
Pork small for Table use	6 cents per lb.
Beef per pound fresh	4 1/2 cents
Mutton per lb. Do 8 cents the mutton remarkably fine	
Sheep per head generally about 4 dols	
Corn per bushel generally about	75 cents
Flour per barrel generally about	10 dols
Pork per barrel generally about	18 dols
Beef per barrel	12 dols
Hides Slaughter green (9) large from 112 1/2 cts to 150 cts and 2 dollars per hide	
Low leather about 20 cts per pound and upper leather in proportion this is one of the finest countries on Earth for Tanners	
Bacon per pound generally about	16 cents
Potatoes sweet per bushel	25 cents
Potatoes Irish scarch intirely regulated by the New Orleans market	

absence of such a record, proof of continued habitation and cultivation for ten years prior to 1803 provided evidence of ownership. All unclaimed areas were designated as public land, and made available for purchase. The Berwicks' claim of ownership of Tiger Island was confirmed by the United States on September 25, 1813; their holdings already had been divided and sold by that date (Lowrie and Franklin 1834:844). The initial transaction appears to have been the sale of half of the seventy arpent front property by Joseph Berwick to Christopher Adams; the documentation of this conveyance has been lost. Adams, in turn, sold this thirty-five arpent front tract to Henry Johnson in May, 1812. This portion of the former Berwick holding was described in the conveyance records as:

That certain tract or parcel of land, lying situate and being in the Attakapas and on the east side of Bayou Teche, on an island between the Teche and the Lakes which extends to Berwick's Bay; having thirty-five arpents in front with the depth of forty, being the depth which Joseph & Eleanor Berwick the original grantees were entitled to, unless that depth should not be found in consequence of the Lake on the back part, and then in that case it is understood that all the depth extending to the lake or such depth as the J & E Berwick would have been entitled to as aforesaid, it being one moiety of a tract of seventy arpents in front by the ordinary depth of forty granted to the said J & E Berwick by the Spanish Government (COB B-A, Folio 43, St. Mary Parish).

In 1813, Joseph Berwick also sold an additional adjacent quarter of the seventy arpent front property in question directly to Henry Johnson; the remaining quarter apparently had been sold at an earlier and unknown date to John Merriman (COB B-A, Folio 91, St. Mary Parish).

The incoming Anglo-Americans were largely responsible for the shift to sugar monocrop cultivation in St. Mary Parish. Because both stock raising and cotton cultivation were profitable, the economic incentive for Creole planters to shift to sugar cultivation was limited. The capital outlays to outfit a sugar plantation also were much greater than those required for a cotton plantation (*viz* Goodwin, Gendel, and Yakubik 1983a, 1983c; Goodwin, Yakubik, and Gendel 1983). The total investment in a sugar plantation could exceed \$200,000.00 (Taylor 1976:65), placing sugar cultivation beyond the reach of small farmers. The average return on planters' investments in cane cultivation was nine per cent for Louisiana (Taylor 1976:65); the return on a cotton plantation of 1500 acres was about seven per cent (Taylor 1976:67). Incoming Americans encouraged the shift to cane cultivation both by buying lands which they then converted to sugar

estates, and by demonstrating to the wealthier resident Creoles the advantages of sugar agriculture. Additional encouragement was found in the protection of domestic sugar under the tariffs of 1816 and 1828. By 1828, there were 99 sugar plantations in St. Mary, St. Martin, and Lafayette Parishes (which included present-day Iberia and Vermilion Parishes). The following year, the number increased to 162 (Sitterson 1953:25). Finally, between 1818 and 1830 cotton prices were depressed, which further induced planters to consider sugar cultivation. Because sugar agriculture was most efficient on a large scale, livestock pasture lands were converted to cane fields. Similarly, small farms in the parish were purchased and consolidated into sugar estates in the decades preceding the Civil War. Cane cultivation, sugar manufacture, and sugar plantation organization have received detailed attention elsewhere in the literature (Goodwin, Yakubik, Selby, et al. 1985; Goodwin, et al. 1985; Goodwin, Yakubik and Gendel 1983; Goodwin, Yakubik, Stayner and Jones 1984).

The Cathcart Expedition (1818-1819)

The Lower Atchafalaya Basin remained undeveloped during the early American period, but its live oak and cypress timber reserves quickly drew the attention of the Federal Government (Figure 2). Government action pertaining to this area was based on increased recognition of the importance of sea trade and of maritime power following the War of 1812. Thus, in 1817, the U.S. Congress passed an act "Authorizing the President to Institute Necessary Surveys and to Make Reservation of Such Timber Lands for the Benefit of the Navy." In response to this act, on November 4, 1818, John C. Calhoun, Secretary of War and Acting Secretary of the Navy, commissioned John Leander Cathcart, James Hutton, and John Landreth to survey the Attakapas District.

Both Cathcart and Landreth kept journals of the survey. These reports and journals contain the earliest descriptions of the lands surrounding the project area. Both of these journals emphasized the timber resources of the area. Cathcart wrote of Tiger Island:

Where we landed on the South side of Tiger Island, which bounds the North side of Bayou Boeuf,, small cane was growing in abundance on the margin (and) at 100 yards distance it was large and impassible, there was a bad groth (sic) of live oak on the ridge, behind the low land or swamp, but of no consequence, as the land is not sufficiently elevated, or dry on this part of the Island, to produce good timber, although the existence of cane evidences that the soil is congenial to its groth (sic) (Pritchard et al. 1945:791-792).

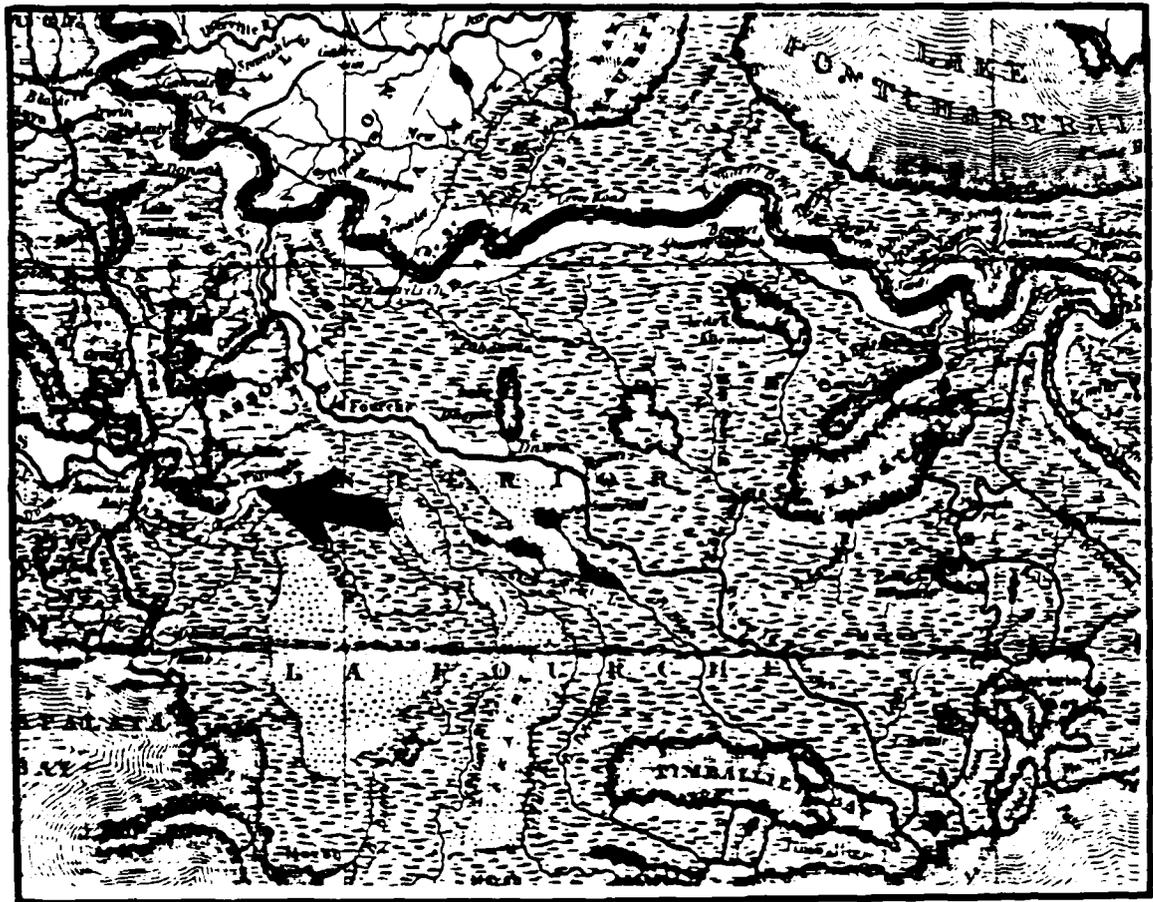


Figure 2. Excerpt from H.S. Tanner's 1820 map of Louisiana and Mississippi, showing undeveloped lands around the project area (Louisiana Collection, Tulane University Library).

Landreth also detailed a visit to Bryan's (originally O'Brien) plantation, which was located on Tiger Island facing Bayou Boeuf:

We then Steer Still in Bayou Buff West by North two hundred yards to the dwelling Plantation of the Bryans who claim Tiger Island. here Mr. Cathcart Mr. Hutton and myself went ashore and looked at some Timber which Mr. Bowles got for the United States the Timber is very fine here we saw Mr. Huttons Mounds. we went and examined the growing Timber found considerable quantity of good Live Oak and it is said there is a great deal on other Island but there the Island being generally very low and the Timber being generally pretty far back a great deal of the best Live Oak Land next the water being cleared that it would be scarth worth getting. but this is the case only on Bayou Buff but no part of tiger Island can be two miles from navigable water (D. Gibson 1979, sic throughout).

Landreth recorded the 1819 prices of land along Bayou Teche, and of stock, slaves, and commodities in the Attakapas region (Table 1). The low price of land should be noted: even top quality improved land was only \$16.00 per arpent. The price of slaves, however, was unusually high when compared to prices on the Mississippi River (Goodwin et al. 1985; Goodwin, Gendel, and Yakubik 1983b). While land was abundant, slave labor was relatively scarce and expensive. The cost of slaves further increased after the importation of African slaves was terminated in 1808. A tradition of large scale slave holding had not yet been developed in the region at that date. An 1810 tax list demonstrated that among 258 landholders between Berwick Bay and the Attakapas Church, only two, Nicolas Prevost and Joseph Sorrel, owned more than fifty slaves. Thirty-six other landholders owned between ten and fifty slaves, and 132 farmers owned no slaves at all (Sanders 1975:216-221).

Landreth also noted the yields per arpent of sugar, cotton and corn. Second quality land apparently yielded about twenty per cent less than first quality lands, regardless of which crop was grown (Table 2). It should be noted, that the value of cotton fell by a third between 1818 and 1819 (Table 1).

Early Landowners on Tiger Island

During the 1830s, Dr. Walter Brashear, for whom the town of Brashear was named, began buying land on Tiger Island. Brashear, a native of Maryland, was a descendent of the French house of Brassier. A prominent physician, he was schooled at Transylvania College, Kentucky, and at the University of Pennsylvania. At one time or another Dr. Brashear owned Tiger Island Plantation, Golden

**Table 2. Average Crop Yields per Arpent of Sugar, Cotton,
and Corn in 1819 as recorded by Landreth
(Gibson 1979:106, sic throughout).**

First quality Lands will yield to the arpent or acre in sugar	3000 lb.
Second quality Do.	2500 lb.
Cotton First quality Lands	1000 lb.
Second quality Do.	800 lb.
Corn First quality Lands	60 bushels
Second quality Do.	from 40 to 50 bushels

Farm Plantation, Bayou Boeuf Plantation, and Cote Blanche, Grand Cote, Petite Anse and Orange Islands (Morgan City Historical Society 1960:13).

On August 18, 1832, Brashear purchased from William Blunt Robertson the tract of Tiger Island property that previously had been owned by Henry Johnson. In consideration for \$5,000.00, Brashear received a parcel of land located:

on the island commonly known by the name of Tiger Island... containing forty arpents front on Berwick's Bay by a depth of fifteen arpents (COB C, Folio 579, St. Mary Parish).

Three years later, on May 21, 1835, Brashear bought an additional parcel of land from Henry Johnson for the sum of \$2,100.00. It was described as:

...situated on Tiger Island in the said Parish of St. Mary fronting on Berwick's Bay and containing six hundred and sixty superficial arpents more or less. The same tract of land was purchased by the present vendor from Christopher Adams (COB 8, Folio 8, St. Mary Parish).

Together, these lands acquired by Dr. Walter Brashear became known as Brashear City. In 1842, Brashear donated this large tract to his children, Robert B., Thomas T., and Frances E. Brashear. Conveyed were:

...two certain tracts of land situated on the east side of the Atchafalaya at Berwick's Bay in said Parish on the island called Tiger Island, one of which tracts was purchased by the said Walter of Blunt Robertson and the other of Henry Johnson, the two tracts containing together twelve hundred and forty arpents more or less with the two steam engines therein situated and all the buildings, mills, (furnaces), household and kitchen furniture, carts, wagons and other implements of agriculture, also the blacksmith cowpens and carpenters tools, also all the horses, mules, oxen, milk stock and dry cattle therein together with the following Negro slaves for life... (COB 11, Folio 523, St. Mary Parish).

A list of slaves conveyed in this act of donation is contained in Table 3. The Brashear family, aided by their substantial land and capital assets, played the major role in the ante bellum development and accelerating settlement of the Tiger Island area.

**Table 3. Slaves Included in Brashear's Tiger Island
Plantation Donation of 1842. (COB 11, Folio 532,
St. Mary Parish).**

<u>Name</u>	<u>Age</u>
Adam	38
Aaron Crapper	51
Aaron Smith	30
Alick	30
Augustus Johnson	25
Armstead	30
Amos	20
Billy Bryant	58
Billy Stump	40
Charles	45
Daniel Atin	30
Copeland	35
Dudly	30
Edmund	27
Edward	30
Henry Todd	33
Henry Cox	30
Harry Brown	25
Isaac Eastin	42
Jim Roy	38
Jerry Key	34
Jacob	30
Lewis	40
Joshua	26
Jim Pendleton	25
Moris George	30
Moris Clay	48
Rolla	30
Sam Peyton	38
Walker	35
Brooks	28
Bob	36
Ben	28
Jim Todd	34
Ferrell	18
Albert	21
George Boswell	20
Job Pray	16
Alfred	14
Sam Ferrygood	36
Henry Bryan	18
Lark Thomas	48
Saunders	13
Willis	13

Table 3. Continued.

<u>Name</u>	<u>Age</u>
Maria Key	32
and her children	
Amanda	11
Dick	10
Margaret	8
William	6
Brayton	3
Maria	1
Lucinda	25
and her children	
Elisha	8
Peter	6
Clifton	4
Frances	4 mo
Milly	40
and her children	
Esther	9
Levin	5
Violetta	25
and her children	
Sarah	10
Cyrus	8
Winnie	6
Washington	4
Ara Ann	2
Lelly	30
and her children	
Osbourne	12
Edney	8
Nat	7
Sarah	5
Walter	2
Abram	1
Maria Crow	22
and her children	
Coleman	6
Delphi	1
Elija Atin	24
and her children	
Lucy	4
Harrisson	18 mo
Betsy	27
and her children	
Nelson	10
Polly	8
Nancy	5
Mac	2
Patsy	1 mo

Table 3. Continued.

<u>Name</u>	<u>Age</u>
Eliza Cox	21
and her children	
Larry	10
Evelina	3
Tyler	1
Becky	40
and her children	
Alfred	12
America	10
Celia	8
Jenny	18
and her child	
Laura	1
Maria	15
and her child	
Primera	infant
Mary Bryan	--
and her child	
Georgiana	10 mo
Mathilda	32
and her children	
Annette	3
Allen	1
Tamin	48
Jenny	58
Anna	14
Rhody	14
Corilla	18

During the period when the Brashears were acquiring their extensive landholdings, Edwin Stansbury began to develop a plantation on the eastern end of Tiger Island between Bayou Boeuf and Lake Palourde. Stansbury's plantation eventually included portions of the present project area (Figure 4). Edwin was the son of Charles Gorsuch Stansbury and Gulaema Cox; he was born in Baltimore, Maryland, in 1813. Family tradition states that Charles Stansbury and his brother moved to New Orleans around 1819 because they had been implicated in a murder; a boy fell and hit his head on a table in a Baltimore tavern and subsequently died. Later, the brothers were cleared of the charges (Roland Stansbury, personal communication 1985).

Edwin Stansbury may have acquired part of his lands as early as 1835 (Roland Stansbury, personal communication 1985). Stansbury acquired most of the eastern half of the southeastern quarter of Section 8 in T16S, R13E, in partnership with William Collins (Figure 3) (Roland Stansbury, personal communication 1985). Stansbury probably acquired the adjacent southwestern quarter of Section 9 at about the same time (Figure 4).

In addition to his original small tract on Tiger Island, Stansbury received several patents for previously unclaimed and undeveloped land during the 1840s. In 1845, Stansbury acquired the southwest quarter of the northeast quarter of Section 8, and the southeast quarter of the northwest quarter of Section 8 in T16S, R13E, a tract totaling 79 acres. The following year, Stansbury received three separate patents totaling 200 acres. These lands included Lot 4 of Section 9 in T16S, R13E, the southeast quarter of the northeast quarter of Section 8 in T16S, R13E, the southeast quarter of the northeast quarter of Section 7 in T16S, R13E, and the southwest quarter of the northwest quarter of Section 8 in T16S, R13E. He received patents in 1848 for all of Section 5, and for Lots 1 and 2 in the eastern half of Section 6. This final acquisition brought Stansbury's holdings to a total of 644 acres (Figure 4) (Succession of Edwin Stansbury, #657, Filed 13 February 1849, St. Mary Parish). The Stansbury property later became known as "Orange Grove Plantation."

With the exception of a portion of his earliest acquisition along Bayou Boeuf, Stansbury's Orange Grove Plantation consisted of unimproved cypress swamp (Figure 4). Stansbury also owned a parcel of land on Avoca Island, on the southbank of Bayou Boeuf, and one descendent Roland Stansbury, believes that the majority of Edwin Stansbury's cultivated land was located on the Avoca Island property. In fact, the Stansbury's wood sugar house and steam powered mill were located on Avoca Island (Bouchereau 1870-1878). However, the Stansbury family cemetery is located on Tiger Island in Section 8 of T16S, R13E (Figure 5). Edwin Stansbury's residence appears to have been located on Tiger Island, as well, since his daughter Martha's obituary stated that she had been born in her father's house on Bayou Ramos. The exact location of this house is unknown (Roland Stansbury, personal communication 1985).

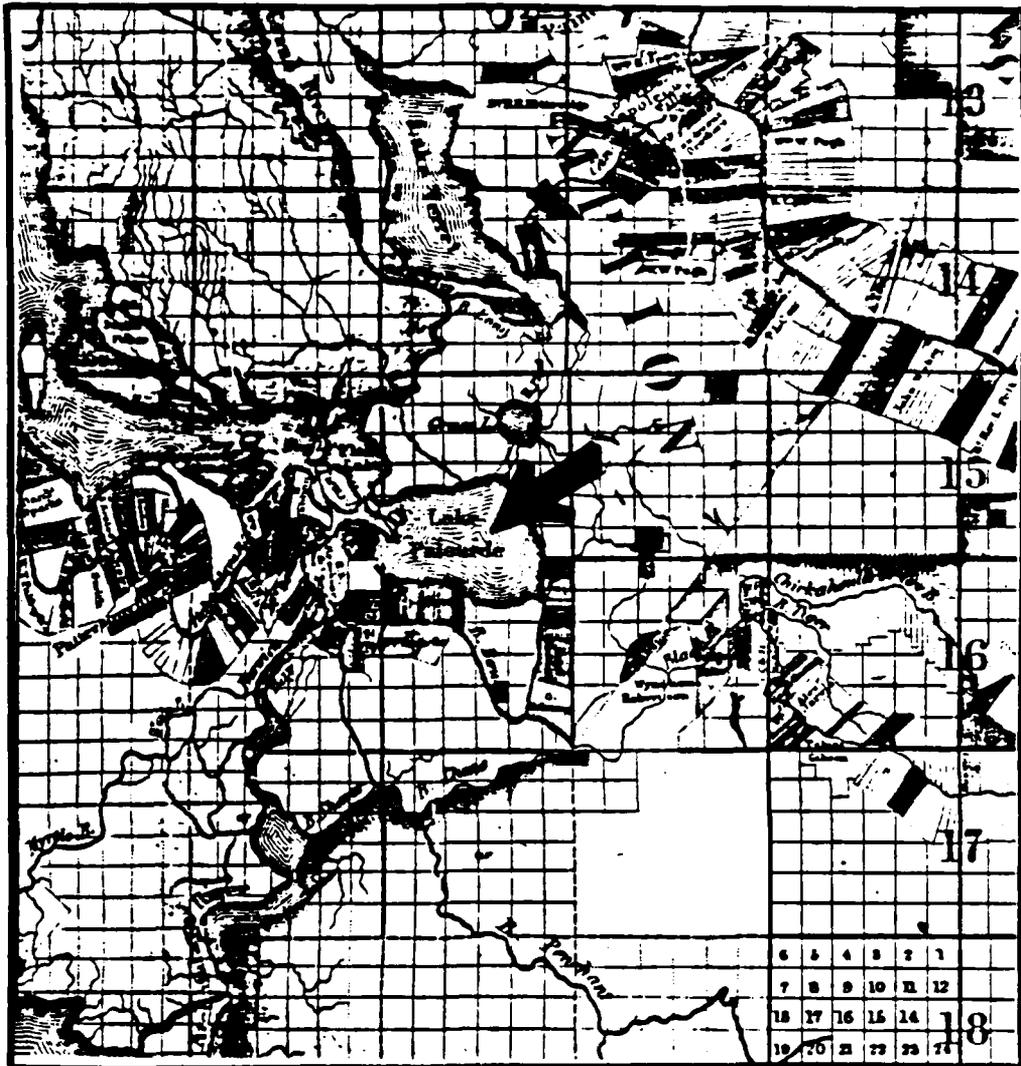


Figure 3. Excerpt from La Tourette's 1845 Reference Map of the State of Louisiana, showing William Collins' land ownership in Section 8, T16S, R13E (Map Division, Library of Congress).

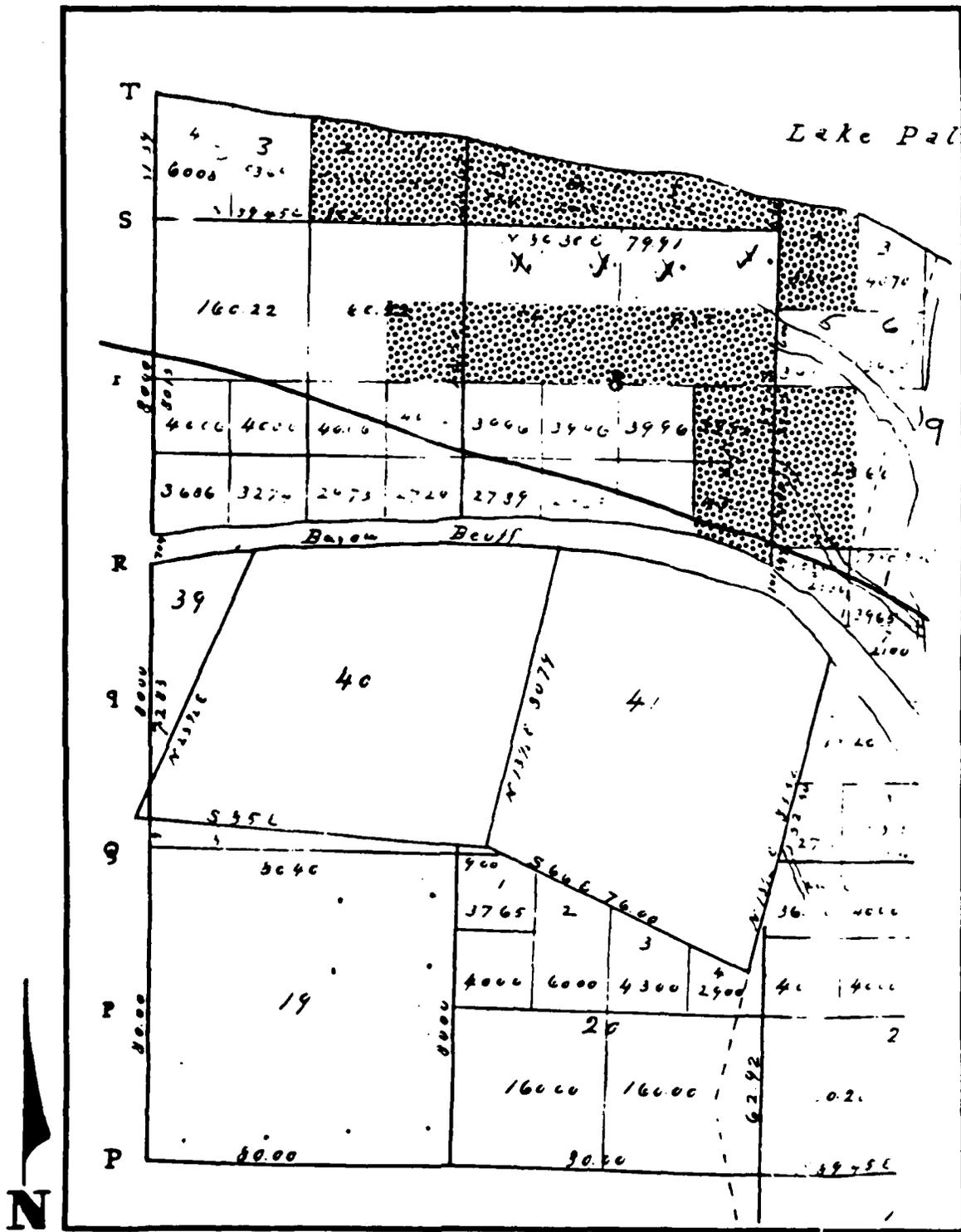


Figure 4. Undated map of Edwin Stansbury's holdings in Sections 5, 6, 7, 8, and 9 of T16S, R13E.

It does not appear that Edwin Stansbury or his heirs ever attempted to clear and drain any of their Tiger Island land for agriculture. Data from the sugar reports from the ante bellum period indicate that the largest sugar crop ever taken from Orange Grove Plantation was 124 hogsheads in 1845, the year Stansbury received the first of his several patents (Table 4). Clearly, the Stansburys were not planting cane on any of this additional acreage. It is possible that some of the highest land may have been drained for pasture. The present project area crosses undeveloped sections of Orange Grove; the land fronting on Bayou Boeuf that was suitable for improvements and agriculture is outside the impact corridor (Figures 1 and 4).

Edwin Stansbury died in 1848. His probate inventory suggests that he was a small-scale planter (Table 5). The total value of his estate was \$14,693.69. He owned thirteen adult slaves, nine of whom were considered of prime age. This limited labor force could not have cultivated large amounts of land. In addition, the inventory gives no indication that the undeveloped swamp lands were being utilized extensively. Stansbury owned very little stock, and no tools were listed that would suggest that Stansbury was engaged in large scale lumbering (Table 5). Small plantations such as the Stansbury holdings were still common in St. Mary Parish during the period, despite the fact that the Parish had become the largest sugar producer in the state. In 1850, forty per cent of the plantations in St. Mary Parish were under 500 acres; only four per cent exceeded 3500 acres. These large and small estates were mixed throughout the parish.

Edwin Stansbury's estate was purchased at public auction by Mary Collins, his widow. Mary continued to cultivate sugar cane at Orange Grove until the Civil War (Table 4). Edwin James Stansbury evidently managed the plantation for his mother between 1855 and 1857 (Table 4).

The Establishment of Brashear City

During the 1850s, construction of a railroad from Algiers to Berwick's Bay was initiated by the New Orleans, Opelousas, and Great Western Railroad Company (Figure 6). Mary Collins Stansbury granted a servitude across her plantation to the railroad company in 1853 (Figure 5) (COB N, Folio 119, St. Mary Parish). Similarly, Robert B. and Thomas T. Brashear, under the name of R. B. Brashear and Company, issued a grant to the railroad company providing a right-of-way through their plantation on Tiger Island (COB L, Folio 453, and COB B, Entry #213, St. Mary Parish). The Brashears recognized the tremendous development opportunities presented by the coming of the railroad, and made additional lands available to the railroad company. On May 19, 1853, the railroad company purchased a lot from the Brashears for the sum of \$1.00 for the purpose of constructing a depot and machine shop for the company. An additional grant, dated August 7, 1856, and recorded on August 20, 1856 (COB L, Folio 456, St. Mary Parish), entitled the New Orleans, Opelousas, and Great Western Railroad Company the

Table 4. Sugar Production on the Stansbury Plantation,
 1844 - 1861 (Champomier 1844-1862,
sic throughout).

<u>Year</u>	<u>Owner/Manager</u>	<u>Hogsheads</u>
1844	E. Stansberry	91
1845	Edward Stansberry	124
1849	Mrs. Elwin Stansberry	75
1850	Mrs. Elwin Stansbury	37
1851	"	66
1852	"	33
1853	"	51
1854	"	55
1855	Elwin Stansbury	32
1856	"	2
1857	"	42
1858	Mrs. Elwin Stansbury	106
1859	"	55
1860	"	53
1861	"	57

Table 5. Slaves and Movable Inventoried in the Succession of Edwin Stansbury (#657, filed 13 February 1849 St. Mary Parish).

<u>Slaves</u>	<u>Age</u>	<u>Value</u>
Bill	30	\$700.00
Joe	25	600.00
Ned	20	600.00
Miles	24	500.00
Deal	24	500.00
Bill	25	500.00
Joe	25	500.00
Sam	27	600.00
Mitchel	60	350.00
Jack	60	300.00
Prince	(80)	
and his wife		
Hannah	48	
and their two children		
Clair (one eyed)	12	
Simon	7	700.00
Vina	24	
and her children		
Isabelle	7	
Sarah	3	
Elvira	18 mo.	700.00

Table 5. Continued.

Stock		
6	mules	\$ 240.00
3	American Horses	120.00
7	Oxen	70.00
4	Milk cows and calves	40.00

Movables

1	lot Smith's and Plantation tools	25.00
1	lot Cooper's tools	8.00
1	lot hoop and hoop poles	50.00
1	Pirogue	3.00
2	old ferry flats	10.00
1	skiff	2.00
1	lot staves .	10.00
1	Bed and bedding	15.00
1	Bureau	3.00
1	Table	6.00
1	Clock	3.00
1	Safe	3.00
1	Dining table	2.00
1	old armoire	4.00
1	side board	4.00
1	Bed and bedding	5.00
1	old armoire	1.00
1	lot cooking ware	5.00
1	lot kitchen furniture	5.00
6	old ploughs	3.00
1	ox cart	30.00
3	old ox carts	19.00
	644 acres of land and improvements	6500.00
	Debts owed the estate	860.19
		<u>\$14,693.69</u>



Figure 6. Excerpt from Bayley's 1853 New and Improved Map of Louisiana showing the proposed route of the New Orleans, Opelousas, and Great Western Railroad (Map Division, Library of Congress).

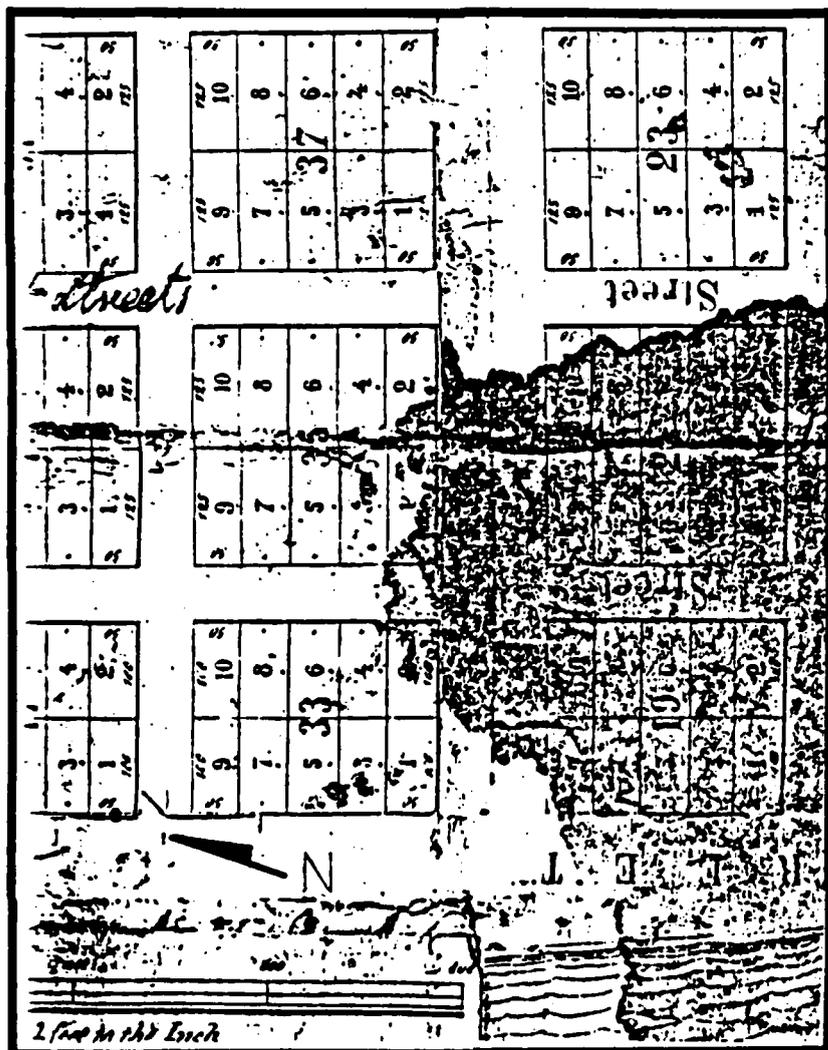
right to construct and maintain wharves, sheds, and other buildings in and on the margin of Berwick Bay for a distance of 130 feet above and 200 feet below the center line of the railroad (COB L, Folio 456, #8559, St. Mary Parish). In a subsequent contract between the Brashears and the railroad dated February 14, 1857, the Brashears agreed to allow even more development along the riverfront. That contract, synopsized by Morell (1956), was undertaken:

...to grant free of cost to the railroad company the right to construct one tract from Railroad Ave. through squares 8 and 10 in a line with Union St. to and into the margin of Berwick Bay, the right of constructing a coal yard wharf and cattle landing. This contract further states that it is also understood that Front off Water Street is to be left open and unobstructed except by track being laid across a width of 75 feet. It is further understood that all crossings of streets over the tracts of said Railroad Company are to be made and maintained in good order by said company. Provides further that whenever said wharves are abandoned or no longer required by the railroad for the uses and purposes specified, the land to revert to the undersigned or their heirs (Morell 1956:2-3).

This latter contract established the intent of the Brashears that property along the riverfront was intended for public use as a street and for public wharves (viz Morell 1956:3). Together these acts, conveyances, and contracts served to bring the railroad to Tiger Island, to establish it there, and to provide the foundation for a viable community on the east bank of Berwick Bay.

Several other steps were taken to attract residents to what was essentially a planned community. In 1853, A.L. Fields was commissioned by the Brashears to prepare his Plan of the Town of Brashear (Figure 7). This plat served as a blueprint for Brashear City. Following preparation of this plan, in 1855 R. B. Brashear and Company advertised in the Picayune (New Orleans) that it was going to "donate 50 to 100 lots to homesteading mechanics, shopkeepers, artisans, etc., in the settlement on Berwick Bay" where "speedy growth is a certainty" (Morgan City Historical Society 1960:15). On April 16, 1857, remaining lots between Berwick Bay and Sixth Street and between Brashear Avenue and Bayou Boeuf were sold at auction. This prepared the way for the incorporation of the Town of Brashear in 1860.

In 1855, the settlement of Berwick Bay acquired its first post office, and Robert Brashear was named Postmaster. A petition by the three hundred residents of the settlement prompted incorporation of the "Town of Brashear" by an act of the Louisiana



Map of Town of Brashear
 made by A. L. Field
 1853 - 200 feet to the inch

Figure 7. Excerpt of A.L. Field's 1853 subdivision of the Town of Brashear (Morgan City Archives).

Legislature in March, 1860 (Figure 8). Boundaries for the Town of Brashear were defined as:

all that tract or parcel of ground in the Parish of St. Mary, beginning at and upon the margin of the east bank of Berwick's Bay, and running thence along and with the north line of Brashear Ave. to the boundary line of lands belonging to Olympus Young; thence following the said boundary line southward to Bayou Boeuf; thence along the shore or margin of Bayou Boeuf to Berwick's Bay and along the margin of Berwick's Bay to the place of beginning (Morgan City Historical Society 1960:15-16).

The War Between the States (1861-1865)

Brashear City's strategic importance during the Civil War is well-documented:

As western terminus of the only line of railway in southern Louisiana and a port on the Atchafalaya River, a main artery of traffic into the interior of Louisiana and west to Texas, Brashear figured prominently in campaign plans on both sides and ended up battle-scarred from actual warfare on its site and ravaged and weary from constant occupation by troops (Morgan City Historical Society 1960:17).

During the first year of the war, the New Orleans, Opelousas, and Great Western Railroad provided transportation for Confederate troops and ammunitions. Three Confederate forts, Berwick, Bisland, and Chene, were constructed in the area, and a regiment of one thousand troops was assembled, all prior to December, 1861. The preparation of these defenses was accompanied by the creation of a partial blockade of the Atchafalaya River by sinking live oak trees in the main channel (Morgan City Historical Society 1960:19). In addition, navigational aids and lights were removed, leaving the channel unmarked (Wells 1979:294). Numerous small fortifications and gun emplacements were erected near Brashear City on the shores of Berwick Bay.

Federal accounts of Brashear City during the Civil War were seldom complimentary. Harris Beecher's Record of the 114th Regiment New York Volunteers was typical. Beecher wrote:

The town of Brashear has been dignified with the title of city, but it is in fact, a poor specimen of a squalid southern village, containing not more than three hundred people in time of peace. It is situated on the banks of Berwick Bay, which is about three fourths of a mile wide (Beecher 1866).

Nevertheless, as Raphael (1976:49) has noted, Brashear City was "A most strategic point in the bayou country campaign," because of its accessibility by land, water, and railroad transportation.

Following the fall of New Orleans to Federal troops on April 25, 1862, and due to the concomitant interruption in the Confederate command structure, Confederate forces in the Brashear City area and in all of the bayou country turned to a form of guerilla warfare. Attacks were waged against the sites of supply lines, bridges, and railroad depots. Many of these attacks were led or directed by Brigadier General Alfred Mouton, a graduate of West Point who had been promoted after recovering from an injury sustained during the battle of Shiloh. Mouton's command of the 18th Louisiana Regiment, the Crescent, Terrebonne, and Thirty-Third Regiments, and of the 2nd Louisiana Cavalry, gave him about 1400 troops (Raphael 1976:41). Throughout this period, all Confederate forces in western Louisiana served under the direction of General Richard Taylor, the son of President Zachary Taylor and brother-in-law of Jefferson Davis.

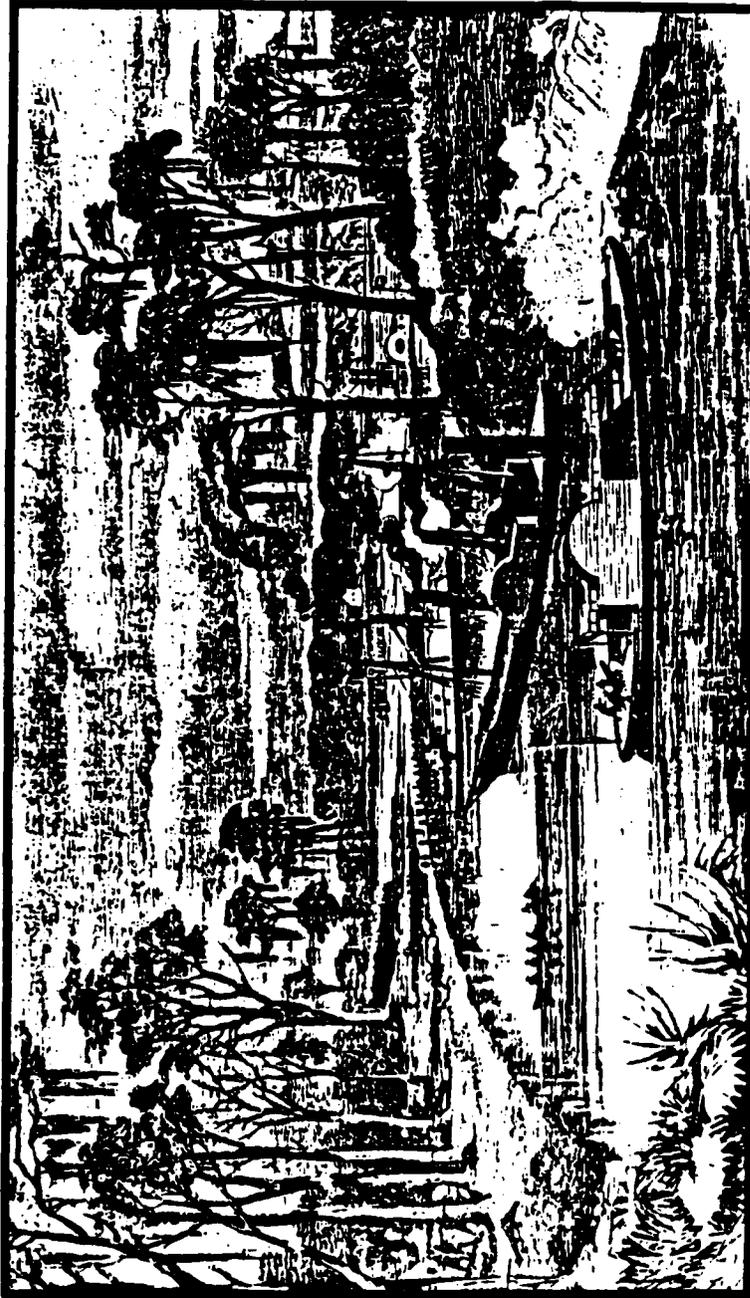
Union strategy in the area was planned and executed by Brigadier General Godfrey Weitzel, U.S.A., a West Point graduate. Under orders from Major General Benjamin Butler, in October, 1862, Weitzel was sent to Brashear City along with approximately 3000 troops of his Reserve Brigade. That brigade was composed of the 12th and 13th Connecticut, 75th New York, and 8th New Hampshire Regiments, and Troop "C" of the Massachusetts Cavalry (Raphael 1976:38). At Brashear City, Weitzel awaited four steam-driven Union gunboats requisitioned by General Butler for the Louisiana campaigns. They were the Estella, Calhoun, and Kinsman, and the Diana (Figure 9). Raphael (1970) described these gunboats as:

the light shallow-draught type, especially designed for action in the bayous and lakes of south Louisiana.

Both the Diana and the Kinsman were partially ironclad. Their combined role with Weitzel's ground forces was:

to attack some batteries at Berwick Bay, to penetrate the waters of the bay and tributaries, and cut off the supplies of cattle for the rebel army from Texas... and to act in conjunction with General Weitzel. At the same time push forward a column from Algiers... along the Opelousas Railroad... to Brashear City, open the railway for the purpose of forwarding supplies to General Weitzel's expedition (U.S. War Department 1891 (XV):159).

The four gunboats arrived in Berwick Bay on November 1, 1862.



From Harper's Weekly

THE GUNBOAT BATTLE AT CORNAY'S BRIDGE

Figure 9. The gunboat battle at Cornay's Bridge, showing the configuration of the Union gunboats (Raphael 1976).

Four days after their arrival, on November 5, 1862, the four Federal gunboats saw action fourteen miles upriver from Brashear City. Lt. Commander Thomas McKean Buchanan, U.S.A., who commanded this naval force from his flagship U.S.S. Calhoun, described that engagement and the role of the Kinsman as follows:

Yesterday I went with all the gunboats up Bayou Teche, and found the enemy about 14 miles from here, posted above the obstructions they had sunk in the Teche. We engaged them for two hours and drove them off, as we also did the Cotton. The Kinsman bore the brunt of it, and received fifty-four shots in her upper works and hull... the iron casing on the Kinsman and Diana turned the shot beautifully (U.S. War Department 1891:673).

During the next few months, all four of these gunboats, operating out of their base at Brashear City, were involved in a series of patrols and engagements in the Teche-Atchafalaya region. Union naval and ground forces remained in control of Brashear City until the Summer of 1863.

On June 23, 1863, troops of General Tom Green's Fifth Texas Mounted Volunteers and of the 2nd Louisiana Cavalry, under orders from General Richard Taylor, C.S.A., recaptured Brashear City in a daring waterborne assault. Using a "Mosquito Fleet" of fifty-three assorted skiffs, canoes, and flats, the largest of which held fifteen men, a small group of Confederates landed on Tiger Island's shore on Lake Palourde. This force stormed Brashear City by a surprise attack from the rear. After removing captured supplies, the successful Confederates burned the rolling stock of the railroad in Brashear City, and ran the engines into Berwick Bay (Morgan City Historical Society 1960:25). In July, 1863, the Confederate troops withdrew up Bayou Teche, and Union forces regained control of Brashear City. The Union Army remained in control of the town through the end of the war.

The Post Bellum Period (1865-1899)

St. Mary Parish was devastated by the Civil War. Both the Federal occupation of the area and the military engagements fought there badly damaged the once profitable sugar plantations. Personal property, stock, and agricultural produce were confiscated by Union forces, impoverishing the area. Emancipation had abolished the reinstatement of slavery and the plantation labor system. Yet the region managed a remarkable economic recovery during and after Reconstruction, as a result of the centralization and industrialization of sugar processing, and of the development of a variety of industries that utilized the skilled labor base of the region.

The period immediately after the close of the war was one of tremendous political unrest. During the ante bellum period, slaves derived a certain measure of protection from their masters, who had a vested financial interest in their well-being. This protection was lost with emancipation, and violence against Freedmen erupted throughout the state. The pro-Union political leaders who controlled federally occupied Louisiana until the end of the war were opposed to Negro suffrage. When pro-Union politicians lost control of the state at the end of the Civil War, the extension of suffrage to Blacks became a Republican cause, as Black suffrage provided their only opportunity to regain political power. A state constitutional convention for this purpose was called in July, 1866, in New Orleans. However, the session never opened because of lack of a quorum. During the delay, a riot broke out between Freedmen and the police. Three white Republicans and thirty-four Blacks were killed; seventeen whites and 119 Blacks were wounded. This riot, along with numerous other acts of violence against Freedmen, drew U.S. Congressional attention to the status of Freedmen in the South. Steps then were taken to secure civil and political rights for Blacks. The first of the Military Reconstruction Acts passed Congress in early 1867. Louisiana and Texas were named the fifth military district, under the command of General Philip Sheridan. The act required voter registration of all adult males who could swear that they never had voluntarily aided and abetted the Confederacy. Because of the resultant disenfranchisement of most Confederate sympathizers, and thus most white Louisianans, Democratic electoral victory depended on keeping Black voters away from the polls. The Knights of the White Camelia was organized in Franklin, Louisiana, in 1867 to insure that Freedmen either voted Democratic or not at all. Judge Alcibiades de Blanc served as the chairman of the group, which claimed to be a

strictly peaceful, law abiding and loyal order; as much so as Freemasons or Odd Fellows (Brown 1970).

The intent of the organization, however, was similar to that of the Ku Klux Klan. Councils rapidly were established all over Louisiana. By the end of the decade, there were ten councils and 800 Knights of White Camelia in St. Mary Parish alone. Members of these councils were armed, reportedly

for the protection of white people against lawlessness and violence, riots and blood shed (Brown 1970).

Carpetbagger rule in parish government spurred further violence in St. Mary Parish. Tremendous hostility was directed toward the carpetbaggers, whom locals blamed for racial tension in the area:

... the Negroes and white people of the parish would have been harmonious and friendly, had

it not been for about a half a dozen carpetbaggers and scalawags who organized and stirred up hell in our midst (Brown 1970).

Daniel Dennet, a local journalist, suggested in 1869 that the carpetbaggers were responsible for all the problems of the area:

The white people and conservative Colored people have every reason to take courage, and work for the over-throw of the carpetbagger, who, if elected, will overwhelm both planter and laborer in ruin. If we defeat them, we hope to see a good degree of peace, prosperity, and good feeling between the two races in this state. In no part of the world is the Colored race treated better or more kindly than in Louisiana. We want peace in this state, and we wish to give no encouragement to disturbers of the peace and mischief-makers of the carpet-bag persuasion (Brown 1970).

Notwithstanding statements to the contrary, violence was frequent. Colonel Henry H. Pope, a native New Yorker who settled in Franklin following the Civil War, was elected sheriff of St. Mary Parish in 1868. In October of that year, Sheriff Pope and a local judge were murdered in the presence of Pope's family in O'Neill's hotel in Franklin. The murderers were disguised, and the suspected involvement of the Knights of the White Camelia in the assassination never was established.

The Recovery of the Sugar Industry

The economic upheaval caused by the war also created social and political tension in the region. After the Civil War, many planters lost their property due to financial difficulties. The number of operating sugar houses in the parish fell from 170 in 1861 to ninety-two in 1869. A number of planters in St. Mary Parish had their lands surveyed for sale in lots of forty to eighty acres, because they no longer could maintain large plantations. Sugar prices, which were exceptionally high immediately after the war, fell steadily until the late 1880s. The largest sugar crop made in the state prior to the Civil War was that of 1861, and during the remainder of the nineteenth century Louisiana's sugar production failed to reach the ante bellum levels. This fall in production was the result of:

changes in the labor system, bad politics and government, and fear that the (sugar) tariff would be abolished or greatly modified, preventing capital from being invested... (Bouchereau 1890:53a).

Critical labor shortages retarded the recovery of the sugar

Critical labor shortages retarded the recovery of the sugar industry. After passage of the Thirteenth Amendment in 1865, plantations throughout the region lay idle for lack of field hands. The free labor system initially proved inadequate for the sugar crop; planters complained that day labor or contract work was inefficient, too costly, and inadequate in number. Former slaves were judged uniformly to be lazy, evil, and a political strength to the foes of the former plantocracy. For these reasons, Bouchereau advocated the introduction of white labor into the state's sugar economy; he also proposed a settlement organization, the Louisiana Immigration and Homestead Company, to "introduce into the state a good class of laborers" (Bouchereau 1871). Bouchereau (1871:xix) formally endorsed the use of German and Chinese contract labor.

Italian immigrants provided another source of white labor. During the late 1860s, Louisiana maintained direct commercial ties with the Mediterranean region, particularly Southern Italian and Sicilian ports. Sicily suffered numerous social, political, and economic problems during the late nineteenth century, including inequitable distribution of land and depression in agriculture. Many disgruntled Sicilians obtained passage on the regular citrus trade routes between Palermo and New Orleans. Beginning in the 1870s, many Italians residing in New Orleans found employment on the sugar plantations of the region (Scarpaci 1972:32-44). They soon proved to be excellent workers:

(The Italian) requires almost no supervision, but, assigned a task, he toils at it without need of watching and urging on the part of an overseer; and though he has not the physical strength of the Negro, his close application makes ample amends for this deficiency. Centuries of experience in a worn out country have made him one of the most careful and economical of farmers. The necessity of cultivating the same little plot of ground year after year has taught him how to obtain the largest possible yield from his limited acreage. As intensive farmers, the Southern Italian and the Sicilian are easily among the best in the world... (Scarpaci 1972:38).

Many Italians would migrate into the sugar parishes for the Zuccarata, or the grinding season, when more labor was needed to cut cane and make sugar (Scarpaci 1972:97). Some seasonal workers came from out of state; wages from the grinding season and escape from winter fuel bills made it profitable for Italians to travel from Northern cities for the Zuccarata (Scarpaci 1972:109). Others permanently settled in the sugar parishes as wage laborers and tenant farmers. Many Italian families established themselves in the vicinity of the project area.

Perhaps the greatest impediment to the revitalization of the sugar industry was the pervasive lack of capital. Many sugar houses could not be rebuilt for lack of funds. In addition, wages had to be paid to the workers for the first time. In response to the lack of capital, Bouchereau (1874:xii; 1877; 1878:xx) repeatedly urged the separation of the agricultural and industrial aspects of sugar production:

Let the sugar factories be established in different neighborhoods and let the producers of the cane sell it to the factory (Bouchereau 1874:xii-xiii).

This was the "Central Factory System," in which individual planters, rather than operate their own mills, would utilize a centralized mill serving the needs of many surrounding planters. The greatest labor and wage expenditures in sugar production were in the actual manufacturing of sugar from cane. The more efficient central factory system helped to alleviate labor problems, thereby reducing production costs. It also assisted the planter who did not have the capital to rebuild his own sugar house, by allowing small scale planters to produce sugar without incurring the cost of a mill. Because the area was impoverished by the Civil War, investment capital for these improvements to the sugar factories in large part came from outside of the region. As early as 1871, large plantations in St. Mary Parish were sold to Northern capitalists (Goodwin, Yakubik, Selby et al. 1985).

The transition to a system of centralized sugar factories was gradual, and it was not completed until the end of the nineteenth century. Changes in the number of sugar houses in operation in St. Mary Parish from 1844 until 1917 are depicted graphically in Figure 10. These data were obtained from the Louisiana State Sugar Reports (Champomier 1844-1861; Bouchereau 1869-1917). As this graph shows, there was a dramatic decrease (46 per cent) in the number of active sugar houses in the parish immediately following the Civil War. However, the number of sugar houses subsequently rose steadily until 1880. This suggests that after the Civil War, attempts to reestablish the sugar industry utilized the ante bellum pattern of private sugar houses on major sugar estates. Despite the construction of thirty-four processing facilities in the eleven years following 1869, there were still thirty-nine per cent fewer sugar houses in St. Mary Parish in 1880 than on the eve of the Civil War. Those planters who were financially capable of rebuilding and refurbishing their sugar houses probably had done so by this date. A large number of sugar estates never reestablished their own processing facilities. The owners of such plantations brought their cane to other mills for processing, or sold it outright to the operators of those facilities. Because the cane had to be processed soon after harvesting, the factories had to become increasingly efficient in order to process greater quantities of cane in a shorter period of time. This discouraged planters from investing in plantation

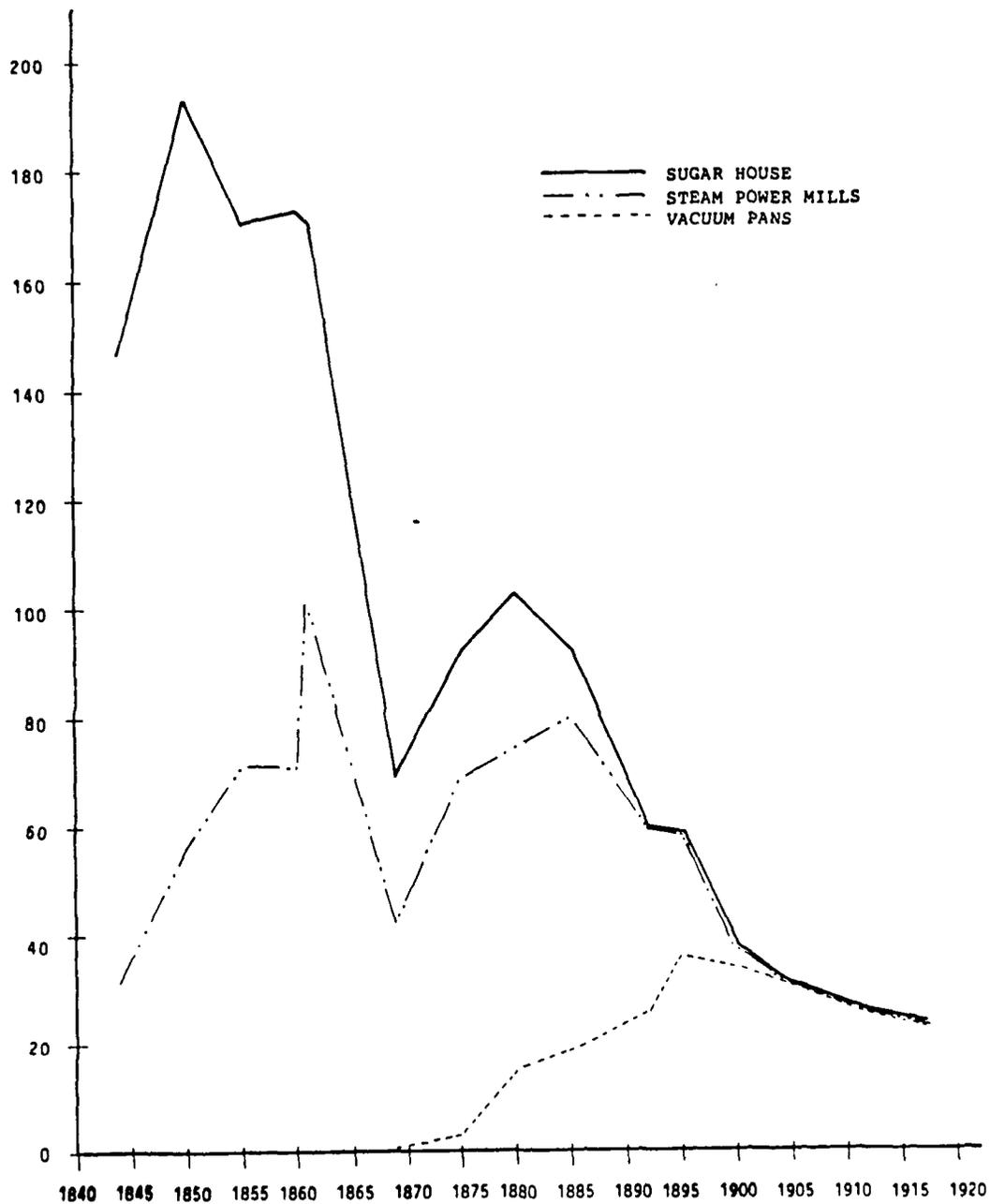


Figure 10. Frequency polygons of the number of sugar houses, steam powered mills, and vacuum pan apparatuses in use in St. Mary Parish, 1844-1917 (Champomier 1844-1861; Bouchereau 1869-1917).

sugar houses, since their cane could be processed more economically and efficiently by the larger and better equipped central processing facilities. The less modern and efficient plantation sugar houses could not compete against. A model of this feedback mechanism is portrayed graphically in Figure 11. The establishment of the Central Factory System produced a steady decrease in the number of active sugar houses in St. Mary Parish during the late nineteenth century, but not a decrease in the amount of sugar produced by the parish. Because the surviving factories were equipped with the most efficient processing machinery, they could obtain greater yields of sugar from the cane than was possible with the traditional open pan method. Allowing for fluctuations in annual crop yields due to extrinsic factors such as the weather, Table 6 shows that sugar production in St. Mary Parish increased steadily after 1880. The amount of sugar produced in 1892 was twice that of the average ante bellum yields, and successive years saw even greater sugar yields (Table 6). From the 1890s through the first decades of the twentieth century, St. Mary Parish regained its position as the leading sugar producing parish in the state and in the nation.

Figure 10 demonstrates that the sugar factories operating in St. Mary Parish during the post bellum period were increasingly better equipped. Approximately the same proportion (60 per cent) of the sugar mills in the parish were steam powered immediately before and after the War. By 1875, about seventy-five percent of the mills were equipped with steam engines; ten years later, the proportion had risen to eighty-six per cent. By 1892, all of the sugar mills in St. Mary Parish were powered by steam (Figure 5-9). Similarly, vacuum pan apparatuses, which crystalized sugar from cane juice in a vacuum instead of a kettle or open pan, were increasingly utilized after the Civil War (Figure 10). No vacuum pan apparatuses were in use in St. Mary Parish prior to 1875; twenty years later, sixty-one per cent of the parish's factories were equipped with them. The competitive advantage of this processing apparatus became especially clear during the last five years of the nineteenth century. Thirty-six per cent of the parish's sugar factories were abandoned between 1895 and 1900, and eighty-nine per cent of those that continued to operate were equipped with vacuum pans (Figure 10). By 1905, all of the sugar houses in St. Mary Parish utilized vacuum pans.

The sugar industry encouraged the development of an industrial infrastructure and of smaller service industries in St. Mary Parish. Because the processing facilities were no longer located on the same plantation where the crop was grown, improved overland transportation was necessary. This required the upgrading and regular maintenance of roads, and the construction of wagons for the hauling of cane. Although slave labor had produced hogsheads on individual plantations, the centralization of sugar factories spurred the establishment of independent cooperages. These service industries provided additional employment for unskilled and semi-skilled labor; drivers were needed for hauling cane, and workers were needed to manufacture

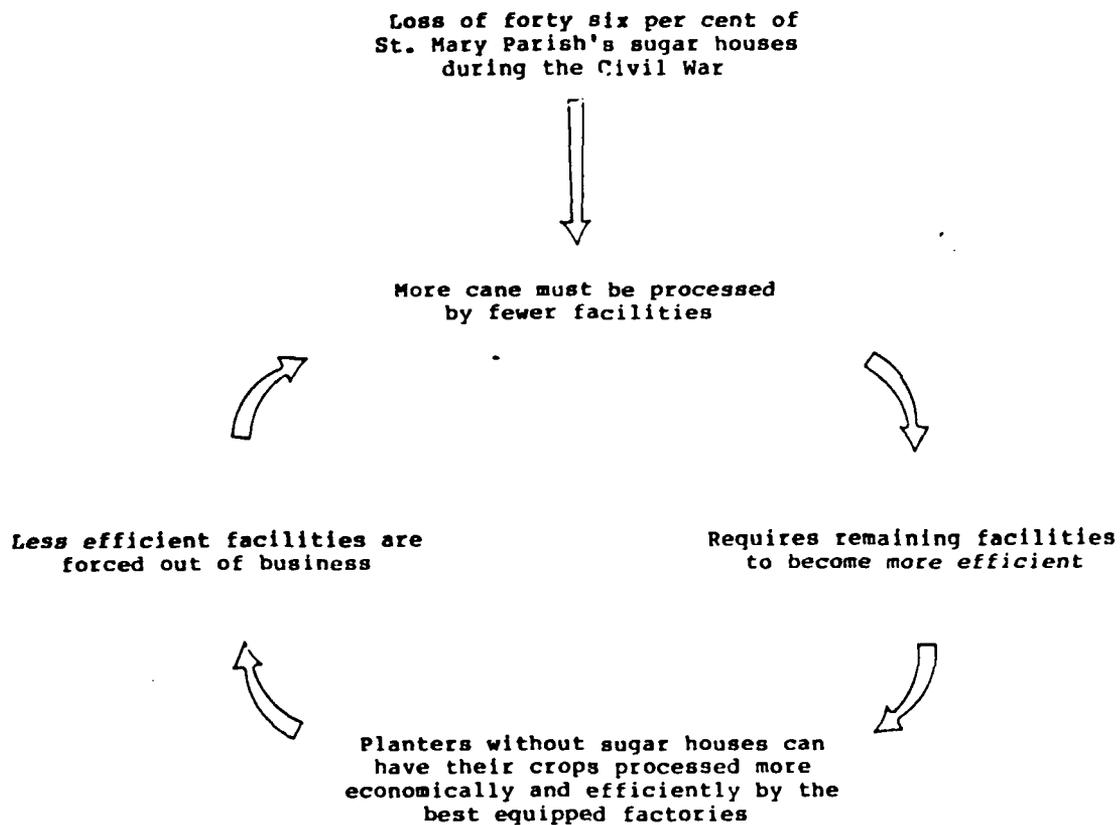


Figure 11. Schematic of post bellum development of the Central Factory System in St. Mary Parish.

**Table 6. Sugar Production in St. Mary Parish
(Champomier 1844 - 1861; Bouchereau 1869 - 1917).**

<u>Year</u>	<u>Production</u>
1844	18,795 hhds.
1850	24,531 hhds.
1855	37,003 hhds.
1860	23,690 hhds.
1861	27,229 hhds.
1869	7,776 hhds.
1875	7,845 hhds.
1880	15,841 hhds.
1885	16,607 hhds.
1892	56,011,091 lbs.
1895	133,424,329 lbs.
1900	56,320,209 lbs.
1905	138,605,669 lbs.
1912	111,971,513 lbs.
1917	107,682,716 lbs.

wagons and hogsheads (Pierre Larroque, personal communication 1984).

Thus, the post bellum reorganization of the sugar processing industry contributed to the diversification of industry in St. Mary Parish, which, in turn, provided new employment opportunities for local workers. This model of post bellum development is portrayed in Figure 12. As Larroque (personal communication 1984) has suggested, the sugar industry provided a skilled labor base for the development of the lumbering industry and foundries. It also created a demand for local foundries, which benefitted the sawmills. The large sugar factories produced a need for smaller service industries, such as wagon makers and cooperages, which then provided additional employment opportunities (Figure 12).

The Post Bellum Period At Orange Grove Plantation

The Stansburys were one of many ante bellum planter families in St. Mary Parish who never made the transition to industrialized sugar production. Like other small planters, they undoubtedly lacked the capital to resume plantation operations. Aside from one crop of three hogsheads which the Stansburys raised on their Avoca Island property in the 1873-1874 season, they completely ceased sugar cultivation after the Civil War (Bouchereau 1868-1917). Roland Stansbury (personal communication 1985) does not believe that the plantation was used agriculturally after the Civil War, although it appears that family members resided on the property and retained ownership of the plantation throughout the remainder of the nineteenth century.

Mary Collins Stansbury died in 1866. Unfortunately, her succession records have been lost. The plantation thereafter passed to the Stansbury children: Alfred; Julie Ann (Gulie), the wife of John P. Walter; Susanna (Susan), the wife of Robert McGlaughlin; Mary Ester (Hester); Emma Eliza; Martha Elizabeth, and Edwin James. Subsequently, Martha, Mary Ester, and Emma sold out their interests in the property (COB Q, Folio 550, St. Mary Parish; MB 23, Folio 797, St. Mary Parish; MB 24, Folio 277, St. Mary Parish). Edwin James Stansbury died in 1890, and his interest was inherited by his wife, Sophia Gouner, and his minor children Hester, Joseph, and Edwin (#2628, filed 4 June 1890, St. Mary Parish). Two years later, Edwin's brother-in-law, John P. Walter died (#2674, filed 21 April 1892, St. Mary Parish). Walter, who was Julie Ann Stansbury's husband, had been born in Louisville, Kentucky ca. 1812. He had served as the Mayor of Brashear City in 1865. Walter was a professional engineer; a notice in the Banner in 1871 stated that he was experienced in building and repairing machinery, engines, sugar mills and sawmills. Walter and his family may have lived in his in-laws' former residence, since all of his children were born on Bayou Ramos (John P. Walter, FF 391, Morgan City Archives). After his death, Walter's interest in Orange Grove was inherited by his widow Julie Ann, and by their children (Succession of John P. Walter, #2674, 21 April 1892, St. Mary Parish).

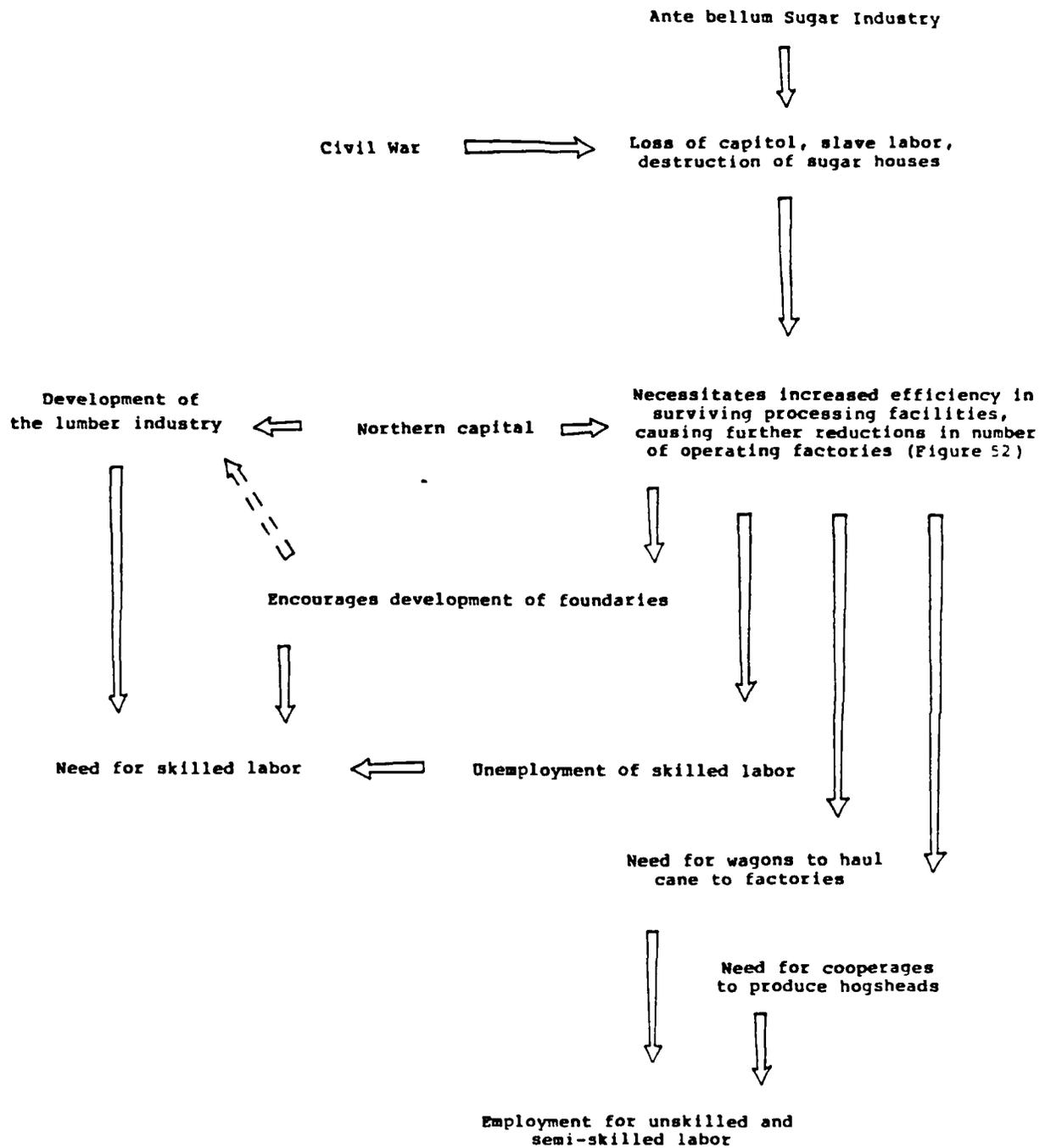


Figure 12. The Larroque Model of Industrial Development in St. Mary Parish after the Civil War (Pierre Larroque, personal communication 1984).

Thus, by the early 1890s, Orange Grove Plantation still was held by the children and grandchildren of Edwin and Mary Collins Stansbury. In May, 1894, Alfred Stansbury petitioned the courts for a sheriff's sale, since the property could not be partitioned and he no longer wished to hold the plantation in division (#9239, 17th Judicial District Court of St. Mary Parish). The plantation was purchased at the resulting 1895 sheriff's sale by Alfred Stansbury and by John Walter's heirs (COB EE, Folio 706, St. Mary Parish). Two years later, the property was sold for taxes, and it was purchased by Alfred B. Walter, John P. Walter, and Julie Stansbury's son (COB GG, Folio 701, St. Mary Parish).

The Expansion of the Lumber Industry

During the last quarter of the nineteenth century, which was the period of centralization of the sugar factories, the lumber industry expanded dramatically in the region. The lumber industry in Morgan City and St. Mary Parish had its beginnings in the ante bellum period. During the 1840s and 1850s, local sawmills provided fuel for steamboats. The laying of the railroads provided an additional impetus for growth, because lumber was needed both for fuel and for railroad ties (MS 26, Morgan City Archives). Millions of acres of virgin timber were made available to Louisiana lumbermen on March 2, 1849, when the United States Congress granted the state all swamp and overflowed lands unfit for cultivation. The Louisiana Legislature was to dispose of these lands, using the proceeds for the construction of levees and drains (Norgress 1947:986-987). Louisiana accepted the grant on March 28, 1850 (Norgress 1947:989). Five years later, the Louisiana State Legislature approved the sale of one million acres of swamp and overflowed lands in tracts of 40 to 640 acres. Each acre was to be sold for not less than \$1.25. However, little of this swamp land was purchased prior to the Civil War, since the swamps were considered inaccessible. After the War, the 1866 passage of the Homestead Act by the United States Congress effectively prevented the sale of the swamp lands. The act specified that lands in Louisiana, Mississippi, Alabama, Arkansas, and Florida only could be acquired through occupation and cultivation. However, this did not prevent the illegal harvest of timber:

...entry men would go to the land office and upon payment of a five dollar fee would enter the land, and despoil the timber with no intention of "proving up" for a homestead... the system prevailing favored the "trespasser" and the trespasser alone (Norgress 1947:975).

In 1874, only 65 of 4,040 entries had been proven up and received final certificates (Norgress 1947:995).

In 1876, the southern states voted in Congress almost unanimously to repeal the Homestead Act of 1866. The passage of the Timber Act of 1876 permitted the sale of almost unlimited quantities of forest land (Norgress 1947:996; MS 26, Morgan City Archives). The following year, Louisiana's swamp lands were divided into three classes: swamp lands, lands subject to overflow, and timber lands. Prices varied from 12.5 cents to \$1.25 per acre. By this date, the cypress swamps were considered economically exploitable timberland, rather than inaccessible wasteland. As had occurred in the sugar industry, lumbering was spurred by an influx of northern capital:

...you got people looking at government surveys, and bam! It hits them right in the middle of the eye, look at the cypress, look at the timber, look at the lumber! And I'm sure we must have had a hell of a lot of influx of capital... like Williams and Patterson, or Hughes; Hughes is in Jeanerette. Hughes is not a native of Louisiana, he's some Yankee that saw a government survey. That damn timber was there for \$2.00 an acre, and he knew how to market it... (Pierre Larroque, personal communication 1984).

Thus, during the last quarter of the nineteenth century, virgin cypress forest could be acquired for a minimal investment, and the deforestation of Louisiana's swamps was begun. Technological improvements during the 1880s and 1890s accelerated this process. One of the earliest methods of felling cypress was "girdling" the trees, or removing a ring of bark and sapwood to deaden the tree. The tree then was felled after the cypress needles had dried up and fallen off. This process made the trees more buoyant, and thus easier to pull through the small lumbering canals cut in the swamps (Prophit 1982:7-8; MS 26, Morgan City Archives). Girdling and felling the trees was timed in anticipation of the June water rise, which occurred during the high water stage on the Mississippi River; most of the felling was carried out during the Winter months. However, this process was inefficient, since some years the water did not rise enough to float the logs out of the swamp (Norgress 1947:999).

One solution to this problem was the introduction of the steam skidder in 1883. This technique involved stretching a cable between two high poles or trees. The felled timber then was dragged by this overhead cable to a waterway, and the logs were floated to the mill. This system necessitated large expenditures for canal construction, since the skidder, as originally developed, had a range of only 700 to 1,000 feet (Norgress 1947:1002). This limitation was overcome in 1889, when William Baptiste of New Orleans invented the pullboat, which had a range of one-half mile. Later, he improved this range to 3000 feet (Norgress 1947:1002). The pullboat was a barge mounted with a steam-powered cable drum. A canal was excavated into the swamp to

a preselected site, and the barge was towed to this location. The cable then was used to drag the logs to within a one-half mile radius of the pullboat. The logs then were rafted to the mill (Kniffen 1968:162). Shortly after the introduction of the pullboat, the steam skidder was improved.

In 1892, the Louisiana Red Cypress Company of Patterson first utilized the skidder to load a railroad car with logs. The utilization of narrow gauge railroads built through the swamps proved to be an efficient and inexpensive method of logging (Norgress 1947:1002). Sawmill machinery also improved at the end of the nineteenth century. Circular saws and rotary saws had been in use since 1855 and 1860, respectively. In 1889, the band saw was introduced, and it greatly increased the productive capacity of Louisiana's mills (Kniffen 1968:163-164).

The nineteenth century lumber industry, like the sugar industry, relied on steam engines for power, both in the mill and at logging sites. The new lumber industry had need for individuals with knowledge of boilers and steam engines. Larroque (personal communication 1984) feels that skilled laborers who no longer could find employment in the sugar industry filled this need. This permitted rapid growth of the lumber industry, because the labor base in the region was pre-adapted to its technology.

Some of the lumbermen and their families lived near their work site in "skidder towns." These temporary settlements consisted of dwellings, a school house, an ice house, and a commissary. The settlement was moved when all the lumber in a locale was exhausted (MS 26, Morgan City Archives). When a pullboat was used, boats with quarters, a kitchen, and offices were towed to the work areas for the employees (Kniffen 1968:162). The lumbering swampers included local inhabitants of French descent, Blacks, and experienced lumberjacks from northern and western states, all of whom worked in the lumber industry on a seasonal basis (Comeaux 1972).

The sugar and the lumber industries prompted other industrial development in the region. Both encouraged the growth of local foundries to manufacture processing machinery. The sugar industry, in particular, needed local suppliers of machinery parts, since mill rollers wore out and had to be replaced on a regular basis. Although such factories initially were established to meet the needs of the sugar industry, similar machinery and parts were utilized by sawmills. Like the lumber industry, parts manufacturing was able to draw on a pool of skilled personnel who already had familiarity with steam powered machinery.

Charles Morgan and the Growth of the Port of Brashear

The post bellum sugar and lumber industries also encouraged the expansion of regional transportation systems, since their continued growth was dependent on the efficient transport of

processed goods. In 1865, the New Orleans, Opelousas, and Great Western Railroad, commonly known as the "Opelousas Railroad," regained possession of its properties, but it was unable to recoup its wartime losses. In 1869, Charles Morgan purchased the bankrupt railroad at a U.S. Marshal's auction for \$2,050,000.00; he subsequently renamed it "Morgan's Louisiana and Texas Railroad" (Figures 13, 14, and 15). Permission to construct a wharf extension was granted to Morgan's Railroad by the Town of Brashear in an agreement dated August 3, 1869 (COB C, Folio 120, St. Mary Parish). Among other privileges, this grant entitled Morgan's Louisiana and Texas Railroad and Steamship Company to construct a double railroad track running along Berwick Bay to the proposed wharf extension and continuing northward to the foot of Everett Street. This track later was extended up Berwick Bay.

At that time, Brashear City was still the terminus of the railroad, and commerce and transportation further west necessarily were accomplished by steamboats. Morgan's fleet of steamships operating in this coastal trade included the steamers Matagorda, Alabama, I.C. Harris, Harland, Clinton, and St. Mary. The latter two weighed about one thousand gross tons each, and had "fairly good passenger accommodations" (Jungen 1930:1). Between 1870 and 1872, the Morgan Line added to its service the fourteen hundred ton side wheeler Hutchinson, the thirteen hundred ton steamers Whitney and Josephine, and the S.S. Gussie. The Whitney and the Josephine later were placed in the Cuban and Mexican trade (Jungen 1930:1).

Initially, the steamers entering the port of Brashear City were shallow draft vessels, since the channel into Berwick Bay limited access to vessels drawing less than seven and one-half feet. Once through the channel, however, Berwick Bay provided sufficient depth for the docking of deep draft vessels. In 1871, Charles Morgan undertook the dredging of the Berwick Bay Ship Channel in the Lower Atchafalaya River. "Morgan's Ditch," as the channel became known, was six miles long, from one hundred and twenty to two hundred feet wide, and ten feet deep. The dredging operation took two years, and it is reputed to have cost one million dollars. The results of this operation also were impressive. By 1873, seventeen Morgan Line vessels alone called from Brashear City to points along the Gulf Coast. In that year, the Congress of the United States made Brashear City a Port of Entry.

In 1876, the Louisiana Legislature renamed the town of Brashear "Morgan City," in recognition of Charles Morgan's contribution to the economic growth of the port. A census taken one year earlier showed about two thousand residents in the town. After Morgan's channel improvements, maritime trade and the transshipment of goods accelerated rapidly. In 1876, fully twelve per cent (2000 hhds.) of the St. Mary Parish sugar crop and fourteen per cent (3200 bbls.) of its molasses production cleared Morgan City in chartered schooners bound to Charleston and New



SCALE OF MILES
0 10 20 30 40 50

Figure 13. Excerpt from Colton's 1871 Map of the State of Louisiana and Eastern Part of Texas, showing Morgan's Railroad (Map Division, Library of Congress).

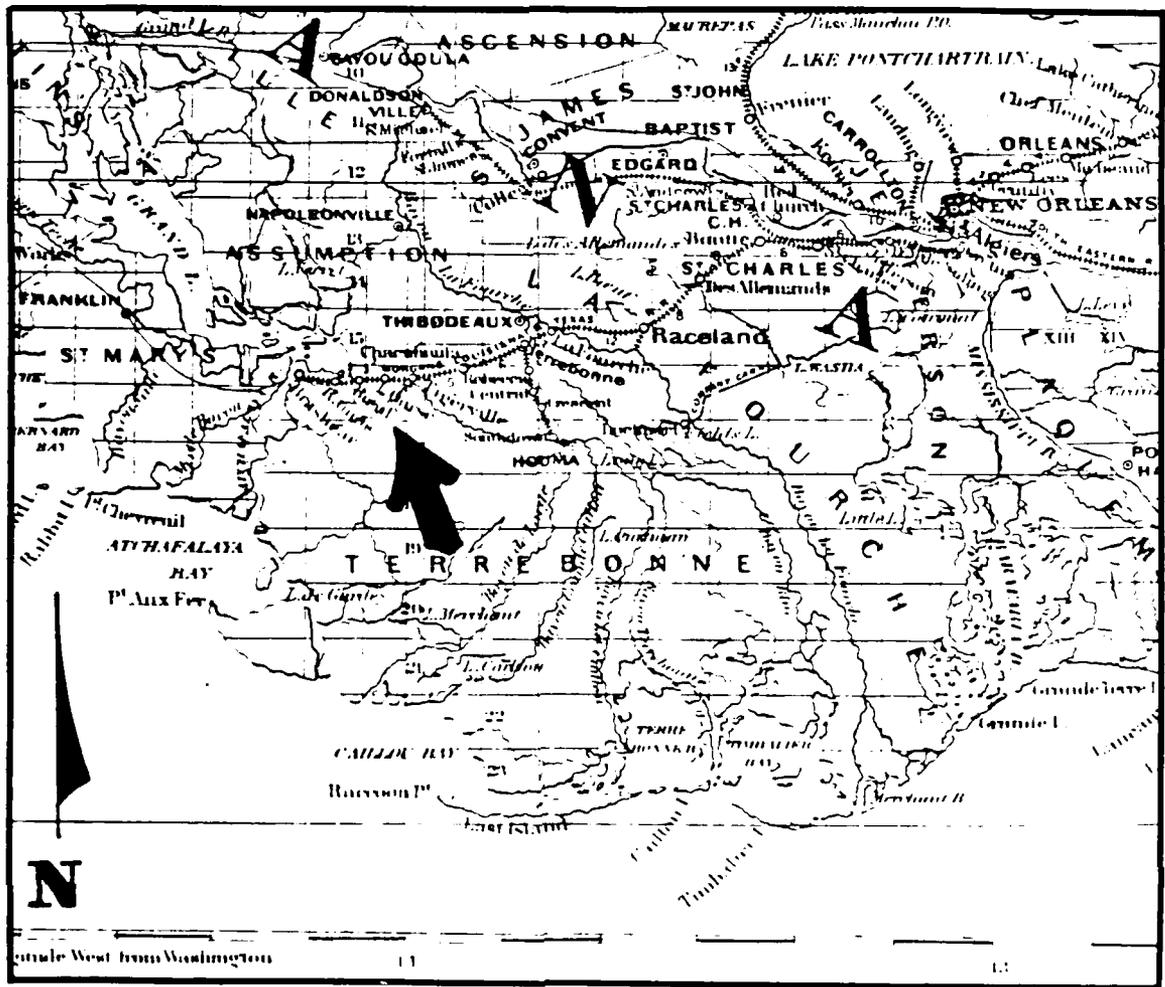


Figure 14. Excerpt from Asher and Adams' 1874 Map of Louisiana and Mississippi, showing Morgan's Railroad (Map Division, Library of Congress).

York. Timber reserved by the United States Government for ship building left Morgan City for Navy yards in Washington, D.C., Brooklyn, San Francisco, and Kittery, Maine.

In 1882, the first railroad bridge across Berwick Bay was completed (Figure 16). The first train from New Orleans to San Antonio arrived on February 6, 1883; its counterpart train from San Francisco arrived in San Antonio on February 7, 1883. Thus, through train service from New Orleans to California was begun, signaling the beginning of the end of Morgan City's major role in the steamship era. An 1891 report by Capt. W.L. Fisk to the Chief of Engineers noted that only two Morgan Line steamships were left in Morgan City; one of these traded with Texas ports at ten day intervals, while the other plied the Veracruz trade once every two weeks.

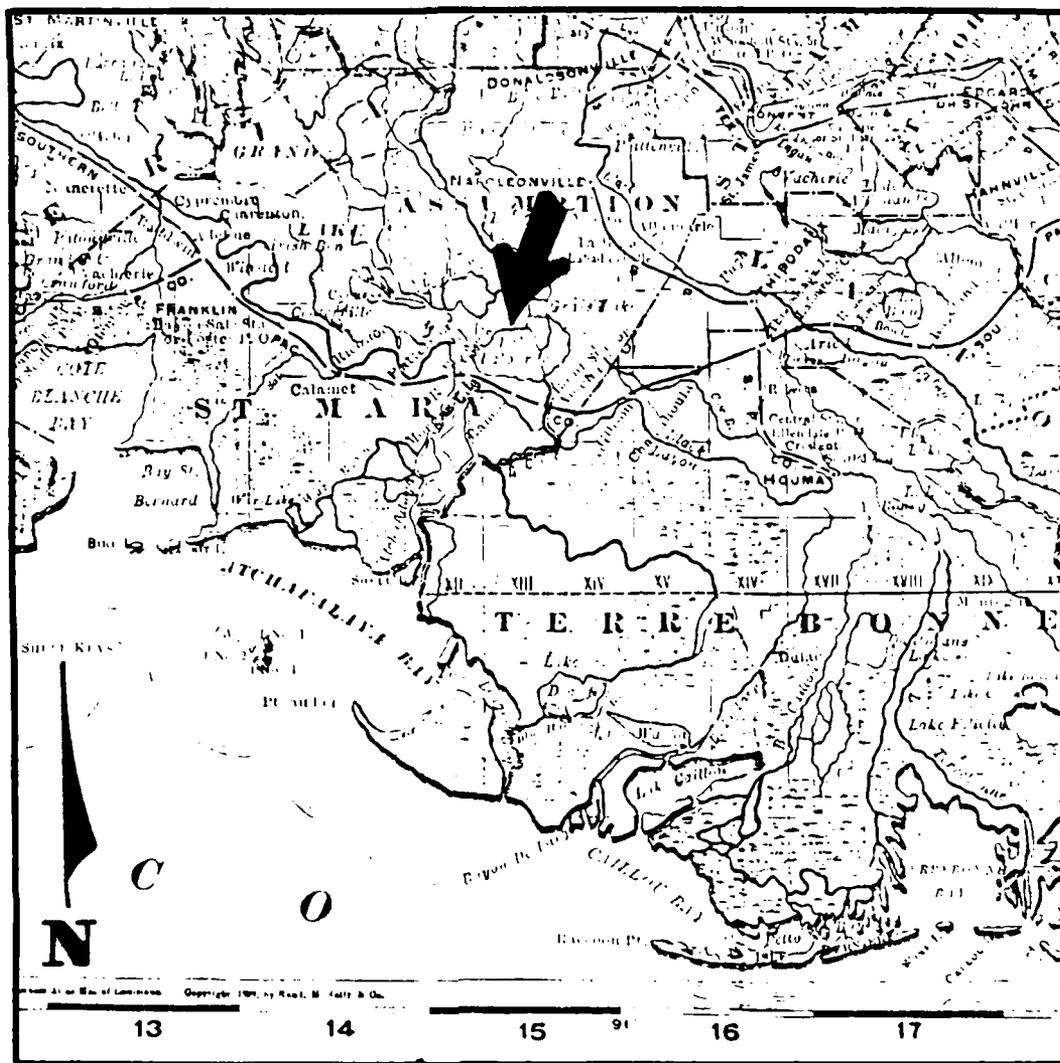
The Modern Period (1899-1985)

Exploitation of timber continued on a large scale during the early twentieth century; it ended only when large stands of virgin cypress had been depleted by 1930. Rail and water transportation networks continued to develop with Morgan City as their center. Development of the petrochemical industry in the Atchafalaya Basin and offshore Louisiana in recent years has increased Morgan City's importance for Louisiana's economy.

Land Tenure at Orange Grove Plantation and Vicinity

Despite the rapid growth of the lumber industry in St. Mary Parish during the late nineteenth century, there is no documentary evidence that the Stansbury family exploited the timber reserves on Orange Grove. In 1899, the timber on the land was sold to Willard O. Ditch, a local entrepreneur, who initiated lumbering on the property. In addition, Ditch attempted to acquire full title to all of the land in a series of acts (COB JJ, Folios 709-717).

Williard Ditch was born in 1869. His father, Ozenne Ditch, was a cattleman and butcher in Morgan City. Like his father, Williard raised cattle. He also ran a meat market, served on the City Council during the early 1900s, served as Secretary of the Board of Trade in 1909, was President of the Fire Department, and speculated in real estate (Figure 17) (Ditch, Ozenne and Family, FF 143, Morgan City Archives). In the early twentieth century, Willard developed Ditch's Annex to Morgan City, which was "centrally located in the residential section of the town" (Ditch, Ozenne and Family, FF 143, Morgan City Archives). Willard had the land subdivided into lots which he offered for sale for \$200.00 or more, and he intended to build a few residences for sale. He donated land for a public school, and offered to donate sites for factories. Willard laid in the streets and sidewalks in his subdivision, probably with the "large steam road-roller machine" he owned (Ditch, Ozenne and Family, FF 143, Morgan City Archives). He no doubt found numerous other applications for his steam roller, as he was the Chairman of the Streets and Landing Committee in Morgan City.



SCALES.

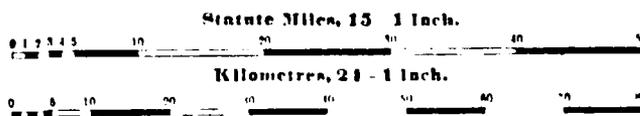


Figure 16. Excerpt from Rand McNally and Company's 1895 Louisiana Railroads Map, showing the continuation of the railroads to the west of Morgan City (Map Division, Library of Congress).

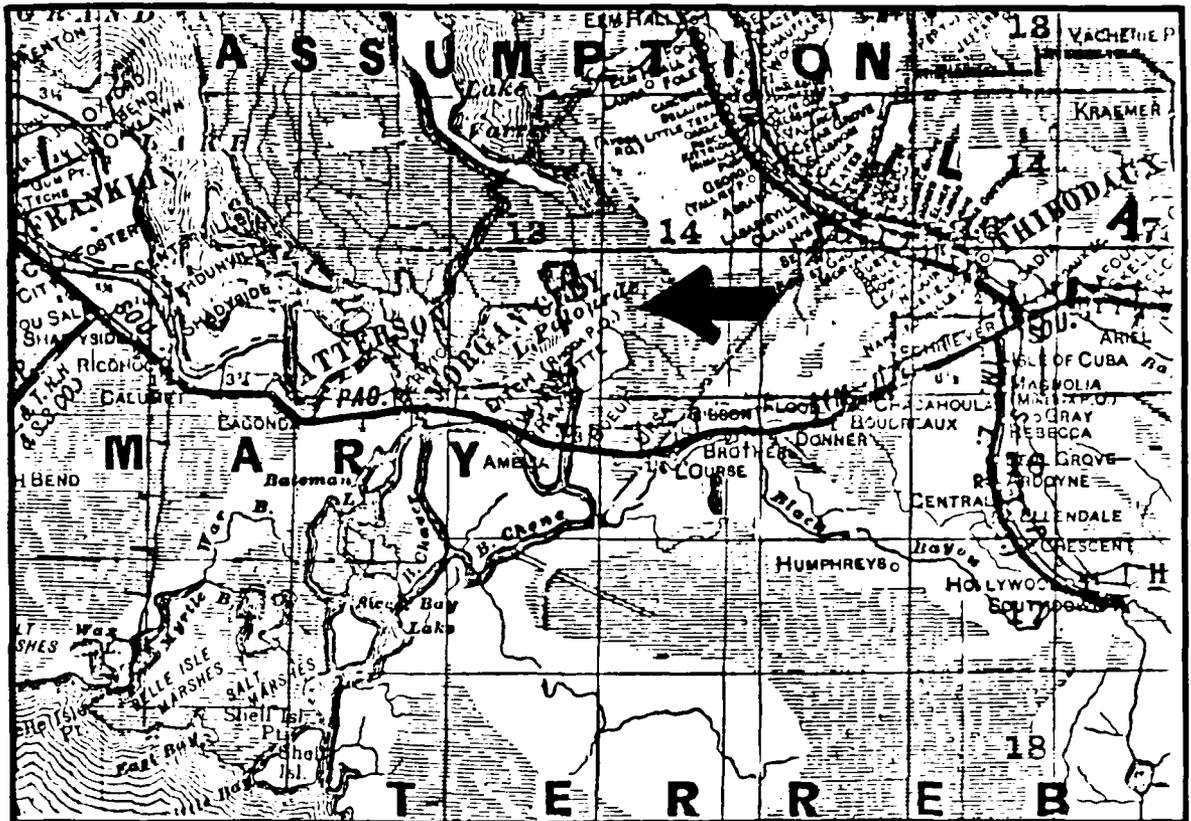


Figure 17. Excerpt from the Railroad Commission of Louisiana's 1914 Map of the State of Louisiana, showing the location of one of Ditch's landholdings (Map Division, Library of Congress).

During the same year in which he purchased the timber on the Stansbury property, Ditch decided to acquire the northern half of the northern half of Section 8 in T16S, R13E (Figure 18). This parcel includes a portion of the project area. This tract of swamp land was granted to Dr. Henry J. Sanders, the owner of Luckland Plantation, by the State of Louisiana on January 28, 1862. On May 20, 1895, Sanders sold the tract to N.B. Trellue, a shingle and lumber manufacturer based in Pattersonville (COB EE, Folio 384, St. Mary Parish). The Trellue Lumber Company apparently did not cut any lumber on this tract prior to the end of the nineteenth century, because on March 2, 1899, Willard Ditch filed Homestead entry No. 19890 on the tract. Ditch gave notice of his intention to submit final proof on June 25, 1900, but the Trellue Lumber Company filed a protest. They stated that the land always had been a cypress swamp that was subject to overflow, was unfit for habitation, and was without value except for the cypress on the property. They also claimed that Ditch did not live on the property, but that he lived nearby in Morgan City. Trellue contended that Ditch made the entry only to acquire the timber, and that he sold the stumpage to the Cotten Brothers Cypress Company, the owners and operators of a pullboat. Ditch, in turn, claimed that he had built a house on a high ridge of land in the swamp and that he was cultivating the land. He stated that he lived alone on the land because his wife was an invalid who lived elsewhere, and his young daughter was away at school. The Department of the Interior originally decided in favor of Ditch, but the Trellue Lumber Company won an appeal in 1902. Two years later, the Trellue Lumber Company sold the tract back to Sanders (COB RR, Folio 561, St. Mary Parish), and it subsequently was held by the Sanders family until 1914 (COB 3-I, Folio 453, St. Mary Parish).

It appears that on July 11, 1899, Ditch sold his interests in the Stansbury heirs' property to the children of Julie Stansbury and John P. Walter: Alfred, Joseph, John, and Mary (Mamie). The purchase was described as:

All the lands acquired from the Stansbury heirs, east of a line running in a straight direction from Bayou Boeuf along Major Johnson's line and continuing in a straight direction to the Lake, through the Stansbury tract: Bounded North by Lake Palourde, East by lands of Gus Drews and E. William Dreiholtz, West by lands retained by William O. Ditch and lands of Major Johnson, and South by school section and Bayou Boeuf (Figure 5) (COB JJ, Folio 717, St. Mary Parish).

Ditch reserved the right to use the road from Bayou Boeuf parallel to Major Johnson's land. He also reserved the right to remove the cypress timber from the land, and to use the wood as fuel to operate a pullboat (COB JJ, Folio 717, St. Mary Parish).

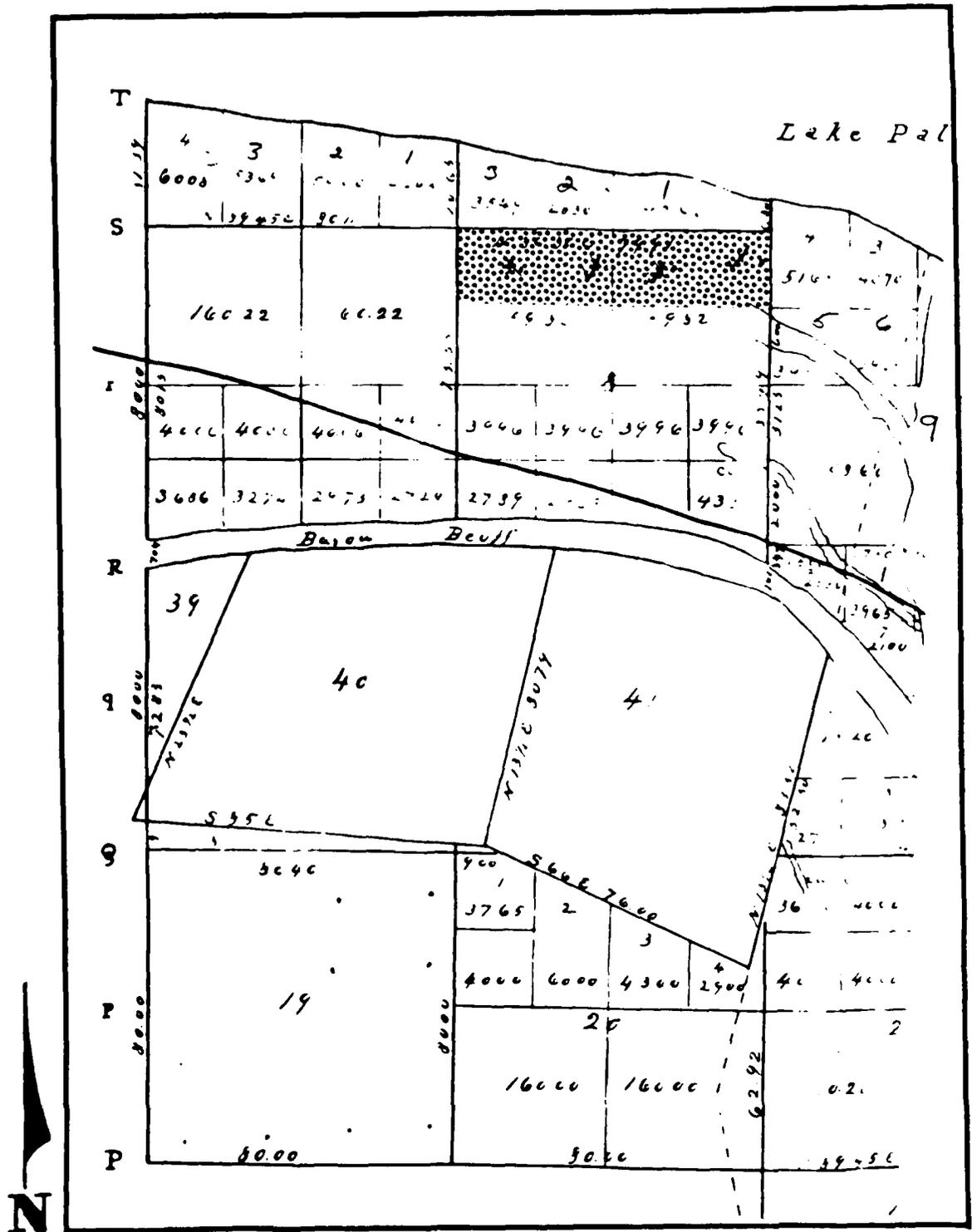


Figure 18. Undated plat showing the northern half of the northern half of Section 8 in T16S, R13E.

The following year, Ditch purchased a one-fifth interest in this property from the Walters (COB LL, Folio 145, St. Mary Parish). A few months later Ditch sold his interest to Joseph S. Walter, giving the latter a two-fifth interest in the property (COB LL, Folio 230, St. Mary Parish). The Walters then leased the land to B. O'Brien (COB LL, Folio 290, St. Mary Parish). Mary, or Mamie Walter was married to a Frank O'Brien, so B. O'Brien probably was a relative.

On June 5, 1902, the Walters partitioned their property. The resulting distribution is shown in Figure 5 (COB NN, Folio 227, St. Mary Parish). The following year, Joseph Walter sold Section 9 to William Adams, reserving for himself a narrow strip of land on the western end of the property (COB NN, Folio 734, St. Mary Parish).

On July 11, 1899, the same day he sold interests in the above lands back to the Walters, Ditch sold the cypress timber on the remainder of the property (as well as that on the Trellue Lumber Company's tract which he was at this time allegedly "homesteading") to Albert M. and Herbert M. Cotten. Ozenne Ditch, Willard's father, sold timber on some of his swamp land in this same transaction. The consideration for the sale was \$1.50 for every thousand feet of lumber cut. The agreement stated that:

...the sale herein embraces the right of the said Cotten Bros. to go upon the land and take therefrom the timber in any way they may see proper either by pulling, boating, floating, hauling or in any other manner provided the same is pulled to Lake Palourde or Bayou Ramos, and provided further that the said Cotten Bros. shall complete this contract and take from the above described lands all the trees thereon as aforesaid not later than five years from the date of this contract. It is further agreed and understood that the said Cotten Bros. shall begin to prepare said timber for taking same off the land within a reasonable time and will make every effort to commence pulling timber by the first day of September, 1899. It is further agreed that the said Cotten Bros. shall pull all timber as aforesaid which does not exceed a distance of thirty-five hundred feet from the place of anchoring their pull-boat and, in case there are any trees or timber on said land which are at a greater distance than thirty-five hundred feet from where a pull-boat shall be left at the option of the said Cotten Bros. whether they shall pull the same. The said O. and W.O. Ditch each further declares that the said Cotten Bros. shall have the right to cut from the said land wood in any quantity for firing the boilers of their pull-boat or

other machinery necessary for pulling or moving said timber from said land, free of charge. And O. and W.O. Ditch further declare that they bind and obligate themselves to cut two canals from Lake Palourde - one to run out to the North line of Section 1, T16S, R13E, and the other to the North line of Section 7, T16S, R13E, provided these canals can be cut for the sum of one thousand dollars, that is, five hundred dollars for each canal, and in case said canals cannot be cut for five hundred dollars each, then the said O. and W.O. Ditch agree to invest that sum in each canal and stop when said sum is exhausted. The canals shall be of sufficient width and depth to allow the free use of the pull-boat, in floating timber; and said canals shall be completed within twelve months of the date of this contract. It is further agreed that the said Cotten Bros. shall advance sufficient money to pay off the hands employed in cutting the canals, and said advances shall be deducted from the price of the timber as above stated taken from the lands above described (COB JJ, Folio 720, St. Mary Parish, sic throughout).

In 1899, Cotten Brothers was a relatively small operation; only the two brothers were named in this contract. By 1904, they had incorporated as the Cotten Brothers Cypress Company. Their mill was located in Morgan City at the foot of Federal Avenue. In 1908, a subsidiary company, the Louisiana Hardware Lumber Company, was established. By 1909, Cotten Brothers' production had risen to fifteen million feet annually, and they were shipping lumber to the United Kingdom, Baltimore, New Haven, New York, Canada, Galveston, Mexico, and Central America (MS 26, Morgan City Archives).

The Cotten Brothers Cypress Company was not the only large lumbering concern operating in the vicinity of the project area at this date. The Ramos Lumber Company was located on Bayou Ramos at Bayou Boeuf, on land that had been held at one time by Mary Collins Stansbury (COB U, Folio 201, St. Mary Parish). Their plant had a daily capability of fifty thousand feet, and they manufactured lumber, shingles and lathes. The town of Ramos (Figures 19 and 20), which included a store, a hotel, a school, and cottages, was built by and owned by the Ramos Lumber Company (MS 26, Morgan City Archives).

In addition to selling timber from their swamp land, Willard Ditch and his father Ozenne rented their agricultural lands for cultivation. Most of these rentals were made to Italians. By the early 1900s, Italians rapidly were replacing black workers on sugar plantations in the region (Scarpaci 1972:41). The Italians

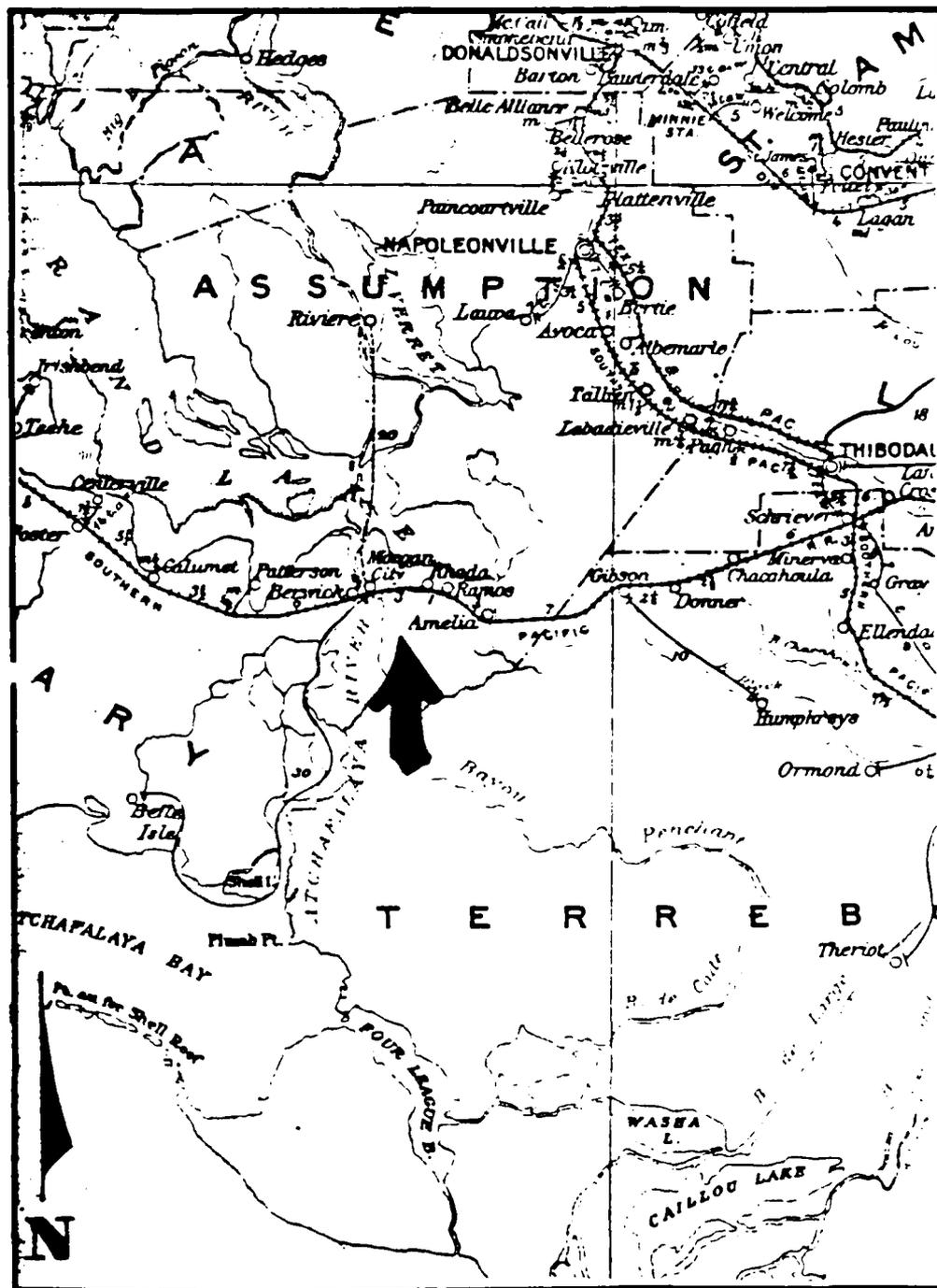


Figure 19. Excerpt from Von Haake's 1902 Post Route Map of the State of Louisiana, showing Ramos (Louisiana Collection, Tulane University Library).

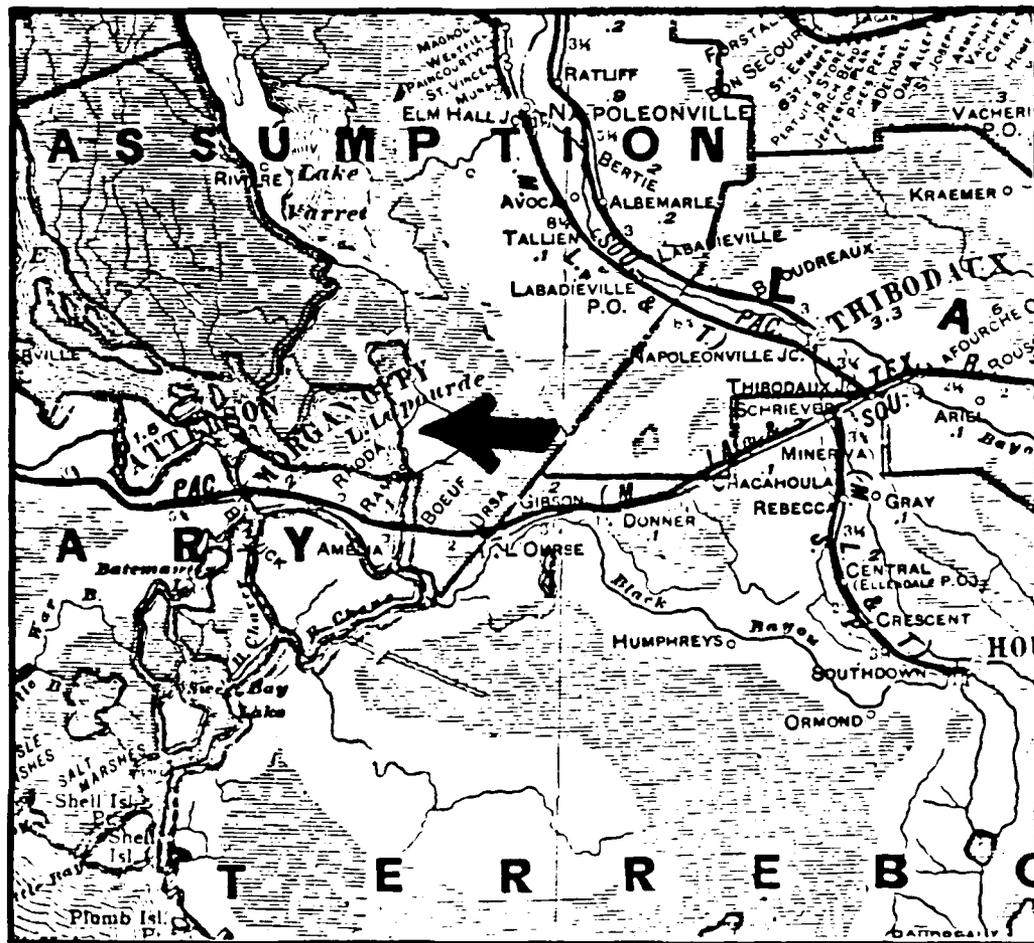


Figure 20. Excerpt from Cram's 1905 Map of Louisiana, showing Ramos (Map Division, Library of Congress).

were industrious, and their thriftiness generally prevented them from overwhelming themselves with debt. In 1905, fifty-nine per cent of Italian day laborers were debt free, as opposed to only three per cent of the black laborers (Scarpaci 1972:40). By saving money, the Italian day laborer could afford to rent land and improve his economic situation. Many landowners were willing to rent land to the Italians. Even owners of sugar estates, who preferred to operate their plantations with wage laborers, were willing to let Italian tenants grow cane and pay to use the sugar house:

We give them free quarters, free fuel, cheap medical attention and are glad to sell them tracts of land or give them land to work on shares. If they want a garden patch for their own use, we let them have it free. In fact, there is no inducement calculated to secure their permanent connection with the plantation that is withheld from them (Scarpaci 1972:137).

Many tenants saved sufficient money to buy land.

The Ditches leased small parcels of twenty to forty acres. Although precise locational information was not provided in these leases, the contracts included those with Nugio Liggio and Company (COB JJ, Folio 794, St. Mary Parish), Mariana Miele and Leoluca Lepalerna (COB KK, Folio 690, St. Mary Parish), Louis Castro (COB XX, Folio 398, St. Mary Parish), Ludice Cascio (COB ZZ, Folio 447, St. Mary Parish), Gaetano Dimicele (COB ZZ, Folio 449, St. Mary Parish), and Carlo Marino (COB ZZ, Folio 450, St. Mary Parish). In addition, some Italians purchased land in the area. In 1906, William Adams sold Section 9 in T16S, R13E to Sam Siracusa (COB QQ, Folio 124, St. Mary Parish). Joseph Walter subsequently sold Siracusa the strip of land he had reserved from his sale to Adams and the adjacent 220 feet front of Section D (Figure 21) (COB YY, Folio 164, St. Mary Parish). This provided Siracusa with ownership of all of Section 9.

In June of 1905, Willard Ditch sold his brother, Ernest, thirty acres of land known as the "Cattle Pen Tract." This property was described as being bounded on the south by the public road, on the east by B. O'Brien, on the north by O. Ditch and on the west by Ralph Squires. The property was located in the southern portion of Section 7, adjacent to Survey Area C (Figure 22). Also conveyed in this same act of sale was a second parcel outside of the project area (COB TT, Folio 174, St. Mary Parish). Ernest sold the Cattle Pen Tract back to Willard six months later (COB ZZ, Folio 562, St. Mary Parish).

Willard Ditch sold additional acreage to his father in 1909. The land conveyed included the Cattle Pen Tract, and three other parcels

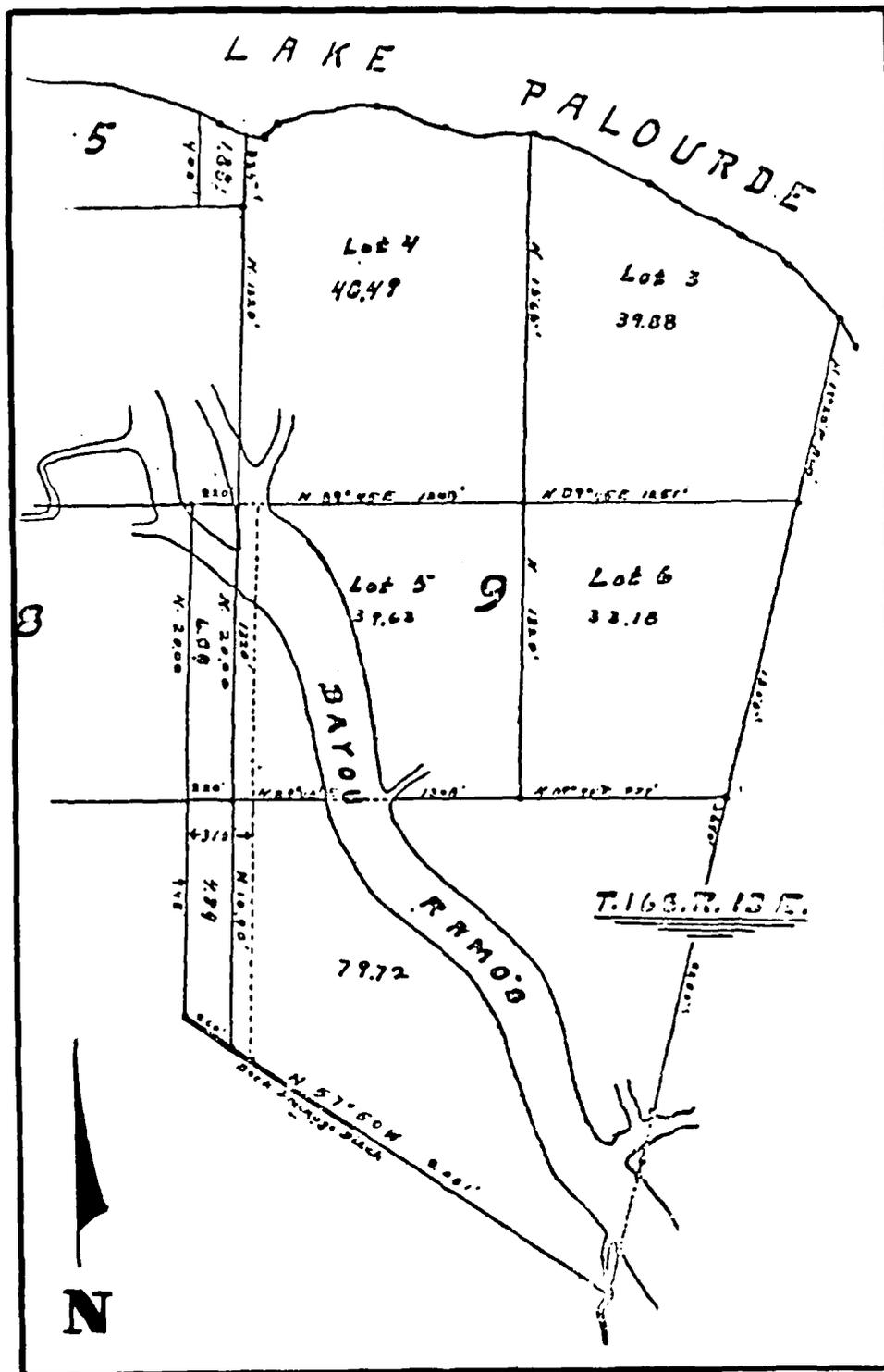


Figure 21. 1913 plat showing land owned by Sam Siracusa and later by A.F. Storm (COB 3-I, Folio 181, St. Mary Parish).

No. Two. A certain tract of land lying and being situated in the said parish and state, known as the Stansbury tract, containing one hundred and sixty acres, bounded North by Government lands, East by land of Walthers, South by land of B. & P. O'Brien and West by land of Vendee.

No. Three. A certain tract or parcel of land lying and being situated in the said parish and state, containing one hundred and eighty acres, more or less, known as the Stansbury swamp, bounded North by Lake Palourde, East by land of Walthers, South by said Government lands and West by land of Drews.

No. Four. That strip of land, forty feet in width, running from Bayou Boeuf to the tract herein described as No. Two. Bounded on the East by the land of Walthers and on the West by lands formerly owned by Major Johnson (COB YY, Folio 124, St. Mary Parish).

Willard retained ownership of the "lumber contained in the cattle pens, now upon the cattle pen or first herein described tract" (COB YY, Folio 124, St. Mary Parish). This suggests that Willard had been using this property for timber storage, rather than pasture.

The following year, Ozenne Ditch sold the timber on the above land and other properties to Cotten Brothers Cypress Lumber Company for \$550.00 cash in hand. Cotten Brothers was given five years to clear the timber from these lands (COB 3-B, Folio 364, St. Mary Parish). Ozenne sold a portion of this land to Alfred F. Storm in 1913 (Figure 22). Ozenne reserved the timber for himself in this sale. Despite the fact that the Cotten Brothers still had one remaining year to clear the timber from this property (COB 3-B, Folio 364, St. Mary Parish), Ozenne contracted with his son, John Ditch, to remove the cypress and tupelo gum from property in 1814. Ozenne agreed to rent John use of his wood saw, his engine, and his splitter, and John was to pay him \$6.50 for each thousand feet of timber felled (COB 3-K, Folio 178, St. Mary Parish).

Ozenne Ditch then exchanged timber rights with Cotten Brothers, presumably to compensate the company for any losses sustained by renegeing on the final year of their contract. This agreement was to last for seven years (COB 3-K, Folio 180, St. Mary Parish). In 1912, Willard Ditch sold the timber on all of his property on Tiger Island, including the timber on the lands owned by the Walters, to the Cotten Brothers Company for \$100.00 cash in hand. The lumber company was given three years to remove the timber (COB 3-G, Folio 90, St. Mary Parish). In addition, Ozenne Ditch sold his remaining acreage in Section 7, T16S, R13E to the Cotten Brothers Company in 1915 (COB 3- M, Folio 196, St. Mary Parish).

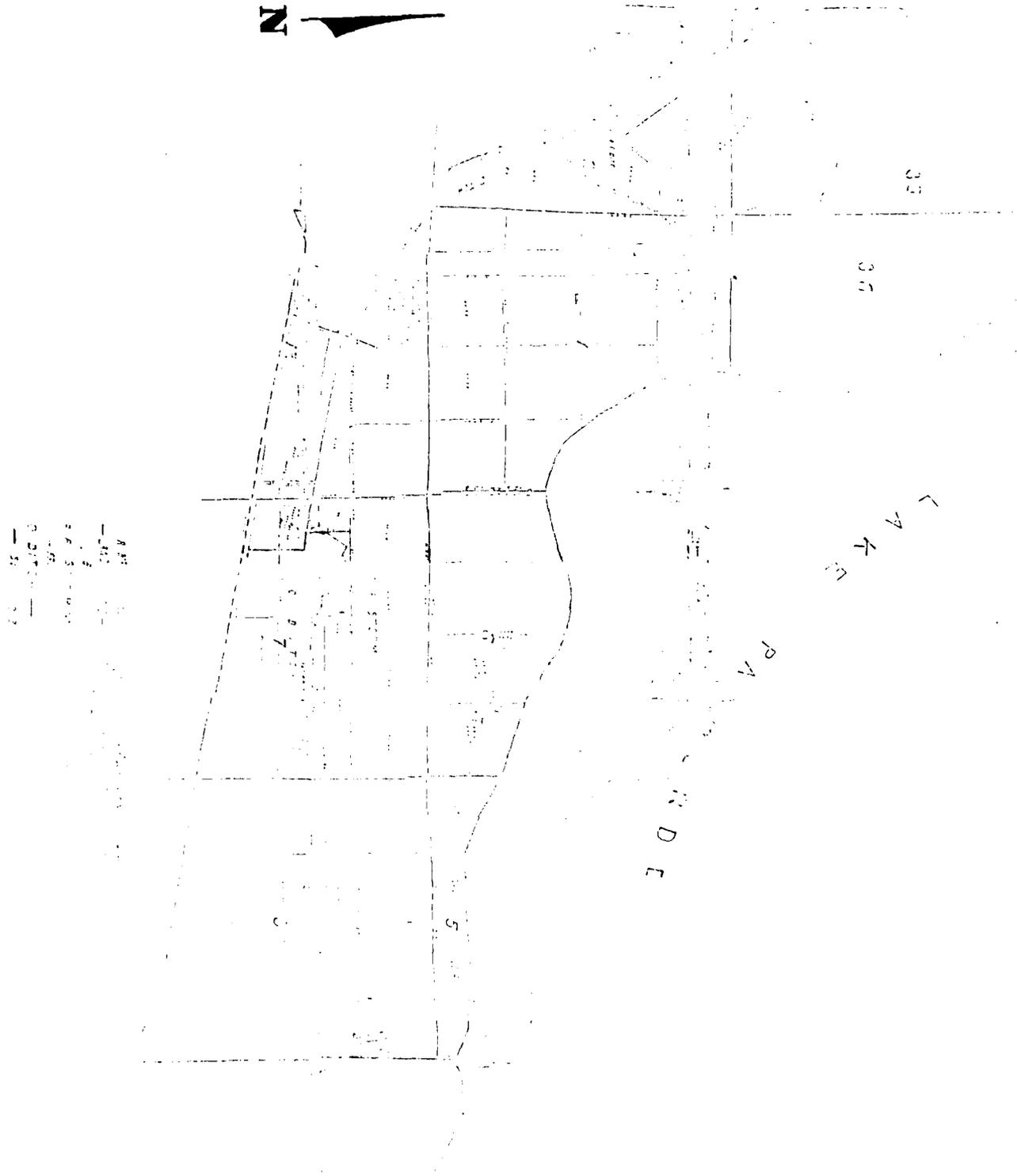


Figure 22. 1913 plat showing land sold to A.F. Storm in 1913. Note the location of the Cattle Pen Tract in the southern portion of Section 7 (COB 3-1, Folio 109, St. Mary Parish).

The following decade witnessed the decline of Louisiana's lumber industry. A drought dried up the water in the swamps in 1924. Two years later a hurricane destroyed much timber, and the fallen trees blocked the lumber canals. The flood of 1927 further disrupted transportation, and Louisiana's cypress supply was depleted by the early 1930s. Coincidentally with the great depression, Louisiana's lumber mills began to close (MS 26, Morgan City Archives).

The Organization of the Morgan City Company (1917)

Alfred Storm purchased Sam Siracusa's land in 1913 (Figure 21) (COB 3-I, Folio 181, St. Mary Parish). That same year, Storm acquired all of Section 36 in T15S, R12E, and part of the northern portion of Section 1 in T16S, R12E (COB 3-E, Folio 330, St. Mary Parish). In 1917, Storm sold all of this property, including several other tracts of land on Tiger Island, to the Morgan City Company (COB 3-R, Folio 281, St. Mary Parish). The Morgan City Company, Inc., was a development company incorporated in 1917 for the purpose of developing land adjoining Morgan City (Incorporation Book 1, Folio 216, St. Mary Parish). The purposes of the corporation were:

To purchase, buy, hold, lease or otherwise acquire and to sell or otherwise dispose of, lands, tenements or other property, movable or immovable, or both; to purchase, or otherwise acquire, and to hold, reclaim, improve and develop swamp and marsh land, or both; as well as all other lands or property; to farm and cultivate lands and property, either by or for itself, or others, and to engage in agricultural pursuits generally, and to operate any manufactory for the purpose of disposing of its agricultural products; to engage in the buying, raising, improving, breeding and selling, either alive, slaughtered, or packed, of live stock of all kinds; to own operate warehouses, granaries, sugar refineries, or such other manufactories as it may see fit; to buy and sell timber and lumber and all kindred products, and to operate sawmills or other wood manufactories, and buy and sell, or otherwise handle the products of the same; to own and operate commissaries and to carry on a general mercantile business, either wholesale or retail, or both; to conduct a general real estate business, and to lay out towns, or town sites, sell and dispose of lots, and to construct all desirable improvements, drainage, sewerage, or all other kinds in connection therewith; to lay out and construct, or acquire roads of all

kinds, ferries, bridges, canals and all appurtenances, install pumping plants, electric lights, gas or water works, on lands owned or held by it; or bought or reclaimed, and to operate any of all of such improvements; to buy, acquire, hold, own and operate such steamboats, barges or other water craft, as it may desire for its private purposes, or may find expedient; to erect all dwellings or other buildings on its property, real, personal, or mixed, necessary or incidental to the carrying out of the above described purposes, or to loan money on property, or to borrow money on its lands, or real estate, tenements, or other property, to mortgage and hypothecate the same, and to issue bonds, notes, or other evidences of indebtedness, and generally, to have such powers and to do and perform all such other and further acts, whether directly enumerated above or not, and as may be permitted by law, to be embraced within the purview of one corporation holding the powers set out above, as well as to do, have and perform all acts necessary or incidental to the enumerated powers (Incorporation Book 1, Folio 216, St. Mary Parish).

The Morgan City Company also acquired the northern half of the northern half of Section 8 in T16S, R13E in 1917 (COB 3-R, Folio 292, St. Mary Parish), as well as much of the undeveloped land of Orange Grove Plantation (Roland Stansbury, personal communication 1985). Eventually the company's holdings achieved about four thousand acres. World War I interrupted development plans. However, by the 1930s, the company was expressing a hope that "something of productive and constructive nature will be done with this local tract of land which is apparently so closely related to any development which takes place in or about Morgan City" (Frank L. Prohaska Scrapbook, MS 5, Morgan City Archives). In 1926, the Morgan City Company donated land for a park on Lake Palourde (Morgan City Review, April 24, 1926). That tract now is occupied by Lake End Park. Much of the company's land, including the majority of the project area, remains undeveloped today.

Summary of Historic Themes Significant to the Region

The vast majority of the project area was undeveloped cypress swamp throughout the nineteenth century. The timber in these areas first was exploited at the turn of the century, but no evidence of lumbering activities was found during archeological survey. Since the discovery of petroleum in the Atchafalaya Basin and offshore Louisiana, Morgan City has become a major economic

AD-A163 637

CULTURAL RESOURCES SURVEY OF THE MORGAN CITY AND
VICINITY HURRICANE PROTE. (U) GOODWIN (R CHRISTOPHER)
AND ASSOCIATES INC NEW ORLEANS LA R C GOODWIN ET AL.

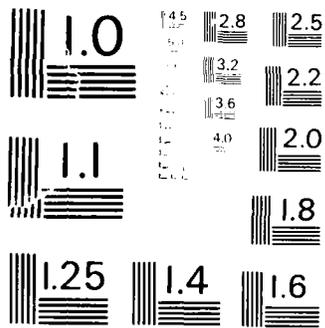
2/3

UNCLASSIFIED

38 DEC 85 COELMN/PD-85/85 DACN29-84-D-0029 F/G 5/6

ML





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 963

center in Louisiana. Although oil-related industries have boomed in the Morgan City area, development has focused on rail and water transportation networks.

Several major themes identified in the history of St. Mary Parish include the growth of the sugar industry, the development of water and rail transportation in the region, the growth of Morgan City, and the development of the lumber industry. The development of the cypress lumber industry is the significant theme that applies most directly to the project area, although the majority of the survey area remains undeveloped. This land was utilized only during the lumber boom period, from ca. 1880 to ca. 1930, and some timber land was exploited for a briefer period. Industrial lumbering on the Stansbury property did not occur until 1899.

Other major historic themes apply to the project area only indirectly. The development of the town of Morgan City was assisted by the lumber industry, in terms both of economic and population growth. Similarly, the development of a regional transportation network was crucial to the success and growth of lumbering. The need for timber for fuel and railroad ties encouraged the lumber industry during its early stages. As we have seen, the sugar industry supplied both skilled and unskilled labor for lumbering, and portions of the survey corridor were formerly part of sugar plantations. These areas, however, were not utilized for cane agriculture; at most, they supplied timber for the fueling of the sugar mills. Thus, the historic themes significant to the region relate to the project area primarily through their relation to the commercial exploitation of the extensive timber stands formerly located within the survey corridors.

CHAPTER 7

FIELD INVESTIGATIONS

During May - July, 1985, field investigations were conducted within the Morgan City and Vicinity Hurricane Protection Project area. Field work consisted of pedestrian survey and reconnaissance, topographic mapping, and subsurface testing. Archeological testing at the Goat Island site (16 SMY 1) took the form of four 1 x 2 m excavation units; this testing program was designed to enable the evaluation of 16 SMY 1, applying the National Register criteria.

Survey Methodology

Pedestrian survey was performed by four surveyors, each of whom was assigned an individual transect with a maximum width of 25 m (82'). A subsurface shovel test regime was implemented at intervals of 50 m (164'). The pedestrian survey provided virtually one hundred percent coverage of the project area, with the exception of a narrow (approx. 100' wide), inundated corridor paralleling the lakeside edge of the existing levee in Area B. Several previously recorded sites outside of the project area (16 SMY 133, 16 SMY 136, 16 SMY 140) along the west bank of Bayou Ramos were flooded, and thus inaccessible to update survey. No new sites were discovered during pedestrian survey and systematic subsurface shovel testing. Two separate standing structures, a barn and an abandoned shed, are located within Area A (Figure 23). However, these structures are not shown on any available historic maps, and they do not have sufficient age for National Register eligibility. They appear to post date the ca. 1970 land clearing operations which occurred in Area A (Mr. David B. Graf, personal communication 1985).

During the pedestrian survey a Rangia shell deposit was discovered in Area A, west of Highway 70 and adjacent to the west edge of an unnamed canal. Further testing determined that this deposit represented modern dredge spoil; most of the bivalves were unopened, and no artifacts were present. Local informants (Mr. David B. Graf, personal communication 1985) believe this shell heap to derive from local road construction activities.

An extensive late twentieth century garbage dump was noted west of Highway 70 in Area A, approximately 250 m northeast of the shell heap discussed above. This dump resulted in part from municipal land fill operations, and it contains a large number of whole automobiles and large appliances.

16 SMY 1: The Goat Island Site

Due to the lack of new sites, additional testing was concentrated at the Goat Island site (16 SMY 1). Previous investigations at this site include a surface collection performed by Claire Brown in 1933, with subsequent updates or citations in

McIntire and Saucier (1952), McIntire (1958), Weinstein et al. (1977), and Weinstein et al. (1978). Originally reported by McIntire and Saucier (1952) as 700' long, 50-75' wide, and 1 1/2' high, Weinstein et al. (1978:73) describe the site as:

Situated on what was originally the natural levee of this unnamed bayou, a midden of Rangia shell extends for a distance of approximately 300-325 m on both banks of the bayou. Rangia, was also observed in the cut bank of the drainage canal where it follows the old course of the bayou, indicating that part of the site was probably destroyed in the construction of the road.

This description coincides with the present survey's findings; however, the midden appears to contain a discontinuous horizontal stratigraphy.

The site lies primarily in a wooded (wet hardwood) area representing forest re-growth after ca. 1970 land clearing operations. Floral species in the area of 16 SMY 1 formerly included willow, bay, swamp maple, myrtle, cypress, tupelo gum, pecan, palmetto, and button bush. There probably was an understory of lizard tail, delta potato, cut grass, and cattail. Currently, cypress, swamp maple, and palmetto are present. Most vegetation is secondary, since the site area has been cleared and burned several times in recent years.

At present, the site consists of a discontinuous Rangia shell midden. Boundaries were determined on the basis of surface distribution of Rangia shells which were observed during a pedestrian survey. Surface concentrations vary in density, and they appear to be associated with a network of small relict distributaries. A topographic map of the Goat Island site (16 SMY 1) was executed, showing the location of major natural and artificial features, standing structures, excavation units, and the approximate site boundary (Figure 23).

Four 1 X 2 m test excavation units were excavated at the Goat Island site. These excavation units were designed to provide information on horizontal and vertical stratigraphy of the site, and to determine whether subsurface deposits exhibited contextual integrity. Because subsurface testing had never been undertaken, placement of units in discrete areas also was designed to provide adequate coverage of the larger site and to characterize accurately the nature of archeological deposits. Units were located both within and around the major surface concentrations of shell. Excavation Unit 1 was located within the southernmost concentration of shell; Excavation Unit 2 was located within the central concentration. Excavation Unit 3 was placed in a less dense concentration on the western side of a road that cuts through the site; Excavation Unit 4 was placed on the eastern side of the road, within the same concentration. Locations of the four 1 x 2 m

test excavation units are indicated on Figure 23. Vegetative covering of the unit surfaces consisted of vines, ivy, briars, blackberry bushes, and palmetto. The units were excavated in 15 centimeter arbitrary levels below ground surface.

The subsurface excavations revealed that the thickness of in situ midden and its depth below overburden deposits varied across the site (Figures 24 - 27). Nevertheless, shell midden deposits generally were thin (5 - 10 cm); in situ midden contained ash, charcoal, and calcined shell. In all four test excavations, the midden was underlain by a sterile clay substrate at between 10 - 30 cm below surface. The midden material in Excavation Unit 3 was found to be disturbed, apparently by adjacent drainage ditch and culvert excavations. Samples of Rangia shell were collected from levels II and III of Excavation Unit 1, from levels I and II of Excavation Unit 2, and from levels I and II of Excavation Unit 4. The samples were collected for subsequent laboratory analysis to elucidate size distributions between stratigraphic levels and units.

Soil groups in the study area primarily are comprised of swamp clays and mucky clays. These poorly drained soils originate from Mississippi River materials and mixed Mississippi River and Red River alluvium. Water is near or at the surface much of the time. These soils lack the thick organic surface layer characteristic of swamp mucks and peats. The absence of an "O" Horizon can be seen in profiles of excavation units 2, 3, & 4 at the Goat Island site (Figures 25, 26, & 27). These soils primarily are level and located along natural levee ridges where they occur in depressions fed by surface water run-off. Elevations range from sea level to three feet. Frequent inundation of large areas by tidal waters and stream overflow also occurs.

An ash and shell lens four to five centimeters thick and 15 to 20 centimeters below ground surface, occupied the eastern third of Excavation Unit 2 (Figure 25). Two one-liter samples of this ashy matrix were extracted from the center of the ashy area, and they were bagged for radiocarbon assays. A charcoal lens composed of burnt clay and charcoal lay below the ashy matrix, 21 centimeters below ground surface (Figure 25). The lens, which rested directly on sterile clay, was devoid of artifacts and vertebrate faunal remains. Charcoal samples for radiocarbon assay also were extracted from the shell midden matrix that characterized Level 1 of Excavation Unit 4.

Weinstein et al. (1978:74) report that Claire Brown, in 1933, collected 103 sherds at the Goat Island site; that collection represents the largest sampling of the site. During Weinstein's 1977 survey, a single sherd of Coles Creek Incised, var. unspecified, was collected from the surface. During the present survey, three additional sherds were recovered. Two of these were found in Level 2 of Excavation Unit 2; the third was found in Level 2 of Excavation Unit 1. The three sherds were Baytown Plain, var. unspecified. Ceramic sherds collected at the Goat Island site by

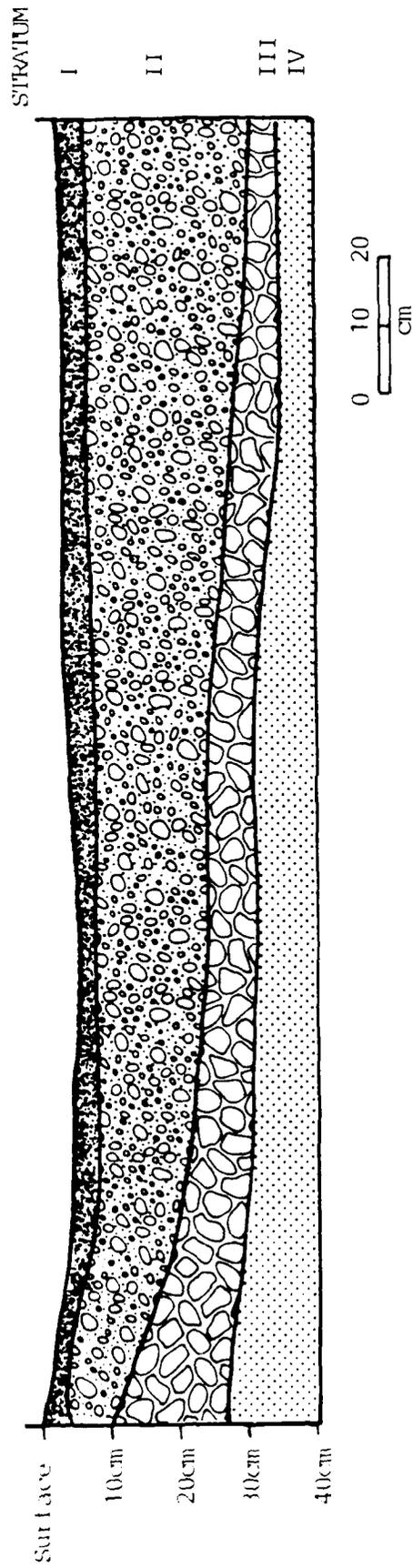


Figure 24. East wall profile of Excavation Unit No. 1, 16 SMY 1. Surface is .28 m NGVD.

- I. Black humus (2.5 Y 2/0)
- II. Very dark gray clay loam with scattered Rangia shells (2.5 Y 2.5/0)
- III. Very dark gray Rangia shell lens (10 YR 3/1)
- IV. Dark grayish brown sterile clay (10 YR 4/2)

STRATUM

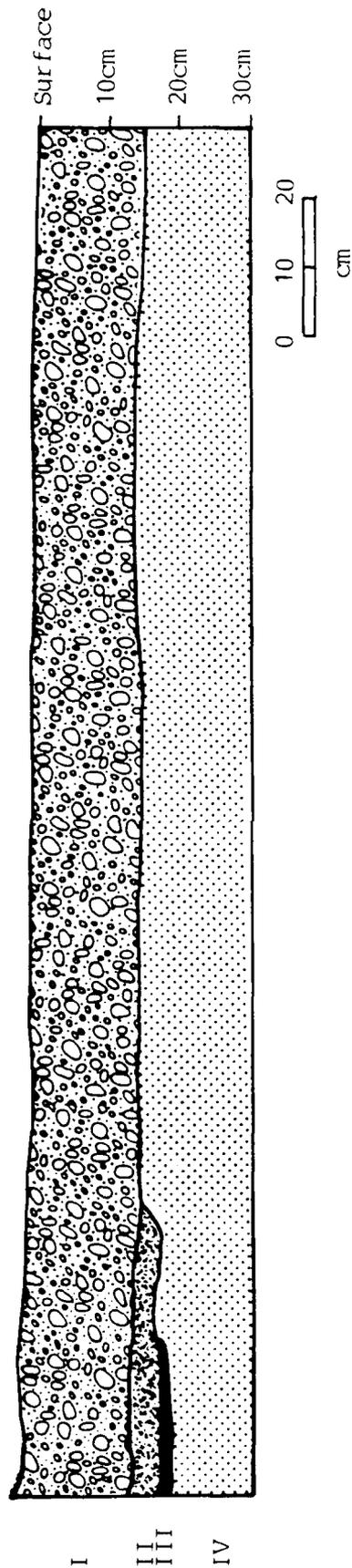


Figure 25. South wall profile of Excavation Unit No. 2,
16 SMY 1. Surface is .30 m NGVD.

- I. Dark gray clay with scattered Rangia shells
(2.5 YR 4.5/0)
- II. Dark gray ash and Rangia shell lens
(2.5 YR 4.5/0)
- III. Black charcoal lens (7.5 YR 2/0)
- IV. Dark grayish brown sterile clay (10 YR 4/2)

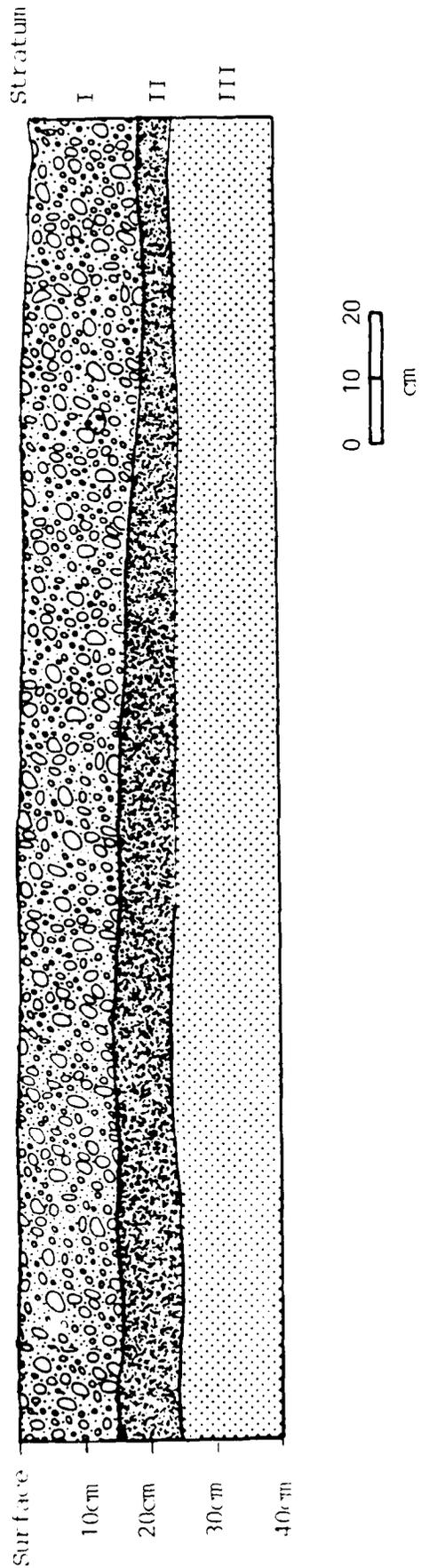


Figure 26. South wall profile of Excavation Unit No. 3, 16 SMY 1. Surface is .28 m NGVD.

- I. Dark gray clay with scattered Rangia shells (2.5 YR 4.5/0) and plastic cup fragment
- II. Dark gray clay with abundant Rangia shells (2.5 YR 4.5/0), wood fragments, and glass
- III. Dark grayish brown sterile clay (10 YR 4/2)

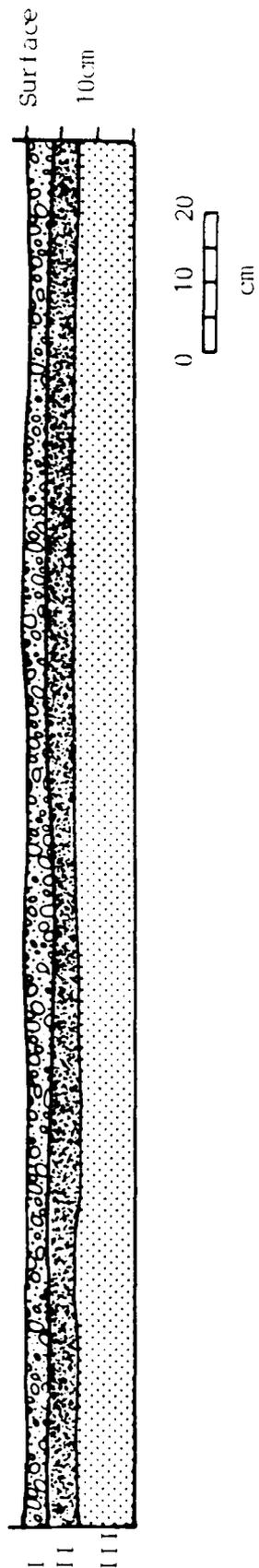


Figure 27. East wall profile of Excavation Unit No. 4,
 16 SMY 1. Surface is .25 m NGVD.

- I. Very dark gray clay loam with scattered Rangia shells (2.5 Y 2.5/0)
- II. Gray ash and Rangia shell midden (2.5 YR 4.5/0)
- III. Dark grayish brown sterile clay (10 YR 4/2)

Brown, by Weinstein, and the three sherds collected during the present survey, are shown in Table 7. Sherds of Baytown Plain var. unspecified clearly predominate in the small ceramic subassemblage from the Goat Island site.

The Coles Creek period (A.D. 700-1200) is characterized as one of increasing reliance on productive maize agriculture, resulting in population growth and areal expansion. However, the maize economy was supplemented by seasonal exploitation of coastal areas. In the case of the Goat Island site (16 SMY 1), the low number of recovered prehistoric ceramics may indicate that this site primarily functioned as a seasonal camp or as a single activity locus for episodic shellfish gathering, rather than as a semi-permanent village. The absence of stratigraphic separation between components is additional negative evidence for episodic activity.

The lack of material culture in the assemblage from 16 SMY 1 effectively limits study of the site to non-artifactual methods of analysis. In an attempt to characterize the site, soil flotation, pH testing of matrix samples, and analyses of Rangia shells were undertaken. The absence of bone or seed in the eighteen liters of matrix samples separated using froth flotation strengthens the interpretation of 16 SMY 1 as a single activity locus. Soil pH (7.4 - 7.6) was fairly uniform across the site. Although samples of Rangia shells from three excavation units (EU 1, 2, & 4) were measured using the vernier caliper, no statistically significant difference was found during comparison of size distributions between stratigraphic levels and units. In general, the shell length distributions were bimodal, with modes occurring at 4.0 - 4.2 and 5.0 - 5.2 cm.

The paucity of artifacts, and the absence of architectural features, floral remains, and vertebrate fauna provide negative evidence for the interpretation that the Goat Island site (16 SMY 1) served as a shellfish gathering station, rather than as a habitation site. The apparent presence of extensive single activity shellfish gathering sites in the Lower Atchafalaya Basin has important implications for archeological understanding of the region. In particular, previous arguments against the dietary importance of Rangia cuneata (e.g., Byrd 1976; Brown 1984) either overlook or fail to explain the existence of an entire class of archeological sites. Data from the Goat Island site suggest that a reexamination of coastal Coles Creek period subsistence and settlement patterns is necessary. Although it seems likely that this site served as a food processing station for the habitation sites located along nearby Bayou Ramos, the absence of artifacts at 16 SMY 1 makes demonstration of this relationship difficult.

The original limits of 16 SMY 1 apparently extended to both the east and west sides of Highway LA 70. Weinstein et al. (1978:73) noted impacts resulting from both highway construction and drainage canal excavation. During the present survey, additional impacts observed included small drainage canals, dirt

Table 7. Classification of Prehistoric Ceramics from the
Goat Island Site (16 SMY 1) (After Weinstein
et al. 1978:74).

Classification	Rim	Base	Body	Total
Baytown Plain <u>var. unspecified</u>	8	2	86	96
Coles Creek <u>var. Chase</u>	1			1
<u>var. Coles Creek</u>	1		1	2
<u>var. unspecified</u>			1	1
Pontchartrain Check Stamped <u>var. Pontchartrain</u>			7	7
Total	10	2	95	107

roads, and an extensive dirt bike trail system.

Coles Creek Chronology in the Morgan City Area

Three radiocarbon dates were obtained from samples excavated at the Goat Island site during 1985 (Table 8). The three dates cluster around A.D. 1100, placing the site within the later part of the Coles Creek period. The tight range of dates obtained from two excavation units with considerable horizontal separation suggests that activities at the Goat Island site spanned a relatively brief period of time.

Weinstein et al. (1978:23-24) proposed a division of the regional Coles Creek sequence into an early (Bayou Cutler) and a late (Bayou Ramos) phase. During their 1977 survey of the Goat Island site (16 SMY 1), Weinstein et al. (1978:74) recovered a single sherd of Coles Creek Incised var. unspecified. In an attempt to date the site on the basis of ceramics, they examined the sample collected by Claire Brown in 1933. Ninety per cent of sherds from the site have been classified as Baytown Plain var. unspecified; unfortunately, variability in these plain utilitarian wares is so poorly described and understood that such a classification has little chronological application. Two sherds of Coles Creek Incised, one each of vars. Chase and Coles Creek, and seven sherds of Ponchartrain Check Stamped var. Ponchartrain (Table 7), also were classified. On this basis, the Goat Island site was assigned to the Bayou Cutler (early) phase of the Coles Creek period (Weinstein et al. 1978:74). However, it should be noted that Phillips (1970:154) considered Pontchartrain Check Stamped var. Ponchartrain to be a late Coles Creek marker (Weinstein et al. 1978:100). Weinstein et al. (1978:23) suggested that high frequencies of Pontchartrain Check Stamped var. Ponchartrain are indicative of the Bayou Cutler phase, while low frequencies of that type demarcate the Bayou Ramos phase.

At the nearby Bayou Ramos I site (16 SMY 133), a Rangia cuneata midden, Weinstein et al. (1978) recovered ceramic artifacts from two test pits. Test Pit I revealed disturbance by a root mold which had allowed sherds to migrate downward. At the lower levels, they recovered one sherd of Coles Creek Incised var. Mott, two of Mazique Incised var. King's Point, and six of Mazique Incised var. Bruly. The Mott and King's Point sherds are said to signify "a secure late Coles Creek period" (Weinstein et al. 1978:91). A radiocarbon date of 970 ± 55 B.P. (980 A.D.), which equates well with the late (Bayou Ramos) phase (850-1000 A.D.), was obtained from an associated Rangia sample; an earlier date of 1215 ± 70 B.P. (735 A.D.) was obtained from a Rangia sample collected from a shallower stratum that yielded no artifacts. Occurrence of the earlier date at a higher stratigraphic level than the later date was attributed to disturbance of the site; nevertheless, the earlier date was viewed as evidence for an early (Bayou Cutler phase) Coles Creek occupation at the site (Weinstein et al. 1978:89).

Table 8. Radiocarbon Dates from the Goat Island Site
(16 SMY 1).

Provenience	Sample No.	Material Dated	Age
EM4, Level 1	DIC-3185	Shell	840 ± 45 B.P. (A.D. 1116)
EM1, Level 2	DIC-3186	Charcoal	860 ± 130 B.P. (A.D. 1090)
EM2, Level 2	DIC-3187	Charcoal	810 ± 80 B.P. (A.D. 1140)

Decorated ceramics recovered from the 20-30 centimeter level of Test Pit 2 at the Bayou Ramos I site (Weinstein et al. 1978:98-99) consisted of two sherds of Coles Creek Incised var. Coles Creek; on this basis, that occupation was assigned to the Bayou Cutler (early) phase. Seven sherds of Mazique Incised var. King's Point recovered from the 10-20 centimeter level provided the basis for assignment of the shallower midden to the Bayou Ramos (late) phase. The two subassemblages were dated using radiocarbon assays from Rangia samples: the 20 - 30 centimeter level of the pit provided a date of 1155 ± 55 B.P. (795 A.D.), and the shallower 10 - 20 centimeter level yielded a date of 1020 ± 60 B.P. (930 A.D.). However, at their two-sigma limits, the radiocarbon dates overlap, and the samples must be considered contemporary. In this light, the only chronological support for division of the Bayou Ramos sequence into two phases was stratigraphic superposition. In addition, at the 20-30 centimeter level of the Test Unit 2, which provided the earlier date, three square-headed nails, ten brick fragments, two dark green glass fragments, and one clear glass fragment were recovered. The 10-20 centimeter level, which provided the later date, also produced one "Coke" bottlecap, one piece of threaded pipe, nine glass fragments of various types, and three pearlware body sherds.

Furthermore, the Goat Island radiocarbon dates and those of the Bayou Ramos phase occupation at the Bayou Ramos I site are within two standard deviations of each other. Given classificatory confusion over the chronological placement of the predominant ceramic type at both sites, e.g., Baytown Plain var. unspecified, the extremely small numbers of decorated ceramics on which previous phase designations were based (Weinstein et al. 1978), the negative evidence for habitation at the Goat Island site, the geographic proximity of the sites, and the aforementioned radiocarbon milieu, it is at least as likely that the sites were contemporary as not. In the absence of viable data to the contrary, then, the Goat Island site can be viewed as an extraction camp for the Bayou Ramos occupations.

CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

The Prehistoric Period

Intensive archeological survey of the Morgan City and Vicinity Hurricane Protection Project area was designed to locate and evaluate cultural resources in the impact area, and to address substantive issues pertaining to the prehistoric and historic archeology of the Lower Atchafalaya Basin. A regional approach, utilizing the method of human ecology, was used to formulate a set of research questions concerning human occupation of the southern portion of the Basin. However, field investigations failed to reveal the presence in the survey area of previously unknown cultural resources. The single site relocated in the survey area was the Goat Island site (16 SMY 1), which has been described previously.

The hypothesis that prehistoric sites will be concentrated at access points to subsistence resources, such as ecotonal settings and locations near Rangia beds, appears to obtain in the case of the Goat Island site (Figure 23). The consequent prediction that prehistoric sites will exhibit a linear distribution pattern along natural stream courses (Gibson 1978, 1982), also appears true in this case, since the site in question is located along the natural levee of a relict distributary. The absence of other sites in the intervening survey corridors between stream courses also supports this model. This hypothesis apparently is supported by the regional site distribution previously documented by Gibson (1978, 1982) in the Lower Atchafalaya Basin. Similarly, the site distribution along Bayou Ramos (Weinstein et al. 1978) is linear, insofar as the sites follow the bayou levee. The examination of lakeshore and bayou banksides and adjoining backswamp areas in the present project zone provides a limited field test of the suggested site pattern in a range of environmental settings.

However, linearity of sites along relief features in the wetland does not describe the parameters of a settlement and subsistence pattern. Rather, as Gibson (1978) has noted, site distributions along stream courses appear random, with the exception of the clusters of sites observed at the confluences of waterways. The Goat Island site indicates that any characterization of settlement and subsistence systems will have to account for differences in site function, and for the relationships between sites.

The relative paucity of artifactual remains at the Goat Island site indicates that the middens reflect a substantial clam fishery, but not a living area. It seems likely, then, that the site 16 SMY 1 was a shellfishing station for one or more of the villages on Bayou Ramos. As noted above, similar radiocarbon ages at least will confirm approximate contemporaneity. Brown (1984:105-106) has suggested that since there are few places in the

marsh that are dry enough for occupation, "it is possible that Coles Creek peoples consumed shellfish primarily for the shell byproduct." The tight range of radiocarbon dates obtained by this study, indicating relatively transient occupation of the Goat Island site during clam gathering episodes, appears to invalidate this hypothesis. Either there was a surplus of clam shells for construction, or the shells represent dietary refuse.

Reconstruction of any horizontal stratigraphic milieu is encumbered by the site's history of disturbance and site destruction processes. These include: highway construction, canal and drainage ditch excavation, and impacts resulting from deforestation. Present impacts include dirt roads and trails, and erosion. All of these have served to lessen the research potential of the site, as well as its integrity.

The Goat Island site has helped demonstrate the gaps in our knowledge of prehistory in the Lower Atchafalaya Basin that were discussed in detail above. If it has contributed to our knowledge of prehistory (36 CFR 60.6), it has done so by enabling demonstration that it is a special activity site. Its ability to contribute further to our understanding of prehistory is hampered by a lack of artifacts, or even of ecofacts reflecting more than periodic clam gathering. Determination of the duration of shellfish collection in any one locale, or of the life history of the site itself, is a matter for speculation, because of the perturbed condition of the site.

For these reasons, then, the Goat Island site is not considered to have the quality of significance, as reflected in the ability to yield information important in prehistory (36 CFR 60.6). Finally, the extent of disturbance at the site effectively has reduced any areas of the site with contextual integrity to pockets of shell midden that lack stratigraphy and artifacts. In summary, the site 16 SMY 1 does not meet the criteria for eligibility for the National Register of Historic Places. No further work is recommended for this site.

The Historic Period

As shown above in Chapter 6, the majority of the project area was and is undeveloped. Prior to the boom of the lumber industry in the late nineteenth century, these lands were swamps with virgin cypress timber stands. These swamp lands were not claimed until the 1840s or later, because they were not suitable for habitation or agriculture. Even after the lands had been claimed by individuals such as Edwin Stansbury and Henry J. Sanders, they were utilized only as a source of lumber for plantation fuel; the lands were too low and wet for cane cultivation. Repeatedly, these swamp lands were called "worthless" except for their timber stands (Succession of Dr. Henry J. Sanders, #3280, filed 25 February 1909; Letter from the Department of the Interior to the Louisiana State Land Office, August 21, 1901). Thus, it is not surprising that no plantation remains were recovered in the survey areas adjacent to

Lake Palourde.

The absence of plantation remains along Bayou Boeuf in Survey Area C is similarly unremarkable. Although there were several plantations fronting on Bayou Boeuf, the land in Survey Area C is low lying and it would not have been selected for improvement for this reason. As we have seen, an adjacent parcel of land was utilized for pasture and timber storage during the late nineteenth century. However, even if Area C had been utilized for similar purposes, neither animal husbandry nor timber storage would be expected to leave much in terms of archeological evidence.

The only historic time period of extensive activity within the project area was during the lumber industry boom between 1880 and 1930. However, no evidence of lumbering activities in these areas was recovered during archeological survey. This includes an absence of remains associated with lumbering camps and timber processing facilities in the few higher, better drained sections of the project corridor. No documentary evidence was found for lumber mills within the project corridors. A mill formerly was located at Wyandotte, but this was undoubtedly located closer to the railroad spur to the west of Area C (Figure 1). Similarly, the Ramos Lumber Company was located adjacent to, but not within the project area (Figure 5). The Cotten Brothers Cypress Lumber Company, which cut much of the lumber within the project area, operated a mill within Morgan City. The absence of evidence of work camps suggests that the laborers either lived in Morgan City, or in company towns like Ramos that were located outside of the project area. Alternatively, workers may have lived in quarters boats attached to pullboats at the work sites. However, this latter arrangement should have resulted in the deposition of refuse, and no artifact concentrations indicative of even temporary habitation were found. No lumbering canals were observed during survey, yet the documentation indicates that canals were cut and pullboats were utilized during lumbering activities; this suggests that the appearance of the project area has changed radically since the lumber boom. Canals were filled by natural and artificial means, and in the process any evidence of temporary work camps has been destroyed. Today, the only clear evidence of former lumbering within the project area is the absence of virgin cypress stands. For the historic period, then, no significant archeological remains were encountered, and no further work is recommended.

BIBLIOGRAPHY

- Allain, Mathe (Translator)
1968 Instruction for Mr. de Clouet, Commandant of Two Districts of Attakapas and Opelousas. Attakapas Gazette 3(1):18.
- 1979a Bouligny's Account of the Founding of New Iberia. Attakapas Gazette 14(2):79-84.
- 1979b Bouligny's Account of the Founding of New Iberia. Attakapas Gazette 14(3):124-131.
- Beecher, Harris H.
1866 Record of the 114th Regiment, N.Y.S.V.: Where It Went, What It Saw, and What It Did. J.F. Hubbard, Jr., Norwich, NY.
- Bergerie, Maurine
1962 They Tasted Bayou Water. A Brief History of Iberia Parish. Pelican Publishing Company, New Orleans.
- Binford, Lewis R.
1964 A consideration of an archeological research design. American Antiquity 29:425-441.
- Bouchereau, Louis and Alcee Bouchereau
1908-
1917 Statement of the Sugar and Rice Crops Made in Louisiana. Pelican Steam Book and Job Printing, New Orleans.
- Brown, Fay G.
1970 Reconstruction Sweeps Away Way of Life. St. Mary and Franklin Banner-Tribune, April 23, 1970, Sesqui-Centennial Edition.
- Brown, Ian
1984 Late Prehistory in Coastal Louisiana: The Coles Creek Period. In Dave Davis, Ed., Perspectives On Gulf Coast Prehistory, pp. 94 - 124. Gainesville, Florida: The Florida State Museum.
- Byrd, Kathleen M.
1976 Brackish Water Clam (Rangia Cuneata): Prehistoric Staff of Life Or Minor Food Resource? Louisiana Archeology 3:23-31.
- 1978 Zooarchaeological Analysis of material from certain sites along Bayous Chene, Shaffer, and the Lower Atchafalaya River. In Archaeological Survey of the Lower Atchafalaya Region, South Central Louisiana. University of Southwestern Louisiana, Center for Archaeological Studies, Report 5.

- Cassidy, Vincent H. and Mathe Allain
 1967 The Attakapas Territory, 1699-1721. Attakapas Gazette 2(3 & 4): 31-34.
- 1968 The Attakapas Territory: 1721-1747. Attakapas Gazette 3(2):14-16.
- Champomier, P. A.
 1844- Statement of the Sugar Crop Made In Louisiana.
 1866 Cook, Young and Company, New Orleans, LA.
- Collins, Henry B.
 1927 Archeological work in Louisiana and Mississippi. Smithsonian Miscellaneous Collections 78(7):200-207.
- Comeaux, Malcolm (editor)
 1972 Atchafalaya Swamp Life. Geoscience and Man, vol. II. Louisiana State University, Baton Rouge.
- 1976 An Early View of the Atchafalaya: The Lt. Enoch Humphrey Expedition of 1805. Attakapas Gazette 11(4):152-163.
- Davis, John (Translator)
 1806 Travels in Louisiana and the Floridas in the Year 1802, Giving a Correct Picture of Those Countries. I. Riley & Co., New York.
- Fisk, H. N.
 1944 Geological Investigation of the Alluvial Valley of the Lower Mississippi River. U.S. Army Corps of Engineers, Mississippi River Commission, Vicksburg, MS.
- Ford, James A.
 1951 Greenhouse: A Troyville-Coles Creek Period site in Avoyelles Parish, Louisiana. American Museum of Natural History, Anthropological Papers 44 (1).
- 1969 A Comparison of Formative Cultures in the Americas: Diffusion or the Psychic Unity of Man. Smithsonian Contributions to Anthropology 11.
- Ford, James A. and Gordon Willey
 1940 Crooks Site, a Marksville Period Burial Mound in LaSalle Parish, Louisiana. Department of Conservation, Louisiana Geological Survey, Anthropological Study 3.

- Frazier, David E.
 1967 Recent Deltaic Deposits of the Mississippi River: Their Development and Chronology. Transactions of the Gulf Coastal Association, Geological Society 17:287-315.
- 1974 Depositional Episodes: Their Relationship to the Quaternary Stratigraphic Framework in the North-western Portion of the Gulf Basin. Bureau of Economic Geology, Geology Circular 78:(1).
- Gagliano, Sherwood M., Richard A. Weinstein, and Eileen K. Burden
 1975 Archeological Investigations Along the Gulf Intracoastal Waterway: Coastal Louisiana Area. Submitted to the Department of the Army, New Orleans District, Corps of Engineers.
- Gibson, Dennis
 1979a The Journal of John Landreth. Attakapas Gazette XIV(3):103-109.
- 1979b The Journal of John Landreth. Attakapas Gazette XIV(4):160-67.
- 1980a The Journal of John Landreth. Attakapas Gazette XV(1):37-40.
- 1980b The Journal of John Landreth. Attakapas Gazette XV(2):69-78.
- 1980c The Journal of John Landreth. Attakapas Gazette XV(3):116-122.
- Gibson, Dennis A. (editor)
 1975 Index to Louisiana Place Names Mentioned in The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. University of Southwestern Louisiana, Lafayette, LA.
- Gibson, Jon L.
 1978 Archeological Survey of the Lower Atchafalaya Region, South Central Louisiana. University of Southwestern Louisiana, Center for Archeological Studies, Report No. 5, Lafayette, LA.
- 1982 Archeology and Ethnology on the Edges of the Atchafalaya Basin, South Central Louisiana. Submitted to the Department of the Army, New Orleans District, Corps of Engineers, Contract No. DACW29-79-C-0265.

- Goodwin, R. Christopher, Peter A. Gendel and Jill-Karen Yakubik
1983a Archeological Survey of the New House Site, Harlem Plantation, Plaquemines Parish, Louisiana. Submitted to the Department of the Army, New Orleans District, Corps of Engineers, Contract No. DACW29-83-M-0977.
- 1983b Historic Archeology at the Old Courthouse Site, Convent, St. James Parish, Louisiana, 16 SJ 35. Submitted to the Division of Archeology, Department of Culture, Recreation, and Tourism, State of Louisiana, Baton Rouge, LA.
- 1983c Archeological Assessment of Two Sites on the Mississippi River: 16 PC 33 and 16 EBR 46. Submitted to the Department of the Army, New Orleans District, Corps of Engineers, Contract No. DACW29-83-M-0186.
- Goodwin, R. Christopher and Galloway Walker Selby
1984 The Historic Archeology of the Morgan City Floodwall Boat. Submitted to the Department of the Army, New Orleans District, Corps of Engineers, Contract No. DACW29-84-D-0029
- Goodwin, R. Christopher and Jill-Karen Yakubik
1982a Data Recovery at the New Orleans General Hospital Site, 16 OR 69. Submitted to the Division of Archeology, Department of Culture, Recreation, and Tourism, State of Louisiana, Baton Rouge, LA.
- 1982b Report on the Level II Archeological Survey of Magnolia Plantation, Plaquemines Parish, Louisiana. Submitted to the Division of Archeology, Department of Culture, Recreation and Tourism, State of Louisiana, Baton Rouge, LA.
- 1983 Analysis of Historic Remains from Two Archeological Test Units at Chalmette National Historic Park. Submitted to Jean Lafitte National Historic Park, New Orleans, LA.
- Goodwin, R. Christopher, Jill-Karen Yakubik and Peter Gendel
1983 Historic Archeology at Star and Bourbon Plantations. Submitted to the Department of the Army, New Orleans District, Corps of Engineers, Contract No. DACW29-83-M-0521.

Goodwin, R. Christopher, Jill-Karen Yakubik, Peter A. Gendel, Kenneth Jones, Debra Stayner, Cyd H. Goodwin, Galloway W. Selby, and Janice Cooper

1985 Preserving the Past for the Future: A Comprehensive Archeological and Historic Sites Inventory of Jefferson Parish, Louisiana. Submitted to the Division of Archeology, Department of Culture, Recreation, and Tourism, Baton Rouge, Louisiana.

Goodwin, R. Christopher, Jill-Karen Yakubik, Galloway W. Selby, Kenneth R. Jones, Debra Stayner and Janice Cooper

1985 An Archeological and Historic Sites Inventory of Bayou Teche Between Franklin and Jeanerette, Louisiana. Submitted to the Division of Archeology, Department of Culture, Recreation and Tourism, Baton Rouge, LA.

Goodwin, R. Christopher, Jill-Karen Yakubik, Debra Stayner and Kenneth Jones

1985 Cultural Resources Survey of Five Mississippi River Revetment Items. Submitted to the Department of the Army, New Orleans District, Corps of Engineers.

Goodwin, R. Christopher, Jill-Karen Yakubik and Cyd Heymann
Goodwin

1983 The Historic Archeology of Elmwood Plantation. Submitted to the Division of Archeology, Department of Culture, Recreation and Tourism, State of Louisiana, Baton Rouge, LA.

1984 Elmwood: The Historic Archeology of a Southeastern Louisiana Plantation. Jefferson Parish Historical Commission, Metairie, LA.

Hempel, C.G.

1966 Philosophy of Natural Science. Prentice-Hall, Englewood Cliffs, New Jersey.

Holmes, Jack D.

1967 Indigo in Colonial Louisiana and the Floridas. Louisiana History 8:329-349.

Jungen, C.W.

1930 Memoirs of Ancient Ships and Incidents Recalled by Review. The Shopcraft Magazine 6(7):1.

Kniffen, Fred B.

1968 Louisiana, Its Land and People. Louisiana State University Press, Baton Rouge, LA.

- Kolb, C.R., and J.R. van Lopik
 1958 Geology of the Mississippi Deltaic Plain, Southeastern Louisiana. Technical Reports 3-483 and 3-484. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS.
- Lowrie, Walter and Walter Franklin (editors)
 1834 American State Papers, Class VIII, Public Lands, Vols. II and III. Gales and Seaton, Washington, D.C.
- Martin, Francois-Xavier
 1975 The History of Louisiana. Reprint of 1882 edition. Pelican Publishing Company, Gretna, LA.
- Martin, Paulette Guilbert, Translator
 1976 The Kelly-Nugent Report on the Inhabitants and Livestock in the Attakapas, Natchitoches Opelousas and Rapide Posts, 1770. Attakapas Gazette 11(4):187-192
- McIntire, William G.
 1958 Indian Settlements of the Changing Mississippi River Delta. Coastal Studies Series 1. Louisiana State University, BatonRouge, LA.
- McWilliams, Richebourg G. (Translator and editor)
 1953 Fleur de Lys and Calumet, Being the Penicaut Narrative of French Adventure in Louisiana. Reprint. Louisiana State University Press, Baton Rouge, LA.
- Moore, Clarence B.
 1912 Some Aboriginal Sites on the Red River. Academy of Natural Sciences of Philadelphia, Journal 14(4): 482-644.
- 1913 Some Aboriginal Sites in Louisiana and Arkansas. Journal of the Academy of Natural Sciences of Philadelphia, 2nd Series 16(1): 7-99.
- Morell, S.J.
 1956 Report of Ownership of Waterfront Property, City of Morgan City, Louisiana. Morgan City Archives, Morgan City.
- Morgan City Historical Society
 1960 A History of Morgan City, Louisiana. King, Hannaford, Morgan City.
- N. A.
 1923 Records of the Superior Council of Louisiana. Louisiana Historical Quarterly 6:283-310.
- 1933 Records of the Superior Council of Louisiana. Louisiana Historical Quarterly 16:330-338.

- Neuman, Robert
 1984 Louisiana Archeology. Baton Rouge: Louisiana State University Press.
- Neuman, Robert W., and A. Frank Servello
 1976 Atchafalaya Basin Archeological Survey. Submitted to the Department of the Army, New Orleans District, Corps of Engineers.
- Norgress, Rachael Edna
 1947 The History of the Cypress Lumber Industry in Louisiana. Louisiana Historical Quarterly 30:979-1059.
- Phillips, Philip
 1970 Archeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1953. Peabody Museum of Archeology and Ethnology, Harvard University Papers 60.
- Plog, Fred T.
 1974 The Study of Prehistoric Change. Academic Press, New York.
- Post, Lauren C.
 1957 The Old Cattle Industry of Southwest Louisiana. McNeese Review 9:43-55.
- Prichard, Walter, Fred B. Kniffen, and Clair A. Brown (editors)
 1945 Southern Louisiana and Southern Alabama in 1819: The Journal of James Leander Cathcart. Louisiana Historical Quarterly 28:735-921.
- 1936 The Experiences of a Federal Soldier in Louisiana in 1863. Louisiana Historical Quarterly 19:635-667.
- Prophit, Willie
 1982 The Swamp's Silent Sentinel: A History of Louisiana Cypress Logging. Forests and People, Second Quarter:6-35.
- Raphael, Morris
 1976 The Battle of the Bayou Country. Harlo, Detroit.
- St. Clair, C.H.
 1908 Historical Notes. The Rural Topics. Morgan City.
- Sanders, Mary Elizabeth
 1975 Value of Lands Between the Attakapas Church and Berwick Bay. Attakapas Gazette 10:216-221.
- 1976a List of Landowners and Slaveowners of the Attakapas. Attakapas Gazette 11(2):84-91.

- Saucier, Roger T.
1971 Quaternary Geology of the Lower Mississippi Valley. U.S. Army Corps of Engineers Waterways Experiment Station, Special Report.
- 1974 Quaternary Geology of the Lower Mississippi Valley. Publications on Archeology, Research Series No. 6. Arkansas Archeological Survey, Fayetteville, MS.
- Scarpaci, Jean Ann
1972 Italian Immigrants in Louisiana's Sugar Parishes: Recruitment, Labor Conditions and Community Relations, 1880-1910. Unpublished Ph.D. dissertation, Department of History, Rutgers University, New Brunswick.
- Schmitz, Mark
1977 Economic Analysis of Antebellum Sugar Plantations in Louisiana. Arno Press, New York.
- Shenkel, J. Richard
1984 Early Woodland in Coastal Louisiana. In Dave Davis, Ed., Perspectives On Gulf Coast Prehistory, pp. 41-71. Gainesville, Florida: Florida State Museum.
- Sitterson, J. Carlyle
1953 Sugar Country: The Cane Sugar Industry in the South, 1753-1950. University of Kentucky Press, Lexington, KY.
- Smith, L.M., L.D. Britsch, and J.B. Dunbar
1985 Geomorphological Investigation of the Atchafalaya Basin, Area West, Atchafalaya Delta, and Terrebonne Marsh. Prepared by Geotechnical Laboratory and Coastal Engineering Research Center US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. Prepared for US Army Corps of Engineers, New Orleans District, New Orleans, Louisiana.
- Struever, Stuart
1969 Archeology and the Study of Cultural Process: some comments on data requirements and research strategy. Revised version of paper presented at symposium, "Cultural Process and the Evolution of Civilization," Santa Fe.
- Taylor, Joe Gray
1976 Louisiana. W.W. Norton and Company, Inc., New York.

- Toth, Alan
1977 Early Marksville Phases in the Lower Mississippi Valley: A Study of Culture Contact Dynamics. Ph.D. Dissertation, Department of Anthropology, Harvard University, Cambridge.
- USDA
1959 Soil Survey of St. Mary Parish, Louisiana. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.
- U.S. War Department
1891 The War of Rebellion. Vol. XV. U.S. Government Printing Office, Washington D.C.
- Voorhies, Jacqueline K.
1973 Some Late Eighteenth Century Louisianians: Census Records 1758-1796. University of Southwestern Louisiana, Lafayette, LA.
- Weinstein, Richard A., Eileen K. Burden, Katherine L. Brooks, and Sherwood M. Gagliano
1978 Cultural Resource Survey of the Proposed Relocation Route of U.S. 90 (LA 3052), Assumption, St. Mary, and Terrebonne Parishes, Louisiana. Submitted to the Department of the Army, New Orleans District, Corps of Engineers.
- Wells, Carol
1979 Extinguishing the Lights: The Teche District. Louisiana History 20:293-303.

Newspapers

Franklin Banner
Morgan City Review
New Orleans Picayune

Archival Sources

Morgan City Archives
Office of the Clerk of Court, St. Mary Parish, Franklin, LA
Conveyance Office Books (COB)
Mortgage Books (MB)
Incorporation Books

END

FILMED

3 - 86

DTIC