THE PLAQUEMINE AND MISSISSIPPIAN OCCUPATIONS OF THE UPPER TENSAS BASIN, LOUISIANA

A thesis presented

by

DAVID JUDSON HALLY

to

The Department of Anthropology

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

in the subject of

Anthropology

Harvard University

Cambridge, Massachusetts

PREFACE

The following study is concerned with the last five-hundred years of aboriginal occupation in the Upper Tensas Basin of Louisiana. Within this time span, from A.D. 1200 to 1700, three archaeological phases—Routh, Fitzhugh and Transylvania—have been distinguished. Definition of these phases is based primarily upon data gathered by the Lower Mississippi Survey (LMS) during summer field seasons in 1963 and 1964.

Under the direction of Stephen Williams, the Survey was able to locate and investigate a total of 161 sites in the Upper Tensas Basin. Site survey was carried on at two levels with two field crews. One crew searched for and located sites. When visited by this crew, sites were surface collected, mapped with compass and tape, and accurately located on United States Geological Survey (USGS) topographic maps. A number of sites, twenty-three in all, received further investigation in the form of test pit excavations from a second crew. These sites were more accurately mapped with a transit and aerial photographs. Test pits were excavated in midden areas with the goal of obtaining large, single component—or even better, stratified, multiple component—artifact

collections. These "pure" collections were to serve as the basis for definition of archaeological phases.

A total of sixty sites in the Survey Area have components that are relevant to the present study. Of these, six were investigated with test excavations, while the remainder were only surface collected. The former are described in Chapter II; brief descriptions of the latter are contained in Appendix I.

Phase definition in the following report is based almost exclusively upon pottery. Chapters III-V contain descriptions of the ceramic complex of each phase. Settlement pattern for each phase is described in Chapter VI.

While data collected by the LMS during its two field seasons has been of prime importance to the following study, some use has also been made of museum artifact collections from sites in and around the Upper Tensas Basin. In some instances, museum collections from sites in the Survey Area were considerably larger than those collections obtained by the LMS; Swift and Ditto Lake sites are two cases in point. Museum collections were of greater value, however, in working out the relationship of Routh, Fitzhugh, and Transylvania phases to cultural manifestations lying beyond the Upper Tensas Basin. While published site reports have been useful in

detailing extra-area relationships, most observations on sites and phases lying beyond the Survey Area are based upon the author's own analysis of museum collections. Collections with which the author has worked are listed in Appendix III.

A large number of people have contributed in some way to the preparation of this thesis. To them I wish to express my deepest gratitude.

Dr. Stanley J. Olsen (Florida State University) identified a portion of the faunal remains from Transylvania site. Mollusks were identified by Dr. W. J. Clench (Harvard University). Site maps, stratigraphic profiles and some of the pottery illustrations were prepared by Miss Eliza McFadden and Miss Barbara Westman. Manuscript editing was done by my wife, Carolyn Reaves Hally.

Artifact collections were made available for comparative study at several institutions by the following individuals: Mr. Douglas S. Byers (formerly of the R. S. Peabody Foundation for Archaeology), Dr. Junius B. Bird, (American Museum of Natural History), Dr. Frederick J. Dockstader (Museum of the American Indian), Mr. Pete Gregory (Northwestern State College, Nachitoches, Louisiana), Dr. John Griffin (Ocmulgee National Monument), Dr. William G. Haag (Louisiana State University), Mr. John H. MacPherson (East Stroudsburg, Pennsylvania),

Mr. W. Fred Kinsey (Franklin and Marshall College),
Mr. Robert S. Neitzel (formerly of the Mississippi State
Historical Museum), Dr. Phillip Phillips (Harvard University), Mr. Gregory Perino (Thomas Gilcrease Foundation),
Clarence H. Webb (Shreveport, Louisiana), and Dr. Stephen
Williams (Harvard University).

Dr. Phillip Phillips and John S. Belmont provided invaluable encouragement and criticism during the analysis and writing stages.

My advisor, Dr. Stephen Williams, made available the artifact collections and fieldnotes upon which this dissertation is based and financed a month long study of collections which the author and John Belmont undertook at institutions throughout the southeast. Dr. Williams' profound influence on the author's academic and professional development is witnessed throughout this thesis.

Finally, I wish to acknowledge the patience, understanding, and encouragement with which my wife, Carolyn Reaves Hally, supported me during the long years of thesis preparation.

TABLE OF CONTENTS

Preface	
List of Figures	iii Vii
	vii
]
Chapter]
I. INTRODUCTION	
The Survey Area	1
in the Upper Tensas Basin	5 79
Method and Theory	7
	13
II. SITE EXCAVATIONS	22
Introduction	22
Mannard and Control	22 22
riranuan sita 193-1ii	
Canebrake Site (24-J-9) Preston Site (24-J-24)	100
Preston Site (24-J-24)	143
Du Rosset Site (24-K-8)	181
	197 211
	211
III. ROUTH PHASE	243
Introduction	243
The Ceramic Compley	245
Non-Ceramic Artifacts	
	325 341
)41
IV. FITZHUGH PHASE	343
Introduction	
The Ceramic Complex	343° 348
Non-Comprise Asset Cont.	62
Mannal Damaina	102 176

Chapter		Page
v.	TRANSYLVANIA PHASE	-
		478
	Introduction The Ceramic Complex	478
	Miscollaneous C	481
	Miscellaneous Ceramic Artifacts	541
	Non-Ceramic Artifacts	542
	Faunal Remains	549
VI.	SITE DISTRIBUTION AND SETTLEMENT PATTERN	
	IN THE MISSISSIPPI AND HISTORIC PERIODS	(
		551
	Introduction	551
	Site Distribution and Hydrography of	0.01
	the upper Tensas Basin	554
	Configuration of Mississippi Period	234
	Mound Sites	577
	Ceremonial and Habitation Sites	586
11T T		300
VII.	RADIOCARBON DATING THE MISSISSIPPI	
	PERIOD	597
VIII.	SUMMARY AND CONCLUSIONS	<i>331</i>
- · · · · · · · · ·	DOTALINI AND CONCLOSIONS	605
	Summary of Plaquemine Phases in the	
	opper Tensas Basin	C 0 F
	Geographical Distribution of	605
	Plaquemine Culture	
	Plaquemine Culture The Origin of Plaquemine Culture	608
*	Mississippian Influences in the	613
	opper Tensas Basin	615
BIBLIOGE	АРНУ	
		636
APPENDIC	ES	
		•
	I. Upper Tensas Basin Sites with Late	
	Components Dasin Sites with Late	
	Components	648
I	I. Design Analysis of Leland Incised	
	Pottery Or Letand Inclsed	
		718
II	I. List of Museum Collections Utilized	
		761

LIST OF TABLES

Tabl	e			•	Page
1.	Transylvania Site. Mound Designations Dimensions	ar •	nd •		28
2.	Transylvania Site. Ceramic Counts for Cuts 8-14, Fitzhugh Component	•			43
3.	Transylvania Site. Ceramic Counts for Cuts 8-14, Transylvania Component .	•			44
4.	Transylvania Site. Ceramic Counts for Cuts 8-14 by Analysis Unit	•			46
5.	Transylvania Site. Ceramic Counts for Cut 1	•		• •	58
6.	Transylvania Site. Ceramic Counts for Cut 2		•		67
7.	Transylvania Site. Ceramic Counts for Cut 5		_		68
8.	Transylvania Site. Ceramic Counts for Cut 3			- •	76
9.	Transylvania Site. Distribution of Fit Phase Sherds in Cut 3	zhi	ıgr	1	
10.	Transylvania Site. Ceramic Counts for Cut 4	•	• •	•	77
11.	Transylvania Site. Ceramic Counts for Cut 6	• ,	• •	•	82
12.	Transylvania Site. Ceramic Counts for Cut 7	• •	•		86
13.	Sundown Phase Pottery at Transylvania	• •		•	92 95
14.	Fitzhugh Site. Comparison of Mound Designations from Hough and LMS Maps .				105
	taran da antara da a		-	-	J. 0 9

Table		Page
15.	Fitzhugh Site Ceramic Counts for Cuts 1-3 and Surface Collection from Location E	114
16.	Fitzhugh Site. Distribution of Shell Tempering and "Tunica" Rims in Cuts 1-3	129
17.	Canebrake Site. Mound Dimensions Obtained by Moore and the LMS	146
18.		155
19.	Canebrake Site. Ceramic Counts for Cuts 1-5 and Surface CollectionsRouth, Fitzhugh, and Indeterminate Components	156
20.	Preston Site. Ceramic Counts for Cuts 1-3 and Locations A, B, and C	192
21.	Faunal Remains from Preston Site	195
22.	Du Rosset Site. Ceramic Counts for Cuts 1-3 and Surface Collections	205
23.	Routh Site. Mound Dimensions	214
24.	Routh Site. Ceramic Counts for Cuts 1-5	222
25.	-Ceramic Counts for Routh Components at Routh, Preston, Balmoral and Rose Hill Sites	246
26.	Frequency of Addis Vessel Shapes and Modes at the Routh and Rose Hill Sites	247
27.	Classification of Routh and Mayersville Type Collections	289
28.	Representative Balmoral Phase Ceramic Counts	309
29.	Distribution of Projectile Points Among Sites with Balmoral and/or Plaquemine Components	332

dable		Page
30.	Large Points Associated with Routh Phase Components	336
31.	Occurrence of Flakes with Wear Pressure Retouch at Routh Phase Sites	337
32.	Occurrence of Flaked Pebbles at Sites with Routh Phase Components	338
33.	Faunal Remains from Preston and Canebrake Sites	342
34.	Ceramic Counts for Fitzhugh Components at Fitzhugh, Transylvania and Somerset Sites	346
35.	Frequency of Addis and Addis/Shell Vessel Shapes at Selected Fitzhugh Phase Sites	351
36.	Frequencies of Addis and Addis/Shell Carinated Bowl Rim Modes at Selected Fitzhugh Phase Sites	358
37.	Dimensions of Small Carinated Bowls	365
38.	Occurrence of Cross-Hatching with Leland Incised Designs	387
39.	Frequency of Shell-Tempered and Clay- Tempered Pottery in Selected Fitzhugh Phase Sites	392
40.	Dimensions of <u>Belzoni</u> Vessels from Transylvania Site	405
41.	Classification of Pottery from Selected Proveniences at Fatherland Site	436
42.	Classification of Pottery from Selected Proveniences at Anna, Gordon, and Emerald Sites	439
43.	Classification of Pottery from Baptiste, Rosedale, Peter Hill, Angola Farm and Bayou Goula Sites	441
•		

elds!		Page
44.	Classification of Whole Vessels from Ring, Glass, Oak Bend Landing, and Burthe Sites	446
45.	Illustrated and Unillustrated Pottery from Glendora Site	457
46.	Available Whole Vessels from Glendora Phase Sites	458
47.	Faunal Remains from Fitzhugh Phase Sites	477
48.	Classification of the Transylvania Phase Type Collection	479
49.	Dimensions of Measurable Specimens of Barton Incised, var. Stowers	509
50.	Dimensions of "Walnut Bayou" Bowls	509
51.	Vessel Dimensions of Winterville Incised, var. Winterville	521
52.	Dimensions of Erwin Vessels	526
53.	Faunal Remains from Transylvania Site	550
54.	Association of Components and Channels	564
55.	Radiocarbon Dates from the Upper Tensas Basin and Surrounding Areas	598
56.	Provenience of Design A Specimens used in Analysis	722
57.	Provenience of Design B Specimens used in Analysis	729
58.	Provenience of Design C Specimens used in Analysis	736
59.	Provenience of Design D Specimens used in Analysis	739
60.	Provenience of Design E Specimens used in Analysis	742

Table		Page
61.	Provenience of Design F Specimens used in Analysis	. 745
62.	Provenience of Design G Specimens used in Analysis	

LIST OF FIGURES

Figur	:e	Page
1.	Map of the Upper Tensas Basin, showing the location of sites with Routh, Fitzhugh and Transylvania phase components	2
2.	Archaeological sequences for the Upper Tensas and Lower Yazoo Basins	14
3.	Location of Transylvania site	23
4.	Transylvania. LMS site map	25
5.	Transylvania. Moore site map	27
6.	Transylvania. Ford site map	27
7.	Layout of Cuts 8-14	33
8.	Cut 8 profiles	34
9.	Cut 9 profiles	34
10.	Cut 10 profiles	35
11.	Cut ll profiles	35
12.	Cut 13 profiles and plan	36
13.	Cut 12 profiles	37
14.	Cut 14 profiles	37
15.	Cut 1 profiles and plan	55
16.	Cut 2 profiles	60
17.	Cut 5 profiles	
	Cuts 2 and 5 plans	
	Cut 3 profiles	
	Cut 3 plans	72
		1 2

F	igure		Page
	21.	Cut 4 profiles	79
	22.	Cut 6 profiles	79
	23.	Cut 7 profiles	88
	24.	Cut 7 plans	88
	25.	Cut 7, excavation units	91
	26.	Location of Fitzhugh site	101
	27.	Fitzhugh. LMS site map	102
	28.	Fitzhugh. Hough site map	104
	29.	Cut 1 profiles	110
	30.	Cut 2 profiles	116
	31.	Cut 3 profiles	123
	32.	Fitzhugh site. Surface sherd distribution	301
		and posthole soundings	134
		Location of Canebrake and Preston sites	144
	34.	Canebrake. LMS site map	145
	35.	Cut l profiles	149
	36.	Cut 5 profiles	149
	37.	Cut 2 profiles	158
	38.	Cut 4 profiles	158
	39.	Cut 3 profiles and plan	163
	40.	Preston. LMS site map	183
	41.	Cut l profiles	186
	42.	Cut 2 profiles	186
-	43.	Cut 3 profiles (Preston)	187
	44.	Cut 3 profiles (Du Rosset)	187

Figure			Page
45.	Location of Du Rosset site		198
46.	Du Rosset site. LMS site map	,	199
47.	Cut 1 profiles		202
48.	Cut 2 profiles		202
49.	Location of Routh site	•	212
50.	Routh. LMS site map		213
51.	Cut 4 profiles		218
52.	Cut 2 profiles		218
53.	Cut 1 profiles		224
54.	Cut 3 plan		224
55.	Cut l plan	•	224
56.	Cut 5 profiles	•	225
57.	Cut 3 profiles	•	225
58.	Routh site channel associations		240
59.	Baytown Plain, var. Addis rim and vessel shape modes	•	248
60.	L'Eau Noire Incised decorative designs	•	264
	Addis and Pocahontas vessel shape and		
	rim modes	•	353
62.	L'Eau Noire Incised, var. Paine. Vessel shapes and decorative designs	•	378
63.	Spread of Mississippian ceramic traits through the general area of the Upper		-
C 4	rensas Basin	•	431
64.	Decorative motifs characteristic of Barton Incised, var. Atherton		487

Figure		D = = =
65.	Barton Incised, var. Stowers, whole	Page
·	vessels	. 491
66.	Transylvania phase jar shapes	513
67.	Meander belt ridges and site association in the Upper Tensas Basin	557
68.	Sites with multiple components and multiple channel associations	561
69.	Plan of Routh and Fitzhugh sites showing only comparable elements	582
70.	Site maps	649
71.	Site maps	658
72.	Site maps	666
73.	Site maps	
74.	Site maps	674
75.	Site maps	683
76.	Site maps	690
11.1		698
	Site maps	708
78.	Leland Incised, Design A	721
79.	Leland Incised, Design B	728
80.	Leland Incised, Designs C and D	735
81.	Leland Incised, Designs E, F, and G	741

LIST OF PLATES

Plate		Page
I.	Routh phase pottery types	-
	Routh and Balmoral phase pottery types	
	Miscellaneous pottery types	
IV.	Stone and bone artifacts from Routh and	327
v.	Fitzhugh phase pottery types	371
	Fitzhugh phase pottery types	
VII.	Winterville Incised, var. Belzoni, vessel from Cut 4, Transylvania	403
VIII.	Transylvania phase pottery types	483
	Transylvania phase pottery	
	Transylvania phase and late pottery	
	Stone and bone artifacts from Transylvania and Burthe sites	