

CHAPTER III

ROUTH PHASE

Introduction

Definition of the Routh phase is based primarily on a ceramic sample of approximately 1500 sherds obtained in test excavations at the Routh site (24-L-7). This sample was supplemented by small excavated collections from the Balmoral (24-L-1) and Preston (24-J-24) sites and a large surface collection from the single component Rose Hill site (21-L-2). Additional information pertaining to the definition of this phase was obtained from sites located beyond the Upper Tensas Basin. Especially useful were the collections obtained by Cotter (1951:24-32) at the Anna site (26-K-1), and Phillips (1970:505-11) at the Mayersville site (21-L-1).

In the Upper Tensas Basin, the following sites have produced pottery collections identifiable as Routh phase:

21-L-2	Rose Hill
21-L-3	Lake Providence
23-L-9	Compton Lake
23-L-11	Willow Lake
23-L-16	Point Lake
24-J-9	Canebrake
24-J-24	Preston
24-L-1	Balmoral
24-L-7	Routh
26-J-7	Dunbarton

Ceramic counts for the Routh components at Routh, Preston, Balmoral, and Rose Hill are presented in Table 25. Complete counts for all sites with Routh components can be found in Chapter II and Appendix I.

Routh phase is the earliest full expression of Plaquemine culture in the Upper Tensas Basin. Nearly all Plaquemine markers are represented in its ceramic complex. Except for Coles Creek Incised, var. Hardy, and Mazique Incised, var. Preston, pottery varieties specifically identified with Coles Creek phases are absent. The Coles Creek heritage of Routh phase ceramics is evident, however, in the carry over of Hardy and Preston, and in the existence of several types and modes which appear to have developed out of earlier Coles Creek types and modes.

The following types and modes constitute the Routh phase ceramic complex:

Baytown Plain, var. Addis
 "interior strap" bowl rim
 "Preston" bowl
 "Walnut Bayou" bowl
 "Delta City" bowl
 Coles Creek Incised, var. Hardy
 Evansville Punctated, var. Sharkey
 Harrison Bayou Incised, var. Harrison Bayou
 Hollyknowe Ridge Pinched, var. Patmos
 L'Eau Noire Incised, var. L'Eau Noire
 var. Anna
 var. Bayou Bourbe
 var. Carter
 var. Evangeline
 Leland Incised, var. Leland
 Mazique Incised, var. Manchac
 Mississippi Plain, var. Pocahontas

Mound Place Incised, var. unspecified
 Plaquemine Brushed, var. Plaquemine
 Winterville Incised, var. Coleman

The Ceramic Complex

Description of Pottery Types and Modes

Baytown Plain, var. Addis

Approximately 75 per cent of the pottery in Routh phase collections is undecorated and conforms to the type, Baytown Plain, var. Addis, as described by Phillips in his roster of Lower Mississippi Valley pottery types (1970: 48-9). According to Phillips, Addis paste "tends to warm shades of brown with small granular particles of variegated color that show through on the smooth matte surface, giving a mottled effect that is almost sortable" (ibid.:49). In the Survey Area, Addis can be further characterized as having a uniform textured paste, fire clouding, and, in the case of carinated bowls, polished surfaces. Addis paste remains unchanged from Routh through Fitzhugh phase with the exception that shell is sometimes added to it in later and more northern Fitzhugh phase components.

Several vessel shapes and modes are characteristic of Addis during the Routh phase:

1) Simple Bowl. Bowls with a plain, rounded profile are the most common Addis vessel form in Routh phase

TABLE 25

CERAMIC COUNTS FOR ROUTH COMPONENTS AT ROUTH,
PRESTON, BALMORAL AND ROSE HILL SITES

	Routh	Preston	Bal- Moral	Rose Hill
Baytown Plain, <u>var. Addis</u>	1083	458	38	341
"interior strap" bowl rim	20			3
"Delta City" bowl	7	2		2
"Preston" bowl	51	3	2	5
"Walnut Bayou" bowl	4	1	2	3
bottles	3			
Coles Creek Incised, <u>var. Hardy</u> ¹	3	+	+	
Evansville Punctated, <u>var. Sharkey</u>	5	2	1	2
<u>var. unspec.</u>				1
Harrison Bayou Incised, <u>var. Harrison Bayou</u>	8			
Hollyknowe Ridge Pinched,				
<u>var. Patmos</u>	3		1	2
L'Eau Noire Incised,				
<u>var. L'Eau Noire</u>	40	5		7
<u>var. Anna</u>	29	5		15
<u>var. Bayou Bourbe</u>	3			
<u>var. Carter</u>			1	
<u>var. Evangeline</u>				1
<u>var. unspecified</u>			1	
Leland Incised, <u>var. Leland</u>	30			1
<u>var. unspecified</u>		5		
Mazique Incised, <u>var. Manchac</u>	15	15		5
<u>var. unspecified</u>			2	
Mississippi Plain, <u>var. Pocahontas</u>	43		46	7
Mound Place Incised, <u>var. unspecified</u>	1			
Plaquemine Brushed, <u>var. Plaquemine</u>	135	61	9	12
Winterville Incised, <u>var. Coleman</u>	13			

¹The plus sign indicates the type is present in a collection but can not be identified with a specific component.

(Table 26). Rims are predominantly plain, but interior straps also occur. The latter have been identified as a rim mode and designated the "interior strap" bowl rim (Fig. 59, a). Rim straps range between 1 cm. and 2 cm. in width. Of the Addis rim sherds in the type collection from Routh site, 52 are plain bowl rims, and 20 are "interior strap" bowl rims.

TABLE 26

FREQUENCY OF ADDIS VESSEL SHAPES AND MODES
AT THE ROUTH AND ROSE HILL SITES

	Routh Site	Rose Hill Site
Simple bowl	76	8
"Preston" bowl	51	5
"Walnut Bayou" bowl	4	3
"Delta City" bowl	7	2
Unidentified	0	8
Total	137	26

2) "Preston" bowl (Fig. 59, d). The "Preston" bowl is a carinated vessel characterized by a flat base, straight bottom walls and relatively short side walls which may be concave or straight.¹ The angle between side and

¹In order to describe carinated bowl shapes, it has been necessary to develop a special terminology for the various parts of such vessels. That portion upon which the vessel rests is the base. That portion lying between the base and the point of carination is the bottom wall. Finally, the portion of the vessel, including the rim, above the point of carination is the side wall.

Fig. 59--Baytown Plain, var. Addis rim
and vessel shape modes

- A. "interior strap" bowl rims.
- B. "Vicksburg" rim.
- C. "Crippen Point" bowl.
- D. "Preston" bowl.
- E. "Delta City" bowl, hypothetical early form.
- F. "Delta City" bowl, hypothetical intermediate form.
- G. "Delta City" bowl, hypothetical late form.
- H. beaker, Fitzhugh site, Cut 1, Level D.
- I. Mississippi Plain, var. Pocahontas, jar rim and
shoulder, Routh site, Cut 5, Level E.

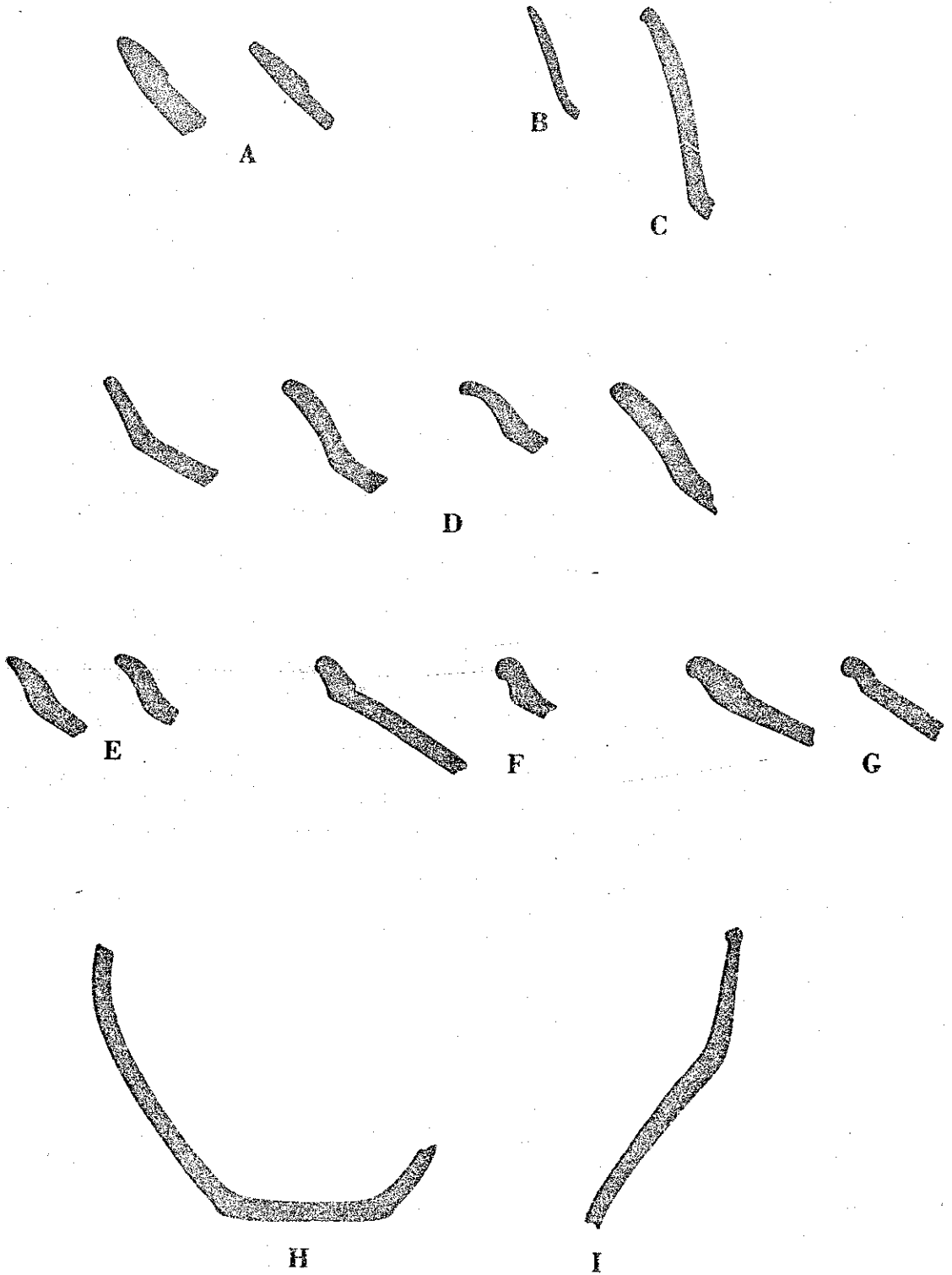


Fig. 59.--Baytown Plain, var. Addis rim
and vessel shape modes

bottom walls is sharp. Two additional distinctive features of this vessel mode are the lack of an interior incised line to mark the junction of side and bottom walls and the exclusive use of plain rims. A broad finger-impressed groove may mark the interior junction, but usually this is absent.

Based on measurements of sherds from the Routh site, rim diameter is consistently close to 30 cm. Width of the upper side wall ranges between 2.3 cm. and 3.7 cm. with a mean of 3.0 cm. Cotter (1952:Fig. 60, No. 5) illustrates a specimen from the Gordon site (26-L-2) that is 30 cm. in diameter and has an upper side wall of 3.0 cm. width.

This vessel form is second in popularity only to the simple bowl in Routh components (Table 26), and is the most common carinated bowl form during the phase. The author has identified ten "Preston" bowl fragments in the Mayersville phase type collection. Several are illustrated by Phillips (1970:Fig. 237, a-f).

In the Upper Tensas Basin, the "Preston" Bowl has been found only on Addis paste. In LMS sherd collections from Lake George (21-N-1) and Winterville (19-L-1) sites in the Lower Yazoo Basin, the author has noted some specimens with fine shell-tempered paste equivalent to Bell Plain.

3) "Walnut Bayou" bowl (Fig. 61, b-d). The "Walnut Bayou" bowl is diagnostic of the Fitzhugh phase and is described in detail in Chapter IV. It need only be noted here that a few examples of the form do occur at the Routh site and possibly in other Routh phase components. Of the four specimens from Routh site, only one has an interior line or groove at the junction of side and bottom walls, which is a characteristic of the vessel form in Fitzhugh phase. The remaining examples have the smooth, rounded junction that is characteristic of the "Preston" bowl. Only plain rims are known for this vessel shape made in the Routh phase.

4) "Delta City" bowl (Fig. 59, e-g). The third form of carinated bowl characteristic of the Routh phase is the "Delta City" bowl (Phillips 1970:558, Fig. 238). In general, this form is characterized by a sharp angle of carination, and very short, out-flaring, side wall. As defined here, the "Delta City" bowl occurs in both the Routh and Fitzhugh phases. In the Lower Yazoo Basin it is diagnostic of the Mayersville phase (ibid.).

There is actually a great deal of variation within the category "Delta City" bowl. In some instances it resembles the "Preston" bowl, while in others it resembles a shallow bowl with an interior rim strap and exterior groove. It is felt that these two extremes represent

respectively earlier and later forms of the mode. At Routh and Rose Hill, presumably early Routh phase sites, the form is really just a "Preston" bowl with short side wall, and the distinction between the two forms there is arbitrary to some extent (Compare Fig. 59, d and e). In what is felt to be a later development (Fig. 59, f), the side walls become shorter and the angle of carination decreases. In its final form (Fig. 59, g), the side wall is flared out sharply to lie in a plane parallel to that of the bottom wall. In some examples the concave exterior surface of the side wall is produced by grooving that surface with the finger or a stylus. Most examples from the Fitzhugh site exhibit this last feature.

These changes are not entirely sequential. There are no late forms at Routh or Rose Hill, but the Mayersville site collection contains nearly the entire spectrum of variation, and the Fitzhugh phase type collection contains some examples of the earlier forms. The change through time is quantitative as well as qualitative.

Measurement of rim sherds from the Fitzhugh and Routh sites indicates that the "Delta City" bowl has a rim diameter of approximately 30 cm. In the Upper Texas Basin, the "Delta City" bowl is known to occur only on Addis paste. The author has observed specimens in the LMS collections from the Lake George site (21-N-1), however,

that have Addis paste with shell added. As is indicated in Table 26, the "Delta City" bowl is a rather infrequent vessel mode in Upper Tensas Basin sites.

The carinated bowl has a long history in the Lower Yazoo and Upper Tensas Basins. This history begins late in the Coles Creek period and carries through to historic times. The earliest recognized form, occurring in the Balmoral and Kings Crossing phases, is a vessel with a rounded bottom wall and straight side wall. The latter may be vertical, slightly out-flaring, or slightly in-sloping. The author has noted in Balmoral phase collections that the width of side walls ranges between 2 cm. and 8 cm., but no large sample of vessels has been measured to verify this impression. This vessel form can be found on paste equivalent to Baytown Plain, var. Valley Park, but more frequently, paste resembles the Vicksburg variety of Baytown Plain. In the latter case, rims are thin, tapered, and well polished (Phillips 1970:57,435). In the present paper, such rims are given modal status and designated, "Vicksburg" rims (Fig. 59, b).

In the Lower Yazoo Basin during the subsequent Crippen Point phase, carinated vessels frequently have side walls that are slightly out-flaring and/or concave outward (Fig. 59, c). Carinated bowls with these characteristics are referred to in this report as "Crippen

Point" bowls. This vessel shape mode also occurs in some Balmoral phase collections from the Survey Area.¹

Presumably these sites are late within the phase.

The Routh phase seems to be a period when the carinated bowl is undergoing rapid and diverse changes. The "Preston" bowl is most similar to the earlier forms of the Balmoral, Kings Crossing, and Crippen Point phases. The "Delta City" bowl can be derived from these earlier forms through a progressive diminution of the side wall. The "Walnut Bayou" bowl may be seen as a variation that emphasized increasing width of side walls and lower angle of carination. It comes into its own in the subsequent Fitzhugh phase when the "Preston" bowl disappears. This mode is found primarily in the following locations: the Upper Tensas Basin; the Natchez area; and the Lower Yazoo Basin along the Deer Creek and present Mississippi meander belts. In Lake George phase, the common carinated vessel form is known as the "Yazoo" bowl (Phillips 1970:60). In this, the sharp angle of carination is retained, but the outward curvature of the side wall is greatly increased. Some "Preston" bowl examples from Mayersville and even Routh phase sites, exhibit these characteristics to a

¹Specifically, Canebrake (24-J-9) and Ditto Lake (25-J-5).

degree, suggesting that the "Yazoo" bowl derives from a "Preston" bowl antecedent.

Both "Walnut Bayou" bowl and "Yazoo" bowl differ from "Preston" bowl in their close association with specialized rim modes--"Tunica" rim in the former and "Haynes Bluff" rim in the latter.

5) Bottle. Bottles appear to be relatively uncommon in Routh phase. Three sherds from the Routh site have been identified as bottle rims, but due to small size, they provide no insight into total vessel shape.

6) Beaker. Most decorated pottery in the Routh phase occurs on a beaker-shaped vessel. Although no undecorated examples are known to the author, they no doubt do occur. Decorated types associated with this vessel shape are: Plaquemine Brushed, var. Plaquemine, Mazique Incised, var. Manchac; Evansville Punctated, var. Sharkey; and Hollyknowe Ridge Pinched, var. Patmos. Vessel bottoms are either flat and circular, or flat and square. Above a restricted base, sides are relatively straight and vertical, and rims are usually slightly out-flaring (Fig. 59, H, Plate II, E. The beaker shape is a carry over from Balmoral phase, where it is characteristic of Coles Creek Incised, var. Mott, and other decorated types.

Coles Creek Incised, var. Hardy

Sherds identifiable as Coles Creek Incised, var. Hardy (Ford 1951:87-8; Phillips 1970:74) can be found in both Balmoral and Routh phase pottery collections. The few Routh phase specimens available are generally of small size, with the result that little is known about vessel shape and total design. There is a tendency for lines to be more widely spaced in these sherds than in Balmoral specimens, but paste seems to be a more reliable sorting criteria. In Routh phase, paste is equivalent to Addis variety of Baytown Plain.

Hardy is definitely a minority type in Routh phase. At the type site, there are a total of three Hardy sherds, which can be attributed to the Routh component on the basis of paste and stratigraphic context. Of the remaining sites with Routh components, only Lake Providence and Point Lake have yielded Hardy sherds that can be identified with Routh phase on typological grounds. In the Lower Yazoo Basin, the Mayersville phase type collection of 548 decorated sherds contains 16 Hardy sherds (Phillips 1970:508). Brain (1969:272) finds Hardy sherds in Winterville phase stratigraphic context, but suspects their presence is "probably largely the result of re-location."

Many, if not most, of the sherds classified as Coles Creek Incised, var. Hardy, in Routh phase collections

may actually derive from pottery types entirely unrelated to Hardy. The sherds of L'Eau Noire Incised, var. L'Eau Noire, illustrated in Plate I,h,j, are a case in point. Plate I,a,b, illustrates two sherds from Routh site in which Hardy-like lines and a row of punctations underlie a field of parallel, diagonal lines. If the upper one centimeter of these sherds were missing, they would be classified as Hardy. The total design, however, is similar to that characteristic of Plaquemine Brushed.¹

Evansville Punctated, var. Sharkey (Plate I,c,d)

Sharkey is a numerically minor type in the Routh phase. It is, however, represented in all but the smallest site collections. Due to generally small sherd size, little can be said to characterize the type beyond what has been described by Phillips (1970:81). Paste is the equivalent of Baytown Plain, var. Addis. Only punctations made with the fingernail, or pinched between thumb and finger are represented. These appear to be arranged always in vertical or diagonal rows. If more and larger sherds were available for study, it is possible that Routh and Fitzhugh phase variations could be distinguished. As it is, no such distinction can be made.

¹Actually the specimens conform to no one type defined for the Lower Mississippi Valley. Their best fit is with the western Louisiana type, Dunkin Incised (Webb: 1948).

PLATE I.--Routh phase pottery types

- A. Dunkin Incised, Routh site, Cut 1, Level B.
- B. Dunkin Incised, Routh site, Cut 3, Level B.
- C. Evansville Punctated, var. Sharkey, Routh site, Cut 1, Level C.
- D. Evansville Punctated, var. Sharkey, Routh site, Cut 5, Level A.
- E. Harrison Bayou Incised, var. Harrison Bayou, Canebrake, surface.
- F. Harrison Bayou Incised, var. Harrison Bayou, Routh, Cut 3, Level B.
- G. Hollyknowe Ridge Pinched, var. Patmos, Routh site, Cut 4, Level C.
- H. L'Eau Noire Incised, var. L'Eau Noire, Routh site, Cut 3, Level A.
- I. L'Eau Noire Incised, var. Bayou Bourbe, Routh site, Cut 3, Level B.
- J. L'Eau Noire Incised, var. L'Eau Noire, Routh site, Cut 3, Level B.
- K. L'Eau Noire Incised, var. Anna, Routh site, Cut 5, Level B.
- L. L'Eau Noire Incised, var. Anna, Routh site, Cut 5, Level D.
- M. Leland Incised, var. Leland, Routh site, Cut 3, Level B.
- N. Leland Incised, var. Leland, Routh site, Cut 3, Level D.
- O. Leland Incised, var. Leland, Routh site, Cut 4, Level B, C.

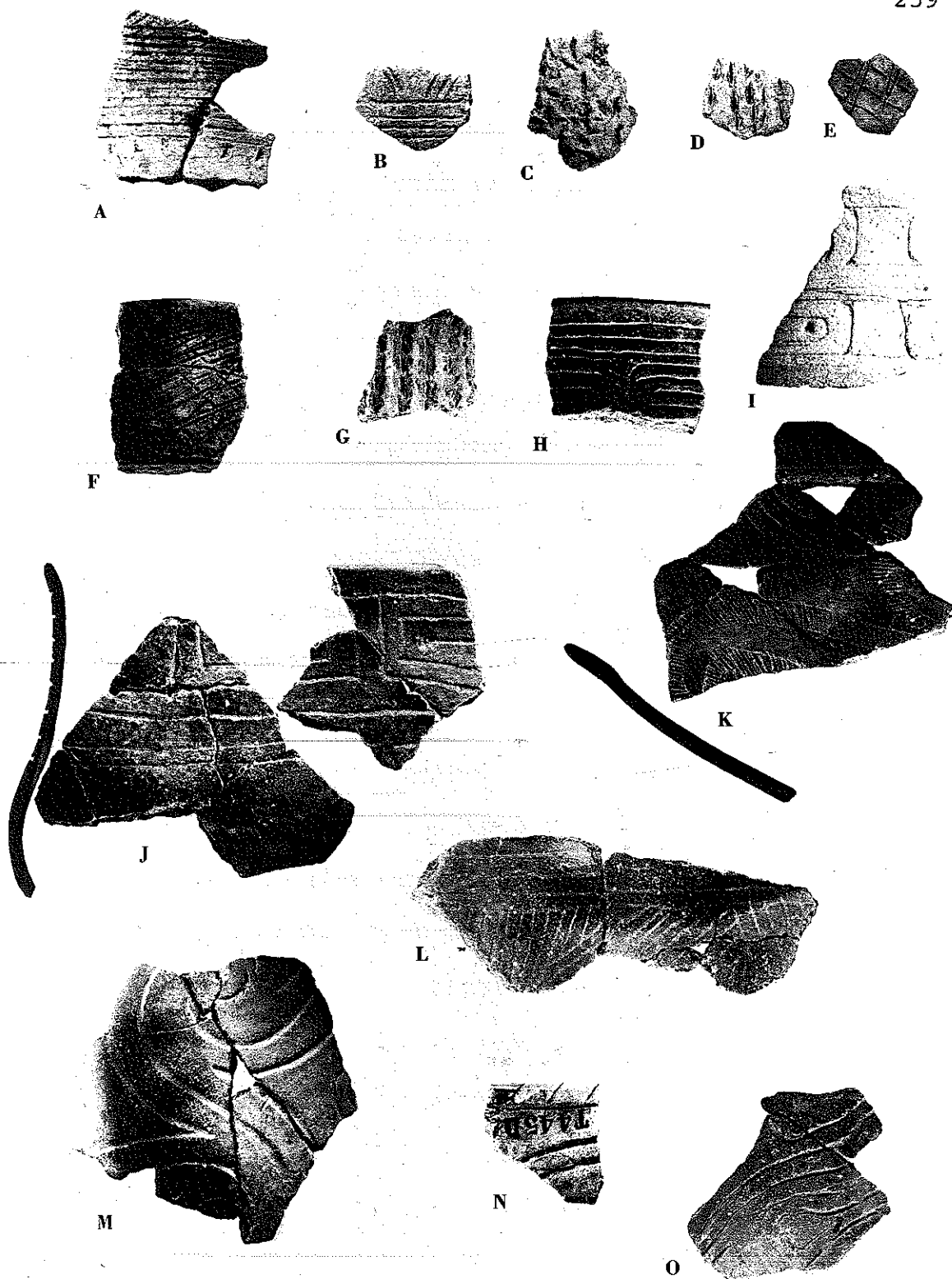


PLATE I.--Routh phase pottery types (1/2 scale)

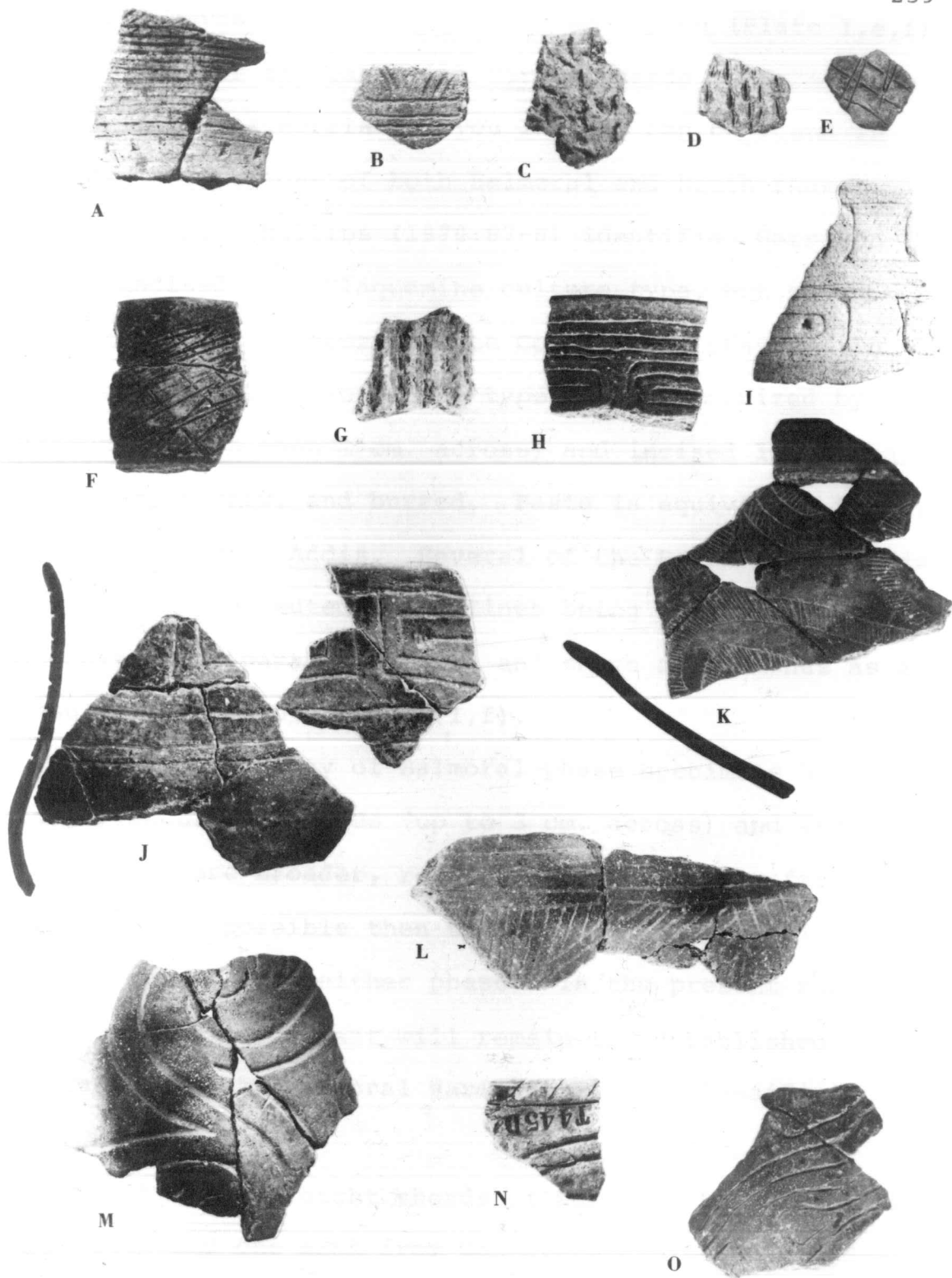


PLATE I.--Routh phase pottery types (1/2 scale)

Harrison Bayou Incised, var. Harrison Bayou (Plate I,e,f)

As was the case with Hardy, sherds conforming to the criteria of Harrison Bayou Incised can be found in pottery collections of both Balmoral and Routh phase affiliation. Phillips (1970:87-8) identifies Harrison Bayou Incised as a Plaquemine culture type, but notes that it may also occur in late Coles Creek phases. In Routh phase collections, the type is characterized by small diamonds (less than 1 cm. across) and incised lines that are deep, narrow, and burred. Paste is equivalent to Baytown Plain, var. Addis. Several of the Routh site sherds are sloppily executed, with lines being irregularly spaced and often not parallel. Size and shape of diamonds as a result are variable (Plate I,f).

The majority of Balmoral phase specimens have large, regular diamonds (up to 3 cm. across) and incised lines that are broader, rounded, and relatively free of burr. It is possible then to sort sherds of Harrison Bayou Incised into either phase. In the present report, the Routh phase variant will remain the established variety, and the Balmoral variant will be classified as var. unspecified.

There are eight sherds of Harrison Bayou from the type site and one each from Canebrake and Lake Providence. Phillips (1970:508) has identified six in the Mayersville site collection.

Hollyknowe Ridge Pinched, var. Patmos (Plate I,g)

As with Evansville punctated, var. Sharkey, Patmos is a numerically minor type that occurs in most of the identifiable Routh phase components in the Upper Tensas Basin. Because the total number of sherds of Routh phase affiliation available for study is small, little can be said by way of characterizing the type. It appears to conform to the description offered by Phillips (1970:90). Paste is similar to Baytown Plain, var. Addis. Decoration consists of pinchmarks that are arranged in linear fashion.

As with Sharkey, the type persists into the Fitzhugh phase, and the limited sample does not permit distinguishing variations between the two phases.

L'Eau Noire Incised, vars. L'Eau Noire and Bayou Bourbe (Plate I,h-j)

In his type-variety classification of Lower Mississippi Valley pottery, Phillips (1970:10-4) recognizes seven varieties of the type, L'Eau Noire Incised. Three of these, L'Eau Noire, Bayou Bourbe, and Shell Bluff, bear similar decorative designs and appear to be closely related. L'Eau Noire Incised was first defined by Quimby (1951:119-20) on the basis of pottery recovered from the Medora site. Phillips' classification assigns the Medora material to Bayou Bourbe and reserves the status of established variety for pottery with supposedly different

designs. The single bottle from the L'Eau Noire site illustrated by Moore (1912:Fig. 2) is cited as an example of the variety, L'Eau Noire. In terms of sorting criteria, the established variety is said to be characterized by "rectilinear stepped or key designs", while Bayou Bourbe is said to be distinctive in having "complex designs" (ibid.:101-2). Shell Bluff is differentiated on the basis of paste ("smooth polished ware equivalent to the best examples of Vicksburg and Addis"), decorative technique ("fine incising and excising") and decorative design ("rectilinear guilloche and stepped motif") (ibid.:102-3).

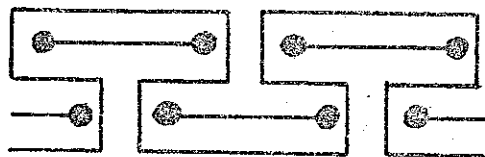
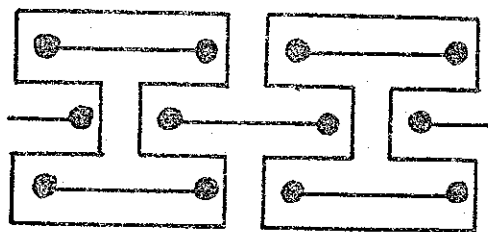
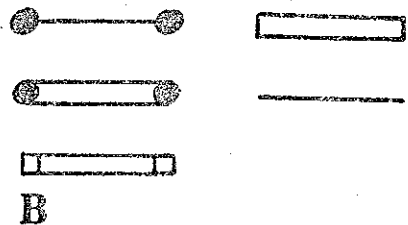
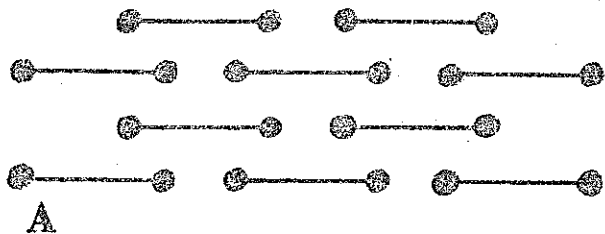
The author's own work with L'Eau Noire Incised pottery has led him to believe that Phillips is correct in distinguishing three varieties. He would, however, define them differently. After reviewing all relevant material available from sites both within and outside of the Upper Tensas Basin, it has become evident to the author that the great majority of pottery classifiable as L'Eau Noire, Bayou Bourbe or Shell Bluff, is decorated with two basic designs here designated (Designs A and B) which first appear sometime prior to Routh phase and continue into Fitzhugh phase.

Design A is at all times numerically predominant. This design involves two or more vertical rows of

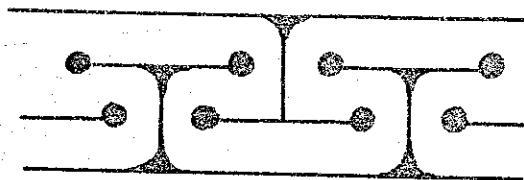
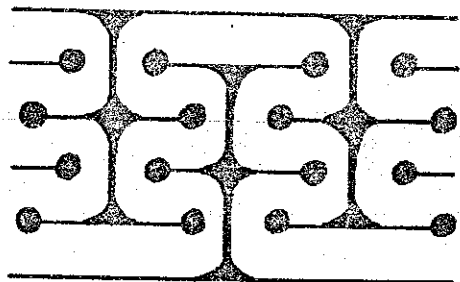
overlapping horizontal line segments (Fig. 60, a) which are depicted in one of five different ways as shown in Fig. 60, b.

These line segments serve as elements around which either incised lines or plain bands meander. Fig. 60, c, depicts the former and Fig. 60, d, the latter. The rounded corners characteristic of the meandering band are produced either by a simple incised line or by excising as shown in Fig. 60, e. Apparently this feature, rounded corners, does occur with the meandering line variant, but no examples are known from the Upper Tensas Basin. It always occurs with the meandering band variant.

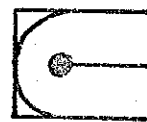
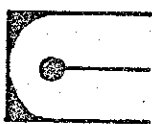
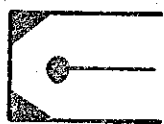
The author feels that the meandering band is chronologically and developmentally earlier than the meandering line variant. The meandering band is surely identified in only a few instances: Medora (Quimby 1951: Fig. 19), Baptiste (28-H-10), Davis (Krieger 1949:Fig. 33, J), and L'Eau Noire sites (Moore 1912:Fig. 2). Davis is quite certainly the temporal equivalent of Balmoral phase, or the younger Crippen Point phase in the Lower Yazoo Basin. Medora site may also be this early (see pg. 302). The age and/or cultural affiliation of the other sites is unknown. The meandering line variant occurs in the Routh and Fitzhugh phases (Plate I, h, j). The meandering band variant is more complex in that excising is common, corners



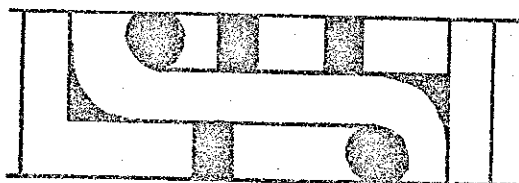
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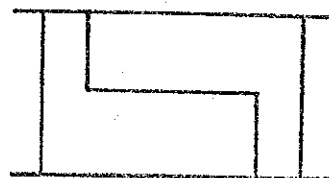
D



E



F



G

Fig. 60.--L'Eau Noire Incised decorative designs

are always rounded, either by excision or by incision, and line segments terminate in circles. The meandering line variant usually lacks the rounded corners, line segments frequently lack the elaboration of circles, and excision rarely occurs.

It is proposed that the more elaborate design, in which a meandering band is portrayed, be the sorting criteria for the varieties Bayou Bourbe and Shell Bluff: the former having a distribution in the southern portion of the Lower Mississippi Valley, and the latter a more northern distribution beginning in the Lower Yazoo Basin.

Accordingly, the variety, L'Eau Noire, can be restricted to the later, simpler variant characterized by a meandering line. Phillips (1970) draws his distinction between L'Eau Noire and Bayou Bourbe varieties using illustrated pottery from the L'Eau Noire and Medora sites. According to the above analysis, this pottery all belongs to one variety, Bayou Bourbe. The vessel from the L'Eau Noire site (Moore 1912:Fig. 2) and one of the vessels from Medora that Quimby illustrates (1951:Fig. 19, c) bear identical designs except that the latter is on a plate interior. The vessel that Quimby illustrates in Fig. 19, b and d, is very similar to these, but differs in that the meandering band is cut up into segments which are enclosed in individual panels. The chevron decoration in

Fig. 19, b is merely a filler element, necessary if one is to put rectangular designs on a circular field.

A second basic design (Design B) is portrayed in Bayou Bourbe, Shell Bluff and probably L'Eau Noire, as these varieties are defined here, and in a fourth variety, Paine. Few examples of the design are known, and it is poorly understood at present. The design frequently occurs in panels and involves a meandering band or line that begins in one upper corner of the panel and meanders across and down to the opposite lower corner. A specimen from Shell Bluff site illustrated by Phillips (1970:Fig. 38, p) does not have panels. In this specimen, interlocking bands meander diagonally across the design field.¹

Fig. 60, f shows Design B in its presumed earlier form. Fig. 60, g shows the much simplified, and definitely later form. The difference between them parallels to some extent that described for the better known, Design A. The earlier form makes use of excision, rounded corners, and circles; the later form lacks these elements. This design first occurs in Alto focus and Kings Crossing phase

¹Fig. 38, o (Phillips 1970), is apparently a variant of Design B. Fig. 38, n, however, is probably similar to sherds from Balmoral and Point Lake sites which bear complex curvilinear designs with fine line incision and excision. How these sherds relate to L'Eau Noire Incised is not known. No Shell Bluff specimens with Design A are known to the author, but this is probably due to sampling error.

contexts; and it is known in its early form from Davis¹ (Krieger 1949:Figs. 33, i and 34, k), Shell Bluff (Phillips 1970:Fig. 38, p), and Baptiste (28-H-10). There is then a hiatus in its occurrence until Fitzhugh phase when it is common and occurs in the form depicted in Fig. 60, g. In this later form, it is known as L'Eau Noire Incised, var. Paine (see Chapter IV).

The frequency of L'Eau Noire in available Routh phase ceramic collections is quite variable. At Point Lake and Dunbarton, no examples have been found; at Routh and Rose Hill, the type accounts for 15 per cent of all decorated sherds. Quality of execution varies considerably also. Incision may be heavy and careless (Plate I, j) or quite fine and well controlled. There are no examples in Routh phase collections, however, that would qualify as being engraved.

Three sherds, belonging to a single vessel, (Plate I, i) in the Routh phase type collection are classified as Bayou Bourbe. Excision, rounded corners and line segments terminating in circles, characterize the decoration of this vessel. The total design is not present, but what there is fits neither the meandering band nor

¹Krieger (ibid.:91) refers to the design as "stepped designs."

meandering line variant exactly. Apparently, the total design has been split up and the resulting segments used separately. Bayou Bourbe, like Shell Bluff, probably reaches its maximum popularity prior to Routh phase. Since L'Eau Noire develops directly out of it, some specimens classifiable as Bayou Bourbe should occur in Routh phase.

L'Eau Noire Incised, var. Anna (Plate I, k, and l)

Published definitions of Anna (Ford and Willey 1940:55, Phillips 1970:102) accurately describe the variety as it occurs in the Upper Tensas Basin during Routh and Fitzhugh phases. The samples of Anna from Routh phase sites are such, however, that some details can be added to these original definitions.

Decorative designs portrayed on Anna from Routh phase sites are commonly of two kinds. One consists of plain or line-filled bands radiating out from the vessel center with the intervening triangular zones being filled with close spaced parallel lines (Plate I, l). This rectilinear design accounts for the vast majority of Anna sherds in Routh phase sites. The remainder bear a design consisting of narrow (up to 1 cm. wide) curvilinear bands forming interlocking scrolls or loops pendant from the rim (Plate I, k). These bands are filled with closely spaced parallel lines while the remainder of the vessel surface is plain. This curvilinear design is reminiscent

of that occurring on pottery of the Bossier Focus from northwest Louisiana that Webb (1963) calls Carmell Engraved. Neither of these two Anna designs have anything in common with the two designs characteristic of L'Eau Noire, Bayou Bourbe, and Shell Bluff.

Rims of Anna vessels are always undecorated and set off from the decorative zone. Plain interior rim straps are a common feature during the Routh phase. Of equal frequency, however, is the practice of setting off an unthickened rim area by an incised line. In both cases, the rim area is undecorated and up to 2 cm. in width.

In Routh phase collections, the frequency of Anna ranges between 5 and 45 percent of the decorated pottery.

L'Eau Noire Incised, var. Carter

This variety is fairly common in the Lower Yazoo Basin, occurring at Mayersville (Phillips 1970:508), Lake George (ibid.:Table 2), and Winterville (Brain 1969:165) sites. It is virtually absent in Routh phase sites, one sherd from Balmoral site being the only known example.

L'Eau Noire Incised, var. Evangeline

As with Carter, Evangeline is virtually absent from Routh phase sites in the Upper Tensas Basin. Only one sherd, from the Balmoral site, has been found in

Routh phase context. The variety is well represented at Medora, indicating that its center of distribution may lie to the south of the Survey Area.

Leland Incised, var. Leland (Plate I, m-o)

Phillips' (1970:104-7) classification of Leland Incised pottery recognizes no clay-tempered varieties.¹ In Routh and Fitzhugh phase collections, most Leland Incised pottery has clay-tempered paste that resembles Baytown Plain, var. Addis; this pottery is identical in other respects to several of Phillips' varieties. In sorting Leland Incised pottery from the Upper Tensas Basin then, the author has been faced with the choice, either to create several new varieties, or to expand the definitions of existing varieties to include the characteristic of Addis paste.

Paste and temper play a large role in the Phillips classification of Leland Incised. Results obtained from an analysis of Leland Incised decorative designs (Appendix II), however, indicate that decorative design and decorative technique have greater chronological significance than paste and tempering characteristics. The author has therefore decided to expand the existing varieties to

¹As defined by Phillips (ibid.:69), the type "Coleman Incised" would include such material.

include pottery with Addis paste. Thus in the present paper, the varieties Leland, Deep Bayou, and Ferris, encompass pottery with both Holly Bluff and Addis paste.

Leland is the only variety presently known for Routh phase, and the type site provides the only good collection of it in the Survey Area. Designs A and C, as described in Appendix II, are present in the Routh site collection. The examples of Design A (Plate I, m) are of Stage 1 type, and the single Design C example is of the tentatively defined early variety (Plate I, o). Execution is characterized by relatively broad lines that may be either deep or shallow. Lines are carefully executed, evenly spaced, and frequently polished over.

Leland Incised is certainly not a numerically important type in the Survey Area during Routh phase. The largest sample, 30 sherds from Routh site, represents only 10 per cent of the decorated pottery from that site. Elsewhere in the Survey Area, it can be definitely identified with a Routh component only at Rose Hill and Preston. Phillips (ibid.:308, 558) records no Leland Incised pottery from the Mayersville site and does not include it in the Mayersville phase ceramic complex.¹ On the basis of his

¹At least two of the Coleman Incised sherds from Mayersville site that Phillips illustrates (ibid.:Fig. 236, d, j) would be classified as Leland in the present paper.

excavations at Winterville site, Brain (1969:164) has defined a new type, 'Bethlehem Incised,' which he feels is closely related to Leland Incised and precedes it in time.¹

'Bethlehem Incised' is characteristic of the Middle occupation at Winterville (a manifestation of Winterville phase which is roughly contemporaneous with Routh phase).

With Leland present in Routh phase in the Upper Tensas Basin, it should not be surprising that something similar is present at the same time in the Lower Yazoo Basin.

The one whole vessel of 'Bethlehem Incised' that Brain illustrates (ibid.:Plate 6, m), however, does not bear a design that the present author considers typical of Leland Incised.

Mazique Incised, var. Manchac (Plate II, a, b)

Manchac is a common variety in both the Routh and Fitzhugh phases. The available sherd collections indicate that the variety undergoes no radical change during this period of time. In Routh phase, the variety conforms fairly closely to the original type description (Quimby 1942:267). In that description, Quimby was dealing with

¹When discussing pottery types reported at sites beyond the Survey Area, the pottery type nomenclature of each author will be used. This usage will be indicated by half quotes. In most cases, such pottery types can be translated directly into the type-variety classification employed in the present report.

PLATE II.--Routh phase and Balmoral phase pottery.

- A. Mazique Incised, var. Manchac, Routh site, Cut 1, Level B.
- B. Mazique Incised, var. Manchac, Routh site, Cut 3, Level A.
- C. Mound Place Incised, var. unspecified, Routh site, Cut 1, Level C.
- D. Plaquemine Brushed, var. Plaquemine, Routh site, Cut 1, Level C.
- E. Plaquemine Brushed, var. Plaquemine, Routh site, Cut 5, Level D.
- F. Winterville Incised, var. Coleman, Routh site, Cut 1, Level A.
- G. Winterville Incised, var. Coleman, Routh site, Cut 1, Level C.
- H. Unidentified curvilinear excised, Balmoral site, Cut 4, Level C.
- I. Mazique Incised, var. Preston, Canebrake site, Cut 3, Level F.
- J. Mazique Incised, var. Preston, Canebrake site, Cut 1, Level B.
- K. Mazique Incised, var. Preston, Canebrake site, surface.
- L. Mazique Incised, var. Preston, Mott site, Cut 1, Level B.
- M. Dunkin Incised, Preston site, Cut 2, Level B.
- N. Maddox Engraved, var. Maddox, Preston site, surface.

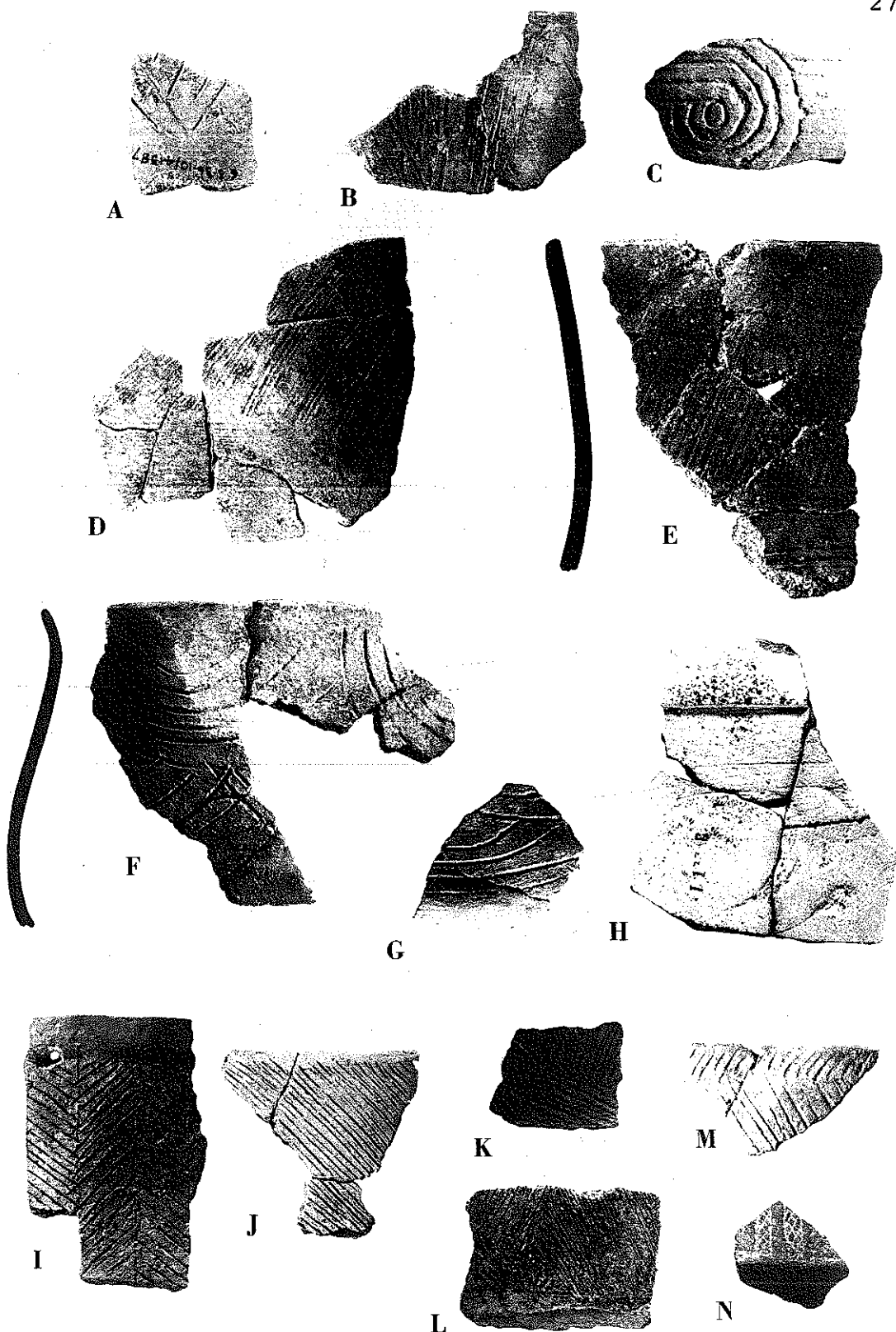


PLATE II.--Routh and Balmoral phase pottery types (1/2 scale)

pottery from a large geographical area (Baton Rouge to Vicksburg) and covering a long time span (Early Plaquemine to Historic).¹ As a result, Manchac from the Routh phase exhibits less variation than is described by Quimby. According to Quimby (1951:111), decorative designs consist of "line filled triangles and herringbones, bands of diagonal lines or bands of vertical lines encircling the vessel." Manchac of the Routh phase appears to bear only a line filled triangle design. Quimby also describes a rim variation consisting of a plain exterior thickened rim. This feature does not occur in the Upper Tensas Basin in Routh phase, but rather appears to be characteristic of the Natchez area and farther south during Fitzhugh phase. Finally, Quimby describes Manchac as occurring on either a vessel with relatively straight sides or one with constricted neck and out-flaring rim. In Routh phase, only the former shape occurs. It possesses a square or circular flat bottom; sides are relatively straight and usually vertical; and the rim is vertical or slightly out-flaring. The second vessel shape attributed to Manchac by Quimby

¹ Much of what Quimby illustrates as Manchac in the Medora report (1951:Fig. 12) would be classified as variety Preston in the present report. See pp. 310-312. for the definition of this new variety.

is characteristic of later times and is frequently shell-tempered.¹

Manchac occurs in the Routh phase with a frequency about equal to that of Anna and L'Eau Noire, but below that of Plaquemine Brushed.

Mississippi Plain, var. Pocahontas

Coarse shell-tempered plain pottery equivalent in paste to Mississippi Plain, var. Pocahontas, has been found in association with Routh phase occupations at three sites in the Survey Area: Routh, Rose Hill, and Balmoral. A total of 43 sherds came from Cuts 1, 3, and 5 at Routh. Thirty-four of these belong to a single vessel (Fig. 59, i) found deep within Cut 5 in Routh phase stratigraphy context. The entire Rose Hill collection, consisting of 407 sherds, was obtained from the surface of the site. All sherds, except 7, which are shell-tempered and undecorated, can be easily accommodated in a single component of Routh phase affiliation. It is certainly possible that these few shell-tempered sherds are the result of a later site occupation; but the absence of other later pottery types in the collection argues that they belong to the Routh component. The Balmoral site has yielded 47 Pocahontas

¹ See description of Barton Incised, var. Stowers, pp. 490-497.

sherds. With this exception, the entire ceramic collection from the site can be assigned to two components of Balmoral and Routh phase affiliation. Except for two sherds, all Routh phase pottery came from Cut 2 on the flank of Mound B. Twenty-three Pocahontas sherds came from this same cut; the remainder were found in Cut 4 just below plow zone. It would appear that Pocahontas is an integral part of the Routh component at Balmoral.

In all three of the above instances, it is possible to account for the presence of Pocahontas pottery by postulating a later site reoccupation. The explanation that Routh phase people were using, if not actually manufacturing, shell-tempered pottery in small amounts, however, does less violence to the evidence from these sites. Furthermore, it is given considerable credence by the fact that contemporary people to the north and east in the Lower Yazoo Basin were definitely in possession of shell-tempered pottery. Brain (1969:Table 22) sees Mississippian influences of a Cahokia nature first appearing in the Lower Yazoo Basin at the Winterville site in late Crippen Point phase. In the subsequent Winterville phase, the temporal, and to some extent, typological equivalent of Routh, shell tempering is quite common. Several pottery types in that phase, such as 'Barton Incised,' 'Parkin Punctated' and 'Winterville Incised,' are always shell-tempered and

others, such as 'Anna Incised,' 'L'Eau Noire Engraved,' 'Carter Engraved,' and 'Bethlehem Incised,' frequently occur on Addis paste which has small amounts of shell added. In short, it is entirely possible that some shell tempering should occur in the Upper Tensas Basin as early as Routh phase. Phillips (ibid.:508) apparently excludes shell tempering from the Mayersville phase. All shell-tempered pottery in collections from the Mayersville site sorted by him, is assigned to Deer Creek components.

The fact that shell tempering does not become prominent during Routh phase suggests that trade may be the mechanism whereby such pottery enters the Upper Tensas Basin. Relevant to this question is the shell-tempered vessel from Cut 5 at Routh site. It is a globular jar with weakly defined shoulder, straight neck and rim 4 cm. high, and slightly rolled lip (Fig. 59, i). Brain (Personal communication, September, 1969) has commented that this vessel resembles the plain shell-tempered jars characteristic of the Winterville phase. This shape is unique in Routh phase.

Other than this single jar from the type site, there is no information available on vessel shapes characteristic of Pocahontas during Routh phase.

Mound Place Incised, var. unspecified (Plate II, c)

Three sherds, one from Routh and two from Compton Lake, have been identified as Mound Place Incised. All occur on Addis paste. Decoration on the Routh specimen consists of close spaced horizontal lines interrupted by loops. An effigy bowl with similar incised design from the Chickasawba Mound, Mississippi County, Arkansas, is illustrated in the 1951 Survey report (Phillips, et al. 1951:Fig. 102, J). While rim effigies are not known for the Routh phase, they do occur in Fitzhugh phase collections in association with horizontal lines incised below bowl rims. On typological grounds, the Upper Tensas Basin material should be included in the type, Mound Place Incised, but until more data on this pottery is at hand it would be unwise to attempt variety identification.

Plaquemine Brushed, var. Plaquemine (Plate II, d, e)

This is the most abundant decorated type in Routh phase collections with a frequency ranging between 30 and 60 per cent of decorated pottery. Plaquemine in the Survey Area conforms closely to Quimby's (1951) original type description.

Analysis of Plaquemine Brushed from Routh and Fitzhugh phase collections, indicates that there are some slight changes in the type from one phase to the next. In the earlier phase, brushing tends to be lighter and less

burred, although fine brushing does occur in Fitzhugh phase collections. In both phases, the most common design entails diagonal brushing above horizontal brushing. In Routh phase, the horizontal brushing forms a band 2-5 cm. in width, and punctations of various forms are frequently placed below. In Fitzhugh phase, this horizontal band tends to be less than 2 cm. wide and seldom has punctates. Concurrent with this change, there appears to be an increase in the width of the zone of diagonal brushing. Further information on these trends may eventually make possible the definition of early and late varieties of this widespread type.

Winterville Incised, var. Coleman (Plate II, f, g)

The sorting criteria which Phillips presents for the type 'Coleman Incised' are as follows:

Incised or "trailed" lines in simple curvilinear patterns on "clay-tempered" ware comparable to the Addis variety of Baytown Plain (1970:69).

This is a very sketchy description, and, were it not for a reference elsewhere to "curvilinear decoration comparable to Winterville Incised," it would be difficult to know what kind of pottery Phillips had in mind when he defined the type. Additional information on 'Coleman Incised' from the Upper Tensas Basin indicates that decoration is indeed similar to that characteristic of Winterville Incised. With the redefinition of the Belzoni variety of

Winterville Incised (Chapter IV) to include broad line decorated pottery with clay-tempered paste, it becomes necessary to reconsider the typological status of 'Coleman Incised.' Having a bias toward design in the matter of pottery typology and toward cultural continuity rather than discontinuity in the matter of Plaquemine-Mississippian relations, the author can see no alternative but to include 'Coleman Incised' as a variety within the type Winterville Incised. With the information from the Survey Area at hand, it seems desirable to present a formal type description of this variety.

Sample: Sherds from Fitzhugh, Anna, Emerald (26-L-1), and Gordon (26-L-2) sites; a partial vessel from Routh; and a whole vessel from Turkey Point Landing (24-J-8).

Paste: Clay-tempered paste equivalent to the Addis variety of Baytown Plain.

Surface: Smoothed, but not polished.

Vessel form: Only the rounded bowl and jar forms are represented. The latter is illustrated by the vessel from Routh (Plate II, f) and the vessel from Turkey Point Landing (Moore 1913:Fig. 119). The Routh specimen approaches the form of the tall cylindrical beaker that is characteristic of most Plaquemine decorated types. The

rounded bowl form is postulated on the basis of small rim sherds from Gordon, Anna, and Emerald sites. Cotter illustrates a Coleman bowl from Emerald (1951:Fig. 17, 2).

Rim: Straight or slightly out-flaring. Lips are unmodified or slightly rolled.

Vessel size: Information on vessel size is limited to the vessels from Turkey Point Landing and Routh. The former is 11.5 cm. high and 13 cm. in diameter. The latter is approximately 19 cm. high and of a lesser diameter. These vessels are considerably smaller than the norm for Belzoni.

Decoration: Decoration is exclusively by incision with a narrow pointed tool in wet paste. Lines average about 1 mm. in width and are at least that deep. Wet, burred lines are quite characteristic. Occasionally the burr is smoothed over. Festoons consistently arranged in an imbrication pattern is the sole design that has been identified. It would not be surprising, however, if the guilloche should also be present. In both jar and bowl forms, decoration extends up almost to the lip. In the two jars, decoration is confined to the shoulder-neck area.

Distribution: Coleman occurs throughout the Upper Tensas and Lower Yazoo Basins. The largest extant sample

is from the Gordon site near Natchez, Mississippi. Comparatively few sherds are known from the neighboring Emerald and Anna sites, however.

Chronological Position: Routh, Mayersville, and Fitzhugh phases.

Cultural Interpretation: It is evident from characteristics of design and vessel shape that Coleman is related to the Winterville Incised varieties: Winterville, Belzoni, and Erwin. These varieties do not appear until Fitzhugh and Transylvania phases, and since Coleman first occurs in the Routh phase, it apparently precedes them in time. It is tempting to speculate that the whole Winterville Incised series begins with Coleman and as such is an indigenous Plaquemine type. According to this scheme, Coleman gives rise to broad-line incised pottery of the Belzoni variety in Fitzhugh phase, which in turn leads to the narrow-line Winterville variety in Fitzhugh and Transylvania phases. Unfortunately the picture is not so simple; to begin with, Belzoni and Coleman occur together in certain Fitzhugh phase components (e.g. Fitzhugh, Transylvania and Somerset). There is not, in short, a simple evolution of the one into the other. Secondly, Brain (1969:203, 272) reports the occurrence of pottery similar to Belzoni (classified as 'Winterville Incised')

in the Middle occupation at the Winterville site. Since that occupation is roughly contemporaneous with Routh phase, the appearance of Belzoni in the Upper Tensas Basin only during the subsequent Fitzhugh phase would seem to indicate that the variety developed in the Lower Yazoo Basin.¹

Discussion

Relationships Within the Survey Area

Routh is the earliest known manifestation of Plaquemine culture in the Upper Tensas Basin. The preceding phase, Balmoral, is a late manifestation of Coles Creek culture and as such differs considerably from Routh. In late Coles Creek and early Plaquemine times, cultural developments in the Lower Yazoo and Upper Tensas Basins parallel one another rather closely. Kings Crossing and Balmoral phases are near cultural and chronological equivalents² as are the later phases, Routh, Mayersville, and Winterville (see pp. 287-390). There is not, however, a

¹For further discussion of this point see pp. 411-412.

²The evidence for this equation will not be reviewed here, but the reader can check the validity of the equation for himself by comparing the pottery complex tabulated in Table 25 with that described by Phillips (ibid.:556) for Kings Crossing.

Tensas Basin equivalent of the culturally and chronologically intermediate Crippen Point phase. A small number of sites within the Survey Area--Ditto Lake, Canebrake, Chelly Landing, Welch, and Compton Lake--yield pottery indicative of that phase¹, but with the exception of Ditto Lake, a pottery complex cannot be sorted out of the multiple component artifact collections presently available from these sites. Ditto Lake appears to be a single component site, but it is known only through two surface collections, the larger of which has been in storage at Louisiana State University for many years. While there is some evidence for a Crippen Point-like phase in the Survey Area, there is not at present adequate ceramic data available for its definition. As a result, all late Coles Creek components including those at Ditto Lake, Canebrake, Chelly Landing, Welch, and Compton Lake, are classified as Balmoral phase in the present report.

Routh phase is succeeded throughout the Upper Tensas Basin by Fitzhugh phase. So great is the ceramic continuity between these two phases that their distinction is to a great extent arbitrary. Nearly all decorated types, with

¹High frequency of Coles Creek Incised, var. Hardy, and Mazique Incised, var. Preston (see pp. 310-311 for definition of this new variety), and the presence of the Baytown Plain mode, "Crippen Point" bowl.

the exception of those derived from Coles Creek culture-- Coles Creek Incised, var. Hardy, and Harrison Bayou Incised, var. Harrison Bayou--carry over into Fitzhugh with little or no change. A number of new types, including Winterville Incised, var. Belzoni, Leland Incised, var. Ferris, Barton Incised, var. Stowers, do appear in Fitzhugh phase; but they occur infrequently in most collections and are for the most part late additions to the Fitzhugh ceramic complex.

Fitzhugh phase is clearly the result of gradual, indigenous, ceramic development within the Upper Tensas Basin. Fitzhugh in turn leads directly into historic Taensa and Natchez culture. Despite the gradual acceptance of shell tempering and the addition of new pottery types, some of which may reflect stimulus from the north and west, Plaquemine culture persists in the Survey Area for nearly five centuries, beginning in Routh phase and terminating with the demise of aboriginal culture under the onslaught of European civilization.

Those ceramic traits characteristic of Routh phase which best distinguish the phase from Fitzhugh are the Addis vessel modes, "Preston" bowl and "Delta City" bowl. Even these, however, are not absolutely reliable as Routh phase markers. The "Delta City" bowl persists into early Fitzhugh phase, although in modified form. Since the

"Walnut Bayou" bowl probably evolves out of the "Preston" bowl, there are bound to be sherds in Fitzhugh collections which have to be classified as "Preston" bowl. Carinated bowl rims in Routh phase are without exception plain. This stands in sharp contrast to Fitzhugh phase where rim modes such as the "Tunica", "Haynes Bluff", and "thickened-beveled" rims, may occur with some frequency. Any pottery collection containing the vessel modes, "Preston" and "Delta City", and lacking specialized carinated bowl rim modes can be safely assigned to Routh phase.

External Relationships

Routh phase is only one manifestation of the larger entity, Plaquemine culture, which is found throughout much of the Lower Mississippi Valley over a period of some 400 to 500 years. The relationship of Routh to other Plaquemine manifestations lying beyond the Upper Tensas Basin is the subject to which we now turn.

Lower Yazoo Basin

In the Lower Yazoo Basin, the Mayersville phase, as defined by Phillips (ibid.:558-60), shows close similarities to Routh phase. Mayersville components have been identified at several sites including the type site (21-L-1), Winterville (19-L-1) and Lake George (21-N-1). At the type site, Phillips identifies two components,

Mayersville, the major occupation, and Deer Creek, an occupation of apparently minor intensity. Table 27 reproduces Phillips' classification of the type collection (ibid.:508) and the author's counts for the total Routh phase type collection. The similarities are obvious; the differences between the two being the lack of Leland Incised, Mound Place Incised, and Mississippi Plain in what Phillips (ibid.:558, Figs. 235-8) identifies as the Mayersville component.

The author has analyzed the Mayersville type collection and finds the ceramic similarities to Routh phase even greater than indicated in Table 27. Harrison Bayou Incised is characterized by small diamonds similar to that found at Routh site, and all Addis vessel modes diagnostic of Routh phase--"Preston" bowl and "Delta City" bowl--are present. On the basis of this information, it could be argued that Routh and Mayersville constitute a single phase.

Phillips (ibid.:479-482) has also identified Mayersville and Deer Creek components at the Winterville site. As a result of his recent excavations at that site, Brain (1969:276-278) identifies three components: Crippen Point, Winterville, and Deer Creek. In Brain's classification, the Winterville component is roughly equivalent to Phillips' Mayersville component. Unlike Mayersville,

TABLE 27

CLASSIFICATION OF ROUTH AND MAYERSVILLE
TYPE COLLECTIONS

	<u>Mayersville Site</u>	<u>Routh Site</u>
	Mayersville Component	Routh Component
Baytown Plain, <u>var. Addis</u>	453 ¹	1083
Coles Creek Incised, <u>var. Hardy</u>	16	3
Evansville Punctated, <u>var. Sharkey</u>	27	5
Harrison Bayou Incised, <u>var. Harrison Bayou</u>	6	8
Hollyknowe Ridge Pinched, <u>var. Patmos</u>	22	3
L'Eau Noire Incised, <u>var. L'Eau Noire</u>	5	40
<u>var. Anna</u>	56	29
<u>var. Bayou Bourbe</u>		3
<u>var. Carter</u>	18	
<u>var. unspecified</u>	35	
Leland Incised, <u>var. Leland</u>		30
Mazique Incised, <u>var. Manchac</u>	81	15
Plaquemine Brushed, <u>var. Plaquemine</u>	198	135
Winterville Incised, <u>var. Coleman</u>	14	13
	Deer Creek Component	
Barton Incised, <u>var. Barton</u>	5	
Mississippi Plain, <u>vars. Yazoo</u> and <u>Pocahontas</u>	26	43
Mound Place Incised, <u>var. unspecified</u>	2	1
Parkin Punctated, <u>var. unspecified</u>	16	
Plaquemine Brushed, <u>var. Grace</u>	4	
Pouncey Ridge Pinched, <u>var. unspecified</u>	3	
Winterville Incised, <u>var. unspecified</u>	5	
Unclassified	15	

¹This figure represents only rims.

however, Winterville phase is characterized by both clay-tempered ('Addis Series' in Brain's terminology) and shell-tempered ('Greenville Series' and 'Neeley's Ferry Series') plain and decorated types. Specific similarities with Mayersville phase (and Routh phase) include the presence of 'Plaquemine Brushed', 'Patmos Pinched', and the vessel modes, "Preston" bowl and "Delta City" bowl.¹ The two decorated types typically have paste that Brain designated, 'Greenville', and describes as resembling Addis to which small amounts of shell have been added (ibid.:160). Winterville phase differs from Mayersville phase (and Routh phase) most strikingly in having a pre-dominance of coarse shell-tempered pottery ('Neeley's Ferry Series') which includes the types, 'Parkin Punctated', 'Barton Incised', and 'Winterville Incised.' In sorting his collection from Winterville, Phillips has apparently assumed that the Mayersville component would consist of clay-tempered Plaquemine types exclusively; all types not conforming to these standards he has assigned to the later Deer Creek occupation.

Brain (personal communication 11/25/69) finds the same situation at Lake George. Where Phillips (ibid.:286)

¹Brain does not identify these modes in his thesis, but the author has observed them in collections from Winterville site that are housed in The Peabody Museum of American Archaeology and Ethnology, Harvard University.

identifies a Mayersville component, Brain identifies a Winterville component. In his own examination of material from Mound G at Lake George, the author has identified the types: Harrison Bayou Incised; L'Eau Noire Incised, var. L'Eau Noire; Plaquemine Brushed; Mazique Incised, var. Manchac; and the vessel modes, "Preston" bowl and "Delta City" bowl as occurring on Addis paste to which frequently small amounts of shell have been added.

Returning to Phillips' classification of the Mayersville type collection, one wonders if the same situation does not exist there also. -Perhaps rather than two components--Mayersville and Deer Creek--there is only one which is similar to Winterville phase in possessing both Plaquemine and Mississippian ceramic traits. Phillips (ibid.:508) found, however, that all but five of the Deer Creek sherds he collected, were restricted in their distribution to Mound I, indicating perhaps that they do represent a separate site occupation. Even if these shell-tempered sherds do belong to the Mayersville component, the ratio of Plaquemine to Mississippian types is completely different from that existing at Winterville. The Mayersville type collection is essentially Plaquemine, while the Winterville phase type collection is clearly a thorough blend of the two cultures. While Mayersville phase, as defined by Phillips, does not exist at

Winterville site, nor probably Lake George, it would seem to exist at the type site.

The difference between Mayersville and Winterville phases appears to be largely the result of contacts the latter had with Mississippian cultural developments to the north. Archaeological evidence presently available indicates that, beginning in late Coles Creek times, Mississippian influences reach the Lower Yazoo Basin and spread gradually southward through it and into the Upper Tensas Basin. According to Brain (*ibid.*:276), Mississippian influences are evident in the Early Occupation (Crippen Point phase) at Winterville in the form of shell tempering and specific pottery types of northern origin or inspiration. In addition, there seems to have been direct contact with the Cahokia area near the end of this occupation. So far as known, there is no evidence of Mississippian influences in the Upper Tensas Basin at this time.

Subsequently, a large portion of the Lower Yazoo Basin is characterized by cultures with ceramic complexes that are essentially blends of Plaquemine and Mississippian traits. In the Middle Occupation (Winterville phase) at Winterville site, shell-tempering predominates in plain and decorated pottery and several pottery types of Mississippian affiliation--'Parkin Punctated', 'Barton

Incised', 'Winterville Incised'--are present in quantity. Several Plaquemine types also occur, however, and Brain (ibid.:276) characterizes the occupation as being intermediate to Plaquemine and Mississippian cultures. The contemporary Routh phase in the Upper Tensas Basin remains virtually unaffected by these developments, although small quantities of shell-tempered pottery are introduced into the area at this time. Mayersville site, located less than twelve miles from one of the Routh phase sites, Rose Hill, seems to have been little affected also.

In the latest prehistoric phases--Lake George, Deer Creek, Wasp Lake--in the Lower Yazoo Basin, all pottery is shell-tempered and features of the Plaquemine ceramic tradition are difficult to recognize. Only the carinated bowl with various rim modes and Leland Incised are obvious Plaquemine carryovers, or at least related to Plaquemine developments further south. The Upper Tensas Basin during Fitzhugh phase remains essentially untouched by these developments across the river. Shell-tempered pottery is slightly more common throughout the area, but the first real acceptance of it occurs at this time only in the Fitzhugh component at Transylvania site, located at the northern end of the Basin.

In the subsequent Transylvania phase, the northern end of the Basin is characterized by a 100 per cent

shell-tempered pottery complex. Such a situation never develops farther south, not even in the historic period. The historic pottery at Fatherland site is predominantly grit-tempered, while the historic Taensa collections also contain a fair amount of clay-tempered pottery.

The process of "Mississippianization"¹, which has differentiated Winterville phase from Mayersville and Routh phases, gives rise at a later date to the distinction between Lake George-Deer Creek phases and Fitzhugh phase and ultimately to the distinction between Transylvania and Fitzhugh phases.

Natchez Locality and South

Pottery obtained by Cotter (1951) from a stratigraphic test in Mound 5 at Anna indicates that there are both Routh and Fitzhugh phase components at that site. Mound 5 was apparently erected in four stages. Pottery from the surface and fill of mound stage 1 and a sub-mound midden (Zones A-B) is Routh phase in affiliation.² The

¹Brain (1970) uses this term in reference to the effect of Mississippian influences during the Middle Occupation at Winterville site. The central point of Brain's thesis is that this process is more complex than has been recognized.

²The following statements are based on the author's analysis of Cotter's collection housed at Ocmulgee National Monument, Macon, Georgia.

pottery inventory from these zones consists of the following items: Plaquemine Brushed, var. Plaquemine; L'Eau Noire Incised, vars. L'Eau Noire, Anna, and Australia; Evansville Punctated, var. Sharkey; Maddox Engraved, var. Emerald; Mazique Incised, var. Manchac; and the vessel modes, "Delta City" bowl and "Preston" bowl. The Fitzhugh phase markers, "Tunica" rim and "Walnut Bayou" bowl, are restricted in occurrence to Zones C-E, indicating that mound stages 2-4 are probably Fitzhugh phase. Shell-tempered plain pottery occurred in all excavation zones, a fact that is not surprising considering the evidence from Routh phase sites across the river. Given the proximity of Anna to the Upper Tensas Basin and the extent of ceramic similarity, the author feels justified in identifying the earlier component represented in Mound 5 as Routh phase.

The author knows of no Routh phase sites south of Dunbarton and Anna in Tier 26. The Medora site occupation, as defined by Quimby (1957) differs from Routh phase in many respects: specifically, the presence of numerous Coles Creek related types. If Quimby is correct in identifying only a single component, Medora is probably somewhat earlier than Routh phase. On the other hand, there is some evidence that Medora site had two distinct occupations of late Coles Creek and Plaquemine affiliation

(see pp. 287-288). If this interpretation is correct, the later occupation would show numerous similarities to Routh phase.

At least one site in the Baton Rouge area, Peter Hill (31-K-2) has yielded a pottery collection that is quite comparable to Fitzhugh phase. It contains, among other Fitzhugh phase types, several specimens of "early Tunica" rim. It appears then that Plaquemine culture extends at least as far south as Baton Rouge. It is probable that a phase comparable to Routh will eventually be defined for that area.

Lower Ouachita Basin

At present, we know little concerning the cultural situation west of the Survey Area during Routh phase. If Alto focus dates to a late Coles Creek time level (see pp. 320-321). Bossier focus is probably contemporaneous in part with Routh phase. Bossier focus sites listed by Webb (1948:101), however, are restricted to northwestern Louisiana. Between the Red River and the Tensas Basin itself, the whole of northern Louisiana is virtually unknown.

In the Lower Ouachita Basin, only two sites, Sycamore Landing and Myatts Landing, have components that could possibly be on a Routh phase time level. Moore (1909:119) excavated a total of 78 vessels from the cemetery at Sycamore Landing. The author has seen 24 of

these.¹ Eight are shell-tempered and appear to be relatively late. There is, for example, one shell-tempered "Walnut Bayou" bowl with "late Tunica" rim (Plate III, f). The remaining 16 vessels, however, are clay-tempered and quite probably belong to a separate component. This lot includes a L'Eau Noire bowl (Moore 1909:Fig. 117), a Manchac beaker with punctates underlying the incised design, a Patmos jar and a vessel that somewhat resembles the "Delta City" bowl. Two beaker-shaped vessels with decoration reminiscent of Pease Brushed-Incised complete the available collection.

The cemetery at Myatt's Landing yielded 17 vessels of which the author has seen a total of 9.² Of these, only one is shell-tempered, a bottle with Wallace Incised-like decoration. The remaining three decorated vessels are Pease Brushed-Incised. From this limited data, it is possible to conclude at least that the Ouachita Basin is sufficiently different from the Survey Area, that the concept of Routh phase cannot be extended to it. The Lower Ouachita seems to have similarities to both Bossier and

¹Moore, (1909:Figures 117-118) and collections in the Peabody Museum and Heye Foundation.

²Moore (1909:24-27) and a collection in the Peabody Museum.

Plaquemine cultures. Considering its intermediate geographic position, this is to be expected.

Four sites in the Survey Area--Routh, Preston, Canebrake, and Graves--have produced sherds that could be said to evidence Bossier focus influences. Sherds resembling Dunkin Incised were recovered at three of the sites (Plates I, a, b, and II, m); while Graves also yielded 2 sherds resembling Kiam Incised as defined by Webb (1963:159); and Preston and Canebrake each yielded sherds of Maddox Engraved, var. Maddox (Plate II, n).

Definition of the Plaquemine Ceramic Complex

The complex of pottery types first appearing in Routh phase remains relatively unchanged over most of the Survey Area through Fitzhugh phase. It would seem then that the Routh phase ceramic complex is typical of Plaquemine culture. An examination of the literature on Plaquemine, however, leads one to believe that it is not.

The Medora site report (Quimby 1951) is the first published statement of what constitutes Plaquemine culture. According to Quimby's interpretation of the site, the pottery inventory for the Plaquemine occupation contains several Plaquemine types--'Addis Plain', 'Plaquemine Brushed', 'Manchac Incised', 'Hardy Incised', 'Medora Incised', 'Harrison Bayou Incised', 'Australia Incised', 'Evangeline Incised', 'L'Eau Noire Incised', 'Lulu Linear

Punctated' and 'Dupree Incised', and some Coles Creek types--'Chevalier Stamped', 'Coles Creek Incised', 'Larto Red Filmed' and 'Pontchartrain Check Stamped'.

At Bayou Goula site, Quimby (1957) distinguished two occupations, one being Plaquemine (referred to here as Bayou Goula I) and the other being Natchezan (Bayou Goula II). According to Quimby, pottery types characteristic of the Plaquemine occupation included several types found at Medora--'Addis Plain', 'Hardy Incised', 'Plaquemine Brushed', 'Medora Incised', 'Manchac Incised', 'Dupree Incised', 'Harrison Bayou Incised', 'Evangeline Incised', 'Australia Incised' and 'Pontchartrain Check Stamped',--and several types not found at Medora--'Neeley's Ferry Plain', 'Coles Creek Plain', 'French Fork Incised', 'Rhinehart Punctated' and 'Beldeau Incised'.

For Greenhouse site, Ford (1951:85) lists the types, 'Plaquemine Brushed', 'Hardy Incised', 'Manchac Incised', 'Wilkinson Punctated' and 'Dupree Incised', as constituting a Plaquemine occupation.

Cotter (1952:119) identifies two "horozons" or "periods" at Gordon site, but never lists the pottery types characteristic of each. Presumably Cotter conceived of Gordon as having a single continuous occupation in which two horizons could be distinguished. During this occupation, houses changed from round to square, and there

were changes in the relative frequency of pottery types. The Plaquemine horizon is presumably represented by collections such as that from "Feature 4, first fill" (ibid.:Fig. 55) in which Plaquemine Brushed is the predominant type. Pottery types represented in this collection include 'Fatherland Incised', 'Plaquemine Brushed', 'Australia Incised', 'Maddox Incised', 'Hardy Incised', 'Rhinehart Punctated', and 'Manchac Incised'.

Finally, Brain (1969:276) finds the following types diagnostic of the Crippen Point component at Winterville site: 'Addis Plain', 'Hardy Incised', 'Wilkinson Punctated', 'Manchac Incised', 'Harrison Bayou Incised', 'Beldeau Incised', 'Dupree Incised' and several shell-tempered types with affiliations to the north.

These five components contain several types not found in Routh phase: Medora Incised; Avoyelles Punctated, var. Dupree; Chevalier Stamped; Lulu Linear Punctated; Pontchartain Check Stamped; Coles Creek Incised, var. unspecified; French Fork Incised; and Beldeau Incised. Coles Creek Incised, var. Hardy, while present in Routh phase collections, is not very common; but it is a numerically dominant type at the sites under discussion here.

We have then two conflicting pictures of what constitutes the Plaquemine ceramic complex. At first glance there would seem to be two ways to reconcile them. We can relegate Routh and Fitzhugh phases to the status of local

variants of Plaquemine culture, or we can identify them as late expressions of Plaquemine culture while identifying the components at Medora, Bayou Goula, Greenhouse, Gordon, and Winterville as early Plaquemine. The former alternative appears to be incorrect as there are components similar to Routh and Fitzhugh phases in the Natchez area (Anna and Emerald sites) and the Baton Rouge area (Rose-dale and Peter Hill sites).

The latter alternative is quite attractive because the types that are characteristic of the five sites, but absent from Routh and Fitzhugh phases; are also characteristic of the late Coles Creek phases, Balmoral and Kings Crossing. If identified as early Plaquemine, the five components provide a nice intermediate or transitional step in the development of Plaquemine culture from Coles Creek culture. This, however, is a false picture. These components do show strong developmental ties to Balmoral and Kings Crossing phases, but they bear little resemblance to Plaquemine culture of the Routh and Fitzhugh phase variety. We do not get a Coles Creek-Plaquemine transition merely by including these components in Plaquemine culture.

In order to resolve the problem at hand, it would seem necessary to rethink our conception of what constitutes Plaquemine culture. The generally accepted

definition of Plaquemine culture is based on data from the four sites, Medora, Bayou Goula, Gordon, and Greenhouse. It is the author's opinion that this definition is incorrect, and that it is incorrect because these four sites either did not yield evidence adequate for distinguishing Plaquemine components, or interpretation of the evidence was faulty.

The problem begins with publication of the Medora site report. In his analysis of the site's pottery, Quimby (1951) worked only with collections obtained from a sub-mound midden, and 3 stages of mound fill. No difference was noted between these collections and Quimby concludes that the site had only a single component with a ceramic assemblage characterized by Plaquemine types and "a few Coles Creek types" (ibid.:123, 127). Since three of his four collections are derived from mound fill, it is quite possible that any change through time or even the existence of two distinct components at the site would be obscured. In fact it seems quite likely that two distinct components are present: one being late Coles Creek and characterized by the types: 'Hardy Incised', 'Medora Incised', 'Lulu Linear Punctated', 'Harrison Bayou Incised', 'Coles Creek Incised', 'Chevalier Stamped', 'Pontchartrain Check Stamped', and 'Dupree Incised'; and the other being Plaquemine, and possessing the types: 'Addis Plain',

'Plaquemine Brushed', 'Manchac Incised', 'L'Eau Noire Incised', 'Evangeline Incised', and 'Australia Incised'.

Having defined Medora as a single component Plaquemine site, Quimby goes on to identify Bayou Goula I as Plaquemine also. Bayou Goula I, in fact, is said to have a ceramic assemblage similar to that found at the Medora site (1957:143). It is difficult to understand how Quimby arrived at this observation when the Old Humus Level--the stratum in which Bayou Goula I is found--contains only four Plaquemine Brushed sherds; no L'Eau Noire, Australia, or Evangeline; an abundance of Pontchartrain Check Stamped; and several types ('French Fork Incised', 'Beldeau Incised', 'Rhinehart Punctated') not found at Medora.

The present author's work with the Bayou Goula I collection leads him to classify it as a manifestation of late Coles Creek, similar to Balmoral and Kings Crossing phases. Not only do types characteristic of late Coles Creek phases in the Tensas and Yazoo Basins dominate the collection, but only two Plaquemine markers, Plaquemine Brushed and Manchac Incised, are present in the Old Humus Level. These are so infrequent, furthermore, that they can be accounted for as having been wrongly identified or as intrusive from the Natchezan occupation stratum.

The presence of sites and components such as Bayou Goula I, Peter Hill, and Rosedale in the Baton Rouge area

provide the necessary guides for distinguishing two components at Medora site. It seems quite likely that Medora has a Bayou Goula I type component and a Plaquemine component roughly similar to Routh phase. How Quimby was able to expand his conception of Plaquemine derived from the Medora pottery assemblage to include Bayou Goula I, is incomprehensible to the present author. The important thing though is that Bayou Goula I was so identified and the precedent of a Plaquemine assemblage that includes Plaquemine and Coles Creek types became firmly established in the literature.

Ford has little, if any, stratigraphic evidence for the identification of a Plaquemine component at Greenhouse. He identifies the latest structures in Mound F as being Plaquemine in affiliation, but the percentage graph for this mound (1951:Fig. 37) fails to indicate a concentration of Plaquemine pottery types in the appropriate levels. Belmont's reanalysis of the pottery from Greenhouse (1966) shows the occupational history of the site to be considerably more complex than Ford described it. It would seem that Ford's Plaquemine assemblage was recognized more on faith than firm stratigraphic grounds. Needless to say, the existence of a Plaquemine ceramic complex with abundant Hardy Incised is given further support by his published findings.

The author has spent several days analyzing Cotter's material from Gordon site. There is good stratigraphic and typological evidence for two and perhaps three components (equivalent to Balmoral, Fitzhugh, and possibly Crippen Point phases) at the site. These are evident even in Cotter's published data. Where Cotter sees pottery collections evidencing gradual change from Troyville through Coles Creek into Plaquemine, however, he is actually dealing with mixed collections. Although it cannot be demonstrated, due to the absence of pure stratigraphic collections, it is almost certain that the Plaquemine occupation at Gordon is very similar to Fitzhugh phase and lacks Coles Creek types.

Published descriptions of these four sites established Plaquemine culture as characterized by abundant Coles Creek Incised, var. Hardy, and minor amounts of several other Coles Creek types. Phillips (1970) and Brain (1969) seem to have followed this precedent in their classification of Crippen Point phase as Plaquemine. In comparison with Routh and Fitzhugh phases and also the later Mayersville phase in the Yazoo Basin, Crippen Point exhibits few, if any, Plaquemine marker types. 'Dupree Incised', 'Beldeau Incised', 'Harrison Bayou Incised', and 'Hardy Incised' are characteristic of Coles Creek culture and are not represented or only poorly represented in

Routh and Fitzhugh phases. The ceramic shift that distinguishes Routh and Mayersville phases from Coles Creek culture has not occurred by Crippen Point times. Several Coles Creek types are still present and the majority of Plaquemine markers are absent. Crippen Point, as it has been defined, should be classified as late Coles Creek.

One of the most important implications of the foregoing discussion is that we do not really know what the early stages of Plaquemine development look like. We certainly have no obvious candidates from the Upper Tensas Basin. It is quite possible that Plaquemine ceramic markers do first appear in the Lower Mississippi Valley in association with late Coles Creek pottery types. This possibility is not being contended here. It is being argued, however, that so far we have no archaeological manifestations that show us this development in process.¹

Based on data from the Upper Tensas Basin, the author ventures to define Plaquemine culture as characterized by the following decorated types and varieties:

Baytown Plain, var. Addis
Evansville Punctated
Hollyknowe Ridge Pinched, var. Patmos

¹Medora, if it is a single component site, and Mayes phase are two possible exceptions to this statement. The latter, defined by Belmont (1966) for the Marksville-Lake Catahoula Area, is not, unfortunately, documented by any large, stratigraphically isolated, pottery collections.

L'Eau Noire Incised, var. L'Eau Noire
 var. Anna
 var. Evangeline

Leland Incised

Maddox Engraved

Mazique Incised, var. Manchac

Plaquemine Brushed, var. Plaquemine

To this core of types we can add others that have a relatively restricted temporal or spatial association with Plaquemine culture. Depending on what the initial stage of Plaquemine culture looks like when it is finally identified, we may find present types such as L'Eau Noire Incised, var. Bayou Bourbe, Lulu Linear Punctated, Harrison Bayou Incised, Coles Creek Incised, var. Hardy, and other late Coles Creek types. Mississippi Plain and several varieties of Barton Incised and Winterville Incised first appear in the Lower Yazoo Basin in Crippen Point and Winterville phases and extend their distributions southward through time. They are present in many Tensas Basin Plaquemine components but by no means all. L'Eau Noire Incised, var. Paine, is a late addition in the Tensas Basin area. Several types and varieties--Evansville Punctated, var. Sharkey, L'Eau Noire Incised, var. Carter, Mound Place Incised and Winterville Incised, var. Coleman--appear to have distributions restricted to the Lower Yazoo and Upper Tensas Basins and the Natchez area. Evansville Punctated, var. Wilkinson, and L'Eau Noire Incised, var. Australia, on the other hand, have a more southern distribution.

The Problem of Plaquemine Culture Origins

Perhaps the most important conclusion to be drawn from the foregoing discussion is that the ceramic shift from Coles Creek to Plaquemine has yet to be documented archaeologically in the Lower Mississippi Valley. In what must be a matter of only one or two centuries--the period between A.D. 1000 and A.D. 1200--there is an almost total replacement of the late Coles Creek ceramic complex by pottery types of the Plaquemine complex. Ceramic counts for five Balmoral phase sites are presented in Table 28. One need only compare the inventory of types listed there with those listed in Table 25 to note the extent of this change.

Despite the lack of direct evidence for the appearance of the Plaquemine ceramic complex, it is possible to speculate on the nature of the transition. To begin with, there is definite evidence for ceramic continuity between late Coles Creek and Plaquemine phases within the Lower Mississippi Valley: Some late Coles Creek pottery types carry over into Plaquemine culture, while others foreshadow later Plaquemine types. This evidence can be summarized as follows:

1. Sherds conforming to the sorting criteria for Coles Creek Incised, var. Hardy, (Phillips 1970:73) do occur in Routh phase components and quite probably do

TABLE 28

REPRESENTATIVE BALMORAL PHASE CERAMIC COUNTS

Types	Bal- moral	Routh	Mott	Cane- brake	Ditto Lake
Avoyelles Punctated, <u>var. Kearny</u>			1	1	6
<u>var. unspecified</u>		4			
Baytown Plain, <u>var. Valley Park</u>	2,416	+ ¹	1,148	+	+
"Cruppen Point" bowl			2	7	7
<u>var. Vicksburg</u>	22	20	32	5	
"Vicksburg" rim	35	4	18		
Beldeau Incised, <u>var. Beldeau</u>	24	2	8	6	2
Chevalier Stamped, <u>var. Chevalier</u>		2	3	1	2
<u>var. Lulu</u>			1		
Coles Creek Incised, <u>var. Coles Creek</u>			3		
<u>var. Blakely</u>	27	4	21	2	7
<u>var. Campbellville</u>	3				
<u>var. Greenhouse</u>	29	7	13		
<u>var. Hardy</u>	8	16	13	+	52
<u>var. Mott</u>	107	54	90	14	16
<u>var. unspecified</u>	23		22		
Evansville Punctated, <u>var. Rhinehart</u>	5	9			1
Harrison Bayou Incised, <u>var. unspecified</u>	10	11	2	4	4
L'Eau Noire Incised, <u>var. Bayou Bourbe</u>				1	2
Medora Incised, <u>var. Medora</u>	15	4			
Mazique Incised, <u>var. Mazique</u>	1		1		
<u>var. Kings Point</u>		3	6		
<u>var. Preston</u>	3	4	6	+	38
<u>var. unspecified</u>			1		
Pontchartrain Check Stamped			3		
Sicily Island Incised, <u>var. Iberville</u>	2		4		
<u>var. McNutt</u>	27	1	20	1	2
<u>var. unspecified</u>	6				1
Unidentified curvilinear excised	11				

¹Plus sign means that type frequency can not be determined with accuracy.

represent continuity with the variety as it is found in Balmoral and Crippen Point phases.

2. Sherds conforming to the sorting criteria for Harrison Bayou Incised, var. Harrison Bayou, (ibid.: 88) occur in small amounts in some Routh phase collections. They may be developmentally related to the type as found in Balmoral and Crippen Point phases. As with Hardy, however, the type seems to die out by Fitzhugh phase.

3. Phillips' classification (1970:129-30) of Manchac as a variety of Mazique Incised carries the implication that Manchac develops out of the Coles Creek varieties, Mazique and Kings Point. In working with Mazique Incised pottery from Balmoral phase collections, the author has found it convenient to recognize an additional variety which he has termed, Preston (Plate II, i-1). Preston is characterized by incised lines that are quite narrow and deep, usually burred and typically very close-spaced. Decorative design is most frequently the line-filled triangle, sometimes with punctate-filled areas included; although line-filled squares and vertical bands of diagonal lines also occur.

Preston grades into both Kings Point and Manchac. In the shift to Manchac, the most dramatic change is the reduction of variation in decorative designs; Manchac seems to have only line-filled triangle designs. In

several Routh phase collections, one or a few Mazique Incised sherds could have been as easily classified Preston as Manchac. The Mayersville phase type collections contains several such sherds (see Phillips, 1970:Fig. 235, f). Mazique and Kings Point are not very common types in late Coles Creek pottery collections. Preston is relatively abundant in most collections in which it occurs and in this regard foreshadows Manchac which usually is second in frequency only to Plaquemine Brushed.

Preston occurs in Kings Crossing, Balmoral, and Crippen Point phases. It is most common during Crippen Point phase in the Lower Yazoo Basin and in what are probably late Balmoral phase collections in the Upper Tensas Basin. It is abundant in Crippen Point contexts at Lake George¹ and in the collections from Ditto Lake and Canebrake. Beyond the Yazoo and Tensas Basins, the variety is represented with some frequency at Gordon,² Medora (Quimby 1951:Fig. 13), and Bayou Goula.³

¹Based on author's own observations of the LMS collections in the Peabody Museum of American Archaeology and Ethnology. See Phillips, 1970:Fig. 52, o, q.

²Based on author's observations of the collections housed at Ocmulgee National Monument, Macon, Georgia. See Cotter, 1952:Fig. 57, 16.

³Based on author's observations of the collections at Louisiana State University.

Typologically and chronologically, Preston would seem to be an essential element in the transition from Coles Creek to Plaquemine.

4. Carinated bowl forms characteristic of Routh and Fitzhugh phases seem to develop directly out of forms present in late Coles Creek phases.

5. The majority of decorated types in Balmoral and Routh phases occur on carinated bowls and barrel-shaped beakers.¹

6. The complex scroll designs characteristic of most Leland Incised varieties may develop out of the designs characteristic of Sicily Island Incised.² Quite specific comparisons can be made between the scroll design of Leland Incised and the repetitive circle and triangle design characteristic of Sicily Island Incised, vars. McNutt and Iberville. Both types, however, appear to be dying out in late Coles Creek phases: Belmont (1967:33) reports that McNutt is terminating in Greenhouse phase at

¹To judge from Ford's (1951:Figs. 17, 21, 22, 31-3) reconstruction of vessel shapes in the Greenhouse collections, jars are common in Coles Creek culture, but the author cannot recognize any examples in Balmoral or Routh phase collections with the exception of the Winter-ville Incised, var. Coleman, and Mississippi Plain, var. Pocahontas, vessels from Routh site.

²Belmont (1966) has divided French Fork Incised into two distinct types, Sicily Island Incised and French Fork Incised.

Greenhouse, and Brain (1969:276) does not even list these types as occurring in the Crippen Point component at Winterville site.

Balmoral, Routh, and Point Lake sites have all yielded a small number of interesting sherds that have a bearing on this problem.¹ These sherds, presumably of Balmoral phase age, have a fine paste equivalent to Baytown Plain, var. Vicksburg. Decoration is with fine line incision and excision in curvilinear designs which, in the Balmoral specimens at least, can be identified as scrolls (Plate II, h). One of the L'Eau Noire Incised, var. Shell Bluff, sherds that Phillips illustrates (1970:Fig. 38, n), appears to have a curvilinear design and may resemble those from the Survey Area. Krieger (Newell and Krieger 1944:Fig. 34, a, c, e, h) illustrates sherds from Davis site with similar execution and design and refers to them as "tendency toward scroll design". It may be in pottery of this type that the origin of Leland Incised lies.

Designs characteristic of L'Eau Noire Incised, var. L'Eau Noire, may also derive ultimately from the types French Fork Incised and Sicily Island Incised, but

¹This pottery is designated "Unidentified curvilinear excised" in the ceramic counts.

more immediate antecedents can be found in late Coles Creek contexts in both the Lower Yazoo and Upper Tensas Basins. If Phillips (ibid:557) is correct in assigning his Shell Bluff Complex to the general Kings Crossing-Crippen Point time level, then the Shell Bluff variety of L'Eau Noire Incised can be dated to the terminal end of Coles Creek cultural developments. In the Survey Area, two sites, Canebrake and Ditto Lake, have each yielded a single sherd of L'Eau Noire Incised pottery in late Balmoral phase contexts. Ditto Lake is quite certainly a single component site of Balmoral or Crippen Point affiliation. At Canebrake, the single specimen came from deep within Mound B in association with Balmoral, Marsden, and Issaquena pottery. This specimen (Plate III, g) has paste equivalent to Vicksburg, a thin tapering "Vicksburg" rim, and fine line incision and excision. While not enough decorated surface is present in each case for design identification, these two sherds are being classified as L'Eau Noire Incised, var. Bayou Bourbe, on the assumption that they do have the appropriate design. Finally, it may be noted that Krieger (Newell and Krieger 1944:Figs. 33, h-j, 34, k, O) illustrates sherds qualifying as Bayou Bourbe from Davis site. There is then evidence for L'Eau Noire antecedents on a late Coles Creek time level.¹

¹See pp. 265 for further discussion of the relationship of L'Eau Noire, Bayou Bourbe and Shell Bluff.

7. There are a small number of sherds from late Coles Creek contexts in the Upper Tensas Basin and further south in the Alluvial Valley, that show design combinations in which a zone of incised line-filled triangles, incised diagonal lines, incised cross-hatching or punctations is placed above a zone of incised horizontal lines. Sherds from vessels with such design combinations would probably be classified as one of several types-- Coles Creek Incised, vars. Mott and Hardy, Mazique Incised, vars. Kings Point and Preston; Evansville Punctated, var. Rhinehart; Harrison Bayou Incised; and Avoyelles Punctated, vars. Dupree and Kearny--depending upon what portion of the vessel they were from.¹ Plate III, h-k, shows several such combinations from Ditto Lake, Gordon, and Medora sites. The best sample of these sherds comes from Gordon and Ditto Lake sites where the combination of line-filled triangles or diagonal lines above horizontal lines is relatively common.

Since no sherds are available that show the entire decorated surface, it is not known whether punctations occur below the lower zone or not. In all likelihood, they

¹This fact probably accounts for the lack of attention such decoration has received in the literature for the Lower Mississippi Valley. Since the author himself has only recently recognized these design combinations, he has not had a chance to search the Tensas Basin collections for this feature.

PLATE III.--Miscellaneous pottery types

- A. Leland Incised, var. Ferris, Swift site, U.S. Nat. Museum, cat. no. 8613.
- B. Leland Incised, var. Ferris, Swift site, U.S. Nat. Museum, cat. no. 8644.
- C-D. Leland Incised, var. Leland, Transylvania, Mound B, Heye Foundation, cat. no. 6/2172.
- E. Leland Incised, var. Dabney, Transylvania, Mound B, Heye Foundation, cat. no. 6/2172.
- F. Mississippi Plain, var. Pocahontas, "Walnut Bayou" bowl with "late Tunica" rim, Sycamore Landing, Peabody Museum, cat. no. 74798.
- G. L'Eau Noire Incised, var. Bayou Bourbe, Canebrake, Cut 3, Level E.
- H. Kings Point-Mott, Gordon site, village zone below Mound A, Ocmulgee National Monument.
- I. Dupree-Hardy, Medora site, LSU.
- J. Preston-Hardy, Gordon site, village zone below Mound A, Ocmulgee National Monument.
- K. Rhinehart-Hardy, Ditto Lake site, LSU.
- L. Harrison Bayou-Hardy, Medora site, LSU.

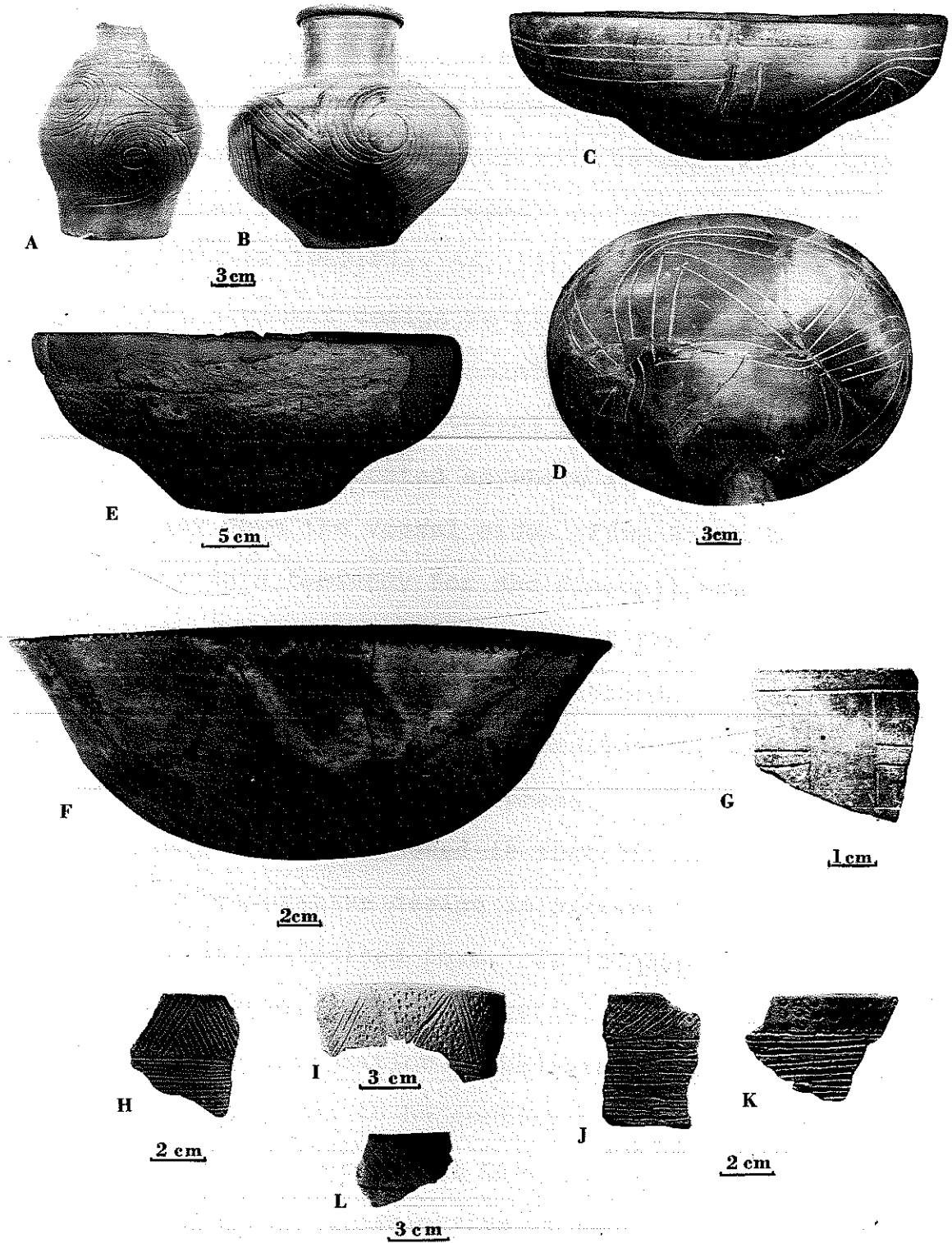


PLATE III.--Miscellaneous pottery types

do because Coles Creek Incised, vars. Mott and Hardy, at this time invariably do. The upper zone is relatively narrow (4 cm. or less) and frequently occurs on a thickened rim strap. The lower zone is apparently quite wide, covering much of the vessel surface (see for instance, Cotter 1952:Fig. 54, 13).

The dominant design in Plaquemine Brushed during Routh and Fitzhugh phases consists of a zone of diagonal brushing that extends from vessel rim down to a zone of horizontal brushing located anywhere from one-third to one-half way down the vessel side. From Routh to Fitzhugh phase there is a tendency for the diagonal brushing zone to increase in width at the expense of the horizontal brushing zone. In Routh phase, punctations are commonly placed beneath the lower zone of brushed decoration; they are usually absent in Fitzhugh phase.

The point to be noted is that the entire Plaquemine Brushed decorative design is present in late Coles Creek times in an incised form. It is quite possible that Plaquemine Brushed, as it appears in Routh phase, may derive from the application of brushing to this design. There certainly seems to be continuity in the evolution of the design from late Coles Creek through Fitzhugh phase.

Evidence from Davis site in east Texas has a bearing on this question. This site is felt to equate

chronologically with Balmoral phase and the late Coles Creek phases, Kings Crossing and Crippen Point, in the Lower Yazoo Basin. Brushing is present as evidenced by sherds illustrated by Newell and Krieger (1944:Fig. 44, a-o). One of these sherds (Fig. 44, a) is of particular interest, as the total vessel shape and decorative design can be reconstructed (see, *ibid.*:Fig. 42, d). This vessel has a narrow band of crudely incised diagonal lines immediately below the rim. Below that there is a wide band of horizontal brushing, covering roughly two-thirds of the vessel surface, and this in turn is underlain by a row of punctates. We have in this vessel, the entire Plaquemine Brushed design in its hypothetical early form and executed in part by brushing.

Krieger had difficulty classifying a large segment of the Davis site pottery. Several types that had earlier been distinguished by Newell were eventually lumped together by Krieger into the type, Dunkin Incised. One of the reasons for this difficulty lies in the fact that much of the Dunkin Incised pottery combines two distinctive decorative techniques and designs on the same vessel. Combinations include: line-filled triangles, or diagonal lines above horizontal lines, or fingernail punctation; horizontal lines above fingernail punctation; and cross hatching above line-filled triangles (*ibid.*:Figs. 41-3).

The similarity to design combinations described above for the Lower Mississippi Valley is obvious. It would seem that in late Coles Creek times there was a widespread tendency to treat beaker-shaped vessels as having two design areas, each of which could take a distinct decorative design and treatment. The design typical of Plaquemine Brushed in Routh and Fitzhugh phases may be seen as just one of the several possible combinations. Unlike the others, though, it apparently caught on in the Lower Mississippi Valley, and eventually became the characteristic design of Plaquemine Brushed.

The presence of brushing at Davis on a late Coles Creek time level suggests that, that technique may have originated somewhere to the west of the Lower Mississippi Valley.

Two cultural manifestations, Alto focus and Mayes phase have some bearing on the problem of the development of Plaquemine culture. Krieger (Newell and Krieger 1949:66-70, 223-4) distinguishes three "phases" of Alto focus occupation at Davis site and correlates them with the Marksville, Troyville, and Coles Creek periods of the Lower Mississippi Valley. Considerable effort has been expended by a number of archaeologists since 1949 in an attempt to disprove this temporal and cultural alignment (Ford 1951, Griffin and Yarnell 1963), and it now appears

that the Davis site and Alto focus are considerably younger than Krieger proposed. On ceramic grounds, the author would date Alto focus to approximately the time of Balmoral, Kings Crossing, and Crippen Point phases, that is, A.D. 900-1200. Recently published radiocarbon dates from the Davis site (Valastro, Jr. and Davis 1970:626-9) seem to support such a chronological alignment; dates for the sub-Mound B occupation cluster between A.D. 800 and 1100.

The complete inventory of Alto focus pottery types recognized by Krieger is as follows:

- Holly Fine Engraved
- Hickory Fine Engraved
- Dunkin Incised
- Davis Incised
- Crockett Curvilinear Incised
- Pennington Punctated-Incised
- Weches Fingernail Impressed
- Duren Neck Banded
- Miscellaneous Engraved
- Free Punctates
- Crockett-Pennington "Hybrid" Designs
- Grooved vessels
- Molcajete-like Bowls
- Bowles Creek Plain

Several of these--Hickory Fine Engraved, Holly Fine Engraved, Weches Fingernail Impressed, and Duren Neck Banded--have no apparent relation to Lower Mississippi Valley pottery types of the same general time period. On the other hand, Davis Incised, Pennington Punctated-Incised, Crockett Curvilinear Incised, and Dunkin Incised have obvious and widely recognized similarities to the Lower Mississippi Valley types Coles Creek Incised,

Avoyelles Punctated, Sicily Island Incised, Mazique Incised, and Plaquemine Brushed (Newell and Krieger 1949, Ford 1951, Webb 1961, Suhm and Jelks 1962). Several additional ceramic parallels exist between Alto focus and the late Coles Creek and Plaquemine phases in the Lower Mississippi Valley. The similarity of Davis site pottery with "stepped designs" to pottery of the type, L'Eau Noire Incised, vars. Bayou Bourbe and Shell Bluff, has already been cited. Also previously noted is the similarity of Davis site pottery with "tendency toward scroll design" decoration to sherds classified as "unidentified curvilinear excised" from Balmoral, Routh, and Point Lake sites. Vessels with incised and punctated design combinations of the kind described in item 7 above have a direct Alto focus parallel in the type Dunkin Incised. Finally, Krieger's "Molcajete-like bowls" bear a certain resemblance to L'Eau Noire Incised, var. Anna, and carinated vessels of several Alto focus decorated types closely resemble the Baytown plain modes, "Preston" bowl and "Crippen Point" bowl.

It is the author's opinion that Alto focus and the late Coles Creek phases, Balmoral, Kings Crossing, and Crippen Point, are roughly contemporaneous and that they experienced somewhat similar ceramic developments. These developments would include: the appearance of the

decorative techniques, engraving, excising, and brushing; the apparent stylistic shift in the way certain complex designs, originally characteristic of Sicily Island Incised and French Fork Incised, are portrayed; and changes in the Coles Creek type, Mazique Incised, which give rise to Plaquemine Brushed and possibly such diverse products as Sanson Incised, Sinner Linear Punctated, and Pease Brushed-Incised. The value of Alto focus (specifically Davis site) is not as a possible source for Plaquemine ceramic features, but rather as a mirror of ceramic developments that are probably occurring over a wide area extending from the Lower Mississippi Valley to east Texas.

The Greenhouse site (28-H-2) lies approximately fifty miles south of the Survey Area near the mouth of the Red River. As a result of his analysis of artifact collections obtained from the site during WPA excavations, Belmont (1966) has recognized several distinct occupations. Of relevance here are Greenhouse, Spring Bayou, and Mayes phases. According to Belmont, the chronological and cultural equivalents of Greenhouse and Spring Bayou phases in the Upper Tensas and Lower Yazoo Basins are respectively, Kings Crossing-Balmoral, and Crippen Point.

The subsequent Mayes phase is poorly represented at Greenhouse, but additional components are found at

Mayes (27-I-2), Crooks (26-H-3), and Sanson (27-H-10) sites. Mayes phase ceramics include Plaquemine Brushed, Mazique Incised, var. Manchac, Coles Creek Incised, var. Hardy, Sanson Incised, and Evansville Punctated, var. Wilkinson.¹ Belmont interprets Mayes phase as possibly a "brief Caddoan intrusion into this area (mouth of the Red River) from the west" and suggests that it is one source for later Plaquemine ceramic developments in the Lower Mississippi Valley (1966:34). Although he places the beginning of Mayes phase at A.D. 1200, Belmont presumably feels that it is developmentally and chronologically antecedent to Routh phase.

Rather than a "Caddoan intrusion," the present author would suggest that Mayes phase is simply the local expression of widespread ceramic changes that, in the Lower Mississippi Valley, give rise to Plaquemine culture. When this phase is better defined by large, unmixed pottery collections, it may become one of our best examples of "early" Plaquemine.

It does seem strange that with the extensive site surveys in the Lower Yazoo and Upper Tensas Basins, no "early" Plaquemine components have been found. There may be a short period of time that is not represented by any

¹ Belmont, personal communication, 1969.

pottery collections in the two areas, but it seems more likely that most of the early stage of Plaquemine culture is represented in collections already in hand. Sites such as Gordon, Ditto Lake, and Canebrake may have the sought after components. What we need though are large, unmixed pottery collections and an eye for such things as an incised prototype of Plaquemine Brushed and an engraved prototype of Leland Incised.

Non-Ceramic Artifacts

Flaked Stone

Projectile Points

The great majority of projectile points found on sites with occupations dating to the Coles Creek and Mississippian periods are small in size, usually less than 3 cm. in length. According to Fenenga's (1953:322) observations concerning the relationship between projectile point weight and function, these artifacts can be identified as arrow points with some certainty. Several types are represented in the Upper Tensas Basin including Alba, Scallorn, Hayes, Clifton, Claiborne, Madison, and "Fish Tail" (Suhm and Jelks 1962, Quimby 1957:129-30, Ford, Phillips and Haag 1955).¹

¹See Plate IV, c-r.

There are no instances in the Survey Area of stone arrow points being definitely associated with Routh components. At the type site only 2 bifacial implements were recovered as a result of all investigations. One is a drill-like point (Plate IV, a) from definite Balmoral phase context (Cut 2, Level D) and the other is the basal portion of what could be a large triangular point (Plate IV, b) from Routh phase contexts (Cut 5, Level D). It is not possible to make a positive identification of the latter specimen, but it should be noted that it does resemble the larger Madison points associated with historic Taensa phase sites. Since triangular points are not known to occur in the Survey Area until historic times, this fragment may not be a point.¹

The only other site where Routh phase material has been found in unmixed condition is Rose Hill. No projectile points occur in the relatively large surface collection from that site. In addition to the type site, Routh phase material has been obtained in excavations at three sites: Preston, Balmoral, and Canebrake. All these

¹An alternative interpretation is possible, however, given the specimen's association with a shell-tempered vessel and a radiocarbon date of A.D. 1640 in Level D of Cut 5. All items may be the result of an unrecognized, intrusive pit dating to a late prehistoric reoccupation of Routh site. In Chapter II, the author argues that the shell-tempered vessel belongs to the Routh component and that the radiocarbon date is wrong.

PLATE IV.--Stone and bone artifacts from Routh and
Fitzhugh phase sites

- A. Bifacial point, Routh site, Cut 2, Level D.
- B. Bifacial blade, Routh site, Cut 5, Level D.
- C. Alba point, Canebrake site, Cut 1, Level B.
- D. Alba point, Canebrake site, Cut 2, Level A.
- E-G. Alba points, Preston site, surface.
- H. Hayes point, Canebrake site, surface.
- I-J. Hayes points, Preston site, surface.
- K-L. Scallorn points, Canebrake site, surface.
- M-P. Scallorn points, Preston site, surface.
- Q. Scallorn point, Preston, Cut 1, Level B.
- R. Claiborne point, Preston, Cut 1, Level A.
- S. Madison point, New Ground site, surface.
- T. Snub-nosed scraper, New Ground site, surface.
- U-V. Bifacial blades, Canebrake site, surface.
- W. Bifacial blade, Canebrake site, Cut 4, Level A.
- X-Y. Bifacial blades, Preston site, surface.
- Z. Bifacial blades, New Ground site, surface.
- AA. Modified flake, Routh site, surface.
- BB. Modified flake, Fitzhugh site, no provenience.
- CC. Pebble scraper, Routh site, surface.
- DD. Pebble scraper, Routh site, Cut 1, Level B.
- EE. Pebble core, Routh site, Cut 3, Level B.
- FF. Pebble core, Routh site, Cut 4, Level G.
- GG. Pebble core, Canebrake site, Cut 1, backdirt.
- HH. Pebble core, Fitzhugh site, surface.
- II. Pebble core, New Ground site, surface.
- JJ. Whetstone, Routh site, Cut 4, Level C.
- KK. Whetstone, Preston site, surface.
- LL. Whetstone, Fitzhugh site, Cut 1, Level E.
- MM. Pitted cobble, Canebrake site, Cut 1, Level B.
- NN. Worked antler, Preston site, Cut 1, Level B.
- OO. Worked bone, Preston site, Cut 2, Level B.
- PP. Worked antler, Canebrake site, Cut 4, Level A.
- QQ. Worked bone, Canebrake site, Cut 3, Level F.
- RR. Worked bone, Canebrake site, Cut 5, Level B.
- SS. Worked bone, Canebrake site, Cut 4, Level B.
- TT. Worked bone, Canebrake site, Cut 5, Level B.
- UU. Worked bone, Canebrake site, Cut 3, Level B.

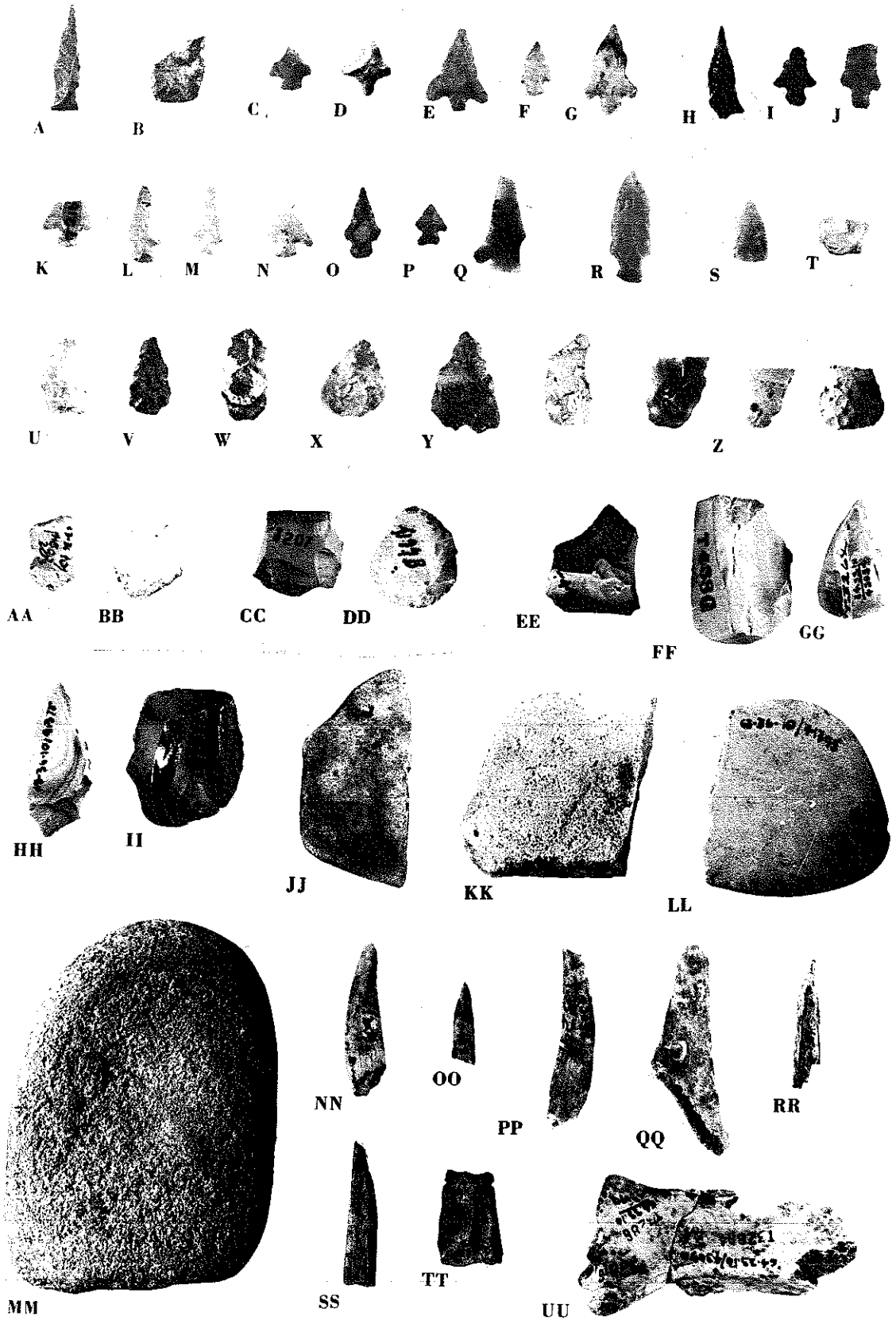


PLATE IV (1/2 scale)

sites are multicomponent and have failed to yield stratigraphically isolated collections of Routh phase material. Projectile points of the types, Alba, Scallorn, Hayes, and Claiborne, occur at Canebrake and Preston in excavation levels producing both Balmoral and Routh phase ceramics. At Balmoral, no points occurred in Cut 2, Levels A-D, where the only large collections of Routh phase pottery was obtained.

Of the remaining sites with Routh components-- Willow Bayou, Compton Lake, Point Lake, Lake Providence, and Dunbarton--all are multicomponent and are known entirely or mainly from surface collections. None have yielded small projectile points.

Cotter (1951) reports no projectile points from Anna site, and we may assume, therefore, that he found none in the Routh phase level of his test excavations. In the Lower Yazoo Basin, Brain (1969:272) reports that the Winterville phase is characterized by Scallorn points. This phase is roughly contemporaneous with Routh, and the two are related ceramically. Scallorn points occur at three of the sites (Balmoral, Preston, and Canebrake) that have Routh components, but, since all are multicomponent sites, these points can not be attributed to the Routh phase occupation with any degree of certainty. Phillips (1970:508) reports a single Claiborne point from

the Mayersville site and ascribes it to the Mayersville component. Elsewhere Phillips (*ibid.*:347) assigns this point type to Deasonville culture.

The evidence presented above indicates that stone projectile points are probably not a feature of Routh phase. To substantiate this conclusion, it is necessary to bring in evidence from both earlier and later phases. It appears from this evidence that stone projectile points are common in Balmoral phase, that they disappear with the beginning of Plaquemine culture, and that they reappear in Transylvania phase and the historic Taensa and Natchez phases. Point types found in association with Balmoral components are Scallorn, Alba, Hayes, Clifton, Claiborne, and the "fish tail" point. The Transylvania site excavations yielded one point which conforms to a newly defined type, the Burthe point (see Plate XI, b).¹ Stratigraphic context is inadequate for definite assignment of this specimen to either component at the site, but the only other site known to have yielded Burthe points is the historic Burthe Cemetery (24-M-6). Presumably, the Burthe Point first appears in late prehistoric (Transylvania) times. Finally, the historic Taensa sites, Beasley and Clark Bayou, and the nearby

¹This point is defined in Chapter V, pp. 542-546.

Fitzhugh phase site, New Ground (Plate IV, s), have yielded triangular points identified here as Madison (Ford, et. al. 1955:131).

The absence of points during Routh and Fitzhugh phase occupation of the Upper Tensas Basin is well documented by the absence of points in large excavated collections from the Routh, Fitzhugh, and Transylvania sites, and in large surface collections from single component sites such as Rose Hill, Somerset, Ulmer, and Elk Ridge.

There are 59¹ sites in the Survey Area that have yielded surface or excavated collections of pottery that are identifiable as Balmoral, Routh, or Fitzhugh phases or as Plaquemine culture.² Eight of these are single component Balmoral sites; 15 are single component Plaquemine sites (Routh, Fitzhugh, or Plaquemine culture); 1 is a multicomponent site with stratigraphically separated Balmoral and Routh components; and 35 are multicomponent, yielding only mixed collections of Plaquemine pottery and Balmoral or earlier pottery. The occurrence of projectile points at these sites is presented in Table 29.

¹This figure does not include Swift site.

²Where phase identification is not possible, Plaquemine components are identified as Plaquemine culture.

TABLE 29

DISTRIBUTION OF PROJECTILE POINTS AMONG SITES
WITH BALMORAL AND/OR PLAQUEMINE COMPONENTS¹

	Balmoral component	Multiple component	Plaquemine component
Points present	5	12	1
Points absent	4	23	15

One fact that stands out in Table 29, is the relative scarcity of points in collections from sites with any kind of component: Less than half the sites have yielded points. Of the sites with points, nearly all have either Balmoral or multiple components. The single site with only a Plaquemine component, New Ground (24-L-12) had triangular points and is situated so near to the historic Beasley site (24-L-14) that the particular specimen could be a stray dating to the historic period. On geological evidence, New Ground is very late, while on typological grounds, it can be ancestral to historic Taensas. It is also possible, then, that the point actually belongs with the component.

The absence of stone projectile points during the last several centuries before European contact is further

¹The total of 60 sites reflects the fact that Routh site, with stratigraphically isolated Routh and Balmoral components, has been counted twice.

substantiated by ethnohistoric data. In describing the Natchez, Du Pratz notes that arrow points were fabricated from different materials depending upon their use: cane splints for birds and small fish; large bone splints for bison and deer; bipointed bone for large fish; and garfish scales for war arrows (Swanton 1911:58). Stone is not listed. One wonders, in view of the existence of triangular stone points at Fatherland and the historic Taensa sites, why it is not mentioned. Quite possibly the practice of using stone is just beginning to gain popularity in early historic period.

According to Swanton (1911:24-5) Natchez, Tunica, and Mobilian terms for the Avoyel, situated at the mouth of the Red River, meant, "Flint People" or "Flint Point People." It is possible that this designation refers to a distinctive characteristic of the Avoyel, namely their use of stone for projectile points. The Natchez and Tunica, by implication, were not using this material.¹

Evidence from sites outside the Tensas Basin tends to support the conclusions that Plaquemine culture is not characterized by stone points. Cotter (1951) reports no stone points as occurring in his collections from Anna

¹ I am grateful to John Belmont for drawing this information to my attention.

and Emerald sites. Anna has Routh and Fitzhugh components, while Emerald appears to have only a Fitzhugh occupation. At the Gordon site, Cotter (1952:Fig. 59) illustrates 10 points that are relevant to the present discussion: 4 are "fish tail", 1 is a Hayes type, and 5 are Scallorns. Provenience data for all points but one, a Scallorn, is presented in the text and figure descriptions. In all cases but one, points occurred in late Coles Creek stratigraphic context: either "sub-Mound A village" or "Mound A Fill." The exception, a single Haynes point, occurred in Mound A plow zone. In addition to providing evidence for the lack of projectile points in Plaquemine culture, the Gordon evidence suggests that "fish tail" points are a late Coles Creek type. This point type was first recognized at Bayou Goula site where Quimby (1942:269, 1957:128-9) attributed it to the historic component. Quimby obtained 26 "fish tail" points and 27 Scallorn points in his excavations. Thirty-four points were found in the fill of historic burials intrusive into Mound 1 (Quimby 1942:269); and an additional 12 points were found in excavations in the vicinity of these burials (1957:129). Mound 1 was apparently constructed entirely during the Bayou Goula I occupation (1957:143). It seems, therefore, that points found in the fill outside the intrusive burial pits would date to the Bayou Goula I occupation. Such

points could be part of a single cache disturbed by the excavation of burials in historic times as Quimby suggests (1957:129). The remaining 7 points were obtained from the "top level" stratum north of Mound 1. The historic component is represented only in this stratum, but Bayou Goula I is strongly represented also. There is, then, evidence that "fish tail" points are of late Coles Creek culture affiliation at Bayou Goula site as well as at Gordon.

The Medora site excavations of Quimby (1951) yielded only three stone points. Two of these are dart points and presumably early, and the third is not identifiable. The absence of light points here, supports the conclusion regarding the absence of stone points in Plaquemine culture. It does not support the suggestions of 2 components at this site. If Medora has a late Coles Creek phase, we should expect Alba, Scallorn, and other types to be present.

From the foregoing evidence it seems safe to conclude that stone arrow points are not used by people with a Plaquemine ceramic assemblage over a large portion of the Lower Mississippi Valley until the historic period.

A small number of large points, presumably dart points, have been recovered from sites with Coles Creek and Plaquemine culture components. Presumably these

points are characteristic of earlier occupations in the Survey Area and their occurrence in Coles Creek and Plaquemine contexts is fortuitous. The occurrence of large points in association with Routh phase components is listed in Table 30.

TABLE 30

LARGE POINTS ASSOCIATED WITH ROUTH PHASE COMPONENTS

Site	Point Type
Compton Lake	1 unidentified fragment
Preston	1 Gary
Preston	1 unidentified fragment
Canebrake	1 unidentified fragment
Dunbarton	1 Gary
Point Lake	1 unidentified fragment

Miscellaneous flaked stone

Flaked stone objects of any kind are exceedingly rare in Routh phase according to the evidence from the type site. Lithic material is predominantly a tan chert that occurs naturally in the form of pebbles. According to Haag, (Ford *et. al.*, 1955:126-7), the nearest source of such pebbles are the Pleistocene gravels occurring on terraces that flank the alluvial valley of the Mississippi.

Flakes of irregular shape comprise the largest category, with 51 occurring in Routh phase strata at the

type site. Of these, 9 show evidence of use in the form of wear-pressure retouch¹ along some portion of an edge (Plate IV, aa). Similar artifacts occur in collections from other sites with Routh phase components (Table 31) but they cannot be definitely assigned to any one component.

TABLE 31

OCCURRENCE OF FLAKES WITH WEAR PRESSURE
RETOUCH AT ROUTH PHASE SITES

	Unmodified flakes	Modified flakes
Dunbarton	97	3
Balmoral	17	17
Rose Hill	27	0
Point Lake	27	17
Compton Lake	66	1
Preston	300	13

Second in frequency are pebbles that have been fractured or flaked to varying degrees. Seventeen occur in Routh phase stratigraphic context at the type site (Plate IV, ee, ff). In most examples, flaking is of sufficient regularity to suggest identification as cores. These items are present at other Routh phase sites (Table 32) but again, component identification is not possible with the exception of Rose Hill.

¹This terminology is used by White (1963:47) to describe edge flaking due to usage.

TABLE 32

OCCURRENCE OF FLAKED PEBBLES AT SITES
WITH ROUTH PHASE COMPONENTS

Point Lake	10
Rose Hill	1
Compton Lake	1
Dunbarton	1
Balmoral	5
Preston	2
Canebrake	11

Five implements obtained at Routh site are here designated pebble scrapers (Plate IV, cc, dd). These are pebbles that have been bifacially flaked by percussion around most of their perimeter. Portions of the resulting working edges evidence wear-pressure retouch. In most instances considerable pebble cortex remains. At the type site, three specimens occurred in Routh phase strata, one occurred in a Balmoral phase stratum, and one was a surface find. Similar tools are present in the LMS surface collection from Dunbarton.

One fragment of a thin bifacially retouched artifact was obtained from Cut 5, Level D, at the type site. As noted on p. 326, its functional identification is indeterminate. It could be the basal portion of a large Madison point, or part of some other kind of tool.

Several multicomponent sites with Routh components have produced small, thin bifaces that frequently bear wear-pressure retouch along some portion of their edge. Shape varies between roughly triangular to elongated oval to bi-pointed (Plate IV, u-z). Specimens are found at the following sites: 3 at Canebrake, 2 at Preston, 1 at Compton Lake, and 8 at Point Lake. Given the variety of form and the number of phases represented at these sites--Fitzhugh, Routh, Balmoral, Issaquena and Marksville---it is probable that these specimens do not constitute a culturally meaningful tool category, nor can they be assigned to any one particular phase.

Ground Stone

There is little evidence for ground stone artifacts in Routh phase. From the type site, the only items are three sandstone slabs which show wear on their flat surfaces and are presumably whetstones. One derives from Cut 4, Level C (Plate IV, jj), which yielded predominantly Routh phase pottery. The others were obtained from Cut 2, Level C, in indisputable Balmoral phase context.

Other sites with Routh components that have yielded ground stone artifacts have multiple occupations, and definite phase association is not possible. These sites include: Dunbarton, with three sandstone whetstones; Preston, with one whetstone (Plate IV, kk); Point

Lake, with the bit of a polished celt; Compton Lake, with a fragment of a biconcave discoidal and one polished celt fragment; and Canebrake, with one sandstone whetstone, the mid-section of a polished celt, and a large tabular piece of sandstone with battered ends and one slight depression in the middle of each flat surface (Plate IV, mm).

Five sites with components identifiable only as Plaquemine culture have also yielded groundstone artifacts. Indian Village, which appears to be a single component site, has produced one piece of sandstone with three grinding facets that give the object a triangular cross-section. The remaining four sites, known only from surface collections, have multiple occupations. Ground stone tools obtained from these sites include: Formosa, with one polished celt; Quimby, with fragments of two polished celts; Taxodium, with one tabular piece of sandstone with pits on each side; and Azucena, with one "plummet."¹ These artifacts could belong to Balmoral, Routh, or Fitzhugh phases.

¹This artifact is listed on preliminary sorting forms but was not located by the author during the course of his analysis of worked stone.

Worked Bone

No worked bone was recovered from the Routh site. Elsewhere specimens are known only from the multicomponent Preston and Canebrake sites. From Preston there is a single antler tine with blunted tip (Plate IV, nn) and a bone splinter with one end, ground to a point (Plate IV, oo). The artifacts from Canebrake include: two splinters of large mammal bone with points ground on one end (Plate IV, rr, ss); one fragmentary deer ulna with its distal end ground down to a blunt point (Plate IV, gg); the proximal end of a deer radius, from which the shaft has been cut and which bears a second encircling incision (Plate IV, tt); one antler tine showing evidence of grinding near its tip (Plate IV, pp); and the proximal end of a large deer or elk scapula into which a large notch has been cut (Plate IV, uu). Needless to say, these artifacts could belong to any one of several components: Balmoral or Routh, at Preston site; and Issaquena, Marsden, Balmoral, Routh or Fitzhugh at Canebrake site.

Faunal Remains

Virtually no bone was encountered in the Routh site excavations and what little there was could not be identified. Faunal remains were present in small amounts in the midden strata at Preston, but due to poor stratigraphic separation this can not be assigned to either the

Balmoral or Routh component. Excavations at Canebrake produced a relatively large collection of faunal remains, but again, lack of cultural stratigraphy prevents phase assignment. A list of the individual species and their frequency of occurrence at both sites is given in Table 33.

TABLE 33

FAUNAL REMAINS FROM PRESTON AND CANEBRAKE SITES

	Preston	Canebrake
Deer	37	149
Rabbit	2	7
Raccoon	1	3
Squirrel	1	
Opposum		1
Lynx		1
Turkey		1
Bird (unidentified small species)	1	1
Turtle	2	25
Gar		3
Fish (unidentified)	6	24
Unidentified	67	242

Shell was scattered throughout the midden deposits at both sites. All recovered shell specimens have been identified as fresh water mussel (*unio naiadus*) by Dr. W. J. Clench of the Department of Mollusks, Harvard University.