

A PRELIMINARY REPORT ON THE INDIAN MOUNDS AND MIDDENS OF PLAQUEMINES AND ST. BERNARD PARISHES

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Introduction

The Indian mounds of Plaquemines and St. Bernard Parishes are prominent landmarks in an area devoid of natural relief. Beyond that they are variously regarded, according to the background and inclination of the observer. To the commercial exploiter of clam shells they are a possible source of supply. To the seeker for the lost treasures of Lafitte they are a challenge to dig. To the archaeologist they are the sources of the fragmentary clues from which he must reconstruct the civilization of their builders. This paper pretends to no such ambitious accomplishment as is implied in the last sentence, but it does point out certain indicated relationships among the ancient inhabitants of the delta, and it throws some light on the recent physiographic history of the region.

The writer was privileged to accompany Dr. Russell on his two initial trips to the delta, and supplemented them with two others, each of about a week's duration. During the course of the four visits all but six of the fifty sites shown on the map (Fig. 36) were visited. Mounds were measured and sketched; depth borings were sunk; the sites were scoured for fragments of pottery and other articles of primitive manufacture. Fishermen, trappers, and guides were consulted; miles of waterways were followed, with the idea of making the canvass as thorough as possible. It was soon found that the white glare of a *Rangia* clam accumulation, or any conspicuous clump of vegetation justified a visit, even though it meant the difficult negotiating of shallow waters, or the even more difficult floundering through the marsh. It is believed that the fifty sites repre-

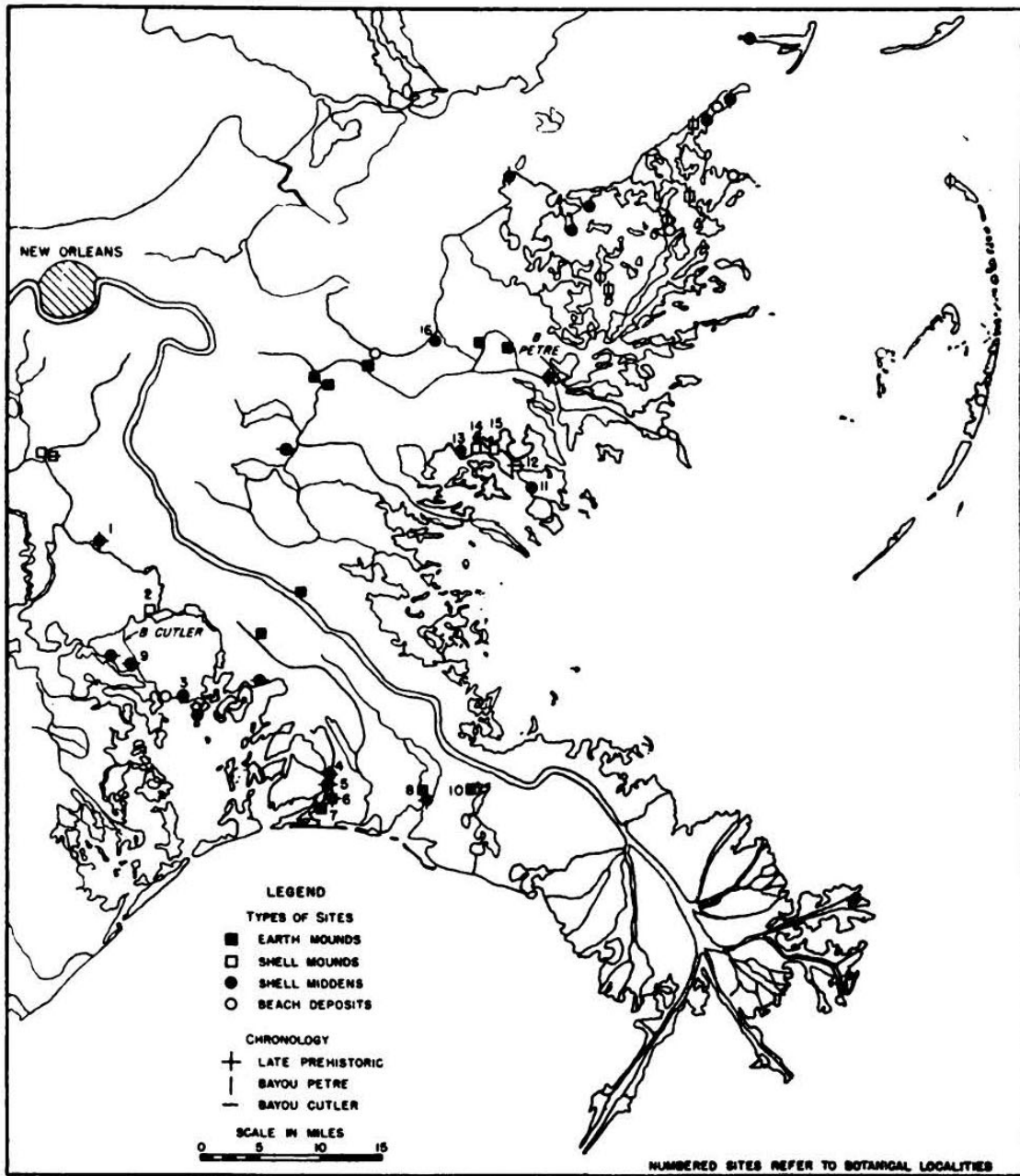


Figure 36. Mounds and middens of the Lower Delta.

sent a fair accounting for the region, and even if a few were missed the general import of the map is correct. In other words, there are areas where sites are abundant, areas where they are few, and areas where they do not occur.

Kinds of sites

All the sites visited fall into one of four general classes: earth mounds, shell mounds, shell middens, or beach deposits. The first three are man-made, while beach deposits

are natural formations, included only when they contain potsherds.

Mounds are artificial eminences apparently shaped by their Indian builders in accordance with some plan or design; while middens are incidental accumulations of village refuse: potsherds, bones, and shells, disintegrated and decomposed, and intermingled with black earth.

The earth mounds characteristically appear in a clump of three or more, and, with two doubtful exceptions, are built in the form of steep, four-sided, truncated pyramids. They vary in size, with average dimensions of perhaps seventy-five by fifty feet at the base, and rise to elevations of some five to eight feet above the level of the surrounding marsh. They are conspicuous landmarks, not so much because of their size, but because they generally support a vigorous fresh-water flora with large live oaks and yuccas, distinguishable for miles above the lower-lying marsh species.

The shell mounds, relatively few in number, are generally built on a ridge or platform of the same material, and are likewise flat-topped pyramids. In several instances the shell mounds are so nearly submerged that their forms are not distinguishable.

The shell middens are of two general types: low-lying, formless accumulations; and large, ridge-like structures, attaining lengths of several hundred feet and heights of from three to eight feet above the surrounding country.

The beach deposits are wave-formed accumulations containing shells and potsherds. In every instance where this association was observed, both shell and potsherds are believed to be derived from some mound or midden, now destroyed or submerged.

The brackish-water clam *Rangia cuneata* forms the great bulk of the major shell accumulations, but it is significant that a number of sites show from a high percentage to a marked dominance of marine shells, particularly *Ostrea*.

Location of sites

The first notable fact concerning the location of the sites is that every mound and midden appears to be referable to the natural levee of a present or former stream course. Such a selection on the part of the primitive builders was almost compulsory. The high ground provided sites for villages and maize fields. The streams furnished the fresh water necessary to human occupation. The brackish-water ponds beyond the levee back-slope provided the *Rangias*; the flesh was eaten, and the shells were built into mounds or discarded in midden heaps.

A second pertinent observation concerning the location of the sites is that the Balize district of the delta is without a known mound or midden, and the same, with the exception of the Pointe a la Hache site, is true for the banks of the present Mississippi below New Orleans.

The third point has to do with the location of specific types of sites. As shown by the map, the earth mounds show a marked linear and highly restricted distribution. One series of earth mounds would fall on a line extended generally southward from Pointe a la Hache to the coast, while another follows the middle course of Bayou La Loutre. The shell mounds show no conspicuous segregation. The ridge-like shell middens are rather widely distributed, being least prominent in the northeasternmost section. The smaller, and generally superficial, shell middens are most abundant in the region directly east of Barataria Bay. The beach deposits are dependent upon natural conditions, so that their distribution is of limited significance in the present connection.

The pottery

From the archaeologist's point of view, the most significant key to the past is found in the study of artifacts, that is, products of human workmanship. It is well established, for instance, that pottery, both as to general make-up and decorative design, is distinctive of time and place. A group of people of given period and area show little departure from a set technique and complex of designs. Hence,

the careful study of the pottery fragments or sherds, and the comparison of the collection from one site with those from others frequently enable the student to arrive at conclusions regarding the historical sequence of the primitive groups who inhabited the area and made the pottery. Such conclusions may be induced from surface collections of potsherds; their validity is firmly established when confirmatory evidence is found in a stratigraphic sequence. That is, if excavation should reveal one type of pottery in the surface layer of a mound, another type lower down, and still another type near the bottom of the mound, the relative ages of the three types would be apparent. The type at the bottom would be the oldest, since it was deposited first, while the one lying near the surface would be the youngest in age.

As yet the potsherd collections from the fifty sites are not sufficiently complete to justify detailed conclusions with regard to the sequence of pottery types. Of the fifty sites scarcely ten are represented by sherd collections sufficiently large to be considered representative. No excavation was undertaken to seek stratigraphic sequence. However, comparison of the adequate collections from a few widely separated sites does reveal differences suggestive of at least two distinct pottery complexes.

The first pottery complex is named Bayou Cutler, for the excellent site occurring on the stream of the same name, near the point where it enters Bayou St. Denis, about four miles northwest of Barataria Bay, in Jefferson Parish. The site is a large, ridge-like accumulation of *Rangia* shells, and is locally called Cheniere Cutler. As the name implies, the ridge carries a growth of live oaks, and for this reason is a conspicuous landmark. The following combination of positive and negative traits characterizes the Bayou Cutler pottery complex (see Plate 14) :

1. Presence of lugs or ears on rims of vessels; ears frequently decorated.
2. Often line in the rims.
3. Dominance of straight line decoration on body of vessel.

4. Abundant use of check-stamp decoration.
5. Absence of shell tempering (material added to prevent cracking of clay in firing).
6. Absence of handles on pots.

The second pottery complex is called Bayou Petre, for the site at the junction of Bayou La Loutre and Bayou Petre, in the eastern part of St. Bernard Parish. The following combination of positive and negative traits characterizes the Bayou Petre pottery complex (see Plate 15) :

1. High percentage of shell-tempered sherds.
2. Handles abundant.
3. Simple nodes or lugs on rim of vessel.
4. Check-stamp ware lacking.
5. Rims plain and undecorated.
6. Contains characteristic ware, red, with gritty texture.
7. Greater use of curved, incised lines than Bayou Cutler complex.
8. Ware coarser than that of Bayou Cutler.

Though the two complexes are readily distinguishable, they have a few traits in common, such as the use of punctates.

Each complex is represented by several relatively "pure" sites, that is, sites whose collections meet the qualifications listed above. Of the fifty, five sites may be classed as Bayou Cutler, and five as Bayou Petre. All the remaining sites show some degree of difference, either a suggestion of mixture of the two complexes, or the absence of certain typical features, or even the addition of new ones. It should be pointed out that most of these unassigned sites are represented by very small sherd collections, so that the mere absence of certain of the features listed above as typical, does not exclude the probability that the site belongs to one of the two major complexes. So, with some reservation, two additional sites are assigned to the Bayou Cutler complex, and five to the Bayou Petre complex. This means that the two complexes together account for seventeen of the entire fifty sites. The sites classed as Bayou Petre compactly dominate the northeasternmost portion of St. Ber-

nard Parish, while sites referable to the Bayou Cutler complex dot the remainder of the occupied region. The seventeen sites thus accounted for are all that can with any certainty be assigned to a complex on the basis of pottery collections.

Turning outside the two parishes, there is found some evidence to confirm the distinction of the two major complexes. The resemblance between the Bayou Cutler complex and the Coles Creek complex described by Ford¹ is immediately apparent. The main differences are the absence in the Bayou Cutler complex of the overhanging-line decoration *motif*, so characteristic of the Coles Creek of central Louisiana; and the infrequent appearance in the Coles Creek complex of the check-stamp ware found abundantly in the Bayou Cutler complex.

Potsherds collected by Collins from the Veazey site, Pecan Island, Vermilion Parish, Louisiana, have been identified by Ford² as "showing definite Coles Creek characteristics, although with slight local variations." By inference from Collins' description the Veazey collection contains check-stamp ware and rims decorated like those of the Bayou Cutler complex.

From a point near the mouth of Mobile Bay Moore⁴ describes two adjacent sites exhibiting differences suggestive of those distinguishing the Bayou Cutler and Bayou Petre complexes. The Strong's Bayou site is a deposit of oyster shells. The pottery is shell-tempered, lacks check-stamp ware, has handles, and in its decoration and whole make-up is very like the Bayou Petre ware. The nearby Seymour's Bluff site is made up of nine earth mounds. The

¹Ford, J. A. Outline of Mississippi and Louisiana pottery horizons. La. Conservation Rev., vol. 4, no. 6 p. 38 ff. Apr., 1935.

²Ford, J. A. Ceramic decoration sequence at an old Indian village site near Sicily Island, Louisiana. This series, Anthropological Study no. 1, p. 30, 1935.

³Collins, Henry B., Jr. Smithsonian Explorations, 1926. Smith. Misc. Coll., vol. 78, no. 7, pp. 200-206. Wash., 1927.

⁴Moore, Clarence B. Certain aboriginal mounds of Mobile Bay and Mississippi Sound. Jour., Acad. Nat. Sci. Phil., vol. XIII, 2nd series, art. 4, p. 293. Phil., 1905-08.

pottery is almost entirely check-stamp ware and lacks shell temper, which is at least suggestive of the Bayou Cutler complex.

The definite distinction between the Bayou Cutler and Bayou Petre complexes seems certain. It also seems clear that they must differ in time. It is unlikely that two groups could exist side by side without showing some mixture of pottery designs. Assuming that they are different in time, it is important to know which is the older. The evidence is not conclusive. What there is favors the greater age of the Bayou Cutler complex. The check-stamp ware of the Bayou Cutler complex occasionally appears in the Bayou Petre. On the other hand, no diagnostic trait of the Bayou Petre complex, such as handles, appears in the type Bayou Cutler collections.

Chronology

Developing the time sequence beyond the point attained above demands different procedure. There are several angles of approach: the amount of subsidence of the shell accumulations; the development of soil profiles in the earth mounds; and the suggested changes in the shell life used by the Indians for food.

Bore-hole tests were made on the shell mounds and middens to provide an estimate of the amount of subsidence suffered since their construction. It is assumed that they must have been built initially with bases at least as high as sea and marsh level. The tests revealed maximum subsidence of from seven-and-a-half to eleven feet, averaging approximately the same for the extreme eastern and western sides of the region. Such results are of no particular assistance in the present connection. However, when, as in the area between Barataria Bay and the Mississippi, there are shell middens showing no appreciable subsidence, we may infer that they are of comparatively recent origin.

Some evidence concerning the antiquity of the earth mounds is found in their well developed soil profiles, which obviously have formed since the mounds were constructed. Though the impression is now growing that soil profiles do

not take so long to form as was formerly believed, still the maturely developed profiles of the earth mounds eliminate the possibility that they are of recent origin. Immediately adjacent to the most southerly earth mounds are small shell middens, lying on the marsh deposits and showing no appreciable subsidence. It is significant that these superficial middens are composed dominantly of salt-water oysters, while the occasional shells appearing in cuts in the adjacent earth mounds are invariably brackish-water *Rangias*. Here is good evidence of two distinct periods of occupation, the older represented by the earth mounds, the younger by the shell middens. There is also the implication of an increasing salinity since the building of the earth mounds.

With fair assurance there may now be postulated a period of human occupation more recent than those represented by the Bayou Cutler and Bayou Petre complexes. To this period are assigned the above-mentioned superficial middens, with the possibility that to it may belong also some of the other shell accumulations whose sherds could be classed as neither Bayou Cutler nor Bayou Petre. Making this period younger than the Bayou Cutler and Bayou Petre complexes seems amply justified on the basis of comparative subsidence alone. For convenience the name "Late Prehistoric" is given to this period, since it appears to be very recent, with no evidence that it is historic.⁵

The particular time to be assigned the earth mounds offers a difficult problem. There is no inherent reason why they should be culturally distinct from the shell mounds and middens. However, they are distinct in their tendency to cluster, several in a group; and they are distinctive in their linear and restricted distribution. Pottery collections from the earth mounds are so poor as to be virtually worth-

⁵Historic sites are those occupied after direct or indirect contact of the Indians with Europeans. Evidence of contact is found in the presence of glass beads, guns, bells, and other articles of European manufacture.

less. The bits of evidence add up to suggest that the earth mounds are among the oldest, if not the oldest sites in the whole delta region.

The suggestions offered above may be summarized in outline form in a proposed sequence of occupational periods for the delta:

Late Prehistoric period (youngest)
 Bayou Petre complex
 Bayou Cutler complex
 Earth mounds?

It is impossible as yet to place this delta chronologic sequence in its proper setting in the larger Gulf Coast region. However, a few suggestions may be offered. What is thought to be the oldest pottery complex in Louisiana and Mississippi, the Marksville,⁶ is not suggested by any of the sherd collections from the delta. Neither is any one of the sites visited known to be historic. There were Indians within the two parishes after the arrival of Europeans, for it is well authenticated that the Washa and Chawasha tribes established villages on the Mississippi near English Turn, after the founding of New Orleans. By the time Europeans arrived in America mound building had declined to a very low point, though there is no reason to believe that the accumulation of refuse in middens should have been affected. The whole problem of recent occupancy of the delta is complicated by our lack of knowledge of the pottery made by the historic tribes of south Louisiana.

It would thus appear that neither the oldest nor the youngest time period of Louisiana's archaeological chronology is represented by the delta mounds and middens. The oldest delta period appears to be roughly the equivalent of the Coles Creek, which immediately overlies the Marksville. The

⁶For a description of the Marksville pottery complex, and a graph showing the time relations of Coles Creek and Marksville, see Ford's "Outline of Louisiana and Mississippi Pottery Horizons," *op. cit.*

youngest delta period must be but little older than the arrival of Europeans.

Physiographic implications

The varying geographic expression of the succeeding complexes and periods was conditioned by changes in the discharge of the Mississippi. Along the natural levees of the main stream or on the major distributaries were the sites favorable to human settlement. As the flow of fresh water was diverted to new channels, the older ones lost their habitable qualities. Increasing salinity reduced the potability of the water; the clams of the neighboring ponds and lakes were succeeded by oysters. Gradual subsidence and the encroachment of marsh deposits left the partially submerged mounds as islands of fresh-water vegetation.

The earliest inhabitants may be envisioned as descending the ancestral Mississippi, and as perhaps responsible for the line of earth mounds. The subsequent rise of the Bayou Cutler complex led to the occupation of sites on the stream of the same name and along another distributary outlined by the sites lying to the east of Delacroix Island, in St. Bernard Parish. The shift of the main volume of discharging water to the northeast may have left the old sites uninhabitable. The newly built land was occupied by the Bayou Petre complex, coming in from the east. Quite recently, as measured in geologic time, the Mississippi swung again to the west, occupying something like its present course. The Late Prehistoric period followed the westward swing of the river, with evidence of renewed occupation, perhaps seasonal visits, nearly to the coast. The absence of aboriginal sites in the Balize district of the delta speaks for its too great recency of formation, as is also true of the barren stretch of the Mississippi's banks below New Orleans.

PLATE XIV

Potsherds from Type Bayou Cutler Collection

All views exterior except 11 and 12.

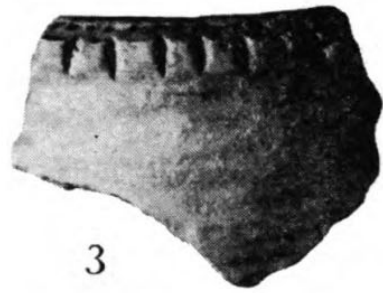
- Figures 1, 2, 3.** Thickened rims; lips slant outward, with rows of punctates in incised line ("line in rim"). Strongly suggestive of Coles Creek; outward slanting lips more frequent in Bayou Cutler complex.
- 4.** Large triangular punctate used singly in connection with curvilinear incised design. A common Coles Creek *motif*.
- 5, 6.** Check-stamp ware. Abundant in Bayou Cutler; rare in Coles Creek.
- 7, 8.** Incised curved prints producing effect similar to rocker rouletting of Coles Creek.
- 9.** Small ears apparently rimming vessel. Similar ears appear in Coles Creek, but normally with four to a vessel.
- 10.** Portion of square-bottomed vessel. Common in Coles Creek.
- 11.** Vertical view of rim; exterior to right. Small ears decorated with large triangular punctates; inward slanting lip; row of punctates in incised line.
- 12.** Vertical view of rim; exterior to left. Rim thickened; small ear. Inward slanting lip marked with row of punctates, not in incised line.
- 13.** Thickened rim; small ear decorated with single punctate; outward slanting lip. Vessel wall decorated with vertical parallel rows of punctates; appears in Coles Creek.



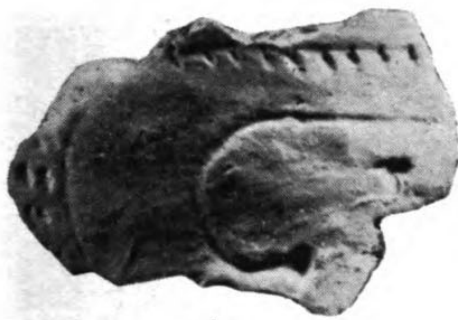
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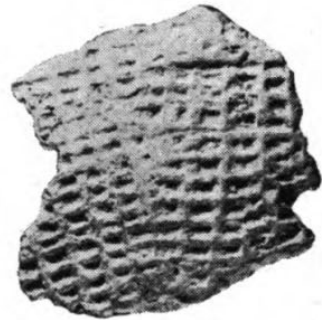
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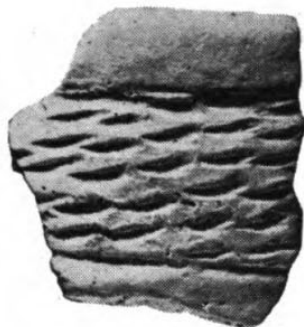
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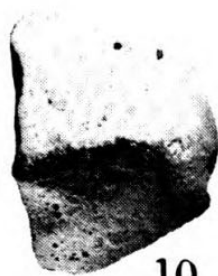
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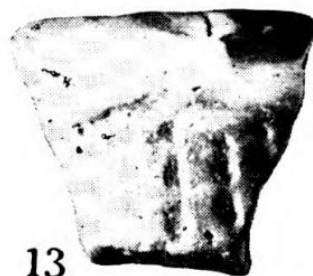
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Plate XIV. Potsherds from Type Bayou Cutler collections.

PLATE XV

Potsherds from Type Bayou Petre Collection

All views exterior

- Figures**
1. Rim with knob similar to those found on historic Lower Mississippi Valley and Gulf Coast wares; seemingly related to occurrence of handles.
 2. Closely spaced incised lines parallel to rim; suggest of common Coles Creek *motif*.
 3. Rim of pot-shaped vessel. Decorative design appears the common filling with rows of punctates above incised line describing a series of "V"'s around body of the vessel. Handle common among recent wares of Gulf Coast and Lower Mississippi Valley.
 4. Scroll design; common in recent pottery horizons of Gulf Coast and Lower Mississippi Valley.
 5. Undecorated rim. Decorated area set off by double incised line spaced an inch below top of rim.
 - 6, 8, 9. Illustrate common use of widely spaced incised lines. The pitting observed on sherd 8 and other sherds on this plate is due to the solution and removal of fragments of shell used as tempering.
 7. Coarsely notched rim. Similar notching extends to the Marksville through recent pottery horizons.
 10. Rim of pot-shaped vessel. Design may conceivably be similar to that suggested by sherd 3.

The originals of rims 1, 2, 5, 7, and 10 show slight interior thickening, not detectable in illustrations.

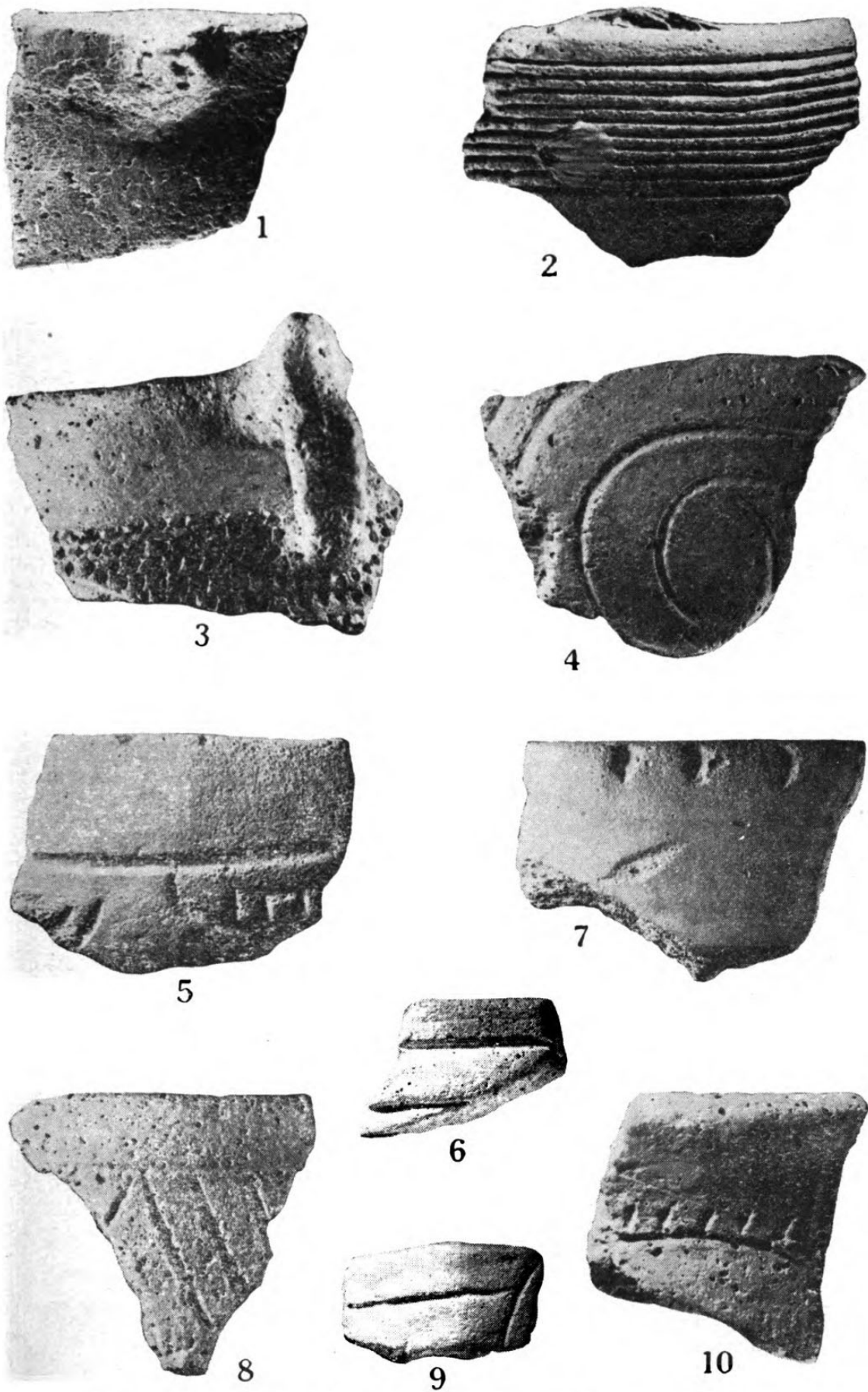


Plate XV. Potsherds from Type Bayou Petre collections.

Conclusion

Finally, let it be emphasized that all the inferences, theories, and conclusions advanced in this paper are not equally supported by evidence. Concerning the actuality and distinction of the Bayou Petre and Bayou Cutler complexes there can be little question. The completion of the chronologic sequence, and the physiographic interpretation are admittedly a venture on ground as uncertain as that of the coastal marshes themselves. *Finis* cannot be written to the archaeologic approach to the study of the delta until the sites have been thoroughly excavated and their extra-regional relations satisfactorily established.