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THE DISTRIBUTION OF POTTERY WARES IN THE GLADES ARCHAEOLOGICAL AREA OF SOUTH FLORIDA

JOHN M. GOGGIN

The Glades archaeological area has been defined as "the region between the Kissimee and Indian Rivers and all the peninsula from Lake Okeechobee to the Florida Keys inclusive."¹ This area comprises all of the Everglades, the Big Cypress Swamp, the Ten Thousand Islands, and strips of pinelands and flatwoods along both the east and west coasts.² This is a country of many and diverse features ranging from forests of pine to jungles of West Indian hardwoods. Swamps vary from those composed of cypress, or of water oak and bay, to the great mangrove swamp of Florida's southwestern coast that is known as the Ten Thousand Islands. The Everglades bisect this "area" from the north to the south forming a barrier that could only be crossed by means of a canoe in aboriginal times. The Everglades themselves seem to have been comparatively uninhabited except along their edges, where rivers drained off the overflow of water.³ The greatest centers of aboriginal population seem to have been at the mouths of creeks, rivers, and inlets, on keys, and on the coastal beaches that are separated from the mainland by mangrove swamps. The early inhabitants were essentially fisherfolk, and without exception their villages were always accessible by water. Burial and ceremonial sites are sometimes found in the pinewoods, but midden sites are never so situated. (Big Cypress Swamp may be an exception.)

When the first European explorers came to Florida, this part of the state was occupied by two outstanding tribes plus a number of lesser ones. On the west coast, from Charlotte Harbor south, the Calusa held sole sway. It seems probable that they controlled the Cape Sable region, but the Keys were most probably occupied by the Tekesta Indians. The main center of the Tekesta was on Biscayne Bay. Northward they may have controlled as far as Pompano or Lake Worth. Centered around Jupiter Inlet were the Jeaga or Hobe Indians, and at St. Lucie River were the Santa Lucia Indians.⁴

1. Stirling, M. W., "Smithsonian Archaeological Projects Conducted under the Federal Emergency Relief Administration 1933-34," *Annual Report for 1934*, Smithsonian Institution, Washington, D. C., 1935, p. 335; also see map, Kelly, A. R. "The Coördination of Southeastern Archaeological Studies," *The Regional Review*, Vol. 1, pp. 8-12, Region One, U. S. National Park Service, Richmond, Va.

2. For a complete discussion of natural regions, vegetation types, etc., see Harper, Roland. "National Resources of Southern Florida," *18th Annual Report*, Florida State Geological Survey, Tallahassee, Fla., 1927.

3. There seem to be no village sites in the Everglades except a few mounds in the western Broward County. In the central part around Pinecrest (45 miles west of Miami) sites are entirely lacking.

4. For further ethnological background see Swanton, John R., "The Early History of the Creek Indians and Their Neighbors," *Bulletin 73*, Bureau of American Ethnology, Washington, D. C., 1922.

This portion of southern Florida has been visited by many archaeologists from 1870 on, but up to the present time no one has yet published a complete report of any single site. Most papers have been concerned with descriptions of sites and of shell and wood artifacts, etc. Pottery has been dismissed with nothing more than casual reference by the early workers. C. B. Moore says in his conclusions on southern Florida "Fragments of earthenware though fewer in number and of a far inferior quality on an average than in central and northern Florida are met with along the southern Florida coast."⁵ Thus this valuable criteria of aboriginal distribution was dismissed.

In 1935 M. W. Stirling began to name Florida pottery types,⁶ but not until 1936 did he define the "Glades area" and name the dominant pottery Glades ware.⁷ In his description he mentions that "it is accompanied to some extent by the omnipresent check-stamped ware";⁸ but he failed to show that this ware has a very definite distribution, not merely a haphazard one. This check stamp ware I have named Biscayne Chalky Ware. In Table 2 I present an analytical description of it.

The most widely distributed pottery ware is Glades Gritty ware. It is present at all sites and when associated with another it is always the dominant ware. Its limit on the west coast is uncertain, but material from Bonita Springs and from near Immokolee is very typical. Near the Caloosahatche river North Florida wares meet it. On the east coast I have collected typical shards as far north as Fort Pierce. It is found throughout the southern part of the peninsula and the keys. When decorated, it is always incised; and some areal difference is noticed in these designs. An outstanding decoration is the feather design.⁹ As a rule, however, the typical decoration consists of one or two incised lines below the rim. This form is very common on material from Coot Bay (north of Flamingo, Cape Sable), Miami Beach, and Key Largo. All shard material yet found in the Big Cypress Swamp area is undecorated, but this lack of incised material may be due to the small number of shards available for study.

Biscayne Chalky ware is check stamped rather than incised and has a somewhat more limited distribution. It is essentially found on the east coast in the area that was not inhabited by the Calusa Indians. It is found at most sites around Miami and northwards. Biscayne Bay seems to be a center of occurrence, for at a site in Surfside

5. Moore, C. B., "Miscellaneous Investigations in Florida," *Journal*, n.s., vol. 13, Academy of Natural Sciences of Philadelphia, 1905, p. 304, Philadelphia, Pa.

6. Stirling, M. W., *op. cit.*

7. Stirling, M. W., "Florida Cultural Affiliations in Relation to Adjacent Areas," *Essays in Anthropology Presented to Alfred Louis Kroeber*, (Robert Lowie, Ed.), 1936, p. 353. A complete analytical description of this "Glades Ware" has since been given and the name expanded to Glades Gritty Ware. Goggin, John M., "A Ceramic Sequence in South Florida," *New Mexico Anthropologist*, Vol. III, 1939, pp. 37-39.

8. Stirling, *op. cit.*, p. 353.

9. Goggin, John M., *op. cit.*, pp. 38, 40.

north of Miami Beach it represents as much as approximately 25 per cent of the total number of shards. To the southward it is found on Key Largo, but no data are available as to its presence on the Lower Keys. Its westward extension is quite limited. It is not found at the Coot Bay site previously mentioned. Shell mounds have been reported at Madera Bay (on the mainland west of Key Largo) and possibly this ware might appear there. The uninhabited Everglades act as a boundary line for this ware, from Cape Sable to Lake Okeechobee. Pine Island (west of Fort Lauderdale) is the westernmost occurrence in the Everglades proper. On the northern edge of the Everglades it apparently occurs at Belle Glade, for Stirling mentions "check stamp" decoration, which is probably Biscayne Chalky ware.¹⁰ It is not present on the southwest coast in the Glades area. To the north in the "Gulf Coast Area"¹¹ a check stamp ware is found but its connection with Biscayne Chalky ware is uncertain. The southernmost record of check stamp ware on this coast is at Punta Rassa, Lee County.¹² Other sites nearby where check stamp ware occurs are Pine Island, Lee County,¹³ and Englewood, Sarasota County.¹⁴ Unfortunately no data are available from sites on the west side of Lake Okeechobee, but from the Lake north, throughout the state, check stamp ware is found. Not all of it, however, is necessarily related to Biscayne Chalky ware as check stamp shards from around Gainesville (Alachua County) have a very different paste. On the northern east coast centering around New Smyrna there is found a type of check stamp ware that is undoubtedly affiliated with Biscayne Chalky. Some shards from New Smyrna could easily be confused with Biscayne Chalky, yet as a whole they present a paste that contains more fine quartz grit and are much harder. This may be a result of local variation in clays and not a cultural difference.

Unfortunately stratigraphy is not available to substantiate the theory, but I believe Biscayne Chalky Ware is a direct outgrowth of the type found around New Smyrna on the Indian River. It would seem that this check stamp ware moved down the east coast into the Glades area and developed into the form called Biscayne Chalky Ware. In the New Smyrna area check stamp was not the earliest type, for at Oak Hill it was found by Nelson to overlie plain ware.¹⁵ The temporal range of Biscayne Chalky ware is uncertain. In the southeastern part of the Glades area certain sites along the edge of the Everglades seem to be younger than sites along the coast. This is revealed by the common presence of such trade material as glass beads, bottles, and metal, in the Everglades sites, while such European re-

10. Stirling, M. W., "Smithsonian Archaeological Projects—," p. 375.

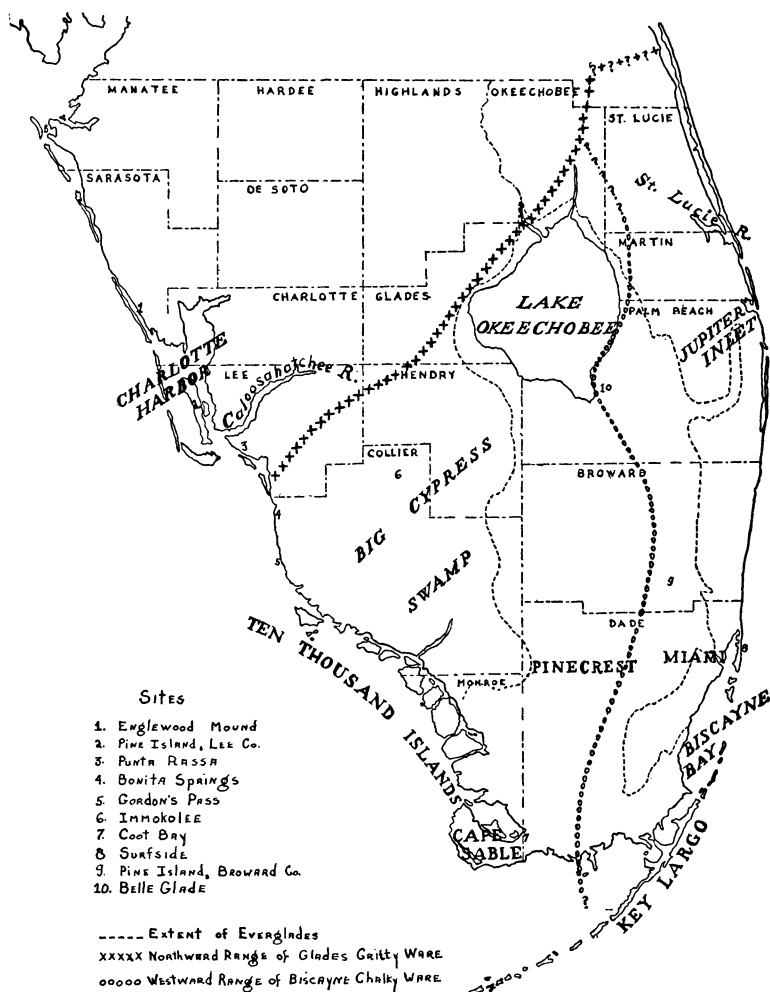
11. Stirling, M. W., "Florida Cultural Affiliations—," p. 309.

12. Moore, C. B., *op. cit.*, p. 309.

13. *Ibid.*, p. 306.

14. Stirling, M. W., "Smithsonian Archaeological Projects—," p. 384.

15. Nelson, N. C. "Chronology in Florida," *Anthropological Papers*, American Museum of Natural History, vol. 22, pt. 2, 1918, New York, pp. 92-95.



Distribution of Pottery Wares in The Glades Archaeological Area

mainly are absent or very rare in coastal sites. In the large shell mound at Surfside (a coastal site) this ware seems to appear in greater quantities in the upper levels. This would indicate that Biscayne Chalky ware was most abundant in the middle period, dwindling in use during proto-historic times. This theory, however, cannot be proven by stratigraphy as yet. Future work may add to this theory or else prove it erroneous.

In all discussions of check stamp ware the same question ever arises—what is the center of origin and distribution? Outstanding centers of occurrence are the states of Florida, Georgia, and Alabama.

From this center check stamping is found in diminishing quantities north through the Carolinas to the Iroquois country where it sporadically occurs. Wintemberg found examples in Ontario,¹⁶ Parker in New York,¹⁷ and Holmes mentions it on the Delaware River above Trenton.¹⁸ Its western limit is southern Louisiana, but it is found only rarely in that state and in Mississippi. In Kentucky and Tennessee it is commonly found. To the northwest the discovery of check stamp ware in North Dakota is unique.¹⁹ The most isolated occurrence, however, is in an Eskimo site on St. Lawrence Island, Alaska.²⁰ No method of ceramic decoration, with the possible exception of cord marking, has the areal or cultural range of the check stamp in North America (north of Mexico.)

Still, despite its abundance in many cultural levels in the Southeast, it is surprisingly absent in certain places. An outstanding example of a site where check stamp pottery is not found is at Moundville, Alabama.²¹ Check stamping is such a widespread trait that it seems difficult to imagine that any culture, even one so specialized as Moundville, could resist its influence if they were contemporaneous. Moundville pottery, however, has been found at a site in northern Alabama where check stamp shards form a large portion of the total collected.²²

The complicated stamp wares which usually occur with the check stamp wares in the larger part of the Southeast do not reach into the Glades areas. Their distribution in Florida is very definite. They are abundant on the central Florida west coast and are found as far south as the Little Manatee River.²³ Along the Atlantic coast south and east of the St. John's River they are not present, but west of the river in central Florida they are widely found.

Another pottery type found in the Glades area is a fugitive red ware. This ware seems to be distinct as it has a combination of shell and sand temper to differentiate it from the painted specimens of

16. Wintemberg, W. J., "The Roebuck Prehistoric Village Site, Grenville County, Ontario," *Bulletin 83*, National Museum of Canada, Ottawa, Canada, 1936, p. 43.

17. Parker, Arthur C., "The Archaeological History of New York," *Bulletins* 235-238, pt. 1, New York State Museum, Albany, New York, 1922, plate 27.

18. Holmes, W. H., "Aboriginal Pottery of the Eastern United States," *20th Annual Report*, Bureau of American Ethnology, Washington, D. C., 1903, p. 177.

19. Will, G. F. and H. J. Spinden, "The Mandans," *Papers*, vol. 3, no. 4, Peabody Museum, Cambridge, Mass., 1906, plate xli.

20. Collins, Henry B. Jr., "Archaeology of St. Lawrence Island, Alaska," *Smithsonian Miscellaneous Collections*, vol. 96, no. 1, Washington, D. C., 1937, p. 169, fig. 17.

21. Moore, C. B., "Certain Aboriginal Remains, Black Warrior River," *Journal*, n.s., vol. 13, Academy of Natural Sciences of Philadelphia, Philadelphia, Pa., 1905, p. 141. Recent investigations by the Alabama Museum of Natural History may have had different results.

22. Griffen, James B., "Report on the Ceramics of Wheeler Basin," in "An Archaeological Survey of Wheeler Basin on the Tennessee River in Northern Alabama" by William S. Webb. *Bulletin 122*, Bureau of American Ethnology, Washington, D. C., 1939, p. 163.

23. Stirling, M. W., "Smithsonian Archaeological Projects—," p. 379.

Biscayne Chalky ware. Most probably it is a trade ware from the northern part of the state although no exact center of this ware has yet been determined. At no place in the state is shell tempered ware very common.

The only find of another pottery type is the presence of a cord marked ware on Key Marco.²⁴ This being the only occurrence within an area several hundred miles in extent, one might be inclined to doubt the record were it not for the fact that Moore must have been quite familiar with cord marked pottery as a result of his work in other parts of the Southeast. The presence of these shards can probably be laid to trade.

So far, only northern affiliations of the pottery have been considered; this leaves us the West Indies to examine. From the earliest workers to the present, all have endeavored to show relationships between the Southeast and the Antillean area. Holmes tried to show Caribbean influence in the Southeast.²⁵ After him Kreiger, Loven, and Rouse have believed the theory of influence from the Southeast into the West Indies.²⁶ Harrington²⁷ and Rouse²⁸ believe that the inturned shoulder or rim is a characteristic which spread from the West Indies to the mainland. Actual trade shards from Florida (or the Southeast in general) are very rare in the West Indies. Andros Island, the nearest large island of the Bahamas, produced no examples.²⁹ One check stamp shard (probably from Florida) has been found on Crooked Island, Bahamas.³⁰ No West Indian shards have yet been recognized in the Southeast.

Rouse has gone into the ceramic relationships with great thoroughness, and believes his Meillac ware (an early form found in the northwestern part of the Greater Antilles) had its origin in the southeastern United States rather than in South America.³¹ This connection he bases on several forms of evidence, but goes into the typology in greatest detail. He finds that out of twenty-eight characteristics of the Meillac type, eighteen occur in the Southwest. These occur at Etowah, Nacoochee, and Stallings Island sites, all in Georgia. If Meillac pottery did originate in the Southeast, the basic ideas would, in all prob-

24. Moore, C. B., "Notes on the Ten Thousand Islands, Florida," *Journal, Academy of Natural Sciences of Philadelphia*, n.s., vol. 13, Philadelphia, Pa., 1907, p. 458.

25. Holmes, W. H., "Caribbean Influence on the Prehistoric Ceramic Art of the Southern States," *American Anthropologist*, n.s., vol. 7, 1894, pp. 71-78.

26. Kreiger, Herbert W., "Aboriginal Indian Pottery of the Dominican Republic," *Bulletin 156*, United States National Museum, Washington, D. C., 1931; Loven, Sven, *Origins of Taino Culture, West Indies*, Goteborg, 1935; Rouse, Irving, "Prehistory in Haiti," *Yale University Publications in Anthropology*, No. 21, New Haven, 1939.

27. Harrington, M. R., "Cuba Before Columbus," *Indian Notes and Monographs*, pt. 1, vol. 1-2, New York, N. Y., 1921, p. 421.

28. Rouse, Irving, "Some Evidence Concerning the Origin of West Indian Pottery Making," *American Anthropologist*, vol. 42, 1940, p. 75.

29. Goggin, John M., "An Anthropological Reconnaissance of Andros Island, Bahamas," *American Antiquity*, vol. 5, 1939, p. 26.

30. Rouse, Irving, "Prehistory in Haiti," p. 71.

31. *Ibid.*

ability, have passed through southern Florida. So it might be well to analyze the pottery types of the Glades area in terms of the characteristics of Meillac ware. Taking Biscayne Chalky ware first, I find no characteristics in common. The fugitive red and cord marked wares will be ignored because they are trade wares. As a matter of record they show no characteristics in common with Meillac ware. With the Glades Gritty ware we find nine characteristics in common, as follows:

Inturned shoulders

Ornamentation before clay was relatively dry

Ornamentation only on shoulders

Affixation

Cutting incision

Cross hatch incised design

Punctuation

Horizontal parallel line design

Ridge on outside rim.

"Inturned shoulders," as has been mentioned before, is believed to be a West Indian trait. It is found on the west coast usually on feather design material. Harrington noted it on Pine Island (he calls it Long Key) west of Fort Lauderdale.³² "Ornamentation before clay was relatively dry" occurs throughout the Glades area but incisions were also made when the clay was dry. "Ornamentation only on shoulders" may occur on the feather design material from Gordon's Pass (near Naples). Analogous to this trait is the use of incision in the rim area only, which is typical of Glades Gritty Ware. "Affixation" is represented by a shard from Miami Beach that has small bosses below the rim. "Cutting incision" is the typical method of incising. "Cross hatch design" (incised) is very rare but shards have come from Dade County that bear this design. "Punctuation" may be considered present if the short dashes on the feather design shards fit into this category.³³ "Ridge on outside rim" occurs sparsely on both coasts, with its greatest distribution on the eastern side. It is not so pronounced as in the West Indies. "Horizontal parallel line design" is common on the east coast and parts of the west.

Of the nine characteristics only one, "cutting incision," is typically found throughout the area. "Inturned shoulders," "ornamentation before the clay was relatively dry," "ornamentation only on the shoulders," and "horizontal parallel line design" are characteristics that are only rarely found.

On analysis, it is very difficult to suppose that any ware in the Glades area may have had much typological connection with the origin of West Indian pottery. Rouse admits that he has found little re-

32. Harrington, M. R., "Archaeology of the Everglades Region, Florida," *American Anthropologist*, vol. 11, 1909, p. 141.

33. Most of the illustrations of punctuation in Rouse, "Prehistory in Haiti," do not resemble any Florida techniques, yet one (plate 4, no. 3) does have dashes which are called punctuation.

semblance in Florida pottery,³⁴ but I wonder how the supposed stimuli or ideas could have gone from Georgia to the West Indies without leaving more traces en route. South Florida was the logical embarking place for any sea voyage to the Bahamas or Cuba, and if northern peoples used it they should have left some ceramic record of their presence there.

The situation is very similar to the case of the stone celt of the St. John's River country. This celt somewhat resembles the petaloid celt of the Antillean area, and many workers have postulated connections between the areas on this basis of this artifact. On examination of the St. John's River country we find no stone suitable for the manufacture of these celts in the vicinity. The closest material is several hundred miles to the north. All celts that have been found in south Florida as yet are "oblong." Did the whole celts jump from the Bahamas (or West Indies) to northern Florida, or did the stimulus alone go there with the local manufacture out of imported materials?

Perhaps the answer to both questions will be found when more excavation is done. But I believe that no amount of further work will change the basic ceramic wares or relationships outlined.

The distribution of pottery wares seem to indicate ceramic sub-areas in the Glades archaeological area. These closely coincide with the range of the former Tekesta and Calusa tribes. The Tekesta sub-area on the east coast is characterized by both Glades Gritty and Biscayne Chalky wares. The Calusa sub-area on the west coast has only Glades Gritty ware. These sub-areas are further substantiated by other archaeological evidence which is presented in Table 1. Besides these traits there is greater occurrence of some artifacts in one sub-area than in another. Shell adzes, for example, are much more abundant in the Tekesta sub-area.

TABLE 1

<i>Sub-areas</i>	<i>Tekesta</i>	<i>Calusa</i>
Glades Gritty ware	+	+
Biscayne Chalky ware	+	—
Sand ceremonial mounds (High west end type)	+	—
Stone mounds	+	—
Large shell works	—	+
Middens that are predominately shell	—	+
Flat topped sand mounds	—	+
Canals	—?	+

To summarize, it can be said that the Glades area is divided into two sub-areas, the Tekesta and the Calusa. Glades Gritty ware is the

34. Rouse, Irving, "Some Evidence Concerning the Origin of West Indian Pottery Making," p. 65.

oldest and is found in both areas, while Biscayne Chalky ware is more recent and probably came from the northern Florida east coast.³⁵

DESCRIPTION OF BISCAYNE CHALKY WARE³⁶

Construction—The method of construction seems to be coiling. It is quite common for shards to break along this coiling line. On examination of the interior walls one finds fracture lines slanting from the inside out. These probably represent coil sections that have been overlapped. After coiling, the ware was finished with a paddle and anvil technique. The inside of the ware often shows clearly the indentations left by the anvil, while the outside sometimes shows facets left by the paddle. As a rule, though, such marks were removed by scraping.

One of the puzzling features in the study of the ceramics of this area is the source of clay. Small pockets of a reddish brown clay occur in the oolitic limestone of the east coast, but they are quite rare, except in the Redlands district around Homestead. Furthermore, this clay is quite sandy, and while it might have served for making Glades Gritty Ware it would not have served for Biscayne Chalky. I offer the suggestion that possibly saltwater marl deposits were utilized. These marls are free from quartz sand and when fired might form a paste similar to this Biscayne Chalky Ware. At least this is a possibility that might be examined in the future by a trained ceramic technologist.

Paste—The outstanding characteristics of this paste are the chalky feel of the soft surface and the lack of a gritty temper. With little effort powder can usually be rubbed off the surface of a shard with the fingers. Shards that have been found in conditions where they have been covered by water for a long time (certain sites along the eastern edge of the Everglades) are in an extremely "pasty" state. In washing them extreme care must be taken, as a stiff brush will easily wear them away. Typically this ware lacks sand temper, but a few shards have what seem to be accidental inclusions of quartz sand in the paste. An examination with a hand lens shows very fine fiber temper or else burnt out holes. This temper is so very fine that the fiber must have been of a type that could be crushed, when dry, to form almost a

35. Another district that may be postulated is the Kissimmee-Eastern Okeechobee sub-area. Its validity is not definite but certain characteristics, such as sand earthworks, stand out. While the knowledge of the archaeology of the sub-area is scant, certain variances are conspicuous.

36. Biscayne is used as a geographical designation because of the abundance of this ware around Biscayne Bay, Dade County. A system of trinomial nomenclature is now being used by Southeastern archaeologists (Kelly, A. R., "A Preliminary Report on Archaeological Explorations at Macon, Georgia," *Bulletin 119*, Bureau of American Ethnology, Washington, D. C., 1938). However, binomial nomenclature is used in this paper because not enough data is available yet to form the subdivisions commonly used in trinomial classification. Undoubtedly in the future this ware will be divided into plain and stamped types; perhaps several stamped types, if ceramic investigations in the Southeast become as intensive as those in the Southwest. (Appreciation is expressed to Dr. Florence Hawley for aid in this description.)

dust. This fiber is probably intentional tempering, and not an accidental inclusion. This is the best fired ware in the area, but even so only 20 per cent of the specimens examined approach complete firing. Some shards have a clear ringing sound when struck. Sixty per cent of the shards show a carbon streak with light sides, 20 per cent are black throughout, and the remainder are fully fired. One feature that is very typical is a laminated appearance of the paste. This is probably due to poor mixing of the clay. As a result of this poor mixing, stress lines which are set up within the pottery cause the flaking off of small pieces of the outside during firing. Also, any other break is liable to have some flaking accompanying it.

*Hardness*³⁷—The range of hardness is from 1.5 to 3.5. The average is about 2.6.

Thickness—The range in thickness is from 4 mm to 14 mm. The average thickness is a little more than 7 mm. There is little variation in this particular between the rim and the body of the vessel. Some pieces will show a divergence in thickness in different parts of the same shard, due to the depressions left by the anvil.

TABLE 2
A COMPARATIVE TABLE OF BISCAYNE CHALKY WARE AND
GLADES GRITTY WARE

	Biscayne Chalky Ware	Glades Gritty Ware
Number of shards examined	60	200
Range of hardness	1.5 to 3.5	2.5 to 5.5
Average hardness	2.6	3.56
Range of thickness	4 mm. to 14 mm.	2.5 mm. to 11 mm.
Average thickness	7.16 mm.	6 mm.
Percentage of shards completely fired or nearly so	20%	9%
Percentage of shards with carbon streak and yellow or orange sides	60%	62%
Friability	Very slight	Pronounced
Temper	Vegetal	Quartz sand
Decoration (when present)	Stamped	Incised
Rim decoration	Never decorated	Sometimes grooved or crimped
Feel of surface	Chalky	Gritty
Number of rim types	7	21
Number of rim shards examined	12	76

Surface—Owing to the softness of the paste a polish was not possible, but a few of the harder shards have been finished to a very smooth surface. Cracks occur on the outside of some of the shards. Scraping marks are sometimes present. The condition of the surface shows that the scraping was done when the clay was not quite dry. The

37. Recorded in differences of .5 of a point.

color is usually gray to black. Yellow is common, but the red and brown shades are rare. This would seem to indicate that only a small amount of iron was present in the clay.

Decoration—No exact figures are available on the percentage of decorated shards but an approximation would be 20 per cent.³⁸ The decoration, when present, is paddle stamped, rarely painted, and *never incised*. The paddle stamping is always a form of check stamp. The complicated stamp is not found on this ware. The variation in size of the check is from 2.5 to 8 mm. Two sizes of check are sometimes found on the same shard. Typically the stamp is neatly made and carefully applied, but some shards have been found that exhibit careless overlapping stamps. A couple of shards have been found that show traces of red paint. One was stamped on the outside and had red paint on the exterior. This paint is of the "fugitive red" type.

Form—The type of vessel most common is a large shallow bowl.³⁹ However, straight sided vessels (cylindrical?) also seem to be represented. Seven types of rim forms have been identified. None of them exhibit any of the grooving or crimping that is often found on rim shards of Glades Gritty Ware. Rarely a little thickening occurs on the inside of the rim.

Type Site—A shell midden in the village of Surfside, north of Miami Beach, Dade County, Florida.

Ceramic Affiliations—This ware is closely related to a type of check stamp pottery found on the northern Florida east coast (centered around New Smyrna). The two types may even be identical yet from a casual examination of north Florida shards I believe that these more typically contain a fine grit temper.

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38. This is much higher than the percentage of decorated shards of Glades Gritty Ware.

39. All observations on vessel shapes from Southern Florida are based upon the study of shards, as no whole vessels are known from this area.

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