

J. CLARENCE SIMPSON, 1910 TO 1952.

**FLORIDA**  
**STATE BOARD OF CONSERVATION**

**FLORIDA GEOLOGICAL SURVEY**

Herman Gunter, Director

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**REPORT OF INVESTIGATIONS**

**NO. 8**

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**ELEVEN ARCHAEOLOGICAL SITES  
IN HILLSBOROUGH COUNTY, FLORIDA**

By

**Ripley P. Bullen**

Assistant Archaeologist

**FLORIDA PARK SERVICE**

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LETTER OF TRANSMITTAL



*Florida Geological Survey*  
*Tallahassee*

April 15, 1953

Mr. Charlie Bevis, *Supervisor*  
Florida State Board of Conservation  
Tallahassee, Florida

Dear Mr. Bevis:

During the years of 1935 to 1938, the late J. Clarence Simpson, formerly of this department, was supervisor of rather comprehensive archaeological studies in Hillsborough County, Florida. These studies were a part of the Works Progress Administration program, and the data collected were never fully studied and reported upon.

Mr. Ripley P. Bullen, now Curator of Social Sciences at the Florida State Museum, Gainesville, has recently compiled these data and has made correlations of the various sites. This study is being published as Report of Investigations No. 8 of the Florida Geological Survey and it is a memorial to Mr. Simpson and to his unselfish service to the State.

Respectfully,

Herman Gunter, *Director*

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## J. CLARENCE SIMPSON

(1910-1952)

To the staff of the Florida Geological Survey and to his many friends the sudden passing of James Clarence Simpson on March 29, 1952, at his home in Marianna, Florida, came as a great shock. Courageously and cheerfully he had struggled against ill health even after the discouraging day his loved ones were told he could live only a few weeks or months. With renewed determination, however, he accepted the fighting chance offered through unwavering adherence to a very restricted prescribed diet. Thus he added four to five years to his life span. Through it all he worked untiringly and enthusiastically at his loved work as a naturalist, spending his last day in the interesting activity of mounting a portion of the skull and lower jaw of a four-tusked mastodon. Then bidding us a cheery adieu at the close of the day, he went out. That night he lay down to rest in his home and just slept on past rising time in the morning.

Clarence was born in 1910 at Micanopy, Alachua County, Florida, the son of Katie Mathers Simpson and the late Henry H. Simpson of High Springs. "Bruce," so known to his boyhood and intimate friends, received training in the High Springs elementary and high schools graduating in the class of 1929. Through these early years he manifested unusual interest in natural history, which interest dominated his later life and resulted in an amazing fund of knowledge relative to archaeology, geology, the fauna and flora of his native State and natural history in general.

In 1930 Clarence joined the Florida Geological Survey and remained on the staff almost continuously until his death. Although denied the advantages of formal training, Clarence was well equipped for life's endeavors through his keen sense of observation, inquisitive mind, natural intuitiveness and self-schooling in those subjects he loved most—archaeology, botany, entomology. He was always happy in sharing his vast store of knowledge, and in showing his treasured collections of artifacts, vertebrate fossils and objects of natural history. His enthusiasm for the out-of-doors and his insatiable desire to explore resulted in an intimate familiarity with natural history, and a knowledge of the many fossil collecting localities of Florida. He brought to the attention of scientists such

X

localities as Thomas Farm in Gilchrist County, the Itchtucknee River, the Santa Fe River for vertebrate fossil collecting and the many archaeological sites within that area, as well as in other parts of Florida. His short life was crowded to the last with constructive activities and faithfully performed services.

In 1936 at Tampa, Florida, Clarence was married to Zelma Harris, and to this union three children were born—Bruce 14, Genevieve 5, and Jo Ann 3, all of whom survive. He also leaves his mother, Mrs. Katie Mathers Simpson, one brother Harry Horton Simpson of High Springs, one sister Mrs. Dorothy Simpson Baer, Gainesville.

—Herman Gunter.

Reprinted from the Society of Vertebrate Paleontology News Bulletin, October, 1952.

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# ELEVEN ARCHAEOLOGICAL SITES IN HILLSBOROUGH COUNTY, FLORIDA

Ripley P. Bullen

## INTRODUCTION

### PURPOSE OF REPORT

Between November 2, 1935, and March 31, 1938, an archaeological survey was made of Hillsborough County, Florida, and excavations conducted at eleven sites under two Works Progress Administration projects. Results of these excavations have never been fully reported although J. Clarence Simpson, field supervisor of both projects, briefly discussed some of the salient features in two progress reports (Simpson, 1937; Anonymous (J. Clarence Simpson), 1939). Gordon R. Willey, also, has discussed two of the sites, Thomas and Cockroach Key, in some detail, briefly described three and mentioned five others in his *Archeology of the Florida Gulf Coast* (Willey, 1949, pp. 113-125, 158-171, 335-9).

The Archaeological Survey of the Florida Board of Parks and Historic Memorials has become the repository of most of the original field notes. This places upon it an obligation to report, in so far as possible, the results of this work. It is believed publication will salvage knowledge which otherwise would be lost and will present data not included by Willey on the Thomas mound and Cockroach Key.

### HISTORY OF W. P. A. PROJECTS 690 AND 1928

On November 2, 1935, W.P.A. Archaeological Project No. 690 opened with a personnel of approximately 90, including the supervisor. This project was written and directed by Vernon Lamme, then State Archaeologist, for the purpose of investigating Indian remains in Hillsborough County, Florida. It was sponsored by the State Archaeologist in cooperation with the Smithsonian Institution, Washington, D. C., the South Florida Archaeological Research Society at Miami, and the Florida Historical Society.

On December 11, 1935, the project was reorganized and transferred by Executive Order to the State Board of Conservation, and J. Clarence Simpson, of the Florida Geological Survey, was placed in charge of field activities. The Smithsonian Institution cooperated by sending Preston Holder to supervise field techniques.

By mutual agreement, half of the material secured was to go to the Smithsonian Institution and half to the State of Florida. The Geological Department of the University of Tampa, then under the direction of Professor Robert F. Webb, cooperated by providing storage and exhibition space and technical services in the laboratory.

Under this arrangement two sites, the Thomas mound and Cockroach Key, were partially excavated. On April 14, 1936, the project was closed for lack of funds. Specimens were divided with the Smithsonian Institution according to agreement and those going to the State of Florida were deposited in the museum of the University of Tampa as a loan until such time as other provision could be made.

On May 12, 1936, the project was reopened and continued as before except for the withdrawal of the Smithsonian Institution. J. Clarence Simpson, as field supervisor, continued the cataloging system and field techniques started by Preston Holder. Excavations were conducted at the Spender, Cagnini, Branch, and Lykes mounds. Work at the last site was terminated on September 29th, 1936, but the supervisor and two clerks were maintained until November 1, 1936, to get all notes, charts, and other details finished and filed, when Project 690 was closed.

A new W.P.A. project, No. 1928, was approved and work started January 11, 1937, with a personnel of 34, including the field supervisor, J. Clarence Simpson. Under this project the Snavely, Jones, Picnic, Sellner shell midden, and Buck Island mounds were excavated, additional work was done at the Thomas mound, and two weeks were spent screening the spoil bank of a new canal for fossils. Forty-eight Indian sites in the County, including mounds, midden deposits, and chert quarries were surveyed, recorded by brief descriptions, and located on large scale maps. During most of the work at Sellner's and at Buck Island, William G. Southerland, the foreman, acted as field supervisor while Simpson arranged for the Buck Island excavations and worked on closing the project which was completed March 31, 1938.

#### METHODS USED IN EXCAVATIONS

Holder's field techniques, also used by Simpson, included staking the area to be excavated into a convenient grid of 4- or 5-foot

squares, recording of contours, taking of profiles, and keeping a field note book. Burials and important specimens were located horizontally by reference to the grid and vertically by depths in the ground. Whenever possible, individual sketches were made of each burial. All deposits that contained culture material were screened.

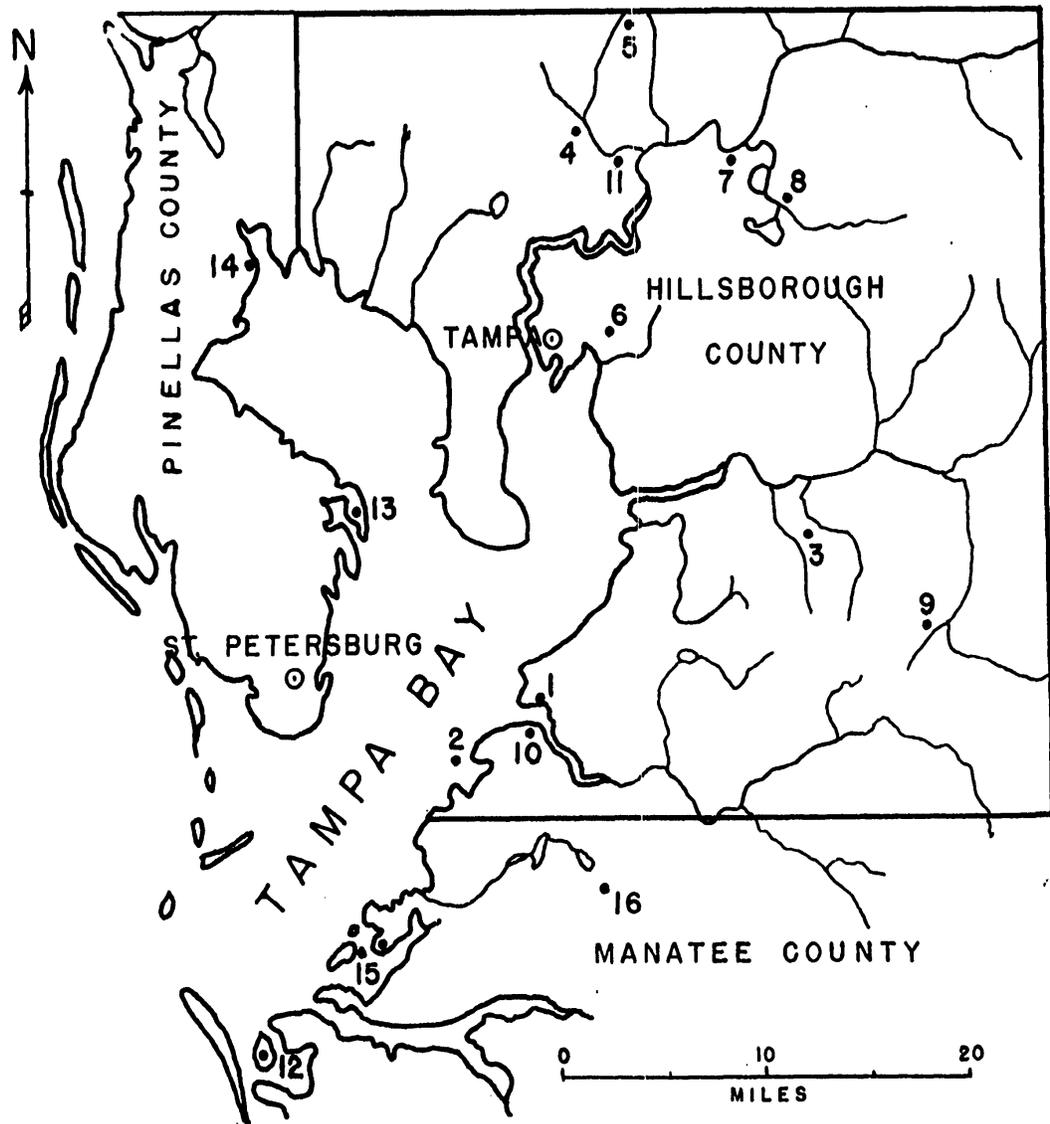
The presence of brow ridges and poor development of genial tubercles were used by the excavators to indicate the male skeleton. The large number of male skeletons relative to those of females reported in the following data is probably the result of this inaccurate method of sex determination.

At the time these excavations were conducted, pottery types and their implications were practically unknown in Florida archaeology. Consequently, little attention seems to have been paid to sherds unless they were especially distinctive. In some cases, especially at the thick Sellner midden, material was removed by arbitrary zones so that a chronology based on variations in artifacts occurring with depth could be established. Unfortunately, material has not been preserved over the years in that manner.

#### LIMITATIONS OF DATA

Many specimens and the data which accompanied them have become lost in the sixteen years since excavation. We have had to rely on field note books for the little information which is available regarding a chronology based on changes in pottery and projectile points. Fortunately, Simpson appreciated the difference between Weeden Island and Safety Harbor—then called “decadent Weeden Island”—pottery decoration and realized that narrow triangular arrow points (sometimes called “bird points”) were a very late phenomena. His comments in these respects, both in the field notes and in his preliminary reports, have been very helpful.

The data from W.P.A. excavations in Hillsborough County have been so poorly preserved that we have samples of pottery from only four of the mounds, and of the great many specimens of chipped stone which were unearthed only three are available. Fortunately, Simpson took the unique polished stone pendants and certain other important specimens, when he returned to the Florida Geological Survey, and deposited them with that agency or they would probably have disappeared also. It was only the personal



## HILLSBOROUGH COUNTY SITES

- |                 |                |
|-----------------|----------------|
| 1-THOMAS        | 7-SNAVELY      |
| 2-COCKROACH KEY | 8-JONES        |
| 3-SPENDER       | 9-PICNIC       |
| 4-CAGNINI       | 10-SELLNER     |
| 5-BRANCH        | 11-BUCK ISLAND |
| 6-LYKES         |                |

## OTHER SITES

- |                  |
|------------------|
| 12-PERICO ISLAND |
| 13-WEEDEN ISLAND |
| 14-SAFETY HARBOR |
| 15-TERRA CEIA    |
| 16-PARRISH       |

Figure 1.—Map of Hillsborough County and Tampa Bay Region, Florida.

interest of J. Clarence Simpson that preserved these specimens and the field notes and makes the writing of this report possible.

### CULTURE SEQUENCE IN TAMPA BAY REGION

In this paper the data are described and discussed in terms of the culture sequence at present applicable to the Tampa Bay Region (Willey, 1948, 1949; Goggin, 1950; Bullen, 1951). This sequence, while only relatively recently formalized, is based on work done in 1923-24 at Weeden Island near St. Petersburg, in 1930 at Safety Harbor, and in 1933-34 at the Parrish mounds and at Perico Island west of Bradenton. Figure 1 presents a map of the Tampa Bay region on which these sites as well as those in Hillsborough County covered by this report are located. The evident proximity of all of these sites makes the comparison proper.

The culture sequence, slightly modified, follows:

	Seminole
1700 A.D.	Historic Safety Harbor
1500 A.D.	Prehistoric Safety Harbor
1400 A.D.	Weeden Island II
1100 A.D.	Weeden Island I
700 A.D.	Perico Island
100 B.C.	Fiber-tempered pottery (?)
2000 B.C.	Preceramic Archaic (?)
?? B.C.	Palaeo-Indian or Folsom-like (?)
8000 B.C. (?)	

Dates given for the above sequence should be considered merely as current estimates, subject to future change. The three earliest periods are represented in this region only by occasional finds of diagnostic artifacts and have not, as yet, been found as separate and complete entities.

In order that readers may be acquainted with artifact complexes representing the periods since the time of Christ, certain diagnostic traits will be mentioned here.

The division between Historic Safety Harbor and Prehistoric Safety Harbor is based on the absence of items of European origin.

Otherwise, Safety Harbor times are characterized by narrow triangular arrow points, and by the Safety Harbor Incised, Pinellas Incised, Lake Jackson Plain, and St. Johns Check Stamped pottery types (Griffin and Bullen, 1950). Temple mounds as well as burial mounds are found and interments are nearly always of the secondary or bundle type.

As defined at present, Weeden Island refuse containing sherds from Wakulla Check Stamped vessels but none from Swift Creek Complicated containers would be representation of Weeden Island II while the reverse would be considered Weeden Island I (Willey, 1949). This distinction, established in the northwestern part of the State, may not be applicable to Hillsborough County and the Tampa Bay region. It seems best, however, to continue a division of Weeden Island into two parts as there must have been an early and a late Weeden Island period even if Wakulla Check Stamped pottery is not the proper marker.

Important pottery types of the Weeden Island periods include Weeden Island Plain, Weeden Island and Papys Bayou Punctuated and Incised, Carrabelle Punctuated and Incised, Hillsborough Shell Stamped, Dunns Creek Red, and Wakulla and St. Johns Check Stamped. The last two were also made in the succeeding Safety Harbor period. Stone axes or celts and plummet-shaped pendants of shell and stone are also present in Safety Harbor time but they are more common in the preceding Weeden Island period. Burial mounds, containing various types of interments, should be found at a Weeden Island site, but temple mounds should not be associated with this culture.

The Perico Island period is by far the least known of the ceramic periods. For purposes of this report it will be considered as an early pottery making period during which vessels were only occasionally decorated. Sometimes decorated sherds from the Deptford and Swift Creek complexes to the north are found. Burials are of primary (in the flesh) types.

### ARCHAEOLOGICAL PROBLEMS

Most of the material excavated in Hillsborough County by the W.P.A. projects pertains to the Weeden Island and Safety Harbor periods. The latter, which is pre-Seminole, represents the culture of the Timucua Indians who were found in the Tampa Bay region

by early Spanish explorers. It is the archaeological expression of the end result of aboriginal influences entering the area from the northwest and acting upon Indians who lived in a cultural manner which we refer to as Weeden Island. It is this change from Weeden Island to Safety Harbor upon which data from the excavations particularly shed light.

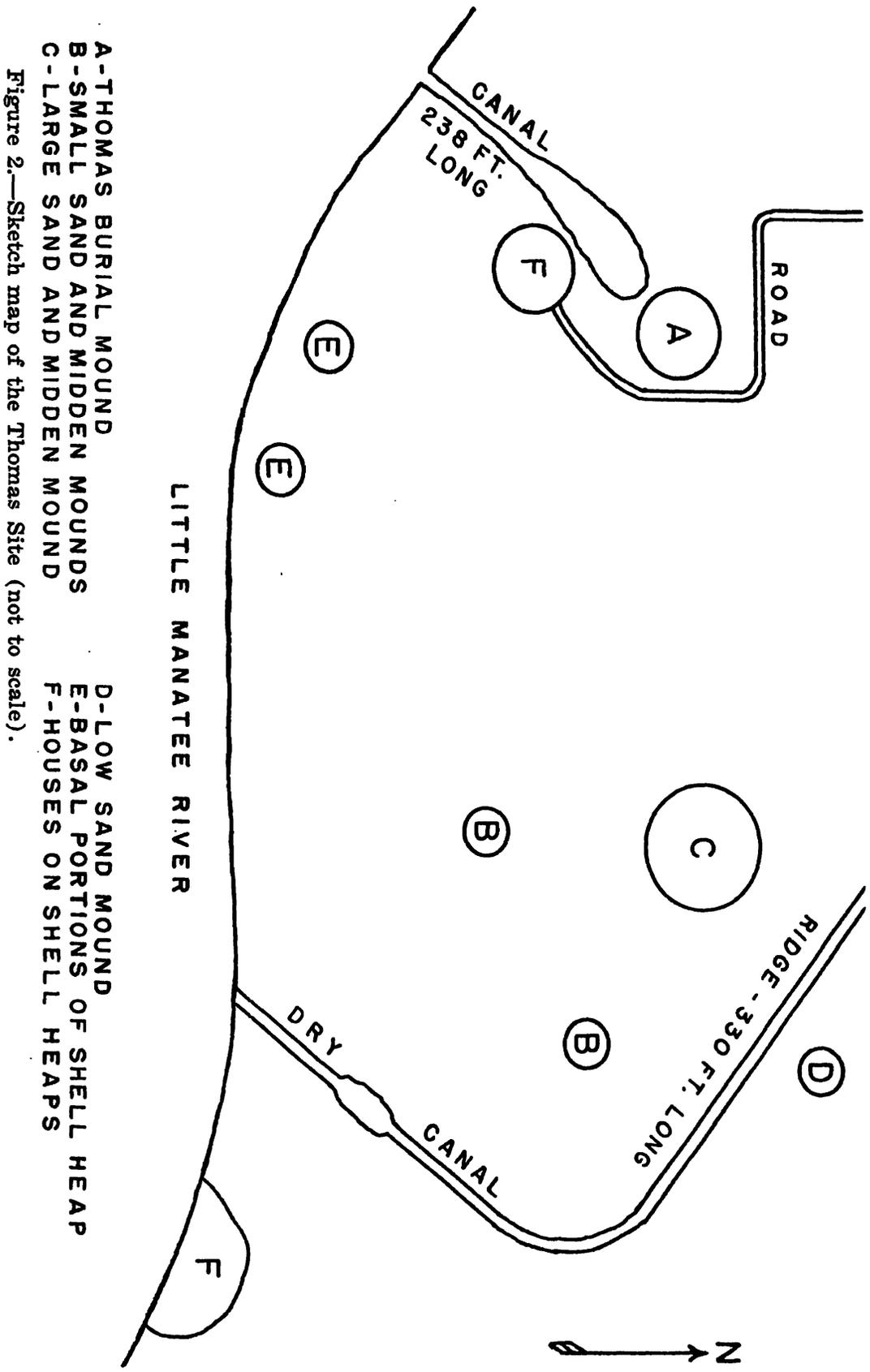
In his recent *Archeology of the Florida Gulf Coast*, Gordon R. Willey noted the presence of European trade objects and Safety Harbor period pottery in burial mounds that but for these objects would be classified as Weeden Island. He considered such specimens to be intrusive—late intrusions into or reuse of an older mound. Frequent repetition of this phenomena suggests rather that Indians of Hillsborough County continued to use the same burial mounds, without any hiatus, after their material culture had changed from that of Weeden Island to that of Safety Harbor.

Data from the W.P.A. excavations in Hillsborough County, while oftentimes incomplete, bear upon these problems and increase our knowledge of past inhabitants. If publication could have occurred shortly after excavation, when more of the material was available, we would know much more about the prehistory of the Tampa Bay region. It is only by piecing together this scattered, poorly recorded, and incomplete evidence that an understanding of the life of and cultural forces at work upon the inhabitants can be made clear.

### THOMAS MOUND

The extensive and complex Thomas site is located on the north side of a large bayou which joins the Little Manatee River about a mile and a half west-northwest of Ruskin (Fig. 1). Clarence B. Moore tested the burial mound at this site in 1900. The first W.P.A. project excavated part of this mound in December, 1935, and January, 1936, and the second W.P.A. project, in 1937, completed excavation of the Thomas burial mound and made tests in other parts of the site. The W.P.A. projects will be referred to respectively as the first and second visits.

Figure 2 presents a plan of the site made during the second visit. Originally a large shell deposit or midden bordered the bayou and residences (F and F) are situated on large remnants of this shell heap. "E" and "E" are listed as "leveled sand-shell mounds"



and represent basal portions of the shell heap. "B" and "B", small sand and midden mounds, may be the remains of landward extensions of the shell heap. Toward the north are shown three sand mounds of which "A" is the burial mound and "C" a residential mound or the beginnings of a temple mound. Data are not available concerning "D."

The Thomas burial mound (Fig. 2, A) was about 60 feet in diameter and six feet in height. According to Moore (1900, p. 358) an aboriginal canal connected the southwest side of this mound with the bayou, 238 feet distant. The canal was 64 feet wide near the mound and 26 feet wide where it joined the bayou. Probably this canal started as a borrow pit to supply material used in the construction of the burial mound. On the plan another canal, terminating at the end of a sand ridge, is shown to the east. This second canal is not mentioned by Moore whose activities were limited to the burial mound. Examination of the site in 1952 strongly suggested both canals to be drainage ditches dug by early settlers for farming purposes.

Figure 3 is the excavation plan of the second visit and locates the burials found during that visit as well as indicates the area excavated during the first visit and by Moore. Well over 400 burials were removed during the three excavations. Moore (1900, p. 358), referring to the 112 burials he uncovered, writes:

"The prevailing form of interment was a squatting position, the feet on a level with the pelvis, the legs against the thighs and these drawn up against the body. The upper arms were against the sides with the forearms sometimes parallel to the upper arms and sometimes on the chest, reaching to the neck. The head was bent over and forced between the thighs, sometimes to the pelvis. Certain [other] skeletons lay on the side with the same general arrangement of the extremities and the skull pressed over against the knees."

Moore also found a shell cup, a shell bead, a chert spear point or knife, a small hammerstone, a smoothing stone, a worked fossil shark's tooth, blue glass beads, two pieces of looking glass, three stone pendants, and a quantity of sherds. These sherds were usually undecorated but some bore incised and some punctated markings while one exhibited a stamped design (Moore, 1900, p. 359). One of the stone pendants represented the head of a bird, but unfortunately, the bill was missing (Willey, 1949, p. 123, Fig. 15).

Results of the first W.P.A. visit and, to a lesser extent, those



TABLE 1.  
VERTICAL DISTRIBUTION OF BURIALS AT THOMAS MOUND

Burial type	Depths in feet					
	0-1	1-2	2-3	3-4	4-5	5-6
	First visit					
Cremation .....		1				
Vertical bundle .....	11	29	14	4	2 <sup>1</sup>	
Horizontal bundle .....	3	8	11	7	4 <sup>2</sup>	
Flexed .....					4	1
Semi-flexed .....				3		
Isolated skulls .....	1			1		
	Second visit					
Cremation .....			1			1 <sup>3</sup>
Vertical bundle .....		15	40	29	3	
Horizontal bundle .....		4	8	7	2	7 <sup>4</sup>
Flexed .....	1		5	17	21	30
Semi-flexed .....			1 <sup>5</sup>	2	3	3
Isolated skulls .....		2	14	21	23	12
Extended .....						7

<sup>1</sup>One below limestone block.

<sup>2</sup>Of four lowest, one 9 inches above flexed burials, 3 doubtful as to type.

<sup>3</sup>Listed as "decomposed cremation."

<sup>4</sup>One badly disturbed, five listed as "decayed bundle burials."

<sup>5</sup>Badly disturbed.

of the second visit, have been reported by Willey (1949, pp. 115-125). Both visits uncovered the same types of burials as reported by Moore, vertical bundle and horizontal flexed interments, with the additional information that flexed burials were the deeper and, hence, the earlier type. The superposition is shown in Table 1 for burials upon which the requisite information is available. As suggested in Table 1, the extended burials appear to have been the earliest form at this site, followed by flexed and semi-flexed interments which, in turn, were superceded by vertical and horizontal bundle burials. The habit of interring isolated skulls appears to occupy no definite position vertically and the number of cremations are too few for any chronological implications. Excavations during both visits found burial pits that had penetrated other burial pits, showing that these interments were not all made at one time.

Pottery sherds from both the Weeden Island and Safety Harbor periods are present in all collections from this site. Except for an association between check-stamped sherds, Wakulla or St. Johns Check Stamped, and the cremation at a depth of 30 inches and for

the finding of part of a square red vessel at a depth of 59 inches, we have no data regarding the vertical distribution of pottery types found during the second visit. Willey, who had such information on 1143 of the 7746 sherds found during the first visit, noted no vertical differences except that pottery of the Safety Harbor period came from not far below the surface of the mound (Willey, 1949, p. 119).

During the first visit it was observed that the sherds, while found throughout most of the mound, were concentrated in two zones which at the center were 24 to 36 and 42 to 50 inches below the surface.

A narrow curving deposit of midden material was also noted at a depth of 42 to 50 inches near the northern edge of the mound (Fig. 3, Sections 63 to 153 to 184). Subsequently, during the second visit, this deposit was found to extend southwesterly to Section 202 and northwesterly to the middle of Section 49. Simpson's field notes suggest this deposit may have marked the edge of a primary mound.

These slight indications of physical stratigraphy in the Thomas mound together with the superposition of different types of burials suggest various building periods or superimposed mounds. On this point Willey quotes from field notes written during the first visit:

"While suggestions appeared in the field to support a thesis for the existence of two mounds, one of which was an older underlying mound about 20 to 30 feet in diameter with a rise of perhaps 2 feet which had subsequently been covered over by the present mound, it is doubtful that the evidence recovered will warrant such an hypothesis. The evidence of definite (physical) stratigraphy was disappearingly faint." (Willey, 1949, p. 116).

That such may, however, have been the case is indicated by two items found among the field notes of the second visit. One is a penciled cross-section, presumably not made to scale, which we have traced, reduced, and reproduced in Figure 3. This sketch bears the notation, "Cross Section from N to S beginning in Sec. 151 and continuing S to Sec. 153. Showing older mound with newer mound superimposed."

The other is a note which reads, "All burials in Sections 170-171-172-173-174-185-186-187-188 were uncovered at the same time—showing Recorded Burials 141-142-143-144-145-147-148 to be on

the west side of sloping ground." The sloping ground is further delineated as 30 inches below the mound surface at the eastern edge of Sections 171-172 and 54 inches below the mound surface at the western edge of Sections 186-187. This sloping ground may have once been the surface of a primary mound. If so the dirt surrounding these burials, all of which were flexed except for one skull and long bones in a disturbed area, should represent an accretion to the mound.

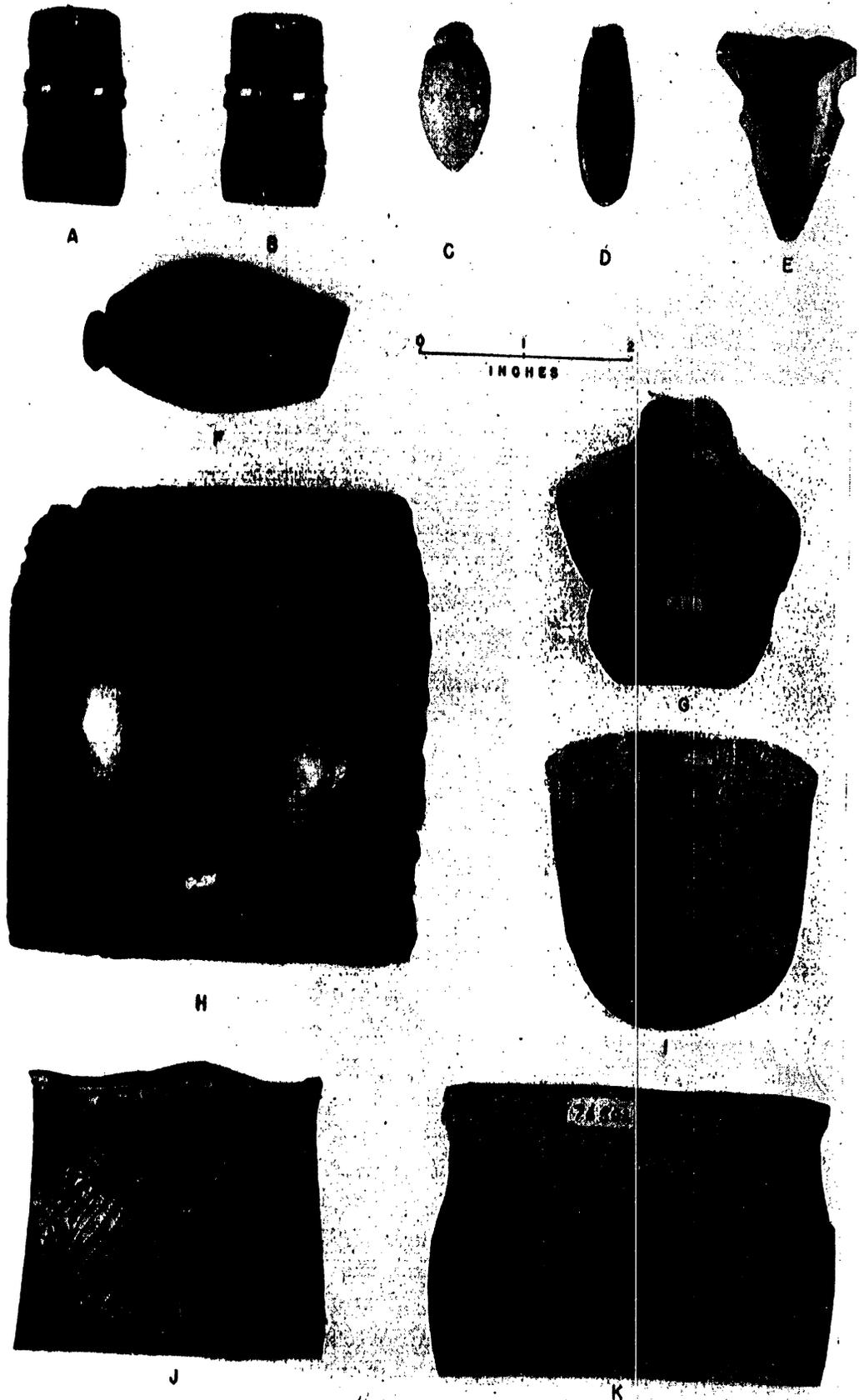
Accretional building of the mound is also suggested by the following statement found in an original field notebook, written, apparently, by Jimmie Redding:

"In the NW  $\frac{1}{4}$  of the plat (as much as excavated) two levels of pottery appear with fair regularity indicating two different periods [of] occupation [construction] of the mound. The upper most level shows high frequency of pat[t]ern[ed] pottery and occurs at 24 to 36" at peak of mound. The lower most level shows more black ware (cooking pottery?) and occurs 42 to 50"."

To summarize the foregoing, the Thomas burial mound appears to have been built by accretion and may have consisted of a primary and a secondary mound. During its construction burial habits changed from extended to flexed and then to bundle interments while pottery increased in percentage of decorated wares and the Safety Harbor period pottery types were relatively late.

The 1143 sherds, collected during the first visit, stored and cataloged in the U.S. National Museum, have been classified by Willey (1949, pp. 119-120). The collection includes many Weeden Island types, eight Safety Harbor Incised, one Pinellas Plain, and one Pinellas Incised. The most common are the Weeden Island Punctated, Incised, and Plain with the St. Johns and Wakulla Check Stamped being less common.

Some of the pottery collected during the second visit is stored at the Florida State Museum in Gainesville, having been transferred there, February 24, 1939, by the Florida Geological Survey. Dr. John M. Goggin, now of the University of Florida, classified this collection some years ago and the results were presented by Willey (1949, p. 121). Changes in and additions to pottery classifications have occurred since this work was done. Our classification of this collection, Florida State Museum Cat. Nos. 76502-76638, Acc. No. 3422, follows:



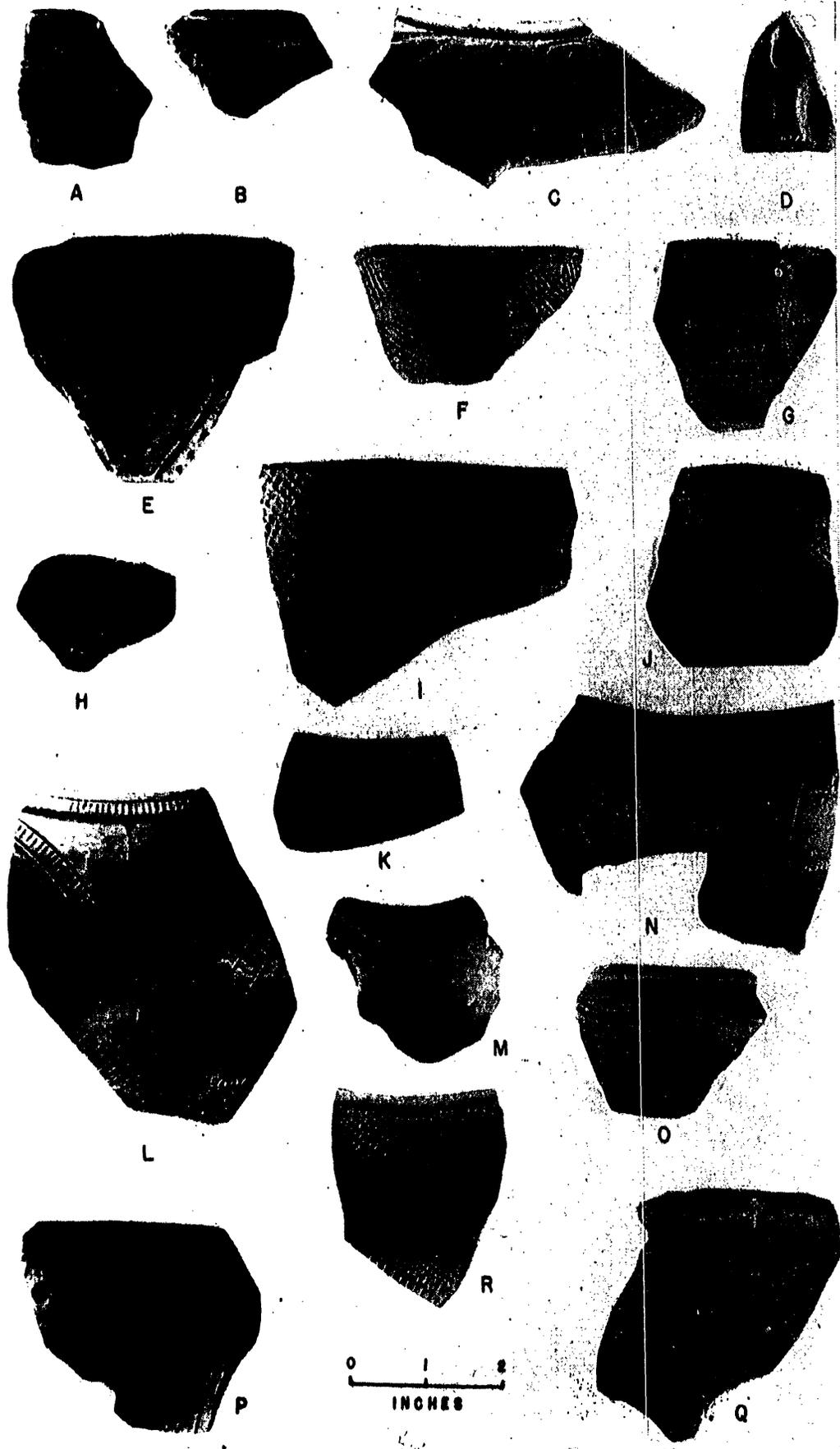
	Sherds	Restored Vessels
<b>Safety Harbor Period</b>		
Safety Harbor Incised .....	8	1
Pinellas Incised .....	2	1
Ft. Walton Incised .....	4	
<b>Safety Harbor or Weeden Island Period</b>		
Englewood Incised .....	1	
Wakulla Check Stamped .....	32	1
St. Johns Check Stamped .....	14	
St. Johns Plain .....	14	
Belle Glade Plain .....	1	
<b>Weeden Island Period</b>		
Weeden Island Plain .....	3	
Weeden Island Incised .....	30	
Weeden Island Punctated .....	26	1
Weeden Island Zoned Red .....	2	
Carrabelle Incised (one with Pasco paste) ...	2	
Carrabelle Punctated .....	4	
Hare Hammock Surface Indented .....	2	
Sun City Complicated Stamped .....	1	
Hillsborough Shell Stamped .....	7	1
Swift Creek Complicated Stamped (Late Variety) .....	3	
Tampa Complicated Stamped .....	4	1
Prairie Cord-marked .....		1
Gainesville Linear Punctated .....		1
Papys Bayou Punctated (two red painted)	19	
Papys Bayou Incised .....	2	
Dunns Creek Red .....	14	
Pasco Plain .....	20	
<b>Miscellaneous</b>		
Unclassified complicated stamped .....	2	
Unclassified incised or punctated .....	9	
Unclassifiable (eroded surface) .....		1
Plain Red .....	3	
Residual .....	5	
Totals	234	9

These sherds include examples of duck bills as ornamental details (Fig. 5, j) and several necks of water bottles. Some of the restored vessels are rather small. The Safety Harbor Incised container has an incised band around the neck reminiscent of Swift Creek Complicated Stamping (Fig. 4, k).

The field notes include pen and ink drawings of sherds, found



Figure 4.—Miscellaneous artifacts from Thomas Mound: a, incised brass tablet; b, same, incision indicated by ink; c-d, stone pendants, plummet type; e, fossil shark tooth pendant; f, stone pendant, bird effigy type; g, Weeden Island Incised sherd; h, silver pendant; i, restored vessel, Prairie Cork Marked, 9½ inches across; j, portion of Weeden Island Punctated vessel, 7½ inches across; k, portion of Safety Harbor Incised vessel, 5 inches across. a-f, Florida Geological Survey, balance Florida State Museum. Florida Park Service and Florida State Museum photographs.



during both visits. These illustrations include designs of Kaith Incised, St. Petersburg Incised, Oklawaha Plain, and Sarasota Incised not listed above.

Other specimens from both W.P.A. excavations are listed by Willey (1949, pp. 122-4). We have added a few from the field notes. Stone specimens include three narrow, triangular arrow points (Safety Harbor type), twelve stemmed points, two drills, one scraper, two abrading stones, several tubular steatite beads, and seven pendants. The pendants comprise one steatite and four quartz (Fig. 4, c-d) plummet type pendants, one fragmentary pendant, the beak of a bird-effigy pendant (Willey, 1949, p. 123, Fig. 15), and a nearly complete duck-effigy pendant (Fig. 4, f). To this list should be added the bird-effigy pendant found by Moore (Willey, 1949, p. 123, Fig. 15).

Shell tools and artifacts were represented by various fragments including worked columellae and clam shells, a *Busycon* cup or bowl, *Venus* shell anvils and seven shell beads. A worked shark's tooth (Fig. 4, e) was also found.

European contact is indicated by glass beads and two fragments of looking glass found by Moore and by about 200 glass beads, a triangular piece of sheet copper, measuring three inches on each side, a tubular silver bead, a brass pendant or tablet (Fig. 4, a-b) and a larger silver pendant (Fig. 4, h) found during the second visit. The smaller pendant is also illustrated by Willey (1949, p. 124, Fig. 16), but it is not certain that figure 4 a-b is the right or left of Willey's figure. If figure 4 a-b is the same as the left of Willey's figure 16, it would correct the outline and the incised drawing; if figure 4 a-b is the same as the right of Willey's figure, it would add the design and a hole for suspension.

During the second visit, a stone bead, 50 mm. long and 14 mm. in diameter, and a small quartz pendant was found associated with vertical bundle burials, and an egg-shaped abrading stone and a drill were recorded with flexed burials.



Figure 5.—Miscellaneous sherds from Thomas Mound: a, Pinellas Incised; b, c, Safety Harbor Incised; d, Hare Hammock Surface-Indented; e, Ft. Walton Incised; f, Hillsborough Shell Stamped; g, Englewood Incised; h, Tampa Complicated Stamped; i, St. Johns Check Stamped; j, Weeden Island Plain; k-m, q, Weeden Island Incised; n, Weeden Island Zoned Red; o, p, r, Weeden Island Punctated. Florida State Museum photographs.

Skeletal material was extremely poorly preserved and very little about physical types at the Thomas site could be determined. Apparently, they were mesocephalic to brachycephalic with, in some instances, pronounced prognathism and heavy supraorbital ridges. Field designations of age and sex simply imply a normal distribution in these respects except that data from both visits indicate nearly three times as many men as women. In several cases an infant's skull was buried with an adult suggesting difficulties of child-birth may have been a factor in the surplus of males.

While back-filling the Thomas mound during the second visit, five exploratory trenches were dug in other parts of the site. At Mound C (Fig. 2) some midden material and a sherd were found on the north side and a midden area, five by three feet, composed of oyster shells, fish bones, and dark sand was present on the east side. This low sand mound probably was the site of an Indian home, possibly the beginning of a temple mound. Small midden areas B and B produced an arrow point and a rough abrader. Results of tests at D are not given in the field notes.

### SUMMARY

The Thomas site was a complex unit with extensive shell deposits, midden areas, a large burial mound, and two smaller mounds.

At the burial mound vertical and horizontal bundle burials overlay primary flexed interments. Pottery, while tending to concentrate at depths of 30 and 46 inches, was found throughout the tumulus. Most of this pottery is typical of the Weeden Island period, but some sherds, found near the top of the mound, represent the Safety Harbor period. Stylistically some of the Weeden Island pottery foreshadows later Safety Harbor ceramics. Projectile points pertain to both the Safety Harbor and Weeden Island periods. No pottery or other artifact attributable to pre-Weeden Island times was uncovered.

The evidence suggests that the Thomas mound was used over a long period of time and additions to the structure were made periodically. Flexed burials of the lower zone were probably interred during a Weeden Island I period or between 700 and 1100 A.D. The bulk of the pottery and most of the bundle burials are Weeden Island II in date, about 1100 to 1400 A.D. People were still living at the site and making additions to and burying in the mound

in Safety Harbor times to judge from the pottery and triangular projectile points of that period.

The metal and glass found by Moore and during the second W.P.A. visit raises the question as to whether the community was still a going concern after the discovery of America by Columbus. Specimens are of types used by Indians in Florida during early post-Columbian times but differ from those known for the later Leon-Jefferson (Spanish mission) period of north Florida.

While depths, associations, and other details regarding European derived materials from the Thomas mound are not available, field notes indicate their horizontal distribution. Moore's beads must have come from the area he dug, presumably the southern part. All these locations, each separated by about 10 feet, have been shown on the excavation plan (Fig. 3) by the letter "E." This distribution supports a theory of continued occupation of the site in post-Columbian times as opposed to an intrusive interment after the site had been abandoned.

Thus it would seem that the Thomas site was occupied and its burial mound used from Weeden Island I times into the contact part of the Safety Harbor period. This would mean a life of about 900 years or from about 700 A.D. to 1600 A.D. A relatively small but stable community over this period would readily account for the extensive remains.

A somewhat different temporal interpretation is possible which, however, might omit a Weeden Island I period. In a preliminary unpublished report on the second visit Simpson wrote, probably during the winter of 1937-8:

"Potsherds were fairly abundant in both levels. Level 1 [the lower] contained less pottery than Level 2 and pottery from Level 1 was predominantly plain and crude, largely cooking ware bearing heavy soot accumulations.

"Pottery from Level 2 was of a superior workmanship and preservation. The ware itself was in all respects better. Most of the sherds from this level could be classed as Weeden Island type with a good deal of degenerate Weeden Island or Safety Harbor type pottery. A great deal of common check stamp ware was found at this level. Portions of level 2 are unquestionably of comparatively late post-Columbian age although the greater part of this level may be early post-Columbian or late pre-Columbian."

The above suggests a much higher percentage of Safety Harbor ceramics than is indicated by the surviving collections and a

greater difference between sherds from the two zones than is indicated elsewhere. Ceramically, the plain pottery from the lower zone would correlate well with the Perico Island period. If such were the case most of the flexed burials would be of that period. This would suggest the mound to have been used from shortly after the time of Christ, about 100 A.D., until about 1600 A.D. As this length of time is extremely long, the shorter time span is favored and the lower zone with flexed burials and a few decorated sherds is assumed to represent a Weeden Island I period.

From the fragmentary data available, we get but little idea of the life of the inhabitants of the Thomas site except that they collected shellfish and animals for food, made pottery vessels and stone and bone tools, died, and were buried. For some reason, bird heads, especially ducks, were prominent during Weeden Island times as an art form. Duck bills are frequently represented on clay vessels and stone pendants carved in the form of bird heads are sometimes found.

The copper and silver ceremonial tablets represent an entirely different art form, technique, and concept. They must date from the Safety Harbor period as they are made of post-Columbian materials. This artistic difference may reflect a different psychological orientation during Safety Harbor as opposed to Weeden Island times, possibly correlating with much greater dependence on agriculture.

### COCKROACH KEY

Cockroach Key is a small island on the eastern shore of Tampa Bay about three miles west of Sun City (Fig. 1). Formed entirely of shells and midden deposits left by Indians, the island is about 600 feet long, 200 feet wide, and reaches an elevation of thirty-five feet above mean high tide.

One feature of the site is an oval burial mound, about 50 by 70 feet, with a height of 10 feet above surrounding shell deposits. This mound was tested by Moore (1900, pp. 359-360), who illustrated his work with an excellent picture that shows the burial mound cleared for excavation and the higher shell ridge towering behind it.

W.P.A. Project 690 spent ten weeks excavating the eastern

half of this mound and testing four other parts of the site by means of extensive exploratory trenches, see Willey (1949, pp. 158-172) and the reader is referred to Willey's account for a map of the site, a profile of the burial mound, lists of artifacts, fauna, mollusca, and other details. The writer's discussion of the site is limited to the burial mound and is based on the reworked original field notes. It supplements information already presented by Willey.



Figure 6.—Decorated dagger of deer bone, 8 inches long, from an exploratory trench at Cockroach Key. Florida Geological Survey.

As excavated the burial mound was found to consist of three structures. The base was merely a low elevation, about  $2\frac{1}{2}$  feet in height, of the horizontally stratified shell midden. Over this rise an irregularly stratified mound was built of shells, sand, and midden material, adding about three feet in height. Then a foot or more of midden accumulated which was capped by a layer of white sand, several inches thick. The final addition of a tertiary mound, built of clean shells, brought the burial mound to a total height of about 10 feet.

Depths are available for all burials and, for those removed after the multiple structure of the mound was ascertained, a comment was given regarding their relationship to the secondary mound. Unfortunately, however, elevations of the tops of burial pit shafts were not noted. Importance of this point is indicated by seven instances where later burials are recorded as cutting through earlier interments and three other cases where burials are mentioned as being in pits.

All burials, except a few omitted because of disturbance or other reasons, are tabulated in Table 2 against depths below the surface. These burials have been divided into groups, those from the mound proper and those from the more or less level area immediately southeast of the mound (below the 5-foot contour; Willey, 1949, map 12, area "A"). Included as flexed burials are over fifteen interments of children. For those listed as "Baby or Child" the type

TABLE 2.  
VERTICAL DISTRIBUTION OF BURIALS AT COCKROACH KEY

Burial type	Depths in feet							
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8
	In mound proper							
Vertical bundle .....		2					1	
Horizontal bundle .....		3	2					
Flexed .....		5	7	17	17	4	1	1
Semi-flexed .....			2	4	2		1	
Isolated skulls .....			7	1		1		
Extended .....					1	1?		
Baby or child .....	7	5	19	32	12	1	2	
	In level area							
Horizontal bundle .....		4	4 <sup>1</sup>	1		1		
Flexed .....	3	7	2	5	2			
Semi-flexed .....		2	2	2	1			2 <sup>2</sup>
Isolated skulls .....	1	1	2	1				
Extended .....			1					
Baby or child .....		4	1					

<sup>1</sup>Includes three group bundle burials; one with 30, one with 10 and one with 6 femurs.

<sup>2</sup>In one case depth due to inclusion of Moore's spoil in vertical measurement.

of burial was not otherwise specified. Similar analyses using only adult burials or those related to the top of the secondary mound (when possible) did not produce significantly different results.

As shown in Table 2, the bundle burials in the mound proper, and to a lesser extent in the level area, were, on the average, shallower in depth than the flexed or semi-flexed interments. This agrees with burial sequence data presented for the Thomas mound in Table 1. It is also evident, relatively speaking, that flexed burials were more numerous at Cockroach Key and bundle burials more prevalent at Thomas. If this burial sequence has implications of chronology Cockroach Key should be the older site.

Age groupings of skeletal remains, as entered in the field notebook, are: Baby to 5 years, 70; child, 25; youth, 10; young adult, 50; middle aged adult, 1; unknown, 28. An excess number of the very young and a lack of old people is obvious. Willey (1949, p. 163) has suggested an epidemic disease might have caused the high infant mortality. While the data indicate more male than female burials the ratio (4 to 3) is closer to what might normally be expected than at the Thomas mound.

Two skulls from Cockroach Key are at the Florida State Museum in Gainesville (Cat. No. 76792, Acc. No. 3422, transferred by the Florida Geological Survey, Feb. 24, 1939). Both have shovel-shaped incisor teeth, deep grooves behind mastoid processes, and exhibit pronounced prognathism. One is the long-faced skull of a rugged, middle aged to old man with well-developed but not heavy supraorbital ridges. This skull is 187 mm. long, 145 mm. wide, and has a cephalic index of 77.5 per cent. The other is that of a young, adult female whose third molars are not erupted. It has a length of 167 mm., a width of 132 mm., and a cephalic index of 79 per cent. With upturned nasal bones, heavy and foreshortened mandibles, these skulls are remarkably similar to three described by Willey (1949, p. 117) from the Thomas mound although the two from Cockroach Key do not have particularly low foreheads, a characteristic of the Thomas mound specimens.

Willey lists 340 plain and 18 St. Johns Check Stamped sherds from the burial mound at Cockroach Key but had only 93 available for classification. Of this sample he noted that 39 out of 40 Belle Glade Plain, 18 St. Johns Check Stamped, and 23 that he classified as Pinellas Plain (a Safety Harbor period type), came from a depth of 30 to 36 inches and, hence, were included in the fill of the tertiary mound (Willey, 1949, p. 167).

The inclusion of St. Johns Check Stamped sherds in the fill of the tertiary mound, by definition, dates its construction as Weeden Island II (or later). Similarly, the bundle burials from this zone are also dated as of the Weeden Island II period. This agrees nicely with data from the Thomas mound where bundle burials were correlated with the Weeden Island II period.

The only exception to the above at Cockroach Key was Burial 92, found at a depth of 6-7 feet in the mound proper. This burial was of the vertical bundle type where long bones were used to line a pit after which other bones and the skull were placed between the long bones. As a pit burial, it is obviously intrusive but the elevation from which the pit was dug is not known.

For the level area, the notebooks mention check-stamped pottery in only one case, a flexed burial at a depth of 30 inches. This information agrees with data given above and indicates that the bundle burials of the level area to have also been Weeden Island II in date. Quite evidently, however, some of the flexed burials were also interred as late as Weeden Island II times.

The field notes mention red pottery in four cases; twice for flexed burials in the mound proper at depths of 24 and 40 to 47 inches, and twice for the level area with a horizontal bundle burial between depths of 12 to 20 inches and with a flexed burial at 54 inches. No red painted sherds were included in the sample classified by Willey. We do not know if the red pottery was painted red or colored red by overfiring in an oxydizing flame. There is the possibility these red sherds may have been Dunns Creek Red which, below the check stamped sherds, would suggest a Weeden Island I date for lower zones.

Other sherds mentioned in the field notes were all of a black, sand-tempered ware. They were recorded for depths of 12 to 47 inches in the mound proper and between depths of six and 60 inches in the level area. Red ochre is mentioned for Burial No. 120, a semi-flexed interment which intruded into another burial at a depth of 96 inches in the level area; and for Burial No. 108, a group of four skulls, randomly arranged with other bones at a depth of 30 inches in the mound proper.

One comment in the field notes, written March 13, 1936, when the work was about half finished, should be mentioned. It reads:

"The pottery up to date, with the exception of one piece, is crude and plain. No soot is found on the outside of any of this pottery but numbers of stones of roughly  $\frac{1}{2}$  lb. weight have been found showing indications of having been heated and [they] may have been used for bringing water to a boil in these vessels."

Another comment not specifically dated is also of interest:

"It seems likely that the fish were scaled before cooking rather than being cooked or roasted whole, because of the deposits of almost pure fish scales found through the midden. The long bones of the mammals and larger birds were all split for extraction of the marrow."

## SUMMARY

In the burial mound and adjacent level area at Cockroach Key, bundle burials and St. Johns Check Stamped, Belle Glade Plain, and Pinellas-like plain sherds were limited in vertical distribution to upper zones. Flexed interments and plain, sand-tempered sherds were present in both the upper and lower zones.

The Pinellas-like plain sherds did not have notched lips or handles, such as is frequently found on Pinellas or Lake Jackson

Plain vessels (Willey, 1949, p. 164). For this reason and because similar Pinellas-like plain sherds were found in lower zones of the Prine burial mound at Terra Ceia (Fig. 1) in an unquestionably Weeden Island context (Bullen, 1951, p. 28), we do not believe such pottery can be taken as evidence of Indians living at Cockroach Key during the Safety Harbor period.

We would conclude Indians started living at Cockroach Key at least as early as Weeden Island I times, more likely during the preceding Perico Island period (because of crude, plain pottery from lower zones) or during the early centuries of the Christian era. Habitation continued into the Weeden Island II period about 1100-1400 A.D., as evidenced by bundle burials and St. Johns Check Stamped pottery.

The stratigraphy at Cockroach Key is similar to and supports the interpretation of the stratigraphy at the Thomas burial mound except that the occupation started earlier at Cockroach Key and continued later at the Thomas site. Reasons for the abandonment of Cockroach Key are not evident but it is suggested that increasing interest in agriculture may have been one factor. Farming on the key would have been impossible while the nearby mainland consists of mangroves and marsh, that could not be farmed either.

During a long period of about a thousand years, Cockroach Key was inhabited by a group of Indians who might have been fishermen. Their sustenance consisted of fish and shellfish supplemented by game. Judging from the high rate of infant mortality and from some pathology among adults, they may have suffered from dietary deficiencies.

### SPENDER MOUND

The Spender mound, located about five miles southeast of Riverview, is situated between Fishhawk and Bell creeks which join the Alafia River about two miles north of the site (Fig. 1). Formerly, this mound had a cap of shells, approximately two feet thick, which was removed five years prior to excavation.

Excavations consisted of an east-west trench, 124 feet long, and a north-south trench, 140 feet long. These trenches, which intersected in the center of the mound and were laid out along its major and minor axes, were four feet wide.

This work uncovered two sawed cypress boards and two small fireplaces, one containing charred fragments of a board, a little south of the center of the mound. These were believed to be associated with a disturbance or exploratory trench, other evidence of which was also found, dug by unknown investigators since the removal of the shell cap in 1931.

The mound consisted of sand containing occasional fragments of charcoal, some chips of chert, one fragment of worked chert, and three small, undecorated sherds. Chert chips had random distribution at various depths greater than two feet. The worked chert was found at a depth of three and one-half feet which was also the average depth of the three sherds.

The Spender mound is believed to be of the domiciliary type which has been investigated by Moore and others with very meager results. Presumably, it was built as a platform for a home. The shell cap, removed prior to excavation, may have been a midden deposit. If so, pottery and other specimens would have been removed with these shells. The few chips and sherds uncovered were undoubtedly at or near the original surface of the ground upon which the mound was built.

The Spender mound was located in an area suitable for agriculture. That it once supported an aboriginal farmhouse is a reasonable hypothesis. Specimens, upon which an estimate of the date of construction might be based, were, unfortunately, not found.

### CAGNINI MOUND

The Cagnini burial mound, located about ten miles north of the center of the city of Tampa, was situated on a sandy ridge on the north side of a grassy pond about a half-mile west of Cypress Creek, which drains into the Hillsborough River (Fig. 1). The mound, with a height of two and one-half feet and major and minor axes of about 100 and 80 feet respectively, contained ninety-four burials as shown on the excavation plan (Fig. 7).

While built of unstratified sand, the Cagnini mound contained various features. In Sections 116, 227, and 243, three decayed tree stumps, 12 and 14 inches in diameter, were found at depths of 82 and 72 inches. One stump was that of a pine tree, two were charred at the top while another had completely decayed above the water table. Roots of other trees were also found.

Depths recorded for these stumps would place them well below the elevation of the surface of the sand ridge on which the mound had been built. The trees may have grown in natural depressions or the stumps may have continued to burn underground below the original surface. Simpson (fieldnotes) interpreted these burnt stumps as evidence of subsurface preparation of the area by Indians prior to construction of the mound. This would seem to be a reasonable theory.

A charred area or fireplace, in Sections 222, 223, 240, and 241, covered an irregular area, 48 by 108 inches in extent, at a depth of

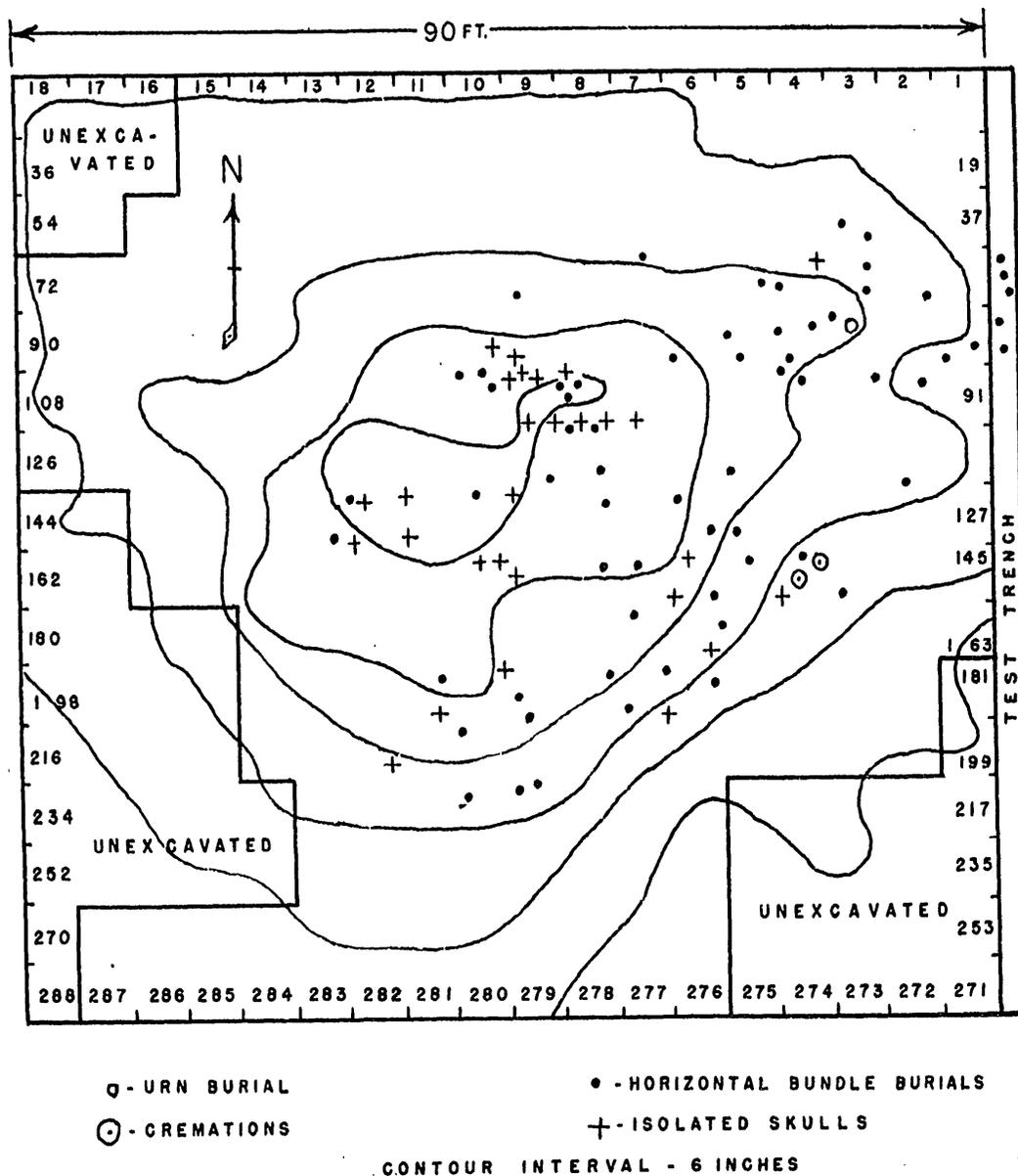


Figure 7.—Cagnini mound, excavation plan.

24 inches. Located at the periphery of the mound, this fireplace was lower than the surface of the surrounding land. It is described as; "Fairly heavy deposits of charcoal and ashes in hard packed layer, approximately 6 inches thick." Another fireplace was found in Section 148 at a depth of 48 inches or, again, substantially below apparent mound base. It formed a shallow pit as the deposit consisted of, "Ashes in hard packed layer, 3 feet across, approximately 12 inches in thickness at center."

Two other possible fireplaces were noted. One, in Section 77, covered an area 12 inches across at a depth of 60 inches and was below mound base. It was called a deposit of charcoal fragments, pottery, and fragments of chert, all showing evidence of having been burned. The other, in Section 138 and also at a depth of 60 inches, is listed as a deposit of charcoal, pottery, bone, and chert fragments, sandstone, and "ironized" (sic) bone closely packed in an area 5 by 15 inches in extent.

The elevations of the fireplaces and of the charred stumps were lower than that of the surrounding land. It is likely Indians prepared a subsurface base for the Cagnini mound, similar to those mentioned by Moore and one other recently excavated (Bullen, 1949).

It is also possible the mound was built over an older habitation area. A cache of large fragments of chert in Section 32 at a depth of 24 inches, parts of pottery vessels in Sections 40, 41, and 147 at 20 inches, in Section 187 at 42 inches, and in Section 208 at 36 inches might be so interpreted. Included in the body of the mound were; in Section 113, a deposit of deer bones which covered an area 12 inches across at a depth of 24 inches and; in Section 98, at a depth of 24 inches, sherds and charcoal plus a pine knot, found just below the sherds.

All 94 burials at the Cagnini mound were of secondary types. These included 1 urn burial, 2 cremations, 58 horizontal bundle burials, and 33 interments of isolated skulls. Skeletal material was in extremely poor condition but field observations indicated a distinctly roundheaded group. Interments are listed as one child, three youths, thirteen male adults, one female adult, seventy-two adults of unknown sex, and four unknown as to age or sex. One humerus exhibited a healed fracture. One mandible contained an impacted third molar.

Burials were concentrated in the eastern, southeastern and southern parts of the mound while interments of isolated skulls tended to be more centrally located than bundle burials (Fig. 7). The bundle and isolated skull burials were found between depths of 6 and 42 inches but of the two types, the bundle burials had the shallower average depth. Forty bundle burials were found above and eighteen below a depth of 2 feet while only nine isolated skulls were found above and 24 below that depth.

Both cremations were found at a depth of 30 inches and the urn burial at a depth of 12 inches. The latter consisted of bones of a child placed in a large, wide-mouthed, undecorated pottery vessel of about four gallons capacity. It was a disarticulated or bundle burial as the skull was found below the long bones.

Artifacts from the mound included five arrow points; four spear points; seven drills, three turtleback scrapers, six small scrapers; and 158 chips, all of chert; 32 sandstone abraders; seven stone pendants (plummet type; two sandstone, one coral, one quartz, and three of imported stone); an *Oliva* shell bead; a shell awl(?); an arrow point made of the tooth of a shark; 213 sherds; and three pottery vessels. Of these artifacts a stone drill, quartz pendant, sandstone abrader, and in five instances sherds are mentioned in the fieldnotes as associated with burials. Other lists add a stone celt, a triangular arrow point (Safety Harbor type), and a shell dipper to the inventory.

The fieldnotes record undecorated and somewhat crude pottery. Color is given as dark brown in one case, light tan in another. One nearly complete vessel is described as, "almost perfectly round in shape," and was about 15 inches in diameter. Another is given as six inches in diameter and two inches deep. In a preliminary unpublished report Simpson<sup>1</sup> wrote:

Pottery in the Cagnini mound consisted, with only one exception, of simple spherical pots and plain shallow bowls. One small sherd had been ornamented on the rim with a series of shallow triangular pits incised [punctated] after the vessel had been fired [dried]. Fugitive red slip had been used on the spherical pots. This ware was smooth and untempered. The simple bowls were of a peculiar pitted ware of poor quality later found in the upper levels of both the Jones and the Lykes mounds. Caches [deposits] of potsherds containing parts of several vessels were found at various points during excavation."

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<sup>1</sup>Manuscript on file in Archaeological Survey of Florida Park Service office, Gainesville, Florida.

The rim sherd with the triangular punctations is undoubtedly representative of Weeden Island Punctated. The red-slipped, untempered vessels are unquestionable Dunns Creek Red. Both are pottery types of the Weeden Island period. The simple bowls of pitted ware are Pasco Plain, a limestone-tempered ware made over a long period of time, particularly in the area to the north of Tampa Bay.

### SUMMARY

Indians built the Cagnini burial mound either upon a prepared subsurface base or upon a previously occupied ground surface. In either case, fill of the mound contained pottery, chips of chert, and other specimens derived from an Indian village area.

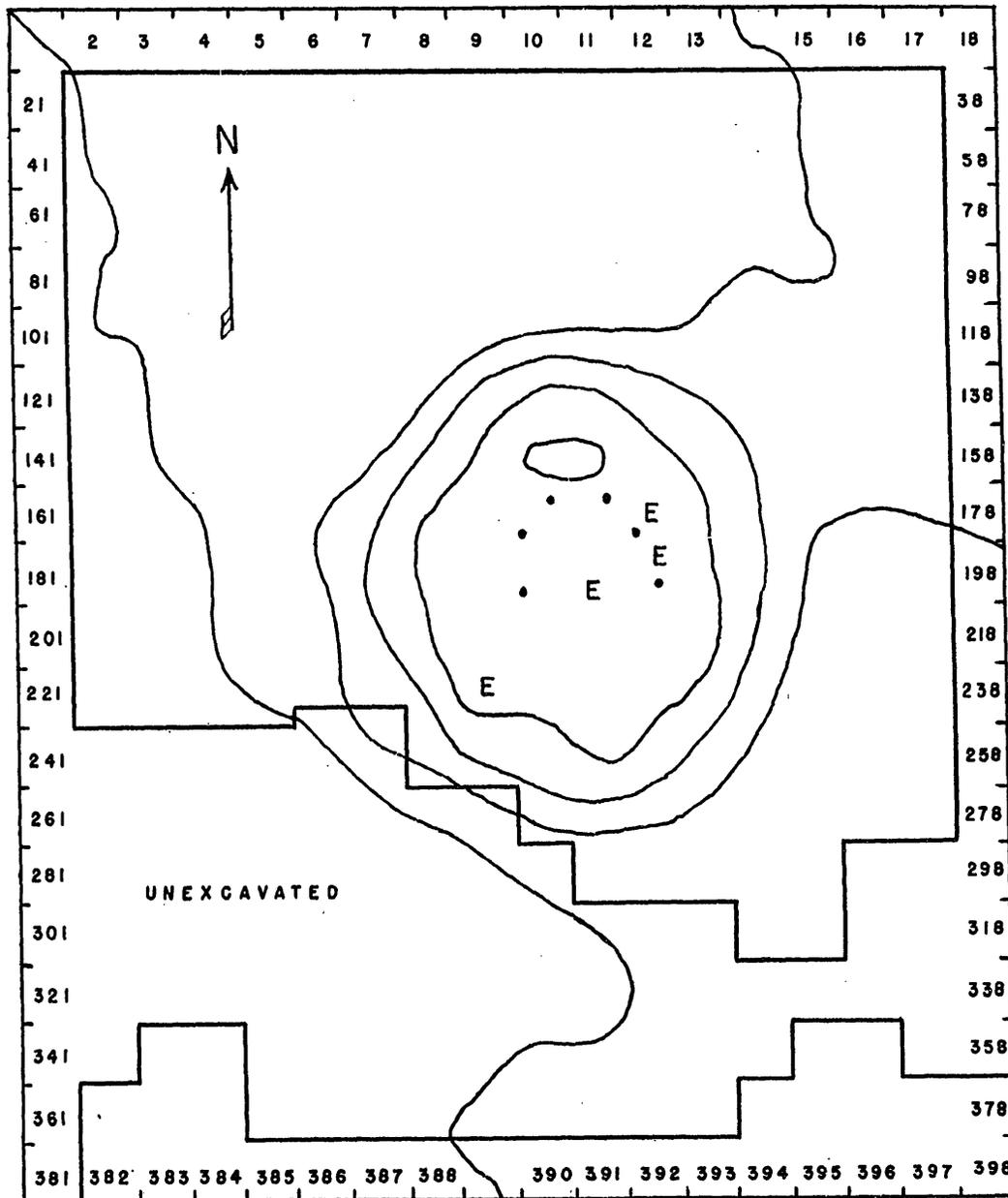
All interments were of secondary types, predominantly horizontal bundle burials plus many consisting only of isolated skulls. As isolated skulls were deeper, on the average, this form of interment may have been decreasing in favor during the period of use of the mound. Excavators also found two cremations and a burial of a child in a pottery vessel.

Specimens from the fill of the mound and usually considered typical of the Weeden Island period, include one sherd of Weeden Island Punctated, many sherds of Dunns Creek Red, a stone celt, a shell dipper, and seven stone pendants (plummet type). The stone pendants and celts may be either Weeden Island or Safety Harbor in date. The one narrow triangular arrow point is suggestive of Safety Harbor while burial in a pottery vessel is reminiscent of the Fort Walton period of northwest Florida. Cremations also appear to be a late trait as they occur in Parrish Mounds 2 and 3 (Fig. 1) with articles of European manufacture (Willey, 1949, pp. 146-156; particularly p. 153).

Construction and use of the Cagnini burial mound occurred during the Weeden Island II period, about 1100-1400 A.D. Due to the lack of flexed burials and to inclusion of cremations and a burial in a pottery vessel, the mound should probably be considered late Weeden Island II, possibly 1300-1400 A.D., with use extending into early Safety Harbor times.

BRANCH MOUND

The Branch mound was located on the east side of Cypress Creek about six miles northeast of the Cagnini mound and sixteen miles north of the center of the city of Tampa (Fig. 1). Details regarding the site, other than contours shown on the excavation plan (Fig. 8), are not available.



• - BURIALS

E - GLASS BEADS

CONTOUR INTERVAL - 6 INCHES

Figure 8.—Branch mound, excavation plan.

The mound was circular with a diameter of 50 feet and a maximum height of two feet but, in general, it formed a more or less level plateau only 18 inches above the surrounding land. These dimensions are suggestive of a domiciliary mound or platform for a house, but as neither postholes nor other features suggested such occupation, it must be assumed the Branch mound was built for burial purposes.

Six burials, four of adults and two of youths, were uncovered between depths of two and twelve inches. These are listed in the field notes as two horizontal bundle, one isolated skull, one cremation, and two semi-flexed interments. Skeletal material is described as "very fragmentary" in all cases.

Sketches are available for the isolated skull, one of the bundle, and one of the semi-flexed burials. The sketch of the latter shows a skull, shoulder blades, humeri, and thoracic vertebrae in anatomical order but no lower arm bones, no pelvic bones, nor any bones of the legs or feet. If a complete body had been interred some evidence of pelvis and lower extremities should have been found. While arrangement of the bones present suggests a semi-flexed burial, incompleteness of the sketch raises a doubt. The other semi-flexed burial is mentioned as too fragmentary for sketch or accurate description.

Horizontal locations of these burials (Fig. 8) suggest a planned burial pattern or, at least, that knowledge of locations of previous burials was available when later interments were made.

The sand fill of the mound, evidently derived from a village area, produced a drill, fourteen whole or fragmentary arrow points, a sandstone abrader, three scrapers, a piece of burnt chert, at least seventeen sherds plus portions of a pottery vessel, and five whole or fragmentary small glass beads. Pottery is not described but both plain and decorated sherds are listed. One, at least, must pertain to the Safety Harbor period as it is described as a section of rim with decoration and a lug handle. Two of the glass beads, one whole and one broken, are listed as associated with an isolated skull and with a horizontal bundle burial, respectively. The other glass beads were found at or near the surface.

#### SUMMARY

The small Branch mound contained six burials arranged in a

semi-circle. All burials were at shallow depths and, apparently, interred over a very short period of time. Fill of the mound contained arrow points, pottery and, near the surface, small blue glass beads. Types of arrow points and pottery are not known except that one sherd pertains to the Safety Harbor period.

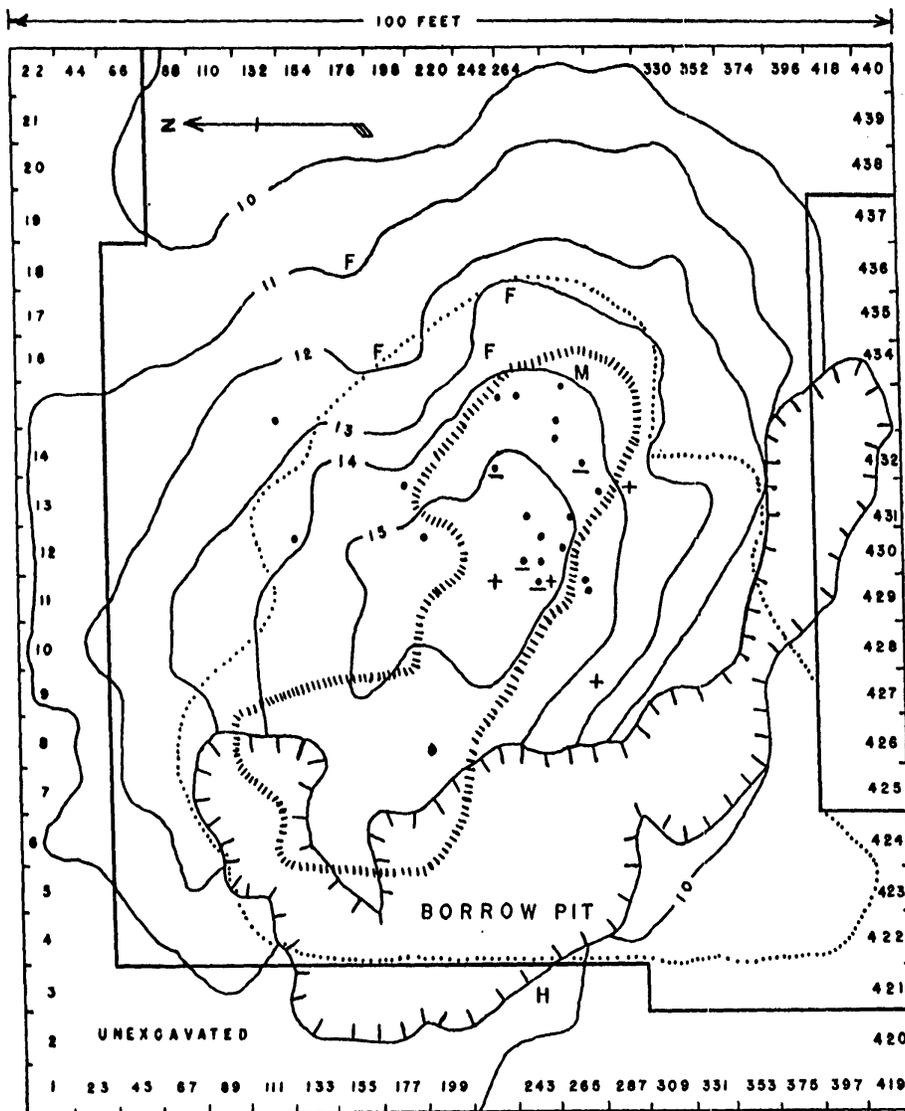
To agree with data from sites discussed earlier, flexed burials should be approximately Weeden Island I in date. The two semi-flexed interments listed for the Branch mound were very fragmentary and we do feel they may be considered unquestionably as of that type.

Hence, in spite of these burials, we believe the Branch mound was built and used for burial purposes near the middle of the Safety Harbor period, about 1550 A.D. The cremation, decorated rim sherd with lug handle, and glass beads all point towards such a date. As glass beads were only found at or near the surface, the mound may have been built a short time prior to the introduction of such beads as trade goods to Indians of Florida.

### LYKES MOUND

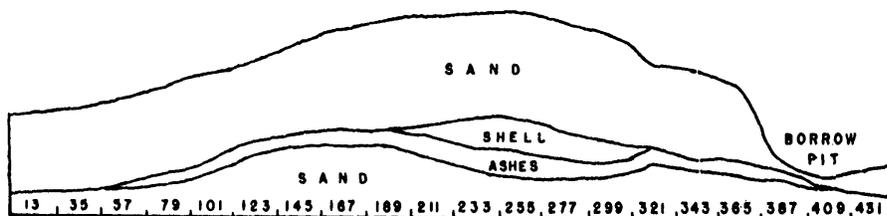
The Lykes mound, located behind the Lykes Brothers packing house in the Oak Park section of Tampa, was about a half-mile northeast of the head of McKay Bay and a mile north of the mouth of Palm River (Fig. 1). A north-south profile and an excavation plan showing contours, locations of burials, extent of shell and of ash areas, and a borrow pit are shown on Figure 9.

The available data permit a reasonably accurate reconstruction of the building of the Lykes mound. Judging from the profile (Fig. 9), there was a slight rise of ground at the spot chosen for the mound (this assumes a surface elevation lower than at present). Into this rise a shallow pit or fireplace was dug (between Sections 189 and 321). Dirt from this pit was placed towards the north, forming a low and small pile of debris (between Sections 101 and 211). The pit was then filled with ashes and charcoal (probably by building a fire in it for some time). This fill (mixed with sand) extended beyond the limits of the pit to form a mound base capping both the pit and the dirt thrown out from it. The extent of this ash and charcoal zone is shown on the excavation plan (Fig. 9).



- - BUNDLE BURIALS
  - - FLEXED BURIALS
  - + - ISOLATED SKULLS
  - M - MULE BONES
  - |||| - EDGE OF SHELL DEPOSIT
  - .... - EDGE OF CHARCOAL & ASH DEPOSIT
  - F - FIREPLACES
  - H - HORSE BONES
- CONTOUR INTERVAL - 1 FOOT

EXCAVATION PLAN



HORIZONTAL SCALE - 0 5 10 15 FEET  
 VERTICAL SCALE - 0 5 10 FEET

PROFILE

Figure 9.—Lykes mound, excavation plan and profile.

While the pit was, undoubtedly, used as a large fireplace for the production of ashes and charcoal, supplementary fireplaces were also used. One in Section 172 was the base of a charred stump. Another, in Section 259, contained portions of charred logs, four to six inches in diameter and 18 inches in length. A third, in section 192, was three feet in diameter and was filled with ashes and burnt sand.

These fireplaces were found at depths of 15, 38, and 39 inches, respectively. Changing these depths below surface to depths below the top of the mound, by adding to them the indicated contour differences, shows that these fireplaces were located approximately 62 to 76 inches below the top of the mound. Ash in the central pit was found between depths of 64 and 76 inches.

There seems to be no doubt but that these fireplaces and the central pit functioned as charcoal generators to produce the basal zone of charcoal and ash impregnated sand. The supplementary fireplaces were all located near the eastern edge of the charcoal and ash deposit. Similar fireplaces, damaged when the borrow pit was dug, may have located towards the west.

After the installation of this charcoal zone, a slight concavity existed in the surface over the central pit. This declivity was filled with material taken from a shell midden. Midden material (chiefly shells of a small clam) was deposited to a thickness of about 18 inches to form a core or small primary mound. Sand, presumably from the borrow pit shown just to the southwest of the mound (Fig. 9), was then used to build the mound proper and to cover both the prepared base and the deposit of shells and midden material.

Building of the mound proper did not occur all at one time. A flexed burial was found in the shell and midden layer while another was in the top of this layer. They probably represent original interments over which part of the sand was deposited. In these cases shallow depressions or basin-shaped pits were scooped out of the surface of the shell-midden deposit. The remains were laid in such depressions and covered over with dark sand heaped up like a small mound. Unopened clam shells were then scattered over the surface of these small individual mounds.

The other flexed burials were treated similarly but were at a

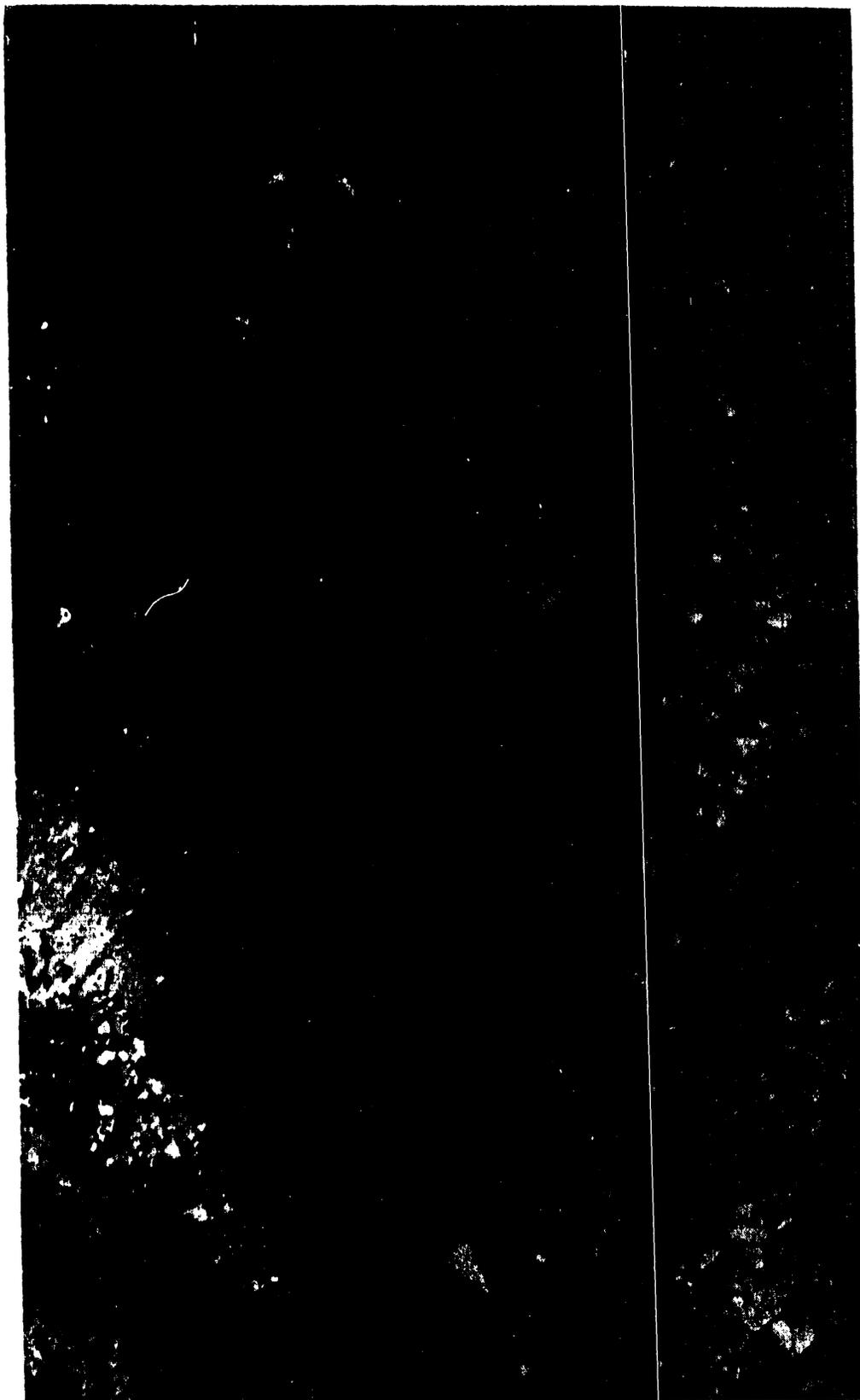


Figure 10.—Flexed burial in shell and midden deposit at Lykes mound.

slightly higher elevation, being in the lower part of the overlying sand. A dark humic-like stain was noted in the soil immediately surrounding flexed burials. This was caused by decay of animal matter plus, quite likely, clothing or bindings required to keep the bodies in a closely flexed position.

Vertical location and this special treatment of flexed burials, small individual mounds surrounded by clam shells, implies that at some time in the history of construction of the Lykes mound the sand mantle was relatively thin. Subsequently, more material was taken from the borrow pit and the mound was heightened. In this additional material were found bundle burials. The resultant mound was about five feet in height with a northwest-southeast major axis of 110 feet and a northeast-southwest minor axis of 60 feet.

Horizontally, burials were concentrated in the southeastern quadrant of the Lykes mound. Vertical distribution of burial types is given in Table 3. These twenty-six interments represent about thirty-four individuals who were listed in the field notes as two children, one female youth, three youths of unknown sex, four adult males, two adult females, and twenty-two adults of unknown sex. The number of children is smaller, relatively, than at the Cockroach Key site.

TABLE 3.  
VERTICAL DISTRIBUTION OF BURIALS AT LYKES MOUND

Burial type	Depths in feet				
	0-1	1-2	2-3	3-4	4-5
Horizontal bundle .....	9	3	2	1	
Group horizontal bundle .....	3	1			
Isolated skulls .....	1	2			
Tightly flexed .....			1	1	2

As indicated in Table 3, bundle burials were concentrated in upper zones and flexed burials in lower zones. The data from the Lykes mound agree with data from the Thomas mound and Cockroach Key to indicate a period during the life of these mounds when burials were flexed followed by a period when interments were predominantly of bundle types.

Sherds are mentioned as associated in the fill of four of the bundle burials and the shallowest flexed burial, otherwise, grave goods were not found. Pottery is not described but that in the

upper or bundle burial zone is mentioned as undecorated and rather crude. Some sherds of the plain pitted ware (Pasco Plain) such as that found at the Cagnini mound, were noted. One decorated sherd is listed but neither the description nor location are given.

Artifacts included five arrow points, two scrapers, three worked fragments of chert, two sandstone abraders, a piece of a celt, and a fragmentary shell dipper. Small concentrations or caches (basket loads?) of closed clam shells and of small quartz pebbles are also mentioned in the field notes. The former might be offerings of food but the latter were probably natural inclusions in the fill.

Two other finds should be mentioned. One was the skeleton of a mule in Section 280 at a depth of 48 inches together with an old fashioned iron horse or mule shoe. The other, in Section 245 at a depth of 9 inches, was the fragmentary skeleton of a horse. It may be presumed both of these buried animals were intrusive and that their interments occurred a long time after the abandonment of the mound by Indians. Locations of these finds are given on the excavation plan (Fig. 9).

### SUMMARY

The Lykes burial mound was built of sand over a prepared base, of charcoal impregnated sand. The association of the base with large fireplaces probably denotes a purification or sanctification ceremony. Such prepared bases have been found under several burial mounds of the Weeden Island period (Moore, 1902, pp. 130-1; Bullen, 1949).

In agreement with data presented earlier for other sites, flexed burials at the Lykes mound underlay bundle interments. Unfortunately, we have no information regarding types of either pottery or projectile points found in the mound fill. By correlation with other sites, it may be suggested that the Lykes mound was built in late Weeden Island I times, for flexed burials, and added to and used, for bundle burials, during the early part of the Weeden Island II period, about 1100-1300 A.D.

Data from the Lykes mound strongly support that from other sites in respect to the succession of burial habits while the smaller number of interments for such a large mound implies it was used only a relatively short period of time.

## SNAVELY MOUNDS

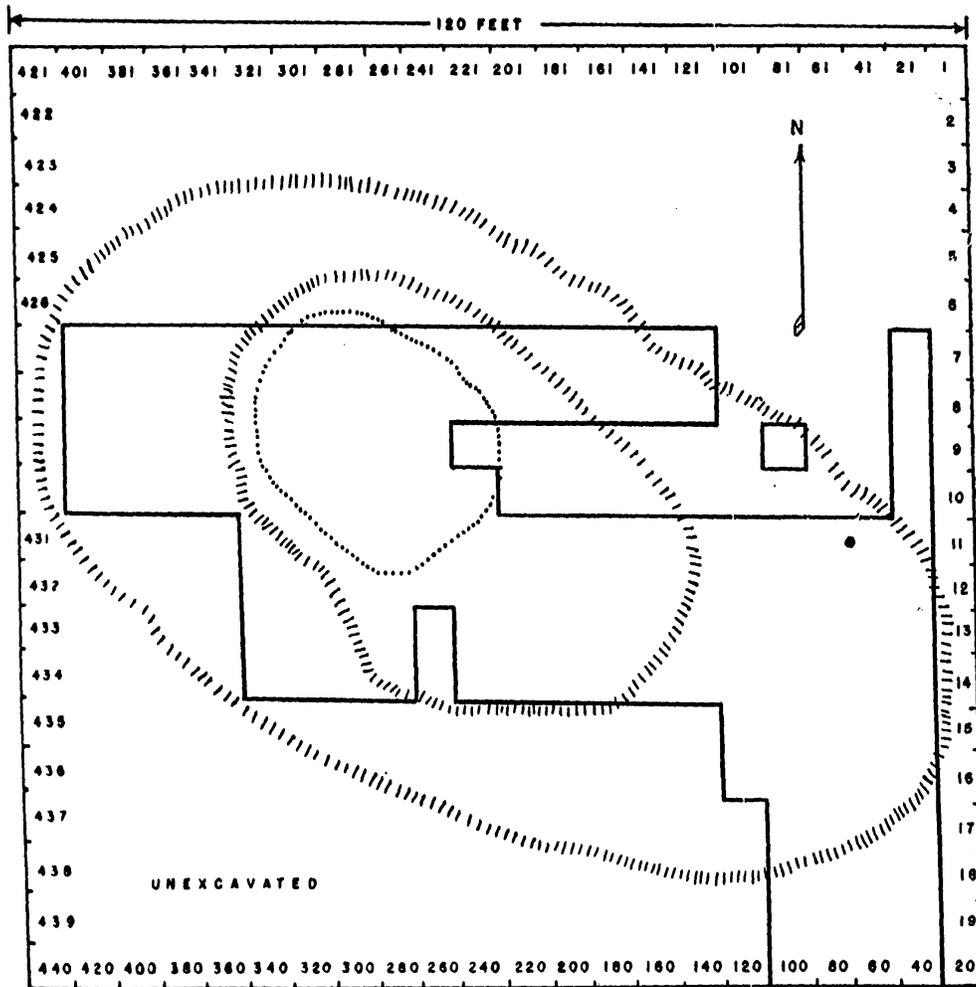
The two Snavely mounds were located, about three-quarters of a mile apart, on a sand ridge that borders the swamp along the south side of the Hillsborough River about a mile north-northwest of Thonotosassa (Fig. 1). Approximate peripheries of the mounds and of their more or less level tops, as well as extents of excavated areas and of discolored ash zones are given in Figure 11. Both mounds were about three feet in height.

Excavation, carried to a depth of a foot below the elevation of the surrounding land, was more complete in the case of the first mound, known as Snavely Mound A. Only two features were noted, a badly decomposed horizontal bundle burial, in Section 71 at a depth of 18 inches, and a discolored zone composed of ashes and charcoal. No additional data are available regarding the bundle burial.

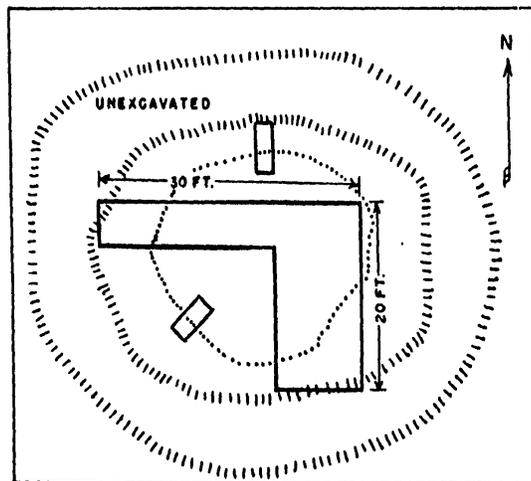
The discolored zone of Mound A, which did not exceed a thickness of three inches, was uncovered a few inches below the surface. This zone covered about half of the top of the mound (Fig. 11). Edges are mentioned as having been fairly distinct. This discolored zone, as well as that found in Mound B, presumably represented a house floor even though it was not, apparently, associated with postholes.

A surprisingly large number of chert spalls and chipped tools were found in Mound A, including 84 arrow points, 11 knives or spear points, 139 scrapers, 74 chipped blanks, six drills, a broken celt, three hammerstones, and three abraders. This list undoubtedly, contains many duplications as most specimens were listed as broken. Several of the arrow points were narrow and triangular, typical of the Safety Harbor period.

Forty-six locations of pottery were recorded in the notebooks and these represent a much greater number of sherds. Vessel fragments seem to have been small, as if trampled upon. In four cases, they are mentioned as "black." One heavy or thick sherd was found at a depth of 48 inches but otherwise the vertical position was not given for either pottery or stone specimens. Horizontally, the stone artifacts were two or three times as frequent in the level portion of the mound as in the sloping sides. The reverse would seem to have been true of pottery.



MOUND A



MOUND B

- - HORIZONTAL BUNDLE BURIAL
- .... - EDGES OF DISCOLORED ASH AREAS
- - PERIPHERIES OF BASES AND TOPS OF MOUNDS

Figure 11.—Snively mounds, excavation plans.

Snavelly Mound B was tested by means of an "L"-shaped trench and two supplementary tests (Fig. 11). This mound was similar to Mound A in that it also contained a discolored ash and charcoal zone at a shallow depth below the surface. While Mound B was about half as large as Mound A, the discolored zones of both mounds were nearly the same size (Fig. 11).

Artifacts were not plentiful in the excavated portion of Mound B but one small and one large arrow point, and a chipped blank were found.

### SUMMARY

Both Snavelly mounds appear to be good examples of domiciliary mounds or low flat-topped mounds built as foundations for aboriginal residences. Oval zones, discolored with ashes and charcoal and found slightly below the surface, presumably represent house floors. Unfortunately, postholes were not found so that shapes of the houses cannot be determined.

Large quantities of chips, broken artifacts, and chipped blanks suggest Mound A may have been the home of a manufacturer of chipped tools. This assumption would be supported if such specimens were found near the surface of the mound, a point not mentioned in the field notes. A chert quarry, found by Simpson during the excavations, a short distance from the site was probably the source of the stone worked at this mound.

In contradistinction to all of the burial mounds, previously described, these residential mounds had a charcoal and ash zone near the surface, as opposed to a basal location, the artifacts of chipped stone were relatively numerous and burials either absent or extremely rare.

Due to the inclusion in Snavelly Mound A of narrow triangular arrow points, we believe it to have been built during the Safety Harbor period, about 1400-1550 A.D. Description of pottery as "black," as well as the apparent lack of decoration, are apparently characteristic of this period, to judge from sherds found at the Safety Harbor site (Griffin and Bullen, 1950). The presence of a bundle burial would also agree with this dating.

As the Safety Harbor period was an agricultural era and the Snavelly mounds were located near arable land, it is likely they supported Indian farmhouses.

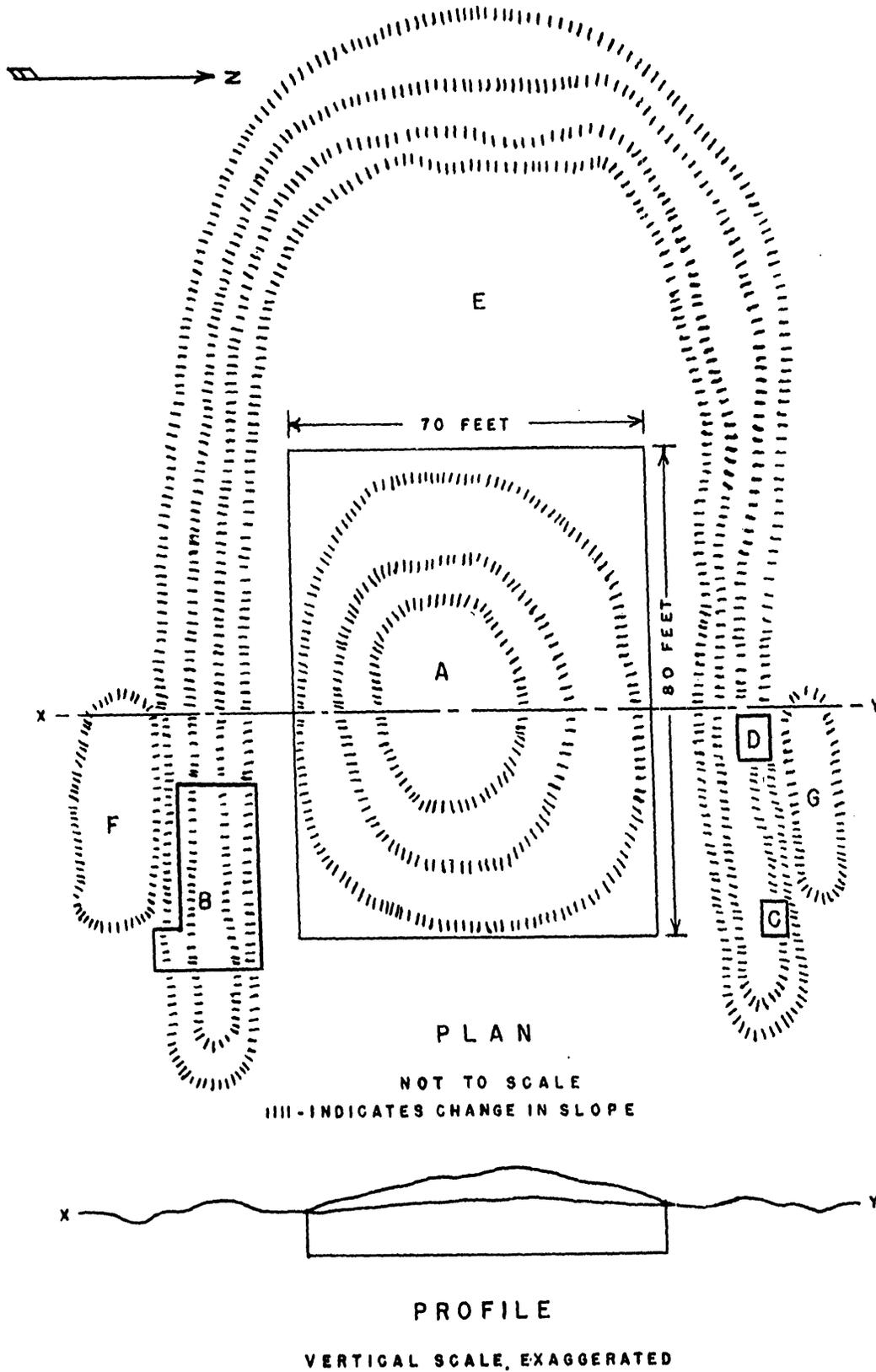


Figure 12.—Jones mound, sketch map and surface profile.

## JONES MOUND

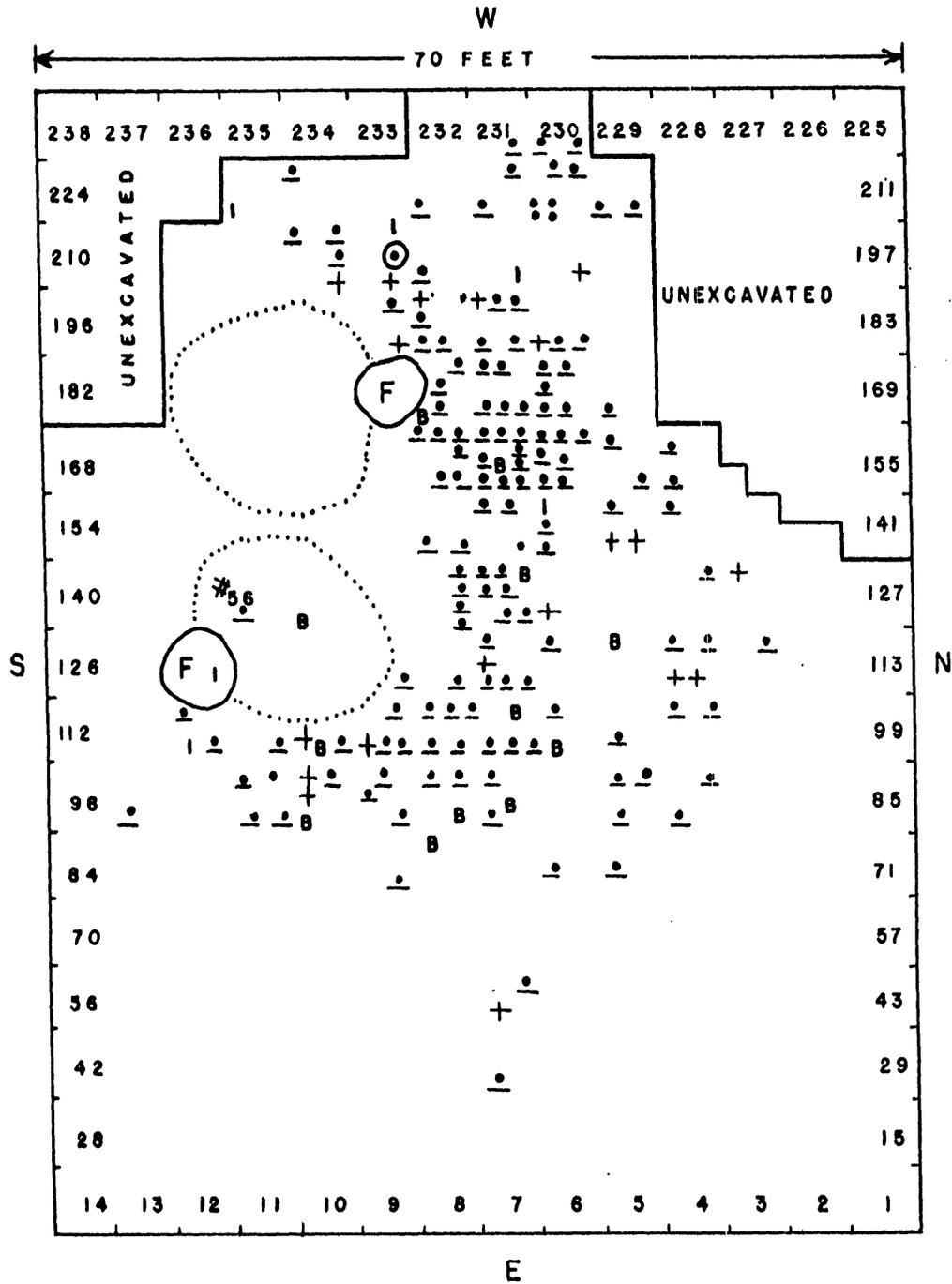
The Jones burial mound was located near the east bank of Pemberton Creek about a mile southeast of Lake Thonotosassa (Fig. 1). As shown in Figure 12, the site consists of a burial mound (A), about 70 feet in diameter and three feet in height, situated between the open ends of a horseshoe-shaped ridge (B, D, C), about a foot in height. Just outside the ridge, on the north and south sides opposite the mound, were two borrow pits (F and G), two and a half and one and a half feet deep respectively. Area E was level and many sherds were noted on its surface. The whole complex faced east.

Excavation of the burial mound was nearly completed when it was decided to dig a trench and two small tests in the eastern ends of the horseshoe-shaped ridge. Data regarding these two tests are not available other than a list of artifacts uncovered. The list includes arrow points, other stone tools, and both plain and decorated pottery and indicates that the ridge, or at least its eastern ends, was built of sand taken from a habitation area.

For the burial mound we have a cross-section taken near the center of the mound (Fig. 12, lower). This section shows an irregular humic stratum extending across the mound at about the elevation of the surface of the surrounding land. The humic zone was about a foot higher near the center than at the edges of the mound.

Simpson refers to this structural feature as a, "very dim broken humic layer." The field notes state, "Mound built up of yellowish-brown sand. Base level on east side 36" below surface" and "Base level burned and calcified [calcined]. Found at depth of 34" in Section 29" (see excavation plan, Fig. 13, for section locations). A large fireplace, about six feet in diameter, was found at a depth of 40 inches below the junctions of Sections 109, 110, 123, and 124. The various depths at which evidence of fire was found, when referred to the top of the mound, form a zone five to six feet below the top.

These data indicate a subsurface prepared base, similar to those discussed for the Lykes and Cagnini mounds. If this is correct, the humic zone mentioned earlier must represent either a period of abandonment or infrequent use, during which humic ma-



- |                    |                                |
|--------------------|--------------------------------|
| ⊙ - CREMATION      | B - BURIALS OF INFANTS         |
| • - BUNDLE BURIALS | I - INDETERMINATE BURIALS      |
| ⌒ - FLEXED BURIALS | F - FIREPLACES                 |
| +                  | .... - EDGES OF CHARCOAL AREAS |

Figure 13.—Jones mound, excavation plan.

terial accumulated naturally, or a stage in mound construction during which humic material was deposited on the mound.

Two features similar to house floors with associated fireplaces but no postholes were found in the southwestern quadrant of the mound (Fig. 13, F and F indicate the fireplaces). The first or more westerly floor was six inches thick and composed of black "oily looking," midden-like soil, hard-packed and mixed with ashes and charcoal. At its northern margin this floor was 12 inches beneath the surface. Due to its location near the edge of the mound, its southern margin was at a shallower depth. The fireplace at the northern end of the first floor consisted of a deposit of charcoal and ashes containing burned shell and bone fragments, at places eight inches thick. The top of the charcoal was, apparently, a few inches lower than the elevation of the floor.

The second floor was likewise composed of hard-packed, more or less "sticky," soil mixed with ashes and charcoal. It had an average thickness of six inches and was found at a depth of about four inches. Details regarding the fireplace at the southern end of this floor are not available. As the second floor was found at a shallower depth, although nearer the center of the mound, it may be the later of the two floors.

A flexed burial (Fig. 13, No. 56) was inhumed partly in and partly below the second floor. The shallowest part of this burial was at a depth of only four inches as was the surface of the floor. For this reason and because the skull had not become filled with dirt while the bones were relatively well preserved, it is believed this burial was the last interment in the Jones mound.

The vertical distribution of 179 burials is given in Table 4. Most interments were very tightly flexed with arms and legs folded and bones of both upper and lower portions of limbs parallel to the vertebral column, knees and elbows close to the chests. Frequently, the vertebral columns are shown in burial sketches as curved or bent at an angle. In eight cases flexure was so extreme pelvis were lying close to heads and vertebral columns were "U"-shaped. Only four interments could be classed as semi-flexed.

Flexed burials occurred both singly and in groups. Four bundle burials formed a group interment. Indeterminate burials in eight cases consisted of skulls and arm bones, skulls and vertebrae, or

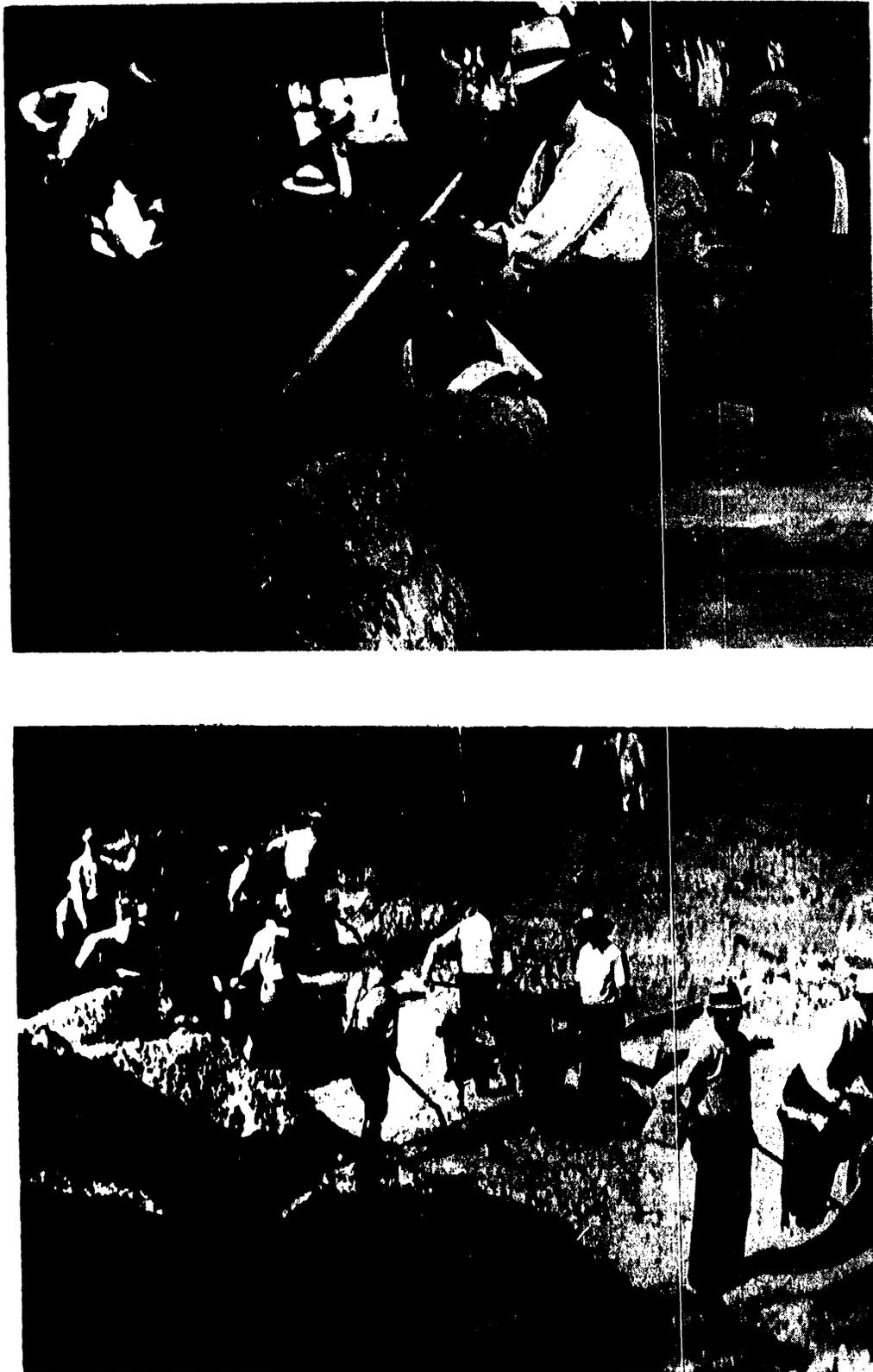


Figure 14.—Excavations at the Jones mound.

skulls, vertebrae and arm bones. In a few cases only teeth or only teeth and other bones were reported. Some of these may represent bundle burials.

TABLE 4.  
VERTICAL DISTRIBUTION OF BURIALS AT JONES MOUND

Burial type	Depths in feet						
	0-1	1-2	2-3	3-4	4-5	5-6	6-7
Cremation .....		1					
Horizontal bundle .....		4 <sup>2</sup>					
Isolated skulls .....		4	7		1	2	
Flexed .....	1 <sup>1</sup>	16	27 <sup>3</sup>	28	34	23	6
Infant or young child .....			1	4	5	3	
Indeterminate .....		6 <sup>4</sup>	2		3	1	

<sup>1</sup>In second house floor.

<sup>2</sup>One, effect of fire around right eye, charcoal in front of face.

<sup>3</sup>One, at 24 inches, some of long bones burnt.

<sup>4</sup>One, includes burnt bones.

Examination of Table 4 will disclose that a cremation, other burials showing evidence of fire, and bundle burials were all found at shallow depths, not over 24 inches below the surface. Similarly, isolated skulls and indeterminate burials, which may include some of the bundle type, concentrated at relatively shallow depths. These data agree with those from the Thomas, Cockroach, Cagnini mounds, in that bundle burials and cremations are, on the average, found at shallower depths than flexed burials, thus implying changing burial habits during the useful life of the mound.

Use of the mound for burials over a period of time is also indicated by fifteen cases in which one burial intruded into or through another. Three other instances of disturbances, of an unspecified type, are mentioned in the field notes.

Skeletal material was in very poor state of preservation. Field designations of age indicate ten babies, nine children, fourteen youths, 123 adults, twenty-four old adults, and eight not specified. This would seem to represent a normal population distribution. As at the Thomas mound, however, adult males outnumbered females three to one. In a few cases skulls of babies suggested, by their location, childbirth may have been a contributing factor to the death of female adults.

Many of those interred in the Jones mound were well supplied with burial goods (Figs. 15-20). Data from individual graves have

been studied to see if any generalizations could be formulated in correlating specific types of objects with age or sex. Results were not very satisfactory.

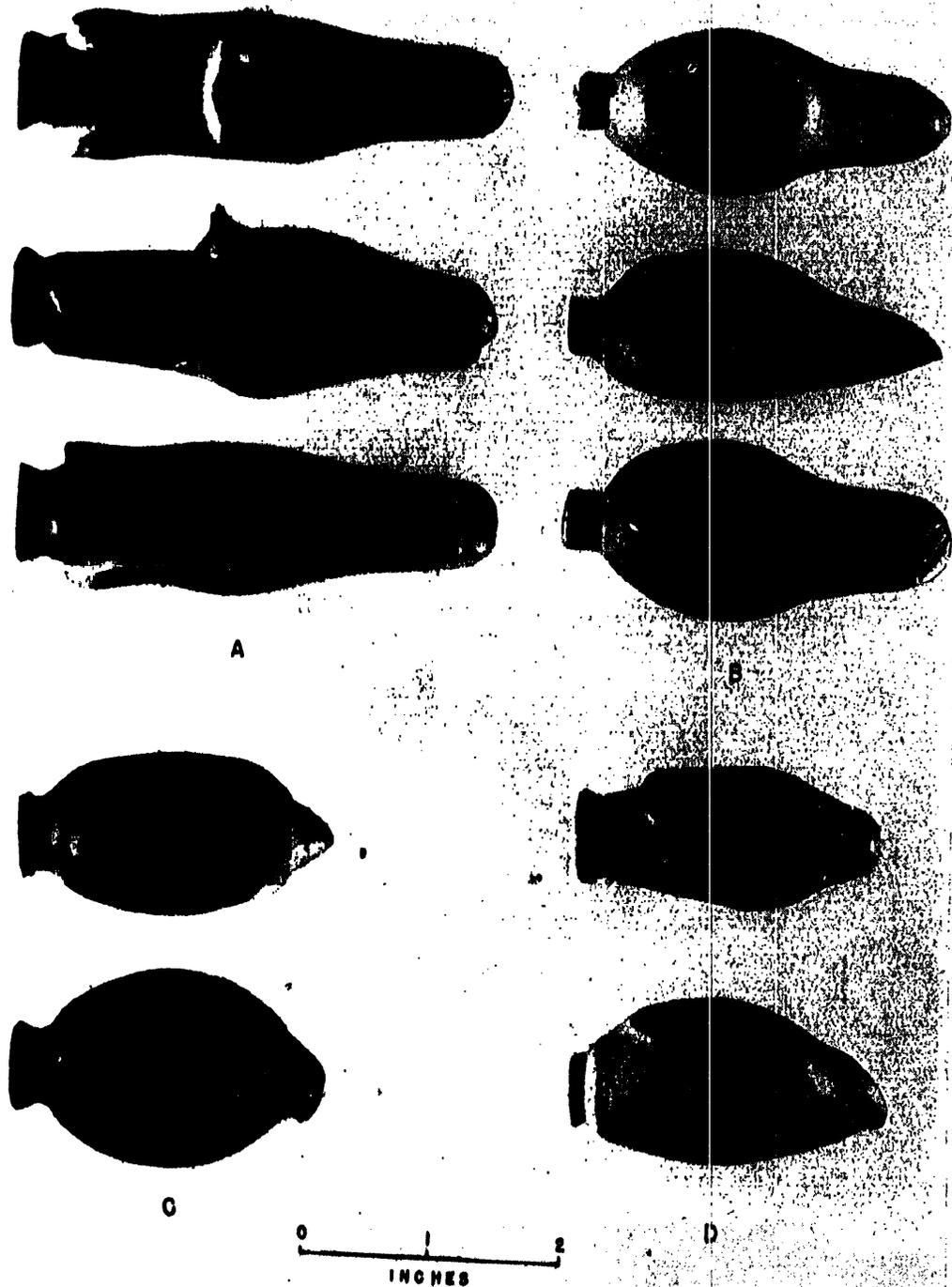


Figure 15.—Deer-head and bird-head stone pendants from Jones mound. Florida Geological Survey; Florida Park Service photographs.

In 22 burials where red ochre was present, six skeletons were babies, eight were adults of unknown sex, eight were male adults, and one was a female adult with unborn child. This slightly favors a correlation between the presence of red ochre and burials of males but there appears to be no correlation with age. All of the babies and one old adult were in ochre stained sand or completely surrounded by ochre. In certain cases piles of sand had been heaped over burials and ochre sprinkled over the piles. In the case of thirteen adults, ochre covered the skull, was around the skull, or on and around the skull. Only a small amount of ochre was found with isolated skulls. From these data, if any conclusions can be drawn, ochre appears to be associated with the head.

Beads (Fig. 19, e-h) may be correlated with female burials. In thirteen instances beads were associated with two babies, a child, an eleven or twelve year old boy, seven female adults, one male adult, and an indeterminate burial. In all seven cases where locations of beads are given, they were around the neck or in the region of the neck, in front and below the jaw.

Twenty burials were supplied with pendants (Figs. 15-18), made either of stone or of shell. They were found between depths of 18 and 68 inches with the vast majority between depths of 24 and 40 inches. Due to the importance of these specimens, Table 5 has been prepared to indicate their distribution by burials.

TABLE 5.  
STONE PENDANTS AND BURIAL TYPES AT THE JONES MOUND

Burial type	Number of burials	Number of pendants except duckbill type	Duckbill or birdhead pendants
Male, adult, flexed .....	9	14	2
Female, adult, flexed .....	4	6	3
Adult, flexed, sex unknown .....	2	5	
Isolated skull, sex unknown	3	6	1
Indeterminate .....	2	14	3

Pendants were supplied only in cases of adult burials. Apparently, they are more apt to be found with males except for duckbill or birdhead type pendants which, while equally divided between the sexes, were relatively more frequent with females. Due to the method of sexing skeletons in the field, this suggestion is extremely tentative. Pendants were located at necks or chests and so, presumably, were suspended from the neck in life.

Three stone celts were found, all associated with isolated skulls. All were between depths of 18 and 28 inches and had the shallowest distribution of any type of burial offering. In one case, Burial 147,

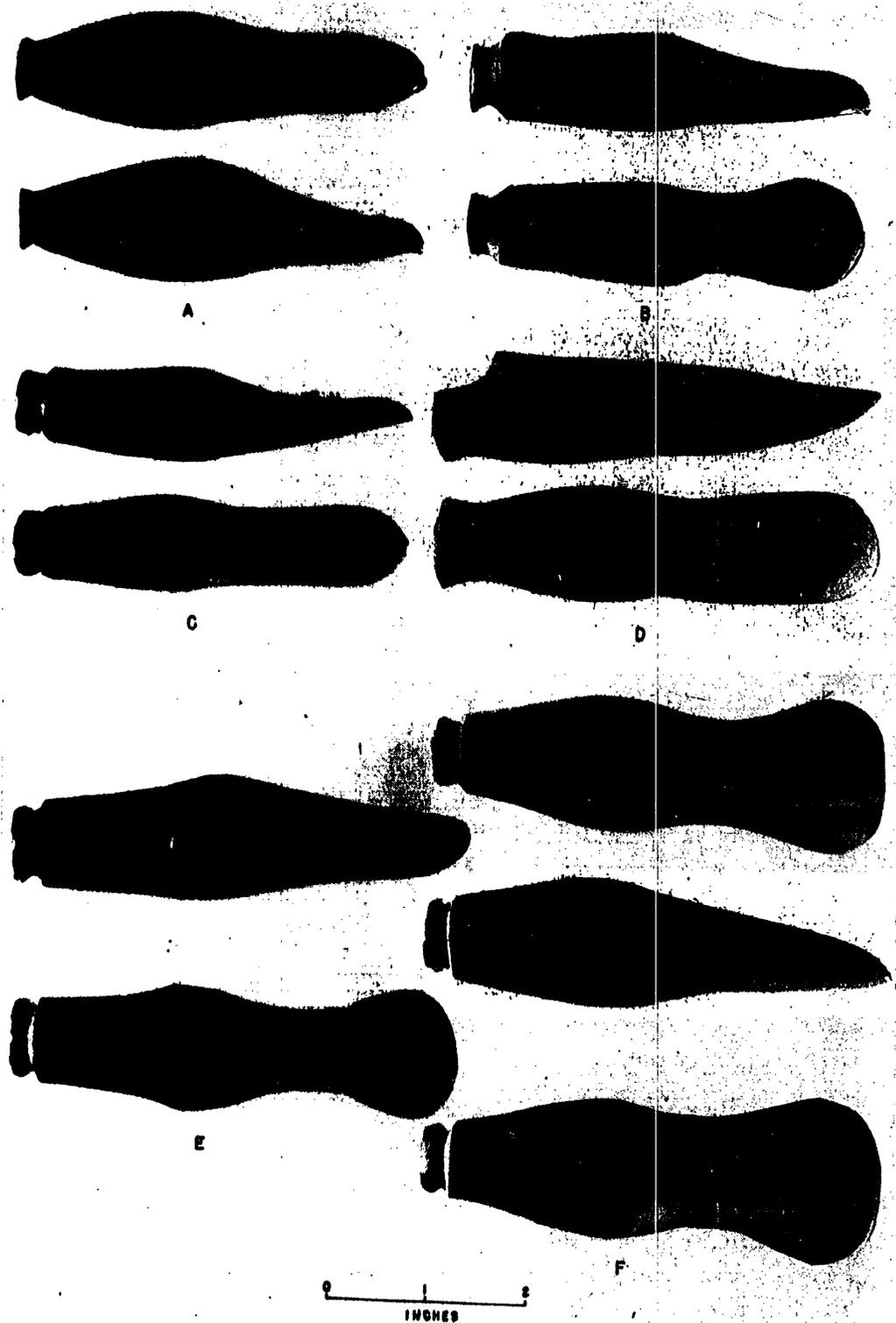


Figure 16.—Duckbill type stone pendants from Jones mound. Florida Geological Survey; Florida Park Service photographs.

a celt was associated with pendants and other specimens. In the other two instances, celts were the only burial offering present.

A few of the outstanding burials from the Jones mound are described below:

Burial 36—Adult, flexed burial, sex unknown, in Section 105 at depth of 68 inches, with long shell pendant just below jaw and three plummet-type limestone pendants (Fig. 17, j) under head and neck.

Burial 63—Flexed burial of child, 3 to 6 years of age, in Section 119 at depth of 72 inches. Pelvic bones surrounded by fresh water mussel shells.

Burial 82—Aged female adult, burial consisted of skull and humeri in anatomical order. Double string of 25 graduated shell beads (Fig. 19, f) around neck and on chest.

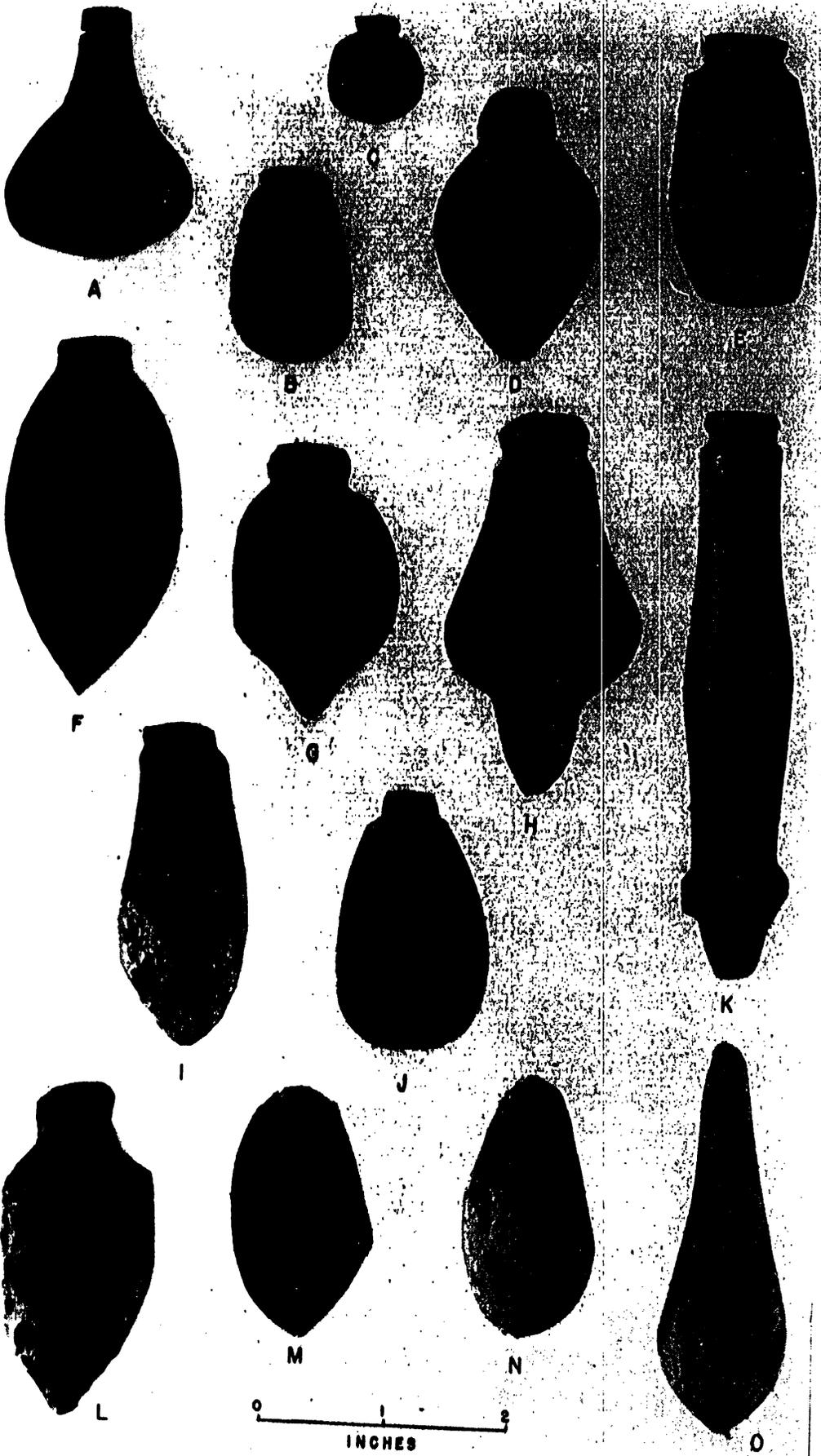
Burial 125—Aged female adult, flexed, in Section 162 at depth of 40 inches with 125 small shell beads (Fig. 19, e) in front and below jaw. Beads, apparently, in a pile.

Burial 130 and 132—Group burial of male adult, female adult, and two to three-year old child, in Section 174 at depth of 48 inches. Adults flexed and facing each other, eight inches apart, with child between at chest of female. Duckbill pendant (Fig. 16, e) under right side and cone-shaped pendant under center of jaw, two oblong stone and shell pendants in vicinity of neck of male. Large quantities of small and medium-sized shell beads (Fig. 19, e and f) about child and neck of female. Bird head pendant (similar to Fig. 15, d) and two shell pendants between skull of child and jaw of female.

Burial 135—Adult, female, flexed burial in Section 161 at depth of 40 inches with small round pendant (Fig. 17, c) under jaw.

Burial 136—Adult, female, flexed burial in Section 175 at depth of 36 inches. Duckbill pendant (Fig. 16, a), eroded limestone pendant, oblong shell pendant and long, awl-like object at neck.

Burial 141—Adult, male, flexed burial in Section 190 at depth of 30 inches. Parts of two or more undecorated clay vessels over pelvis and along left side. Plummet-type stone pendant (Fig. 17, d), another of limestone, and three eroded shell pendants in vicinity of head and shoulders. Two *Busycon* dippers near by.



A

C

E

B

D

F

G

H

K

I

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0 1 2  
INCHES

O

Burial 146—Adult, female, flexed burial in Section 189 at depth of 30 inches. One duckbill pendant (Fig. 16, c), two other stone pendants (Fig. 17, e), two shell pendants, and quantity of shell beads present.

Burial 147—Adult burial(?) consisting chiefly of teeth in Section 202 at depth of 18 to 24 inches. Associated objects were seven pendants of imported stone (Fig. 15, b and d; Fig. 16, b; Fig. 17, a, f, h, and k), two coral and two limestone plummet-type pendants, 10 shell objects including pendants (Fig. 18, a-g), and a large stone celt. The celt, not illustrated, had parallel sides. These specimens were in a cache or group of caches at or near where the chest of the burial should have been.

Burial 149—Represented by teeth in Section 189 at depth of 28 to 30 inches. A duckbill pendant (Fig. 16, d) is listed as associated.

Burial 163—Adult, male, flexed burial in Section 217 at depth of 18 inches. First molars on right sides of both upper and lower jaws worn down to alveolar processes leaving a symmetrical hole when jaws were closed. Associated objects included a paraquet head (Fig. 15, c), another stone, and two shell pendants as well as a miniature, punctated, clay vessel (Fig. 19, a).

Burial 174—Adult, female, flexed burial in Section 230 at depth of 24 inches. A shell pendant, three perforated fossil shark's teeth (Fig. 19, b-d), five awl-like shell objects, a chert scraper, and a quantity of medium-sized shell beads (Fig. 19, f) were present. According to the burial sketch, beads were arranged in three or four strings around the neck and shoulders with the shark's teeth in the second or third string. Three of the awl-like objects were over the beads and over the left shoulder (the skeleton lay on its right side) behind the ear and head.

Pottery and artifacts of stone and of shell, not associated with burials, were found over most of the area of the mound but were more frequent in the eastern half while burial offerings were much more apt to be found towards the west. Depth measurements are only occasionally given in the field notes for specific objects.

Probably the most interesting specimen is a beautifully carved



Figure 17.—Stone pendants, plummet type, from Jones mound. Florida Geological Survey; Florida Park Service photographs.

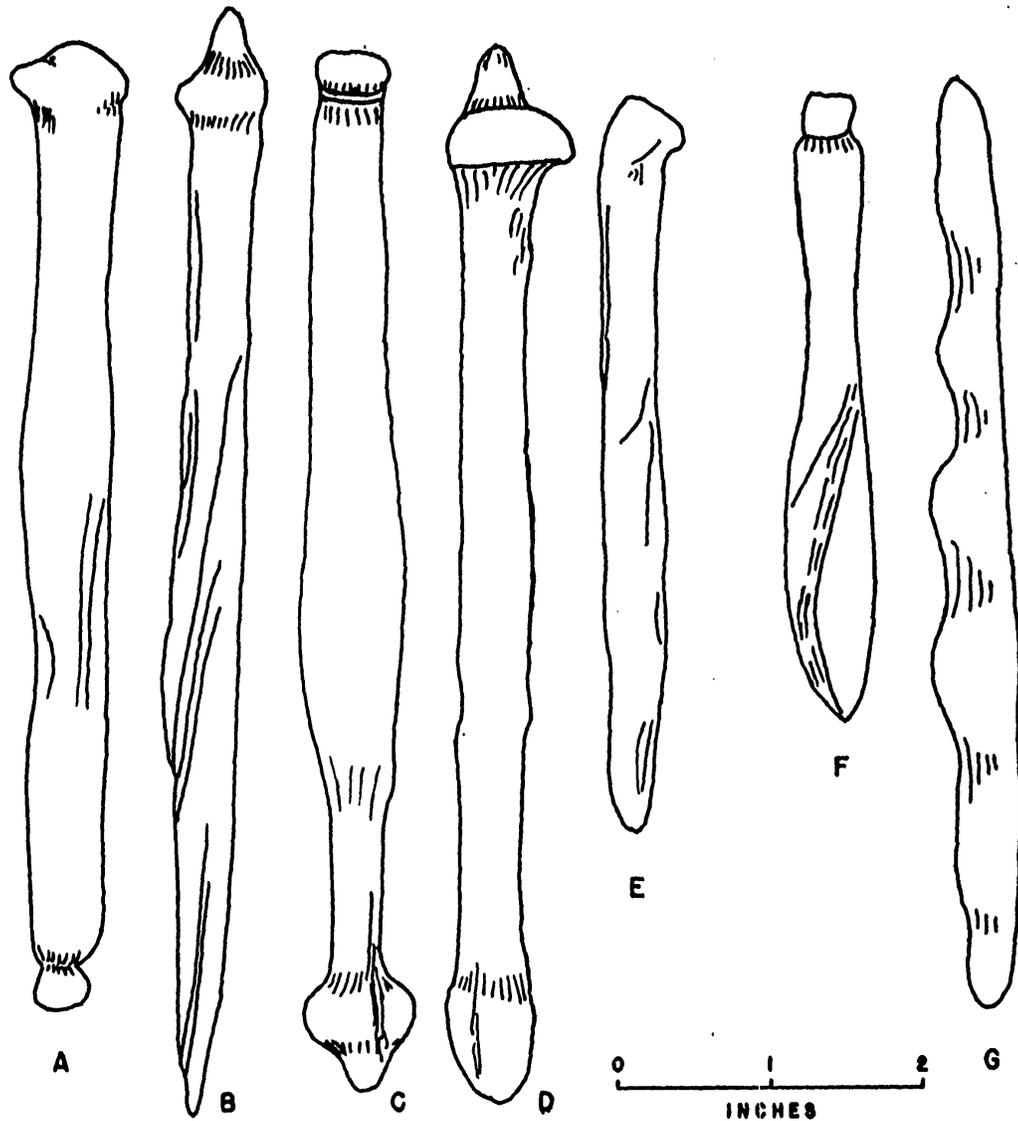


Figure 18.—Shell pendants and *Cassis* Lip, Burial 147, Jones mound.

and polished pendant of imported stone made in the shape of the head of a deer (Fig. 15, a). It was screened from loose dirt in the northeastern quarter of Section 189 at a depth of 48 inches. Burial 146 (see above), in the same quarter section at a depth of 30 inches, was well supplied with pendants. Possibly the deer head pendant originally belonged to this burial.

In Section 92, not associated directly with a burial but in such a location it might have been an offering for a child, Burial 20, was a cache of six *Busycon* dippers and three strings of shell beads at a depth of 30 inches. In Section 133, at a depth of 48 inches, was what appeared to be a cache of about 30 *Busycon* dippers as-vessels. The cache was generously sprinkled with red ochre. associated with parts of one plain and three check-stamped clay

In Section 94, at a depth of 30 inches, was a neat pile or cache of 18 pieces of chert. Some had been roughly worked into leaf-shaped blanks. Other specimens found at this site include 170 arrow points, 28 scrapers, 15 drills, two knives, 31 chipped blanks, eight hammerstones, a smooth stone ball, an abrader, 19 occurrences of chert chips, 32 of decorated and 11 of plain pottery, and some fragments of *Busycon* shells as well as a rare bead or pendant not associated with a burial. To this list may be added 17 arrow points, two scrapers, five drills, two blanks, two hammerstones, and plain and decorated sherds from exploratory trench B (Fig. 12) and six arrow points and some sherds from tests C and D. As many of the stone tools were broken, quantities given are probably greater than the actual number of tools represented.

A small collection of pottery from the Jones mound is at the Florida State Museum in Gainesville (Cat. Nos. 76639-76657, Acc. No. 3422, transferred Feb. 24, 1939, by the Florida Geological Survey; examples are illustrated in Figure 20). This collection has been classified as follows:

	Sherds	Restored Vessels
<b>Safety Harbor Period</b>		
Pinellas Incised .....	4	
Safety Harbor Incised .....	8	1
Pinellas Plain with notched rims .....	2	
<b>Safety Harbor or Weeden Island Period</b>		
Sarasota Incised .....	1	
Miscellaneous Incised .....	1	
St. Johns Check Stamped .....	3	1
St. Johns Plain .....	8	
<b>Weeden Island Period</b>		
Papys Bayou Punctated .....	23	1
Weeden Island Punctated on Pasco paste ...	1	
	51	3
Totals		

Parts of the necks of two waterbottle-shaped vessels are included in the above list under Safety Harbor Incised. One exhibits an incised, outstretched hand upon a punctation filled background, fingers to the left and thumb towards the bottom (Fig. 20, a).

Pottery from the Jones mound clearly refers to both the Weeden Island and Safety Harbor periods. Ceramic stratigraphy is suggested by Simpson who wrote in an unpublished preliminary report that pottery from the older or lower portion of the mound was Weeden Island in type while the majority from the upper portion appeared to be "degenerate Weeden Island" (Safety Harbor In-

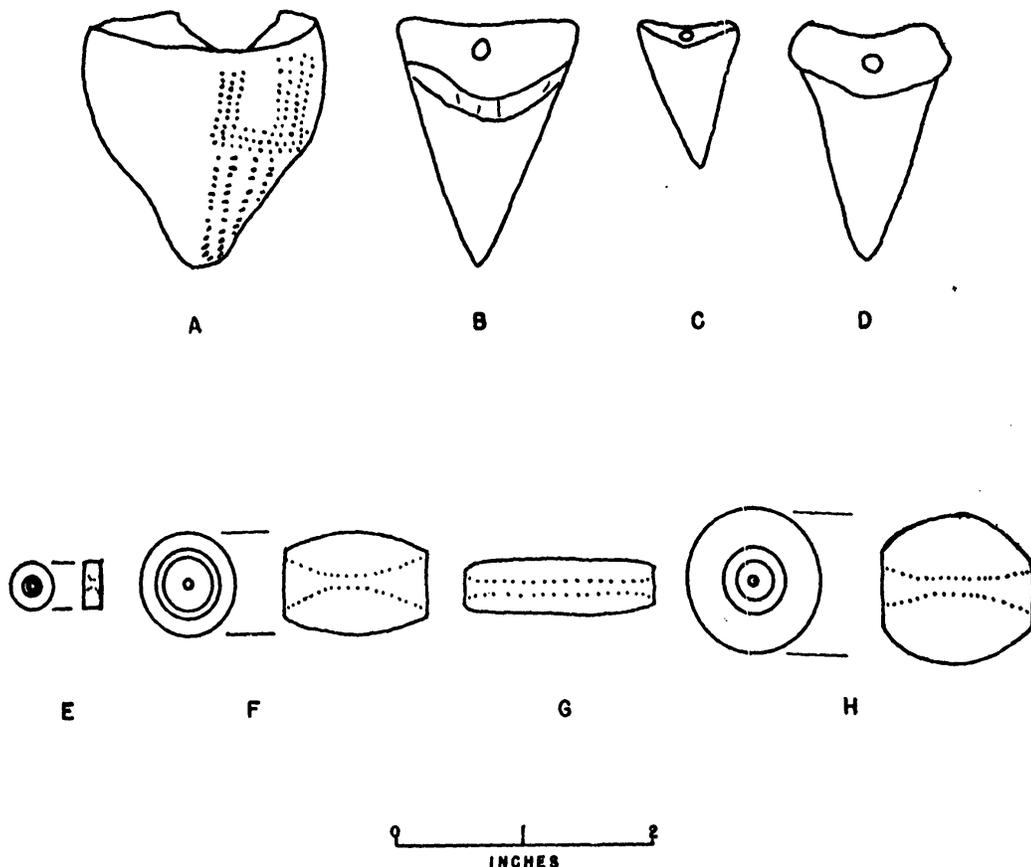


Figure 19.—Miscellaneous artifacts from Jones mound. (a) miniature punctated vessel; (b-d) perforated fossil shark teeth; (e-h) shell beads.

cised) with check-stamped and pitted plain (Pasco Plain) sherds predominating. It would appear the mound was started in late Weeden Island I times and was still being used and additions made to it during the Safety Harbor period.

No information is available in the field notes regarding types or vertical distribution of arrow points except that some are identified as narrow triangular arrow points. However, Simpson, in a preliminary published report (Anonymous, 1939, p. 59), wrote:

“In the eastern half of the mound proper [the upper part] and decreasing towards the cemetery level [lower zones] and towards the western part of the mound, were found many small triangular ‘Bird Points.’” This distribution agrees with that given for the pottery and indicates the use and continued construction of the Jones mound into the Safety Harbor period. Such points were also found in tests made in the eastern ends of the horseshoe-shaped embankment (Fig. 12), this portion having apparently been built during the Safety Harbor period.

A few objects of metal and of glass were also found in the Jones mound. These include a broken green glass bead near the surface in Section 22, a piece of sheet copper in Section 61, a small thin concave copper object, possibly an ornament, in Section 93, a piece of thin copper in Section 130, a broken trade pipe in Section 146, a copper bead in Section 160, and small pieces of copper in Section 204. The small ornament-like copper object from Section 93 was analyzed on February 11, 1938, by Mr. B. J. Owen, then Assistant State Chemist, and found to contain a relatively large amount of nickel thus indicating European origin. Probably, some of the other copper pieces are also of European or post-Columbian origin.

The vertical locations of these objects are not available except for the green glass bead. Due to the rather general horizontal distribution, it seems likely these specimens indicate that the Jones mound was used and added to as late as the historic portion of the Safety Harbor period.

### SUMMARY

Excavations at the Jones mound revealed it to be a burial mound partly surrounded by a horseshoe-shaped embankment. Pottery found there pertained to both the Weeden Island and Safety Harbor periods but sherds of the latter period were limited to upper zones. Similarly, narrow triangular arrow points of the Safety Harbor type were found in the eastern ends of the embankment and in the upper zones of the eastern portion of the mound.

The Jones mound was built during Weeden Island times, probably with a prepared subsurface base, and substantial additions were made to it during the Safety Harbor period. The horseshoe-shaped embankment was probably constructed, or at least extended easterly, during the latter period. Some additions to the mound were probably made during the historic portion of the Safety Harbor period.

Burial data; including a group bundle burial, a cremation, a few burials with burned bones at relatively shallow depths (24 inches or less) and flexed interments continuing downward to a depth of six feet; show the same sequence of burial habits encountered earlier at other burial mounds. However, to agree with data from the other mounds there should have been many more bundle



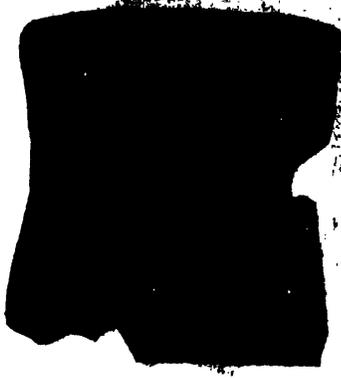
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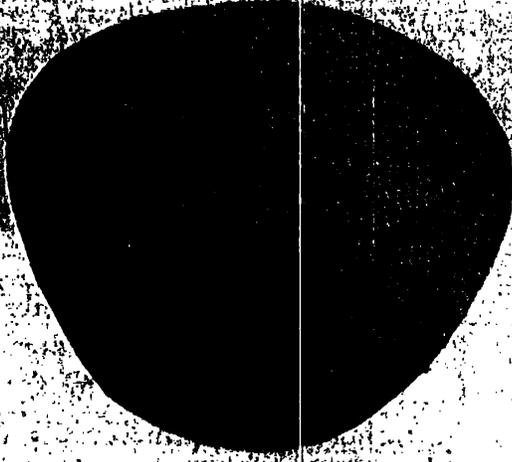
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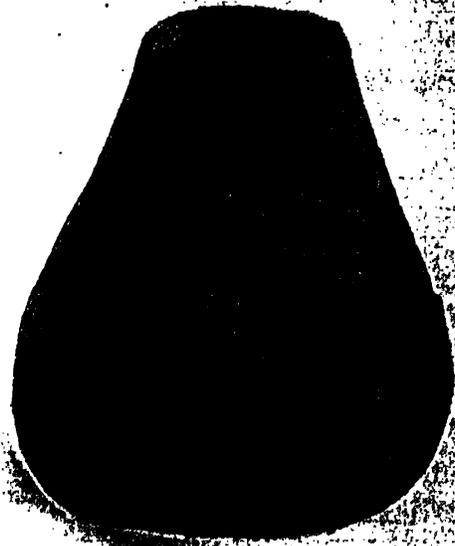
C



D



E



F

burials in the upper zones. Even if isolated skulls and indeterminate burials are considered representative of a bundle type of interment, this discrepancy would seem to remain.

Various possibilities may explain this difficulty. One would be that the Jones mound predominantly represents a Weeden Island burial mound which was abandoned and then added to and reused during the Safety Harbor period. Such a theory would seem to require the mound to have been used, during the Safety Harbor period, as a domiciliary and not a burial mound. Concentration of triangular arrow points in the eastern portion of the mound, where burials are rare and not close to the surface (Figure 13), would support this theory. It does not, however, satisfactorily explain the two floors with associated fireplaces at shallow depths in the southwestern quadrant.

Another possibility is that Indians who used the Jones mound for their interments were more conservative in their burial habits as far as the actual body was concerned, than others in the region. They may have adopted the carnal houses, triangular points, and new pottery styles of the Safety Harbor period but continued to bind their dead. Possibly the population at this site became very small after the beginning of Safety Harbor times with most of the people moving elsewhere.

The two floors with associated fireplaces in the southwestern part of the Jones mound may have represented carnal houses. That they probably were not habitation floors is suggested by the fact that domestic artifacts, found in the fill of the mound, were less frequent near these features than elsewhere.

Examination of the excavation plan (Fig. 13) indicates a peculiar horizontal distribution of burials. The greatest concentration is north of the first floor. This concentration continues, with a little less intensity, to the east and curves around the second floor up to its fireplace. This arrangement might be expected if the floors were present during times of inhumation.

Exceptions to the above are Burial 56, shown for the area of



Figure 20.—Pottery from Jones Mound: a, Neck of water bottle, showing human hand, Safety Harbor Incised; b, Pinellas Incised, sub-type B, with handle; c, Safety Harbor Incised; d, Weeden Island Punctated; e, St. Johns Check Stamped; f, Safety Harbor Incised. Sherds about  $\frac{1}{8}$ -size; e, 8 inches across; f, 4 inches high. Florida State Museum photographs.

the second floor, and an indeterminate burial, below and predating its fireplace. Burial 56 was intrusive into this floor and must post-date its construction.

Both floors at the Jones mound differ from those found at the Snavelly mounds, which were taken to represent habitation house floors. The floors at the Snavelly mound were three inches thick, described as discolored ash and charcoal area, about 25 to 35 feet across, without adjacent fireplaces and located on the flat top of the mound, and in an area of heavy artifact concentration. Those at the Jones mound, on the other hand, were six inches thick, composed of black, heavy, and somewhat "sticky" or "oily" dirt, about 15 feet across, associated with adjacent fireplaces, located at the sloping sides of the mound, and in an area of relatively low artifact concentration.

These differences plus the horizontal distribution of burials suggest, but do not prove, that the floors at the Jones mound may represent carnal houses where bodies may have been kept and semi-preserved by smoke prior to inhumation. Groups of flexed burials support this possibility. One cremation and three burials with partially burned bones are also suggestive.

Mention has been made of the extreme flexure of the skeletons found at the Jones mound. To achieve it, bodies must have been tightly bound, probably before rigor mortis occurred. If such tightly bound bodies were not left too long in a carnal house before interment, they would produce flexed and not bundle burials.

There are several similarities between the Jones and Thomas burial mounds. Both show use from Weeden Island into the historic part of the Safety Harbor period, both have embankments or earthworks, and at both, duckbill and many plumbob-type pendants were found. In the upper zones at the Thomas mound, many burials classed as vertical bundle burials were found, but these were, in many cases, articulated sitting burials in which the skull had fallen into the pelvic region. Simpson says "these interments were tightly flexed and undoubtedly bound before inhumation." If these burials had been laid horizontally or those at the Jones mound placed vertically, it is doubtful if any difference would have been discerned.

At the Thomas mound duckbill pendants, while present, were not found *in situ*. At the Jones mound eleven naturalistically

carved stone pendants were uncovered representing a deer, eight ducks, a paraquet, and an osprey. Many of these were found at the necks and chests of flexed skeletons in the western part of the mound between Sections 175 and 189 and between depths of 30 and 48 inches, associated with the plumbob type of stone and shell pendants. In Section 217 the paraquet head pendant was found with Burial 163 at a depth of 18 inches while a sherd of Weeden Island Punctated was associated with Burial 165 listed for a depth of 14 to 20 inches in the same section. For this reason and because narrow triangular arrow points, representative of the Safety Harbor period, concentrated in the eastern portion of the mound while pendants came from western sections, it seems fairly certain these specialized pendants are Weeden Island, probably very late Weeden Island, in date.

Both the Jones and Thomas mounds seem to have been related to special groups or relatively rich villages to judge from burial goods. Perhaps these sites were the homes of regional chiefs or priests. Perhaps a caste system is indicated by the presence or absence of rich burial goods.

While the Jones mound was used for burial purposes from about 1100 A.D. to about 1600 A.D., all of the special bird head pendants were made of the same material with the same workmanship. It would seem they must represent a relatively short time span in the total history of the construction and use of the mound. They were probably made by one person or a small group of persons, possibly at the Jones site, although the material, being a volcanic rock, must have been imported from the mountainous area to the north of Florida.

### PICNIC MOUND

The Picnic mound, sometimes called the Thatcher mound, was located about one-half mile southwest of the town of Picnic on the south bank of Hurrah Creek which flows into the Alafia River (Fig. 1).

In the field notes, Simpson emphasizes the amount of disturbance which had occurred prior to excavation, particularly in an upper portion or secondary mound. For this reason it is difficult to accurately determine the aboriginal appearance. An excavation plan and three profiles will be found in Figure 21.

Simpson describes a secondary mound as 60 to 70 feet in diameter and four feet in height, completely encircled by a shallow depression or trench, and superimposed over a broad, low primary mound (Anonymous (J. Clarence Simpson), 1939, pp. 60-61). To judge from the surface profiles (Fig. 21), the lower primary mound extended at least 120 feet north and south (A to B) and supported a ridge (a) along its southern border. This ridge, as well as the lateral extension of the primary mound to the north, gave the appearance of a ditch or borrow pit, as mentioned by Simpson, to

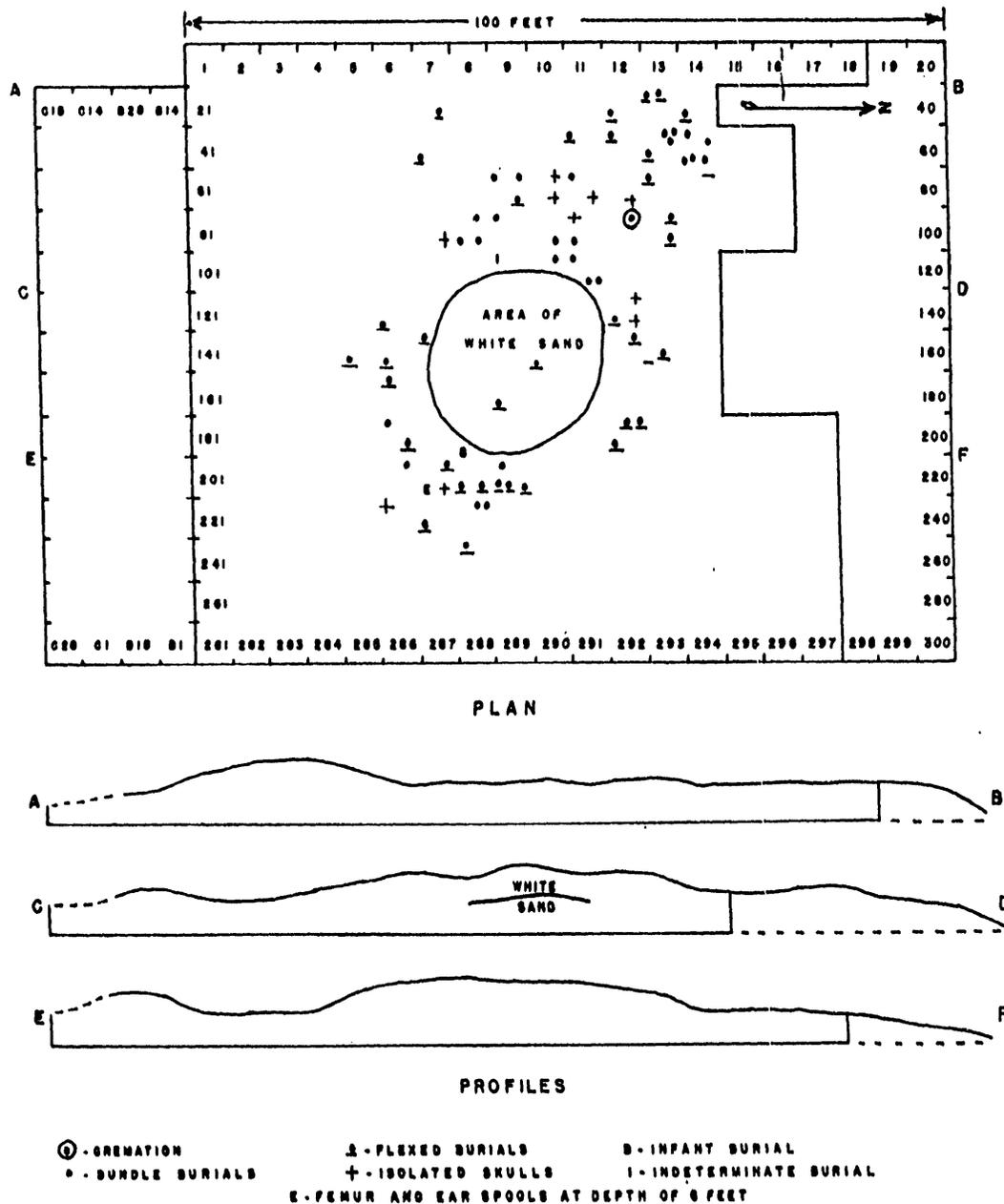


Figure 21.—Picnic mound, excavation plan and profiles.

the area immediately surrounding the upper part or secondary mound. The primary mound reached a height of about three feet above the general ground level while the ridge extended two feet and the secondary mound about four feet higher.

It is not certain whether or not the Picnic mound had a prepared subsurface base. "Remains of cypress stumps, roots, and knees, were abundant at the water level on the northern side of the mound, in some instances projecting over a foot into the mound soil itself" (Anonymous, 1939, p. 61). The bases of these stumps were at water level in yellow sand. Burial 48 in Section 209 at a depth of 60 inches had a quantity of burned wood near the pelvis. Burial 52 in Section 207 at a depth of 72 inches was "at contact with original yellow sand" and "on original surface of base." Fragments of the femur of this interment were beneath charcoal. There is less evidence of a prepared sub-mound base at the Picnic mound than at some of the mounds previously discussed.

Both primary and secondary portions of the Picnic mound were built of dark, heavy, loamy sand with no demarcation lines to indicate pauses in construction. There was, however, a zone of white sand, three inches thick and about 25 feet in diameter, located near the center of the mound (Fig. 21). The western edge of this white sand was 30 inches and the eastern edge 30 to 34 inches below the surface while elevation above the base of the mound is given as 24 inches for the western and 24 to 30 inches for the eastern edge. As shown in the middle profile (Fig. 21), the layer of white sand was slightly dome-shaped.

As has been mentioned, the secondary mound had been nearly entirely dug over prior to excavation. Originally it contained burials and many post-Columbian objects. Screening of this disturbed dirt produced fragmentary skeletal material, objects of European origin, including many glass beads of various types, and nearly 100 narrow triangular arrow points. Lower zones produced 77 undisturbed burials whose vertical distribution by types is given in Table 6. Apparently, these interments came from the lower portion of the secondary mound as well as from the underlying primary mound.

In spite of the aforesaid disturbance the vertical distribution of burial types is similar at the Picnic mound to that at other mounds in Hillsborough County. Bundle burials were uncovered at

TABLE 6.  
VERTICAL DISTRIBUTION OF BURIALS AT PICNIC MOUND

Type	Depths in feet					
	1-2	2-3	3-4	4-5	5-6	6-7
Cremation .....			1			
In <i>Busycon</i> dipper .....			1			
Vertical bundle .....			2			
Horizontal bundle .....	7	8	4	1		
Isolated skulls .....	2	1	10	4	1	
Flexed .....	5	8	6	8	6	
Indeterminate .....				1 <sup>1</sup>		1 <sup>2</sup>

<sup>1</sup>Child, 2-4 years

<sup>2</sup>Femur, ear spoons

relatively shallow average depths as compared with flexed burials.

Except that field designations of age and sex show many more adult males than adult females, a normal population is indicated as follows: one baby, three children, two youths, 24 male adults, four female adults, 10 adults of unknown sex, 10 old male adults, four old female adults, and 19 unspecified as to age or sex.

In eleven instances, bodies were accompanied by burial goods, articles of personal adornment, or specimens accidentally included in grave fill. *Busycon* shells or dippers have been mentioned earlier for other burial mounds but close association between such utensils and skeletal material was more prominent at Picnic mound than elsewhere in Hillsborough County.

Burial 27, a group burial at a depth of 40 inches, was supplied with a ceremonially broken pottery vessel, eight inches in diameter. Ochre had been spread over the skulls and the vessel. Burial 43, a flexed interment at a depth of 60 inches, appears to have been supplied with a small pot and a *Busycon* dipper. A flexed burial, number 46, at a depth of 46 inches, had sherds of a small decorated pot in the vicinity of the ribs. The fill of Burial 39, a flexed burial at a depth of 36 inches, contained the neck of a Safety Harbor Incised water bottle.

Burial 25, at a depth of 24 inches, consisted of parts of the skeletons of a very young adult and an infant with which four *Busycon* shells were associated. Apparently, this was a bundle burial, and *Busycon* shells had been placed over each skull and over some of the other bones. A flexed burial at a depth of 60

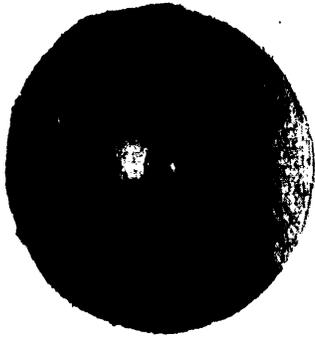
inches, Burial 57, was supplied with a *Busycon* dipper placed just behind the skull.

A shell bead and the bones of an infant found in a *Busycon* dipper, at a depth of 26 inches, comprised Burial 40. Forty additional shell beads are listed in the field notes after the notes on this burial but association is not stated. Three large shell beads and the bones of a very young child formed Burial 50, found at a depth of 50 inches. A large shell bead was also found at the neck of the flexed interment of an old male, Burial 48, at a depth of 36 inches.

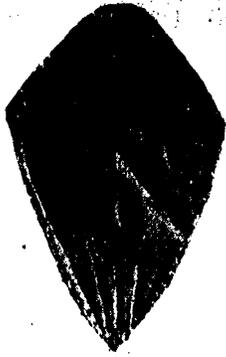
The two most interesting interments were Burials 36 and 52. The latter consisted of fragments of a femur and two copper-covered cypress ear spools. These specimens are not illustrated but each consisted of an oval-shaped piece of wood, two and one-eighth by two and one-half inches, with a convex, copper-covered outside. The opposite side was flat except for a "lug," about one-half inch in diameter and one-quarter of an inch thick, located adjacent to one of the longer sides. This was the deepest burial, found at a depth of 72 inches lying upon undisturbed yellow sand. Another ear spool (Fig. 22, c), made of stone and covered on its flat outer side with copper, is recorded for this site but its original location is not given in the field notes.

Burial 36, uncovered at a depth of 30 inches is mentioned as disturbed but appears from the burial sketch to represent a bundle burial. Objects associated with this burial included a bead of fossilized manatee bone, one-half inch in diameter; two large blue glass beads; remnants of iron and of copper; and two carved bone ornaments stained with copper salts (Fig. 22, e-f).

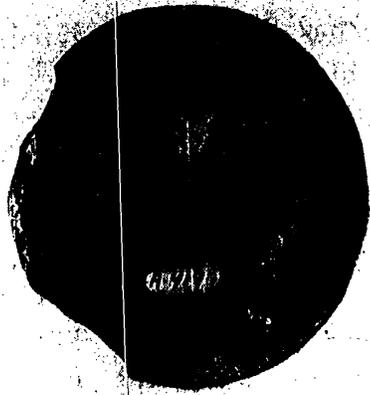
Pottery was distributed at random throughout both the primary and secondary mounds. Unfortunately, sherds from the secondary mound were not segregated from the others and trends in ceramic designs can not be determined at the Picnic mound. Most of the decorated and some of the undecorated pottery is stored at the Florida State Museum in Gainesville (Cat. Nos. 76658-76735, Acc. No. 3422, transferred February 24, 1939, by the Florida Geological Survey) and examples are illustrated in Figures 22 and 23. This collection has been classified as follows:



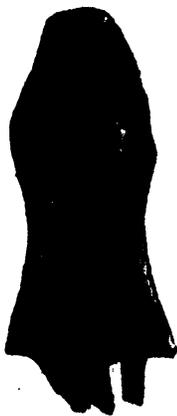
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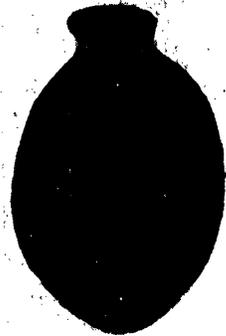
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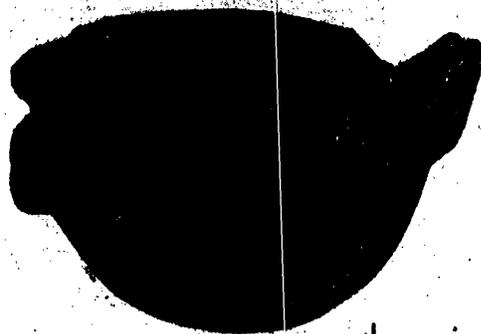
H



INCHES



I



J

	Sherds	Restored Vessels
<b>Safety Harbor Period</b>		
Lake Jackson Plain .....	3	
Pinellas Incised .....	17	
Pinellas Plain, notched rim .....	2	
Plain, Pinellas paste .....	7	
Safety Harbor Incised .....	44 <sup>1</sup>	3
Ft. Walton Incised .....	19	
Plain, Ft. Walton paste .....	2	
<b>Safety Harbor or Weeden Island Period</b>		
St. Johns Check Stamped .....	28	
St. Johns Plain .....	4	
Little Manatee Zoned Stamped .....	1	
Miscellaneous Stamped .....	1	
Miscellaneous Incised .....	3 <sup>2</sup>	
Belle Glade Plain .....	42	
Smooth Plain .....	4	
Residual Plain .....	15	
<b>Weeden Island Period</b>		
Weeden Island Incised .....	2	
Weeden Island Punctated .....	1	
Papys Bayou Punctated .....	4	
Dunns Creek Red .....		1
Totals	199	4

<sup>1</sup>Includes ten with interior red paint.

<sup>2</sup>Includes two with interior red paint.

Some of this pottery is of the Weeden Island period but much of it is referred to Safety Harbor times. Included among the restored vessels are a frog effigy container (Fig. 22, j) and a water bottle decorated with incised hands upon a punctation filled background (Fig. 22, i). The hand is repeated three times on the body and twice on the neck. Parts of decorated necks of three other water bottles are also in the collection (Fig. 23, c, g, l).

The pencil drawings of the pottery from this site, that accompanied the notebooks, include two small representations of human faces with pierced ears. These specimens are not illustrated in this report but they are one and one-half to two inches in size and are made of clay. Both were rim decorations of clay vessels.

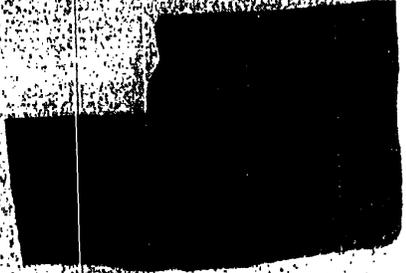
Stone tools found at the Picnic mound include ten scrapers, nine abraders, two spear points, several stemmed points, four



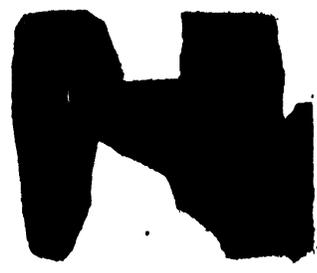
Figure 22.—Miscellaneous artifacts from Picnic Mound: a, Silver disc; b, decorated silver pendant; c, ear spool of stone (steatite?), front copper covered; d-f, carved bone ornaments, copper-stained; g-h, stone pendants; i-j, Safety Harbor Incised vessels. i, 10 inches high; j, 3½ inches high. a-h, Florida Geological Survey, Tallahassee; i-j, Florida State Museum, Gainesville. Florida Park Service photographs.



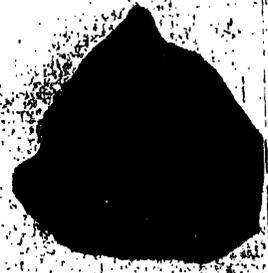
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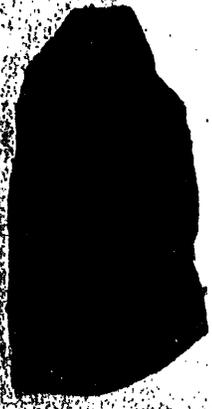
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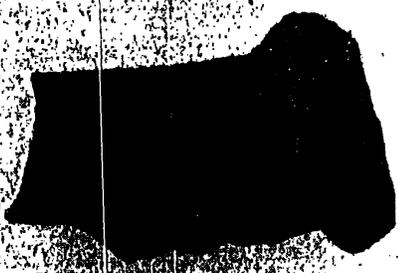
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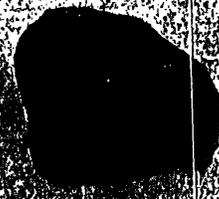
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I



J



K



L

INDEX

stone pendants, three pieces of galena, two pieces of mica, and over eighty narrow triangular arrow points. Points were restricted to higher elevations and, hence, appeared relatively late in the construction of the mound. Simpson (Anonymous, 1939, p. 61) confirmed this when he reported that nearly 100 small triangular "Bird Points" were screened from the disturbed upper secondary mound. The most unique pendant is illustrated (Fig. 22, h). Others were of simple plumbob types (Fig. 22, g). The mica came from Sections 169 and 189 at depths of 50 and 40 inches respectively or below the deposit of white sand. This location should indicate a relatively early or Weeden Island date of deposition.

Shell artifacts include a large hammer or pick as well as the beads and *Busycon* dippers mentioned earlier. One drilled and five undrilled shark's teeth were also found. Other artifacts of bone are represented by a bone awl, a pear-shaped ornament, and the two carved and copper-stained bone objects (Fig. 22, e-f) found with Burial 36. A similar carved bone specimen, exhibiting part of a shaft, was found in Section 207 (Fig. 22, d).

A large number of glass beads and post-Columbian metal objects were found, particularly in the upper or secondary mound, both during the W.P.A. excavation and previously. Some of these have been mentioned. An iron celtiform axe came from disturbed dirt at a depth of 26 inches.

Silver objects included a small claw- or fang-like object, a perforated disc (Fig. 22, a), a decorated pendant (Fig. 22, b), an undescribed pendant, and what appears to have been the cover of a tobacco pipe. The last object was probably lost by someone while digging in the mound during the last 100 years.

The small, silver, claw-like object, one and five-eighths inches in overall length, is of considerable interest. It was made in middle America and, undoubtedly, came from the wreck of a Spanish vessel. As such wrecks usually occurred in south Florida, communication in some form between that area and Hillsborough County seems indicated.



Figure 23.—Miscellaneous sherds from Picnic Mound: a-b, Ft. Walton Incised; c-d, g, l, Safety Harbor Incised; e-f, Pinellas Incised; h, Pinellas Plain with notched lip; i, Lake Jackson Plain, sub-type C; j, rim sherd with notched lip and punctated body; k, Weeden Island Punctated. g, l, necks of water bottles (l, double scale). Florida State Museum photographs.

Horizontally, specimens of metal concentrated southeast of the center of the mound in a triangular area outlined by Sections 144, 225, and 231. It seems evident they and the glass beads came from relatively shallow depths and indicate use of the Picnic mound for burial purposes during the historic part of the Safety Harbor period.

Sherds, eleven arrow points, a chipped blank, an abrader, a small hammerstone, and two pieces of iron were found in Trenches B and C, dug in the area of the ridge at the southern end of the mound (Fig. 21). The iron came from a depth of 40 inches in Section C-7 which would suggest the ridge to have been added in post-Columbian times or during the historic part of the Safety Harbor period.

### SUMMARY

The Picnic mound may have been originally built, in part, to cover the deepest burial, Burial 52, which had copper-covered ear spoons. When completed it was probably a low, dome-shaped affair and probably also contained Burials 57 (at a depth of 60 inches) and 64 (found below the deposit of white sand) and perhaps some of the other deep flexed interments. This construction occurred in Weeden Island times and may have commenced as early as 1000 A.D.

Subsequently, a cap of white sand, three inches thick and 25 feet in diameter, was deposited on the dome-shaped central part of the mound. Significance of this cap is not evident but knowledge of its location and the avoidance of its area for inhumation is suggested by the horizontal distribution of other burials as shown on the excavation plan (Fig. 21).

As time passed, the secondary mound was added and also the low ridge to the south. These additions may have been made gradually over a long time or as major projects over a short time. Toward the completion of the mound bundle burials began to displace flexed interments as the burial norm. Much of the upper portion was made during the Safety Harbor times to judge from the pottery and triangular arrow points while final additions occurred during the historic portion of that period.

While burials are not shown on the excavation plan (Fig. 21)

for the part of the mound built over the deposit of sand, this does not imply knowledge of and avoidance of this area throughout the useful life of the mound. It will be remembered that most of the upper portion of the secondary mound had been disturbed prior to excavation and that burials had been found. If their locations were known and plotted, it is likely there would have been some over the layer of the sand.

Presumedly, such burials would have been either bundle interments or cremations, as these types have been found at other mounds with historic goods. In support of this assumption it may be pointed out that the only burial with historic goods found during excavation of the Picnic mound, Burial 36, was apparently of the bundle type.

There are obvious similarities between the Thomas, Jones, and Picnic mounds in succession of burial forms, types of pottery, and presence of some form of earthworks. As the ceramic stratigraphy in these mounds has not been well-preserved, it may be worth noting that the one with the highest percentage of Safety Harbor pottery types, the Picnic mound, is also the one with the greatest amount of historic material.

### SELLNER SHELL MIDDENS

Extending for about a half mile along the south bank of the mouth of the Little Manatee River, opposite the Thomas mound and about two miles north of Sun City, are, or were, large deposits of shells. Such shell heaps were lived on by Indians while being formed by accumulating refuse discarded by the inhabitants.

Excavations were made in three places; the eastern part of the main shell heap, owned by Robert Sellner; the next lot to the west, part of the same deposit but owned by a Mr. Smith; and smaller shell deposits about one-quarter mile to the east, owned by Henry Sellner. It is not clear from the field notes how much was excavated at Robert Sellner's but it has been estimated as an area about 40 by 70 feet. At Mr. Smith's plot, 1875 square feet were dug but the digging was substantially less on Henry Sellner's lot. Work at Robert Sellner's and Smith's will be considered together as the same strata were found in both cases.

The main deposit varied from seven to nine feet in thickness,

depending on surface elevation and slope of the underlying ground and consisted of shells, discarded from innumerable meals, with which were mixed bones of food animals, charcoal, ashes, pottery, and artifacts made of shell, bone, and stone. The charcoal, ashes, food bones, sherds, and artifacts were concentrated in "midden layers" and were separated by zones of relatively clean shells.

Four layers of concentrated midden material were uncovered at depths of one and one-half, three and one-half, seven and one-half, and nine feet, respectively. The highest midden layer was six to eight inches in thickness. The lowest covered an area some 60 feet across while the highest extended 130 feet. Intermediate midden layers had widths between these extremes indicating growth of the shell heap laterally as well as vertically with time.

At various places these midden strata thickened and dipped downward to form fireplaces filled, primarily, with charcoal, ashes, and burned shells. Three such fireplaces, two to two and one-half feet in diameter, were found in the highest midden layer at Robert Sellner's and four, varying from four to six and one-half feet in diameter, in various strata at Smith's. The largest, at the base of the heap at Smith's, contained ashes and had a vertical dimension of two feet.

Oyster shells predominated in the heap but other shells, native of the region, were also present. At a depth of four feet at Robert Sellner's, oysters, coquina, scallop, and clam shells were noted. Other types of shells are listed later as used in the manufacture of tools. For the deepest midden strata, oyster shells, fish bones, sting ray spines, and fragments of turtle carapaces are mentioned.

The base of the shell heap at both Robert Sellner's and Smith's rested on gray beach sand but in addition two mangrove stumps were found at the bottom near the center of the deposit at Smith's.

One burial, the flexed interment of an adult male, was found near the surface on the north side of the shell heap at Smith's. It was unaccompanied by any burial objects.

Specimens recovered from the mound included a copper penny, a copper punch, modern iron and brass, lead weights, a long glass bead, and bones of a pig and of a horse or of a cow. Most of these items were found near the surface and may be considered recent

with the possible exception of the horse and pig bones. These bones were split, as if for marrow extraction, and found apparently, as deep as one to two feet. However, they appear to have been limited to two locations near the northeastern border of the heap so that they are possibly intrusive.

Field notes indicate vertical distribution of certain aboriginal artifacts, in some cases by depth measurements, in others by inclusion in the upper three feet or in the lower part of the shell heap. Thus some of the specimens may be divided into an upper or relatively late and a lower or relatively early period. Unfortunately, none of the objects themselves are available.

Check-stamped and other decorated sherds were limited to upper zones. St. Johns Plain, present in both zones, appears to have been more common in the upper zone. Other plain sherds were about equally divided between the two zones while those from lower levels at Smith's are referred to as "low grade pottery."

The most common artifacts—small shell hammers, bone awls, detached columellae, abraders of sandstone, *Venus* shell anvils, columella gouges or chisels, and *Oliva* shell beads, in descending order of frequency—were typical of both zones although many more of the hammers came from the upper zone and more of the columella chisels from the lower zone. A *Busycon* dipper and a bone artifact with barbed sides were found in the upper zone. Interestingly, a lump of red ochre, a ground deer jaw, two bear teeth pendants (drilled?), a long shell bead, a fragment of a celt, and a double knobbed bone artifact came from the lower zone. Other specimens include two arrow points, worked sting ray spines, a bead of manatee bone, an antler punch, a polished stone, one-half inch in diameter and one and one-half inches in length, and a columella pendant, which was uncovered at a depth of 60 inches.

Evidences of food animals, other than those of shell fish, included bones of deer, bear, opossum, raccoon, rabbit, bird, turtle, alligator, and fish, including rays and sharks. Among mammals, deer bones were the most, and bear bones the least, common. Fish bones are mentioned as very common, turtle as common, and alligator as fairly common.

At Henry Sellner's, one-quarter mile to the east, six small shell midden deposits were located. Each presumably represented in-

dividual house sites. One was circular, nine feet in diameter, but most were oval, varying from nine to fifteen feet in length and from six to eight feet in width. Close to four of these deposits, on the side opposite the river, were shallow depressions.

Exploratory trenches were dug in two of the shell deposits and between one of them and one of the shallow depressions. Plain sherds, detached columellae, etc., were found. These exploratory trenches were not very productive and little work was done. It is likely such small deposits of shell and refuse represent the earliest stage of large shell ridges such as were excavated at Robert Sellner's and Smith's.

### SUMMARY

Excavation at the Sellner shell heap was done by removing the upper 36 inches over a large area before underlying deposits were examined. When this work was done, fifteen years ago, pottery types and their significance as well as chronological implications of various types of stone, bone, and shell tools were practically unknown. This work represents the first extensive attempt to secure chronological data from a Florida shell heap. It is most unfortunate all the data have not survived for analysis.

Evidence of at least two archaeological periods was secured at the Sellner shell midden. It is reasonable to believe that the upper levels, containing check-stamped and other decorated pottery, were deposited during Weeden Island II and, possibly, also during later times. Deeper deposits with predominantly plain pottery are referred to the Weeden Island I or Perico Island periods. Undoubtedly, this shell heap started to accumulate during what we refer to as the Perico Island period, about 100 B.C. to 700 A.D., but probably very late in that period, perhaps about 500 A.D. If it were still inhabited at the close of the Weeden Island II period, for which we have indicated a date of about 1400 A.D., it had a useful life of about 900 years! Such use, however, may have been intermittent.

Indians lived on the growing Sellner shell heap where they brought the shell fish which supplied the bulk of their sustenance. To this home they also brought deer and other products of hunting, and probably nuts and roots, to supplement their diet. Fishing and turtle collecting must have been major operations to judge

from the large number of bones of these species reported. Here they also made their pottery containers and other tools, clothes, and ornaments. Probably they were protected by some form of house.

A small group of Indians undoubtedly lived for generations at the Sellner shell midden. After death they may have been interred in a nearby but now unknown burial mound or, quite likely, ferried across the Little Manatee River to repose in what we refer to as the Thomas burial mound.

### BUCK ISLAND

Buck Island, a relatively high, sandy island completely surrounded by dense cypress swamp, is located on the south side of Cypress Creek, a mile west of its confluence with the Hillsborough River and about nine miles northeast of Tampa. At the time of excavation the island belonged to the estate of the then late Percy A. Rockefeller.

Due to the surrounding swamp, it was necessary to construct an access causeway which consisted of 880 feet of bridge and 526 feet of earth fill. The island had an area of about 20 acres, on 11½ of which evidence of Indian occupation was found. Exploration consisted of a main excavation, 105 by 160 feet, a smaller excavation, 20 by 55 feet, and fifteen exploratory trenches.

The island was formed of sand, the upper three to seven feet of which is described as white in color. At these various depths representing the base of white sand, limonitic concentrations and, in places, yellowish, crusty, limonite—cemented sand was found. Junction between these zones was extremely irregular. The lower zone is probably a post-occupation phenomenon resulting from deposition of iron salts by seeping surface water.

Apparently, the surface of the island consisted of various sandy ridges, upon which and in which evidence of Indian occupation was found, and a burial area or mound. The latter is described as low, irregular, and previously disturbed to a large extent. Apparently, the burial area was formed by digging a large hole and throwing sand outward for burials around the margin.

Twenty-eight burials, some multiple, were found near the center

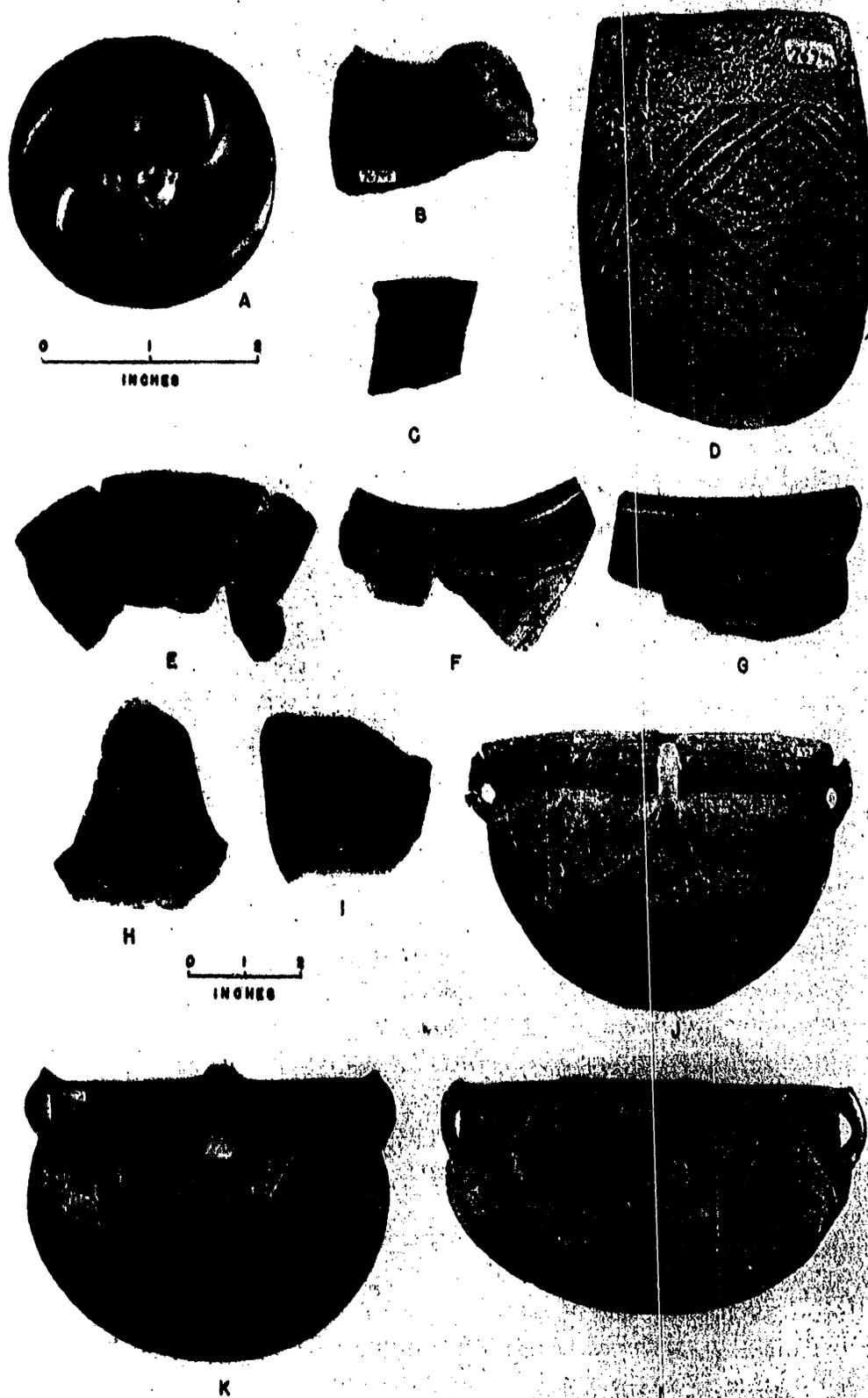


Figure 24.—Miscellaneous artifacts from Buck Island: a, Gold disc with central gold button; b, duck head vessel adrona, Weeden Island Zoned Red;

of the main excavation. Of these twenty-one were concentrated in an area 30 feet across, five were 15 to 25 feet further to the north, and two were 30 and 50 feet further to the west. While some disturbance had occurred, all burials seem to have been secondary interments of the bundle type although a few may have been those of isolated skulls.

Skeletal material was badly decomposed and damaged by tree roots so that no information is available regarding age or sex. Artifacts associated with burials, placed there either intentionally or accidentally, consisted of three stone beads, one inch in length, a conch shell, sherds, and two pieces of gold.

Burials were recorded between depths of one and three feet. Burial 19, at a depth of 24 inches, comprised six skulls and scattered bones. Under one of the skulls was a decorated gold disc. In an adjacent section, also at a depth of 24 inches, was a much smaller undecorated gold disc. These discs have been reassembled to form one ornament as shown in the illustration (Fig. 24, a).

Plain and decorated pottery, narrow triangular (Safety Harbor type) and stemmed arrow points, and a stone celt were also found in the burial area. The celt was five and three-quarters inches long, two and three-quarters inches wide at the edge and one and one-quarter inches wide at the poll end.

Data from the site as a whole suggest the presence of a pre-ceramic occupation. Near the burial area, pottery and other artifacts were found to lie in a zone, eight to twelve inches thick, about a foot below the surface. In another location, sherds occurred between the surface and a depth of 18 inches. Chips and worked chert, on the other hand, were recorded for depths of five feet and mentioned several times as occurring at the base of white sand and in the upper part of the limonitic zone. Individual spear points were noted at depths of 24 and 38 inches and a cache of eight of them at a depth of 36 inches. Those in the cache averaged five and one-half inches in length and one and three-quarters inches in width. A charcoal deposit was found at 27 inches and a deer jaw at 36

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c, Pinellas Incised; d, small vessel, Safety Harbor Incised; e, Pinellas Plain with notched rim; f, Papyrus Bayou Punctated; g-i, Weeden Island Punctated; j-l, Pinellas Incised vessels, restored. d, 3½ inches high, j-l, 10-11 inches in diameter. a, Florida Geological Survey; balance Florida State Museum photographs.

inches. If sherds were not found below a depth of 18 inches, the sum of these data should indicate the presence of a preceramic zone.

Except as mentioned above, specimens cannot be placed vertically. The field catalogue includes, in addition to items mentioned earlier, 43 spear points, 350 whole and fragmentary arrow points as well as 20 specifically mentioned as narrow triangular in shape, 30 scrapers, six hammerstones, a sandstone abrader, four shell columella, and over 125 fragments of *Busycon* shells. This material and also the pottery came from excavations throughout the site, not just from the burial area.

Both plain and decorated pottery is mentioned in the field notes but identification was not attempted. Some of this collection is now at the Florida State Museum in Gainesville (Cat. Nos. 76736-76787, Acc. No. 3422, transferred February 24, 1939, by the Florida Geological Survey; examples are illustrated in Figure 24). A classification of this pottery follows:

	Sherds	Restored Vessels
<b>Safety Harbor Period</b>		
Lake Jackson Plain .....	6	
Pinellas Incised .....	1	3
Pinellas Plain, notched rim .....	15	
Plain, Pinellas paste .....	42	
Safety Harbor Incised .....	7	2
Engraved (?) (see below) .....		1
<b>Safety Harbor or Weeden Island Period</b>		
Englewood Incised .....	6	
Sarasota Incised .....	1	
St. Johns Check Stamped .....	3	
St. Johns Plain .....	18	
<b>Weeden Island Period</b>		
Weeden Island Zoned Red, adorno .....	1	
Weeden Island Punctated .....	1	
Weeden Island Plain .....		2
Papys Bayou Punctated .....	25	
Similar but on Pasco paste .....	2	
Tampa Complicated Stamped .....	5	
St. Petersburg Incised .....	3	
Plain, sand-tempered .....	6	1
<b>Unique</b>		
Boat-shaped with loop handle .....	2	
Alternate oblique hatching and punctations in plain area in band below rim, body Wakulla		
Check Stamped .....	3	
<b>Totals</b>	<b>147</b>	<b>3</b>

Under restored vessels, one was listed as engraved. The few sherds, from which this vessel was formed, exhibit fine, apparently post-fired incisions. The pattern cannot be determined with certainty but seems to represent part of a "feathered being."

The Weeden Island Zoned Red adorno clearly represents a duck (Fig. 24, b). The collection includes pottery types typical of both Weeden Island and Safety Harbor periods. Unfortunately sherds cannot be segregated except typologically.

### SUMMARY

Excavations at Buck Island disclosed an extensive village area and a small burial area or mound from which twenty-eight interments, apparently all of the secondary or bundle type, were removed.

As a gold disc was found under the skull of one of these burials, and all burials were of the same type, it may be suggested these interments were made during the Safety Harbor period although some may date from late Weeden Island II times. Pottery from the rest of the site refers to both Weeden Island and Safety Harbor times.

A preceramic occupation has been suggested based on the field data. If one were present, there must have been an hiatus at the site from preceramic times up to the Weeden Island period, as ceramic material to fill such a gap was not encountered.

### CONCLUSIONS

Available data from eleven excavations conducted in Hillsborough County in 1935-8 under W.P.A. auspices have been presented. Sites include a shell midden village, two domiciliary mounds, and eight burial mounds. With the probable exception of the lowest levels at Buck Island, all of these remains were those of Indians who manufactured pottery.

Information from the shell midden village located at Sellner's, showed Indians had lived there, either continuously or intermittently, for an extremely long time, undoubtedly several hundred years, while the accumulation of refuse attained a depth of seven to nine feet. During this time changes occurred in industrial prod-

ucts. The most important of these, in terms of local chronology, was the relatively late appearance of check-stamped and decorated pottery.

The data are not sufficiently specific to permit reconstruction of aboriginal life at different time periods. Nevertheless, the large inventory makes the reconstruction of Indian life on shell middens possible if questions of chronology are forgotten. This is of considerable interest as living on shell heaps was typical of the Tampa Bay area for a thousand years or more. Evidence from other large shell middens of the region agrees with that from Sellner's to show that such villages had an extremely long life which spanned two or more archaeological periods.

One of the unresolved problems of Florida archaeology may be included under the term "domiciliary mounds." These low but fairly wide "mounds" have been sporadically investigated by Clarence B. Moore and others with very meager results. The W.P.A. excavations included two sites, Spender and Snavely, which represented this type of mound.

Work at the Spender mound did little more than show it to have been built by man. Removal of a shell cap, about two feet thick, five years prior to excavation, is the probable reason for the scarcity of artifacts, or features suggesting houses. Both Snavely mounds contained ash and charcoal areas, near their surfaces, which were suggestive of house floors although no post holes, for walls, were noted. The horizontal distribution of sherds and chipped stone at Snavely Mound A supported the theory it was built as the foundation for a home.

That such mounds were built during the Safety Harbor period, is indicated by small triangular arrow points, typical of that period, found at Snavely's. The pottery and a bundle burial would not argue otherwise. It is rather likely that domiciliary mounds were not built during earlier periods but this assumption is based entirely on negative evidence.

Where available, stratigraphic data from the eight burial mounds agree with the accepted chronology of the Tampa Bay area. These data, combined with that from Sellner's shell midden, confirm that the Weeden Island period followed one during which pottery decoration was rare and was, in turn, followed by the

Safety Harbor period. At the Thomas mound, for example, decorated pottery came from zones higher than those which produced primarily undecorated sherds while types of the Safety Harbor period were limited to shallow depths. Similarly, at the Jones mound, Safety Harbor ceramics overlaid those of the Weeden Island period. Triangular arrow points, a Safety Harbor type, were relatively high in the Picnic and Jones mounds. The presence of European goods at superficial depths in five of these mounds indicates their use into the historic portion of the Safety Harbor period.

Data also support the theory that some Weeden Island mounds had been built upon prepared subsurface bases. Special pottery caches near mound peripheries do not seem to be a Weeden Island period trait of Hillsborough County. Carved and polished stone pendants (of duckbill and other special shapes) may be correlated with the Weeden Island period but those of the plumbob types were also used in Safety Harbor times.

The late introduction of carnal houses was suggested by data from the Jones mound. At least what was taken to represent such structures, was found near the surface of this mound while similar structural features were not found at intermediate depths in this or any of the other mounds.

Use of burial mounds over long periods of time is indicated by cultural stratification. These data include pottery superposition, relatively shallow depths of triangular arrow points versus stemmed points, and superposition of burial types. The latter will be discussed more fully later.

Mound structure also supports such a theory. For Thomas a primary and a secondary mound have been suggested. At Picnic a white sand divided two zones of midden sand and at Jones a humus layer separated sand zones, piled upon a prepared base. At Lykes the prepared base was covered by midden shell over which sand had been deposited while at Cockroach white sand separated a midden zone from clean shells.

The sum total of these data indicates the large number of individuals found buried in these and similar mounds is probably a function of time and not that of a large local population.

Superposition of types of burials at the eight mounds presents a picture of changing habits in disposal of the dead. These types include skeletons prone or extended on the back, flexed on the side, isolated skulls, bundles of more or less disarticulated bones, and cremations, listed in their apparent chronological order.

Prone interments were found at only two sites, Cockroach Key and the Thomas mound. At the former site one or two such burials were found in the mound proper near the bottom of the burial zone. At Thomas seven prone burials were uncovered during the second visit, all in the lowest foot of skeletal producing deposit. At the famous Weeden Island burial mound on the west side of Tampa Bay (Fig. 1), prone interments were in lower zones into which flexed burials had intruded (Willey, 1949, p. 108).

These data agree in demonstrating prone interments to be the oldest type at the mounds under consideration. In none of these cases do they appear to be burials of especially important people. In terms of culture periods of the region, they may be early Weeden Island I in date or, more likely, they represent a holdover trait from the earlier Perico Island period.

Flexed burials were found in the same levels as prone interments in the two mounds mentioned above but were also present at substantially shallower depths. They were also uncovered in the Picnic, Jones, and Lykes mound. In each of these mounds bundle interments were also found and all occurred at an average depth shallower than the flexed burials, although there were substantial overlaps vertically. This suggests a gradual change in burial modes with bundle burials replacing flexed inhumations. At the Weeden Island mound, again, bundle burials overlay flexed ones (Willey, 1949, p. 108).

Of the five mounds, Thomas, Cockroach, Picnic, Jones and Lykes, with bundle burials higher than flexed burials, Cockroach Key produced check-stamped pottery—presumably a Weeden Island II type—in higher zones while Thomas, Picnic, and Jones contained Safety Harbor as well as Weeden Island pottery types. At Thomas the Safety Harbor pottery was, apparently, limited to higher zones. At Picnic, narrow triangular arrow points, a Safety Harbor type, were relatively high. At Jones, both Safety Harbor sherds and triangular arrow points were relatively high. For the Lykes mound, there are no data regarding either pottery or arrow points.

Data from Thomas, Picnic, and Jones suggest a correlation between flexed burials and Weeden Island pottery and between bundle burials, Safety Harbor sherds, and triangular arrow points. However, the lack of such arrow points or of definitively Safety Harbor pottery at Cockroach Key argues differently, as does the presence of some Weeden Island pottery at Buck Island and at Cagnini with bundle burials but no flexed interments.

The inference is that the change from flexed to bundle burial occurred entirely within the Weeden Island period. That this change might represent a difference between an early and a late Weeden Island is likely but that it might be correlated with Weeden Island I and II as now defined is less certain. Presumably, this change occurred gradually and some people, like those of the Jones site, were more conservative than others.

Because of the extreme deterioration of skeletal material frequently mentioned in the field notes, it is possible that some burials of isolated skulls should have been classified as other forms of interments. In some cases there is no question but that isolated skulls were buried. Their vertical distribution seems to span both the time when flexed burials prevailed and when bundle burials were the mode.

That bundle burials plus some cremations were the vogue in Safety Harbor times seems beyond question. Not only is this indicated by data presented here but the burial mound at the Safety Harbor site as well as Parrish Mound I produced only bundle interments (Willey, 1949, pp. 136 and 143). Both mounds contained Safety Harbor pottery types exclusively plus historic goods.

The few cremations, while not particularly shallow, came from relatively high zones at the Thomas, Picnic, Jones, Branch, and Cagnini mounds. It may be suggested this was a new burial type being introduced about the time of the abandonment of these mounds. At Parrish Mound II, 39 out of 41 interments were cremations and the pottery and arrow points were of Safety Harbor types found associated with European goods (Willey, 1949, pp. 147-152).

Some of the cultural changes mentioned in this report, such as the introduction of triangular arrow points and the modification of Weeden Island ceramics to those of the Safety Harbor period, represent results of influences entering Florida from the northwest. We consider such influences to have originated with Middle

Mississippi cultures of the Mississippi River drainage. Their dynamic effect in the Tampa Bay area and Hillsborough County was to change the culture of the inhabitants from what we call Weeden Island to the Safety Harbor culture found by the first Spaniards.

Data from W.P.A. excavations in Hillsborough County support chronologies otherwise established and give us our first good information on the burial habits of the inhabitants during Weeden Island and early Safety Harbor times. While the data are tantalizingly inconclusive, probably none of it would have been secured if this work had not been done. Certainly, much less of it would have been preserved and this report would not have been possible, if it had not been for the personal interest of J. Clarence Simpson.

### BIBLIOGRAPHY

- Anonymous (J. Clarence Simpson)  
 1939 **Notes on Two Interesting Mounds Excavated in Hillsborough County: Third Biennial Report, Florida State Board of Conservation, Archaeological Survey, Biennium ending June 30, 1938, Tallahassee, pp. 56-62.**
- Bullen, Ripley P.  
 1949 **The Woodward Site: The Florida Anthropologist, Vol. II, Nos. 3-4, Gainesville, pp. 49-64.**  
 1951 **The Terra Ceia Site, Manatee County, Florida: Florida Anthropological Society, Publication No. 3, Gainesville.**
- Goggin, John M.  
 1950 **Florida Archeology—1950: The Florida Anthropologist, Vol. III, Nos. 1-2, Gainesville, pp. 9-20.**
- Griffin, John W.  
 1950 **Test Excavations at the Lake Jackson Site: American Antiquity, Vol. 16, No. 2, Menasha, pp. 99-112.**
- Griffin, John W. and Bullen, Ripley P.  
 1950 **The Safety Harbor Site, Pinellas County, Florida: Florida Anthropological Society, Publication No. 2, Gainesville.**
- Moore, Clarence B.  
 1900 **Certain Antiquities of the Florida West-Coast: Journal of the Academy of Natural Sciences of Philadelphia, Second Series, Vol. XI, Pt. 3, pp. 350-394.**  
 1902 **Certain Aboriginal Remains of the Northwest Florida Coast: Journal of the Academy of Natural Sciences of Philadelphia, Second Series, Vol. XII, Pt. 2, pp. 126-358.**
- Simpson, J. Clarence  
 1937 **Report on Activities in Hillsborough County, Florida State Board of Conservation-Archaeological Survey, Second Biennial Report, Biennium ending June 30, 1936, pp. 109-116.**  
 1948 **Folsom—Like Points from Florida; The Florida Anthropologist, Vol. I, Nos. 1-2, Gainesville, pp. 11-14.**
- Willey, Gordon R.  
 1948 **Culture Sequence for the Manatee Region of West Florida: American Antiquity, Vol. 13, No. 4, Menasha, pp. 209-218.**  
 1949 **Archeology of the Florida Gulf Coast: Smithsonian Miscellaneous Collections, Vol. 113, Washington.**