

SURVEY NO. * 2225SURVEY LOG SHEET
FLORIDA MASTER SITE FILEPlotted? * Y NTITLE The Ruth Smith, Weeki Wachee, and Tatham Mounds:
Archaeological Evidence of early Spanish ContactAUTHOR(S) Jeffrey MitchemARCHAEOLOGIST/HISTORIAN Jeffrey MitchemAFFILIATION Louisiana State UniversityPUB. DATE 12/89 TOTAL NUMBER OF PAGES IN REPORT 23PUBLICATION INFO Published by Florida Anthropological SocietyKEY WORDS/PHRASES DESCRIBING SURVEY (max of 30 columns each)
Ruth Smith Mound, Weeki Wachee Mound, Tatham Mound

CORPORATION, GOVERNMENT UNIT, OR PERSON SPONSORING SURVEY

NAME not stated

ADDRESS _____

DESCRIPTION OF SURVEY: NUMBER OF DISTINCT AREAS SURVEYED 3
MONTH/YEAR DATES FOR FIELD WORK: START _____ THRU _____
TOTAL AREA 8 ha/ac IF CORRIDOR: WIDTH _____ m/ft LENGTH _____ km/mi
TYPE OF SURVEY (Use as many as apply): ☒ archaeological
☐ architectural ☐ underwater
OTHER TYPE(S): _____METHODS EMPLOYED (Use as many as apply): ☐ unknown ☒ archival
☐ pedestrian ☐ shovel test ☐ test excav. ☐ posthole
☒ extensive excav. ☐ auger survey ☐ coring ☐ local informt
☐ remote sensing ☐ windshield ☐ surf.exposrs ☐ probing
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PREVIOUSLY RECORDED SITES : COUNT 3 LIST CI 200, CI 203, HE 12

NEWLY RECORDED SITES : COUNT _____ LIST _____

COUNTIES: Citrus, HernandoUSGS MAP(S) Stokes Ferry, Rutland, Weeki wachee Springs

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REMARKS (Use reverse if needed): S/E 18/20 S/E 19/21 S/E 23/17
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**THE RUTH SMITH, WEEKI WACHEE, AND TATHAM MOUNDS:
ARCHAEOLOGICAL EVIDENCE OF EARLY SPANISH CONTACT**

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Introduction

This paper has two primary purposes. The first is to describe and illustrate the artifactual evidence of early sixteenth century Spanish/Indian contact from three sites on the Gulf Coastal Plain of peninsular Florida. The sites are aboriginal burial mounds which have yielded a remarkably large number of Spanish artifacts dating to this time period.

The second objective is to demonstrate the importance of careful scientific archaeological research, and to illustrate the types of information and insight into past human behavior that can be recovered from such research. The three sites under consideration are especially appropriate examples, because they are all burial mounds constructed by American Indians during the same time period (ca. A.D. 1500-1560) in west peninsular Florida. Artifacts and human skeletal remains were removed from the mounds by various individuals using very different methods, and the goals and methods of those individuals affected the types of information we have available today.

My interest in this story developed over the past several years, while intensively studying the aboriginal inhabitants of west peninsular Florida, especially the groups encountered by the first European explorers. These American Indians, called the Safety Harbor Culture by archaeologists, occupied the Gulf Coastal Plain from the Withlacoochee River on the north to as far south as Charlotte Harbor (Figure 1) during the period of about A.D. 900-1650 (Mitchem 1989:553-567). As part of my work on this culture, I was fortunate to be able to study the collections of artifacts from the Ruth Smith and Weeki Wachee Mounds, and to direct three field seasons of excavations at the Tatham Mound. The results of this research are reported here in condensed form.

Each site will be discussed separately below, followed by my interpretations of the available data. However, it is first necessary to put the sites in proper cultural perspective with a brief discussion of the Safety Harbor Culture and its characteristics.

The Safety Harbor Culture

The Safety Harbor archaeological culture was first defined by Gordon R. Willey (1948, 1949:475-488), though it had been identified as a separate archaeological entity with distinctive artifact types several decades earlier (Stirling 1935:378-383, 1936:353). Willey also delineated a separate, slightly earlier period, which he named the Englewood Period (Willey 1949:470-475). This is now considered a part (phase) of the Safety Harbor Culture (Luer and Almy 1987:Figure 5; Mitchem 1989:557-561; Mitchem and Hutchinson 1987:10). The name Safety Harbor comes from a well-known site (8Pi2) in the town of Safety Harbor on Old Tampa Bay which was used as the type site for describing "typical" sites of the culture (Griffin and Bullen 1950; Willey 1949:135-142).

The great majority of Safety Harbor sites that have been excavated have been mounds (Milanich and Fairbanks 1980:205), either burial mounds or large flat-topped mounds used as platforms upon which chiefs' houses, charnel structures, or other public buildings were built (Luer and Almy 1981). Therefore, our knowledge about their culture is biased toward their burial customs and the artifacts included in mounds. While this has allowed archaeologists to make inferences about their social structure and religious/ceremonial practices, we know comparatively little about their day-to-day activities, houses, settlement patterns, and general way of life (Bullen 1978; Milanich and Fairbanks 1980:204-210;

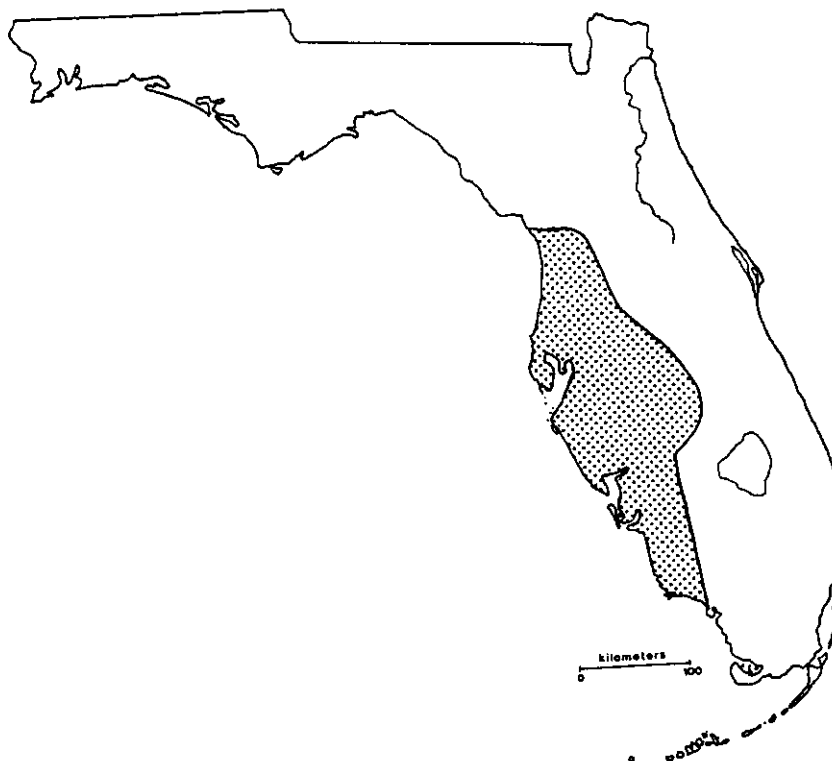


Figure 1. Approximate extent of the Safety Harbor Culture area.

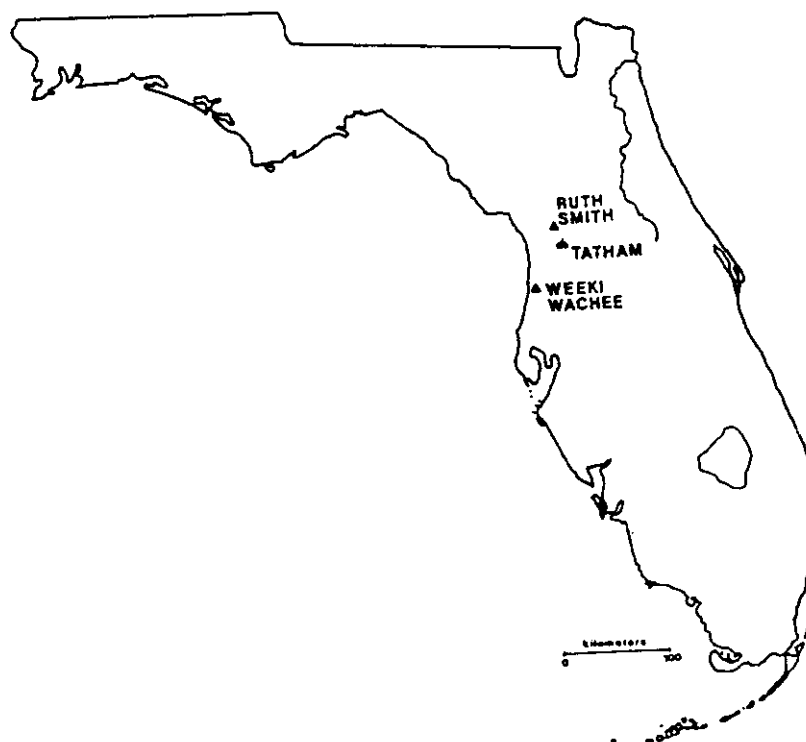


Figure 2. Locations of the Ruth Smith, Weeki Wachee, and Tatham Mounds.

Mitchem 1989:583-588).

Willey's (1949:476-477) original definition and the excavations at the type site (Griffin and Bullen 1950) indicated that groups of the Safety Harbor Culture settled most often on the Gulf Coast, subsisting on marine foods, and typically living in settlements which included a nearby burial mound and a larger platform mound, with midden (village) areas located between the mounds. Subsequent research has indicated that Safety Harbor groups also lived in inland areas, and that settlements, especially in the northern part of the region, were much more dispersed, with burial mounds often located far from any habitation areas (Mitchem 1988, 1989:590).

The main class of artifact used to identify archaeological sites of the Safety Harbor Culture is pottery, especially decorated varieties. For everyday cooking, storage, and other utilitarian uses, simple undecorated vessels were used most often. By themselves, these vessels or sherds are usually not indicative of the Safety Harbor Culture. While many of these plain vessels show up in burial contexts, the mounds often contain a number of well-made vessels with distinctive incised and punctated designs. The majority of these appear to have been made especially for inclusion with the dead, and almost all of them were broken or had a hole knocked out of the bottom before being placed in the mound. In many cases, the vessels actually were made with a hole in the bottom, leaving no doubt that they were intended solely for display and burial. This practice continued a trend begun by people of the preceding Weeden Island Culture (Cordell 1984:146-151; Milanich et al. 1984:125-132; Sears 1973).

The various designs and vessel forms typical of the Safety Harbor Culture were described formally as ceramic types by Willey (1949:472-475, 479-486). His typology is still used, with some modifications based on more recent work (Mitchem 1989:3-6; Mitchem et al. 1985:187-190; Sears 1967:31-43).

In addition to the pottery, other artifact types are often present on Safety Harbor sites, including small triangular chert projectile points (apparently used

as arrow tips and drills), shell beads, cups made from whelk (*Busycon* sp.) shells, ground stone celts (axes), red ochre (in burial contexts), stone plummets, and various implements of stone and shell (Willey 1949:486-487). Also present on some of the later sites are European articles, especially beads of glass, metal, and amber, iron tools, Spanish ceramics, coins, religious objects, weapons, armor, and even objects of silver or gold. Many of these artifacts (most of the silver and gold articles in particular) could have come from salvage and subsequent trading of materials from shipwrecks along the Gulf Coast, but the majority probably came from Spanish explorers who visited or passed through the west peninsular Gulf Coast area in the sixteenth century (Bullen 1978; Swanton 1985).

For the purposes of the present discussion, two Spanish exploratory expeditions are most important. These are those of Pánfilo de Narváez in 1528 and Hernando de Soto in 1539. Both of these expeditions (or entradas) landed near Tampa Bay and headed north through the western part of Florida (Milanich 1987:3; Núñez Cabeza de Vaca 1983:30-31; Swanton 1985:113, 117-138). They are the most likely sources for the Spanish artifacts recovered from the mounds described below.

The Ruth Smith Mound (8Ci200)

The Ruth Smith Mound is located in eastern Citrus County, approximately 1.2 km southwest of the Withlacoochee River (Figure 2). It is apparently an isolated burial mound, with no associated village area. The site is named after the owner of the land where it is located. It was discovered in 1955 by two of Mrs. Smith's sons while searching for cattle in the dense live oak and palmetto scrub which then covered the area. Beginning in the late 1950s, many local residents and artifact collectors from as far away as St. Petersburg began digging in the mound.

None of these excavators kept notes or maps recording artifact associations, and several of them dug there without permission of the landowners. They recovered human skeletal remains, aboriginal

artifacts, and Spanish artifacts of glass, metal, and pottery. In the late 1970s, the mound was leveled while clearing the area for pasture with a bulldozer. This apparently ended digging at the site until 1984, when Florida State Museum archaeologists supervised the excavation of several test units to determine whether any undisturbed burials or mound features were present (Mitchem and Weisman 1984). These excavations indicated that the mound had been destroyed completely.

While doing background research on the mound, we contacted several of the people who had participated in the uncontrolled digging and who had collections of artifacts from the mound. Though no systematic records were kept, some of these collectors said that the mound was composed of white sand, and was originally about 10-15 m in diameter, with a height of about 1.5-2.0 m. On the west side, there was a depression, probably a borrow pit from which sand was taken to build the mound. Several of these individuals loaned their collections to the Florida State Museum for study, and the results of this study were published in 1985 (Mitchem et al. 1985). The descriptions below are a condensed version of that earlier report, with an emphasis on the European artifacts.

Human Skeletal Remains

No complete human bones from the Ruth Smith Mound were studied. The 1984 excavations yielded small bone fragments and teeth, but no skeletal remains were present in any of the collections examined. Some of the collectors mentioned that two kinds of burials were present: well-preserved skeletons in a tightly flexed position (in which the arms and legs were drawn up to the chest), and disarticulated burials which had been interred after the flesh had decomposed (consisting of jumbled bones, possibly tied in bundles). Unfortunately, we have no idea how many individuals were buried in the mound, or how many different episodes of burial were represented.

Aboriginal Artifacts

There was a total of 863 aboriginal

pottery sherds in the private collections and the material excavated in 1984. The types present clearly indicate a Safety Harbor occupation, with some evidence of interaction with contemporaneous Alachua Tradition peoples from north and east of the Withlacoochee River (Milanich 1971; Mitchem et al. 1985:196-199).

Between 80 and 90 shell beads were recovered from the mound, along with a few shell fragments, probably pieces of shell cups. A total of 19 small triangular arrow points (known as Pinellas points) were in the collections, 10 of which were found within an area three meters in diameter (Mitchem and Weisman 1984:107). Other items in the collections included shark teeth, chert flakes, a polished stone bead, and a steatite bead (Mitchem et al. 1985:Table 6). Two ground and polished celts of non-Florida stone were reported to have come from the site, though they could not be located (Albert C. Goodyear, personal communication 1984).

European Artifacts

The European artifacts from the Ruth Smith Mound include 32 glass beads, beads of silver, gold, and iron, a large iron chisel, interlocking brass rings, and a sherd of green lead-glazed coarse earthenware (Green Bacin). All of these artifacts were brought to the New World by the Spaniards, though the silver and gold objects were apparently reworked by the aborigines into their present forms.

For purposes of dating the Spanish contact, the glass beads are of greatest importance. Archaeological excavations and studies of artifact collections from sites in the Caribbean and South America in the last few decades have resulted in the discovery that certain types of glass beads were brought to the New World only during specific time periods. One site which has proven especially useful is Nueva Cadiz, Venezuela, which was founded in 1515 and destroyed by a hurricane or an earthquake in 1545 (Deagan 1987:9; Goggin 1968:42; Willis 1976:11, 1980:31).

A distinctive type of glass bead was recovered from the site, square in cross section, and often composed of three layers of glass. These beads are now called Nueva Cadiz beads, and are further

subdivided into Nueva Cadiz Plain and Nueva Cadiz Twisted varieties. In the New World, they are found only on sites dating before 1550 (Deagan 1987:163; Smith and Good 1982:11).

Based on the sequence of color layers and the manufacturing technique, a typology has been developed by Marvin Smith and Mary Elizabeth Good (1982) for the early sixteenth century glass beads traded by Spanish explorers and settlers. This classification system includes many varieties of Nueva Cadiz Plain and Twisted, faceted chevron or "star" beads, and various other styles from this time period. It has proven to be a very useful tool for archaeologists, because we can now begin to trace the general routes of the different expeditions by studying the specific varieties of beads they left along the way.

From the Ruth Smith Mound, 21 Nueva Cadiz Plain beads of three varieties were noted in the collections. Ten of the remaining glass beads were faceted chevron beads, of two different varieties. The other bead in the collections was a unique small faceted seed bead of medium transparent blue glass. These are listed in Table 1, along with descriptions based on the Smith and Good (1982) typology. Several of the glass beads are shown in Figure 3.

The non-glass European artifacts from the Ruth Smith Mound are listed in Table 2.

Discussion

The European artifacts from the Ruth Smith Mound indicate an early sixteenth century date (A.D. 1525-1550) for Spanish/Indian contact. We can base this date on the presence of the Nueva Cadiz and faceted chevron beads, both of which are found in sixteenth century contexts in New World sites (Deagan 1987:162-167; Smith 1987:31; Smith and Good 1982). The Nueva Cadiz beads are good early sixteenth century time markers, while chevrons are sometimes found in later sixteenth century contexts (Deagan 1987:165).

The sherd of Green Basin pottery had been worked into a disc, which then had a hole drilled through its center, apparent-

ly to make it a bead (Figure 4). In the New World, this type of pottery has been recovered solely from sites dating to the sixteenth century (Deagan 1987:49).

Smith (1987:36) suggested that iron chisels or celts like the one from Ruth Smith (Figure 5) may date to around 1560, based on finds at sites in the interior Southeast thought to be associated with the 1560 expedition of Tristán de Luna y Arellano. However, a very similar artifact was recovered from the nearby Tatham Mound (to be discussed below), in an early sixteenth century context (Mitchem and Hutchinson 1987:56, 63).

The three interlocking brass rings (Figure 6) are of interest because they may represent a fragment of chain mail. Measuring 0.7 cm in diameter, they were constructed of brass wire bent into rings, with the ends abutting. A small amount of preserved twine was attached to them. Similar brass mail fragments were recovered from a shipwreck off the coast of Texas, which was part of the 1554 flota (Olds 1976:99-101). However, the latter rings were riveted, as was most chain mail (Stone 1961:424), suggesting that the specimens from the Ruth Smith Mound were decorative rather than utilitarian. Most chain mail was made of iron, but decorative rings of brass edging are known from some sixteenth-century European specimens (Williams 1980:109, 129). We assume that the rings from Ruth Smith were decorative rather than functional chain mail. It is also possible that they were not mail at all, but merely links of a decorative brass chain (Mitchem et al. 1985:210).

The rolled iron tubes (Figure 5) from the site were presumably used as beads, and might have been made from plates of Spanish armor. These interpretations are based on evidence from the Tatham Mound (discussed in detail below), where a similar tube of iron was recovered from the neck of a burial, with the plate from which it was made held in the individual's hand (Mitchem and Hutchinson 1987:59). A tube was recovered during the 1984 excavations at Ruth Smith, but the prior destruction of the mound had destroyed any contextual information (Mitchem and Weisman 1984:104).

The silver and gold objects (Figure

Smith & Good * Classification	#	Description **	Notes
IIA2a (#40)	3	Long, tubular: Turquoise blue/thin white/translucent navy blue core	Nueva Cadiz Plain
IIC2a (#50)	14	Long, tubular: Turquoise blue/thin white/navy blue core	Nueva Cadiz Plain, faceted
IIC2g (#56)	3	Short, tubular: Cobalt blue/thin white/translucent light blue core	Nueva Cadiz Plain, faceted
IVC2a (#79)	8	Olive-shaped: Blue/white/red/white/translucent green/white/translucent green core	Faceted Chevron
IVC2d (#82)	1	Olive-shaped: Cobalt blue/white/red/white/transparent medium blue/white/transparent medium blue core	Faceted Chevron
----- (Unique)	1	Medium transparent blue spherical faceted seed bead	

* Number and letter code refers to typology: number in parentheses refers to photograph number in Smith and Good (1982).
 ** Color layer descriptions begin with outer layer and end with core.

Table 1. Glass Beads from the Ruth Smith Mound.

Description	#
Small silver disc beads	ca. 35
Spheroid silver beads	4
Rolled sheet silver beads	9
Drilled silver rod beads	3
Spheroid gold bead	1
Rolled sheet gold bead	1
Rolled iron beads *	3
Large iron chisel or celt (round cross section)	1
Unidentified iron fragment *	1
Interlocking small brass rings	3
Sherd of Green Baciñ pottery	1

* - 1 bead and fragment recovered during 1984 excavations.

Table 2. Non-glass Artifacts from the Ruth Smith Mound.

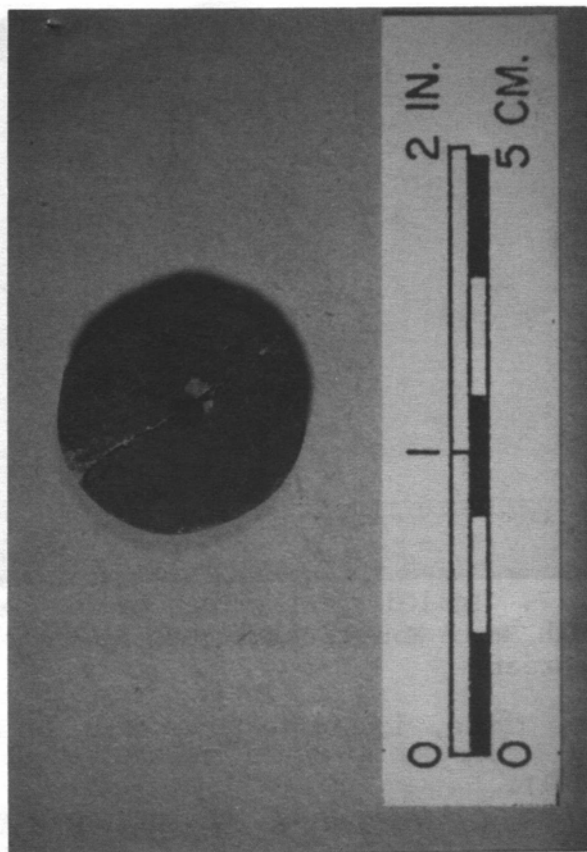


Figure 4. Green Bacin pottery disc from the Ruth Smith Mound. Photograph by Albert C. Goodyear.

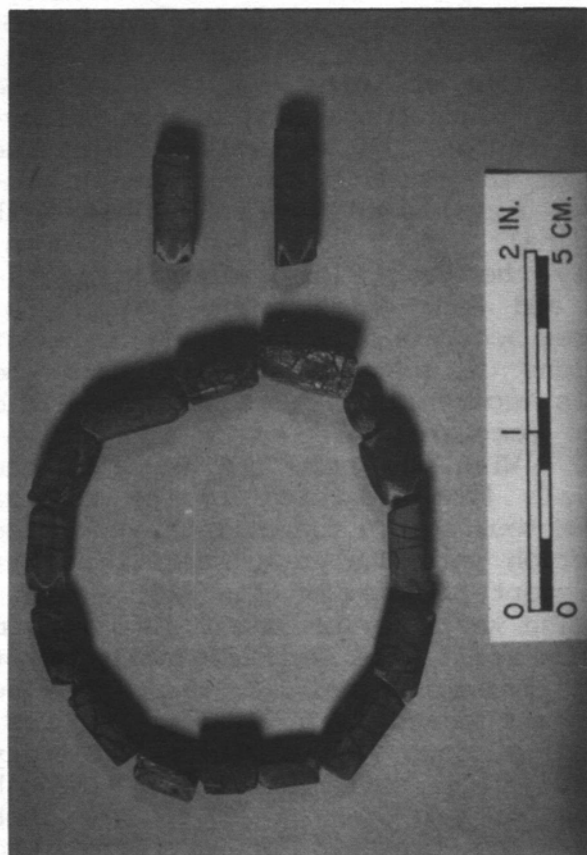


Figure 3. Sixteen Nueva Cadiz beads and one faceted chevron bead from the Ruth Smith Mound. Photograph by Albert C. Goodyear.

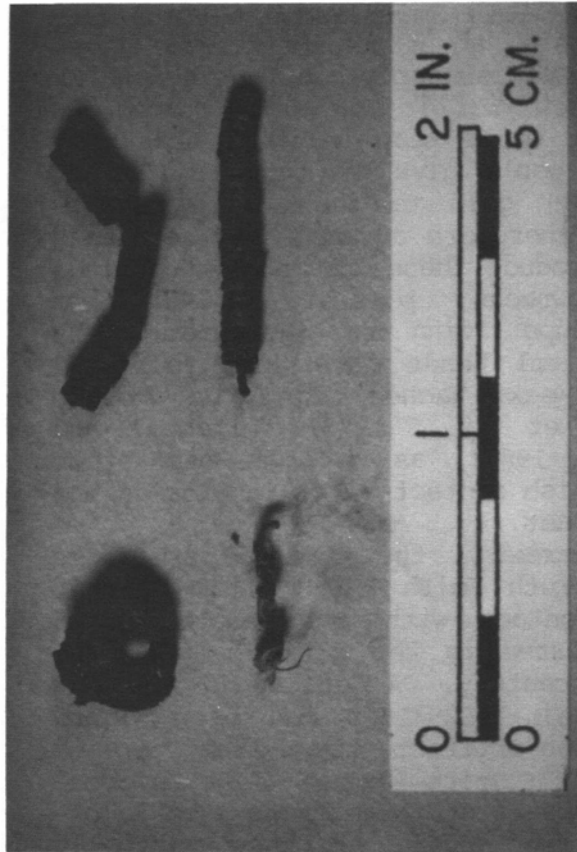


Figure 6. Artifacts from the Ruth Smith Mound. Top, l. to r.: Three brass rings (possible chain mail) with preserved vegetal twine; small silver disc beads with preserved twine. Bottom, l. to r.: Preserved twine; small silver disc beads with preserved twine. Photograph by Albert C. Goodyear.

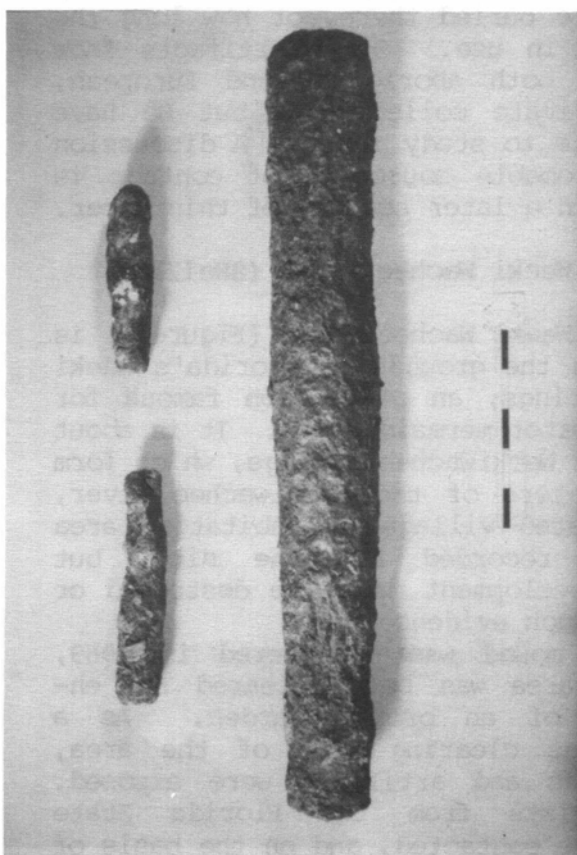


Figure 5. Two rolled iron beads and an iron chisel (or celt) from the Ruth Smith Mound. Photograph by Albert C. Goodyear.

7) from the Ruth Smith Mound tell us virtually nothing about contact at the site. Since the Spanish explorers were generally in the New World to obtain precious metals, it would seem unlikely that they willingly would give or trade silver or (especially) gold to the native inhabitants. We therefore assume that the metals used to produce these beads were obtained from shipwrecks, possibly traded from Indian groups living near the coast. Very similar metal beads have been recovered from the Weeki Wachee and Tatham Mounds (Mitchem et al. 1985; Mitchem and Hutchinson 1987), as well as from other early Spanish contact sites in Florida and the Southeast.

In summary, the European artifacts from the Ruth Smith Mound indicate that Spanish contact with the people buried there occurred in the first half of the sixteenth century. A date range for contact of A.D. 1525-1550 can be assigned based on the artifacts known from the site (Deagan 1987; Smith 1987:45-46). Unfortunately, because of the methods used in excavating the mound, we know virtually nothing about burial practices, how many people were buried there, or how long the mound was in use. Other artifacts from the site, both aboriginal and European, are in private collections, but we have been unable to study these. A discussion of the probable source(s) of contact is included in a later section of this paper.

The Weeki Wachee Mound (8He12)

The Weeki Wachee Mound (Figure 2) is located on the grounds of Florida's Weeki Wachee Springs, an attraction famous for its underwater mermaid shows. It is about 180 m from Weekiwachee Springs, which form the headwaters of the Weekiwachee River. No associated village or habitation area has been recorded for the site, but earlier development may have destroyed or obscured such evidence.

The mound was discovered in 1969, while an area was being cleared for enlargement of an orchid garden. As a tractor was clearing part of the area, human bones and artifacts were exposed. Archaeologists from the Florida State Museum were contacted, and on the basis of

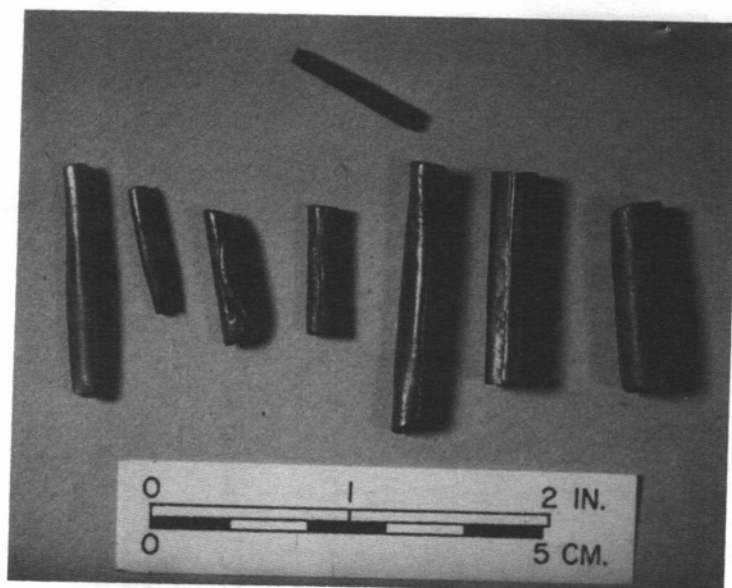


Figure 7. Rolled sheet silver beads from the Ruth Smith Mound. Photograph by Albert C. Goodyear.

pottery types, identified the site as a Safety Harbor burial mound (Mitchem et al. 1985:181).

The following year, an anthropology student at the University of Florida, Robert Allen, was hired to conduct salvage excavations of the disturbed portion of the mound before the garden was enlarged. With a crew of young people associated with the Youth Conference of the Presbyterian Church, he excavated about one third of the mound. His excavations recovered many human burials, along with aboriginal and European artifacts. Luckily, he had prior fieldwork experience, and kept notes, took photographs, and drew accurate maps recording the exact positions of most of the artifacts and burials recovered. Unfortunately, he did not to complete a report on the excavations. With his help and consent, the materials from the site in the Florida State Museum and in the collections at the attraction were analyzed, resulting in a site report (Mitchem et al. 1985).

The Weeki Wachee Mound was composed of white sand, and was originally about 13.7 m in diameter and 0.8-0.9 m high. The site was excavated in 10-foot squares, proceeding down in six-inch arbitrary levels. All soil was sifted through screens varying from 1/32 to 1/4 inch mesh. The contexts of artifacts and

burials were carefully recorded, and field notes were kept describing the excavations. Little stratification (layering of soil) could be discerned, and this, when combined with disturbance by previous landscaping activities, made interpretations difficult. The base of the mound was distinguishable in only a few places, suggesting that most of the original humus had been scraped away before the mound was constructed (Mitchem et al. 1985:184).

Careful recording methods revealed that the mound was apparently built in two episodes, with an initial mound constructed to a height of about 0.4 m. In this mound, several primary (articulated corpses rather than defleshed skeletons) and secondary (bundles of defleshed bones) burials were interred. One bundle burial was later added by digging through this mound into the subsoil and placing the bones in the hole. At some later time, corpses and bones were placed on the initial mound's top and covered with another layer of sand about 0.4 m thick. Many burials were apparently laid out higher up as this sand layer was being added (Mitchem et al. 1985:184).

Lightning Whelk (*Busycon* sp.) and other large gastropod shells and cups made from them were recovered in this upper stratum, some extending up into the modern humus. This strongly suggests that purification ceremonies involving the use of "black drink" or other sacred medicines were performed atop the mound after its construction (Milanich 1979:102-104). Similar, but more convincing, evidence of such ceremonies has come from the Tatham Mound in Citrus County (Mitchem and Hutchinson 1987:23, 84; see also below).

Human Skeletal Remains

A total of 63 burials was delineated during the excavations. These certainly represent more than 63 individuals, but a complete analysis of the skeletal remains has not been completed. However, the remains are presently being analyzed and will be included in a much larger study of Southeastern aboriginal health and diet in the protohistoric period (Dale L. Hutchinson, personal communication 1988). Most of the burials were secondary

interments, and many of the bones exhibited evidence of rodent gnawing. This is probably the result of the corpses being placed in a charnel structure to allow decomposition of the soft tissues, with the bones being gathered up and buried on the occasion of mound construction. This practice was recorded in many ethnohistoric accounts of early explorers, traders, and missionaries (Harriot 1972:72; MacLeod 1926; Swanton 1946:718-722, 725-726; Williams 1986:136, 192). It has also been recorded archaeologically (Hudson 1976:78).

In addition to the secondary remains, at least eight primary flexed burials were present. Extensive evidence of cremation was also recovered (Mitchem et al. 1985:184).

Aboriginal Artifacts

The majority of aboriginal artifacts from the Weeki Wachee Mound consists of ceramic vessels and sherds. These include over 1540 sherds representing at least 38 identifiable vessels. Pottery and other artifacts tended to be located stratigraphically above burials, rather than actually accompanying particular individuals. However, several instances were noted in which skulls were overlain by shells, pottery vessels, or large sherds.

The exact counts of various pottery types are given in Mitchem et al. (1985:185), along with in-depth descriptions of each type. Interested readers are referred to that publication for information in addition to that summarized here. The pottery types consisted primarily of typical Safety Harbor decorated and plain wares, with a small number of Alachua Cob Marked and Prairie Cord Marked sherds, indicating some interaction with Alachua Tradition groups to the north (Milanich 1971).

Shell artifacts were also quite abundant at the Weeki Wachee Mound. Seven *Busycon* shell cups were recovered, along with 13 unaltered shells of the species *Pleuroploca gigantea* (Horse Conch), *Busycon contrarium* (Lightning Whelk), and *Fasciolaria* sp. (Tulip) (Mitchem et al. 1985:191-193). Many fragments of these shell species were also found, indicating

that many more probably were present originally. More than 343 shell beads were excavated, many of which were in direct association with burials. One burial (#10) had several rows of shell disc beads on the right wrist, which were coated with a preservative substance in the ground and removed intact. Other burials had necklaces or bracelets, including at least one instance of shell and glass beads strung together on a necklace (Mitchem et al. 1985:194).

A significant discovery at the mound was the recovery, from three different burials, of 26 freshwater clam shells of the species Elliptio shepardianus (Lea), known as Shepard's Filter Clam. Nine drilled (one was also possibly painted red) specimens of these were found as a necklace with Burial #19. Another 16 were found with Burial #17, and one was with Burial #39 (Mitchem et al. 1985:193). These shells are important because this species occurs only in the Altamaha River drainage of Georgia. Their presence at Weeki Wachee indicates probable contact with Georgia aboriginal groups, though the shells could have been obtained by exchange through intermediary groups. As discussed below, shells of this species were also recovered during excavations at the Tatham Mound (Mitchem and Hutchinson 1987:22-23).

Other aboriginal artifacts from Weeki Wachee include a few stone objects, such as a polished bead of non-Florida stone, some chert flakes, and tool fragments. A fossil bone fragment, part of a catfish spine, and an Archaic (ca. 5000-1000 B.C.) projectile point were also recovered (Mitchem et al. 1985:195).

European Artifacts

The European artifacts from Weeki Wachee are all beads, of glass, silver, and amber. A total of 127 glass beads, 151 silver beads, and one amber bead was recovered during the excavations. Some iron remains were mentioned in the field notes, but are not in the present collections. These are probably recent intrusions, as a number of flower pot sherds and sewer pipe fragments were present in the uppermost levels (Mitchem et al. 1985:

202).

The majority of the European beads accompanied three burials (#17, 19, and 57). Many also came from the burial of a full term human fetus or infant (never given a burial number: was labeled F.S. 48). Among the types of glass beads excavated were several varieties of Nueva Cadiz and faceted chevron beads, along with some striped varieties (Figure 8). Some of the chevron beads listed in the notes and shown in photographs with the site records are no longer in the collection and were not available for study. Descriptions of the glass beads, along with their classifications using the Smith and Good (1982) typology, are listed in Table 3. Readers wishing specific information on provenience are directed to Mitchem et al. (1985:Table 7).

The non-glass European beads from Weeki Wachee are listed in Table 4.

Discussion

The beads from Weeki Wachee indicate an early sixteenth century date (ca. A.D. 1525-1550) for the period of Spanish contact(s) with the people buried in the mound. The Nueva Cadiz, faceted chevron, and striped varieties support this interpretation (Deagan 1987:163, 165, 170; Smith and Good 1982). Spherical amber beads have been found primarily at sites dating to the second half of the sixteenth century, but the rest of the beads from Weeki Wachee suggest an early sixteenth century origin for the amber specimen found there (Deagan 1987:181; Smith 1983:148).

The silver beads from Weeki Wachee (Figure 9) are of little value for determining dates of contact. However, we can say some things about their probable origin and methods of manufacture. Standard acid scratch tests performed on 21 of the small disc beads from the site revealed that the primary constituents were silver and copper, corresponding roughly with coin silver (.900 or less). This indicates that the silver was obtained from the Spaniards (Leader 1983; Mitchem et al. 1985:208). The beads might have been made from silver coins salvaged from shipwrecks, but at present we are

Smith & Good * Classification	#	Description **	Notes
IB3e (#26)	12	Olive-shaped: White with 3 wide blue spiraling stripes	Gooseberry
IB4a (#27)	1	Olive-shaped: Colorless/white stripes/colorless core	Nueva Cadiz
IIA1d (#36)	37	Short, tubular: Translucent dark navy blue	Plain
IIA2a (#40)	11	Long, tubular: Turquoise blue/thin white/translucent navy blue core	Nueva Cadiz Plain
IIA2e (#44)	9	Short, tubular: Translucent navy blue/thin white/translucent navy blue core	Nueva Cadiz Plain
IIA2g (#46)	1	Short, tubular: Translucent cobalt blue/thin white/translucent medium blue core	Nueva Cadiz Plain
IIA2-	1	Tubular: turquoise blue/thin white/transparent purple core	Nueva Cadiz Plain (unique)
IIC2a (#50)	29	Long, tubular: Turquoise blue/thin white/navy blue core	Nueva Cadiz Plain, faceted
IIIA1a (#57)	1	Long, tubular: Transparent navy blue	Nueva Cadiz Twisted
IIIC2a (#67)	1	Long, tubular: Translucent turquoise blue/thin white/translucent navy blue core	Nueva Cadiz Twisted, faceted
IVC2a (#79)	2	Olive-shaped: Blue/white/red/white/translucent green/white/translucent green core	Faceted Chevron
IVC2d (#82)	2	Olive-shaped: Cobalt blue/white/red/white/transparent medium blue/white/transparent medium blue core	Faceted Chevron
IVC2-	16-20	Unavailable for study. (In notes and/or photos, but missing from collection)	Faceted Chevron

* Number and letter code refers to typology: number in parentheses refers to photograph number in Smith and Good (1982).
 ** Color layer descriptions begin with outer layer and end with core.

Table 3. Glass Beads from the Weeki Wachee Mound.

Description	#
Small silver disc beads	124
Spherical silver beads	27
Spherical amber bead	1

Table 4. Non-glass Beads from the Weeki Wachee Mound.

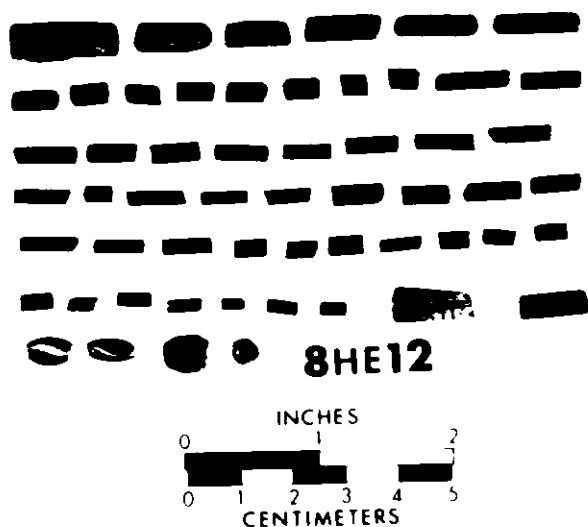


Figure 8. Glass beads from the Weeki Wachee Mound. Top six rows: Nueva Cadiz beads. Bottom row, l. to r.: Two olive-shaped white beads with wide blue spiraling stripes; two faceted chevron beads.

unable to determine this. The silver also could have come from fancy horse gear, sword hilts, or similar high status items carried by explorers or salvaged from shipwrecks (Mitchem et al. 1985:208).

It appears certain that the silver beads were manufactured by Indian artisans. Most of the larger beads were drilled biconically (drilled halfway through from each side until the two holes met), as were many of the aboriginal shell beads of similar size (Robert R. Allen, personal communication 1983). The small disc beads were probably made by hammering out a thin sheet of silver, then drilling holes in it, followed by cutting out small squares around these holes. The perforated squares were then strung and abraded until the edges were rounded (Leader 1983; Mitchem and Leader 1988:53). However, it is possible that at least some of the beads were cut from longer drilled rods. In either case, it appears that the previous shell bead technology was adapted for use on silver.

Many of the European beads from Weeki Wachee are very similar to the beads from Ruth Smith. In fact, the similarity of particular varieties is so close that

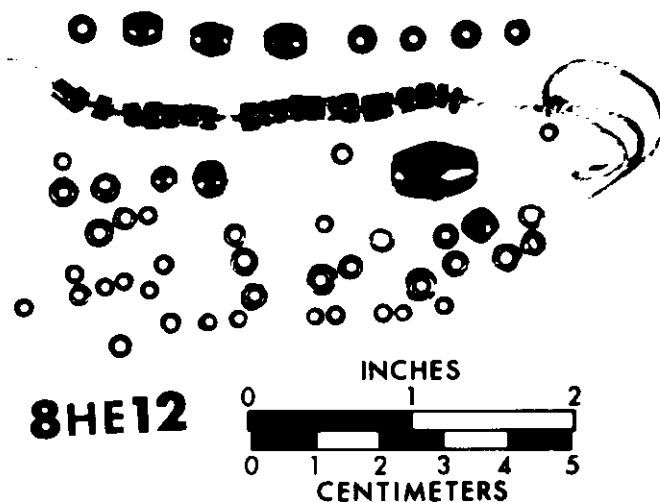


Figure 9. Silver beads from the Weeki Wachee Mound.

the assemblages probably represent contact with the same Spanish expedition(s) (Mitchem et al. 1985:208). This is discussed further in a later portion of this paper.

In summary, the bead assemblage from the Weeki Wachee Mound indicates that the people buried in the mound were contacted by Spanish explorers during the period of A. D. 1525-1550. Contact with more than one group of Spaniards is possible.

The Tatham Mound (8Ci203)

The Tatham Mound (Figure 2) is located in an area of swamps near the Withlacoochee River. It is about nine kilometers (5 1/2 miles) south-southeast of the Ruth Smith Mound, and both may have been built by the same group of Indians. Surveys of the surrounding area failed to locate a village site nearby, though at least two habitation sites in the area have yielded small amounts of Safety Harbor Culture artifacts.

The mound was discovered in 1984 in a dense thicket. It was approximately 17 m across and 1.7 m high, with a roughly square shape. Because of its isolated

location, it was undisturbed. Due to its condition and its potential to answer many questions concerning the nature of Safety Harbor occupations in the area, funding was obtained to allow careful excavation of the site (Mitchem 1989:308-310).

During 1985 and 1986, three field seasons of excavations were conducted. After mapping the mound, a grid of 3 m x 3 m squares was laid out over the site, and excavation began. All soil was sifted through screens of meshes varying from 1/32 to 1/4 inch. Detailed notes, drawings, and photographs were made of each square and its contents, and profile maps were made to record the stratification as accurately as possible.

A small test hole in the mound top at the time of its discovery had yielded Safety Harbor ceramics, and we wished to investigate a number of specific questions about the people who constructed it. We wished to learn as much as possible about Safety Harbor burial practices in the area, and we were especially interested in finding evidence of Spanish contact. It was hoped that the undisturbed nature of the site might afford us a greater opportunity to study the nature and impact of Spanish contact upon the original inhabitants. When excavations began, we had no idea whether or not evidence of contact was present, but the artifacts from the nearby Ruth Smith Mound suggested that it was probable. Excavations revealed that there had indeed been Spanish/Indian contact, and that it marked the final chapter of Safety Harbor occupation in the area.

The mound was built in two stages, the first constructed sometime during the period of A.D. 775-1460 (based on calibrated radiocarbon dates). The remains of at least 24 people were buried in this initial mound, and it apparently was abandoned until after Spanish contact (Mitchem 1989:522-525; Mitchem and Hutchinson 1987:82-83). Many artifacts of shell, copper, and pottery were recovered from this stratum, but these are not discussed here. For information on these remains, readers are directed to Mitchem (1989) and Mitchem and Hutchinson (1987).

The upper stratum was constructed sometime after Spanish contact, anywhere from a few months to several years after-

ward. Before the majority of the burials was interred, a pit was dug into part of the lower mound and two individuals were buried in it. Sometime after this, a large number of corpses were laid out on the mound, along with the jumbled remains of many more individuals, which probably had been stored in a nearby charnel structure. These were then covered with a thick cap of sand, greatly increasing the size of the mound. A sand ramp was added later to the west side.

Excavations revealed that many Busycon shell cups were left on the mound summit, and that dozens of pottery vessels were broken on the top and sides of the mound, apparently deliberately thrown from the top. Many of these were found just a few centimeters beneath the surface, indicating that they were probably left exposed at the time of abandonment. We believe that these artifacts are the result of one or more purification ceremonies involving the use of black drink (Mitchem 1989:531; Mitchem and Hutchinson 1987:84-85).

Human Skeletal Remains

The skeletal remains from the site will be the subject of a doctoral dissertation by Dale L. Hutchinson of the University of Illinois. While the study is not yet complete, we are able to glean a number of facts from the research that has been completed so far.

The excavations revealed that at least 77 individuals were laid out in rows on top of the mound. All except two were placed with their heads to the northwest and the bodies along an axis to the southeast. The other two were turned exactly opposite of the majority. Because all these individuals were buried sometime shortly after death (before the flesh had decomposed), we assume that they all died within a short time period, possibly as the result of a disease epidemic inadvertently introduced by the Spaniards. They were not the result of a massacre, because none of the skeletons showed any evidence of wounds which would have been produced in such a situation (Mitchem 1989:529-530; Mitchem and Hutchinson 1987:79-82).

On top of and between these individ-

uals, the remains of between 213 and 273 people were added. Some of these secondary interments were apparently bundles of the bones of single individuals, while most were mixed skeletal remains from many individuals. The large number indicates that bodies were being stored in a charnel structure, allowing the flesh to decompose (Mitchem 1989:473; Mitchem and Hutchinson 1987:37, 42).

Two of the secondary bones are of special interest. These were fragments of a left humerus (upper arm bone) and a right scapula (shoulder blade). Each of these bones had marks indicating that it had been cut by an edged metal weapon, such as a sword. They were examined by forensic experts, who noted that the types of wounds are very characteristic of injuries caused by swords. Since these bones were included among the jumbled secondary remains, we have no way of knowing whether they were from the same individual, but we can say that the person or persons died long enough before the primary burials for the flesh to have completely decomposed. This indicates that at least one Indian probably was killed by a Spanish explorer (Mitchem 1989:495-498; Mitchem and Hutchinson 1987:41).

As noted above, two of the primary burials were oriented opposite of the majority. One of these was an adult male, and the other was an adult female. They were in separate rows, and both had European artifacts with them. We do not know the reason for this, but the careful placement of the other primary burials indicates that it was done purposely. The female burial was especially interesting, because she was placed on her back with the legs flexed over the chest. Immediately adjacent to her pelvis, the remains of a very young infant or full term fetus were found, along with 68 European beads of silver, glass, and gold. In my opinion, this represents a stillborn infant or one that died during or immediately after delivery, along with the mother (Mitchem 1989:490-491; Mitchem and Hutchinson 1987:63). This is interesting in light of a similar infant burial (F.S. 48) from Weeki Wachee, also accompanied by a large number of European beads (Mitchem et al. 1985:202).

A total of 19 burials from the Tatham Mound had European artifacts buried with them. Of these, 15 were primary interments, two were secondary (bundle) burials (each of which contained bones from more than one individual), one was a cremation, and one consisted of two individuals, one primary and one secondary (Mitchem and Hutchinson 1987:58-65).

The European artifacts are described in a later section, along with some discussion of the specific contexts of discovery for selected artifacts. Interested readers are referred to Mitchem (1989) for more complete information about the contexts of the European artifacts.

Aboriginal Artifacts

The Tatham Mound yielded a large collection of aboriginal artifacts of pottery, shell, and stone. The ceramics consisted of typical Safety Harbor types, with a small number of Alachua Tradition sherds (Mitchem 1989:352-393). Several complete vessels were recovered, and in all but one case a hole had been punched in the bottom before burial. This practice was widespread in the Southeast, and probably reflects beliefs associated with death and mortuary ritual. The majority of pottery consisted of sherds of broken vessels, especially just below the surface on the top and sides of the mound. Only one case was recorded of a pottery vessel buried with a specific individual. The rest were outside of the general burial area in the mound.

Objects of stone were also abundant. A total of 105 triangular arrow points (Pinellas points) were recovered from the mound fill. Most of these came from the east side, and their positions suggested that they were intentionally thrust or shot into the mound fill during construction (Mitchem 1989:393-395; Mitchem and Hutchinson 1987:18-19). Other stone artifacts included four ground and polished stone celts made from non-Florida stone, two quartz crystal pendants, a ground and polished stone pendant of non-Florida stone, and many flakes and tools of chert. A large side notched chert blade or spearhead from the mound fill exhibited considerable polish on the exterior, sug-

gesting that it had been kept and handled (but probably not used as a utilitarian tool) for a long period (Mitchem 1989:398).

The quartz crystal pendants are of interest, because quartz crystals often were used as amulets and sacred religious objects by many Southeastern Indian groups (Hudson 1976:168-169; Mooney 1900:298-300, 460-461; Olbrechts 1930:549-550). One of the uses was to cure diseases, and at least one instance is recorded of their use in ceremonies to prevent epidemic disease (Butrick n.d.:106-107).

The most abundant shell artifacts from the mound are beads made from marine shell. Many of these were recovered as parts of necklaces, and in some cases as bracelets. Nineteen *Busycon* shell cups (along with fragments representing at least another 15) were recovered, most from just beneath the surface. One of these was found within a ceramic vessel, and several were found in a line running north to south on the mound summit. There is little doubt that these were associated with ceremonies involving the use of black drink. A circular shell gorget (with holes for suspension as a pendant) and a celt of shell were also found (Mitchem 1989:Table 51).

At least eight shells of Shepard's Filter Clam [*Elliptio shepardianus* (Lea)] were recovered, from three burials. As discussed above, 26 shells of this species were recovered from the Weeki Wachee Mound. Since this freshwater species occurs only in the Altamaha River drainage in Georgia, we can assume that the specimens from Weeki Wachee and Tatham were obtained from the same source.

Also recovered from the Tatham Mound were many fragments of red ochre, a red pigment present in many Safety Harbor burial sites. Galena, a lead ore found primarily in the interior eastern United States (Walthall 1981:Figure 9), was found in the form of powder and cubes. One of the larger cubes was partially drilled, probably an unfinished bead. Galena was used often as a pigment (Mitchem 1989:408-411).

An interesting artifact of engraved bark was also recovered (Mitchem 1989:412-416, Figure 17). This object, of pine or

cypress bark, had an engraved curvilinear design on its surface, possibly representing a snake motif. Though it is fragmentary and was not found with a burial, we suggest that it was a bowstring wristguard used by an Indian archer. Drawings of eastern Timucua Indians of Florida by the French artist Jacques Le Moyne in 1564 illustrate such wristguards. The caption of one drawing says that strips of bark were used often to make them (Lorant 1946:85).

European Artifacts

There was a total of 152 glass beads recovered from the sixteenth century portion of the mound. In addition, 298 metal beads (of silver, gold, brass, bronze, and possibly copper) were excavated. A number of other metal artifacts were also recovered. These are discussed below in separate categories, summarizing the various types. More complete information on the context of each find is provided in Mitchem (1989).

The glass beads from Tatham Mound are listed in Table 5 by type, using the typology developed by Smith and Good (1982). One nineteenth century Seminole bead from the humus layer is not included in the present discussion. Most of the glass beads are excellent early sixteenth century varieties such as Nueva Cadiz and faceted chevrons (Deagan 1987; Smith and Good 1982). Figure 10 illustrates many of the glass bead varieties recovered from the mound.

Table 6 lists the metal beads from the mound. All of the metal beads appear to have been fashioned by Indian artisans, using metal obtained from Spanish explorers or shipwreck salvage. Many of the metal beads are illustrated in Figure 11. The other metal artifacts are listed in Table 7.

Discussion

The European artifacts from the Tatham Mound clearly indicate a date of 1525-1550 for contact(s) with Spanish explorers. The best evidence for this date range is provided by the large number of early sixteenth century glass beads. Metal

Smith & Good * Classification	#	Description **	Notes
IA4-	1	Short, tubular: Thin colorless with 3 sets of paired opaque white spiraling stripes (6 total)/opaque brick red/pale blue-green core	
IA4-	1	Long, tubular: Thin colorless with 6 opaque white spiraling stripes/opaque brick red/opaque brick red with swirls of transparent pale gray-green (poorly mixed)/transparent pale gray-green core	
IB3e (#26)	2	Olive-shaped: White with 3 wide blue spiraling stripes	
IB3-	1	Barrel-shaped: Opaque light blue with 4 white-on-red stripes	
IB4-	1	Olive-shaped: Colorless with 3 spiraling opaque white stripes/opaque brick red/medium transparent blue core	
IB4-	1	Opaque brick red core	
IB4-	1	Transparent blue core	
IA1d (#36)	3	Short, tubular: Translucent dark navy blue plain	Nueva Cadiz
IA1e (#37)	22	Short, tubular: Transparent cobalt blue	Nueva Cadiz
IA2a (#40)	6	Long, tubular: Turquoise blue/thin white/translucent navy blue core	Nueva Cadiz
IA2c (#42)	2	Long, tubular: Translucent blue/thin white/navy blue core	Nueva Cadiz
IA2e (#44)	1	Short, tubular: Translucent navy blue/thin white/translucent navy blue core	Nueva Cadiz
IA2g (#46)	5	Short, tubular: Translucent cobalt blue/thin white/translucent medium blue core	Nueva Cadiz
IC2a (#50)	7	Long, tubular: Turquoise blue/thin white/navy blue core	Nueva Cadiz
IC2b (#51)	1	Long, tubular: Turquoise blue/thin white/colorless core	Nueva Cadiz
IC2f (#55)	1	Short, tubular: Translucent cobalt blue/thin white/colorless core	Nueva Cadiz
IC2g (#56)	14	Short, tubular: Cobalt blue/thin white/translucent light blue core	Nueva Cadiz
IC2-	1	Long, tubular: Turquoise blue/thin white/translucent purple core	Nueva Cadiz
IIIC2a (#67)	1	Long, tubular: Translucent turquoise blue/thin white/translucent navy blue core	Nueva Cadiz
IVC2a (#79)	2	Olive-shaped: Blue/white/red/white/translucent green/white/translucent green core	Nueva Cadiz
IVC2d (#82)	15	Olive-shaped: Cobalt blue/white/red/white/transparent medium blue/white/transparent medium blue core	Nueva Cadiz

Smith & Good * Classification	#	Description **	Notes
IVC2e (#83)	2	Olive-shaped: Navy blue/white/red/white/translucent navy blue/white/transparent light blue core	Faceted Chevron
IVC2p (#94)	3	Spherical to sub-spherical: Cobalt blue/white/red/white/colorless/white/colorless core	Faceted Chevron
VID1d (#104)	1	Donut-shaped: Transparent pale yellow (very patinated)	Wire-wound seed bead
VID1e (#105)	3	Donut-shaped: Translucent green (very patinated)	Wire-wound seed beads
VID1f (#106)	1	Donut-shaped: Translucent yellow (very patinated)	Wire-wound seed bead
VID1h (#108)	28	Olive-shaped: Opaque medium blue sub-spherical: Translucent dark purple	Seed beads
VID1-	10	Dark purple	Wire-wound seed bead
VID1-	1	Donut-shaped: Color not discernible (very patinated)	Wire-wound seed bead
VID1-	1	Donut-shaped: Red or reddish purple (very patinated)	Wire-wound seed bead
VID1-	5	Spherical dark navy blue	Seed bead
VID1-	8	Spherical transparent green	Seed bead
VID1-	1	Spherical: Color not discernible (very patinated)	Seed bead

* Number and letter code refers to typology: number in parentheses refers to photograph number in Smith and Good (1982).
 ** Color layer descriptions begin with outer layer and end with core.

Table 5. Glass Beads from the Tatham Mound.

Description	#
Small silver disc beads	268
Drilled silver rod beads	10
Drilled silver silver beads	8
Rolled sheet silver beads	2
Barrel-shaped silver beads	6
Rolled sheet gold beads	2
Rolled sheet brass or bronze beads	1
Rolled sheet brass bead (twine preserved inside)	1
Rolled sheet bronze bead	1
Rolled iron bead (made from armor plate)	1

Table 6. Metal Beads from the Tatham Mound.

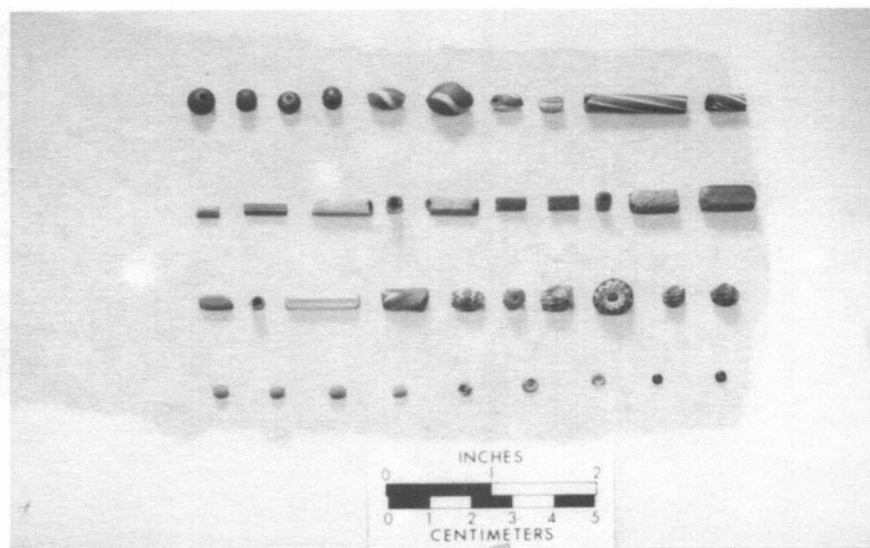


Figure 10. Glass beads from the Tatham Mound. Photograph by Harry W. Buck II.

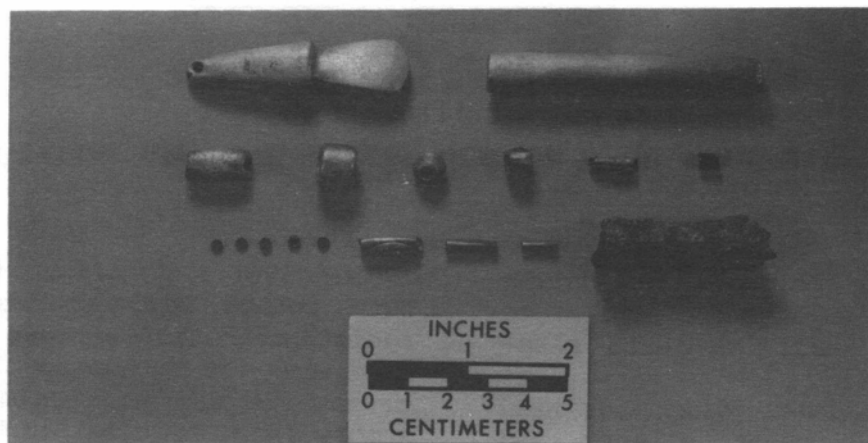


Figure 11. Metal beads and pendant from the Tatham Mound. Top, l. to r.: Silver celt effigy pendant; drilled silver rod bead. Center, l. to r.: Two drilled silver rod beads; two silver barrel beads; two rolled sheet silver beads. Bottom, l. to r.: Five small silver disc beads; three rolled sheet gold beads; a rolled iron bead. Photograph by Harry W. Buck II.

Description	#
Silver socketed celt effigy pendant	1
Dome-shaped silver disc (with possible leather remains)	1
Small dome-shaped sheet gold object	1
Copper fragments	6
Copper or brass fragment	1
Dome-shaped brass object (earspool fragment?)	1
Miscellaneous iron fragments	3
Iron spike fragments	2
Iron armor plate	1
Iron chisel (small, square cross section)	1
Iron chisel (large, round cross section)	1
Unidentified iron object	1

Table 7. Non-bead Metal Artifacts from the Tatham Mound.

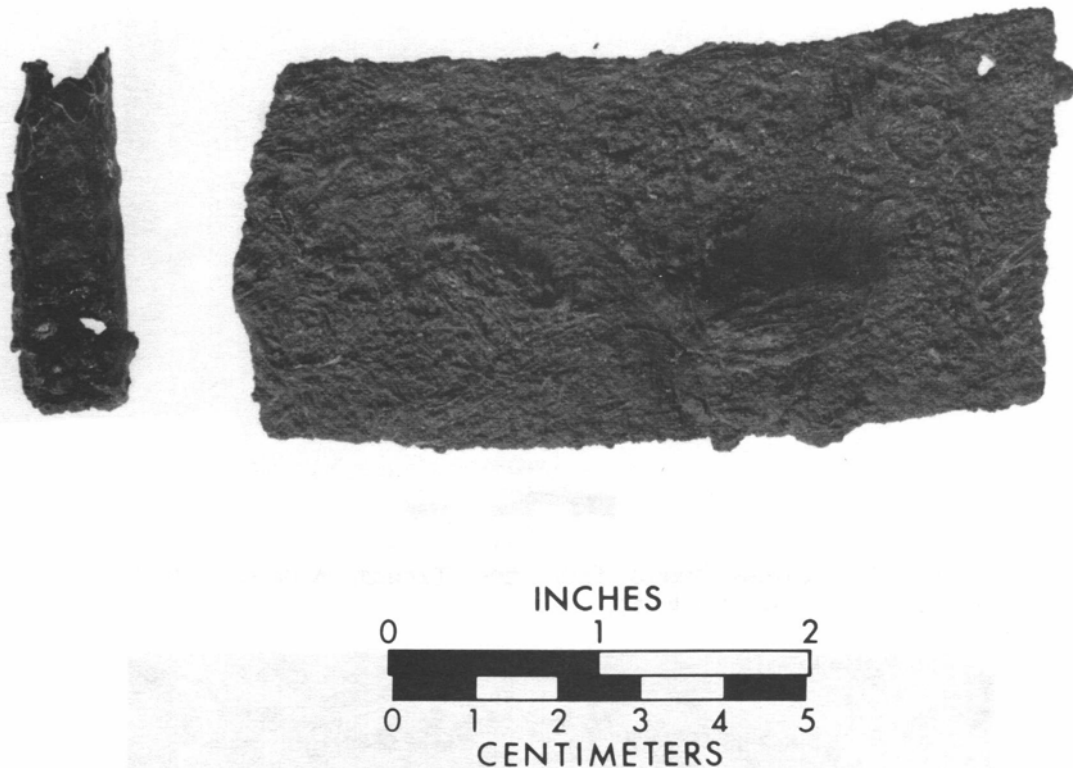


Figure 12. Iron armor plate and rolled iron bead from Burial #7, the Tatham Mound. Photograph by Bunny Stafford.

artifacts are less reliable as dating tools, but the iron objects are similar to specimens found in early contexts elsewhere in the New World.

The small silver disc, drilled silver rod, rolled sheet silver, and rolled sheet gold beads from Tatham (Figure 11) are virtually identical to those found at Ruth Smith and Weeki Wachee. Of special interest is the rolled iron bead from Tatham. This bead was recovered from the neck of an elderly female who held a plate from some Spanish armor in her hand. One end of the plate had been broken or cut off, and this was rolled into a tube and worn as a bead (Figure 12). Three similar objects were recovered from the Ruth Smith Mound and tentatively identified as beads (Mitchem et al. 1985:210). The one from Tatham supports this interpretation. The armor plate is typical of scale or jack armor common during the fifteenth and sixteenth centuries. Such armor consisted of overlapping iron plates attached to a garment of canvas or other strong cloth

(Stone 1961:310, 544). Often the plates were coated with tin to increase rust resistance. This appears to have been the case with the Tatham specimen. I was able to observe similar specimens at the Royal Armory (Real Armeria) in Madrid.

By far the most interesting metal artifact from Tatham is the socketed celt effigy pendant of silver (Figure 11). This pendant was fashioned from a small ingot of fine (.999 purity) silver, probably salvaged from the wreck of a ship transporting South American booty back to Spain. The type of workmanship suggests that it was made by an Indian artisan. It was found near the right knee of a young adult female burial, along with a long drilled silver rod bead (Figure 11), also made from .999 silver.

Another silver object was a dome-shaped disc, which had possible leather remains adhering to the concave surface. We assume that this object was originally attached to some leather object, perhaps a piece of Spanish horse tack.

A very thin gold dome-shaped object

was probably originally a cover for a wooden button or similar artifact. Similar metal clad buttons have come from other Florida sites (Mitchem and Leader 1988: 53).

Several iron tools were recovered from the Tatham Mound, including two iron spike or nail fragments and two iron chisels. The smaller chisel is square in cross-section, and may have been made from a spike or nail. The larger chisel is round in cross-section, and is very similar to the one from the Ruth Smith Mound (Figure 5). Iron tools were very popular trade items and have been recovered from many early contact sites in the Southeast (Smith 1987:35).

Interpretations Of Data From The Ruth Smith, Weeki Wachee, And Tatham Mounds

When we look at what is now known about the three sites discussed above, it is obvious that our knowledge of the Tatham Mound far outweighs our interpretations about the Ruth Smith and Weeki Wachee Mounds. This is primarily the result of careful, controlled excavation of the Tatham Mound. It is unfortunate that the Ruth Smith Mound was not excavated scientifically, because its location so near the Tatham Mound indicates that both probably were constructed and used by the same population. The meager evidence we have suggests that the Ruth Smith Mound was being used at the beginning of the contact period, while the Tatham Mound had been abandoned for several centuries. Perhaps the Tatham Mound was reused only when the Ruth Smith Mound could no longer be used because of too many bodies to be buried (due to a large number of epidemic victims). However, the destruction of the Ruth Smith Mound ensures that we will never be able to tell for sure.

The time limitations and the salvage nature of the excavations at the Weeki Wachee Mound limit our interpretations of the site somewhat, but it is clear that the mound had been used for some time, and was probably a traditional burial place for residents of the western Hernando County area (at least during the time of the Safety Harbor Culture). The excavations demonstrated that primary, second-

ary, and cremation burial types were used at the mound. The large number of shell cups and unmodified shells from the mound strongly suggests that black drink ceremonies were conducted by the Weeki Wachee residents. They may have been involved in trade networks exporting shells and shell products to the north. The shells and exotic artifacts recovered from the Tatham Mound also suggest the existence of such an exchange network. Of particular interest are the Shepard's Filter Clam [*Elliptio shepardianus* (Lea)] shells recovered from both sites, indicating contact of some sort with the Altamaha River area of Georgia.

Archaeological surveys in the vicinities of the three mounds indicate that the Safety Harbor residents of this part of Florida were not living in large, concentrated villages, but apparently were living in small scattered hamlets or single family settlements. This settlement pattern seems to be characteristic of Safety Harbor groups north of Tampa Bay (Mitchem 1988, 1989:586).

The similarity of European bead assemblages from the three sites strongly suggests that the people buried in all three mounds were contacted by the same Spanish expedition(s). The glass beads leave no doubt that contact occurred during the early sixteenth century, and the geographical location of the sites indicates that the two most likely sources of the beads were the expeditions of Pánfilo de Narváez in 1528 and Hernando de Soto in 1539.

The Narváez expedition landed somewhere in the vicinity of Tampa Bay in 1528, then headed north, staying near the Gulf Coast (Núñez Cabeza de Vaca 1983; Scott 1981). The account of the expedition notes that they traveled north for fifteen days without encountering "a single person, village, or house" (Núñez Cabeza de Vaca 1983:36). They then crossed a river with a strong current, probably the Withlacoochee, whereupon they were met by a large force of Indians.

Archaeological evidence suggests that the Withlacoochee River served as a cultural boundary during this time period. North and east of the river, archaeological sites indicate Alachua Tradition

groups inhabited the area (Johnson 1987; Milanich 1971), while to the south and west (the area in which the three mounds under discussion are located), Safety Harbor sites are present. No Alachua Tradition sites have been located south and west of the river, and no Safety Harbor sites have been found to the north and east of the river.

If we can trust the account of the Narváez expedition, the 1539 Soto expedition is the most likely source of the beads and other artifacts from Ruth Smith, Weeki Wachee, and Tatham. Also, the two cut bones from Tatham were probably the result of a skirmish with members of Soto's force.

The Soto expedition landed near the south end of Tampa Bay in 1539, then later headed north. The narratives of the expedition mention at least one skirmish with Indians shortly before reaching the river of Cale (or Ocali), which probably represents the Withlacoochee River (Fernandez de Oviedo y Valdés 1973:68). This would have been in the Cove of the Withlacoochee area, where the Ruth Smith and Tatham Mounds are located. This skirmish or an unrecorded one could have resulted in the cut bones found at Tatham. It is truly unfortunate that the skeletal remains from the Ruth Smith Mound are not available for study, as more evidence of Spanish-Indian warfare might have been present.

The Soto narratives also state that members of the expedition passed through the area two more times after reaching the Apalachee area (Anhaica Apalache) in northwest Florida. A small company of soldiers was sent south traveling on the same route along which they originally traveled to contact the ships waiting at Tampa Bay. After sending the ships north to unload supplies near Apalachee, part of the expedition traveled overland to rejoin the main force (Fernandez de Oviedo y Valdés 1973:81; Hernandez de Biedma 1968: 234-235). They again followed their original route. Several skirmishes with Indians occurred on this final trip (Gentleman of Elvas 1984:162).

Conclusions

In conclusion, the archaeological

data from these three mounds indicate that there was direct Spanish-Indian contact in the Hernando and Citrus County area of west peninsular Florida during the early sixteenth century. Though many of the artifacts (especially the gold and silver) were probably obtained through salvage of shipwrecks or trade of shipwreck material from other aboriginal groups, the cut bones from the Tatham Mound indicate that direct physical contact occurred. The narratives of the Narváez and Soto expeditions seem to indicate that the contact was most likely with members of the Soto expedition, who passed through this area three times during the period of July to November, 1539.

The archaeological evidence indicates that Safety Harbor groups abandoned the area shortly after contact. The Tatham Mound data reveal that an epidemic caused the deaths of a number of people during a short period sometime after contact. However, the careful burial and accompanying ceremonies of these epidemic victims indicate that enough people survived to bury the victims in traditional fashion. The apparent abandonment of the area afterward indicates that the encounter with Europeans signaled the beginning of the end of the Safety Harbor Culture in the Hernando and Citrus County area.

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