

Thirty-Five Beads From Colonial  
To Recent St. Augustine, Florida

submitted by:

Carlos Martinez  
Steven Ruple

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16-23 + 24

De la Cruz house

### ABSTRACT

The University of Florida field school under Dr. Charles H. Fairbanks undertook a ten week excavation of two lots in St. Augustine. Two houses were located on these lots, appearing first on a map dating back to 1740; they were not on the maps of 1788. Cultural relations between Indians and Spanish and the town's subsistence base were two areas of concern and the excavation was designed with these and other factors in mind.

The focus of this paper will be a description of the thirty-five beads found. Some correlation with beads from other sites throws a little light on the origin, typing, and dating of some of the beads, and may help to date other associated materials.

S. A. 16-23 and 24 is a multi-component historic site in St. Augustine, Florida. Although we knew from a preliminary cartographic study of the existence of one, or possibly two houses, our focus of attention was on the ecological and economic way of life in 18th Century St. Augustine. Our reasons for this approach were many. The architecture of the period was well known and we did not expect to make any major contributions to it. Ecological data would allow us to make comparisons with the English colonial coastal sites such as Fort Frederica, and ecological studies would be more informative than mere architectural knowledge concerning subsistence base. We also hoped to better define Indian-Spanish relations during this period, and incidentally trace trade origins of the artifacts found. The Indian-Spanish question was of particular interest for two reasons. First, the Spanish attempted to integrate the Indians into Spanish culture, religion, and agriculture whereas the British kept the Indians at a distance and had mainly trade relations with them, (Chatelain: 1941). Secondly, we know from the abstract of title that one Maria de la Cruz, an Indian, had been the original owner of the houses on our site. This gave us reason to suspect that our site would yield both Indian and Spanish artifacts and features, as indeed it did.

The two house foundations we excavated coincide with the Jeffreys map, published in 1762, but dating back to 1740, (ac-

According to Jeffreys the information on the map came from the Spanish at the end of the last war, which was 1740); they also appear on the Puente map of 1764, (Jeffreys: undated, Puente: 1764). They were located within the palisaded defense lines of the city, in the northern part of St. Augustine about 200 feet east of the Rosario line and 300 feet South of the Cubo line. These were the Western and Northern defense lines respectively. These defense lines were constructed after Governor Moore of South Carolina burned St. Augustine in 1702 and served to protect the city from English or Indian overland attacks.

The houses were large for the times, the north house being about 35 feet by 18 feet and the south house being 40 feet long; unfortunately we were unable to determine the width, (E.-W.), because the walls run under present day Spanish Street. The thickness of the walls of the south house, 1.8 ft., indicate a two story structure, while the north house was probably one story, but large. The houses also lay a few hundred yards from Tolomato, an Indian village just west of the Rosario line.

The foundations were of a poured tabby construction. Tabby consists of sand, whole and crushed shell, and lime made by burning oyster shells which makes a firm cement when mixed with water. On top of this, it was usual to construct the walls of the houses of coquina, the variant of limestone common in the area comprised of small shells cemented together by nat-

ural accretions. The sawn blocks of coquina were mortared to the foundations and to each other with burned shell-lime paste, making a comfortable home.

Since the entire city, save twenty houses around La Solidad Hermitage, was destroyed in 1702 by Moore's raid and we find our houses mapped by 1740, we must assume they were built in this time span. More likely, between 1715 and 1740 because tabby and coquina did not become common building materials until after 1715, (Manucy: 1962). Although the analysis of artifacts collected on the site is not yet complete, we believe these dates will be substantiated.

It should be remembered that since its founding in the 16th Century, St. Augustine was primarily a garrison town. St. Augustine was not self-supporting but was dependent on the situada from Spain which was, essentially, welfare. Its value to Spain lay not in any intrinsic value of the place, but rather in its strategic location. St. Augustine was a starting point for Spain's intensive mission effort among the Southeastern Indians. The mission system was Spain's rationalization for its expansive colonial policy. The city also served as Spain's northernmost bastion guarding the Bahama Channel through which Spanish ships sailing from Nueva Espana, (Mexico), to Spain had to pass, (Chatelain: 1941). In 1763, Spain staded Florida to England for Havana which had been captured by the British in the previous year. This brought drastic changes to St. Augustine. The

majority of the Spanish and some Indians shipped out to Cuba to resettle. The citizens sold their houses to English settlers at very low prices.

Sometime during the English occupation both houses were destroyed because they do not appear on the Roque map of 1788, but appear to have been replaced by two frame houses considerably smaller than those of Maria de la Cruz, (see maps A, B, and C). These structures are listed as being owned by Bartolome Usina, a Minorcan. ( The Minorcans originally came to New Smyrna, Florida, in 1767. They were recruited as indentured servants to begin a colony there, but when the colony failed in 1777, some 600 of them settled in St. Augustine, (Gammon: 1967)).

#### METHODOLOGY

S. A. 16-23 and 24 was excavated from March 28 to June 2 by the University of Florida Archeological field school under Dr. Charles H. Fairbanks. The top three inches of soil had been removed previously by bulldozer to remove a layer of recent debris. The crew then made a surface collection and the site was staked out with the transit into 10 foot squares. The transit was set up and the grid was laid out from stake 10 north, 40 east. Survey pins were used to mark off eight foot square sections in each square thus leaving bulks of two feet on each side. To dig, we used square-ended shovels

and trowels, which were augmented by scoops, spoons, and pallet knives in the reaming of small pits and post holes. Both power and hand screens were in use. The electric screen used had a diamond mesh  $3/8$ " by  $3/4$ ". There were also two gas powered screens with  $1/4$ " overlay mesh and two A-frame hand screens with  $1/4$ " mesh. As the artifacts were found, they went into polyethylene bags, 6 mils, and were labeled. A running daily log was kept and also a record of field specimen numbers, locations, contextual occurrences, and so forth. Features, profiles and the like were recorded in the log and feature cards made of them in the Field Specimen book. All washable artifacts were washed in tap water then dried and classified. There was a duty roster posted listing the students assigned to different tasks each day. In this way each student got to do every job at least twice.

We excavated the Eastern section of the site first in order to define the house locations. We then proceeded Westward picking up more of the north house and the backyard of the south house. During the fifth week, when the crew had been augmented by the arrival of three more members who had been excavating in Georgia, we began digging an East-West trench. The trench was five feet wide and effectively cross-sectioned the site from 35 north, 100 east to 35 north, 14 east. We then expanded excavations to the North and to the South in order to excavate the entire house areas. The last week of the dig,

we received some well points which had been slow in coming and we were then able to excavate a barrel-lined well, probably of the British and second Spanish dominions.

#### BEADS: DISCUSSION AND DESCRIPTION

Thirty-five beads and a stone cross pendant were uncovered in the course of the excavation. Two beads were of cut and polished stone, and the rest were glass. One third of the glass beads were of the tube or cane grouping, the rest were wire or mandrel wound. The only relatively large grouping of types were the Cornaline D'Aleppo trade beads which comprised eight of the ten cane beads. Five are large and cylindrical with dark green cores covered with an opaque red. One of these came from the well described earlier, and can tentatively be assigned to the range from 1763 to 1824, a rather recent date for this type, but plausible. It was in association with one of the smaller beads of the same type, (see figure II: #'s 11, and 12 for comparison), and both types are assigned this date. Sorensen states that the opaque red over translucent green Cornaline D'Aleppo were widely traded from the early 1600's till the early 1800's when new color types were added to the line, (Sorensen: 1971). Other dates have been attached to this same variety of bead which bears Sorensen out, (Pratt: 1961, and Gregory: 1965). The only other Cornaline D'Aleppo that can be roughly dated is the very small one that came from a

IIIa3

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IVa5



shell pit, (figure I:#11); the only other artifacts found in association were some early Majolica. Judging from stratigraphy and associations it is felt this bead was deposited in the earliest occupations- probably in the early 1700's. Similar beads have been dated around 1660-1677 at the Lemery Site by Pratt, (Pratt: 1961)\*. It is in this report that the bead was described as an Iroquois trade bead, and Sorensen states that these were widely distributed, as were all Cornalines, by the Hudson Bay Company.

It was noted that most ends were crimped where the beads were broken off from the original tube. Such a reduction in cross-section would enable the beads to be manufactured rapidly and more accurately. This has not been mentioned in the literature, so far as these authors can determine, although this feature is evident in the photographs included in the Lemery site report, (Pratt: 1961), and in the drawings accompanying the Los Adaes site report, (Gregory: 1965). The method by which the constrictions were made is open to conjecture and needs study.

There was no other significant grouping of beads. It is felt that the sample is too small and varied for statistical analysis, therefore a description of each bead is as follows:

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\*Pratt does not identify his Cornaline D'Aleppo beads as such; but his descriptions, (p. 11, 13), and color photo's, (p. 10B), leave no doubt in the authors' minds.

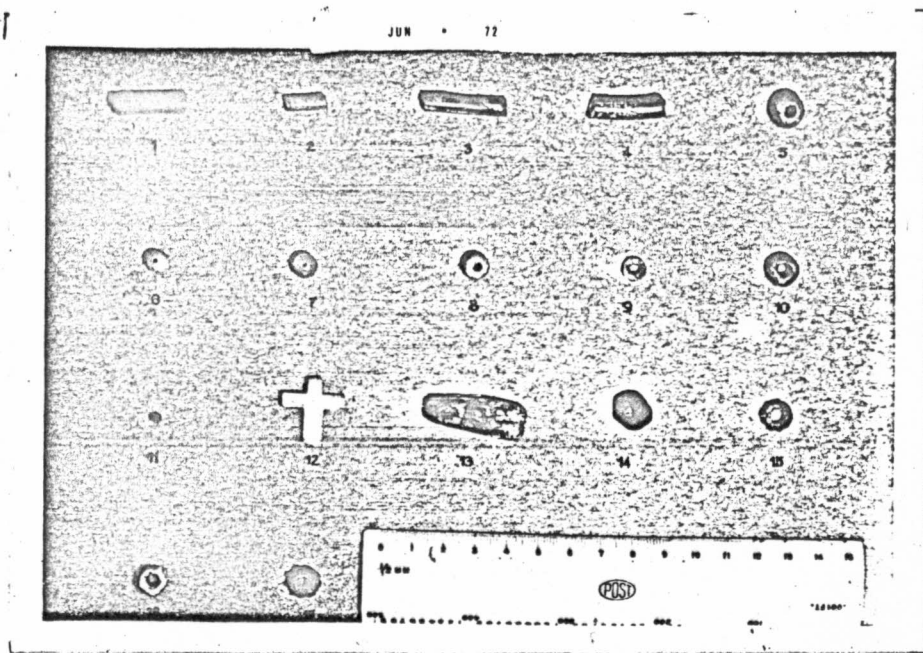


FIGURE I

Refer to figure I for the following beads:

- #1. Opaque red on translucent green core; a cylindrical Cornaline D'Aleppo, large. Length: 24 mm. Diameter: 7 mm. Perforation: 2.5 mm.; classification according to Beck is I.D.2.b.; the Kidd system of classification bypasses this type bead on size and core descriptions. But, being an open-ended system, we propose that this bead type be given the class IIIa3.
- #2. Opaque red on translucent green core; a medium Cornaline D'Aleppo. Length: 13 mm. Diameter: 5 mm. Perforation: 1.5 mm. Classification by Beck system is I.D.2.b., confusion exists as to whether to place this in Kidd's IIIa3 or fit it into the

IIIa3

IIIa3

above proposed new type. We prefer the latter, thus: IIIIa13.

#3. Opaque red on translucent green core; Large cylindrical  
Cornaline D'Aleppo. Length: 26.5 mm. Diameter: 5.5 mm. Perforation: 2.5 mm. Beck type I.D.2.b., Kidd type IIIIa13.

IIIa3

#4. Opaque red on translucent green core; large cylindrical  
Cornaline D'Aleppo. Length: 25 mm. Diameter: 7 mm. Perforation 2.5 mm. Typing: Beck- I.D.2.b. Kidd- IIIIa13.

IIIa3

#5. Spherical, green glass, wire-wound, heavily patinated bead.  
Length: 10 mm. Diameter: 11 mm. Perforation: 3.5 mm. Classification- Beck: I.C.1.a. Kidd: IIa28. - ? wrong

WIB

#6. Spherical, white glass, opaque, wire-wound, badly worn.  
Length: 7 mm. Diameter: 7 mm. Perforation: 1 mm. Classification by Beck: I.C.1.a. Kidd: IIa13. - ? wrong

WIB

#7. Spherical, clear, colorless tube type bead, probably recent.  
Length and diameter: 7.5 mm. Perforation is around 0.5-0.7 mm. Classification- Beck: I.C.1.a. Kidd: IIa9.

IIa9

#8. Opaque turquoise to light blue, spherical, wire-wound bead.  
Length: 7.5 mm. Diameter: 8.5 mm. Perforation: 2.7 mm. Classification- Beck: I.B.1.a. Kidd: WIB\_\_ (10 or 11-a copy of the color chart used by Kidd was not available to us)

WIB11?

#9. Oblate spheroidal, milky-lavender, clear, wire-wound bead.  
Length: 5 mm. Diameter 8 mm. Perforation 2.5 mm. The bead was probably closer to being spherical when in use as the faces have been chipped away rather badly; at least 2 or 3 mm. should be added to the length.

WIB4?

(fig. 1, cont'd.)

- #10. Identical to number 5; spherical, patinated green glass <sup>WIL</sup> wire-wound bead. Length: 7.5 mm. Diameter: 10.5 mm. Perforation 4 mm. Classification: Beck: I.C.1.a. Kidd: IIa28. <sup>wrong</sup>  
(All of this type are assumed to be clear without patina.)
- #11. Small, opaque red on translucent green core; a "seed" var- <sup>IVa5</sup> iety of Cornaline D'Aleppo; probably the earliest found at this site. Length: 2.8 mm. Diameter 3.5 mm. Perforation: 0.5 mm. Classification- Beck: I.B.1.b. Kidd IVa1.
- #12. White marble cross pendant. Bottom broken off limiting height to 23 mm.; width 20.5 mm. 4-5 mm. thick; falls into Beck's general grouping: XXIX.
- #13. Elongated, faceted, ground and polished Chalcedony bead. Color varies from tan to reddish brown; white striations in cob-web pattern appear on one side, (see photo). Drilled from both ends with different diameter drills of 2.0 and 2.5 mm.'s. Body tapers with eight facets along length, corners have four facets around face. Length: 31 mm. Diameter 8-13 mm. taper. Beck: XIV.
- #14. Polished brown pebble bead; varying opacity and color. Length: 9 mm. Diameter: 13 mm. Bored from both sides, bore tapers from around 2 mm. at faces to less than 1 mm. at center. Irregular shape; Classified by Beck: XLIX.
- #15. Clear, lavender hued, wire-wound raspberry bead. Length: 6 mm. Diameter 10 mm. Perforation: 4.5 mm., but varies. Classification: Beck: XXV.B.1.b. Kidd: WIIId2.

- #16. Opaque, light blue wire-wound; marvered to pentagonal circumference. Heavily patinated, and fragile. Length: 6.5 mm. Diameter: 9 mm. Perforation 4 mm. Classification- Beck: VII.B.2.b. Kidd: we propose WIIf6. WIIf\*ult
- #17. Translucent blue wire-wound raspberry bead. Length: 8 mm. Diameter: 10 mm. Perforation: 4 mm. Classification- Beck: XXV.B.2.b. Kidd: WIId7. WIId
- #18. (not in photo, but identical to number 6 in figure II); translucent blue, barrel-shaped, wire-wound glass bead; Length: 11 mm. Diameter: 10mm. perforation: 4 mm. Classification: Beck: I.D.1.a. Kidd: WIc11. WIc

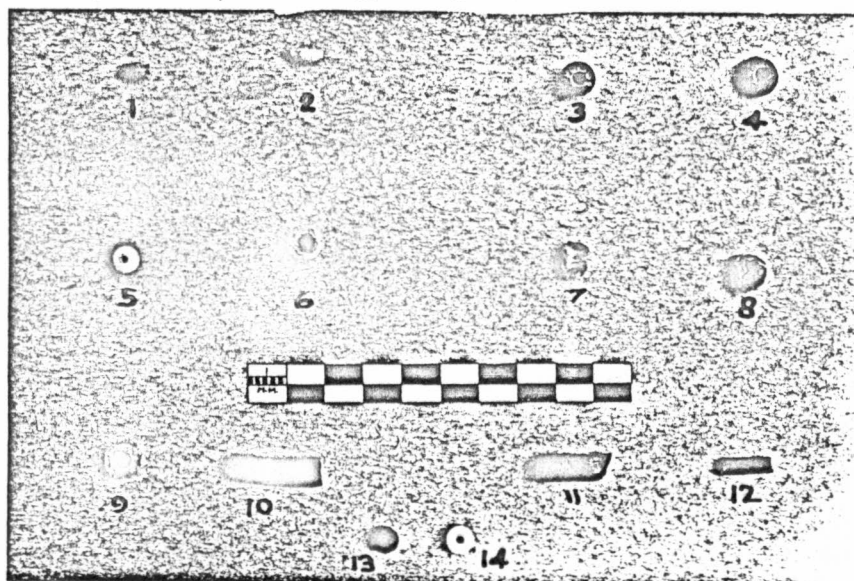


FIGURE II

The following numerals correspond to those in figure II:

- #1. Opaque honey-colored overlay, (or enamel), over white, opaque, wire-wound core; flat oval in vertical section; if cover is enamel it is oxidized badly; if thin glass overlay it is patinated and probably was another color. Highly fragile covering, whatever the material. Similarities exist between this and beads in other papers, although identical beads cannot be found. The Whitney Site, (Pratt: 1961), gives the date 1710-1745 to a barley-corn shaped bead of opaque white body. The Childersburg Site, (DeJarnette: 1960), lists several of the same shape and material and dates them generally between 1700 and 1800. The Natchitoches Site had nine specimen, but none of the above had any mention of an overlay, (Gregory: 1965). The bead's dimensions are, Length: about 8 mm. Diameter: about 5 mm. Perforation: about 1.5 mm., (the bead was too fragile to handle; it will be measured when better preserved.) Classification: Beck: I.D.1.a. Kidd: no type, we propose WIIIE2. WIC1?
- # 2. Lighter color but essentially the same as #1; dimensions- Length: 9 mm. Diameter: 5 mm. Perforation: 1.5 mm. same classification as #1. WIC1?
- # 3. Light blue, clear, wire-wound raspberry bead; slightly flattened. Dimensions- Length: 7 mm. Diameter: 10 mm. Perforation: 4.5 mm. Classification- Beck: XXV.B.<sup>2</sup>1.b. Kidd: WIID2. WID
- # 4. Green wire-wound bead essentially similar to others mentioned above. Dimensions- Length: 6.5 mm. Diameter: 10 mm. Perforation: WIB

- 3 mm. Classification- Beck: I.B.1.a. Kidd: W1b9.
- #5. Opaque pink spherical wire-wound bead. Dimensions- Length: 7 mm. Diameter: 7 mm. Perforation: 1 mm. Classification- Beck: I.C.1.a. Kidd: no type, we propose W1b16. W1b
- #6. Translucent, light blue, satiny, barrel-shaped, wire-wound bead. Appears opaque, but transmits light readily with back-lighting. Dimensions- Length: 11 mm. Diameter: 9.5 mm. Perforation: 4.5 mm. Classification- Beck: I.D.1.a. Kidd: W1c11. W1c
- #7. Blue, clear, wire-wound raspberry bead with two rows of elongated raised bumps instead of the usual three rows of round ones. Dimensions- Length: 7 mm. Diameter: 10 mm. perforation: 4.5 mm. Classification- Beck XXV.B.2.b. Kidd: W1Id2, (if two rows of oval protuberances are acceptable in this group.) W1Id
- #8. Clear blue patinated wire-wound raspberry bead. Length 7.5mm. Diameter: 10 mm. Perforation 4 mm. (same classification as above.) W1Id
- #9. Clear, colorless, wire-wound irregularly marvered, yet spherical bead. Dimensions- Length: 8 mm. Diameter: 10 mm. Perforation: 3 mm. Does not fit into either classification as the marvered portion is irregular and unsymmetrical. One bead was found at the Natchitoches site, (Gregory: 1965), that closely resembles this bead, but is half again as large with length and diameter of 12.5 mm. and 14 mm. , respectively.
- #10. Large Cornaline D'Aleppo, as described above. Dimensions- Length: 24 mm. Diameter: 7 mm. Perforation: 3.5 mm.; ends crimped. Classification- Beck: I.D.2.b. Kidd: IIIa13. IIIa3



(fig. II, cont'd.)

#11. Same as #10., but broken; Dimensions- Length: 20 mm. (broken) III a3  
Diameter: 7 mm. Perforation: 3.5 mm.

#12. Smaller Cornaline D'Aleppo, essentially the same as #2 in III a3  
figure I, but most of red is worn off. Dimensions: Length:  
14 mm. Diameter: 4.5 mm. Perforation: 2.5 mm.

#13. Opaque black wire-wound, spherical and faceted bead. The  
facets are ground into the surface which shows through between  
some facets as spherical. Wrapping marks indicate it is wire-  
wound, but marvering is the usual technique for faceting; Dimen-  
sions: Length: 6 mm. Diameter: 7 mm. Perforation: 2.5 mm.  
Classification- Beck: XIX.A.9, 24 facets; Kidd: no type, we  
propose WIH1.

#14. Hemispherical irridescent, opaque white bead. Five points  
on non-round side; probably modern as it appears to have been  
molded. Dimensions- Length: 4 mm. Diameter: 8 mm. Perforation:  
1.5 mm. Does not fit either classification system. MP?

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The following beads for various reasons were not photographed.

- #1. Pale green translucent spherical wire-wound bead. Eight-  
een scratches or grooves radiate around one orifice. Equator  
protrudes slightly as if a mold mark had been ground down, but  
nevertheless appears to be wire-wound. Length and Diameter:  
11 mm. Perforation: 1 mm. Beck: I.C.1.a. Kidd: WIb17, proposed.
- #2. Light green translucent bicone; granular fractures through-  
out as if damaged by fire. Dimensions- Length: 7 mm. Diameter:



7 mm. Perforation: 1 mm. Beck: I.C.2.e. Kidd: no class for bicones.

#3. Black opaque spherical bead; poor quality, molded, very recent; Length and Diameter: 8 mm. Perforation: 1.5 mm..

#4. Large wire-wound milk glass (translucent) bead. Length: 15 mm. Diameter: 12.5 mm. Perforation: 4.5 mm. Classification by Beck: I.D.4.f.b. Kidd: W1a3 (probably. This type of bead was found at the Whitney site, (Pratt: 1961) and dated 1710-1745. The Childersburg Site report, (DeJarnette: 1960), calls this a "pigeon egg", and dates it between 1700 and 1800. They call its type a Georgia Milk Oval, following the McKern Taxonomic system.

#### GLOSSARY OF TERMS USED IN BEAD DESCRIPTIONS

DIAMETER: the widest measure perpendicular to the hole axis.

LENGTH: the longest measure parallel to the hole axis.

PERFORATION: the diameter of the hole, (through which the bead is strung.

MARVER(ED): when facets have been pressed into the surface of the still plastic bead during manufacture. If the marver board has small holes and is rolled over the bead, the raspberry type results.

TUBE (or cane; sometimes called "bugle"): a bubble is blown into a molten lump of glass and the mass is drawn out into a long cylinder just before it

cools and hardens. The airbubble is drawn out as well, leaving a cylindrical hollow; the long tube is broken into shorter lengths. Sometimes these beads are tumbled in heat to bevel the edges or even approach a spherical shape.

WIRE-WOUND (or mandrel-wound): beads created by wrapping a gather of molten glass about a wire.

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