

**Preliminary Observations on the Archaeological Assemblage of the
1559-1561 Tristán de Luna Settlement**

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The recent discovery of a substantial assemblage of mid-16th-century Spanish artifacts at a terrestrial archaeological site within view of two of Tristán de Luna's wrecked colonial ships in Pensacola Bay, Florida, has led to the identification of this site as Luna's long-lost colonial settlement, occupied continuously between August 1559 and August 1561. Initial archaeological fieldwork was carried out by the University of West Florida during November 2015, and subsequent laboratory analysis of the extensive collection recovered has also expanded to include re-analysis of collections from 1986 UWF fieldwork in the vicinity.¹ While analysis is still ongoing and far from complete, we can now assert with confidence that not only do the mid-16th-century Spanish colonial artifacts at the site match expectations in terms of types, quantities, and proportions, but also cover a broad enough area on a landform that is fully consistent with available documentary accounts of the Luna settlement. In this brief paper, I will provide a preliminary descriptive overview of the artifact assemblage that we now believe to be associated with the first multi-year European settlement in the continental United States.

In order briefly to situate the site in its historical and archaeological context, I should note that the colonial expedition of Tristán de Luna was actually the third formal settlement attempted by the Spanish within the southeastern United States. The first was attempted by Ponce de León in 1521 near Fort Myers, Florida, and the second by Lucas Vázquez de Ayllón in 1526 near Brunswick, Georgia.² Neither of the two previous settlements have been identified archaeologically, and neither lasted more than a few weeks. Three subsequent Spanish expeditions did not result in the establishment of formal settlements, including Pánfilo de Narváez in 1528, Hernando de Soto in 1539-1543, and Fray Luis Cancer in 1549.³ Nevertheless, both Soto's army in the Southeast and that of his contemporary Francisco Vázquez de Coronado in the American Southwest, still left archaeological traces at short-lived winter encampments,

two of which have been discovered and archaeologically tested in recent decades, providing a pivotal snapshot of the archaeological assemblage of early 16th-century expeditionary campsites.⁴

In 1559, the Tristán de Luna expedition was launched as the most ambitious state-sponsored colonial expedition yet attempted in southeastern North America.⁵ Fearing anticipated French intrusions along the lower Atlantic coast, King Phillip II ordered the Viceroy of New Spain to establish a Spanish colony at the Punta de Santa Elena, originally discovered during Ayllón's era, and located at modern Port Royal Sound in South Carolina. Building on reports of Soto's discoveries in the interior Southeast, the Viceroy ordered Luna to establish a first colony at Pensacola Bay, then march inland to establish a second colony at the native province of Coosa in northwestern Georgia, before finally descending to the Atlantic coast to establish a third colony at Santa Elena. The end result would have been an overland route to the Atlantic, avoiding the treacherous Bahama Channel off South Florida.⁶

Luna's fleet of 11 crewed ships left San Juan de Ulua in June of 1559 with some 1,500 soldiers and other colonists on board, and finally landed in Pensacola Bay in mid-August.⁷ Selecting a site to lay out his first colony, named Santa Maria de Ochuse, Luna directed the offloading of his ships there for just over a month, leaving only the precious food stores on board until a proper warehouse could be built on land. On September 19, however, a massive hurricane devastated the fleet, leaving only 3 of the ships afloat, and stranding perhaps 1,300 survivors without food. Over the course of the next two years, the Luna expedition would struggle to survive, ultimately resulting in the withdrawal of all remaining colonists by August 1561. Although Luna's Pensacola Bay settlement was inhabited continuously by at least 50-100 soldiers and colonists throughout the entire two years, population levels fluctuated with the

dispatch of military detachments inland, along with the temporary relocation of most of the colonists inland to the native town of Nanipacana in south-central Alabama between February and June of 1560.⁸ Moreover, four relief fleets carrying food and other supplies arrived from New Spain during the course of the expedition, and the last half of 1560 was marked by the evacuation of many survivors on returning ships, leaving just a hundred by the following spring when Luna was deposed and returned to Spain. Just 50-60 men were left at the port for the final four months before being picked up and returned to New Spain.

These were the circumstances in which the archaeological assemblage discussed here was generated. No roster of soldiers or other colonists on the Luna expedition has survived, so apart from a fragmentary reconstruction of names mentioned in assorted documents, all we know are that there were some 500-550 soldiers divided into six infantry companies and six cavalry companies, about 200 Mexican Indian warriors and craftspeople, and hundreds of others including accompanying family members, servants, and slaves. Regarding the layout of Luna's settlement itself, documentary references provide only a few details, but include numerous specific mentions of a structure known as the royal warehouse, where food and other supplies and equipment were kept under lock and key, presumably including all the relief supplies delivered to the settlement and carefully rationed out to the starving colonists during the two years after the 1559 hurricane.⁹ There was a church administered by the Dominican missionaries,¹⁰ and the private houses of Luna and several of his officers are mentioned as well.¹¹ Beyond this, all we really have to go on are Luna's original instructions,¹² as well as subsequent descriptions of the prescribed norms for setting up new colonial towns as outlined in the 1573 Ordinances,¹³ supplemented by a reasonably abundant documentary and archaeological record of other 16th-century Spanish colonial towns elsewhere in the New World.

While time does not allow me to elaborate extensively here, the extremely dense concentration of artifacts recovered during 2015 excavations suggest that this may actually be the location of the royal warehouse for Luna's settlement, where food and other supplies and equipment would have been offloaded from incoming relief ships, stored, and then repeatedly distributed to settlers living on site over the course of the settlement's two-year duration. Apart from the fact that the location is precisely at the margin of the broad, level terrace on which the rest of the site is distributed, and seems likely to have been the closest ideal spot to the inferred landing from the ships at anchor, the artifacts recovered are substantially weighted toward the food storage category, also including a range of other utilitarian artifacts consistent with a 16th-century Spanish residential occupation. The assemblage is completely unlike the typical assemblage of Spanish gift and trade goods found at a number of contact-era Native American sites across the southeastern U.S., which are normally dominated by glass beads, iron tools, copper-alloy bells, and other similar easily portable items, usually found in burial context.¹⁴ Indeed, the Luna settlement assemblage is far more similar to the assemblages found on slightly later Spanish colonial towns established by Pedro Menéndez at St. Augustine and Santa Elena along the lower Atlantic coast,¹⁵ and to a lesser extent the contemporaneous Fort San Juan at the Berry site in western North Carolina.¹⁶

The Luna settlement assemblage described here derives primarily from an area of about half an acre within a site that has indications of being as much as 10 hectares in extent. The artifacts are the result of extensive surface collection, 76 shovel tests, one 1x1m excavation unit, and monitoring and backdirt sifting during construction trench excavation. Though localized prior disturbances associated with a previous house are doubtless responsible in part for the extensive surface scatter that resulted in the initial discovery of the site, close-interval subsurface

testing has confirmed that these surface finds are directly associated with undisturbed midden and feature deposits immediately adjacent to the 20th-century disturbances, which are otherwise limited to the uppermost surface layer. A cluster of no fewer than four small pit features in one shovel test and adjacent excavation unit produced *in situ* evidence for 16th-century Spanish ceramics, confirming that we do indeed have intact and undisturbed deposits at the site.

The artifact assemblage already recovered at the site is dominated by several hundred sherds of colonial Spanish and Aztec ceramics, but also includes a range of other contemporaneous metal and glass artifacts. I will briefly discuss some preliminary observations on all these artifact types below. The most abundant Spanish ceramic type at the Luna settlement, tentatively amounting to perhaps 250 sherds, are sherds from broken olive jars, or *botijas*, which were the standard liquid storage and transport container for wine, vinegar, olive oil, lard, and water. The Luna material falls within what might be called an “early” Middle Style, following John Goggin’s classification scheme, possessing what appear to be transitional characteristics between his Early and Middle Styles. Like Goggin’s Early Style, vessel walls are thin, apparently averaging around 7 to 8 mm, but vessels do not appear to conform to the Early globular form with handles on the shoulder. All rims recovered so far also lack the classic “donut” shaped downward-sloped thickening of typical Middle Style rims, instead appearing more like Early Style rims with wedge-shaped thickening sloping upward toward the vessel lip. Using Mitchell Marken’s more recent rim classification scheme, the Luna examples are more like thickened variants of his Type 1 rims than any of the other later types, and conform best to examples shown from the early 16th-century St. John’s Bahamas wreck.¹⁷ Not surprisingly, the terrestrial Luna materials appear most similar to olive jar sherds found on the Emanuel Point wrecks, which comprised more than 80% of the ceramic assemblage there also.¹⁸ A greenish lead

glaze is still present on the interior of some sherds, though clearly in the minority. Further detailed analysis of this large and tightly-dated collection of Spanish olive jar should provide an excellent benchmark for chronological studies of this important ceramic type.

A diverse range of lead glazed coarse earthenwares are also present, constituting several dozen sherds, but the range of variability in paste, glaze, color, and vessel form will require serious examination in comparison to established typologies, which are still somewhat ambiguous.¹⁹ The collection includes specimens generally consistent with 16th-century lead glazed redwares, and El Morro and Melado wares, but further specificity cannot be attempted at this early stage. However, these types will doubtless constitute important clues to household food preparation and serving practices at the Luna settlement.

Tin enameled majolicas are also less common components of the ceramic assemblage, comprising only a few dozen sherds at this point. These are dominated by the plain white 16th-century type Columbia Plain in various vessel forms, including at least one green-glazed specimen.²⁰ Other contemporaneous types such as Isabela Polychrome and Caparra Blue are also present, but form an extreme minority.²¹

A highly significant component of the Luna settlement ceramic assemblage is a small number of nonlocal red filmed and black-on-red sherds that are consistent with the Colonial Aztec Red Ware tradition documented archaeologically for 16th-century Mexico.²² A small number of Aztec sherds were also discovered on the Emanuel Point I wreck,²³ and the discovery of more Aztec pottery at the terrestrial Luna settlement is to be expected, given the documented origin of Luna's contingent of Mexican Indians, who were specifically noted to have originated both from the city of Mexico itself, as well as from Santiago Tlatelolco immediately to the north.²⁴ The Pensacola specimens are red-filmed on one or both sides, and several possess traces

of shiny graphite black painted line decorations. While more detailed evaluation will of course require comparisons with Mexican examples, several types of early colonial-era Aztec wares illustrated in the scholarly literature appear similar, such as the type Cuauhtitlán Negro Grafito Sobre Rojo.²⁵

Apart from ceramics, the Luna settlement includes a number of wrought iron nails and spikes consistent with a mid-16th-century date. One particularly notable type among the Luna specimens are at least nine caret-headed nails, identified based on both visual appearance and x-ray photography, which have previously been documented at both Coronado- and Soto-era sites, but which seem to be absent from Menéndez-era sites in Florida.²⁶ The Luna specimens may represent the latest known example of this distinctive nail type.

In addition to a number of presently unidentified iron fragments, other metal artifacts recovered at the Luna settlement include several items of copper, including two small rosettes that may represent rivets on Spanish helmets or other armor, an aglet or lace chape like those found at both St. Augustine and Santa Elena,²⁷ and a fragment of a thin open bell with engraved decoration. Lead objects include a molded lead shot, and clenched line weights presumably used for fishing, also seemingly identical to specimens found at Santa Elena.²⁸

Last but not least, six glass beads were excavated in the immediate vicinity of the densest artifact concentration and subsurface midden and feature deposits, all consistent with a mid-16th century date. Five of the beads are exactly the same type of seven-layer faceted chevron bead (IVC2d), while the sixth bead is a Nueva Cadiz Twisted (IIIA2a).²⁹ Since Indian trade goods are specifically documented to have been brought on the Luna expedition, their discovery in the vicinity of the presumptive royal warehouse at the site is precisely what would be expected.

I should not omit the fact that there is also a reasonably robust assemblage of local Native American ceramics on the site, most of which fall within the late prehistoric to contact era Pensacola series.³⁰ Given that there is no documentary evidence for direct trading with local Pensacola Bay Indian groups during the expedition, three possible explanations may be forwarded for their presence, all of which may be the case. First, they may predate the Luna settlement, and could even relate to the Soto-era chiefdom of Ochuse on Pensacola Bay. Second, they may post-date the Luna settlement, potentially even belonging 17th-century Panzacola or Chacato Indians documented to have lived on the Bay. Third, they may even have been pots brought back with the Luna colonists after their four-month stay at Nanipacana in south-central Alabama. Teasing out the associations and origins of these ceramics will be of particular interest to interpreting the site.

To conclude this very preliminary overview, while full laboratory analysis of the initial collection of artifacts from the Luna settlement is still very much in progress, and the initial stages of more extensive new fieldwork will be underway literally within a matter of days, I have no hesitation in predicting that this substantial and tightly-dated assemblage will eventually serve as an important benchmark in archaeological studies of mid-16th-century Spanish colonial material culture, particularly since it is the only Spanish settlement in southeastern North America in this era that was staged and supplied out of Veracruz, Mexico, unlike the settlements and exploratory expeditions of Ponce de León, Ayllón, Narváez, Soto, and Menéndez, with origins in the Caribbean and Spain. Just like Pensacola's later Spanish presidios post-dating 1698,³¹ Luna's colony was principally a New World venture based in Mexico, and the exploration and analysis of the newly-discovered settlement on Pensacola Bay will add a pivotal chapter to the history of early European colonialism in southeastern North America.

Acknowledgments

This paper is a result of a huge team effort, and I would like to thank all those who have made possible the 2015 discovery of the Luna settlement, as well as the fieldwork and labwork that have followed. While a complete listing is impractical here, I would like to highlight a few, starting with Tom Garner, who originally discovered the surface scatter, recognized its age and import, immediately contacted Jan Lloyd at the University of West Florida, and has continued to play a crucial role as neighborhood liason. I am also extremely grateful to the owners of the lot on which the site was first identified for their interest and willingness to permit archaeological investigations on their property, and to other neighbors whose interest and support have also been tremendous. I would also like to thank UWF Archaeology Institute Director Elizabeth Benchley for her essential role as senior administrator for the Luna settlement project, and who provided Institute staff, paid students, and made equipment and other resources available to the project. Among the Institute staff, UWF Archaeology Lab Director Jan Lloyd has played a pivotal role in the ongoing laboratory analysis of the materials recovered from the site, ably assisted by UWF graduate student Patty McMahon, supervising work by a range of student employees. Collections Manager Norine Carroll has expertly managed pulling old collections and associated records, and Archaeologist Jennifer Melcher has provided invaluable help with spatial controls and databases for the project. Considerable acknowledgments are also due to UWF President Judy Bense, Vice President Brendan Kelly, and the entire UWF communications team for their tremendous efforts in coordinating outreach to the community and the press regarding the discovery. Initial fieldwork at the site was directed by Patty McMahon, and involved a long list of graduate and undergraduate students who worked long hours at the site to recover as much information as possible while the ground was exposed, and who like everyone

else were initially unable to share the news of the discovery until after the December press conference. Field crews also included many other members of the UWF Division of Anthropology and Archaeology, including Archaeology Institute Research Associate Margo Stringfield, who recognized the first pit feature on the site in a shovel test, and Florida Public Archaeology Network staff Mike Thomin, who conducted videography at the site. To all of these individuals, named and unnamed, I extend my sincere thanks. I would also like to acknowledge Caleb Curren of Contact Archaeology, Inc., for his support of the UWF project and willingness to share information from his prior years of searching for the Luna settlement, and also David Dodson, with whom I have had many positive discussions regarding the documentary record of the Luna expedition. As should be abundantly clear by now, the discovery of the Luna settlement is the culmination of many years of interest, effort, and anticipation by the entire Pensacola community, and the investigation of the site has been and will continue to be a team effort.

Endnotes

¹ Bense 1986.

² Davis 1935; Hoffman 1990, 1992; Peck 1992; Worth 2014:8-19, 43-86.

³ Hoffman 1994; Hudson 1997; Worth 2014:23-28, 154-189.

⁴ Ewen 1990; Ewen and Hann 1998; Vierra and Hordes 1997; Mathers 2013:222-226.

⁵ Priestley 2009; Hudson et al. 1989.

⁶ Priestley 2009:(v. I) 102-105, (v. II) 224-225, 256-259, 324-325.

⁷ Worth 2009.

⁸ Priestley 2009; Hudson et al. 1989.

⁹ e.g. Priestley 2009:(v. II) 64-65, 68-69, 80-81, 92-93, 98-99, 106-107, 110-111, 132-133.

¹⁰ e.g. Priestley 2009:(v. I) 86-87; Dávila Padilla 1955:224.

¹¹ e.g. Priestley 2009:(v. I) 86-87, 94-95.

¹² Priestley 2009:(v. I) 18-33, (v. II) 224-225.

¹³ Nuttall 1921.

¹⁴ Smith and Hally 2015; Worth 1994, 2015.

¹⁵ Deagan 1985, 2009; South 1988; South et al. 1988.

¹⁶ Beck et al. 2006; Rodning et al. 2016.

¹⁷ Marken 1994:50-56.

¹⁸ Sorset 2013:44.

¹⁹ Deagan 1987:47-53.

²⁰ Deagan 1987:56-57.

²¹ Deagan 1987:58-59, 62-63.

²² e.g. Charlton and Fournier 2010; Hernández Sánchez 2011:113-120.

²³ Bratten 2009.

²⁴ Priestley 2009:(v. I) 142-143, (v. II) 150-151 (but the first Priestley text mistranscribes Tatelulco as Tatebula; see Luna y Arellano 1561:75r).

²⁵ Charlton et al. 1995:147.

²⁶ Mathers et al. 2010

²⁷ Deagan 1985:22, 26; 2002:74-76; South et al. 1988:135-140.

²⁸ South et al. 1988:179-180.

²⁹ Smith and Good 1982:30, 33-34; Deagan 1987:162-167.

³⁰ Willey 1949:452, 463-466; Fuller and Stowe 1982.

³¹ Bense 1999, 2003; Harris and Eschbach 2006.

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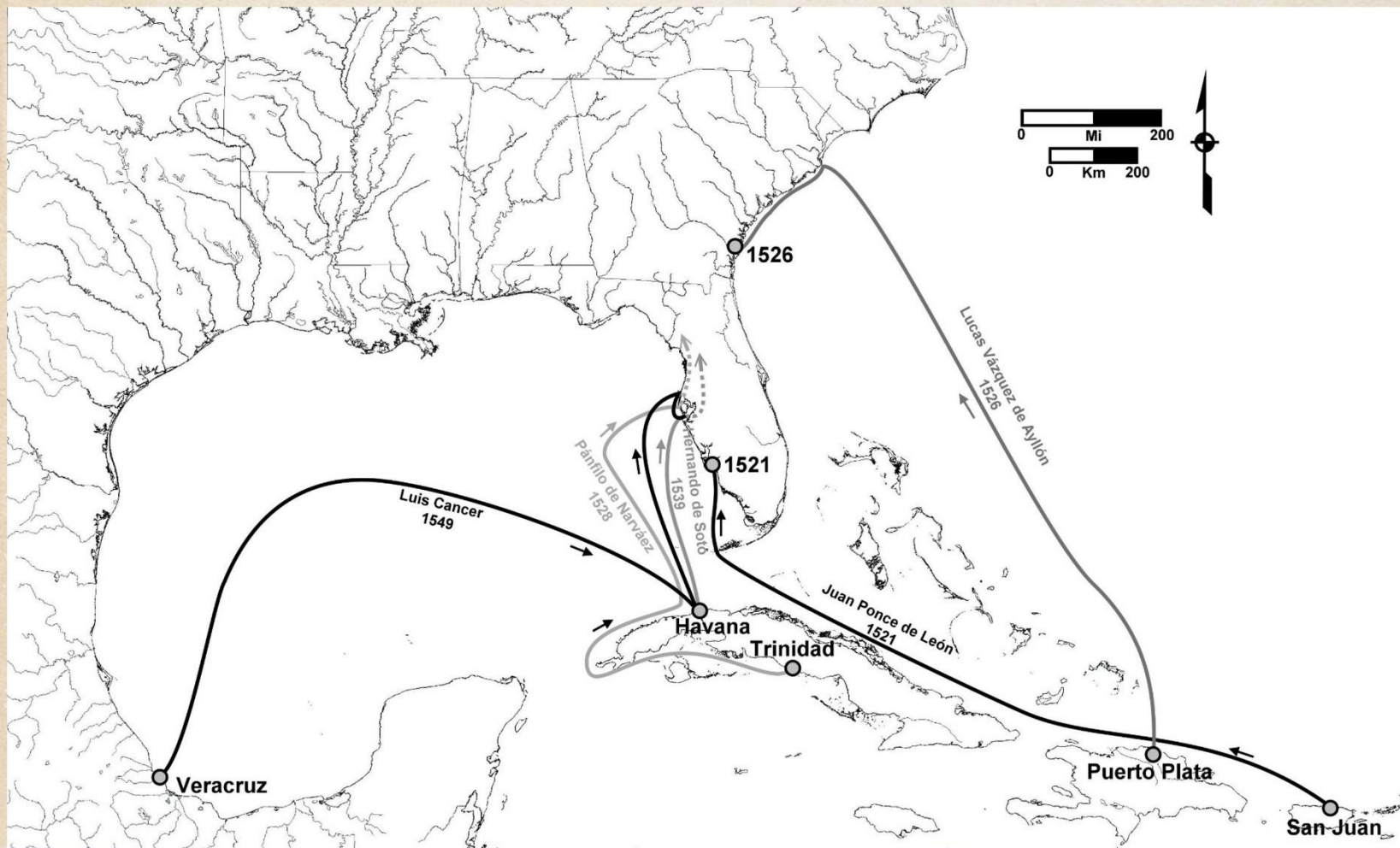
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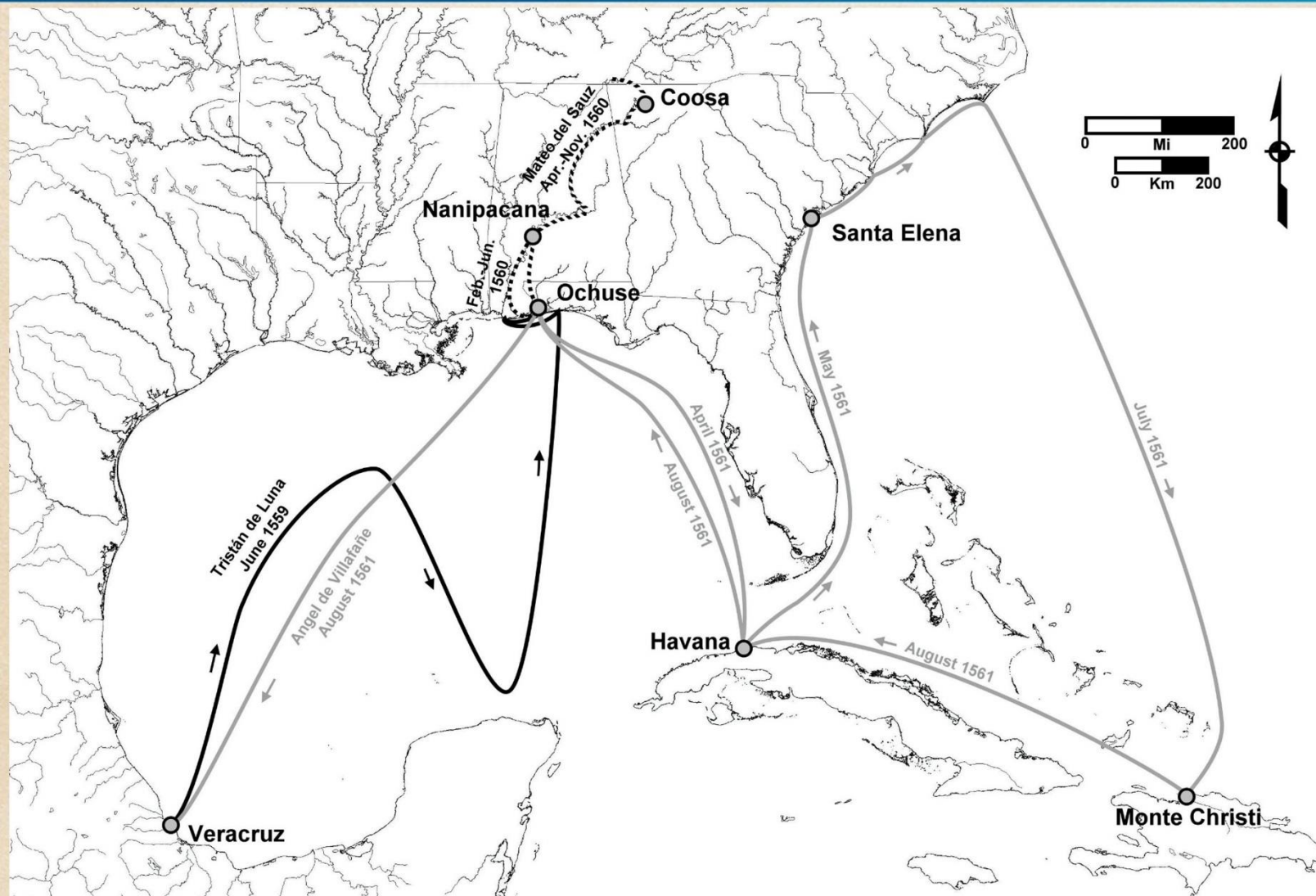
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Settlements and Landing Sites of Major Spanish Expeditions
Before Tristán de Luna

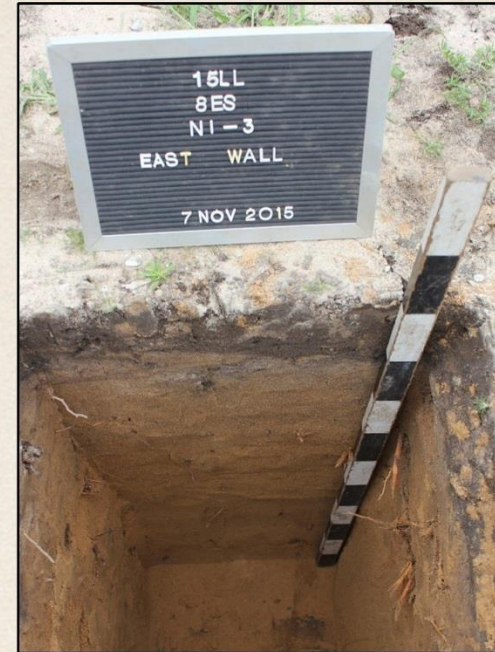


Maritime and Terrestrial Routes of the Luna Expedition



Early European Settlements Post-Dating Tristán de Luna

uwf.edu/luna



UWF Fieldwork, November 2015

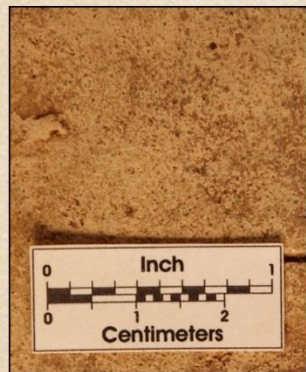


Sherd of Spanish
olive jar *in situ*
within feature

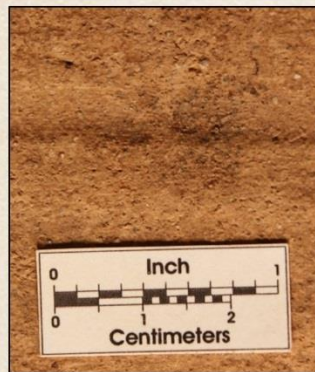
Intact Pit Features



Glazed, Interior and Exterior



Exterior Paste



Interior Paste



Profile Paste



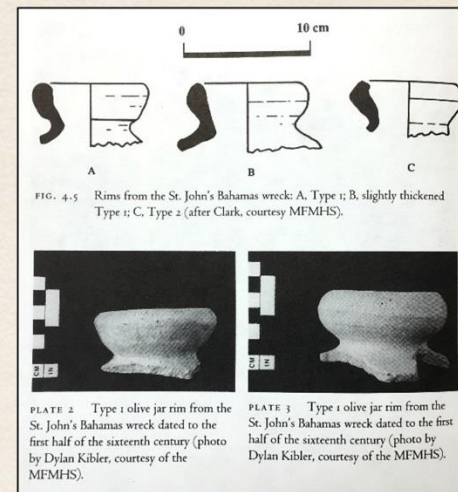
Unglazed, Interior and Exterior



Olive Jar Body Sherds

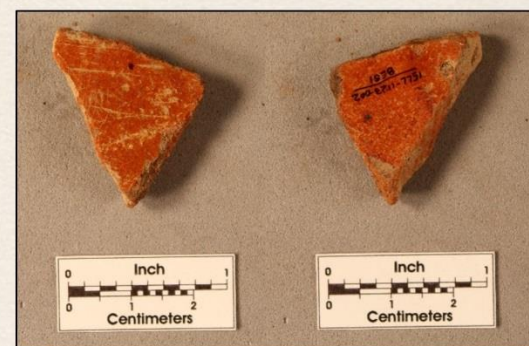
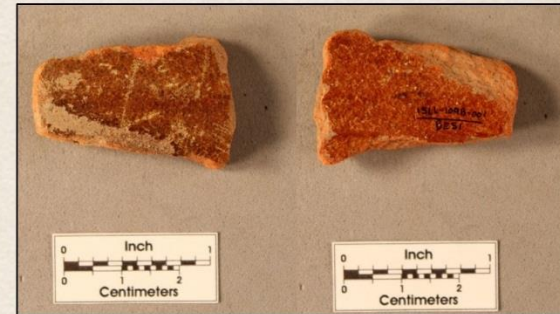


Rim from Emanuel Point II Wreck



Rims from St. John's Bahamas Wreck
(Marken 1994)

Olive Jar Rims



Lead Glazed Coarse Earthenware



Black on Red



Red Filmed

Colonial Aztec Red Pottery



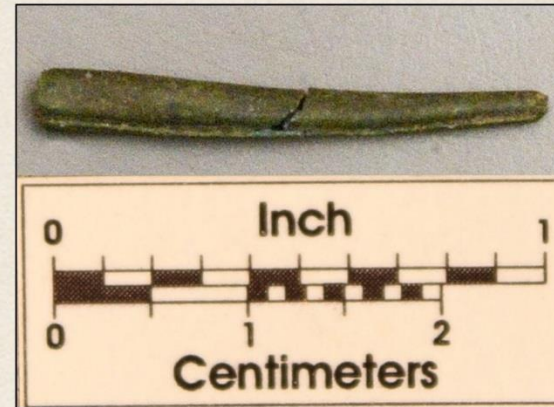
Caret-Headed Nails

Wrought Iron Nails

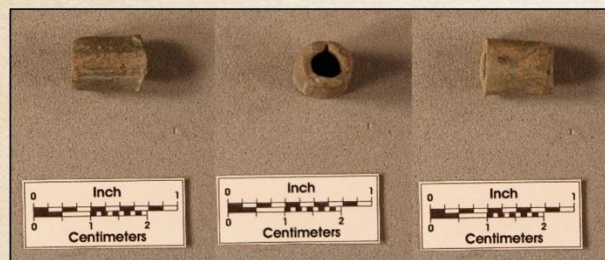
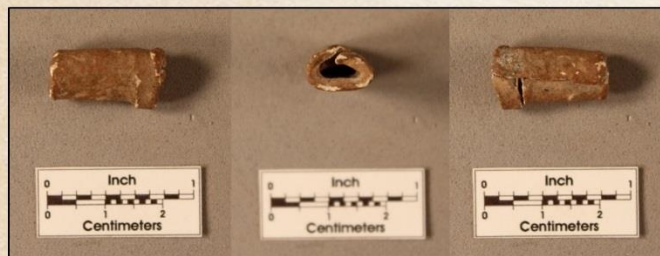
Other Nails



Engraved Copper Bell Fragment



Copper Aglet/Lace Chape



Lead Line Weights



Copper Rosettes

Other Metal Items



Glass Trade Beads