

The Serendipitous Saga of Danish Slave Trade Frigates *Christianus Quintus V* and *Fredericus Quartus IV*, Wrecked in 1710

Lynn Harris

Abstract

A large infusion of slaves into Caribbean Costa Rica came from two Danish frigates, *Christianus Quintus V* and *Fredericus Quartus IV*, wrecked in 1710. Testimonies of witnesses presented in the Danish Court suggest that the two captains conspired from the beginning of their voyage to sail to Panama, instead of the intended destination of St. Thomas. Here they could sell the slaves at a higher price. Part of the voyage account noted that the Danish ships had an unintended stopover at the island of Santa Catalina, a strategic base for British pirates and Miskito Indian allies engaged in slave raids in Costa Rica. After this stopover, the captains amended their plans to head to Central America. It is a significant global narrative intertwining the history of Denmark, England, Costa Rica, and West Africa that contributes towards understanding another complex dimension of slave trade in the early eighteenth century. This study aims to present a historical context for events surrounding the voyage and introduce subsequent investigations of signature artifacts, especially bricks and manillas, from two shipwreck sites in Cahuita National Park.

Introduction

In 1710 two Danish frigates *Christianus Quintus V* and *Fredericus Quartus IV*, carrying 671 enslaved Africans and a mutinous crew, ran critically low on food supplies. The ships arrived serendipitously at a bay on the Caribbean coast of Costa Rica in proximity to cacao plantations in Matina Valley where labor was much in demand at the time. The intended destination was originally the Danish West Indies island, St. Thomas. The crew burnt one ship and left the other to break up in the surf, while releasing enslaved Africans who escaped or were re-captured. The reported location was a remote area frequented by pirates and turtle fishers between Punta Carreta, believed to be renamed Cahuita or Punta Coaita on nineteenth century maps. At the time, this coastline of Central America was an economically contested Caribbean area, characterized by changing alliances and hostilities between indigenous Miskito Indians, Africans, Creole, Spanish, and English stakeholders.¹

A plethora of primary sources is available in the Danish Archives on the ships and the details of the last calamitous voyage. The West Indies trade section contains material about the Danish trading companies and firms, correspondence, accounts, lists of goods in the warehouses, ships' cargoes, ships' logbooks, auction lists, payrolls, dividends and much more. It details the three prior voyages and the final wrecking of the two slave ships is noted in “Documents Concerning voyages to West Indies and Guinea 1671- 1754.” Another important work is the extracted transcript by George Nørregård, *Forliset ved Nicaragua 1710*. Other documents pertaining to the two wrecks reside in the Colonial Documents collection housed in Archivo

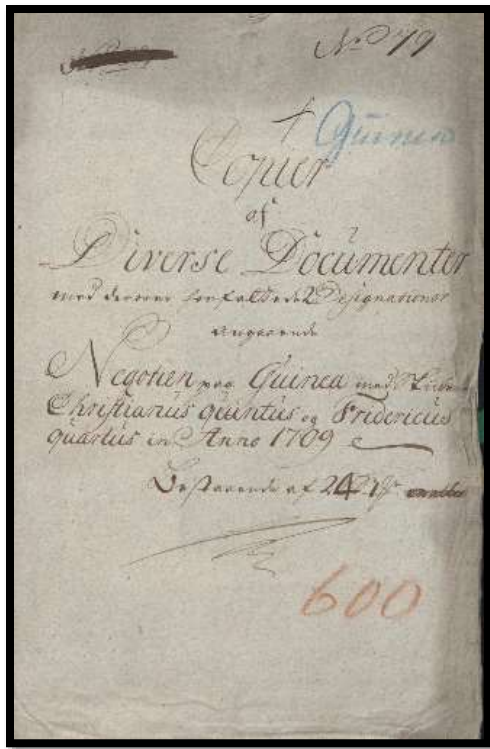


Figure 1. Special Tykkeriet I.Viborg, Copenhagen, Denmark. Negotiations in Guinea for Christiaus Quintus and Fredericus Quartus in the year 1709 (Photo: Lynn Harris).

Nacional de Costa Rica. ² A convenient primary source, in English, is the transcription compiled by Justesen, Ole (editor) 2005, *Danish Sources for the History of Ghana*, Volume 1: 1657-1735, Special Tykkeriet I.Viborg, Copenhagen, Denmark. The voyages are documented in the *Transatlantic Slave Database*. In addition to the enslaved Africans, the ships carried goods essential for the slave trade. These included, amongst others, manillas or trade bracelets, and a cargo of bricks to build warehouses and other colonial structures in the West Indies.

Danish West Indies Guinea Company

The two frigates belonged to the Danish West Indies Guinea Company which reorganized with the favorable trade conditions after the Nine Years War. From 1697 to 1733 shareholders owned around twenty vessels engaged in the slave trade. Some were already in service, and later purchased, renamed and repurposed for slave trade. Usually the company had two ships voyaging together in operation. The captains had to contend with possible mutiny, storms at sea and piracy. They were typically representative of the merchants who backed the voyage, but once underway, they became the sole decision-maker for the ship and all who were aboard. The trade route included risky stopovers for essential victualling at islands well known as pirate bases. About 9,300 slaves arrived on Danish ships in the West Indies between the years 1698-1733. The average Danish ship, like *Kronprins*, was around 100 feet in length, beam 28 feet, depth of hold 13 and a half feet, with 60 men and 20 guns. *Christianus Quintus*, 118 feet in length and 26 feet in beam, was built in Larvik and originally called *Victoria* until the West Indian-Guinea Company purchased the vessel in 1698. The Company renamed it after the Danish king who ruled from 1670 to 1699. Historical records suggest the vessel voyaged to Africa for slave trade missions on three separate occasions under the leadership of different captains. The maiden voyage took place in 1698 under Captain Cornelis Kreinsen Roode and crew of 118 men. In 1699 the ships first visited the Gold Coast of Africa and the West Indies. In 1703 it voyaged to Africa under captain Willem Resen, departing in 1704 from the Guinea coast with 8,510 pounds ivory and 36,000 rixdollars in gold. Captain Niels Corneliussen Boomfelt led the 1706-1707 mission with a 67 man crew arriving in Guinea 1707, then in September 1707 to the West Indies and finally June 20, 1708, to Copenhagen. Peter Wessel, a ship-boy, later became a legendary Danish sea officer and naval hero.

Fredericus Quartus, a larger ship at 144 feet in length, was built in Copenhagen, originally named *Copenhagen Stock Exchange* or *De Beurs von Copenhagen* and renamed after the newly appointed Danish King Frederik IV who ruled 1699-1730. It was purchased half by the firm of Treschow & Dreyer on the Company's account and half on that of a prominent merchant Jacob Lerche. The ship had less use in the slave trade transactions than *Christianus*, yet voyaged several times to Africa and the West Indies returning to Europe with valuable cargoes of consumer goods. From the beginning of their trade ventures the company became aware of the liability of human cargo. Of the 537 slaves purchased for 15,000 rix-dollars during the 1700-1701 voyage, only 238 remained alive upon reaching their destination, dying of smallpox, scurvy, dysentery, and dropsy. Another 41 died upon arrival in the West Indies. Danish vessels, up until 1712 carried no ship surgeons, in contrast to other nations. The range of cargo items obtained in Guinea and the West Indies offset the loss. This included logwood, sugar, indigo, cotton, gold, and ivory. The gold on one earlier voyage brought in 34,000 rix-dollars, the ivory 3,000 rix-dollars, and the rest of the cargo 30,000 rix-dollars. Company record books detail "goods, gold and teeth."³ Gold was often purchased in the form of chunks or dust, in addition to goods popular with African traders like fabrics, guns, tobacco, pewter, brandy, iron, copper and knives. Men mined gold dust and chunks, often diving underwater in rivers, and women sifted with calabashes on the banks. Gold became a common good carried by slave traders along with small balances for weighing the dust. Once acquired, gold dust was often recirculated in other African ports to purchase slaves.⁴

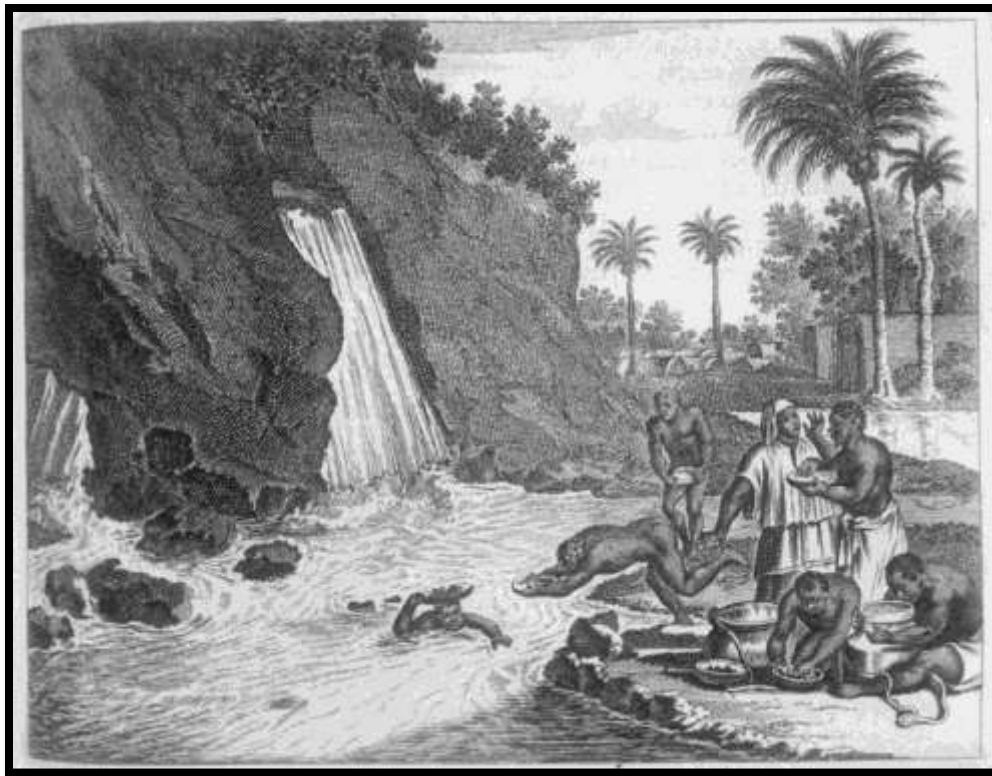


Figure 2. Diving for Gold in West Africa D. O. Dapper, *Description de l'Afrique. . . Traduite du Flamand* (Amsterdam, 1686; 1st ed., 1668), p. 293. *Slavery Images A Visual Record of the African Slave Trade and Slave Life in the Early African Diaspora*, Accessed March 8, 2020. Copy in the John Carter Brown Library at Brown University. Image is in the Public Domain.

Final Voyage of *Christianus Quintus* and *Fredericus Quartus*

In 1708, *Christianus Quintus* and *Fredericus Quartus* commenced what would become the disastrous final voyage for the Danish West Indies Guinea Company with the intent of delivering slaves to the Company Vice-Commander Jochum von Holten in St. Thomas in the West Indies. *Christianus Quintus* carried an outbound cargo intended for the African trade that included 2400 brass manillas, cloth, metal goods, and weapons, as well as building materials like bricks and boards to repair and enlarge Danish forts on the African coast and for building projects in the West Indies. Northern European building traditions heavily utilized brick and this style of construction also dominated the built heritage exhibited in the Danish West Indies. The

cargo of *Fredericus Quartus* included 30 chests of sheets, eight chests of guns, two casks of knives, 522 bars of Norwegian iron, 648 bars of Swedish iron, and nineteen cases of gifts and curios to sell and trade in Africa. There were also four chests of blue paper to pack West Indies sugar on the return voyage. Foodstuffs and provisions for the long voyage included 25,000 pounds of hard bread, 3000 pounds of soft bread, and 22 pounds of salted pork. Leftover African trade cargo often remained in the holds of vessels and was intended for future lucrative trade in the Caribbean.⁵

Captains Hans Hansen Maas, Jost van de Vogel, and Anders Pedersen Wærøe were aboard *Christianus Quintus*. Captain Diderik Pfeiff, in addition to shipwright Johannes Rask and third mate Peter Wessel served on *Fredericus Quartus*. Both vessels sailed from Copenhagen in December of that year armed with 24 cannons and a crew of 60. Landfalls included the Canary Islands and Cape Verde reaching Cape Three Points on the Gold Coast (Ghana) in March 1709, where the Danish head fort, Christiansborg, was located at Accra.

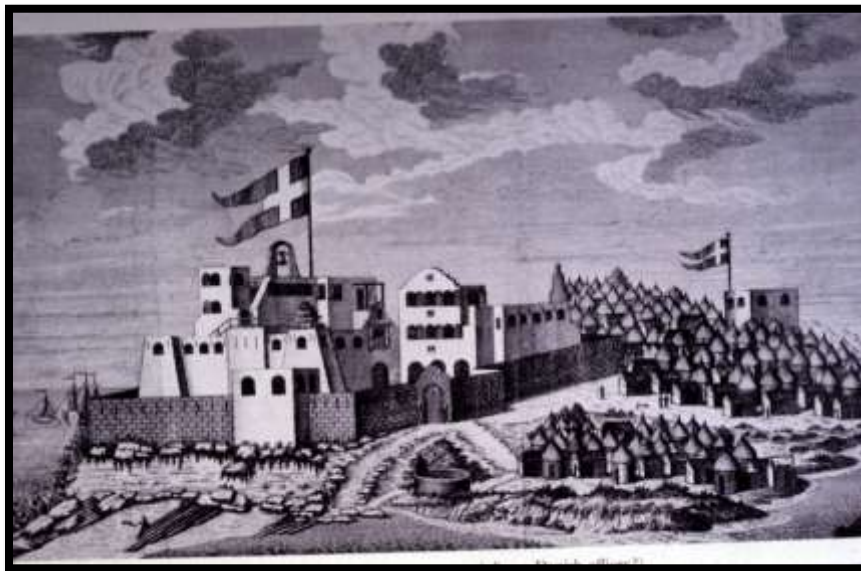


Figure 3. "Kongelige danske hoved Castell Christiansborg ved Accra", *Slavery Images: A Visual Record of the African Slave Trade and Slave Life in the Early African Diaspora*, accessed February 23, 2020, <http://slaveryimages.org/s/slaveryimages/item/634>. Image is in the public domain.

Due to a fire accident in a dingy on 14 June 1709 Captain Hans Hansen Maas drowned. His successor chief officer, Jost van de Vogel, also died the same year of fever. Anders Pedersen Wærøe became captain and possibly represents a crucial link in the narrative. He was still in his twenties, but had served on ships at sea since the age of 10. The priority at this time was to load the the ship with grain, corn and palm oil for slave consumption, but also to use up all their manillas or slave trade bracelets in exchange for ivory.⁶ Equally important was the care of the valuable remaining slave cargo. The crew of the two Danish ships were advised to treat them like small children, to take them outside onto the deck everyday for fresh air, singing and dancing, washing and grooming daily, and to keep their quarters well sanitized with Scadinavian juniper berries. There were two other cautions. First, not to allow the slaves to be overcome by berry fumigating processes and second, officially the crew could not use the slave girls for sexual purposes.⁷

Slave trade ships like these two likely had specific features suited to health and arrangements for carrying human cargoes. A temporary house for accomodating slaves on deck was built by lashing the booms and yards from mast to mast about ten feet above the deck serving as a ridgepole. Several other spars served as rafters 6 inches apart and covered with light matting. It allowed a breeze to blow through, but served to protect occupants from rain and sun, and to prevent Africans captives from easily jumping overboard. Another design feature to increase air circulation were five or six air ports with wind sails in the deck above the slave accomodations. In this area slaves would be exercised, flogged and forced to dance with music and drumming or have sexual intercourse with the crew. Other diversions were giving women bead work. Near the main mast the crew erected a partition or *barricado* made of wooden boards that ran from port to starboard on the deck. It was around eight feet in height and projected about

two feet from the sides of the ship. Ports were intended for blunderbuses or cannon to be trained on the captured Africans as a prevention for mutiny. A sentinel was posted at a door that allowed access to the deck enclosure during the day and it was locked at night. The ship would be divided into 4 rooms of varying dimensions with one for cargo storage (25 feet) and three others separated men (45 feet), women and girls (10 feet), boys. (22 feet). Platforms protruded 8 feet from the side of the vessel like benches with too little head room to sit up unless situated under a deck grate. Space constraints led to close proximity body packing on the platforms and often resulted in skin rubbing off on elbows, hips, and shoulders with the friction from the ship movement. Sick Africans would be placed in another location under the half deck.⁸

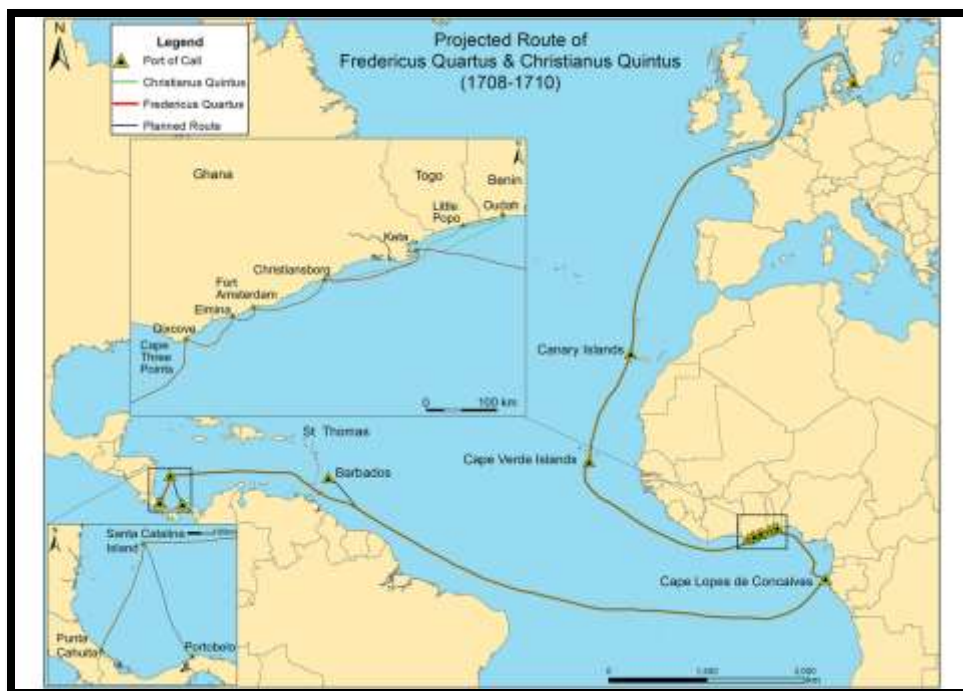


Figure 4. Projected route of the Danish Frigates 1708-1710 (East Carolina University image)

Exchanging trade goods and filling the holds with human cargo was a slow process as the ships voyaged to a variety of African ports receiving constant news briefs on the status of local warfare and delivering updates on their trade progress. The company was apprised and continually updated of what goods African traders preferred and how the Danish ships were

far against other European slave ships, mainly English, Portuguese and French. Nations competed for human cargoes, attempting to meet the needs and changing desires of their African clientele and consumers. On occasion unsold or undesirable trade goods were recycled on another voyage or returned to Europe, like the manillas or slave bracelets carried aboard *Christinuis Quintus* on the final voyage.⁹

Company official Erich Lygaard reported, "Christianus sailed from Oudah, on 28th



Figure 5. "Revolt Aboard Slave Ship, 1787", *Slavery Images: A Visual Record of the African Slave Trade and Slave Life in the Early African Diaspora*, accessed February 23, 2020, <http://slaveryimages.org/s/slaveryimages/item/2060> Image is in the public domain

September, where it took on one hundred and fifty-nine men, eleven boys, one hundred and fifty-one women, and two girl slaves. Of these, ten are dead. The number of slaves are due to the insufficiency of cargo. Far too few platillas¹⁰ and cowries are sent. No Dutch Ship goes to Oudah without 16,000 lbs of cowries and six to ten hundred platillas"¹¹ His missives also reveal the wait for African traders to have access to open roads for

slave trade and the rising costs of purchasing slaves. It cost 52-54

rix-dollars for a male slave and 36-40 rix-dollars for a woman. As the ships might not fill the holds with human cargo, they relied on typical African trade goods, like gold and ivory. Lygaard

reported that assistant Peder Pederson purchased for the ship *Fredericus Quartus* "fifty one marks in gold and four thousand pounds of elephant tusks" to make up for a shortfall in slave cargo.¹² The Danish West Indies Company instructed their Captains to take home whatever they could not sell back to Denmark.¹³ The longer the ships lingered along the coast the more possibility of death, disease, and especially slave rebellion while they had a chance to escape on land. *Fredericus Quartus* experienced just such a mishap. The first allotment of 24 slaves were loaded at the western Dutch fortress at Abandze and in September 1709, further supplemented from the eastern Fort Prinsensten in Keta. One night in September slaves broke free of their shackles. The uprising was quelled. After the ship's council adjournment the next morning, the crew cut off the hands of the rebel leader for display, decapitated him, and hung his body from the rigging for viewing over the next few days to instill fear in the other slaves as a preventative measure for further mutiny.¹⁴

Fearing rebellions amongst slaves, the captains of the two slave ships sailed close together for the remainder of the voyage. Strong currents and adverse winds caused the two ships to miss the usual stops for fresh water and food supplies at the Portuguese islands and pirate bases of São Tomé and Prince Island north east of Trinidad. Further navigation errors caused them to sail past Barbados, another potential stopover, by three degrees to the north. The crew was confused about their location and concerned about the small quantity of remaining food. With this uncertainty they eventually landed on an island with a Spanish fort, later identified as St. Catalina Island, 300 miles away from their intended destination of St. Thomas. It was likely the small satellite island close to the northern end of Providence (Providencia) Island, 125 miles east of Nicaragua, and strategic location for privateers operating against Spanish ships and well known to French and Dutch pirates. Henry Morgan used it as a base for his raid on Panama in

1670 and 1671. At that time there was a stone castle and two forts. The Danish captains went ashore and encountered Jamaican turtle fishermen who supplied them with meat. The two captains had time to contemplate the prospects of their navigational errors and agreed that they could not return to St. Thomas with the lack of crucial supplies. Both decided the best option was to proceed to Portobello, Panama. Here they planned to attempt to sell their remaining slaves to a welcoming market and acquire much-needed supplies.¹⁵ When the two ships approached land, the crew encountered a heavy storm forcing an unanticipated landing 500 miles away on a shoreline that they believed to be Nicaragua. Jamaican fishermen piloted the captains to a bay where the ships anchored. Later reports of slave captives reveal it was the shoreline of Costa Rica. Several 19th century maps show Punta Caretta in a variety of places. A very likely location is present-day Cahuita which appears on 19th-century maps near a river named Caretta. The name of the point or peninsula was possibly misinterpreted and instead corresponds with the location of Punta Cahuita (also labeled as Coiata *Cahuita*, *Cajuita*, *Caguita*, or *Punta Coaita* on maps).¹⁶



Figure 6. Thomas Jeffries Isthmus of Panama, Rumsey Collection. Showing *Punta Carata* and *Punta Chica or Monkey Point* (Punta Mona).

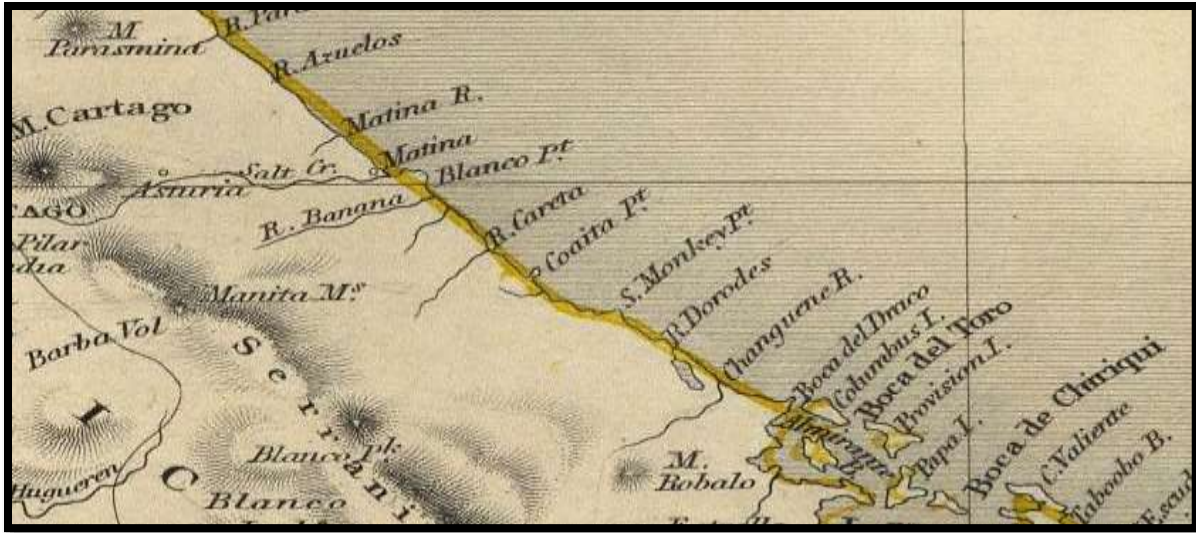


Figure 7. Portion of 1851 Map showing *Rio Careta* (north of *Punta Coaita*) and *Monkey Point*. David Rumsey Historical Map Collection, Published by J & F. Tallis.

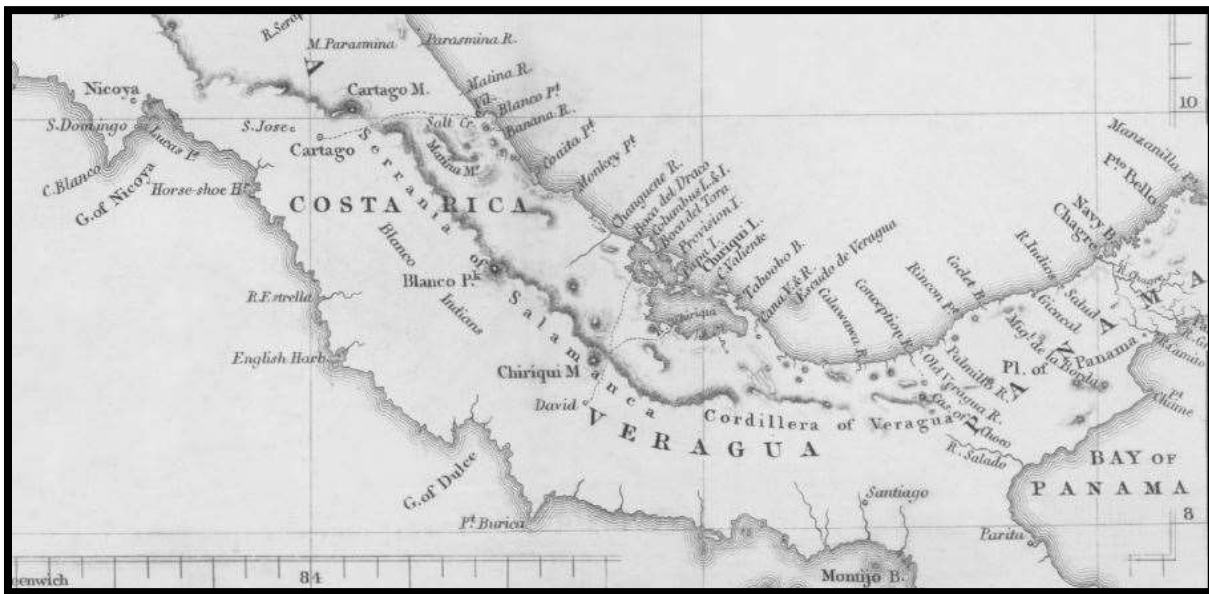


Figure 8. Portion of map showing *Coaita Pt.* (now *Cahuita*) and *Monkey Point* (now *Manzanillo* and *Punta Mona*). Sketch of the Eastern Coast of Central America, Compiled from Notes of Captain Richard Owen and the Officers of Her Majesty's Ship *Thunder*, and Schooner *Lark*, *The Journal of the Royal Geographical Society of London*, Vol. 11 (1841), pp. 76-89.

Upon arrival in the bay, supplies were low and the anxious crew of *Fredericus Quartus* confronted Captain Pfeiff and demanded that the slaves be released so the remaining food could be divided amongst them. When the captain denied their request, as well as their subsequent demand for a month's pay, the discontents threatened mutiny. To appease the sailors, Pfeiff decided to release the slaves ashore, but at this point, the crew was no longer satisfied with the captain's concessions. They rapidly broke open chests and divided the ships' gold among themselves, then set *Fredericus Quartus* alight using a pile of refuse, tar, and pitch. Captain Wærøe himself distributed the gold to the crew. Then the boatswain of *Christianus Quintus* deposited the crew ashore and cut the anchor cable, allowing the vessel to break up in the surf. The crew hired a group of Jamaicans to transport them to Portobello. Left with no other option, apparently, the captains returned to Denmark.¹⁷

Mutiny and Escape

The Danish West Indies company soon received news that slaves escaped into the forests and later observers reported assimilation into Miskito Indian communities. Costa Rican colonists captured some of the slaves and took them to the colonial capital, Cartago, for questioning about their African origins, the voyages and their escape from the ships. In the following months, the Royal Asiento of Panama conducted further investigations of the incidents questioning both the captains and the crew. One hundred and five slaves were captured and resold to Costa Ricans at auctions. Eight years later, accusations of slave smuggling amongst Costa Rica settlers, added to jurisdictional disputes amongst colonial officials, instigated further interrogations of African-born slaves. Spanish colonial authorities initiated a lawsuit against the two captains Pfeiff and Wærøe, for attempts to illegally sell slaves in Spanish territory. Both returned to Denmark and

18 years later Wærøe became Governor of the Danish Gold Coast (24 December 1728 to 12 August 1735) but was deposed in 1735 and charged with illegal trade and a variety of allegations including selling enslaved women for sexual abuse. He died in 1742.¹⁸

While scholars have explored the post wrecking events and transition of Africans into Costa Rican Creoles, understanding the role of piracy and turtle harpooning are significant facets of the fabric of the historical narrative of slave trade in Central America at the time. Well-known British and Dutch privateers turned buccaneers like Henry Avery, Edward Mansfield, Henry Morgan, Edward Collier, Laurens de Graf (Lorencillo) and Laurens Prins were amongst those who frequented the Caribbean shores of Panama and Costa Rica. Not only port cities like Portobello, but also Matina Valley where cacao haciendas existed as early as the late seventeenth century, and planters relied first on Indian labor, but later Africa slaves. These were large plantations where slaves worked almost autonomously with little colonial supervision. In the 1680's the volume of cocoa exports experienced exceptional growth peaking around 1710. Hacienda masters needed more slave labor than ever before and simultaneously slave purchases or hiring from masters in other areas escalated beyond expectation. These buccaneers, along with lesser-known ones, were slave owners, slave raiders and middlemen in the commerce of the slave trade. Along with turtling expeditions, opportunistic and semi-organized slave commerce was equally lucrative and representative of their engagement in the Atlantic World. The buccaneers captured and sold slaves on the beaches of Matina and other parts of the Caribbean coast, but also raided cacao haciendas and kidnapped slaves for a high demand market at the turn of the century.¹⁹

Piracy and Slave Trade

Slave trade vessels, like these two frigates, were vulnerable to piracy. Pirates did not generally hijack the entire ship and cargo for a long sea voyage. Managing a slave ship on a transatlantic crossing was both logistical and fiscally complicated. Shipboard experience in keeping slaves alive was crucial and the business side of transactions was complex. Taking a large illegal human cargo in ports where the main slave auctions were held was therefore problematic. Instead, pirates preyed on slave ships anchoring off the coast of Africa or those sailing to one port to collect slaves. These ships were loaded with a valuable trade cargo of rum, firearms, textiles and metals, which were more easily sold than slaves. Sometimes recently captured ships and slaves were simply taken and ransomed back to the owners. There are other examples of violent and disruptive struggles at sea and in anchorages where captives were moved between ships. Sometimes captures were chaotic and opportunistic, and other times well planned and executed at random stops along well-known voyage routes or locations on land. Furthermore, there were various hues of black-market slave trade that included not only piracy, but also privateering and interloping ships of other nationalities. Many privateers continued as pirates or rather buccaneers, heading to the South Seas towards less conspicuous and increasingly lucrative Central and South American venues to continue raiding and marketing their illicit spoils. Another opportunity for plunder or strategizing with crew and captains, was as the ships approached the West Indies and Americas where the human cargo, African products like ivory and gold, and the ship itself were all valuable assets and could be marketed at more discrete and known pirate locales.²⁰

Danish court records suggest that the two captains had a prior agenda to sell the slaves in Portobello where they would fetch a higher price, so there are questions whether their

engagement with the turtle vessel on Santa Catalina was planned or conveniently strategic. Santa Catalina was a known base for slave raiders. Since 1699, Miskito slave raiders collaborated with British allies. Raiders stole slaves and commodities including cocoa nuts and turtle shell which were traded primarily to Jamaicans. A historical writer known as M.W. reported that a charismatic Miskito king, named Jeremy, described as a 60-year-old six-foot tall man of dark brown complexion with hair hanging down to his shoulders and a voice like a bear, was crowned by his brother in Jamaica and thus had many “courteous” dealings with the British. He was known to “possess several islands of the West Indies, particularly that of Providence (Since called St. Catalina by the Spaniards) which is situated in 13 degrees 10 m. latitude lying east of Cap Gracios de Dios (vulgarly known by the name of the Musqitos)...” Jeremy was also contracted to supply men to “hunt Negroes” and to “give them rum for the voyage home.”²¹ By the early decades of the eighteenth-century, at the time the two ships wrecked, Miskito raiding was heavily influenced by the market provided by Jamaica, or by Jamaicans and European residents on the Miskito coast, and Santa Catalina island was a strategic locale in the planning process.²²

Archaeological Investigations

In 1981, archaeologist Stephen Gluckman of the University of Florida visited two underwater sites in Cahuita and interviewed the community. Locals and free divers knew about the shipwreck sites and revealed they often recovered numerous small artifacts including bottles, bricks, slave trade bracelets or manillas, cannonballs, and swords. Today much of the shipwreck collection is still in the custodianship of residents and park rangers of MINAE (Ministerio de Ambiente, Energia y Telecomunicaciones /Ministry of Environment, Energy, and Telecommunications).²³ Thirty-four years after Gluckman’s visit, the East Carolina University

maritime archaeology team conducted extensive recording operations on two sites between 2015 and 2019 compiling descriptions of the site characteristics.²⁴

Manillas

A variety of items, including tantalizing signature artifacts like slave manillas, were part of the collection of the early explorer, Christopher Weston Knight recovered in 1969 from the Cahuita park wrecks. He donated the artifacts to a community inventory project before passing away. In 2017 East Carolina Universities faculty and student assisted in documenting this collection as part of field school exercises. Manillas, epitomized as the money or currency of the slave trade, were open-circle, copper or brass bracelets with flared ends worn by African men and women on their arms and legs. The term was derived from the Portuguese term *manilha* or “hand ring.” In West Africa, women wore quantities of these status bracelets to symbolize their husband's wealth. Africans from the different geographic regions had varying names for styles of manilla which they valued differently. They developed cultural affinities for styles of manillas and often European slave ships competed to meet and keep up with the needs and trends of their



Figure 9. Okhapo variety of Manillas from Nigeria (Image is in the public domain, Rossier 1954)

African consumers. Manillas were partly differentiated and valued by the sound they made when struck. The Portuguese were the first nation to start imitating and making these bracelets for the slave trade contracting with European manufacturing companies, especially a large company in Antwerp. Later, other European nations began making these bracelets locally and the items became a standard part of the slave ships' outgoing cargo inventory.

This continued to mid-1800's, with trade nations switching

to different metals and alloys, including iron. Africans still wore manillas as decorative body adornments until the 1940's. Several shipwrecks in the archaeological record associated with the slave trade carried these manillas, among others the *Whydah* (1717) in Massachusetts, *Henrietta Marie* (1700) in Florida and the "Manilla Wreck", possibly *Amazon* (1739) in Bermuda.²⁵

Ivory

No ivory has been observed on either of the shipwreck sites yet and the questions arises as to whether the crew or captains had the ability to carry it ashore or salvage lucrative items, apart from the gold, at the time of the wrecking. Tusks were likely stowed above the bricks on planking. Ivory was acquired at the same time as the human cargo or from stockpiles at the West Africa trade forts. Europeans purchased ivory bundles along the West African coast from the Senegal River to Cameroon during the late seventeenth and early eighteenth centuries. The upper Guinea coast, the Ivory and Gold Coasts, and the Slave Coast were all productive target areas. African leaders controlled the trade, and some sources suggest entitlements to a tusk from every elephant killed by a hunter in their area. There is evidence that the king of the Asante had his own elephant hunters. Another easily accessible source were elephant graveyards, with secret locations well known to the local communities. Both hippo and elephant ivory had significance in west-African cultural expression. Mary Kingsley travelogues detail women's ivory hairpins to decorate plaited hair, men's arm bracelets, and ivory furniture. A 72 inch carved African ivory tusk from Benin donated to the Chicago Institute of Art exhibits twenty-seven human figures and many representations of animals. Curators interpret the figures as representing an oral history displaying historic and mythical kings, Benin warriors, and Portuguese soldiers. The animals

depicted are associated with the Royal Benin lineages of the Yoruba peoples and include crocodiles, mudfish, and birds. These are duplicated in other royal areas such as carved doors.

Dutch West Indies records reveal details such as volume of trade and load per ship, which was considerably higher than that of the two Danish vessels. The highest volumes were between the years 1709 and 1723, putting the two Danish ships wrecked in 1710 at the cusp of this trading peak and competing with other European nations in west Guinea. The tusks were designated sizes such as full teeth “tanden” and small tusks “crevel” or “corivillos.” Popular trade items for ivory were sheets, certain colors and styles of cotton fabrics, brass basins, gunflints, and brandy. In Europe, ivory was popularly used for utilitarian and artistic cultural purposes, varying from coffins, large chests, mirror frames, crucifixes, plaques, portrait medallions, furniture decoration and even statues. As it became increasingly available in the mid-1700s, everyday items were carved like hair combs, tankards, hunting horns, powder flasks, billiard balls, toiletries, cutlery handles, chess pieces and boards, spindles and shuttles, and keys for musical instruments. Centers for ivory carving during the seventeenth and eighteenth centuries on the continent were Flanders, parts of Germany (such as Augsburg, Munich and Nuremberg), and Dieppe in France. Carving done in the Netherlands seems to have declined about the middle of the eighteenth century. One writer, however, suggests that the Dutch kept their Flemish neighbors supplied with ivory, and there is no reason to doubt that ivory not used in the Netherlands was sold in Germany.²⁶

Other shipwrecks with ivory as part of the cargo assemblage include Dutch East India Company vessels *Vergulde Draeck* (1656) located near Perth in Australia and *Risdam* (1727) near Mersing east coast of Malaysia, British ship *Child Harold* (1850) wrecked off Dassen Island, South Africa, Danish slave vessel *Fredensborg* (1768) wrecked off the island of

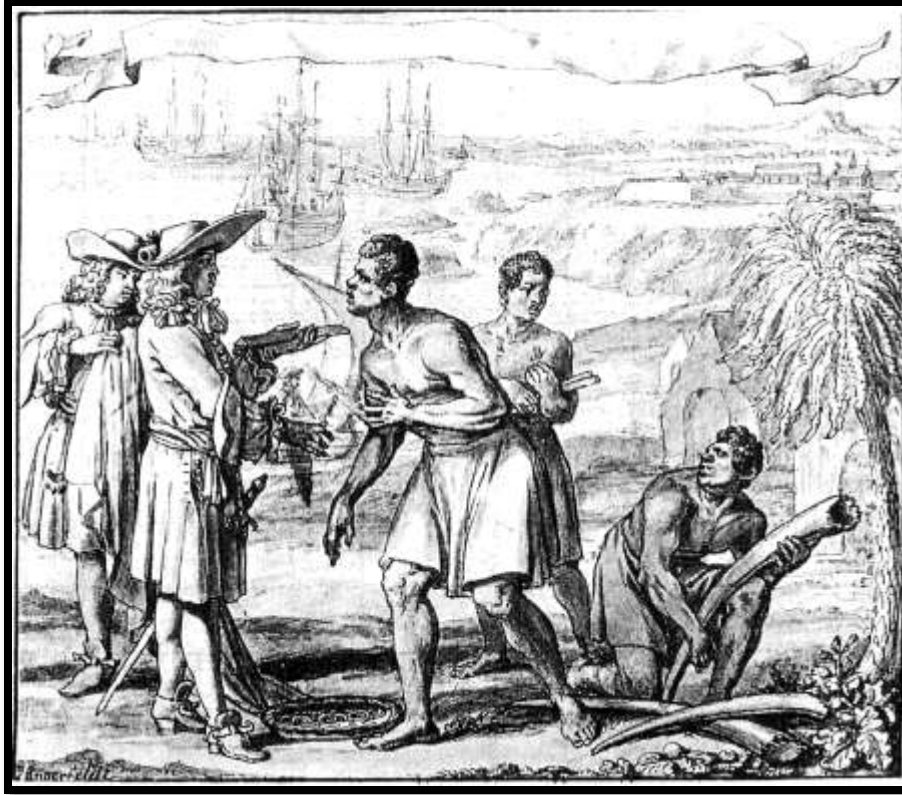


Figure 10. Trading Ivory in the late 1600s. Tauschhandel Grossfriedrichsbur 1690. Rutger van Langervelt, pen-and-ink drawing - Ingrid Mittenzwei, Erika Herzfeld Brandenburg-Preußen 1648 bis 1789, Köln 1987. Slavery Images A Visual Record of the African S

Arendalin in Norway. Ivory artifacts were both from elephants and hippopotami. Some displayed inscriptions identifying trading companies. Chemical analysis of ivory may potentially provide information about date ranges and diet of elephants or

hippos pertinent location of herds. In sum, it could be helpful in filling in details about trading patterns of European ships and African ivory trading networks. To date most of the ivory recovered from shipwrecks originated from East African herds, and those with West African ivory are rare. Finding preserved ivory on the Costa Rica Danish wrecks, should it still be extant, would be significant avenue to add new understandings of slave trade and environmental history of West Africa in the early 18th century.²⁷

Brick Test Excavation Unit

During 2015 field seasons, a maritime archaeological team investigated and mapped the two shipwreck sites in Cahuita park. Of interest was an extensive brick cargo. Although Gluckman's team, with the guidance of a local diver, reported seeing fragments of hull structure and manillas

on the site in 1981, neither the archaeological researchers nor any of the local fishing community observed these features on the site since that time.²⁸ The manilla was located on top of the wood planking and a chipped stone was noted with little descriptive details or photographs. The Brick Site, still relatively intact since the Gluckman visit, still resembled a cargo/ballast area containing a floor of yellow brick ballast with two cannons. It is located 310 meters west of Cahuita Point, on the eastern coast of Costa Rica. Situated within the boundaries of Cahuita National Park, the area of the shipwreck presently encompasses an estimated 1,474.07 m² over a predominantly sandy bottom. The main feature comprises a large, organized mound of yellow bricks oriented along a 335° axis and stacked along their longitudinal edge, with the faces of the bricks pointing east and west.²⁹



Figure 11. Location of Two Shipwreck Sites in Cahuita, Costa Rica (East Carolina University Image)

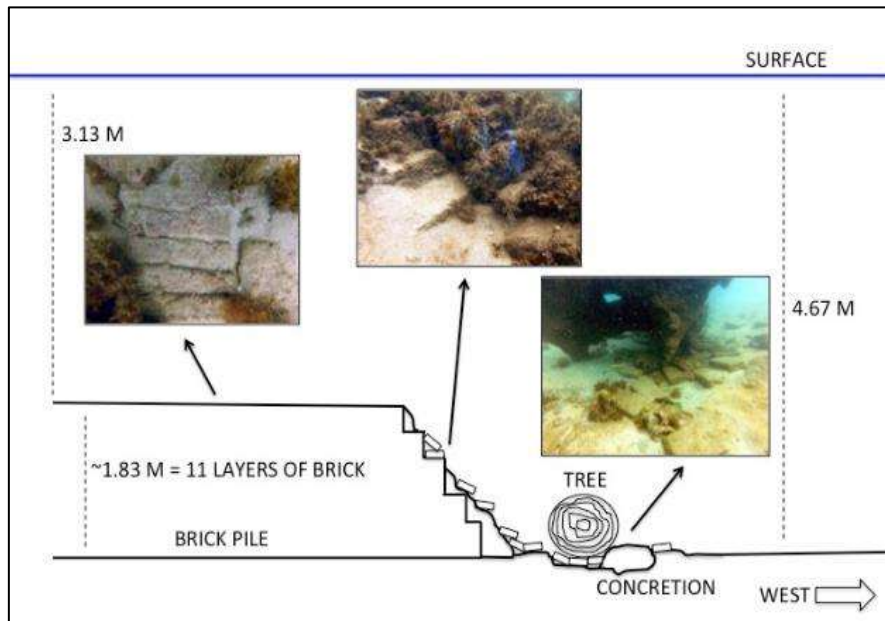


Figure 12. Brick cargo on an eroding profile (East Carolina University Image)

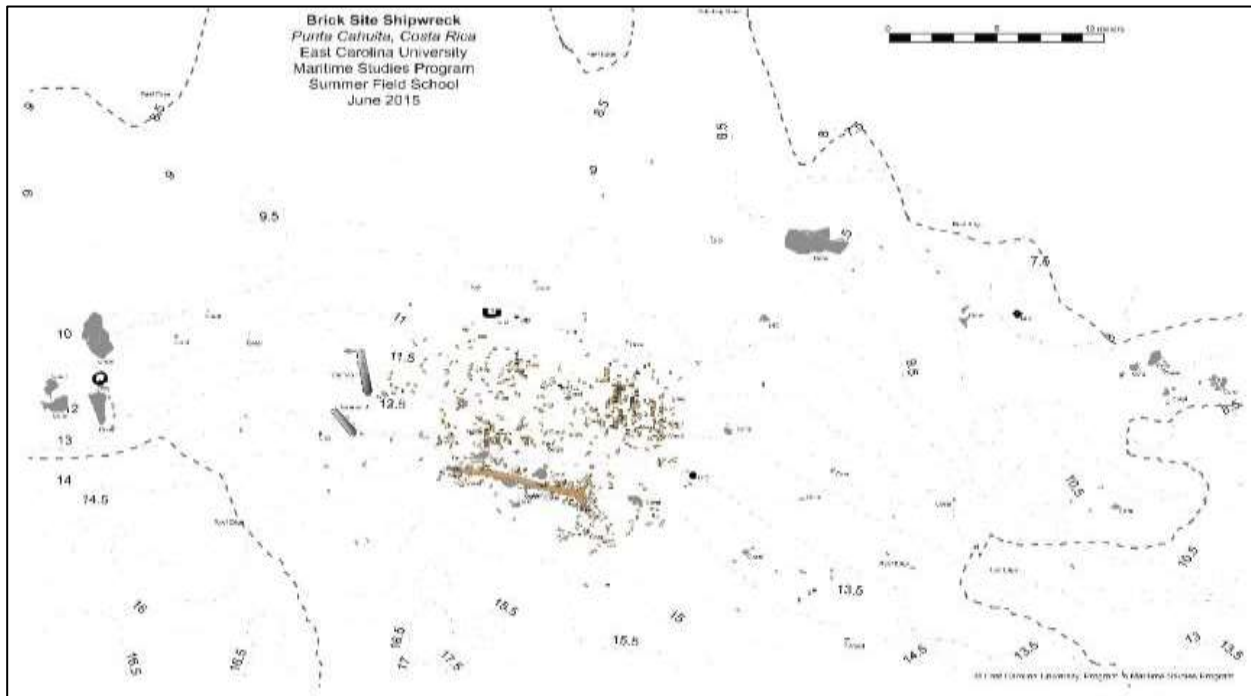


Figure 13. Map of the brick cargo showing location of two cannon (East Carolina University Image)

In summer 2019 an archaeological team returned to the brick site with the specific objective of opening a 50cm by 50cm test unit in the center of the compacted brick cargo. The goal was to understand and interpret stowage and stacking pattern strategies, determine if there were artifacts or ship hull structure under the bricks, or evidence of burning that might connect to the narrative of frigate *Fredericus Quartus* set alight by the boatswain with a pile of refuse, pitch, and tar during the mutiny. In 2015 the researchers documented an eroded profile on the edge of the brick pile. A better preserved, less disturbed location might provide more valid and substantive results. Thus, in 2019 archaeologists uncovered 4 layers of closely stacked bricks with the fifth layer at 33cm. The small operation provided clear evidence that if the site was in situ, it was apparent that the bricks were stacked along the sides or profiles rather than their faces. An alternative hypothesis was that the ship was severely listing to one side when it wrecked, and bricks are angled profile up. Each brick was very tightly packed with two rows of 18 bricks in the 50 x 50 cm unit. A second observation was that below the surface layers comprised both orange and yellow colored brick. Upon reaching layer three, team members noted a sooty dust in the sediments, a black gooey substance and dark discoloration on the bricks. It is unknown without verification of a sample and chemical analysis if this is a clue to a burning event of the ship's hull with tar or pitch, but it is a provocative finding.

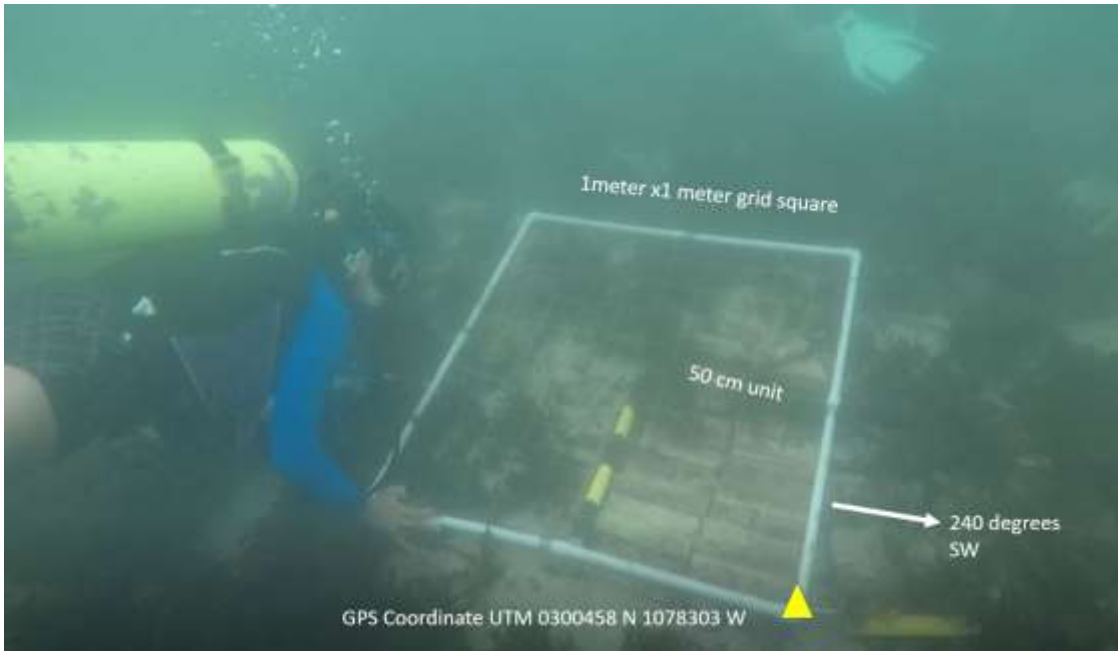


Figure 14. Test unit on a consolidated brick cargo area (East Carolina University image)



Figure 15. Stacked yellow and orange brick cargo at 30cm depth (East Carolina University Image)



Figure 16. Stacked brick ends showing black discoloration at 30cm depth (East Carolina University Image)



Figure 17. Bricks (21-22 cm in length) with black discoloration (East Carolina University Image)

The historical question arises about how and why bricks were stowed on sailing ships.

British Parliamentary papers note:

...in the bottom of the vessel were stowed 70 tons of pig iron chequered to prevent their shifting and rising about ten bars high: above these were laid some iron bars fore and aft to make a floor; on top of these were planks and above these were placed bricks, a space in the center being left for gunpowder.³⁰

Another source dedicated to stowage information advised that bricks should be stowed in “tiers” by men experienced in this practice. The ideal location was the middle of the hold.

Usually thousands of bricks were necessary as ballast especially with light cargoes like bread.

When loaded, the bricks should be as dry as possible to prevent moisture and condensation which might damage the cargo, especially foodstuffs. A common practice was to stow a layer of barrels above the bricks. Brick weight was an important calculation for displacement in the ships hold. 7000 British fire bricks or 8000 common bricks weighed 21 tons and measured 638 cubic feet. Another practice was to sprinkle salt sparingly between the top bricks as dunnage so the cargo would not be too stiff at sea. If it sank too far down into the cargo, it could crust and cause the vessel to be stiff in heavy seas. When the cargo was unloaded, the hold was washed out with fresh water.³¹

A description of a brick cargo by an anonymous person self-identifying as “on board a slave trader” heading to West Africa in a *Harpers Weekly* reported the bricks were laid on the ground tier of the ship. On top of that water butts (possibly casks) some that were empty and others full of rum. Following that a layer of slave food staples especially rice and beans, followed by the general cargo of trade items like cotton, flannel, muskets and knives.³²

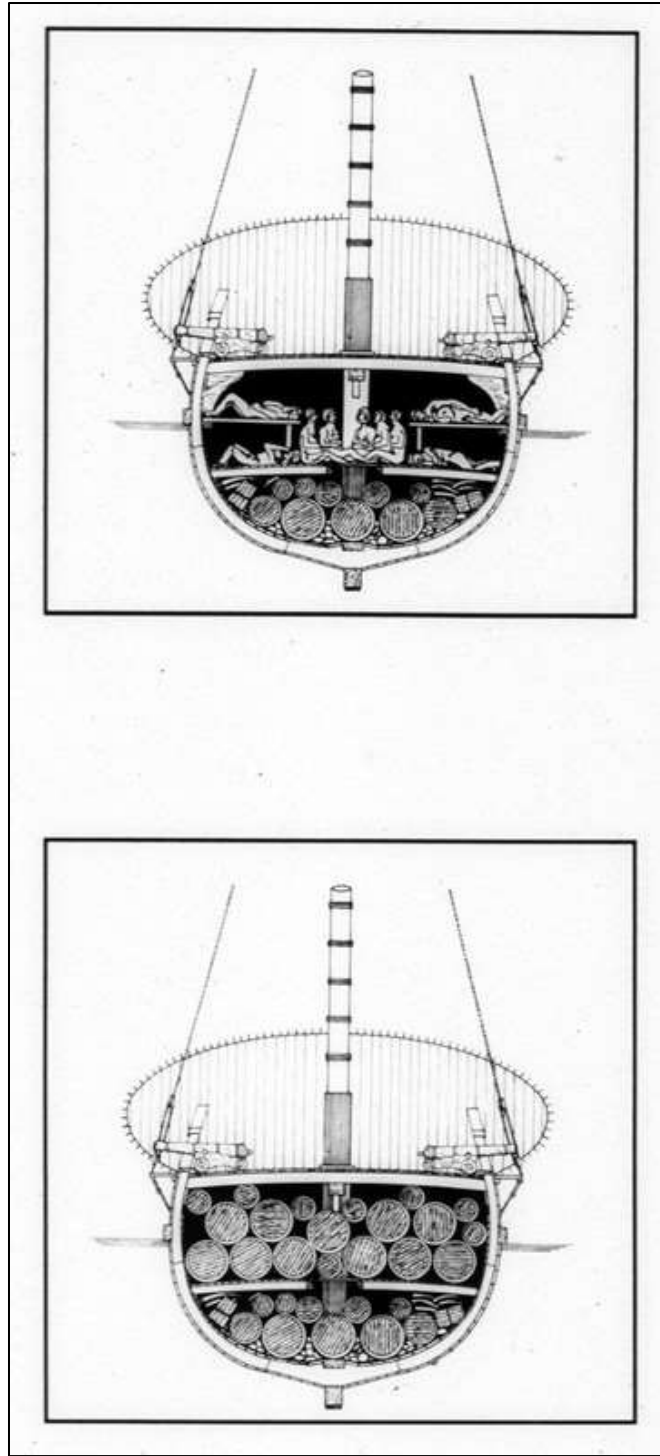


Figure18. Cargo loading showing ballast beneath the barrels and slave deck. "Henrietta Marie", *Slavery Images: A Visual Record of the African Slave Trade and Slave Life in the Early African Diaspora*, accessed February 23, 2020, <http://slaveryimages.org/s/slaveryimages/item/2615>. Image is in the public domain.

Conclusions

Other slave shipwreck archaeological investigations or searches include *Meermin* (1766), *Henrietta Marie* (1700), *Fredensborg* (1768), *Adelaide* (1714), and most recently, *São José-Paquete de Africa* (1794) and *Christianus and Fredericus* (1710) are of the few ships wrecked while on the voyage leg carrying slaves aboard. Pirate ships, like *Whydah* and *La Concorde*, were not working slavers at time of wrecking, but may have some limited capacity to yield much about their earlier roles as human cargo carriers.³³ Other vessels either landed slaves or were on route to conduct slave trade transactions at the time of wrecking. These two sites are high potential candidates for Danish West Indies slave ships wrecked in 1710. Historical research suggests the ship wreckings represent a landmark event associated with a large infusion of Africans, many who remained in Central America. If these are the remains of the two Danish frigates, descendants of the freed enslaved Africans may have assimilated into local Miskito communities, re-enslaved in Matina Valley or elsewhere in Costa Rica, or captured by pirates and taken to main distribution centers like Jamaica or Portobello.³⁴

End Notes

¹The Transatlantic Slave Trade Database, Voyage 35157, *Christianus Quintus (a) Christian V* (1710) <https://archive.slavevoyages.org/voyage/35157/variables>, Voyage 35158, *Fredericus Quartus (a) Frederick IV* (1710) <https://archive.slavevoyages.org/voyage/35158/variables>; George Nørregård, *Forliset ved Nicaragua 1710. Årbog 1948* (Handels Søfartsmuseet på Kronborg, Helsingør, Denmark, 1948); Justesen, Ole (editor) *Danish Sources for the History of Ghana*. Volume 1: 1657-1735 (The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark, 2005). Special Tykkeriet I.Viborg, Copenhagen, Denmark; Russell Lohse, *Slave-Trade Nomenclature and African Ethnicities in the Americas: Evidence from Early Eighteenth-Century Costa Rica*, *Slavery & Abolition*, 23.3 (2002), 76-77; Russell Lohse, *Africans in a Colony of Creoles: The Yoruba in Colonial Costa Rica*. in *The Yoruba Diaspora in the Atlantic World*, edited by Toyin Falola and Matt D. Childs, (Bloomington, Indiana: Indiana University Press, 2005), 136-146; Russell Lohse, *Africans into Creoles: Slavery, Ethnicity, and Identity in Colonial Costa Rica* (Albuquerque, New Mexico: University of New Mexico Press, 2014),7.

² Danish Archives, West Indies Trade, Documents Concerning voyages to West Indies and Guinea 1671- 1754, <https://www.sa.dk/ao-soegesider/en/other/other-collection/102>. Accessed August 10, 2019; Costa Rica Archivio Nacional, Legajo LXXI, Expediente 182, Colonial Serie 1. Catago, “Reclamo por venter de Negros” <http://www.archivonacional.go.cr/> Accessed August 10, 2019.

³ Ship ID. 11305 Fredrick 4/Fredericus Quartus/Friedericus Quartus. SHIP ID. 8465 Christian 5/ Christian V/Christianus Quintus Register of some Danish ships <http://jmarcussen.dk/maritim/skibsliste/index.php>; Erik Gøbel, Erik. Danish trade to the West Indies and Guinea, 1671–1754. *Scandinavian Economic History Review*, 31, No. 1 (1983), 24 and 30; Waldemar Westergaard, *The Danish West Indies Under Company Rule 1671-1754* (London, UK, The MacMillan Company, 1917), 152; Eric Gobel, Danish Trade to the West Indies and Guinea 1671-1754, *Scandinavian Economic History Review* 31:1, 30 -31 &.37-38; Bernard Bierlich, The Danish Slave Trade: Its Surgeons and Slave Mortality, *Outre-Mers*, T. 97, 364-365 (2009), 231.

⁴Mungo Park, *Travels in the Interior Districts of Africa: Performed Under the Direction and Patronage of the African Association in the Years 1795, 1796, and 1797* (London, UK: Cambridge University Press, 2011), IXXXV.

⁵ Nørregård, *Forliset ved Nicaragua* 1710, 70; Governor Lygaard, Christiaansborg to the Directors of the West Indies Company, 5th October 1709, Justesen, *Danish Sources for the History of Ghana*, Volume 1: 1657-1735.

⁶ Governor Lygaard, Christiaansborg to the Directors of the West Indies Company, 9th August, 1709, Justesen, *Danish Sources for the History of Ghana*, Volume 1: 1657-1735.

⁷ Nørregård, *Forliset ved Nicaragua* 1710, 74-75.

⁸ Alexander Falconbridge, *Account of the Slave Trade on the Coast of Africa* (London, England: J. Philips, 1788), 5-6, 11, 20, 23-24, 27-28.

⁹ Governor Lygaard, Christiaansborg to the Directors of the West Indies Company, 23rd February 1708, Justesen, *Danish Sources for the History of Ghana*, Volume 1: 1657-1735.

¹⁰ Platillas are fine white linens. In Stanley B. Alpern. “What Africans Got for Their Slaves: A Master List of European Trade Goods.” *History in Africa*, Vol. 22 (1995), pp. 5-43.

¹¹ Governor Lygaard, Christiaansborg to the Directors of the West Indies Company, 14th January 1709, Justesen, *Danish Sources for the History of Ghana*. Volume 1: 1657-1735.

¹² Ibid.

¹³ Waldemar Westergaard, *The Danish West Indies Under Company Rule (1671-1754)* (London, UK, The MacMillan Company, 1917), 134.

¹⁴ G.L. Grove (Af Arkivsekretær), Nogle Oplysninger om Tordenskjolds første Langfart. Accessed March 9, 2019 https://tidsskrift.dk/personalhistorisk_tidsskrift/article/download/78412/113536/

¹⁵ John Alexander Holm. *The Creole English of Nicaragua’s Miskito Coast: Its Sociolinguistic History and a Comparative Study of its Lexicon and Syntax* (Michigan: Doctoral Dissertation, University College of London, 1978), 184-185; Ole Juteson (Editor), *Danish Sources for the History of Ghana*. Volume 1: 1657-1735 (Copenhagen, Denmark: Special Tykkeriet I.Viborg, 2005), 231; Russel Lohse, *Africans and their Descendants in Colonial Costa Rica, 1600-1750* (Austin, Texas: Dissertation, University of Texas, 2005), 147.

¹⁶ Nørregård, *Forliset ved Nicaragua* 1710, 81; John Alexander Holm, *The Creole English of Nicaragua’s Miskito Coast: Its Sociolinguistic History and a Comparative Study of its Lexicon and Syntax* (Michigan: Doctoral Dissertation, University College of London, 1978), 183. Edmund M. Blunt, *The American Coast Pilot, containing the Courses and Distances between the Principal Harbours, Capes and Headlands*. See several historic maps of

the Isthmus of Panama in the David Rumsey Historic map collection including Aaron Arrowsmith *Chart of The West Indies and Spanish Dominions in North America (1803)*, R.M Martin and J &F. Tallis, *Isthmus of Panama (1851 engraving)*. Sources suggest that the Spanish changed the name of *Caretta* on British charts to *Cahuita*, *Cajuita*, *Caguaita*, or *Punta Coaita* which does not appear in the 18th century maps.

¹⁷ Holm, *The Creole English of Nicaragua*, 186. Nørregård, *Forliset ved Nicaragua 1710*, 69.

¹⁸ Pernille Ipsen, *Daughters of the Trade: Atlantic Slavers and Interracial Marriage on the Gold Coast* (University of Pennsylvania Press, 2015) 26 and 43; Lohse, *Africans into Creoles*, 36-42.

¹⁹ Lohse, *Africans into Creoles*, 113, 137, 140-141.

²⁰ Gregory E. O'Malley, *Final Passages: The Intercolonial Slave Trade of British America, 1619-1807* (North Carolina: University of North Carolina Press, 2014), 104-108.

²¹ Correspondence in Relation to the Proposed Inter-oceanic Canal Between the Atlantic and Pacific Oceans, the Clayton-Bulwer Treaty and the Monroe Doctrine (Reprint of Senate Ex. Docs. No. 112, 46th Cong.; 2d Sess.; No. 194, 47th Cong., 1st Sess.; and No. 26, 48th Cong., 1st Session, US Government Printing Office, 1885), 226-227.

²² M.W., *The Mosquito Indian and His Golden River. Being a Familiar Description of the Mosquito Kingdom in America, &c., &c.* (Written in or about the year 1699), 212, 288, 295. E-book, Accessed March 9, 2019.

²³ Stephen J. Gluckman, "Preliminary Investigations of a Shipwreck, Pumpata Cahuita National Park, Costa Rica." In Larry Babits and Hans Van Tilberg (eds), *Maritime Archaeology: A Reader of Substantive and Theoretical Contributions* (New York: Plenum Press, 1992), 453-469.

²⁴ Lynn Harris and Nathan Richards. "Preliminary Investigations of Two Shipwrecks in Cahuita Park, Costa Rica." *International Journal of Nautical Archaeology* (2018), 1-14.

²⁵ Manilla: Money of the Slave Trade, Blog October 2011. Accessed March 9, 2019, <http://usslave.blogspot.com/2011/10/manilla-money-of-slave-trade.html>; Stanley B. Alpern, What Africans Got for Their Slaves: A Master List of European Trade Goods. *History in Africa* 22.1(1995),13; Sven-Olof Johansson, *Nigerian Currencies: Manillas, Cowries and Others* (Skolgatan, Norrköping: Alfa-Tryck, 1967), 16; Gregory David Cook, *The Maritime Archaeology Of West African in the Atlantic World: Investigations At Elmina, Ghana* (Texas: Doctoral Dissertation, Texas A & M University, 2012), 178; C.E. Smith & C.V.H. Maxwell, A Bermuda Smuggling-Slave Trade: The 'Manilla Wreck' Opens Pandora's Box, *Slavery and Abolition*, 23:1 (2002),57-86; Clifford E. Smith, Jr., The 1998 Archaeological Investigation of the Manilla Wreck Placed into Historical Perspective, *Bermuda Journal of Archaeology and Maritime History* 11 (1999), 95; Karlis Karklins, Beads from the mid-18th-century Manilla Wreck, Bermuda, *International Journal of Nautical Archaeology*, 20.1 (1991), 38; Madeleine Burnside and Rosemarie Robtham, *Spirits of the Passage: The Transatlantic Slave Trade in the Seventeenth Century* (New York: Simon & Schuster, 1997), 18; Michael H. Cottman, *The Wreck of the Henrietta Marie: An African-American's Spiritual Journey to Uncover a Sunken Slave Ship's Past* (New York: Harmony Books, 1999), 30; Barry Clifford with Paul Perry, *Expedition Whydah: The Story of the World's First Excavation of a Pirate Treasure Ship and the Man Who Found Her* (New York: Cliff Street Books, 1999), 8.

²⁶ Mary Kingsley, *Travels in West Africa*. E Book #5891 Project Gutenberg (Prepared by Les Bowler, St. Ives, Dorset, June 2004); Evan Maurer, A Carved Ivory Tusk from Benin. *Bulletin of the Art Institute of Chicago* (1973-1982), Vol. 71, No. 3 (May - June 1977), 6-9; Harvey M. Feinberg and Marion Johnson, The West African Ivory Trade during the Eighteenth Century: The "... and Ivory" Complex, *The International Journal of African Historical Studies* 15: 3 (1982), 435-453.

²⁷ Sila Tripathi and Ian Godfrey, "Studies on elephant tusks and hippopotamus teeth collected from the early 17th century Portuguese shipwreck off Goa, west coast of India: Evidence of maritime trade between Goa, Portugal and African Countries," *Current Science* Vol. 92:3 (2007), 332-339.

²⁸ Gluckman, *Preliminary Investigations of a Shipwreck, Pumpata*, 460-461.

²⁹ Lynn Harris and Nathan Richards. Preliminary Investigations of Two Shipwrecks in Cahuita Park, Costa Rica, *International Journal of Nautical Archaeology* (2018), 1-14.

³⁰ British Parliamentary papers, House of Commons (HMS Stationery Office, 1880), 163.

³¹ R.W. Stevens, *On the Stowage of Ships and their Cargoes* (Рипол Классик, 1863), 39, 40 and 114.

³² *Harpers Weekly*, ON BOARD A SLAVER: By one of the Trade, Volume 4 (2 June 1860) 347.

³³ Jane Webster, Historical archaeology and the slave ship. *International Journal of Historical Archaeology* 12.1 (2008a) 1–5; Jane Webster, Slave ships and maritime archaeology. *International Journal of Historical Archaeology* 12.1 (2008b) 6–19; Leif Svalesen, The slave ship *Fredensborg*: History, shipwreck and find. *History in Africa* **22** (1995), 455–458; Leif Svalesen, *The Slave Ship Fredensborg* (Indiana University Press, 2000); A. Andrews, Shipboard Slave Uprisings on the Malagasy Coast: *Meermin* (1766) and *De Zon* (1775). *Kronos* 33 (November 2007), 84–111; Corey Malcolm and David Moore, Seventeenth century vehicle of the middle passage: Archaeological and historical investigations of the *Henrietta Marie* Shipwreck Site. *IJNA* **12.1** (2008), 20–38; David Moore, D. Blackbeard’s capture of the Nantaise slave ship *La Concorde*: a brief analysis of the documentary evidence. *Tributaries* **11** (2001), 14–31.

³⁴ Harris and Richards, *Preliminary Investigations of Two Shipwrecks in Cahuita Park*, 1.