

Archaeological Investigations at Smiths Island, Bermuda: A Summary of Research and Fieldwork May-July 2012

A Report Prepared for the Bermuda Government Ministry of Parks

By Michael Jarvis

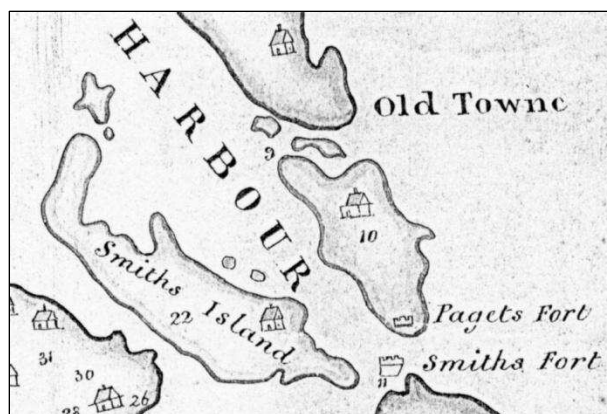
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Introduction and 2012 Season Goals

This report summarizes the findings of the second year of fieldwork at the Bermuda Government Amenity Park on the eastern third of Smiths Island, Bermuda. This year's investigations followed on documentary research and an intensive foot survey in 2010 which charted the history of occupation of Smiths Island, the range of sites that historical records suggest should be found there, and the location of fourteen archaeological sites with above-ground features. This season's excavations involved one graduate student and five undergraduate students from the University of Rochester, as well as several Bermuda National Trust and St. George's area volunteers, making possible large-scale trenching and clearing excavation strategies.

In conjunction with the 400th anniversary of Bermuda's deliberate settlement, this season's investigations targeted Smiths Island's earliest phases of occupation: finding the site that Christopher Carter, Edward Waters, and Edward Chard cleared and farmed in 1610-1612, studying the Oven Site found and partially excavated in 2010, which corresponds to a house located on Richard Norwood's 1617 and 1662-63 surveys (below), and, if time permitted, trying to locate the "First Town" site, where passengers from the *Plough* erected a number of houses in July 1612 before Governor Richard Moore relocated his capital across Town Harbour to present-day St. George's. Approaching the archaeological investigations at Smiths Island as part of a multi-year project exploring four centuries of Bermuda's past, it also made logical sense to start at the beginning and target the earliest sites in order to establish a material culture and architectural baseline for comparison with more recent sites excavated in future field seasons.



Smiths Island on John Speed's 1626 Map of Bermuda (left) and Richard Norwood's mss. 1662/63 survey (right). Note the placement of the house near Pitcher's Point on both maps and the long barracks-like house above the Narrows on the Speed map (actually reflecting the built environment of 1617, when Norwood left Bermuda), which may mark the location of Governor Moore's first July 1612 town site.

Acknowledgments

The May –July 2012 fieldwork was entirely self-funded and was made possible through financial support from the University of Rochester and through the overwhelming generosity of Rick Spurling and his extended family, who contributed time, generous hospitality, logistical help, historical knowledge, and enthusiastic support for this project. Without Rick's aid, this fieldwork simply could not have occurred. I thank Lisa Johnston and the Bermuda Government's Parks Department for granting permission to continue my archaeological investigations. Andrew Baylay, chair of the Bermuda National Trust's Archaeological Research Committee, helped me setting up my field school through the spring. He, Linda Abend, and Stephen Copeland played vital roles in collecting, settling, and helping to feed student participants and in making available the BNT's Reeve Court Archaeology Lab. In his other role as a staff member in the Bermuda Archives, Andrew Baylay also helped me and my students conduct additional research on Smiths Island's history and other research topics. Anne and Norman Brown made their condominium at Convict Bay available for student accommodations – probably the most luxurious quarters that any field school students have enjoyed while digging in Bermuda. Michael Spurling and Michael Whittall generously lent the use of Red Barracks, their wonderful home, to the field school staff during our investigations. Geoffrey Redmond provided the use of his work boat for the season, which enabled us to get to and from our island worksites each day. The residents of Smiths Island shared their island with us and on one memorable afternoon even brought baked goods to our sites. I am especially grateful to Garth Rothwell for allowing us to use his dock and the modern facilities of his cottage throughout the season.

Elsewhere in Bermuda, Dr. Edward Harris and Elena Strong welcomed my field school students to the National Museum of Bermuda and allowed us an advanced peek at its new Shipwreck Island exhibit. Elena also provided an excellent guided tour of the NMB's archaeology lab and museum conservator Piotr Bojakowski shared his knowledge of archaeological conservation techniques with the students. Visiting osteologist Jill Bewsher also guest-lectured to my class on identifying and analyzing human remains in the BNT lab, further enhancing students' training. Brent Fortenberry shared his expertise and the BNT lab with us during our field season at a very busy time for him professionally. Historian Clarence Maxwell similarly took time from his busy research and writing schedule to share his thoughts on seventeenth- and eighteenth-century Bermudian slavery and society.

My biggest thanks go to my field crew, Michael Read, Quarin Bey, Jordan Cicoria, Kristina Fricker, Leigh Koszarsky, and Emily Ramsdell, who participated enthusiastically in field work throughout the four-week season (except Leigh on Saturdays!) and maintained good humor in the face of numerous challenges and ordeals. They indulged my various experiments in teaching and being dragged to history sites on their days off. I am especially grateful to Mike Read, whose meticulous attention to details, planning, and safety, and whose wonderful sense of humor helped us all survive the season with limbs intact and in good spirits. Zoe Brady spent several days volunteering at the site, contributing her knowledge of British archaeological approaches. Alexandra Mairs-Kessler, a member of the 2010 field season, also returned to break new ground and was especially helpful in leading guided tours of the sites.



Finally, I'd like to thank my wife, Anna, for putting up with Bermuda field work that takes me far from home and my daughters Charlotte and Katie, who also participated in the excavations (two weeks and twenty minutes, respectively), along with family friend Rebecca Orbach. Without the collective involvement and hard work of these field crew members, we would know far less about Smiths Island's past and its future potential as a site for studying Bermuda's seventeenth-, eighteenth-, and nineteenth-century history.

Part I - Historical Timeline

of Smiths Island Events and Occupants¹

c. **1505** - Bermuda is thought to have been discovered by Juan Bermudez as he returned to Spain after participating in Christopher Columbus's Fourth Voyage.

July 1609 – The Jamestown-bound *Sea Venture*, flagship of the Virginia Company's Third Fleet, wrecks to the east of Building Bay, St. George's. Castaways establish two camps in St. George's and on the main island and build replacement vessels. Smiths Island appears for the first time on Sir George Somers' manuscript map of Bermuda. The ships depart in May 1610, leaving **Christopher Carter** and **Robert Waters** behind. They presumably live at the now-abandoned St. George's campsite.



Detail, Sir George Somers Map c. 1610 (BNT)

¹ For a full history of Smiths Island and its known owners and occupants, see Jarvis 2010, 6-22.

November 1610 - Sir George Somers returned to Bermuda from Virginia in the *Patience* to acquire food for Jamestown. He died on Nov. 8 or 9 in St. George's, where his heart and entrails are reportedly buried. Somers' nephew, Matthew Somers, assumed command and apparently stayed through the spring, but sails for England rather than Virginia. **Carter** opted to remain in Bermuda and was joined by **Edward Waters, Edward Chard**, and the ship's dog.²

May 1611? – July 1612 – Carter, Chard, and Waters chose Smiths Island for their home, presumably for its proximity to the open reefs via nearby Town Cut and to St. David's, which provided an excellent watchpost (named 'Strachey's Watch' during the *Sea Venture* interlude) above the cliffs at St. David's Head. As mariners, they appreciated Smiths Island's sheltered location from storms within the harbour in the lee of St. David's Island. Upon arrival, they "fell to clearing some ground, planting of corn and setting of pompions [pumpkins] as their groundwork." They also "began to cut down timber, sawing of boards and planks to make them cabins." Obtaining fresh water was an important challenge, but the documentary record is silent on how they managed this. The "lords of the islands" had at least one boat from the *Sea Venture* camp days and perhaps made others, which they used to fish and explore the rest of Bermuda.

Famously, they found an enormous lump of ambergris, "the greatest piece. . . that the world is known ever yet to have had in one lump" on Somerset Island. Stated variously at 180, 160 and 100 pounds, the ambergris find was worth a fortune and apparently sowed dissent between the three men. At one point, Chard and Waters came to blows and their fight was only broken up when their dog bit them mid-scuffle. Another time, they "began a fierce combat in their boat [while] fishing, and with their oars struck one another overboard." Carter sensibly hid their weapons to prevent his comrades from killing each other. Eventually (probably in the late winter or spring of 1612), the three resolved their differences and joined together to build a boat and sail with their ambergris to Newfoundland, where they hoped to get passage home aboard an English fishing vessel.³ When the *Plough* arrived in July 1612, the men had planted "an acre of good corn ripe and ready for the gatherer" and "a great store of wheat, beans, tobacco and melons." The men had "made a great deal of tobacco," which they had likely planted in 1611 and dried and cured over the winter. To prepare for their voyage to Newfoundland, the three had also amassed "many tortoises ready taken" and "a good store of hog-flesh salted and made into flitches of bacon." Their boat was still in an early phase of construction, since they were still in the process of "squaring and sawing Cedar trees . . . intended to build a small Pinnacle." The documented use of saws and axes, clearing of an acre of farmland, cultivation of tobacco and various seeds and plants (obtained from Virginia through George Somers' 1610 return voyage), and boatbuilding activities collectively help us narrow

² Nathaniel Butler, *Historye of the Bermuaes*, ed. Sir J.H. Lefroy (London, 1878), 15-17. Spelling and punctuation in all historical quotes have been modernized.

³ Butler, *Historye of the Bermudaes*, 17-19, 21.

down the location of Carter, Chard, and Waters' farmstead, given Smiths Island's topography (see the Cotton Hole Bight section later).⁴

July 1612 – Upon arrival, **Governor Richard Moore** landed his settlers on Smiths Island, which he named for Sir Thomas Smith, Governor of the Virginia Company, which had sponsored the expedition. Moore chose a location presumably near the already established farmstead with its provisions stores and cleared fields – probably on the south side of the island, since he *Plough* was most likely anchored in the sheltered waters of Smiths Sound. “After the time of our landing, many of the company digged certain plats of ground and sowed divers sorts of seeds to make trial of the ground.” Many of the plants “sprang up after the fourth day after their sowing, and amongst all the rest of the seeds, the cucumber and the melon were [most] forward.” In total, the **newly arrived settlers** “set and sowed four score and one sorts of seeds” within ten days of reaching Bermuda, and “for the most part they are all come up.”⁵

The settlers also quickly erected several buildings, including one large enough to serve as a church. In this building on the second Sunday after their arrival, Governor Moore openly confronted Captain Davis, master of the *Plough*, over his role in a plot with Carter, Chard, and Waters to secretly carry off the ambergris they had found (and which they had concealed from Moore). Governor Moore arrested Davis's accomplice, Edwin Kendall, and kept in a makeshift “prison.” Moore then seized the ambergris from Carter, Chard, and Waters and armed his settlers to defend it, while Davis armed his sailors and captured the ambergris by force. After a tense few days, however, Captain Davis backed down and “a peace on all sides was concluded.”⁶

A few weeks later, Moore shifted his settlers' base across Town Harbour to “St. George's, for the commodity and nearness of fresh water” and “fitted up some small cabins of palmetto leaves for himself, his wife, and some few others in that valley where now stands the prime town of the islands.” Carter, Chard, and Waters may have joined the newcomers at St. George's, but their farmstead and house likely continued to be used, since Governor Moore's first public building project was to erect a fort nearby on the southern tip of Paget Island to defend the sea channel “that leadeth into St. Georges harbour.”⁷

1613-1650 - After erecting a second fort at Castle Island to guard Bermuda's other deep-water harbour from would-be Spanish invaders, Moore built his third fort on Governor's Island just to the east of Smiths Island, which he christened Smith's Fort. Fittingly, it was armed with a cannon raised from the nearby *Sea Venture* wreck. Given the significant number of men

⁴ Butler, *Historye*, 20; Silvester Jordain, *A Plaine Description of the Bermudas* (London, 1613), 18.

⁵ Jornain, *Plaine Description*, 20.

⁶ Butler, *Historye*, 22-23.

⁷ Butler, *Historye*, 23.

involved in fort construction, it would logically follow that already cleared sites and buildings on Smiths Island (especially around Cotton Hole Bight) would be used as a staging ground to support this public works project in 1613 and again in 1617 and 1619, when Governors Daniel Tucker and Nathaniel Butler further improved and expanded Smiths Fort. Although we do not know whether Carter, Chard, and Waters's 1611 farmstead was continuously occupied by others, the original three men never returned there. Chard turned pirate and left Bermuda around 1615 and was reportedly hanged by the Spanish after his ship was captured. Waters left Bermuda for Virginia around 1617 and ended his days there. Carter became a firm supporter of Governor Tucker and supervised many of his public works projects, including the stillborn main island village of Tucker's Town; he eventually secured a lifetime lease for Cooper's Island in Castle Harbour and established a successful farm there in 1622.⁸

Although the names of specific occupants of Smiths Island remain elusive, Richard Norwood's 1617 survey (later published in 1626 by John Speed) shows **two buildings** on Smiths Island. There was a large barracks-like building above The Narrows, which may denote the 1612 town site - a similar long building icon was used to collectively denote Jamestown in Johannes Vingboons' 1617 chart of the James River in Virginia. A second smaller house near Pitcher's Point within the park area targeted for our excavations may denote Carter, Chard, and Waters' earlier farmstead, or document a building erected by other settlers arriving between 1612 and 1617 and perhaps used to support fort construction and manning on the nearby islands to the east.

In 1622, the Bermuda Company reorganized its civil and military policies in order to cut administrative costs. Rather than pay the commanders of Bermuda's forts a salary, it allotted them the use of the company's land in St. George's Parish to compensate them for their service and the responsibility of maintaining guards at the forts and keeping them in a reasonable state of repair. The company's *Orders and Constitutions* formally gave **tenure of Smiths Island to the commander of Smiths Fort**. The company required commanders to actually reside on their allotted lands (which were usually located close to their forts) in order to ensure that they actively supervised the men manning them and were on hand should an enemy appear. Most commanders ignored this clause, however, since they usually also owned private shares on the main island and preferred to reside there. As a result, the use of the company lands allotted to fort commanders was generally sub-leased to landless planters. Because their leases were made in violation of company bylaws with commanders whom the Bermuda Company could dismiss at will, the subletters who occupied Smiths Island and other "fort shares" had diminished incentive to invest much time, labor, and money in building substantial houses or clearing more than minimal acreage for farming; they were also forbidden to extensively

⁸ Butler, *Historye*, 29.

harvest cedars, since the company lands were meant to serve as timber reserves for repairing the company's forts.⁹

Unfortunately, company records do not reveal who commanded Smith's Fort (and thus had the use of Smiths Island) before 1650.

1650-1675 – In 1650, Hamilton Parish planter **Godherd Asser** was listed as Captain and a 1656 document identifies him as commander of Smiths Fort. In that year, he dismissed Thomas Littleton as the fort's lieutenant in order to give the post to his own son-in-law, John Fox. Asser had farmed three shares in Hamilton Parish belonging to Barnstaple merchant John Delbridge since 1626 and subleased 15 acres attached to these shares to Fox. Some time before 1662, he allotted the use of Smiths Island to his daughter, **Mary Asser Sharpe and her husband, Boaz Sharpe**. The Sharpes lived in the sole house marked on Norwood's 1663 survey near Pitcher's Point. From the 1660s onward, whales killed on the reefs or open ocean were butchered as a shoreside Smiths Island site; this may have been at the same location as the 1758 whalehouse or at another site.

1675-1706 - After Godherd Asser died in 1675, **Boaz Sharpe** inherited command of Smiths Fort and thus firm tenure of the land on which he lived. He died in 1706. A probate inventory of his household revealed that the elderly captain lived with nine Native American slaves (four adults and five children) in a small two-room house. The furnishings and domestic equipment were old, sparse, and had low valuations, suggesting a level of poverty that contrasted sharply with the new tide of material success that most maritime-oriented Bermudians enjoyed in the 1680s and 1690s. Sharpe's Native American slaves likely came from South Carolina, which was approaching the peak of its Indian slave trade, thanks to the widespread raiding efforts of English-armed and allied coastal Indians deep within the Southeastern interior.¹⁰

1707-1758 – Occupation of Smiths Island is unclear during this period. The severe hurricanes of 1712 and 1714 likely destroyed the old timber-frame structures standing on Smiths Island. An island-wide tax assessment made in 1727 does not list any households on Smiths Island in that year. Boaz Sharpe's heirs were then living in St. George's or St. David's. Although undocumented, Sharpe family slaves may well have occupied the island autonomously; alternatively the family may have stocked the island with free-ranging cattle, hogs, sheep, or goats. Boaz Sharpe's granddaughter, **Elizabeth Sharpe Pitcher**, had established a household on Smith's Island before 1753, when her husband, **James Pitcher** "of Smiths Island" made his will. Pitcher's Point on Smiths Island's northern shore is likely named for the couple and suggests that their home was near this landmark. The Pitcher household included at least five black slaves: a boy named Toby (who was to be sold after Pitcher's death), women named Ruth and

⁹Bermuda Company, *Orders and Constitutions* (London, 1622), reprinted in Lefroy, *Memorials of the Bermudas* 1:201-202, 206, 215, 225

¹⁰ See Jarvis, 2010, 7-8 for more on Sharpe's inventory and slaves.

Dinah, a man called Tom, and a girl named Hannah.¹¹ There were four other households or individuals claiming the use of portions of Smiths Island in the 1750s. **Elizabeth Pitcher, Charles Davis, and Sibella Sharpe** (probably Boaz Sharpe's descendants) occupied the easternmost 15 ½ acres (encompassed by Smiths Island Amenity Park). To the west, David Sears (12 acres), **Benjamin Gantlett** and **Joseph Lightborn** (12 acres), **Samuel Adams** (12 acres), and **Sarah Higgs and Robert Burchall** (12 acres) all claimed adjoining tracts.

1758 – 1814 - In 1758, Governor William Popple implemented a plan to maximize the colonial government's revenue from Crown lands (original Bermuda Company land which devolved to the British Crown when it took over administration of Bermuda in 1684) – which included Smiths Island. Popple auctioned off tenure of public land shares to the highest bidder, who then paid 3% of the bidding price as an annual quitrent. The bidder and his heirs retained the right to continuously lease the land as long as he or they paid rent on time. St. George's merchant **John Slater** obtained all five parcels of Smiths Island by bidding a total of £1,024, except for a half-acre lot that Popple granted to **the East End Whaling Company**, upon which it had already erected an equipment storehouse and tryworks. Jonathan Burch, the company's agent, was the grantee.¹²

Some time in the 1760s, Slater had sold or transferred his rights to Smiths Island to his St. George's next-door neighbor, **Dr. George Forbes**, who had also obtained a lease for Paget Island. In 1770, Forbes built a Georgian mansion, several outbuildings, and a dock at the western end of Smiths Island, perhaps as country house to escape the bustle of St. George's or as a secure isolated location for variolating patients with smallpox in order to give them lifetime immunity. Variolation (deliberately infecting a patient under controlled conditions) was a controversial procedure that was variously endorsed by and outlawed by the Bermuda Legislature. An isolated site like Forbes's home on Smiths Island fit the criteria for physicians' variolation of patients under the terms of several smallpox acts.

George Forbes died in 1778. His **widow, Mary**, spent most of the rest of her life at the family's Smiths Island mansion living with family slaves who farmed the island while her son, **Dr. Francis Forbes**, occupied the family's home in St. George's. Property valuations reveal that Smiths Island was extensively forested at the time. After Mary's death in 1797, Francis Forbes inherited the island. He spent little or no time there. He may have continued farming the island, relying on autonomous, self-directed family slaves to produce crops or sublet part or all of the island to unrecorded tenants.

1814-1870 - Upon his death in 1814, Smiths Island was divided among Francis Forbes's three heirs: daughter **Jane Forbes Davenport**, who had married St. George's merchant **John Davenport**, and sons **George and Francis Forbes**. Francis Jr., studied law at Lincoln's Inn in

¹¹ 1727 Bermuda property assessment, CO 37/12:10-12, The National Archives, UK; Will, James Pitcher, April 13, 1753, Book of Wills 8:287-288.

¹² Book of Grants 1: 33-37, 42..

London and returned to Bermuda as the colony's Attorney General in 1811. He had the Crown formally regrant Smiths Island to him in three parcels, apparently because his grandfather's original grant had lapsed at some point. According to the new grant, the eastern third of Smith's Island (modern Smith's Island Amenity Park) was valued at £341.6.8 and subject to an annual rent of £10.4.10.

Additional research done in 2012 using the Bermuda National Library's new online searchable database of 19th-century newspapers (<http://cdm15212.contentdm.oclc.org/cdm/>) has greatly clarified the occupation and range of archaeological sites on Smiths Island during the Forbes years.

In January 1816, George Forbes posted the following advertisement in the *Bermuda Gazette*, which provides a snapshot of the archaeological sites on Smiths Island at the time:

This ad helps date the construction of the large tank and dock complex at Pitcher's Point, as well as for revealing that the island was still extensively forested. It also reveals the presence of a fish pond that may have been located at the western bay to the south of the Forbes House. The property, alas, did not sell in 1816, nor in December 1820, when it was offered on identical terms.

The following year (March 8, 1817) another advertisement revealed the extent of the mature forest that had formed on Smiths Island:

FOR SALE OR RENT,
THAT pleasantly situate and desirable Residence, on Smith's Island, the Property of FRANCIS FORBES, Esq.—with Outer Buildings, Fish Pond, &c. ; together with about Fifty Acres of good Pasture Land—and a large Tank, conveniently situated for the Supply of Shipping with Water.
ALSO FOR SALE,
 A quantity of Ship and House **TIMBER.**
 For Terms, apply to WILLIAM TUCKER, Esq. or **GEORGE FORBES.**
 St. George's, January 6.

CEDAR TIMBER.
TWO Thousand Pieces of SHIP and HOUSE **TIMBER,** for Sale on Smith's Island.
GEO. FORBES,
 St. George's, March 8. (tc)

TO BE SOLD AT AUCTION,
On TUESDAY next, the 21st instant,
At the Residence of GEORGE FORBES, Esquire,
SMITH'S ISLAND,
HIS HOUSEHOLD FURNITURE, among which are the following Articles—
 One SOFA ; 2 doz. CHAIRS,
 One SOFA TABLE ; a Set of DINING TABLES.
Plate.
 24 Table SPOONS, 18 Table FORKS,
 18 Desert, Ditto, 18 Desert, Ditto,
 18 Tea, ditto, 4 Salt SHOVELS,
 2 Gravy, ditto, 1 Sugar LADLE,
 1 Soup LADLE, 1 Pepper, do.
 4 Sauce, ditto, 1 Mustard, ditto,
 1 Sugar TONGS, 1 Fish knife, 1 Butter, do.
Plate.
 1 Pair Table CANDLESTICKS, with Branches and extra Shades,
 1 BREAD BASKET, 4 BOTTLE STANDS,
 TEA POT ; COFFEE POT ; SUGAR DISH ;
 and MILK POT.
Cut Glass
 DECANTERS—Wine and Claret GLASSES, and GOBLETS.
 A DINNER SET ; 3 Large VASES ; 2 Small ditto.
 Table CLOTHS ; Table NAPKINS & DOILES,
 1 Floor MAT ; 1 Large Plate CHEST,
 3 COWS—and one STEER.
C. B. HAYWARD.
 St. George's, Jan. 18.

George Forbes continued to live in the family mansion until 1823 when he embarked for England at the start of a British Army career in which he eventually rose to the rank of general. Francis Forbes move to Australia the same year, and eventually became Chief Justice of New South Wales. On January 18, 1823, on the eve of his departure, George Forbes placed an ad in the *Bermuda Gazette* announcing the auction most of the furnishings of Forbes House (left).

Neither George nor Francis Forbes ever returned to Bermuda. When no buyers emerged for the property, the brothers transferred ownership of the western third of the island to their sister Jane and her husband, John Davenport.

Newspaper advertisements (*Bermuda Gazette*, Nov. 2, 1816, right) and Acts of the Bermuda Legislature also establish that Smiths Island was made one of Bermuda's two quarantine stations in 1816; inbound vessels with infected passengers or crew were required to fly a white flag indicating they bore sickness and anchor opposite Smiths Island's Whale House (or at Granaway Deep if they arrived from the west). They were thereafter to remain at anchor eschewing all contact until St. George's designated health officer cleared them of being infectious.

Jane Forbes Davenport resided in St. George's. Acting as her brothers' local agent, she rented out the Forbes House on Smiths Island after 1823. Newspaper advertisements reveal that Benjamin Higgs was apparently the tenant. In 1829, Anthony Minet, a coloured slave who belonged to Higgs, accidentally drowned in St. George's Harbour:

An Inquest was taken on the 8th inst. on the body of a coloured man (ANTHONY MINET,) who was accidentally drowned in St. George's harbor—he belonged to Mr. Benjamin Higgs, of **Smiths Island**—the best and most prompt assistance was rendered by Dr. Hunter, but unfortunately too late: this valuable man was reared from the cradle by his master, who has considered him as a confidential servant and an humble friend, and the interest felt for his fate is the best mark of esteem for his general good conduct.—*Communicated.*

Two years later, Benjamin Higgs lost another of his slaves – to running away. Peter Lee, the fled manservant, was thought to be hiding at the West End. The fact that Higgs continued to place ads for Lee's recovery through most of 1831 and into 1832 strongly suggests that the slave eluded capture and perhaps had left Bermuda entirely.

Bermuda Royal Gazette, Nov. 22, 1831 →

Periodic newspaper announcements document that the Smiths Island whale fishery was active throughout the 1820s,

BERMUDA, alias }
SOMERS' ISLANDS. }

By His Honor WILLIAM SMITH,
Esquire, Commander in Chief
[L. s.] in and over these Islands, &c.
&c. &c.

A Proclamation.

WHEREAS I have received due information of a Pestilential Fever having broke out in the Island of Antigua, and continuing to rage with unabated violence:


I do issue this my Proclamation, strictly charging and commanding all Pilots, or others, taking charge of Vessels, (in his Majesty's Service or otherwise), approaching these Islands from the said Island, either directly or circuitously, forthwith to cause the usual Signal of Sickness (a White Flag), to be hoisted in the Main Shrouds of such Vessels, and to bring them to anchor at the most convenient of the two Quarantine Stations pointed out by the Act of the late Session of Colonial Legislature, which Stations are opposite to the Whale-House on Smith's Island, within the Harbor of Saint George, and as near thereto as a Vessel can safely ride, or at Granaway's Deep in the Great Sound, and in no other place whatever, than is otherwise described by the said Act, as they shall answer the contrary at their peril:—And I do further hereby strictly charge and require the respective Health-Officers of St. George and Hamilton, to use their utmost diligence in examining into the state of Health of the Crews of such Vessels as may arrive within these Islands from the above-mentioned place, during the continuance of this my Proclamation.

GIVEN under my Hand, and the Great Seal of these Islands, the 31st Day of October, 1816, and in the 57th Year of his Majesty's Reign.

WILLIAM SMITH,
COMMANDER IN CHIEF.

By His Honor's Command,
JOHN J. DISMONT,
Deputy Secretary.

GOD SAVE THE KING.

 **RUNAWAY** from the Subscriber, on the 11th of September last, a **NEGRO MAN** by the name of **PETER LEE**; he is supposed to be harboured in Somerset, where he has lately been seen.—All persons are forbid harbouring or employing him, as the Law will be strictly enforced against them.—A suitable Reward will be given to any Person who will lodge him in Gaol, or give such information as may convict any Person harbouring or employing him.

BENJ. HIGGS.
Smiths' Island, November 21, 1831.

1830s, and 1840s, taking and processing several whales each season. The generous prices offered by the Army Commissariat in St. George's for whale oil for the garrison and forts undoubtedly helped to motivate the Smiths Island whalers. The extensive quarrying evident in the Amenity Park may have taken place during this period of tenancy, or perhaps occurred earlier in the 1790s, when Andrew Durnford rebuilt Paget and Smiths Forts.

Benjamin Higgs died in 1854 at the age of seventy and perhaps lived on Smiths Island until his death (*Royal Gazette*, May 23, 1854). Jane Davenport died in April 1853 and John followed her to the grave in November 1857, age 86. An ad in the *Royal Gazette*, Feb. 23, 1858, offered for sale merchandize in his various stores, household furnishings, and the Whale House and one-acre lot on which it stood on Smiths Island. In 1863, Davenport's executors announced the auction of the western third of Smiths Island (currently the Bermuda National Trust's property), which at the time included a small cottage (currently unlocated). The quarry readily visible on the island's southern shore west of the Narrows had also been cut by this time (*RG* Feb. 10, 1863).

BY AUCTION.


THE UNDERMENTIONED PROPERTY belonging to the Estate of the late **R. H. F. Davenport, Esqr.,** deceased, Vizt. :—

In the Parish of St. George,

ON WEDNESDAY,

The 25th Instant, At Noon,

On the Premises,

The Western part of Smiths' Island,
containing about **TWENTY ACRES,**
 **with the COTTAGE** thereon;
to the South of which is a fine **STONE**
QUARRY, and deep water opposite thereto.

ALSO.

A WATER LOT,

Nearly opposite Barrack Hill and to the Eastward of the Convict Bay.

During the **American Civil War**, Bermuda became an important base for supplying the Confederacy. Fast sleek steamers ran through the Union Navy's blockade to deliver war material into Wilmington, North Carolina, and return with southern cotton. St. George's became the principal base for blockade-running due to its proximity to the open ocean and the town experienced a tremendous commercial boom. By 1863, all of the town's warehouses and wharves were full to brimming and dozens of steamers constantly loaded and unloaded in St.

George's Harbour. The presence of vast amounts of dangerous munitions and weapons represented a significant public danger; in 1863, there were still many St. Georgians alive who remembered the devastation that followed the explosion of the British Army's gunpowder magazine on Hen Island in 1814. Although John Tory Bourne, Bermuda's principal contractor for Confederate shipments, kept a considerable quantity of munitions stored at Hunter's Wharf, he placed the most dangerous explosives on Hen Island, Smiths Island, and at Tucker's Town. At the war's end, Bourne foreclosed on former Confederate Agent Norman Walker's property and auctioned off the now-defunct Confederate States' supplies remaining in Bermuda (*Bermuda Royal Gazette*, October 31, 1865). At the time there were 2,330 hundred-pound barrels of gunpowder being stored on Smiths Island and at Tucker's Town, as well as 400 boxes of rifle cartridges (gunpowder charges) and a case of "exploders" (probably mines, hand grenades, or mortar shells). One wonders where on Smiths Island such a vast quantity of gunpowder was stored – perhaps one or more of the older quarries had been temporarily roofed over to create sheltered spaces for the explosives.

Smith's Island for Sale.

THE UNDERSIGNED having been authorized to sell TWO-THIRD PARTS of
Smith's Island,
In the Harbour of St. George,
Belonging to the Estate of the late Sir FRANCIS FORBES and the late GEORGE FORBES, deceased, will receive TENDERS for the same until

Monday, the 4th day of July Next,

AS FOLLOWS:—

For the Eastern End of the Island belonging to the Estate of the late GEORGE FORBES, containing 20½ Acres of well timbered LAND with a small HOUSE thereon.

For the Middle part of the Island, containing 21 Acres with

Dwelling House And Outhouses,

Belonging to the Estate of the late Sir FRANCIS FORBES.

**WM. T. TUCKER,
JOHN T. BOURNE,
J. M. HAYWARD.**

St. Georges, 20th June, 1870.

Any further information may be obtained on application to W. Tudor Tucker.

1870 marked a turning point in land ownership in Smiths Island. By 1870, both Sir Francis Forbes (knighted in 1842) and George Forbes had died and their heirs offered to divide and sell the two brothers' eastern and middle portions of Smiths Island. An advertisement in the *Bermuda Royal Gazette* (June 21, 1870, left) reveals that George Forbes' land (the Amenity Park property) remained forested and also had a small house thereon – perhaps the ruins marked on the 1901 Savage Map to the north of the Oven Site. Francis Forbes' Dwelling House and outhouses are the present Forbes House.

Marshal's Sale.

TO BE SOLD,
By Public Auction,
In the Town of St. George,
At 12 o'clock,
ON WEDNESDAY,
The 22nd Day of November, next ensuing,
Under and by Virtue of a Writ of Execution issued
from the Court of General Assize, at suit
of JOHN TORY BOURNE vs. NORMAN
STEWART WALKER,

The Following Articles,

Feil:—

At Hunter's Warehouse—No. 2.
92 B 16 ditto ditto SHEETS TIN
1 Coil WIRE ROPE
1 Lot old IRON
1 ditto ditto HARNESS

No. 3.
31 Cases SHEETS TIN

No. 4.
3 Kegs WHITE LEAD
3 Cases CHLOROPHORM
8 Cases AXES 3 ditto PICKAXES
1 Case WEDGE AXES 1 Case SCREWS
1 Case AXES 1 ditto PICKAXES
1 Bale CLOTH

No. 5.
10 Barrels ALCOHOL 10 ditto SPERM OIL
10 Linseed OIL 3 Cases CLOTH

No. 6.
6 Barrels EMERY 4 Barrels INK
5 Barrels BLUE STONE

No. 7.
1 Bale NAVY CLOTH 2 Cases RIFLES
10 Jars QUICKSILVER 52 Cases SHELL
229 Boxes SHELL 52 Cases SHELL
1 Case RAYONETS and RAMRODS
1 Case BUCKLES and HOOKS

No. 8
6 ANVILS 23 Pieces CASTINGS
2 Gun SLIDES

No. 9.
2 Cases WHITE LEAD
2 ditto (Loose) DITO
7 Hubs SUGAR 39 Cases SHELL
1 Case PICKAXES
2 Cases CAVALRY HARDWARE
2 Cases PICKAXES 1 ditto WEDGE AXES
4 Cases CAVALRY HARDWARE
1 Case BLACKSMITHS TOOLS
1 Lot OLD IRON 1 Lot OLD ROPE
1 Caisson containing 42 Leather SACKS
1 ditto ditto 25 POUCHES
3 Empty ONES

No. 10.
1 Case STAY BINDINGS—R. R.
8 Brass GUNS

No. 11.
1 Barrel INSULATED RUBBER
1 Case SHEETS INDIA RUBBER
3 Bales LEATHER 1 Case BELTING
57 Barrels BREAD 2 Boxes TOBACCO
1 Keg BUTTER 3 Barrels FLOUR
4 Cases RICE 1 Barrel PEAS
3 Bales BLANKETS
3 Bales HAMMOCKS 3 ditto BEDS
18 Cases PRIMAVERIA 4 Cases Enf. RIFLES
1 Case Disinfecting FLUID

No. 2, 5, 7 and 10.
2 Cases HARDWARE 50 ditto STEEL SHOT
350 ditto SHOT and SHELL
31 ditto HARDWARE
6 Cases TRUSSES 4 ditto MACHINERY
3 ditto HARDWARE

Yard.
7 FLOATS 70 Boxes SHELL

Wharf.
33 Carbonic ACID 2 Mountain HOWITZERS
2 Brass GUNS 8 Blakely GUNS
2 CARRIAGES for Blakely Guns
1 Case MACHINERY
2 Cases 2 150 pound GUNS
19 Cases EQUIPMENTS for 150 pound Guns
2 Cases 2 70 pound GUNS
6 ditto CARRIAGES and EQUIPMENTS for DITO
2 Cases 2 12 pound M L GUNS
8 Cases CARRIAGES and EQUIPMENTS for DITO
2 ditto containing SHELL
2 ditto 2 70 pound GUNS
2 ditto CARRIAGES for DITO
10 Cases EQUIPMENTS for DITO
2 Cases 2 32 pound GUNS
3 Cases CARRIAGES for DITO
10 Cases SHOT and SHELL for DITO
7 ditto ARTILLERY EQUIPMENTS
1 Case MACHINERY 4 Cases GUNS
1 WINCH 4 Cases ACID

Hen Island.
1 Case BURSTERS

Smith's Island and Tucker's Town.
1 Case EXPLODERS
10 Cases Gun COTTON
2,330 Barrels GUNPOWDER, (100 lb each)
400 Boxes CARTRIDGES

Office.
1 Parcel KEYS
1 Case GAUGES for Shot and Shell
3 Cases QUININE 2 Tins OPIUM
J. H. TROTT,
Pro. Mar. Genl.

N.B.—The above named Articles are in Bond

When this ad failed to attract a buyer, the executors resorted to an auction without reserve in August in order to dump the property (below):

Hamilton, August 30th, 1870.

PARISH OF ST. GEORGES

Valuable Real Estate.

FOR SALE AT
PUBLIC AUCTION,
On Thursday, 13th Oct.
Next, at 12 o'clock,

THE Eastern Portion of Smith's Island, near the Entrance of St. Georges Harbour, containing 204 ACRES more or less, subject to a Yearly Quit Rent of £6 2/11.

ALSO
The Middle portion of said Island, containing 21 ACRES more or less, also subject to a Quit Rent of £6 2/11.

The above Lots have a Quantity of good ripe Timber on them and are well sheltered for planting.

This PROPERTY will be sold without reserve, and a Boat will leave the Market Wharf at the above time to convey intending Purchasers to the Island.

Any further information can be obtained on application to

W. TUDOR TUCKER,
Auctioneer.
St. Georges, 29th August, 1870.

Following the auction, David Grant Forbes (the sole remaining heir) transferred the Smiths Island tracts to Joseph Clements Hayward (who purchased the eastern third for £95) and Joseph John Outerbridge, who acquired the middle tract. Within weeks, however, Joseph Clements Hayward sold his tract to his brother, Joseph Ming Hayward, for £100.¹³

During the 1870s and 1880s, Smiths Island was put to more vigorous agricultural use. Joseph J. Outerbridge was a professional farmer who operated several farms scattered across Bermuda. He evidently had a problem with squatters or trespassers on his new Smiths Island tract, since he took out the following advertisement on April 4, 1872:

Caution!

THE Subscriber forbids any Person or Persons from Purchasing any Produce, Timber or Wood, from the following Farms, without the occupants of the Land produce his written authority for so doing.

TUDORS' FARM, in Southampton Parish.
HARVEY'S LAND, in Warwick Parish.
SMITHS ISLAND FARM, (part of)—
St. Georges Parish.

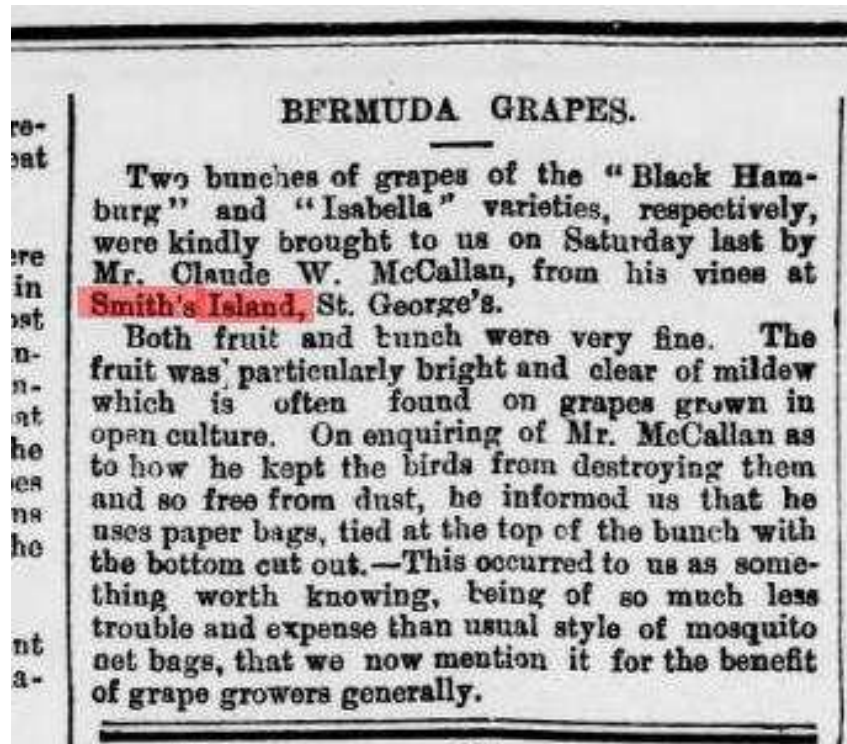
JOS. J. OUTERBRIDGE.
Hamilton Parish, March 30, 1872.

GOLD & Silver WATCHES of all grade and prices at **CHILD'S**

Claude William McCallan and his wife Louisa Outerbridge McCallan acquired the Forbes mansion and the middle third of Smith's Island in 1882 (apparently through John Joseph Outerbridge's tract descending to her after his death in 1878). Their nephew, local historian Ernest A. McCallan, recalled that they "created a home on Smith's Island which was a joy to them and their friends" in the renovated and enlarged Forbes mansion. The McCallan farm was

¹³ Bermuda Government Parks, Smiths Island deeds file; Wilkinson, "Sir Francis Forbes," 14.

“an experimental station” where “many kinds of crops were grown, particularly English peas,” citrus, grapes, and other fruits. Under the care of hired foreman Walter Richardson, the McCallans’ herd of Jersey cows and Berkshire pigs thrived and provided milk to St. George’s households. This farm was also the site of the first recorded control of a plant disease in Bermuda after Claude McCallan successfully isolated powdery mildew in 1889, which was then assaulting the island’s bean crop. By 1893, the McCallans were successfully cultivating grapes for the first time in Bermuda since the early 1620s (*Bermuda Royal Gazette*, Aug. 1, 1893):



McCallan was also very active in civil affairs and promoting agricultural and cultural improvements; in addition to representing St. George’s in the colonial assembly, he was also active in St. George’s town governance, the St. George’s Improvement Commission, the Bermuda Board of Agriculture, the RSPCA, and the Bermuda Agricultural Exhibition Association. Although McCallan worked most of Smiths Island’s fields, small planters from St. David’s hired lots at “Red Patch,” an area on the island’s southern shore opposite Church Wharf.¹⁴

While the McCallans farmed the rest of Smiths Island, Joseph Ming Hayward (or his tenants) worked the eastern third. Hayward, a successful merchant and mayor of St. George’s who lived at Rosebank Cottage on Wellington Street, probably spent little time at his Smiths Island property. He did explore it, however, and had discovered the archaeological remains of several

¹⁴ McCallan, *Life on Old St. David's*, 242.

rock ovens, which he showed to Governor John Henry Lefroy in the mid-1870s. In 1880, Hayward sold a portion of his holding to Paget merchant Daniel Trimingham for £450 but the extent of this property transfer is not recorded. In 1887, he offered to sell or rent his Smiths Island tract in an ad that mentions a “new stone cottage” and timber and fruit trees, establishing a construction date for the ruins of the stone cottage at the center of the Amenity Park tract (*Royal Gazette*, April 12, 1887).

DISPOSAL OF LAND, 12th April, 1887.

FOR SALE OR RENT.

THE Eastern portion of Smiths Island comprising 20½ Acres with New Stone Cottage thereon, timber and fruit trees, situated at the entrance of the harbour of St. George. The property is subject to a yearly Quit Rent of Six Pounds, two Shillings and Eleven pence. Tenders for same will be received up to Noon of 14TH APRIL. The most approved tender will be accepted.

Further particulars can be obtained from
JOSEPH M. HAYWARD.
St. Georges April 2, 1887.—2

In June 1891, Robert Hartley James, a St. George’s merchant, bought out both Hayward and Trimingham for an unspecified price. He, his wife, and three young daughters moved to Smiths soon thereafter and the property stayed in this family’s hands until it was sold to the Bermuda Government in 1987. E.A. McCallan recalled that James “grew lilies and other crops on the eastern end” in the early 20th century, while the western (formerly Davenport, now Bermuda National Trust) end was “not well cultivated within my memory.” The 1901 Savage Map shows an assortment of fields relating to the McCallans’ and James’s agricultural efforts, the footprint of the small building at Smallpox Bay, an L-shaped stone cottage in the middle of the James tract, a large tank near Pitcher’s Point (noted in the 1821 Forbes ad), and a rectangular building near the north shore close to the James-McCallan property line (possibly the cottage mentioned in George Forbes’s advertisements). Several other water catchments and tanks (presumably used for watering livestock) and the footprints of the whalehouse and Forbes mansion and associated outbuildings are also noted.¹⁵

In the twentieth century, the succession of occupation and development remains consistent with the historical overview provided in my 2010 report. Interviews with people associated with the 1970s and 1980s Lovejoy hydroponic farming operations would greatly expand our understanding of very recent Smiths Island history.

¹⁵ Bermuda Government Parks, Smiths Island deeds file; McCallan, *Life on Old St. David’s*, 240, 242.

Part II – Archaeological Excavations

This season's excavations focused on the two earliest sites on the Amenity Park tract: **Oven Site** (identified and first excavated in 2010) and a house site quarried into a hillside near **Cotton Hole Bight** (Hereafter the CHB Site). Artifacts recovered from the limited excavations in 2010 suggested that Oven Site was a post-and-beam building abandoned in the late seventeenth or early eighteenth century. The goals of the 2012 season were to more precisely date these two structures, determine their shapes and extent, confirm our initial identification of them as timber-frame buildings, and ideally discern and compare the construction techniques used to build them.



Topographical Map courtesy of Bermuda Map Viewer (www.bermudamaps.bm)

Methodology: Excavation at both sites began with a three-meter by one-meter penetrating trench to profile the depth and complexity of existing stratigraphy and quickly obtain a rough dating sequence for site occupation. All layers were sifted through ¼-inch mesh. Feature fill and layers of particular importance were screened through 1/8-inch mesh. Following Colonial Williamsburg and SGARP conventions, the sites were laid out using a metric grid system and all units excavated in meter squares. A total of 127 contexts were excavated, relating to 86 master context designations at the Oven Site in three separate excavation areas. At the CHB site, total of 29 contexts were excavated, relating to 14 master context designations.

OVEN SITE

EXCAVATION focused on three main areas: the floor area, the house exterior adjoining the hearth chimney, and the hearth and oven.

I. FLOOR: After clearing vegetation from the footprint of the house floor, excavation commenced on May 28. Backfill was removed from the one-meter unit (N3W1) excavated in June 2010 to expose the bedrock floor (and postholes therein) to provide students with a stratigraphic profile. We surveyed and excavated three meter-square units (N3 E1-3) to the east of N3W1 in order to obtain a cross-section of the house and define the front wall of the structure.



Broadly speaking, the stratigraphy in the floor area fell into four groupings, each with strong internal integrity and very little evidence of disturbance: **Upper layers** (Master Contexts [hereafter MCXTs] 1-3, 18) relating to post-destruction soil and vegetation filling in the shallow floor cellar area, several thick **Destruction layers** (MCXTs 4-5, 44-45) with large cut stones, densely packed limestone rubble, broken red bricks and brick fragments, **Occupation layers** wholly sealed by the destruction layers which relate to the period when Oven House was inhabited (but which lacks discernable compacted floors or discrete microstratigraphy, and **Architectural features** of various dimensions cut into the original limestone walls and floor, including an ambiguous alcove or furnace-shaped feature carved into the middle of the north wall.

UPPER LAYERS consisted of MCXTs 001-003 in the western part of the trench, a thin lens (MCXT 018) present in N3E2 and continuing east. MCXT 003 blended unevenly into the rubble layers below. All four layers relate to post-destruction usage/occupation of the ruin site. Excavations recovered a variety of datable 19th-century artifacts, including animal bones, transfer-print ceramics, a yellow-slip basin or bowl, coal and charcoal fragments, a Bakelite pipe stem, several broken half-bricks, buttons, two hooks and eyes, a brass French



clothing buckle dating to the 1840s. Given the site's proximity to the large quarry to the east and south active during much of the 19th century, we hypothesize that the faunal remains, broken ceramics, clothing items, and other refuse were deposited by workmen who used the house foundation area for food consumption and preparation. (This conclusion was further strengthened by excavations in the hearth area, covered below.) Consequently, the material culture reflects the consumption choices and activities of workmen who probably did not live on Smiths island. The brick fragments apparently relate to 19th-century workmen or residents stripping out the original brick lining of the early hearth oven. A metal fence post for supporting a barbed wire-lined enclosure was partially exposed in N3E3, relating to the land-use shift from quarrying to livestock-keeping in the late 19th century – correlating with the conversion of the southeastern corner of the quarry to wire- and stone-fenced livestock pens (Jarvis 2010, 24-26).



DESTRUCTION LAYERS composed of large whole and broken cut stones, broken architectural stones and/or quarry off-cuts, red brick fragments, and small limestone rubble and pebbles compacted into a dense layer extended across the entire site. The layers were thicker near the cut western and northern walls, suggesting stone used as wall infill collapsed into the empty space after the house's abandonment or dismantling. Several very large cut stones with geometrically irregular faces found in MCXTs 005 and 044-045 appear to be quarry-related refuse rather than original architectural material, complicating the ability to attribute particular cut stone objects to the 17th century house's construction. Removal of vegetation and leaf cover to the north of the floor cut revealed a large pile of cut and broken, irregular stones, which may also either relate to the deposition of 19th-century quarrying refuse or represent the remains of the early house's north wall, which collapsed outward after its abandonment. Few artifacts were found mixed with the stone rubble, especially nails and other iron fragments which one usually would find associated with a building's destruction.

Brick and stone rubble in N3E1 and large dressed stone quarry rubble in N4W1 & N4E1



There was a clear, flat, and undisturbed interface between the stone rubble layers and the OCCUPATION LAYERS sealed by them, although in some areas the sheer weight of the rubble layers intruded large dressed stones into the softer soil layers beneath. MCXT 006 extended across all floor units, including two additional squares (N4W1, N4E1) opened later in the season to investigate the northwest corner of the house.

This fine medium-brown loamy layer yielded a sparse array of artifacts consistent with the 17th and early 18th centuries (plain and polychrome tin-glazed earthenwares, large-bore pipestems, vitrified black bottle glass, thick coarse red earthenwares with brown and apple-green glazes) but lacked ceramics with tightly datable manufacturing dates. In 2010, engraved fragments of a lead crystal wine glass were found in this layer in N3W1. No Westerwald stoneware or white salt-glazed stoneware was recovered, nor any of the mass-market refined earthenwares of the mid-18th century found



ubiquitously on sites in St. George's. This absence strongly suggests the Oven Site was abandoned and sealed in the first decades of the 18th century. The absence of any window glass and the recovery of very few nails is consistent with an open-window early timber-frame

building constructed with treenails. The virtual absence of bottle glass and pipe bowls and pipestems is also striking, but since this layer represents the floor of an occupied house the dearth of artifacts could reflect frequent cleaning and the removal of items used and broken there. We found excellent preservation of faunal material, including small fish and rat bones and even fish scales.

Perhaps the most remarkable artifacts recovered from MCXTs 006 and 009 (the lower half of 006, designated arbitrarily to provide stratigraphic elevation precision) were five worked chert flakes, apparent evidence of flint-knapping imported stone. To date, no stone flakes have been found at any other Bermuda site, making this a unique find. Their presence provides strong evidence that the Oven Site represents Boaz Sharpe's household which, at the time of his death in 1707, was home to nine Native American slaves. Why these Native Americans were making stone tools when metal ones were easily available and how they obtained chert (a North American or European type of rock) as a raw material present compelling historical questions for better understanding trade connections and processes of cultural assimilation, retention, and resistance in seventeenth-century Bermuda.



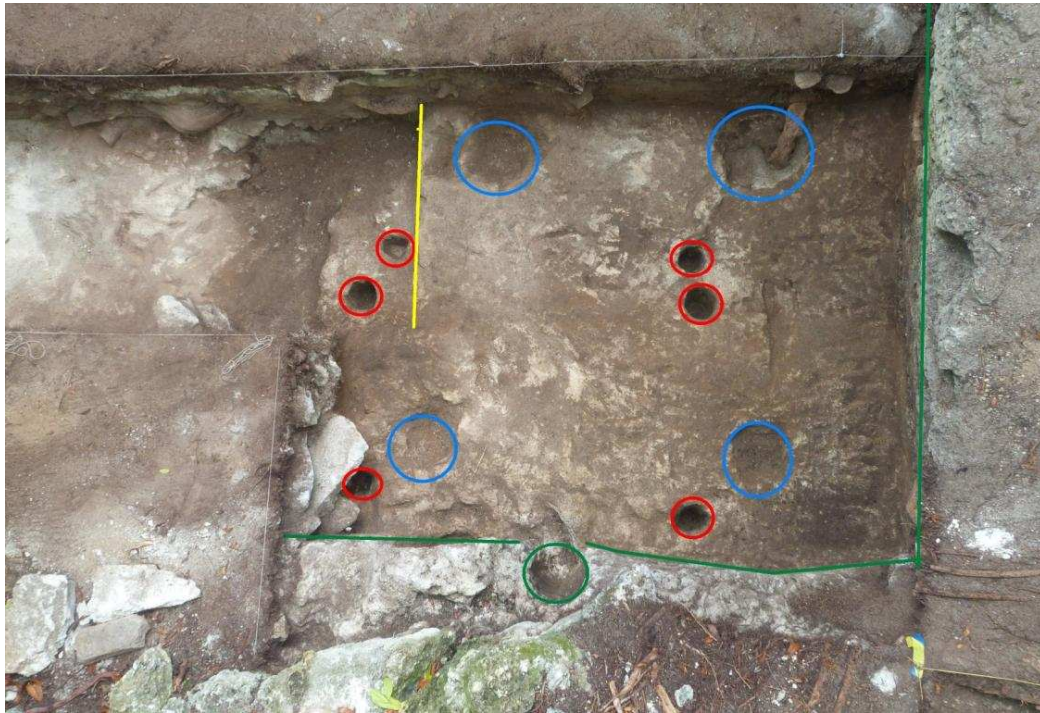
The stone FLOOR beneath the occupation layers is not uniformly level and has a variety of features cut into it that suggests both an episode of building expansion and at least two phases of building repair or renovation.



The numerous postholes cut into the floor represent two phases or types: large-diameter ovate but shallow footing postholes and deep circular postholes that were uniformly about 15 cm in diameter:



In addition to the two different sets of postholes (outlined in red and blue), the northern wall of the house slightly bisects what is either an earlier posthole or a cut feature connected to an alcove cut into the north wall (outlined in green). A north-south running straight cut into the stone floor (yellow line) aligns with the wall cut running south to the east of the hearth area.



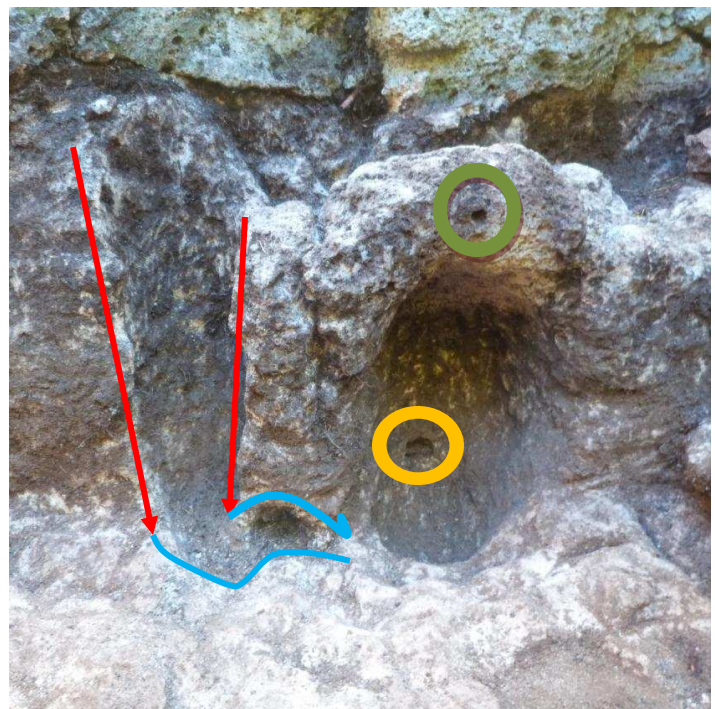
Alignment of southern wall with cut into the stone floor (red line).



In numerous places in the stone floor one can observe the tool marks of the original builders made by shovels and pickaxes:



Expansion of the original trench to the north uncovered a distinctive **alcove-like feature** carved into the house's north wall, which is apparently associated with the deep round cylindrical feature immediately to the west. (We initially interpreted this as a structural posthole later partly bisected by quarried expansion north of the north wall.) The base of the alcove has a small connecting tunnel (blue) about 10cm across linking it with the west side base of the alcove. A small round hole extending 20cm deep capable of anchoring a steel rod is centered



above the alcove (green circle) and a small shallow hole was present in the back of the alcove (orange circle). This sort of feature has never been observed at any other Bermudian site and its purpose is puzzling. Wooden or metal elements may have been present that now require speculation. The alcove could have been the back of a cage, with its front mesh affixed at the top. Or the feature may have been a furnace of some sort covered by a now-gone front stone wall and vented through the base channel into a flue to vent smoke outside the house. In this scenario, the round centered hole at the top held a steel rod from which a crucible or cooking pot was suspended. The absence of deteriorating lime at the alcove's base (evidence of high temperature firing) argues against this hypothesis, however. A third possibility is that the alcove was a shrine for revered objects, reflecting the cultural practices of the Native American slaves who are thought to have occupied the site and would have been constantly present in the kitchen area. A sacred shrine of this sort might reflect indigenous worship practices or syncretic Native America-Catholic practices; the most common source of Native American slaves in the 1680s and 1690s was Charles Town, South Carolina, which exported enslaved Christianized Indians taken from the extensive Spanish missionary network to the south in Florida and modern-day Georgia and Alabama.

HEARTH AND OVENS

The configuration of the Oven Site's hearth and oven is unique in Bermuda, in that the hearth and its associated flue were quarried directly into the limestone hillside and the oven was placed in the back of (rather than alongside or adjoining) the hearth. The lack of precedent among Bermuda's many surviving late 17th- and 18th-century buildings offers strong evidence of the Oven Site's antiquity.



Four units were excavated within the hearth floor and large oven to the south. In the course of excavation, a second smaller blocked-up oven was discovered extending east from the hearth floor. The surface layer of the hearth and oven was covered in a thick pile of stone rubble which had either fallen in from the open floor foundation area or were part of a higher above-ground chimney which collapsed and fell through the chimney flue. No evidence of mortar was found on any of these stones.



The rubble layer sealed a succession of compact ashy layers and a crude flat stone platform in both the hearth and southern oven. These layers were rich in faunal material (including hundreds of fragments of eggshell), nineteenth-century artifacts, and rusted tin cans and nail fragments, revealing that the hearth was regularly used in the post-occupation nineteenth-century quarrying period. The relative dearth of bricks here and the prevalence of broken/robbed bricks elsewhere on the site suggests that the original hearth and oven had a brick floor and lining but that these were salvaged when or after the house was abandoned (circa 1710). No intact layers dating to the eighteenth century were found, but several shallow postholes were revealed cut into in the hearth floor.



A second low-roofed long and thin oven was excavated after the squared stones blocking it up were removed. The top layer of this feature contained the remains of a leather shoe or boot and rusted tin can fragments dating to the 19th century, which overlay an intact in situ brick floor surface. Excavation of this surface was postponed to the 2013 season, so precise dating of this feature is currently unclear.



Interpretation of the floor area and architectural features yields our current working hypothesis that the house had an uneven stone floor in its early years of occupation and perhaps a dirt floor surface that was not heavily trafficked (or was subsequently loosened in post-depositional years through natural forces). This explains the relative dearth of artifacts

found in the occupation layers, and especially early 17th-century artifacts. Three distinct sets of postholes suggest the building had a long lifespan and was repaired or renovated on two occasions. The large shallow square postholes were likely made first in the initial building, reflecting an understandable over-engineering of new construction by newly arrived builders replicating English modes of framing and house support (and quickly using large whole trees rather than squared off or timber-conservative smaller posts). The small round deeply seated posts were added later, and the presence of two closely related sets or pairs indicate either an initial error in placement or (more likely) a repair instance where older failing posts were replaced with new posts set alongside them. The lack of datable artifacts found in the posthole fills does not allow us to date the sequence of events, however. The cut into floor features aligning with the direction of the south wall indicates that the original house footprint was expanded at a later date.

OUTSIDE THE HOUSE

Two units were excavated adjoining the chimney hole outside and above the floor cut in order to find postholes anchoring the exterior walls and in the hopes of finding artifact-rich sheet refuse layers surrounding the house to compensate for the relative dearth of material found within the house occupation layers.

The unit adjoining the chimney flue contained numerous small postholes and the footing for a large wooden mantle extending in front of the hearth. Excavation revealed that the original square-beamed mantle was quite substantial, but was later



replaced by a smaller round pole approximately 10cm in diameter. This developmental sequence parallels that of the structural postholes in the floor area: large posts being replaced over time with two phases of smaller round posts.



Mantle seating with repair fill (left) in profile and as excavated in plan (right)

Clearing brush and leaves to the north of the house floor cut revealed a large pile of large and small building stones sloping north away from the foundation. This material probably represents the house's northern wall or stone infill from a dismantled timber-frame wall.



Discussion: Taken together, documentary and archaeological evidence support the conclusion that the Oven Site is Boaz Sharpe's household and that it was abandoned soon after his death in 1707. The successive sequence of large and small postholes reveal that the building had a fairly long lifespan, almost certainly dating to the 1663 Norwood survey map and possibly to the 1617 Norwood map as well. Although there is a frustrating lack of datable early artifacts to confirm this, the dearth of material in occupation layers is consistent with either an only occasionally occupied house (in the pre-Boaz Sharpe years when Godherd Asser was Smiths Fort's commander) or an impoverished household (as Asser Sharpe's clearly was). Construction techniques reveal an evolution toward smaller framing material, suggesting that the buildings erected by early settlers were likely over-engineered at a time when large mature cedars were abundant but over time Bermudians became more efficient builders as available cedar timber became smaller and fewer. Despite its sheltered location, the perhaps century-old house would have been vulnerable to the severe hurricane that hit Bermuda in 1712, which damaged a majority of the colony's buildings. Since Boaz Sharpe's adult heirs already had established households in St. George's and St. David's, they would have had little incentive to rebuild the Smiths Island house if it had been blown down. Even if the early house survived the hurricane, the empty home would have received very little maintenance from its absentee owners in ensuing decades, presenting another likely scenario of the building's demise.

Further confirmation that this site is probably Boaz Sharpe's house comes from the chert flakes found in the floor occupation layers. These unique finds correlate with the documented habitation of nine Native Americans in Sharpe's home in 1707. Statistically, many more diagnostic artifacts need to be found to decisively establish an Indian presence at the site, but preliminary finds are promising. The function of the enigmatic alcove carved into the Oven Site's northern wall also warrants comparative investigation and collaboration with archaeologists who specialize in Southeastern United States Native American sites.

Future Research: Although the season's goals of identifying this site as Boaz Sharpe's home and confirming its post-and-beam construction were successful, excavations have made clear that the house is larger than originally thought. Future fieldwork should extend excavations to the east in order to define the eastern/front wall of the house and then follow it south. It now appears the Sharpe House in its final phase was an L-shaped structure and that we've only investigated a back kitchen portion of a substantial household. Defining the eastern wall and full floor plan of the house will then facilitate location of midden features and external sheet refuse layers that will reveal substantially more about the activities, diet, and culture of Boaz Sharpe's household members. This is a highly significant site that spans Bermuda's first century of colonization, a largely undisturbed multi-ethnic, multi-generational household nicely sealed by its 1710s destruction layer.



Cotton Hole Bight (CHB) Site

The most singular and important site known to be on Smiths Island has never hitherto been located: the homestead that mariners Christopher Carter, Edward Chard, and Edward Waters established between September 1610 and July 1612. Located somewhere on Smiths Island, the camp was surrounded by an acre of cleared land on which these three “first Bermudians” grew various food crops and the first tobacco grown by Englishmen in an American colony. They operated at least one sailboat, which they used to explore the rest of Bermuda and built a shallop, which they planned to sail to Newfoundland.

These documented activities establish parameters for likely locations within Smiths Island: the “Three Kings” house should be found in close proximity to a flat sheltered field area with good soil but also near a stretch of shore offering both a flat shelf near deep water where the shallop was constructed and a reasonably sheltered location for mooring their other sailboat. Having lived in Bermuda for more than a year before moving to Smiths Island, Christopher Carter would also have been mindful of prevailing winds and the directional approach of storms. Consequently, it is unlikely he would have situated his house on exposed high ground. A sloping hillside on Smiths Island’s more sheltered northern side near a cove or bay would have appealed to Carter. The fork at Smiths Island’s western end offers one promising location, but it suffers from its greater distance from access to the reefs via Town Cut

and the path from St. David's Great Bay leading to Strachey's Watch, from which the men regularly scanned the horizon for approaching vessels. Taken together, these imperatives suggest the vicinity of modern-day Cotton Hole Bight as the most likely location for Carter's homestead and farm.

While scouting in the valley leading to Cotton Hole Bight, we discovered a large deep oven cut into a cut stone face on the valley's western side, approximately midway between the main east-west road leading to the eastern point and the Bight. To the immediate west, the shallow valley drops down about twenty to thirty feet into a broad plain that would be ideal for clearing and cultivation. Further scrutiny of the heavily wooded oven site area revealed a large flat platform adjoining it and clear evidence that a rectangular area had also been cut into the hillside to the north.

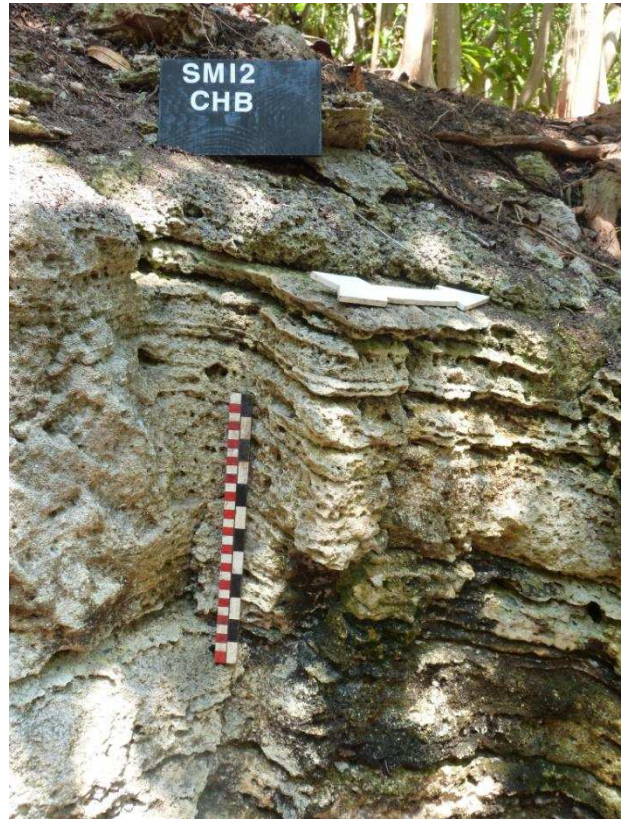


After clearing much of the surrounding vegetation and establishing a meter grid across the site, we observed that the flat cut stone face with the oven was actually the rear portion of a very large hearth, rather than the whole western wall of a building; in the northwestern corner of

this hearth, one can discern clear evidence of a large (appx. 25cm diameter) vertical post that abutted the stone wall. A large house occupied the site, with its floor being the flat area we cleared.

Remote Sensing Experiment

After establishing a grid across the floor area, we enlisted Rick Spurling to conduct a metal detector survey of the site area, marking with different colored visi-tape the iron and non-ferrous signals he got. Most meter squares had between four and eight “hits,” which were mapped in order to determine how well they corresponded to the provenance and depth of metal artifacts recovered during excavation and thus establish the efficacy of conducting metal detection surveys in the future.



Unfortunately, the experiment proved only partially successful. While the metal detector did alert us to the presence of metal artifacts in the area, we recovered many more iron-alloy artifacts even in the topmost layer of the three-meter by one-meter bisecting trench we excavated than were indicated during the survey.

Excavations at CHB site focused on two areas: 1) the edges of the floor cut to the north of the floor (intended to find structural postholes) and 2) an east-west bisecting trench to determine the integrity of stratigraphy and hopefully reveal intact occupation layers with datable artifacts.

Units N10 E10 and N11 E 9-10 did not uncover the corner postholes we expected to find. The bedrock floor in these units was irregular, more resembling quarrying activity than the creation of a habitation area. Unit N10 E 10 did have a sharp vertical cut face and an unusual ovate basin-like feature adjoining it that was clearly human-made (as revealed by workmens' cut marks observable on the surface). The fill of this feature had few artifacts, but did include the tusk of a mature boar or pig that exhibited considerable wear. Since early settlers quickly wiped out the Spanish hogs that had multiplied in Bermuda during the sixteenth century and the tusk from this specimen was clearly from an older feral hog, this find offers promising evidence of occupation at an early date consistent with Carter's occupation, either at this site or one nearby.





The **bisecting trench** (N8 E 8-10) was placed slightly north of and perpendicular to the hearth and oven area. The upper layers were thickly matted with roots. In the westernmost unit (N8E10), we discerned a uniform outcropping of bedrock which at first appeared to be a wall or foundation footing parallel to the hillside cut/west wall of the house. Subsequent excavation to the east revealed a sloping stone face at a 45-degree angle and a vertical eastern cut face. Our initial hypothesis was that this arrangement may have supported long sloping poles that anchored into the hillside, reflecting a lean-to (rather than traditional vertical-walled) house. The fill of the layers abutting this feature in the rest of the trench yielded 19th, 18th, and 17th-century artifacts, but with no discernible stratigraphic integrity.

On the last day of the field school, the trench layers gave way to a thick, relatively artifact-free rubble layer of large and small cut stones and quarry debris. It was initially thought that, like the Oven Site, this layer represented the destruction of an early house and that we would find sealed occupation layers and architectural features below it. A small test pit within N8E9 revealed that the rubble layer went down at least another 40cm but did not uncover the sealed soil occupation layers we expected to find. Subsequent excavations done in late June which removed the rubble layer throughout the trench uncovered an irregular sloping bedrock surface marked by numerous narrow cuts and following the natural striated bedding of the limestone: in short, the bottom of a quarry. Close examination of the rock surface after it was fully exposed in the eastern part of the trench (N8 E10) revealed some degree of weathering and hardening, indicating that this surface was open and exposed to the elements for some time before being covered by the rubble material we excavated, but that the stone surface in N8 E 8-9 appeared soft and unweathered. Current interpretation is that, at least in the area of our test trench, quarrying activity some time in the early 18th century destroyed the original flat floor surface of an earlier house site. The house so disturbed may have been the “Three Kings”

house of circa 1611-1612 or the James Pitcher house documented to have stood in the vicinity in the mid-18th century.

Future Research: We have barely begun to explore this large site's footprint and determine its dimensions. Although the test trench dug in 2012 reveals that the site has been disturbed, there may be substantial parts of the site that were not quarried out. Indeed, extending the 2012 trench two to three meters to the east will reveal the extent of quarrying disturbance and possibly locate the eastern wall of the house. Additionally, sheet refuse layers adjoining the house's exterior and possibly the postholes denoting the eastern and southern walls of the house stand a very high probability of being archaeologically recoverable. Broadening our survey out from the house footprint might also reveal features and outbuildings (such as a well, sheds, privy, and midden) associated with the house.

Given the geography of the valley adjoining this site, we might also test the flat area near Cotton Hole Bight for evidence of boatbuilding activity and early occupation to further build evidence for determining whether this site was the homestead of Christopher Carter, Edward Ward, and Edward Chard.

Post-Excavation Work

At the field school's conclusion, the two sites were left open in order to accommodate public visits on July 15, in conjunction with 400th anniversary of the arrival of the *Plough* with Bermuda's first deliberately sent settlers and their arrival at Smiths Island. Thanks to the sponsorship of the St. George's Foundation, a total of seventy visitors were able to tour our two remote sites. Alexandra Mairs-Kessler provided an excellent overview of the Cotton Hole Bight site, while Michael Jarvis outlined the findings at the Oven Site. In conjunction with the ongoing blog kept throughout the summer (smithsislandarchaeology.blogspot.com), the tour generated great public interest and following of the excavations.



Additional reconnaissance of the Amenity Park was done on July 10 to physically examine the eastern tip of Smiths Island and assess the degree of landscape disturbance in the vicinity of the hilltop casuarinas stand at the island's eastern terminus. Vegetation east of the Smallpox Bay house ruin is virtually impenetrable due to tightly interlocking Mexican pepper trees and an uneven surface - it took two hours to cover a quarter mile. Aerial photos and ordnance survey maps had led me to conclude that the original eastern hill had been bulldozed flat to make way for the extensive hydroponic greenhouse complex built there in the 1970s but this was not the case. The hill remains intact but the varying heights of the casuarinas stand gives the misleading

impression of a flat ground surface. Numerous recent concrete foundations and water troughs were visible inside the casuarinas stand and there was some evidence that recent (post-1990s) cultivation or occupation by squatters had occurred in the area.



Before departing, I completed washing, processing, and completing an inventory of all finds bags from the two sites. The 2010 and 2012 assemblages were archived and placed in the long-term storage area of the Reeve Court Archaeology Lab for future study. On July 16, I backfilled both sites after placing a layer of plastic sheeting to separate excavated surfaces from backfill material. The ground surface was also covered with plastic tarps to discourage the rooting of invasive plant species.



Conclusions and Future Research

The 2012 season succeeded in most of its major goals. The two sites investigated were both revealed to be seventeenth-century sites with clear evidence of timber-frame construction. The Oven Site has a remarkably high degree to stratigraphic integrity and unique evidence of a Native American presence consistent with historical research. The Cotton Hole Bight site shows evidence of extensive stratigraphic disturbance in the eighteenth century but it remains to be determined how extensive this disturbance was across the site. At both sites, we failed to determine the extent and physical layout of the houses under investigation, but this is due to the fact that they are both much larger than originally hypothesized.

Results from the 2012 excavation provide a firm foundation for next year's fieldwork. Future work at the Oven Site will extend excavations east and south to determine the size and full extent of this seventeenth-century house. Testing in the stone rubble pile to the north of the floor cut should reveal buried and sealed outside surface layers that can also refine our dating of the site and provide additional evidence about the house's inhabitants. At the Cotton Hole Bight Site, excavations will concentrate on determining the extent of 18th-century quarrying disturbance, finding intact layers related to the early house's occupation, and investigating the shore near Cotton Hole Bight itself for human activities.

In addition to refining our understanding of known sites, the 2013 season should extend the methodology of the 2010 pedestrian site survey to the western Bermuda National Trust-owned portion of Smiths Island in order to identify potential sites there as well. Maps from the 1870s mark the locations of several house footprints in the area, but these have never been investigated. In order to analyze the whole of Smiths Island as a unit of analysis and understand the changing succession of uses and occupations across four centuries of Bermudian history, we must know the fullest extent of human occupation of all parts of the island. In a similar vein, we will seek permission to assess properties in the middle privately owned portion of Smiths Island.

Appendix. Preliminary Harris Matrix, Oven Site, Selected Master Contexts

