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## Early Settlement at Bombay Hook, Kent County, Delaware

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## **Early Settlement at Bombay Hook, Kent County, Delaware**

By: Megan E. Springate, Richard Grubb & Associates.

Presented at the 4<sup>th</sup> Annual Symposium on the Early Colonial Archaeology of the Delaware Valley, New Castle Courthouse Museum, New Castle, Delaware. Saturday May 14, 2011.

**Note:** To protect areas with archaeological sensitivity, details regarding specific site locations are not included in this document.

### *Introduction*

In 2010, Richard Grubb & Associates was contracted to assist the United States Fish and Wildlife Service to prepare an Archaeological Overview and Assessment of the Bombay Hook National Wildlife Refuge and surrounding areas (Springate et al. 2011). The results would then be incorporated into a Comprehensive Conservation Plan (CCP) of the Refuge. The CCP is intended to assist in the long-term management, preservation, and interpretation of cultural resources at the Refuge. The USFWS is actively interested in the archaeological record at Bombay Hook, and welcomes public input into the CCP process; information is available through the Friends of Bombay Hook website ([www.friendsofbombayhook.org](http://www.friendsofbombayhook.org)).

The Refuge is located in Kent County, Delaware on the western shore of the upper Delaware Bay, straddling the dividing line between Duck Creek and Little Creek Hundreds. The City of Dover is located to the southwest. The Refuge was established in 1937 as one link in a chain of refuges extending from Canada to the Gulf of Mexico used as breeding grounds and feeding/resting grounds along major bird migration routes. Because the area has been part of the Refuge system, it has been protected from development and other activities that have provided information on early settlement elsewhere in Delaware.

The Refuge currently consists of approximately 16,000 acres, most of which is saltwater marshland. The AOA addressed the 16,000 acres within the Refuge as well as an additional almost 5,000 surrounding acres. The study included palaeoenvironmental, pre-contact, contact period, and historic contexts for archaeological resources within the Refuge and site predictive models that determined the likelihood of areas to contain pre-contact and historic archaeological resources.

Although the AOA includes information on settlement in the area through the late twentieth century, this presentation will focus on the earliest settlement in and around the Refuge in the context of various settlement models that have been proposed. Information on development in the refuge through the early nineteenth century will be presented to illustrate the changing settlement trends. Several early landscape features such as roads and marsh improvements remain visible on the landscape, which has undergone relatively little modern development and disturbance.

One aspect of the landscape that has changed over time is the configuration and size of the marshlands. Changes in sea levels, water table levels, and rainfall are regularly addressed in studies of pre-contact settlement patterns in edge environments, and are increasingly being addressed in the historic period. The erosion of historic sites in edge environments is also a concern when considering historic resources – shoreline surveys in the Delmarva have identified seventeenth through twentieth century resources that are now underwater. These include artifact scatters, shell middens, well features, wooden pilings, and structural remains (Lowery 1995, 2001, 2008, 2010; Pohuski 1991). Changes in sea levels and erosion have implications beyond the environment and impacts to historic resources: the legal boundary of the Refuge in littoral and riparian zones is the mean low water line (United States Fish and Wildlife Service n.d.).

A study of the area around Port Mahon at the southern end of the Refuge indicated that the shoreline at the Port Mahon lighthouse receded approximately 300 feet between 1900 and 1981, for an average of about 1 meter per year (Kardas and Larrabee 1981). Other researchers have documented an average loss of approximately 3 meters per year between 1845 through the late twentieth century (Kraft and John 1976). At the Bombay Hook Light Station north of the Refuge, approximately 740 feet of marsh and uplands have eroded into the Delaware Bay since 1831 and an additional 75-100 feet of upland has sunk into the marsh since 1899 (De Cunzo and Silber 1994: 10).

The regional soil survey of the region shows areas of Sunken Mucky Silt Loam within the marshes (Natural Resources Conservation Service 2010). These consist of formerly upland soils that have been subsumed into the marsh either by sinking or by rising water levels. At Blackwater National Wildlife Refuge on the eastern shore of Maryland, areas of Sunken Mucky Silt Loam were identified as having moderate sensitivity for historic sites through the eighteenth century (Millis et al. 2000: 221-226). At Bombay Hook, however, these soils appear to have been sunken later – perhaps as late as the mid-nineteenth century according to historic maps. Archaeological evidence of what are likely the earliest historic sites, built at the marsh edges of uplands and which are poorly represented on maps has not been recovered.

### *Methodology*

Several documents, including maps and land surveys, were used to establish the historic development within the Refuge. Many of the earliest documents are land surveys – completed when land was being transferred by sale, gift, or inheritance. These land surveys often show only property boundaries and main house structures; the more useful ones for this purpose show additional information, including roadways, outbuildings, and information regarding neighboring properties.

This inconsistency in what was depicted, and the lack of documentation of the entirety of the project area at a particular point in time means that early settlement data for the Refuge remains incomplete. This is true particularly of early roadways – while roads or track ways must have provided access to at least some of the earliest settlers along the necks of land extending in to the marshlands, these are often not shown (other early properties were more obviously accessed by water).

Early settlement data for the project area were mapped on current USGSs for the period up to the mid-eighteenth century, the late eighteenth century, and the early nineteenth century. This settlement data included mapped roadways, bridges, dwellings, landings, and known archaeological sites. These date ranges were used instead of Delaware's temporal historic contexts because no data was available for some of them. Further research, including archaeological excavations, may result in sufficient coverage for each of the state contexts in the future.

Because the area in and around what is now the Refuge was largely agricultural throughout its historic development, soil fertility classifications as determined by the United States Department of Agriculture were also shown on the USGS maps. These soil classifications include: prime farmland (land that, with proper management and without excessive inputs of fuel, fertilizer, pesticides, or labor can economically produce high crop yields); prime farmland if drained; farmland of statewide importance (land that nearly meets the requirements for prime farmland); and not prime farmland (land that does not meet the previous requirements) (Natural Resources Conservation Service 2010).

### *Early Settlement*

#### Through the Mid-Eighteenth Century

The landform known as Bombay Hook served as an important geographical reference for travelers along the Delaware River. The name “Bombay Hook” is a phonetic corruption of *Boompjes Hoeck*, the Dutch name for the point of land extending into the Delaware. It translates as “tree point” (Carpenter 1886). Bombay Hook is generally considered the point at which Delaware Bay becomes the Delaware River. The point also served as an important regional boundary marker – in 1638, Bombay Hook served as the southern limit of land purchased by Peter Minuet from the Indians for his New Sweden colony (Johnson 1911: 184). Later, the Hook served as the southern boundary marker for lands transferred by the Dutch West India Company to the City of Amsterdam following the surrender of the Swedes to Peter Stuyvesant. This land transfer served to compensate the City of Amsterdam for the use of one of their warships (Gehring 2003: 18). After 1664, Bombay Hook served as a point on the dividing line between the jurisdictions of the colonial English New Castle and Whorekill Courts.

Following the intensified period of European settlement central and lower Delaware during the 1670s, many of the region’s surviving Indian population left the area, traveling west and north. While many Indians chose or were forced to leave Delaware, others remained. Ned Heite and Cara Blume demonstrated that people with Indian ancestors occupied Pumpkin Neck, including the eighteenth-century Bloomsbury site, located just west of the Refuge’s northwestern boundary (Heite and Blume 2008).

Peter Bayard appears to be the first colonial settler in the project area. He was a Huguenot who immigrated to New Amsterdam in 1647 with his widowed mother Anna, two brothers, and a sister. Journeying with them were Anna’s brother, Governor Peter Stuyvesant and his wife. Both families remained in New York following its transfer to English rule. Anna’s children grew up in New York

and, surely with the support of their powerful uncle, became prominent and wealthy citizens. In 1674, Peter married Blandina Kierstede and moved into a house in New York City on the corner of what is now Broadway and Exchange Place (Wilson 1885:3).

Peter was not content in the city, however, and in 1679 purchased Bombay Hook Island. In 1680, while still in New York City, Peter met with Jasper Danckaerts and Peter Sluyter, followers of Jean de Labadie who were traveling in North America looking for a site to establish a Labadist settlement. In Dankkaerts' diary, he notes that Peter Bayard "intended to abandon the city and commerce and go and live upon his farm" (Murphy 1867: 343-344). Bayard and another family member were listed in an early 1680 census on Bombay Hook Island (Jackson 1983:16-17). They did not stay long at the farm, and left not long after the census was taken to join Danckaert and Sluyter in founding the Labadist community at New Bohemia Manor on Maryland's eastern shore (Bulloch 1919:4-5; Mallery 1888:48-49; Murphy 1867:39; Scharf 1888:1091).

No roads connected Bombay Hook Island to the mainland at the time, and Bayard and his family would have relied on water routes for their transportation. The exact location of Bayard's farm is unknown. Very little is known from maps or historical documents for the remainder of the seventeenth and very early eighteenth centuries.

Settlement prior to the mid-eighteenth century took place on the various upland necks of land extending into the marshes. Early settlement pre-dating 1750 is not mapped along Dutch Neck; however, the presence of the Pasture Point Causeway leading to what was most certainly a landing at the edge of the marsh north of Dutch Neck suggests that early residences and outbuildings may have been present. This causeway may be the one referenced in the 1718 will of John Allee. Other

early, undocumented settlement may be present on areas near the mouths of the rivers or closer to the Delaware. The upland areas of Bombay Hook Island in particular are sensitive for early activity in addition to Bayards farm. The remains of these earliest settlements may have been washed away or are underwater.

Known pre-1750s dwelling locations in the Refuge area include: the mid-eighteenth century Poplar Grove, the seventeenth century Dona Landing Farmstead, the mid-eighteenth century settlement of John Mahan, and the mid-eighteenth century Betty's Fortune. Access to the Delaware River from the southern settlements, especially Betty's Fortune, was via Kelly's Ditch which was built before 1748 and serves as a portion of the Refuge's southern boundary. The Dona Landing Farmstead is located on the edge of what are now sunken soils, and associated archaeological deposits may be submerged. This location on the boundary between prime and not prime farmland is consistent with Gunn and Holland's settlement model (1999: 75-76), which postulates that early homesteads were located on land unsuited to tobacco farming, but near fertile fields so that they did not occupy valuable agricultural land.

Later, early- to mid-eighteenth century dwellings like those of John Mahan and Betty's Fortune were located further inland, generally surrounded by prime farmland or farmland of statewide importance, supporting Lukezic's (1990) hypothesis of centering farmsteads and plantations in the middle of, rather than on the edge of, fertile agricultural fields. This placement minimized the "friction of distance" from the homestead to the fields. This inland settlement suggests an increasing road network, while the continued presence of landings in the marshes emphasizes a continuing reliance on water transportation.



Residents of the pre-1745 White Hall Farm 1, who likely relied on Whitehall Landing for much of their transportation and shipment needs, were also connected by roadways north from the landing and along Whitehall Neck with other plantations to the west, including Whitehall Plantation (Amott et al. 2006: 7). Another landing is located on the Leipsic River to the south of Whitehall Landing. This was most likely accessed by a roadway running north-south just to the west of what is now the Refuge boundary.

Although most settlers in Delaware had shifted from reliance on tobacco crops to wheat crops by the early eighteenth century (De Cunzo and Catts 1990: 50-51), this shift came more slowly to the lands in and around what is now the Refuge. In 1744, the main crop at Whitehall Plantation (portions of which are within the Refuge) was tobacco (Seitz and Reese forthcoming). The persistence of tobacco as a crop at Whitehall may have been possible because of the plantation's large slave population. Other farmers in the area lacking the same labor force may have shifted their crops to wheat sooner or more completely.

The most fertile soils for growing tobacco were well drained (but not excessively drained) soils with an optimum mix of fine particles (silts and clays) with coarse material like sand, and gentle slopes of up to six percent (Lukezic 1990; Smolek 1984:11-12). Smolek (1984) identifies soils in the Sassafras, Matapeake, Mattapex, and Woodstown series as being particularly suitable.

Soils with characteristics suitable for tobacco farming (compiled using criteria presented in Lukezic 1990 and Smolek 1984 and soil data from the Natural Resources Conservation Service 2010).

Soil Type	Drainage	Soil Components	Slope
<b>Suitable for Tobacco</b>	<b>Well drained to moderately well drained</b>	<b>Fine silt or clay with sand</b>	<b>0-6%</b>
Hambrook sandy loam (HbB)	Well drained	Sandy loam	2-5%
Hammonton sandy loam (HnA, HnB)	Moderately well drained	Sandy loam	0-5%
Ingleside sandy loam (IgB)	Well drained	Sandy loam	2-5%
Matapeake silt loam (MkA)	Well drained	Silt loam	0-2%
Mattapex silt loam (MtA, MtB)	Moderately well drained	Silt loam	0-5%
Nassawango silt loam (NsA, NsB)	Well drained	Silt loam	0-5%
Pineyneck loam (PyA, PyB)	Moderately well drained	Loam (high silt content)	0-5%
Reybold-Queponco complex (RdA)	Well drained	Silt loam	0-2%
Reybold silt loam (ReB)	Well drained	Silt loam	2-5%
Sassafras loam (SlA)	Well drained	Loam (over sandy loam)	0-2%
Unicorn loam (U1A, U1B)	Well drained	Loam (high silt content)	0-5%
Woodstown loam (WoA, WoB)	Moderately well drained	Loam (over sandy loam)	0-5%

An analysis of the soils present within the Refuge noted several soils that could be considered prime or very good tobacco soils. While suitable tobacco soils do not necessarily correspond with areas of prime farmland according to current USDA standards because of the differences between the requirements of tobacco versus more modern crops such as wheat (Lukezic 1990), all the soils suitable for tobacco crops within the project area are currently classified as prime farmland.

Consistent with the settlement pattern models for this part of Delaware, the earliest of the pre-1750s settlers at the seventeenth century Dona Landing Farmstead site and Bayard's settlement on Bombay Hook Island were located at the very edges of wetlands and relied on waterways for transportation (Amott et al. 2006: 7). Slightly later settlement during this period, however, including those of John Mahan and Betty's Fortune, was located inland. Though maps do not show roadways or cartways connecting these sites to landings or inland transportation routes, their presence can be inferred.

Roads extending across wetlands and into the marshes were likely of corduroy construction – a

series of logs laid transverse to the direction of the roadway and occasionally covered with a layer of soil. Corduroy roads were used particularly in areas of poorly drained soils such as marshes and kept travelers from being stuck in the mud (Amott et al. 2006: 23). Evidence of early corduroy roads may survive in the Bombay Hook marshes.

### Late Eighteenth Century

By the late eighteenth century, settlement and development within what is now the Refuge had expanded. In addition to several new structures and features, most of the pre-mid-eighteenth century sites persisted. Those that did not include: the settlement at Dona Landing Farmstead and the settlement of John Mahan, both in the southern part of the Refuge. While neither Whitehall Landing nor the landing across the river from it appear on late eighteenth century maps, water remained the dominant means of transportation for people and goods in this period (Amott et al. 2006: 8). It is likely, therefore, that the landings continued in operation. In general, late eighteenth century settlement in the area was inland, with dwellings located in the center of fertile agricultural soils.

Several plantations or large farms were established in the area during the second half of the eighteenth century. Of particular note is the farm associated with the Allee House. This brick house was built as early as 1753, and the USFWS considers it their most significant historic architectural resource in the Northeast Region (Region 5). Surviving outbuildings include a brick smoke house, plank shed, frame barn, and the original brick-lined well.

Across Dutch Neck Road and west of the Allee House was a small dwelling referred to on a 1775 survey as the “Old House.” It is unclear if the Old House was an early home built by the Allee

family on their property, or was constructed as or used as a tenant house or slave quarter. No above-ground evidence of the Old House remains.

Further west of the Allee House was the Nicholson Farm 2 house, built prior to 1792 and perhaps as early as 1753. Also settled along Dutch Neck in the late eighteenth century were the Pasture Point Plantation and the Jonathan Alle House, both on Pasture Point. A roadway (now known as Dutch Neck Road) was built along Dutch Neck connecting all of these properties to each other and to a developing north-south road network to the west. The eastern end of the road terminated at a landing.

Late eighteenth century development along Whitehall Neck was minimal in comparison to that along Dutch Neck, and only one new farmstead, the A.G. Cummins farm, was established. The lack of new settlement during this period along Dutch neck speaks to the persistence of the Whitehall and Mothers Plantations.

In addition to the settlement along Dutch Neck associated with the Allee family, inland farmsteads and plantations were established at Gloster (also spelled Gloucester) and by Samuell Axell the Younger in the northern portion of the Refuge.

One exception to the practice of building inland in the center of fertile soils during this period is found at the Field 502 site. Initially identified archaeologically, the site is associated with the settlement of John Brinkloe, shown on a 1768 map of the area. It was located on the edge of prime farmland and extended into the marsh, suggesting that sunken soils may have been uplands through the late eighteenth century.

Late eighteenth century maps are the first to show extensive marsh control activities in the area.

These include a series of banks or dikes and ditches used to create transportation routes through the marsh or to allow for areas of land to be drained for use as salt meadow for haying and/or livestock. An area in the southern marshes of the Refuge was known historically as Hog Pen Island. Confining the hogs to reclaimed marshland seems a sensible response, given the increasingly prohibitive cost of building hog-proof fences from a decreasing supply of timber (Grettler 1999). The construction of late eighteenth century marsh control features was done in areas associated with settlements, particularly around Dutch Neck.

Several of the ditches excavated into the marsh in the late eighteenth century persist on the landscape through the present-day. These include the Pasture Point Ditch, Farson's Ditch/Dutch Neck Canal, Mike's Ditch, and Kelly's Ditch.

### Early Nineteenth Century

Before discussing the early nineteenth century in and around the Refuge, I wanted to mention the significance of the area for the Underground Railroad (UGRR). While many slaves escaped along more westerly routes including the western shores of the Chesapeake in Maryland, New Castle County in Delaware, and into Pennsylvania, others – especially those from the Delmarva – escaped by heading to the eastern Delaware communities of Dover and Smyrna. These individuals were then ferried across the Delaware River to Greenwich, New Jersey, just across the river from Bombay Hook Island, and the starting point of one of the main UGRR routes through the Garden State. The most direct and most discreet route was through the marshes that are now part of the Refuge (Rizzo 2008:82-85; Switala 2004:42; Trusty 1999:26).

Several eighteenth century sites did not survive the turn of the nineteenth century. These include the house of Samuel Axell the Younger, the Old House on the Allee property, John Brinkloe's house, and at Betty's Fortune.

The disappearance of these last two left the uplands in the south of what is now the Refuge without any domestic or agricultural settlement. Though apparently unsuited to farmsteads, the area along Simons Creek was determined suited for commercial development. A steamboat dock and a road leading to it were built in the marshes circa 1825. By 1846, the complex at Dona Landing included a hotel and storehouse. Historic maps suggest that this area remained marsh, and construction may have been on piers. Hotels did not appear on the American landscape until the very late eighteenth century (Sandoval-Strausz 2007), serving various clienteles ranging from business travelers to resort-goers. If archaeological resources survive at Dona Landing, they would present a unique opportunity to investigate early hotel development associated with trade and transportation networks, rather than the slightly later resort development seen on Bombay Hook Island.

Along Dutch Neck, there were only small changes from the late eighteenth into the early nineteenth century. Of particular note is the new settlement by James Hoffecker prior to 1829 at the extreme eastern edge of Dutch Neck – a location that, while it may have been uplands at the time, is now inundated. The Old Causeway extending into the marsh from Dutch Neck may have led to a landing in this area, possibly Hoffeckers.

Along White Hall Neck, there was extensive development in the first half of the nineteenth century. Lands formerly belonging to Mothers Plantation apparently were sold, and several new properties

appear along a roadway extending northeast from the old White Hall Landing. Archaeological deposits associated with one of these, the Jones Farm, have been recovered. An extension of the old White Hall Neck Road connected these new properties to an expanding inland transportation network. Some reliance on water transport remained, and Wilkinson's Landing may also have been used by these new settlers to transport their crops. Associated with this expanded settlement at the end of White Hall Neck is the development of marsh control features in the area.

A significant change in the settlement of the area took place in the early nineteenth century with the construction of what is now known as Route 6 or Woodland Beach Road, a combination of causeway and bridge that provided roadway access to Bombay Hook Island. Residential and commercial development of the island occurred very quickly once a roadway connection was made with the interior.

Development depicted on an early nineteenth century map of the island includes several dwellings with identified owners and a fish house. This fish house represents one of the few industrial/commercial sites in the Refuge area (the Dona Landing complex is another).

Early nineteenth century settlement trends in the area include an increasing reliance on road connections with an inland transportation route while continuing to rely on water transportation; the development of Bombay Hook Island; the development of commercial establishments including the fish house and the Dona Landing complex; and the early beginnings of smaller farms on former plantation lands. Marsh control features continued to be developed adjacent to or associated with settlements on the uplands.

### *Summary*

In general, early settlement at Bombay Hook follows the trends for the rest of Delaware. There was, however, some variation in the placement of early farmsteads and plantation houses, with some located on the edges of fertile land and some in the center of fertile land. Similar variations were seen at the Patuxent Research Refuge in Prince George's and Anne Arundel Counties in Maryland, indicating perhaps that settlers had different ideas regarding the best organization of their properties (Walker and Springate 2011).

There are similarities between the early settlement along the necks and marshes of what is now the Bombay Hook National Wildlife Refuge and within the eastern shore Chesapeake marshes encompassed by the Blackwater National Wildlife Refuge in Maryland (Millis et al. 2000). Similarities include: the presence of seventeenth century sites on well-drained soils along waterways (including those that are now sunken); the reliance on waterways as major transportation routes in the seventeenth century; continued use of waterways in the eighteenth century; and the extension of settlement to interior areas served by increased overland transportation routes in the nineteenth century. Some differences between the two regions also exist, and may be related to factors such as available resources (i.e., oysters). There is, however, some indication of settlement trends associated with tidal marshes.

Finally, this research indicates that the sunken uplands found in marshes deserve closer consideration for their archaeological potential. Particularly important in this consideration are the limitations of government county-level soil distribution maps; these are prepared at such a scale that they become largely unreliable at the scale needed to pinpoint areas of archaeological sensitivity. Systematic geomorphological testing in marsh areas bounding uplands can provide detailed



information regarding the distribution of sunken soils, and may be able to provide more detailed information regarding when particular soils became inundated. This information would permit a much more informed assessment of archaeological sensitivity in these areas that are likely to have been the sites of some of the earliest settlement in the area.

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