METAL DETECTED HOARD OF ENGLISH HALFPENCE RECOVERED IN BURLINGTON COUNTY, NEW JERSEY

(Wayne H. Shelby, Roger A. Moore, Dan Knight)

INTRODUCTION

Though tension exists between metal detectorists and history-oriented archeologists, many important colonial era artifacts from sites that are now covered with malls and parking lots would never have been recovered and preserved without detectorists having intervened.¹ High on the list of commonly found colonial era artifacts are coins and tokens with over 1,000 having been found in the Burlington County, New Jersey area by one of the authors (WS).² However, metal detectorists typically only find a single coin at a time and thus it is a fascinating exception to find multiple coins in a single dug hole. Far rarer is finding a formal "hoard" of colonial era coins in the United States, whether by detectorists or otherwise. Some of these special hoards that have been both found and reported include an accumulation of 1700s halfpence washed up onto the beach near the southern Delaware, caused by the wreck of the *Faithful Steward*,³ a Pennsauken, New Jersey, halfpence hoard found in a building wall,⁴ a hoard of 1699 cast counterfeit William III halfpence found during the Route I-95 excavations,⁵ and the large group of coins found in Castine, Maine.⁶ Therefore, due to the rarity of hoard finds and the lack of follow-up publications of their discoveries, the authors felt it important to report on the recent metal detecting discovery of a hoard of British halfpence at a farm field site in Burlington County, New Jersey (Figure 1).

¹ Roger Moore and Peter Douvres, "and the <u>dish</u> ran away with the <u>spoon</u>: A Colonial Pewter Plate and Spoon Recovered in the I-95 Dig," *The Colonial Coin Collectors Club Newsletter*, Fall 2020, pp. 33-41.

² Wayne Shelby, "Metal Detecting - Survey of Colonial Coins Recovered in Southern NJ - Part II," The Colonial Coin Collectors Club Newsletter, Vol. 13, No. 2, Summer 2005, pp. 6-44. Also see Wayne Shelby, "Metal Detecting, Survey of Colonial Coins Recovered in Southern NJ - Part III," The Colonial Coin Collectors Club Website Article, pp. 1-69 and accessed via https://colonialcoins.org/media/pdf/Wayne%20Shelby%20Survey%20-%20V1.pdf Also see Don Hartman, "New Jersey Circulation Study Update - 24 March 2020," The Colonial Coin Collectors Club Newsletter, Vol. 28, No. 1, Spring 2020, pp. 30-36 which deals with New Jersey coppers found by metal detectorists throughout the Eastern United States.

³ Roger Moore and Wayne Shelby, "Faithful Steward 'Coin Beach' Finds by one Individual," The Colonial Coin Collectors Club Newsletter, Vol. 19, No. 3, Fall 2011, pp. 5-11.

⁴ Roger Moore and Bruce Kesse, "Halfpence Hoard found in Pennsauken, New Jersey," The Colonial Coin Collectors Club Newsletter, Vol. 19, No. 2, Summer 2011, pp. 49-60.

⁵ Roger Moore, Dan Knight, Peter Douvres, Wayne Shelby, Don Hartman, and Craig Bruns; "Evaluation of William III Cast Copper Counterfeit Halfpence Found During Construction of Route I-95 Through Philadelphia," *Journal of Early American Numismatics*, Vol. 3, No. 2, 2022, pp. 163-193.

⁶ John Kleeberg, Numismatic Finds of the Americas: An Inventory of American Coin Hoards, Shipwrecks, Single Finds, and Finds in Excavations, Numismatic Notes and Monographs, Number 169, American Numismatic Society, New York, 2009, pp. 63-64.



Figure 1 – The hoard of copper British halfpence being discovered and excavated.

TIMELINE OF HOARD DISCOVERY

<u>JULY 2021</u>: A well-known member of the metal detecting community, Henry Winzinger, asked one of the authors (WS) to examine and attribute twenty-nine colonial coppers that he and his friend Jay Cook had recovered at one site over a period of time in Burlington County, New Jersey. Recovering twenty-nine colonial coins from a single site was very unusual, making it worthy of further exploration. After inspecting these individually found "field" coins, it was noted that all were copper halfpennies of English origin encompassing the reigns of King and Queen William & Mary, King William III, King George I (Types 1 and 2), and King George II (Types 1 and 2 - Young and Old head types).

During the inspection of the coins Winzinger and Cook mentioned they had only searched the farm field site a few times before it was unfortunately planted for the summer with a crop of soybeans. It was not until November that the crop was harvested and became accessible for metal detecting once again. One author

(WS) was familiar with this farm field location, having walked the fields many times over the past decade searching for Native American artifacts, but never with a detector in hand.

<u>NOVEMBER 12:</u> The week prior to the Colonial Coin Collectors Club (C4) Annual Convention, a fellow metal detectorist from North Carolina, Dale Isaac, visited the author (WS) to spend time enjoying their metal detecting hobby. By coincidence Isaac and Shelby were out for the day on a planned metal detecting and Native American artifact search when they encountered Winzinger and Cook in the process of detecting the same farm field, which by then had the soybean crop harvested. They discussed the day's recoveries and speculated over what had transpired in this small 50'x50' area of the farm field in which by then twenty-nine coins had been individually recovered.

Most of these "field" coins were recovered over one of the lowest parts of the farm field, an area where water accumulated after heavy rain. The soil was a heavy clay which changed to a sandy loam as the ground transitioned to higher elevations and finally became a small ridge. No signs existed at the site to suggest that a previous standing structure had existed there, especially since most early settlers would have chosen higher ground for their dwellings. Productive metal detecting sites typically show numerous signs of previous structures with the greatest number of artifacts found at the center and lessening numbers as the distance from the primary site increases. Signs that a colonial structure once existed at a site are the presence of materials, such as small bits of brick, red-ware pottery, shells, clay pipe stems, black glass or clear window glass, pieces of plate and Chinaware, and the recovery of metal buttons, thimbles, buckles, and musket balls. It was very unusual to find twenty nine-coins in a farm field site exhibiting none of the other commonly found "signs" of habitation. This dichotomy in found artifacts was a real mystery which on the one hand would seem to indicate that the field had not been the location of a homestead or business, but on the other hand provided no indication concerning why so many coins were found in that one area. The lack of ferrous signals by metal detectors, which if present often indicates a previous structure (due to corroded nails and bits of hardware iron), made it even more of a mystery.

Isaac and Shelby decided to join in on the hunt that day but explored the farm field's extreme outskirts and higher rises without finding any artifacts. Meanwhile, Winzinger and Cook continued to slowly search the lower parts of the field, discovering some deeper metal detected targets that they had missed during previous searches. That day Cook found seven additional colonial English coppers, so the colonial coin count from this site was now increased to 36 coppers! At the end of the day questions remained concerning why such a high concentration of coins occurred in this small area with Isaac taking some photographs of the site before heading home (Figure 2).



Figure 2 - Friday November 12th: Jay Cook, Henry Winzinger, Wayne Shelby

<u>NOVEMBER 13:</u> Though Isaac and Shelby planned another day of metal detecting, their plans were cut short halfway through the day due to a large thunderstorm with heavy rains. They made it back home empty handed of any new artifacts and coins. However, a very excited phone message was waiting for Shelby from Winzinger, stating "*You will not believe what we found today!! A hoard of 208 colonial copper coins!! Please call back.*" Needless to say, Shelby immediately returned the call and found out that Winzinger and Cook had returned to the site and made an amazing discovery (Figure 3).

It was on this day that Winzinger, upon getting a deep but faint signal on his metal detector, dug down one foot before reaching and recovering the cause of the signal - another colonial halfpenny. It is always wise to "recheck" a productive "dug hole" and when swinging his metal detector over the hole once more Winzinger realized there was a stronger signal coming from even deeper in the hole. To his surprise the deeper Winzinger dug the more coins he started to recover, some of which he was able to pull out in handfuls. All in all, Winzinger dug the hole down to a depth of three feet before he felt the entire hoard of coins had been recovered.



Figure 3 – The pile of British halfpence removed from the hole.

When discussing the find with the authors, Winzinger and Cook stated it took them approximately two hours to complete the recovery partly due to the same thunderstorm that Isaac and Shelby had encountered. They even had placed towels on the ground so that Winzinger could lay on his stomach and stay somewhat dry while reaching his arm down to the bottom of the hole.

<u>NOVEMBER 14:</u> Henry Winzinger, Jay Cook, Dale Isaac, and the authors Wayne Shelby and Dan Knight gathered at Winzinger's home at 10am to hear about and view this exciting coin hoard. All the coins were laid out in rows forming a large square and it was a sight to behold (Figure 4). The room was obviously filled with lots of excitement as the group looked through the massive recovery. After agreeing that this find

was something that needed to be studied, it was decided that Shelby should bring the coins to his house for temporary storage as well as collecting specific data on each coin, including weight, diameter, thickness, and some photographic images.



Figure 4 - Dan Knight examining the Henry Winzinger hoard of English halfpence.

DECEMBER 8: Knight and Shelby met to sort the 208 halfpennies into groups to simplify future attempts with attribution. The groupings made were as follows: King and Queen William & Mary, King William III, King George I (Type 1 dump issue 1717-1718), King George I (Type 2 issue 1719-1724), King George II (Type 1 -Young Head), and King George II (Type 2 - Old head). The coins were briefly wetted to loosen adherent soil followed by a soft brushing, leaving untouched the green verdigris which helped to highlight the details on each coin.

<u>DECEMBER 20:</u> Shelby, Knight, and Moore met again at Shelby's house, this time to weigh and measure the coins with some of the coins also photographed. The resulting data and photographs are provided in the next section.

DECEMBER 30: Thinking the hoard overview was completed, Shelby received a surprise call from Winzinger concerning how he and Cook had revisited the hoard site to re-dig the original hole wider and deeper. Armed with a post-hole digger and shovel they dug down to where they had stopped in their previous excavation. At that point Winzinger received some solid signals from his metal detector indicating more targets were deeper in the hole. Once again and as if in a dream, Henry was scooping out handfuls of English halfpennies. When this coin-well finally ran dry it was estimated that the hole was now down between 5 and 6 feet deep, as well as widened to 3 feet within the lower 2-foot portion to ensure that the entire hoard had been recovered. All in all, an additional seventy-three coppers were discovered through this re-digging process (Figure 5).



Figure 5 - Second dig at same site with a deeper and wider hole

<u>SUMMARY OF SUMMER FINDS:</u> When reviewing the events surrounding the discovery of the coin hoard, it should be noted that this remarkable find would not have been possible without the patience, persistence, and determination of both Henry Winzinger and Jay Cook in their re-visiting of this location numerous times in between farm crop plantings. Nor would the main hoard's discovery have happened if they had not previously found 36 halfpence scattered in a small area of a field having no other artifacts. The uniqueness of this occurrence is what roused their curiosity to the point where they continued to search, leading to the final discovery of the cache. With regard to the initial field it should be noted that the surface "field" coins were found at depths ranging from 1 inch to 10 inches with these different depths being caused by years of farm plowing and harvesting activities. The thirty-six "field" coins recovered were of the same date ranges, types, and halfpence denominations, as were the 281 coins recovered in the earlier "cache."

METROLOGY OF THE COINS

The coins were analyzed in two groups by the authors – the 281 total coins found in the cache and the 36 coins metal detected individually from the surrounding field. Each coin in each of the two groups was separated into sub-groups (when possible) based of the King's reign when minted. In addition each coin was weighed, and had measurements of the east/west and north/south diameters, thickness, and axis made. Dates were also noted if present, though the majority of the halfpence were too corroded to determine a date. Photographs of the obverse and reverse were made of selected coins and representative examples are provided in Plate 1. The metrological information was analyzed separately by the sub-groups based on the Kings' reigns for both the cache and field groups. The metrological information for the cache coins is provided in Table 1, with similar analysis for the field found coins provided in Table 3.

<u>GENERAL OBSERVATIONS OF CACHE COINS</u> - The hoard of British halfpence found in a New Jersey field were metal detected in two groups. 281 coins, referred to as the "cache coins," were ultimately recovered from a single hole which was between 2 to 3 feet in diameter and extended down nearly 6 feet in depth. A second group of 36 halfpence, referred to as the "field coins," were found individually scattered in the surrounding field at detectable depths up to 10 inches deep. All of the coins were British halfpence ranging

from the earliest being from the reign of William and Mary to the latest being dated 1740 from the reign of King George II. Every coin suffered heavy corrosive damage with 28 of the halfpence being so corroded that not enough details remained to even distinguish the King for whom they had been minted. The remaining 253 main hoard coins were identifiable as follows: seven were halfpence from William & Mary though none had readable dates; twenty-seven were from the reign of William III with three having readable dates (two of which were 1699 and one 1700); forty-one of the coins were from the reign of George I with ten being the earlier Type 1 issue from 1717-1718 and thirty-one of the Type 2 issue from 1719-1724 (just 2 of the George I, Type 1 issues had readable dates – one 1717, and one 1718). For the Type 2, George I coins, nine had full readable dates – two 1722, three 1723, and four 1724). For the one-hundred seventy-eight George II, Type I (Young Head) cache coins, fifty-three had full dates (one 1729, four 1730, six 1731, two 1732, seven 1734, five 1735, three 1736, eight 1737, six 1738, and eleven 1739). Of the eleven George II, Type 2 (Old Head) cache coins, only four were fully dated and all dated 1740. In summary, we were able to determine the mint date for seventy-one of the 281 halfpence, the remainder being worn from usage or too badly corroded from exposure to the environment.

During our inspections of the coins, an observation was made that the older coins, such as the William & Mary and William III, showed the most wear in addition to the corrosion. This loss of detail from wear and tear contributed to the inability to determine their dates. However, the overall level of corrosion seemed to be severe and similar for coins from all the Kings' reigns. It was also noted that when the coins were dug up, all the different reigns were mixed together implying that they were placed in the hole at the same time, most likely soon after 1740, the latest mint date found. Lastly, it was noted that the coins at the very bottom of the dig (the second group of cache coins) were also a mix of the coins from all reigns and these deeper coins were somewhat more corroded than those recovered from shallower levels of the hole. Perhaps this was due to greater pooling of water at the bottom of the hole or a different composition of the sand/clay soils at different layers.

Though many of the coins lacked significant detail, due to a combination of wear and corrosion, all the identifiable main hoard coins with good to fair detail had the appearance of being regal coins. For the second group of thirty-six "field" coins, they too were British halfpence from the same reigns found in the group of main cache coins, and also regal on appearance. Most likely these were part of the original group of cache coins, which had either been lost individually by the landowner while working the land or were cache coins placed near the top of the owner's hiding place hole which were then scattered during deep plowing of the farm field sometime during the ensuing 280 years.

<u>SPECIFIC MEASUREMENTS OF THE CACHE COINS</u> - All coins from recognizable reigns were weighed and had measurements made of thickness, as well as east/west and north/south diameters. Coins for which the ruler could not be recognized only had their weight measurements performed in part to aid in determining in which King's reign they might have been minted. A summary of these measurements is provided in Table 1. The east/west and north/south diameters were combined when determining the average diameter. Lastly, all coins which had an observable obverse to reverse relationship were noted to have a coin turn axis.

Due to the corrosion which affected every measurement taken, the expectation was that a comparison of these results with known regal parameters would show significant variation. Regal measurements of averages and ranges in weights, as well as ranges in diameters, are shown in Table 2.⁷

⁷ C. Wilson Peck, *English Copper, Tin and Bronze Coins in the British Museum 1558 – 1958,* Second edition, London: British Museum, 1964, pp. 140-233. This data was collected from the limited number of coins at the British Numismatic Museum so the numbers may not reflect the averages and ranges from a larger sample size but do serve as representative values of these parameters.

PLATE 1 – IMAGES OF SOME OF THE "FIELD" AND "CACHE" COINS FIELD FOUND BRITISH HALFPENCE



1723 GEORGE I (FIELD COIN #9) WT- 124 gr., DIA E/W 28 mm, N/S 27.6 mm, THICKNESS 2 mm.



1738 GEORGE II (FIELD COIN #12) WT- 130.6 gr., DIA E/W 28.8 mm, N/S 27.9 mm, THICKNESS 1.9 mm.



1699 WILLIAM III (HOARD COIN #1) WT- 145.2 gr., DIA E/W 28.9 mm, N/S 28.9 mm, THICKNESS 1.9 mm



1724 GEORGE I (HOARD COIN # 35) WT- 138.8 gr., DIA E/W 28.6 mm, N/S 28.2 mm, THICKNESS 2.3 mm



1738 YOUNG HEAD GEORGE II (HOARD COIN #60) WT- 142.8 gr., DIA E/W 29.3 mm, N/S 28.5 mm, THICKNESS 2.2 mm





1700 WILLIAM III (HOARD COIN #17) WT- 131.4 gr., DIA E/W 28.1 mm, N/S 27.7 mm, THICKNESS 2 mm



1722 GEORGE I (HOARD COIN #36) WT- 131 gr., DIA E/W 27.9 mm, N/S 27.4 mm, THICKNESS 2.1 mm



1740 OLD HEAD GEORGE II (HOARD COIN #189) WT- 142.8 gr., DIA E/W 28.2 mm, N/S 27.6 mm, THICKNESS 2.2 mm



1740 OLD HEAD GEORGE II (HOARD COIN #192) WT- 147 gr., DIA E/W 28.9 mm, N/S 28.3 mm, THICKNESS 2.1 mm

AVERAGE WEIGHTS OF EACH RULER				AVERA	AVERAGE THICKNESS OF EACH RULER				AVERAGE DIAMETER OF EACH RULER					
W&M		7	141.8	gns	W&M		7	2.00	mm	W&M	7	28	.51	mm
WIII		27	129.4		WIII	2	7	1.96		WIII	27	27	.95	
GI-D		10	125.8		GI-D	1	0	2.40		GI-D	10	26	.10	
GI		31	126.1		GI	3	1	2.16		GI	31	27	.78	
GIIYH	1	67	131.8		GIIYH	16	7	2.03		GIIYH	167	28	.39	
GIIOH		11	128.6		GIIOH	1	1	2.03		GIIOH	11	28	.05	
UNK		28	119.5		UNK	2	8	NA		UNK	<u>28</u>	N	IA	
Total	2	81			Total	28	1			Total	281			

TABLE 1 - METROLOGY OF THE CACHE COINS

 TABLE 2 - WEIGHTS AND DIAMETERS FOR REGAL COINAGES

REIGN	TYPE	AVERAGE WT.	RANGE WT.	RANGE DIA.		
WILLIAM & MARY	N/A	161.9	139.6-182	28-31.5		
WILLIAM III						
1695-1698	1	160.4	136.5-180.7	28-29.5		
1698-1699	2	157.3	147.3-181.1	28-29		
1699-1701	3	156.9	138.8-192.7	28-31		
GEORGE I						
1717-1718	1	150	144-160	25-26.5		
1719-1724	2	150	144-160	17.5-30		
GEORGE II						
YOUNG HEAD 1729-1739		153.7	145-163.9	28.5-29.5		
OLD HEAD 1740-1754		153.7	132.6-160.3	28.5-29.5		

OBSERVATIONS OF CACHE WILLIAM & MARY COINS – Only 7 William & Mary coins were found in the cache with none having recognizable dates due to a combination of wear and corrosion. The average weight of these coins was 141.8 grains (range of 125-149.8 grains) which falls significantly lower than the average 161.9 grain weight of regal coins of this issue. Due to the wear and corrosion of these coins, this lower weight was anticipated. It could be argued that at least some of these coins might not be regal, since the lower weight might point to them being counterfeits. However, their deteriorated condition prevents any accurate differentiation between regal and counterfeit. The average diameter of these cache coins was 28.5 mm (range of 27.5-29.3 mm) compared to regal diameters that varied between 28-31.5 mm. Cast counterfeits, which had a regal coin used as the model for impressing the mold, would have a smaller diameter than the regal coin used to make the impression (due to shrinkage of the casting metal). The similarity in diameters between the cache coins and their regal counterparts provides support for the cache coins being regal. Since no regal thickness data was available, the average 2 mm thickness (range 1.9-2.2 mm) of these coins served only as an observation.

OBSERVATIONS OF CACHE WILLIAM III COINS - King William III produced three types of copper halfpence over his reign (see Table 2). The cache contained 27 identifiable William III coins but only three of them had readable dates with two 1699-dated coins being Type 2 varieties and one 1700 coin being a Type 3. Unfortunately the analysis of this group was confounded by the inability to place the other coins into one of the three specific types. However, as can be seen in Table 2, the metrological data for each regal type is quite variable, which extensively overlap each other, so grouping the cache coins together was decided upon as the best option. However, on comparing regal weights (Table 2) it is apparent that each regal type has some differences in average weight (the highest average weight was for Type 1 regal coins at 160.4 grains and the lowest average weight was for Type 3 coins at 156.9 grains). The relatively small differences in average weights is engulfed by the huge deviations in weight ranges of individual coins within each type. Therefore, because of the large differences in weight between individual coins for the William III halfpence issues, weight alone is probably a poor indicator of whether a particular coin is a regal or a counterfeit. This supposition was substantiated in an article on a large hoard of Type 2 cast counterfeit William III halfpence in Philadelphia showing an average weight of regal halfpence being 146.8 grains (range of 123.4-159.7 grains) while the average weight of the cast counterfeit halfpence was 111.1 grains (range 75.6-168.7 grains).⁸ The conclusion was: Since a wide weight variation was noted within both the regal and the counterfeit groups and a great deal of overlap between both groups, weight alone served a poor predictor of whether a specific coin was regal or counterfeit.9

Similarly, making a definitive statement concerning whether the William III cache coins were regal or counterfeit on the basis of weight was impossible. The average weight of the William III cache coins was 129.4 grains (range 109.6-145.2 grains) which is significantly less than the expected regal halfpence weight but significantly greater than the average weight found for the cast counterfeits.

In regard to diameters the cache William III coins had an average diameter of 28mm (range 26.6-29mm) compared to Peck's observation that the lowest diameter within all three types was 28mm and the highest was 31mm (see Table 2). Diameters of the cast counterfeit Type 2 William III halfpence measured in the previously mentioned paper were 27mm with a range of 25.6-27.6mm,¹⁰ which was smaller than either the cache coins or Peck's measurements. The conclusion made after comparison of cast counterfeit William III halfpence with regal halfpence was: ...the largest diameter cast counterfeit failed to reach the minimum expected size of the regal coinage, making diameter an indicator to differentiate a regal from a cast. The smaller diameter of the cast counterfeits is not a surprise since a regal William III halfpenny was used as the model to make the mold impression, and after cooling the planchet size of a cast typically shrinks.¹¹

Similarly, since the cache coins were on the larger side in diameter, it might be concluded that they were probably regal rather than cast counterfeits, but this does not rule out that they could have been *struck* counterfeits (which could have therefore been the same diameter as the regal issues). Counterfeits made in England during the early 1700s were primarily made using casting techniques, rather than using a minting press. It wasn't until the 1730s that increasing numbers of struck copper counterfeits began appearing, with the majority of the cache's coins dated before that time frame.

⁸ Roger Moore, Dan Knight, Peter Douvres, Wayne Shelby, Don Hartman, and Craig Bruns, "Evaluation of William III Cast Counterfeit Halfpence Found During Construction of Route I-95 through Pennsylvania," *Journal of Early American Numismatics*, The American Numismatic Society, Vol. 3, No. 2, pp. 163-199.

⁹ *Ibid.* p. 182.

¹⁰ *Ibid*. p 184.

¹¹ *Ibid*.

The average thickness of the cache coins was 2mm (range 1.6-2.3mm). Average thickness of a small group of all three types of regal William III halfpence was 2mm (range 1.7-2.2mm).¹² Cast William III counterfeit halfpence had an average thickness of 1.8mm (range 1.4-2.2mm).¹³ The wide range of thicknesses for both regal and cast counterfeits make thickness of little use in determining whether the cache coins were regal or counterfeit. Therefore, the authors' conclusion, based on the regal look, and the metrological evaluation, was the William III coins were most likely regally issued.

<u>OBSERVATIONS OF CACHE GEORGE I, TYPE I COINS (DUMP ISSUE)</u> – The average weight of the ten George I, Type 1 (Dump Issue from 1717-1718) cache coins was 126.1 grains (range 116.6-140.2 grains). Peck's evaluation of regal coins of this issue had an average weight of 150 grains (range 144-160 grains) which was the same as the 1719-1724 regal George I, Type II halfpence but differed from the Type 2 by having diameters between 25-26.5mm and thicknesses between 2-2.25mm.¹⁴ Therefore, the cache coins were significantly lighter than the expected weight for regal coins but this most likely was due to significant loss of metal from corrosion. The two cache coins with readable dates and greater surface detail looked more regal than counterfeit and had no evidence of being casts. The average diameter of these George I, Type 1 cache halfpence was 26.1mm (range 25.8-26.8mm), which is in agreement with the regal dump issue coins typically being smaller in diameter. The thickness of these cache coins was 2.4mm (range 2.3-2.6mm) making them the thickest of all the cache coins.

OBSERVATIONS OF CACHE GEORGE I, TYPE 2 COINS - The average weight of the 31 George I, Type 2 (1719-1724) cache coins was 125.8 grains (range 101-138.8 grains). Peck's evaluation of regal coins of this issue had an average weight of 150 grains (range 144-160 grains) which was the same as the 1717-1719 regal George I, Type 1 halfpence but differed from the Type 1 by having diameters between 27.5-30mm.¹⁵ Therefore, the cache George I, Type 2 coins, like the Type 1 coins, were significantly lighter than what would be the expected weight for regal coins, again possibly indicating either a greater loss of metal due to corrosion or possibly being underweight counterfeits. The nine with readable dates looked more regal than counterfeit. The average diameter of these George I, Type 2 cache halfpence was 27.8mm (range 27-28.6mm), which is in agreement with Type 2 regal George I coins having larger diameters than the earlier Type 1 issues. The thickness of these cache coins was 2.2mm (range 1.7-2.6mm).

<u>OBSERVATIONS OF CACHE GEORGE II, TYPE I COINS (YOUNG HEAD)</u> – The average weight of the 167 George II, Type 1 (1719-1724) cache coins was 131.8 grains (range 101-155.4 grains). Peck's evaluation of regal coins of this issue had an average weight of 153.7 grains (range 145.4-163.9 grains).¹⁶ The lower weight of the George II, Type 1 cache coins compared to the expected weight for regal coins could be due to either a greater loss of metal from corrosion or the coins having been underweight counterfeits. Like the other coins in the cache, the 53 with readable dates and greater detail did not have any obvious features that would point to any of them being counterfeits. The average diameter of these George II, Type 2 cache halfpence was 28.4mm (range 27.5-29.9mm) which is slightly lower than the expected diameter range for the same type of regal coins from 28.5-29.5mm. The thickness of these cache coins was 2mm (range 1.4-2.4mm).

<u>OBSERVATIONS OF CACHE GEORGE II, TYPE 2 COINS (OLD HEAD)</u> – The average weight of the eleven George II, Type 2 (Old Head) cache coins was 128.6 grains (range 88.4-147 grains) and four had

¹² Moore et. al., "Evaluation of William III Cast Copper Counterfeit Halfpence Found During Construction of Route I-95 Through Philadelphia," p. 168.

¹³ *Ibid.* p. 179.

¹⁴ Peck measurement of GI Type 1, p. 199.

¹⁵ Peck measurement of GI Type 2, p. 202.

¹⁶ Peck weight of GII Young Head, pp. 208-209.

readable dates. Regal weights for this issue were an average of 153.7 grains (range 132.6-160.3 grains).¹⁷ Therefore, similar to the other coins discussed in the cache, the weights seemed to be lower than expected for regal issued coins. However, as with the others, extensive corrosion occurred in every coin. If these coins were regal, the cause for their low weight was most likely accounted for by the severe loss of metal from deterioration. The average diameter for this group was 28.1mm (range 27.1-29mm) while regal coins of this issue had a range of diameters between 28.5-29.5mm. The average thickness of these cache coins was 2mm (range 1.6-2.3mm).

<u>OBSERVATIONS OF UNIDENTIFIABLE CACHE COINS</u> – An additional 28 coins were found in the cache which were so corroded that the king's reign that they represented could not be determined. For these coins it was noted all were copper halfpence sized. Only weight measurements were obtained averaging 119.5 grains with a range of 88.6-153 grains. Further analysis was thought to be of little value.

<u>GENERAL OBSERVATIONS OF FIELD COINS</u> – The thirty-six halfpence found in the field surrounding the deeply buried cache were individually metal detected at a depth down to 10 inches. Similar to the cache coins, all of these coins were heavily corroded with one side more corroded than the other (most likely a function of the side facing the surface holding moisture and fertilizer chemicals to a greater extent than the bottom side). A break-down of the "field" found halfpence is shown in Table 3, which indicates a mix of halfpence from the same reigns as those found in the cache. The fact that they also appear in the same reigns and in the same relative proportion, points to them being part of the original hoard. One William & Mary halfpenny with no discernable date was found, seven William III halfpence with no readable date, five George I with two having dates, both being 1723 (no recognizable dump issues), thirteen George II, Type 1 (Young Heads) with four having readable dates of 1733, 1734, 1737, and 1738, and one George II, Type 2 (Old Head) with a date of 1740. Lastly, all coins from all reigns which had observable obverse to reverse relationships had a coin turn axis.

AVERAGE WEIGHTS OF EACH RULER				AVERAGE THICKNESS OF EACH RULER				AVERAGE DIAMETER OF EACH RULER				
W&M	1	131.2	gns	W&M	1	2.00	mm	W&M	1	27.50	mm	
WIII	5	129.9	gns	WIII	5	1.80	mm	WIII	5	27.50	mm	
GI-D	0	NA	gns	GI-D	0	NA	mm	GI-D	0	NA	mm	
GI	5	129.1	gns	GI	5	2.20	mm	GI	5	27.60	mm	
GIIYH	12	127.1	gns	GIIYH	12	2.00	mm	GIIYH	12	28.30	mm	
GIIOH	1	123.4	gns	GIIOH	1	0.80	mm	GIIOH	1	28.00	mm	
UNK	<u>12</u>	99-137	gns	UNK	<u>12</u>	NA	mm	UNK	<u>12</u>	NA	mm	
		Range										
Total	36			Total	36			Total	36			

TABLE 3 - METROLOGY OF THE FIELD COINS

¹⁷ Peck weight GII Old Head, p. 211.

SPECIFIC MEASUREMENTS OF THE FIELD COINS

<u>OBSERVATIONS OF FIELD WILLIAM & MARY COIN</u> – The single dateless William & Mary halfpenny was both worn and corroded with a weight of 131.2 grains, a diameter average from east/west and north/south dimeters of 27.5mm, and a thickness of 2mm. The weight of this coin was below the average for the cache coins from the same reign but did fall into the range of the weights for the William & Mary cache coins. Similarly the diameter was below the average of the cache coins and at the bottom of the observed range. The lower weight and diameter could well be due to the extensive corrosion of the coin exposed to more moisture, oxygen and fertilizer, though the thickness of 2mm was the same as the cache coins.

<u>OBSERVATIONS OF FIELD WILLIAM III COINS</u> – The average weight of the six William III field coins was 129.9 grains (range 111.6-140.8 grains), which is nearly identical to the William II coins found in the cache (129.4 grains with a range 109.6-145.2 grains). The average diameters of the field coins of 27.5mm (range 27.1-28.8mm) were also comparable with the cache coins (28mm with a range 26.6-2 mm) as was the average thickness of the field coins at 1.8mm (range 1.5-2mm).

<u>OBSERVATIONS OF FIELD GEORGE 1, TYPE 2 COINS</u> – The five George I coins found in the field were thought to be the Type 2 issue and their average weight was 129.1 grains (range 119.8-138.8 grains), which was similar to the George I, Type 2 coins found in the cache of 125.8 grains (range 101-138.8 grains). The average diameters of the field coins of 27.6mm (range 22.2-28.8mm) were also comparable with the cache coins of 27.8mm (range 27-28.6mm), as was the average thickness of the field coins of 2.2mm (range 1.9-2.5mm). The two coins in the group with readable dates were both 1723.

<u>OBSERVATIONS OF GEORGE II, TYPE 1 (YOUNG HEAD) FIELD COINS</u> – The thirteen George II, Type 1 coins found in the field had an average weight was 127.1 grains (range 97-138.2 grains), which was similar to the George II, Type 1 coins found in the cache that had the same wide variation in the ranges for weight (average for cache coins of 131.8 grains and range 101-155.4 grains). The average diameter of the field coins of 28.3mm (range 27.5-29.5mm) was also comparable with the cache coins (average of 28.1mm with a range of 27.1-29mm) as was the average thickness of the field coins of 2mm (range 1.5-2.2mm). The four coins in the group with readable dates were 1733, 1734, 1737, and 1738.

<u>OBSERVATIONS OF GEORGE II, TYPE 2 (OLD HEAD) FIELD COIN</u> – A single George II, Type 2 halfpenny was found in the field with a weight of 123.4 grains, a diameter of 28mm, and a thickness of 1.8mm which were all within the expected ranges for the George II, Type 2 halfpence found in the cache. In addition the coin was dated 1740, which was also the latest date discernable on the dated cache coins.

<u>OBSERVATIONS OF UNIDENTIFIABLE FIELD COINS</u> – An additional 12 coins were found in the field which were so corroded that the king's reign could not be determined. For these coins, all were copper halfpence sized and only a weight was obtained on them, averaging 119.5 grains with a range of 99.6-137.4 grains. Further analysis was thought to be of little value.

X-RAY FLUORESCENCE OF THE COINS

XRF analysis was performed on twenty-one of the cache coins plus two from the field found coins, including one so corroded that the ruler could not be identified. A representative report of the XRF analysis is shown in Figure 6 for Coin # 12 (see coin on Plate 1), which is a field found George II Young Head with summary data shown in Table 4. The XRF analysis was taken on the least corroded side of each coin, with a minimum of three coins for each ruler being tested. One of the "unknown" coins was also evaluated.



Figure 6 – Representative result from XRF on Field Coin # 12.

# Tested	<u>Ruler</u>	Weight	<u>Cu</u>	<u>lr</u>	<u>Pb</u>	<u>Sn</u>	<u>Au</u>	Ag	Fe	Ni
		(gns)	(Copper)	(Iridium)	(Lead)	(Tin)	(Gold)	(Silver)	(Iron)	(Nickel)
3	W&M	143.47	94.07	4.80	0.00	0.21	0.39	0.23	0.13	0.00
1	Jnknown (WIII?)	143.40	96.01	3.36	0.00	0.17	0.26	0.13	0.08	0.00
8	Wm III	129.34	95.94	2.90	0.22	0.47	0.19	0.19	0.07	0.00
3	Geo I	133.33	96.86	0.06	0.97	0.06	0.11	1.73	0.00	0.12
3	Geo II YH	135.53	97.00	0.14	0.09	0.00	0.12	2.44	0.04	0.05
2	Geo II YH (Field)	128.20	98.13	0.07	0.15	0.00	0.11	1.37	0.18	0.00
3	Geo II OH	144.83	97.59	1.99	0.00	0.00	0.15	0.13	0.14	0.00
		(Weight)	(Copper)	(Iridium)	(Lead)	(Tin)	(Gold)	(Silver)	(Iron)	(Nickel)
TOTAL	NA	135.99	96.30	2.73	0.23	0.21	0.19	0.16	0.10	0.02
AVG's		gns	%	%	%	%	%	%	%	%

TABLE 4 – XRF PERFORMED BY KING ON A TOTAL OF 23 OF TH	HE CACHE COINS
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One key finding was that all coins had, as expected, a high copper content, with only 2 containing less than 95% copper and eight containing over 97% copper. The unexpected finding was the presence of iridium in all samples and as the second most common metal. All coins contained at least 1% iridium, a brittle and dense element, with the highest levels found in the William & Mary series, as well as the William III coinages. The finding of iridium in the William III coins was not unexpected since a previous study of both regal and cast counterfeit William III halfpence showed the presence of a similar level of iridium in the regal coins along with its absence in the cast counterfeits.¹⁸ Therefore, this finding added credibility to the proposal that at least

¹⁸ Moore et. al., Evaluation of William III Cast Copper Counterfeit Halfpence Found During Construction of Route I-95 Through Philadelphia," pp. 183, 191-192. The conclusion was: "The most striking and unexpected discovery from the XRF analysis was that the regal coins contained iridium as the second most common metal in their composition, while this metal was missing from all but one of the casts. These findings provide evidence that William III regal copper coins were not being melted in order to supply the copper needed to make the casts."

the William III coins in the cache were regal and not counterfeit. Unfortunately, XRF databases for the coinages of the other regal reigns was not available to make a similar conclusion. Since Iridium is more brittle and denser than copper, it is doubtful that it would be purposefully added to the metal mix for regal planchets. Its presence, instead, might well be part of the mined metal mix that could not be "refined" out during the copper preparation. If so, further investigation may point to the source of the mined copper used during that reign. It can also be speculated that the same copper source was being used for the other regal coinages, with the lessening percentage of iridium and increasing copper content seen during ensuing reigns possibly indicating improvements in the refining process or simply a change in the copper source. In any case, before a definitive answer can be obtained, expansion of the XRF databases for all regal British coppers needs to be performed.

The overall high copper content of all coins in all of the reigns gives credence to them being regal rather than counterfeit. Some lead and tin was found in the William III series at levels higher than the other measured coinages, but those elements were nearly non-existent in any of the George II halfpence. The presence of these small amounts of lead and tin is in agreement with previous findings for regal William III halfpence.¹⁹ One small deviation from the previous XRF study of regal William III coinage is related to the presence of zinc in the analyzed coins, while no zinc was found in the cache coins. Nevertheless, the previous study of cast counterfeit William III halfpence found that nearly 10% of their content was a mix of metals other than copper, supporting the supposition of the cache coins, which all had significant higher copper content, being regal coinages.

To determine if the metal content of the field found coins corresponded to the cache coins, two field found coins had XRF performed. Both had a similar XRF fingerprint when compared to their corresponding cache coins. This serves to support that the field coins were simply part of the original hoard, which became scattered due to farm plowing.

DISCUSSION

Two hundred eighty-one British halfpence from four different but sequential English Kings were found mixed together buried in a single spot in a farm field by metal detectorists. An additional thirty-six coins consisting of the same mix were individually found scattered close-by nearer to the surface. Due the mixing of coins from all reigns the authors believe that the coins were deposited with no relationship as to order of ruler, date, or length of use in commerce (wear pattern). The authors also concur that the "cache" and "field" found coins belong to the same hoard and that the "surface found" field coins were scattered from the cache site when farmers plowed through the upper portion of the hoard, thereby spreading the coins into the field. Despite repeated and deep digging of the specific cache area, it might be expected that other coins remain hidden deeper in the ground. Overall, this hoard could contain upward of four hundred British halfpence dated between the 1690s and 1740 if further exploration with the use of more deeply penetrating metal detectors were done. The fact that coins from the reigns of four kings were all mixed together, with the earlier dates showing more wear that later coins, leads the authors to suspect that they were not added to an existing "hiding hole" over time but instead were deposited together in a single burial event.

All the coins were corroded to a great extent, though some differences were seen in the amount of corrosion between the cache coins and the field coins, most likely due to the differences in environmental exposure. Being buried in the lowest elevation section of the farm field, composed of a heavy clay that retained moisture from rain and drainage water, was unfortunate for the coins' ultimate condition. This type of environment, along with farm fertilizers used in later years, resulted in a faster than normal deterioration of

¹⁹ *Ibid*. pp.183.

the coppers, than what detectorists usually find for coins recovered closer to a field's surface.. Nearly every coin of the hoard exhibited a heavy green verdigris of varying thickness along with scattered porosity, pitting, and occasional peeling. Very few of the hoard coins revealed full legends on both sides or had a full date. A large majority of the coins did retain enough detail for the authors to decipher a recognizable ruler.

Wear was an additional factor increasing the difficulty in evaluating the coins. The degree of wear did differ when comparing the coins from the four Kings, with the oldest coins from William and Mary exhibiting the greatest wear (none had visible dates due to being worn from years of use). Coins from ensuing kings showed progressively less wear and an increasing proportion had visible dates. Therefore, this observation would indicate these coins were most likely collected out of circulation at approximately the same time, most likely in the early to mid-1740s based on the latest dated coin being 1740. Whether the collection was made in England or in the American colonies cannot be ascertained by these results alone, although the hoard having an English origin for its initial collection point seems most likely due to the lack of Irish or other nations' copper coins within it. Another observation was that the dated coins exhibiting fair detail looked to be regal. Most counterfeits in the early 1700s were easy-to-spot casts, not press struck coins, with the casts using regal coins as the models for impressing the casting molds.²⁰ Nevertheless, the overlying corrosion on these coins made any initial differentiation of regal from counterfeit difficult. There was an indication from the generally lower weights of the cache coins, in comparison with their respective regal counterparts, that potentially some might be counterfeits. However, their lower average weights could also be attributed to the wear and corrosion that they exhibited. Evidence that the hoard was mainly, if not all, regal was provided with our XRF study. The fingerprint of iridium, previous shown to occur in all regal William III halfpence but not in counterfeit casts, was present in all of the hoard William III halfpence that underwent XRF analysis. Also, the analyzed halfpence from the other reigns showed a very high copper content, as well as some iridium, which points to them having an official regal origin.

Certainly it would not be unusual for any group of copper coins taken out of circulation in the late 1730s or early 1740s to contain a number, if not a majority of counterfeits. It has been estimated that in England during the following decade some 50% of the circulating coins were counterfeit.²¹ So a hoard of previously circulated coins being 100% regal would be highly unusual and might indicate the hoarder only wanted coins that would pass in commerce without question.

The highly unusual finding of such a hoard leaves many unanswered questions. Why was the hoard hidden? Why was it hidden in that particular low spot of the field? Why were there no farthings or other metal coins mixed in as part of the hoard? Each question will be addressed in turn.

Why was the hoard hidden? Most likely the hoard was stashed in the early 1740's, with developments in both England and Philadelphia possibly contributing to this occurrence. In 1741 the Parliament of Great Britain passed an Act to curtail the increasingly rampant counterfeiting of England's coins, making such counterfeiting a crime of treason. This new Act made both the counterfeiting of copper coins, as well as the passing of counterfeit copper coins (previously considered just a misdemeanor) treasonable acts.²² There was good reason for those in England "stuck" with counterfeit copper coins to either discard them or have them

²⁰ Philip Mossman, *Money of the American Colonies and Confederation*, The American Numismatic Society, New York, 1993, pp. 116-117.

²¹ Ibid.

²² Parliamentary Statute - 15 Geo.2 c.28 - An act for the more effectual preventing the counterfeiting of the current coin of this kingdom, and the uttering or paying of false or counterfeit coin. - Section 6 of the Act stated that making "coin or counterfeit any brass or copper money, commonly called a halfpenny or a farthing," would be punished with 2 years' imprisonment, followed by providing sureties for another 2 years' of good behavior.

sent to the American colonies where possessing them would avoid the English Crown's wrath. Not only were counterfeit copper coins flooding into all the colonies, but the city of Philadelphia was being inundated with regal copper halfpence as well. Copper coins in the colonies were usually valued at twice their English face value so a British copper halfpenny, whether regal or counterfeit, would be valued as a full penny - unless the merchant refused the coin. So the higher value of copper coins in the American colonies would have been a stimulus for travelers from England to bring loads of copper halfpence (both regal and counterfeit) with them on their trip. This abundance of copper coins, including the "good" regal coins, became a major problem for merchants. An attempt by the New York Assembly on December 16, 1737, was made with the passage of an Act which limited the amount of copper coinage allowed to be imported by a person to no more than ten shillings in value.²³ Philadelphia was experiencing the same problem as New York with a massive inflow of copper halfpence. Because the Pennsylvania Assembly was not proactive in stemming this flood of copper into their city, the merchants of Philadelphia took matters into their own hands. On January 8, 1740, an article appeared in the *Pennsylvania Gazette* from a group of Philadelphia merchants unilaterally revaluing the copper halfpence, so that five halfpence would be equivalent to the existing value of four. This was a devaluation of copper coinage by 20%.²⁴ The announcement led to riots in the streets of Philadelphia which required active intervention by the authorities. It is understandable why, with the turmoil occurring over the excessive importation of coppers and their devaluation in Philadelphia, a newly arrived Englishman with a suitcase full of copper halfpence might decide his best course of action would be to stash the coins (especially good regal coins) until things stabilized. Of course alternative theories can be advanced for why the halfpence hoard was buried, such as it having been a savings account put away for a rainy day but never retrieved, or ill-gotten gains from a robbery which were hidden until the "loot" was no longer "hot." However, the concurrence of the approximate time in which the cache was buried in the early 1740s and the existing discord surrounding the flood of copper halfpence into the colony at that same period, seems to make the authors' initial presumption the most reasonable possibility.

Why was it hidden at this location? A close visual inspection of the existing elevation and of the ground surface at the hoard's burial site was carried out. As previously stated, it is very unusual not to recover even a

²³ An Act to prevent the further Importation of Copper money into this Colony," Chapter 655, The Twenty-First Assembly; Passed on December 16, 1737; republished in The Colonial Laws of New York from the Year 1664 to the Revolution Vol. II, James B. Lyon, Albany, 1894, pp. 962-63 - WHEREAS for Some Years Pass'd, great Quantities of England Copper half pence and farthings have been from time to time Imported into this Colony which have been and are paid and received in the Markets and other payments by the Common consent of the People at a higher rate than their intrinsic Value And Whereas by the Conveniency of Such Copper money passing in Small payments the Importation of the Same is still continued. But as the rate at which the said Copper money has been and still be admitted to pass as aforesaid hath occasioned so large an Importation thereof that what was a Conveniency at first may at this time prove otherwise if no remedy be applied And in as much as the Reducing of the present rate at which Copper money doth pass as aforesaid might prove a vast loss especially to Tradesmen Labouring People & Farmers who are possessed of a large Share thereof and might also be a means to deprive us of a Currency which has hitherto proved useful, It is conceived that the most Expedient will be to prevent the further Importation of the said Copper Coin. Be it therefore Enacted ... that all Copper half pence farthings and all other Copper money ... EXCEEDING in Value of ten Shillings Current mony (sic) of this Colony for every Person ... shall be forfeited.... ²⁴ The Pennsylvania Gazette, January, 8, 1740, 1. No. 630, transcribed by Kelli West for the Newman Numismatic Portal; republished by Wayne Homren in The E-Sylum: Vol. 23, No. 16, April 19, 2020, Article 20. Primary source found by Julia Casey - Great Quantities of English Half-pence being Imported here, since the falling of our Exchange, to be pass'd as Pennies, some considerable Dealers were apprehensive we should be overstock'd with them, and began last Week to refuse them otherwise than at the Rate of five for four pence. Their Example being follow'd by many of the Shopkeepers; while others continued to take them for pence apiece, it occasion'd Considerable Confusion in small Dealings. And the Bakers refusing to make any more Bread 'till the Money was settled, the Mob rose on Friday Night and went round the Town breaking the Windows of several Merchants and others, and very much disturbed the City. They began to assemble again the Night following; but by the Vigilance and Resolution of some of the Magistrates, they were timely suppress'd, and the City has since remain'd quiet

single non-ferrous artifact from a site where people once lived or worked. The fact that no "signs" of previous structures existed around the site is especially perplexing. Missing were any evidence of everyday items, such as broken bits of pottery, glass, pipe stems, shells, or bits of brick. So the authors' supposition is that the hiding place selected by the person burying the hoard was one that had little human traffic and one that could be accessed when needed without the risk of being seen by prying eyes.

However, simply burying the hoard in the middle of a field or forest might be problematic for the owner when he tried to retrieve the hidden hoard. Perhaps this was the reason the hoard was never retrieved the owner couldn't figure out where he had buried the cache! Regardless of the reason the hoard was not retrieved, the hoard burial method appears to have been unusual in that it was shaped as a narrow, deep vertical hole (rather than a shallow, wider one). The way the hoard was buried does match one method people used to hide valuables at a spot that they could later easily remember. By placing their valuables within a specific fence-post hole, with the post being easily removable and counting the number of fence-posts leading up to that specific post, owners would have a quick and easy way to relocate their treasure.²⁵ Of course another possibility for a narrow and deep hole was it being an outhouse pit, but it is doubtful that the owner would drop anything into an outhouse hole that he would want to later retrieve. Nor would a toilet normally be located on the muddiest part of a field. Nevertheless, the outhouse theory is a possibility presuming that the choice of this hiding place by the owner was the result of a quick decision, perhaps stimulated by either being chased by bandits or having law enforcement agents breathing down his neck. Despite these possibilities, it is still improbable since the location is so distant from any other signs of human habitation. Outhouses also provided an easy way to discard various household items which were broken, or otherwise non-useable, so the absence of any of these other items in the hole, such as bottles, glassware, plates, chinaware, or redware, also argues against this possibility. A water-well excavation would also provide a deep hole along with an explanation for why the chosen location was at the lowest part of the farm field, being closer to the water table. However, the hoard hole was not found to be lined with brick or stone and there was an absence of any other artifacts that might be expected around a well that had seen even moderate use. Therefore, the authors agreed that the most likely theory was the hoard represents a "fence-post hole bank" hidden by its colonial owner who, for whatever reason, was never able to return to the site to retrieve his stash.

Why no other coins? – The lack of any other contemporaneously circulating coins other than British halfpence is another part of the mystery. Of the more than 300 coins, the lack of appearance of even one farthing, one coin from another nation, one coin of a different denomination than a halfpenny, or one coin with a different metal content is quite surprising. Perhaps the lack of silver and gold coins is explainable due to the laws governing mercantile business in the colonies, which were aimed at depleting precious metals and transferring them into the coffers of England's treasury. One such act was the 1651 Navigation Act which was passed to keep all benefits of trade weighed in the direction of England, including keeping gold and silver in the hands of the English Crown.²⁶ The lack of British gold and silver is substantiated by recorded metal detection discoveries indicating that through the 1750s, English halfpennies were the most common and acceptable form of small change circulating in Southern New Jersey. Other foreign copper/base metal coins

²⁵ Thomas Kays, "Second thoughts on a First Rate Coin Hoard: Castine Revisited, *The Colonial Newsletter*, Vol. 45. No. 2, August 2005, serial page 2860. Also see https://treasurehuntingresearch.com/generating-treasure-leads/treasure-hunting-leads-for-caches. Also see https://www.louisianafolklife.org/LT/Articles_Essays/NSLeJeune3.html (about halfway down under "Buried Treasure" the hiding of treasures in a posthole was referred to as a "post hole bank.")

²⁶ Wayne Shelby, "Metal Detecting – An English Commonwealth Silver Halfgroat (Twopence) Recovered in Burlington County New Jersey" *The Colonial Coin Collectors Club Newsletter Vol. 26, No. 3, Fall 2018, pp. 25-28.* Also see: - J. E. Farnell, "The Navigation Act of 1651, the First Dutch War, and the London Merchant Community," *The Economic History Review,* New Series, Vol. 16, No. 3 (1964), pp. 439-454. – The Act was primarily intended to prevent the Dutch from trading with the colonies and act in competition with the British merchants but one result of this was by undercutting completion the colonist were not able to negotiate for higher payments for their products or for lower payment for needed goods.

along with Spanish silver coins were scarce or absent in most metal detecting recoveries.²⁷ It must also be taken into consideration that the few coins made from other metals or produced in countries other than England with dates earlier than 1740 may have found their way to the colonies long after the 1740s.²⁸

What was the value of 317 halfpence in 1740 translated into today's value? The question remains whether the hoard of 317 halfpence was valuable enough in 1740 that the person that hid them would have had a major economic reason to retrieve them. Using the known valuation of 12 pence to the shilling, the hoard represents 13.2 shillings. There are calculators available that will convert the values of different denominations of money from different countries from as far back as the twelfth century into present day value.²⁹ This calculation was performed with the future projection based on "Real Price," an indication of the value to what a normal household could have used the money to buy goods and services, including food, shelter, and clothing. The value of the halfpence in 1740 was found to be the equivalent of £98.20 today or \$128.68. Assuming the calculation is correct, it becomes apparent that the hoard did not represent a fortune but one which still would have made the owner motivated to retrieve it. Whatever the value, we have no firm evidence concerning whether the hoard was lost, abandoned, or forgotten due to life events or death.

We can be thankful that some 280 years later the hoard was finally recovered by Henry and Jay, who in turn allowed the authors to analyze the hoard's composition. The analysis allowed some interesting theories to be offered concerning the hoarder's reason for hiding the coins, and why that particular hiding place was selected in the context of when it was buried!

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 ²⁷ Wayne Shelby, "Metal Detecting - Survey of Colonial Coins Recovered in Southern NJ - Part II," *The Colonial Coin Collectors Club Newsletter*, Vol. 13, No. 2, Summer 2005, pp. 6-44. - Even though (Shelby) has recovered numerous foreign coins of non-English/Great Britain origin including French, Portuguese, Portuguese Brazil, Spain, Spanish America along with occasional Danish West Indies, Netherlands, Swedish, and German issues approximately 90% of those small denomination pieces postdate 1740. Also see Wayne Shelby, "Metal Detecting, Survey of Colonial Coins Recovered in Southern NJ - Part III," *The Colonial Coin Collectors Club Website: colonialcoins.org (Articles)*, Summer 2020.
 ²⁸ Wayne Shelby, "Metal Detecting" – Circulation Patterns of Small Denomination Regal Spanish Silver in Southern New Jersey During Colonial, Confederation, and Early Federal Times" *The Colonial Coin Collectors Club Newsletter*, Vol. 14, No. 3, Fall 2006, pp. 16-23-a. - Though Shelby recovered and documented numerous small denomination Spanish and Spanish American silver coins at numerous locations, only a few of the early to mid-18th century sites produced silver finds.
 ²⁹ <u>Measuring Worth - Purchase Power of the Pound</u>

https://www.measuringworth.com/calculators/ukcompare/relativevalue.php?use%5B%5D=CPI&use%5B%5D=WAGE&year_early=1740£71=&shilling71=13&pence71=3&amount=0.6625&year_source=1740&year_result=2022