VOLUME XXX, No. 2

THE ARCHEOLOG

PUBLICATION OF THE SUSSEX SOCIETY OF ARCHEOLOGY AND HISTORY



DATING THE HUNTING CREEK KAOLIN PIPES

PERRY S. FLEGEL

For many years we have been able to determine when an English clay pipe was made by examining the shape and other features of its bowl. These attributes have been recorded in a number of books and are readily available. However, such an activity is more to be referred to that actually undertaken.

Usually it is not easy to find enough of a clay tobacco pipe bowl to determine its age. Pipe bowls have found difficulty withstanding the ravages of time since they are fragile, thin, and easily broken.

On the other hand pipe stems are found in large numbers, and the determining factor in dating them is the size of the bore. This feature, which is protected by a heavy clay wall, is not destroyed with the passage of time and so remains constant.

When the Hunting Creek contact midden was excavated in 1964¹, little was known about the Harrington Theory for determining the mean age of a group of white clay tobacco pipes by the size of the stem bores.² Had this writer known about the Theory it probably would not have been mentioned because of the skepticism which surrounded it at the time.

Since then a closer look at this Theory has given it much more credibility and today we can say with a fair degree of accuracy that it is quite acceptable. Harrison's Theory is based upon the fact that as the manufacturing of elay pipes developed and improved, the size of the wire used to make the bore became smaller.

Also, Dr. Lewis R. Binford's straight-line regression formula did not appear until 1962³. This information was not available nor circulated to the extent that it was available for consideration in the paper on the Hunting Creek midden.

- 1. Flegel, P. S. "The Hunting Creek Midden." <u>The Archaeolog</u>, Vol. XVI., No. 2. pp. 1 - 12. (1964)
- Harrington, J. C. "Dating Stem Fragments of the 17th and 18th Century Clay Tobacco Pipes." <u>Quarterly Bulletin of</u> <u>the Archaeological Society of Virginia.</u> (Richmond, Vol. 9. No. 1. (Sept. 1954).
- 3. Binford, Lewis R. "A New Method of Calculating Dates from Kaolin Pipe Stem Fragments." <u>Southeastern Archaeological</u> <u>Conference Newsletter</u> (Cambridge, Mass.) Vol. 9. No. 1. (June 1962, pp. 19 - 21.)

Today, the Harrington-Binford principle has been studied and tested more fully so that now it is generally accepted as a means of dating groups of English clay pipe stems. This gives us a much wider range for determining the time when the pipes were in use since there are always many more pipe stems to be found than bowls.

Newer and additional information on this subject of dating kaolin clay pipes will be found in a recently published book, just off the press.¹ Lewis R. Binford's article, refered to in this paper, as well as a second in a series of articles on clay pipes by J. C. Harrington are noted.

Dr. Binford's formula, based upon the Harrington Theory is stated as fellows:

Y - 1931.85 - 38.26X

In this instance, Y stands for the mean date of an assembled group of pipe stems; 1931.85 represents an imaginary date when the hole, in the pipe stem, as it becomes smaller, would disappear **entirely**; 38.26 is the number of years that elapsed between each lessening size of the pipe stem hole; and X to represent the mean hole diameter for the group. The diameter of each hole to be measured in sixty-fourths of an inch. The X is determined by measuring the size of the bore in each stem (using drill bits of varying sizes), then multiply the number of pieces by the size of each bore. The total number of fragments of all sizes are added together, and then also were their products. These were divided, one into the other, and the answer carried out to three decimal places.

Using the above formula, the following table was developed to determine the mean hole diameter for the Hunting Creek Stems.

Table 1	۰.
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Hole Diameter 64th inches	Number of Fragments	Product
14 5 6 7 8 9 10	4 25 271 399 258 14 1	16 125 1626 2793 2064 126 10
Totals	972	6760 - 6.952X

1. Schuyler, Robert L. <u>Historical Archaeology</u>, Baywood Publishing Company, Inc., Chapters 15 and 16, (1978) 2

Completing Dr. Binford's formula we find that when 6.952 is multiplied by 38.26 we-get 265.973, which when subtracted from 1931.85 gives an answer of 1665.88. This figure represents the mean date when the pipes were made.

Since the pipes were not made on the spot, some time must be allowed for the manufacture and transportation to a port in England, and then to the New World. The number of months or years is speculative.

It is most probable that the pipes reached the colonies rather soon after their manufacture. They were in great demand, and it was still a growing fad to use them. They aided in the development of contacts and associations with the Indians, they were a good bartering commodity, they were extremely cheap and expendables to all economic levels, and replacement due to breakage was high. Certainly not much more than a year, or less, might have passed before pipes made in England were in the hands of the Colonists and the Indians in America.

Since the original article on the Hunting Creek site was published 145 additional pipe stems have been recovered from the site. The total stems now in this writers possession have reached 972. At least several dozen more are known but were not available for use in this report. However, to have had thousands more stems or only a few additional ones would not have altered the final mean date appreciably since the formula seems to work well with a few stems or with many.

Table II classifies the pipe fragments from this site. It includes bowl fragments that had no stem bore available for measurement and broken and split stem fragments which could not be used to accurately determine the bore.

Table II.

Pipe Stems	Bowl End Stems & Bases	Bowls With Stems	Stem Ends Only	Stems With Decor	Bowl Frag- ments	Stem Frag- ments	Total Pieces
581	175	43	121	52	325	99	1396

The Bowl fragments and the split stem fragments which were not used totaled 424 pieces. These subtracted from the total number of 1396 pieces collected gives the 972 figure.

COMPARING PIPE STEMS AND OTHER PIT WARE DATES

In an effort to establish a common date when the pit was open, the ceramic material found therein was also dated to the best of this writers ability. Some interesting results were observed. Table III contains the kinds of pottery and ceramics in the pit that were identified, the period during which these wares were made, and a mean date for their manufacture. In several instances only an approximate period of use and manufacture was used. These dates were the only ones available from references on hand.

Table III.

Kinds of Pottery and Ceramics	Period Over Which Wares Were Made	Mean Date
"delftware"	1675 - 1690	1682 1650 g
Drinking Mugs Westerwold Saltglaze	166 1 - 1683	1672- 1650's
English Maiolica Combed Ware	1 6 20 - 1880	1630
	Tota	1 9984

9984 **±** 6 **=** 1664.0

The difference between the mean date when the pipes were made and the average year for the manufacture of the ceramic and pottery material figures out to be less than two years.

As might be expected, this figure is also extremely conjectural. The average date for the arrival of the ceramics to this particular region of the Chesapeake Bay may be skewed greatly to either one end or the other of the scale. Many factors enter into arriving at a date when the pit was open, or for how long a time it was open. Land snails in the pit separated by several inches of dirt would seem to indicate that the pit was either open for several years, or there may have been several periods of warm, wet, humid, weather in a single year which would bring out the snails and dirt was thrown into the pit covering them to control odor and vermin.

Pottery from Europe may have been old or new at the time it was discarded in the pit. Personal possessions purchased in England before sailing may have been of the latest wares, or may have been purchased from merchants anxious to rid their shelves of old stock to make room for the newest and latest innovations.

The pottery may not have come directly from the Old World. It may have been brought from some other settlement, it may have come overland from the coast, or maybe it was the last of a shipment to be unloaded after a number of stops in the new land. Suggestive possibilities seem endless. The combed ware was found near the top of the pit and close to the bottom of the plow line. It may or may not have been a part of the contents of the pit. If the dates regarding the manufacture of this combed ware are fairly accurate, then the time when the pit was open must have been considerably later than our estimations, that is, if we are to consider it a part of the pit's contents. This ware was the only one from the eighteenth century. It was included in the contents of the pit to allow for any doubt that might arise. If the ware were to be excluded in estimating the average date for the pottery then the pits ceramic contents would be pushed back to about 1656.

This date would still fall within respectable limits acceptable for a time when the pit was open. It could not have been open at any date before 1623 because it was during that year the area was first set foot upon by colonists.

If the pottery wares were discards or out-moded material that was purchased to take to the new land, dates may indicate an earlier opening of the pit, but if the wares were new when purchased the date when the pit was open may have been later. It is not likely that newly made, popular, more expensive wares would be purchased for a trip to the New World if it were possible to purchase merchandize, to serve the same purpose, at a lower price.

Dates for the manufacture of the pottery and ceramics that were used in Table III are based upon information secured from notes and references found in Ivor Noel Hume's book on artifacts in Colonial America.¹

1. Hume, Ivor Noel. <u>A Guide to Artifacts of Colonial</u> <u>America.</u> Alfred A. Knoph, Inc., N. Y.

ADDITIONAL OBSERVATIONS ON THE HUNTING CREEK PIPES

Perry S. Flegel

Since the report in the Archeolog in 1964 on the Hunting Creek pipes¹, the area has continued to produce additional kaolin clay pipe fragments. Each year, as the ground is prepared for cropping, more and more fragments appear on the surface.

The pipes and pipe-stems mentioned here constitute only those that have been recovered since 1964, or were not commented upon in the earlier report. A final summarization of the entire group is also added in light of the new finds.

The vast majority of the pipes found in the area were made without heels or spurs. This tends to place the dating of the pipes in a period from 1680 to 1820². Such a figure places the earliest possible date for the pit to have been open and used, some 14.2 years later than the mean date of the manufacture of the pipes, and is certainly well within the period when the first pipes may have been brought into the Hunting Creek area.

However, there were three pipes with platform-like bases under the bowl which match the type of "tear-drop" formation which is found on the pipes made during the 1610-1640 period³. These pipes were found near the bottom of the pit.

Several pipe bowl fragments from the surface, or near the surface can also be dated. Pieces of the front of bowls were found that had fluting and were reminescent of those pipes that were produced from 1780-1820⁴. Being found as close to the surface as they were, and not too near the pit area, may suggest that they were not associated with the midden.

Not reported earlier were a number of stems, the ends of which had been chewed upon. Teeth marks were prominent on 18 of the 120 fragments that appeared to be stem-ends. Several were chewed to a considerable extent, probably to make a grip for the teeth which would assist in preventing the pipe stem from slipping out of the mouth. (See Fig. 1. and Fig. 2.). These pipe stems were large and did not come from near the tip end

- 1. Flegel, P. S. "The Hunting Creek Midden." <u>The Archeolog</u>, Vol. XVI, No. 2. pp. 1-12, (1964).
- 2. Hume, I. N. "A Guide to Artifacts of Colonial America", Alfred A. Knoph, Inc., New York. p. 302
- 3. <u>Op</u>. <u>cit</u>. No. 3.
- 4. Op. cit. No. 21.

of the pipe. Their size indicated that they were from an area of the stem that was closer to the bowl that it was from the original end of the pipe.

Fig. 1. Stem bore 8/64 of an inch

Fig. 2. Stem bore 6/64 of an inch

Full Size

PIPE STEMS CHEWED TO FIT THE MOUTH .

Several large stems were found that had been whittled down with a knife or some other sharp instrument to make a stem that would fit comfortably in the mouth. These stems were much thicker than those in the above drawings. From the thickness of these stems it appears the entire pipe, with the made-over mouthpiece, bowl and all were not more than three or four inches in length. (See Fig. 3.)



(Full Size)

PIPE STEM WHITTLED TO FIT THE MOUTH.

Fig. 3. Stem bore 8/64 of an inch

An interesting stem was recovered which was made with an enlarged tip end to provide the smoker with a stem, the end of which would not slip out of his mouth. It does not appear to have been whittled or cut down to this shape, but seems to have been made that way. This writer has not been able to find any references which reveal this kind of manufacturing. (See Fig. 4.)



Fig. 4. Stem bore 5/64 of an inch (Full Size)

PIPE WITH AN ENLARGED TIP.

7

It has been commonly accepted for many years that the reason for so many broken pieces of pipe stem was due to the fact that the tip was broken off by a new user so that he might have a clean portion to put in his mouth.

Hume, in his treatise on pipes portends that they were not broken off at the tip for the above reason. His conclusions point up the fact that since the pipes were long and delicate, easily broken, were very cheap, (selling for as little as three for a cent), and when dropped would break into as many as fifteen pieces, would account for the great number of broken stems to be found.

However, what ever conclusions one may draw from these remarks, the idea of cleanliness for things that went into the mouth, was often times paramount in the minds of many smokers, and tavern keepers made an effort to keep the tip ends of pipes clean for their customers. The breaking off of the end of the pipe may have been a substitute for the tavern keepers method them clean when the smoker was not in or near a tavern.

It has been noted that most taverns, that kept pipes for their patrons to use, did sterilize them by baking the pipes in ovens fitted with iron racks made especially for that purpose. The pipes were used over and over as long as they did not become broken. So the idea of breaking off the stem of a pipe in order to secure one that had not been in the mouth of another smoker probably should not be entirely discarded.

ERRATA

THE ARCHEOLOG SUMMER 1978

- p. 22 Third Line. The date should read 1703.
- p. 58 Row of straight rims: Reading from left to right. Drawings 1 through 8 as well as Nos. 10 and 11 have been erroneously inverted.

by

Elizabeth S. Higgins

While it is not a new idea that the descendants of the ancient pyramid builders of Mexico may have indeed been the mound builders of the United States, it is an idea which stirs the imagination. It is a theory that can stand a greater amount of exploration and explanation than has as yet been attempted.

Thomas Fleming in an article titled "Solving the Lost-Continent Mystery" (Reader's Digest, August 1978) states: "Most striking is the similarity between the pyramids of Egypt and those of Central and South America. But equally fascinating are the connections between the Basques of Spain and the Mayan Indians, who built most of the New World Pyramids." And it is again an exploration of the theory that the common source of both the Egyptian and the Mexican peoples was the mystical, mysterious Atlantis. Again, carrying this line of thought further, there are likenesses between the culture that has descended to us from the Mayan Indians and our Adena or Mound Building Indians. A really definitive study (which this short article does not pretend to be) would seem to be a need for the further development of this theory. However, a few facts stand out.

The elapse of centuries between the know-how which one must associate with the building of the huge tombs of the Egyptian Dynasties and/or the Mexican Pyramids, and the erection of the much simpler, less specialized mounds could account for the loss of the knowledge to do the more complex building. Although many of our North American mounds are in areas where stone should have been available for quarrying, stone was not fundamentally a part of the material used. This could indicate a loss of the implements needed to do this work, a loss of the knowledge needed for the making of the implements, and a loss of the necessary skills involved in erecting a pyramid.

In some places where mounds are located, like the beach and shore areas of North and South Carolina, rock and even stone are rare and therefore not available for use in the building of the mounds. And in these areas, local materials would need have been used and were. For instance at the very interesting Santee, South Carolina where there is also now a museum of the findings of artifacts in the area.

Mounds in Alabama, West Virginia, Ohio, South Carolina, New York and other eastern and mid-western states indicate that this was a widespread, almost universally practiced Indian custom regardless of the tribe. Carrying this thought still further, there would seem to be indicated a common, original beginning. And while, if we believe in our Biblical explanation of a common origin, we may have no doubts about this, at the same time, the ways and means by which the descendancy was accomplished seems to be the question here.

The Egyptian pyramids were built primarily as tombs, but not as ordinary burials. They were rather built as monuments to the deceased, and the deceased were primarily the rulers. The Mexican pyramids were rather supposed to have been primarily for the purpose of worship - the same interpretive idea as the steeples on our churches reaching toward the heavens.

Mounds were also primarily tombs, but were used as the burial grounds of many - each one a repository for many. At the Island Field Site (Bowers Beach, Delaware) these graves have been opened in such a way that the viewer may see this composite grave system. It is clear, however, from what we know of the Indians and their customs that they felt it important that there be a ceremonial burial. Also, when the Nanticoke tribes were ordered to leave southern Delaware, they dug up their ancestral bones and carried them along on their several journeys, first to Pennsylvania, then by short treks to Ohio, and many, south to Oklahoma.

Mounds were also erected by North American Indians for use for tribal worship and conclaves. In a replica of an Indian settlement at Town Creek, North Carolina, one mound was built specifically for a huge ceremonial log house, with log seats around a center.

While presently this is theory and speculation, perhaps we will eventually establish the links which lead from the Mayan Indians to the Adena Indians. A closer study of the languages may help us with clues. We do know that the word for corn - maize - developed from <u>Maya Zea</u> - other similarities of which we know nothing at present may exist. Perhaps we will need to add a closer study of tribal customs, of dress, of art and of religion. True it is that all elementary peoples and also those not so elementary, look to the natural things around them for inspiration - the sun, the wind, the rain, the moon, animals, birds and fish - and their art forms follow what they see, but perhaps in some of these, we may find interpretations which will bring us closer to a solving of the mysteries surrounding the evolution of our native American people - the American Indian.





Marker 58

Marker 58

THE MASON AND DIXON MARKERS IN KENT COUNTY

by

Donna Murphy and Mary Poling

After the article was run in the Fall (1977) volume of The <u>Archeolog</u> concerning Mason-Dixon markers in Sussex County, it was brought to our attention by our anthropology teacher, Mr. John D. Downs. We then decided to try to locate all the Mason-Dixon markers in Kent County including the mile markers, which are engraved with a "M" and "P". The "M" stands for Maryland, and the "P" for Pennsylvania. During the Mason-Dixon survey, Delaware was called "The Three Lower Counties of Pennsylvania". The crownstones are located every five miles, and are engraved with family emblems.

located every five miles, and are engraved with family emblems. Marker 58 was the first and northernmost marker located. It is about 1/3 of a mile inside the New Castle County line. It is located by traveling north on Route 13, then taking Route 6 west at Syyrna. Continue westward 6 miles until reaching Blackiston, then turn north on Road 129. Continue on 129 for approximately 1/2 mile, until reaching the border. The marker is a few feet off the right side of the road. It was identified with the help of Mr. Stephen Zmijewski, who lives directly across the road from it. The marker was difficult to identify because it was badly eroded, making the "M" and "P" barely visible, and it was sunken low in the ground.

Crownstone 55 is easily located. To reach it, backtrack to Route 6, and travel west on it, until reaching the sign designating the Delaware-Maryland border. The crownstone is approximately 100 yards south of the route. It is in good condition, with only 2 small chips in it. It was surrounded by weeds, on a slightly elevated dirt platform. The platform was located in a corn field, in the Blackiston Wildlife Area.

Marker 53 can be found by traveling west on Route 6 and about .6 miles from Marker 55 turning south on Road 95. Continue south 2.5 miles, then turn right at the intersection of Road 96. After 1/2 mile, Road 96 intersects with Road 93. Across from the intersection is a house owned by Elwood and Grace Jackson. The marker is in their backyard, about 100 yards southwest of their home. It was in excellent condition, and protected by a grape arbor. Mr. Jackson had recently painted it, and from its appearance he obviously takes good care of it.

Marker 52 is located on the property of Mr. Dunning. It is virtually impossible to locate without his assistance. His home is .3 miles south on Route 6 from marker 53. The marker itself is located in a forest. It had some large chips and a crack in its top, but the "M" and "P" were in excellent condition.

Marker 51 can be located by going 5 miles west on Route 42 from Route 13. At the intersection of Route 42 and 300 in Kenton, turn left. Continue 5 miles until reaching the Delaware-Maryland border. The marker is approximately 100 feet north of Route 300. It was slightly eroded, but otherwise in good condition. It is in a hedgerow that divides two fields, and offers it some protection.

Marker 49 was reported to be lying on its side, and underwater at the time we were searching for it.

Crownstone 45 is located just off Route 8 in Marydel. It is on





Marker 53





Marker 52

Marker 51



Marker 43

Marker 41

the right side of this route when heading westward, and is in a small park just past the Marydel Fire Station. An official Delaware Historical Sign provides visitors with the history of the crownstone, which is set in concrete, and surrounded by small bushes. It is chipped at the top, but the emblems are in good condition.

To reach marker 43 from marker 45, travel east on Route 8 for .3 miles, then turn right on Road 208. Continue south on 208 for .8 miles. At this point, Road 209 branches from Road 208. Follow 209 for 1 mile, until it meets Road 206. Turn right at 206, and continue westward until reaching the Delaware-Maryland border, which can be noted by the change in the road. Look to the right, and the marker is located about 200 yards away in a field. It is in good condition, and partially protected by four small trees growing around it.

According to the latest U.S. Geodic Survey, marker 42 is lost. To reach marker 41, continue west on Road 206 for 1.2 miles, where it intersects with Road 211. Take a left on 211, and continue south on it for 1.8 miles, until the road changes to dirt. The marker is located 100 yards to the right in a field. It is in good condition, but has a large chip in the top, and leans slightly to the north.

Marker 39 can be reached by traveling east on Road 211 for 1 minute, where it intersects with Road 208. Turn right at 208 and continue south for 2 miles, until reaching Route 10. Turn right and travel west for 1.5 miles, until Road 255A is reached. Turn onto Road 255A, and follow it for .3 miles, then turn onto Road 255. The marker is about 50 yards down the road, about 20 feet off it to the right. It has two large chips in it, and leans to the south. It is in otherwise good condition, being protected by a forest.

In order to reach marker 38, continue south on Road 255, for about 1.5 miles, until it intersects with Road 256. Turn right at this intersection and travel .6 miles. At this point, look to the right. The marker is about 600 yards away in a field. It was surrounded by brush in a low, uncut, unplowed field. It was in good condition, but had a "B" carved on the top of it.

Marker 37 can be easily located by continuing south on Road 256 until it intersects with Road 110. Turn right onto 110, and the marker is 20 yards away from the intersection, and 10 feet off the right side of the road. It was straight and firm, but in otherwise poor condition. It was badly eroded and had a lot of deep holes in it. The marker was also tarnished brown on its south side, indicating that it may have been laying down at one time. on that side.

Crownstone 35 is on the property of Mr. Horace Edwards. His home can be reached by traveling south on Road 256, until it turns into Road 268. Continue south on 268 for 1.5 miles, then turn west onto Road 269. His home is the second one on the right, just past the Delaware-Maryland border. The crownstone leans to the south, but was in very good condition. The emblems and grooves in it were still very distinct. It was deep inside a forest, which apparently offered it good protection. Marker 36 is also located on Mr. Edward's property.

Marker 34 can be reached by returning to Road 268, and continue south on it for 1 mile, where it joins with Route 12. Turn right onto Route 12, and continue on it for .7 miles, then branch left onto Road 452. Follow 452 for 200 yards past its intersection with Road 59, or .4 miles, at which point the marker is to the left about 100 yards. It was in good condition, and surrounded by a small area of weeds, in a grain field.



Marker 39



Marker 38



Marker 37

Crownstone 35



Crownstone 35



Marker 34



Marker 29



Marker 27

According to the U.S. Geodic Survey, crownstone 30 is lost. To reach marker 29, travel south on Road 59 for 1 mile, then turn right on Road 291, and continue on it for 3.5 miles, where it joins Road 212. Take Road 212 south for about 1 mile, at which point the marker is about 150 yards to the left. It was slightly eroded, and leaning to the north, but in otherwise good condition. It was protected by a line of small trees and weeds, which divided a corn and a soybean field.

To locate marker 27, continue south on Road 112 for 3 miles, where it intersects with Road 113. Turn right onto Road 113, and travel 1.5 miles to Road 113A. Turn right onto Road 113A and go about .3 miles. The marker is about 300 yards to the right. The marker leaned to the south, but appeared to be in fairly good condition. However, a close observation was impossible because a ditch filled with water and ice lay between the marker and the road.

To reach marker 26, travel south on Road 113A until reaching Road 113. Fork right on 113 and continue south for about 1 mile. At this point the marker is directly off the road to the right. Only the lower part remains. The top part had apparently been cracked off, and was not in the area of the lower half. It seemed that the marker had at one time been covered over by cement, which had later been chipped away. The remains of the marker were surrounded by five wooden posts and the immediate area was strewn with trash.

An interesting item which we happened across during our travels was a witness post and survey marker about .5 miles from marker 37. The area was about .3 miles from the Delaware-Maryland border, and no Mason-Dixon marker was visible, only a small pile of cement directly behind the official markers.

Marker 26 was the last one we located in Kent County. Those not mentioned were either lost, or too difficult to locate. Now only a survey of New Castle County remains.





TOUR OF NORTHWEST FORK HUNDRED

bу

Eleanor W. Tharp

It was Saturday with 90 degree heat. A typical August day. We left home in Seaford and drove to Bridgeville and picked up our friends who were to guide us on our tour of a part of Northwest Fork Hundred. We had been talking about and looking forward to this for a long time. We turned left onto Dublin Hill Road and could not help but note the condition of the fields of corn and soybeans. The drought had taken its toll of the crops. Our friends pointed out to us the various farms as we proceeded. On our right were the lands formerly owned by Dr. Hugh Martin and now owned by the Rust Heirs. We found there an old cemetery with several tombstones bearing these inscriptions:

> In memory of Edward only son of David and Sarah Richards who died Oct. _____ 1815 age 3 yrs 11 mos 7 days

In memory of David Richards who departed this life Dec. 19, 1815 age 32 yrs. 11 days

> Kitty Richards Jan 30, 1832 24 yrs. 10 mos. 12 days

Kathleen Richards wife of Edwin Richards Died Sept. 18, 1825 age 25 yrs. 8 mos. 9 days

On the left was the farm of Mr. Samuel Warrington. I remember in my childhood my father speaking rather often of an elderly black, patient and humble man whose name was Linden Cephas who lived in Seaford and who later in his declining years moved to Dublin Hill area.

At Dublin Hill we continued and came to a beautiful church called Trinity United Methodist Church. The building is a treasure of American architecture. Stark white, it is an enduring emblem of our freedom to worship God. I understand that soon it will be placed on the Register of Historic Buildings. Soon we turned right and onto another road. Few, if any, houses were seen on this road; just woods and fields of parched corn and soybeans. At last, we came to a house on the left where there were children playing in a swimming pool. Immediately next door was a two-story brick home of ancient vintage. It is supposed to have been haunted by a former owner. We then turned onto Road 569.

We rode several miles through fields and woodland, past Jones Mill Branch, past a home, a square frame house where at one time Helen Harper Ward lived. She has lived for several years in Seaford. Next we passed a homestead type home now owned by Gene Melvin. Then we passed the birthplace of one of our guides. Coming onto Road 404, we crossed over to the eastern side where our friends showed us the exact location of the old Woodenhawk School which was removed to Bridgeville and made into a dwelling.

We continued uo to a crossroads where we turned around and retraced our journey across Road 404 at Woodenhawk and continued westerly from whence we had come. We turned left on Road 573 and on our right came to a mobile home and a large watermelon patch which had been productive this far. We continued on this dirt road until we came to a house on the left corner where a widowed lady lives who is 82 years old. From here we came onto Road 575, past the farm of Mr. James Walters who grows delicious asparagus each spring. We came to Road 404 at Scott's Store where we took our friends back to their home and returned home ourselves. Our tour of Northwest Fork Hundred was ended for the time being.

The following month we continued our tour. We started on Road 562 and went to Dublin Hill, the highest spot in Sussex County, we understand. We passed Whitney Swamp where our friend said that he used to hunt coon. Soon we came to the home of Mr. Elbert Turner, which we understand is in Maryland, where we visited with him for awhile. Mrs. Turner was sick with the flu. We sat in awe of the two Doberman Pinscher dogs which he allowed out of their pen. Our car windows were tightly closed. Next we came to Toby Russell's at Houston Branch and Little Nashville. Back into Delaware, after passing a place called Philadelphia, there were firemen answering a call. Then on to Bloomery and Old Bullock Brick 1747 home of Dr. and Mrs. John P. Sloan. Old Bullock Brick was later owned by Charles Johnson. From here we continued on to Smithville.

Bloomery Bridge Methodist Church had the following dates: 1854, 1926, 1954 and the name Conrad Cohen, Minister. I heard him preach once at the Methodist Manor House. Since then, he has a charge in Maryland. We passed Adams Crossroads where there used to be a basket mill which also made crates and trays.

On to Woodenhawk Campground. I understand that a year ago (1976) on Memorial Day, the Wilmington Symphony gave a concert here. We entered and soon turned around and departed as there were several private house trailers there and one man hurried inside upon seeing us.

We passed the site of the now obsolete Gueen Anne Railroad to Milford, Rehoboth, Greenwood, and Love Point, Maryland. The road bed is still discernable. We wondered if this was the same railroad as the one mentioned in the Bi-centennial Publication called <u>Greenwood: A</u> <u>Delaware Town</u> that on page 65 had a schedule on the many stops between Baltimore and Rehoboth. This must have been a most interesting and pleasant trip, besides being restful, in those long ago days. Among the stops were Hobbs, Tuckahoe, and Blanchard.

We came to Adamsville and passed a duck farm once owned by Walton We saw in the distance the home of Mrs. Pauline Reynolds Adams Owens. who used to teach school at Woodenhawk. We came into Woodenhawk where closeby flows the Marshyhope Creek. Velma Turner Short lives at Woodenhawk across from where the school was located. She is the youngest sister of Violet Turner Fleetwood Waller and Elbert Turner. We crossed Route 404 and came to the site of the home of Tillie Swann at Woodenhawk. At one time there was a cemetery near here on the west side of Route 404. There are no gravestones there now. My source of information gave me no dates but the following names of persons were once buried there: William Ross (cousin to Gov. Wm. H.H. Ross), Mary (his wife), Sarah Richards, Gibson Ross, William Ross, Miss Mary Loockerman's grandfather, Nancy Ross, Anna Ross who was married to Ed Wright.

The following inscriptions were taken from tombstones seen along the way:

Elizabeth wife of David Taylor, born Dec. 7, 1799 Died July 8, 1894 In memory of Sarah, wife of _____, Died ____ 1858 James H. son of I.D. & Elizabeth Walls, Died Oct. 16, 1864 David Taylor born July 19, 1797, Died April 27, 1872

We think the above cemetery was on the Collison Farm that is NW of Greenwood near Andrewville. The following came from the Mae Morris Farm, 2 miles NW of Greenwood, going west off Road 16:

> In memory of Danial Morris 1782 1757 Curtis Morris 1804 1803 Edward Morris 1882 1838 William Wilkinson Main 1915

And from the Laws family cemetery came the following:

Charlotte M. wife of Samuel Laws, born Feb. 16, 1786 Died Nov. 1, 1876

Samuel Laws, born July 28, 1781 Died July 17, 1866

These inscriptions bring to mind the memories of generations gone before us and their efforts to establish our nation of free men. We are always aware of their struggles as pioneers in an alien land filled with dangers, sorrows, joy, and a measure of fulfillment. We are ever grateful for our heritage.

Thus we ended our tour of Northwest Fork Hundred. Originally a part of Maryland, the Hundred is an interesting place to tour. One can imagine the wealth of timber in once virgin forests which our ancestors penetrated. Also the abundance of food in the form of squirrel, rabbits, muskrat, beaver, deer, fish, and other wild creatures. The Nutters, Layfields, Polks, and Adamses were early settlers of the area.

We are indeed grateful to our friends, Mr. and Mrs. Leon Smith of Bridgeville for their enjoyable company and invaluable instruction on past and present history of Northwest Fork Hundred.

THE DELAWARE REGIMENT IN THE BATTLE OF LONG ISLAND

b**y**

Joe Bastian

The Battle of Long Island was the first major battle of the Revolutionary War. The British were determined to capture New York, which was the seat of the colonial government, so they organized the greatest expeditionary force ever sent from England. The British had 32,000 veteran troops and ten ships of the line, with several frigates. All of the troops were well-trained and well-equipped. Sir William Howe landed over 20,000 British and Hessian troops on Long Island to begin the assault on the Brooklyn forces.

The American military position was not good. The rebel army was divided into two parts: those under Washington's command who manned the fortifications at New York, and General Israel Putnam's men at the Brooklyn works and along the Heights of Guan. Between these forces lay the East River, which could be controlled by the Royal Navy to prevent reinforcements from one side to the other. Fortunately, there was a northeasterly wind blowing during the battle, and the warships were not able to disrupt the flow of troops.⁵

When Howe had landed on Long Island, Israel Putnam took 7,000 men to defend Brooklyn. He constructed a series of forts and trenches over a mile long between the marshes of Gowanus Creek and the marshes of Wallabout Bay. The outworks were placed on the Heights of Guan, which is a five-mile ridge of 100 foot high hills about a mile and a half from the Brooklyn lines. These hills were covered with dense undergrowth which would make it hard for the enemy to attack. However, there were only 2800 inexperienced soldiers spread thinly over five miles of hills, while on the plains below waited 21,000 trained British and Hessian troops.

General Israel Putnam commanded the Brooklyn lines, while General John Sullivan commanded the Heights of Guan. Sullivan personally took charge of the center of the line, and his extreme left was commanded by Colonel Samuel Miles with his Pennsylvania Regiment. This side was "in the air" because only five men were guarding Jamaica Pass three miles to the east, and the enemy could easily make a flanking maneuver around them. The right side was anchored on the shore of Gowanus Bay, and it was commanded by William Alexander (better known as Lord Stirling). In his brigade was Colonel John Haslet's First Delaware Regiment.

Since this was the first major battle of the war, most of the American troops were inexperienced. Washington himself was only an amateur soldier, and he was not used to commanding large bodies of men. He was also forced to do petty details that should have been by a clerk. However, morale was high because of recent victories at Bunker Hill and Sullivan's Island.

During the night of August 26-27, 1776, General Howe and 10,000 troops marched through Jamaica Pass and around the American left. It was a major mistake that the rebels had only posted a five man picket to guard the pass.

Meanwhile, General James Grant with 5,000 men was ordered to

attack the right side of the line during the night. He advanced to the Red Lion Inn, which was in front of Lord Stirling's line. When Sullivan heard the news, he thought that the main attack would be at the right. At this time, he still didn't know of the flanking maneuver by Howe. He sent some reinforcements and ordered Stirling to repulse the enemy. At 3:00 a.m., Stirling advanced beyond the line with 1600 men, including Haslet's Delawares and Smallwood's Maryland troops. Haslet, Smallwood, and their Lieutenant Colonels were not with their regiments, because they were ordered to appear at a court-martial.¹¹ Stirling met Colonel Atlee of the Pennsylvania Regiment with 120 men, and ordered him to engage the enemy while he chose the position for his line. The contours of the surrounding terrain forced Stirling to form his men into the shape of a "V". Because of this peculiar shape, the two ends of the line were closer to each other than they were to the center. This became important 12 later when reinforcements were needed for the left side of the line.

The Delaware Regiment was on the right side of the line, which was anchored on Gowanus Bay. The left end was extended out into the woods, but it was not connected to Sullivan's line and it was therefore unprotected. Stirling realized this, and after his men were set, he ordered Atlee to withdraw, gave him a detachment of Delawares for reinforcement, and ordered him to capture a hill on the extreme left.¹³ Atlee charged the hill, and after killing several British, took possession and dug in. During this attack, some of the Delawares left. Atlee said they ran, but the Delawares said they were ordered to advance and meet the enemy. They met heavy opposition and were forced back to Stirling's lines. No one is sure who was right, but now the Delaware detachment only had two lieutenants and 16 men left. Atlee and his men held the hill against a counterattack, and very possibly saved Stirling from being outflanked.¹⁴

Meanwhile, Stirling's men had formed up in line of battle and offered battle to the British "in the true English taste".¹⁵ This was the first time that any American troops had stood in the open to face the British. Stirling was showing a brave front, but he was really in a precarious position. He had the most isolated line in the entire army. At any time, the wind might shift, and the menacing British ships of the line could sail up Gowanus Bay to pour devastating broadsides into his line. He was outnumbered 4 to 1, and his inexperienced troops were facing Britain's best. But he continued to hold his ground while both sides skirmished and traded cannon fire for four hours.¹⁶

By 9:00 a.m., Howe had completed his flanking movement and was behind Sullivan's lines. He fired two signal guns to let the British generals know it was time to attack. Howe charged from behind, while General Von Heister and his Hessians made a frontal assault on the center of the line. Sullivan was outflanked and overwhelmed. His riflemen took too long to load, and the British pressed forward with the bayonet. They had been told that the Americans would give them no quarter, so they showed no mercy. The rebels did not know how to fight the bayonet, and they retreated. Stirling had sent off a battalion to reinforce Sullivan, but the situation was hopeless. Some of the troops made it back to the Brookly lines, while many, including Sullivan, were captured. At 10:00 a.m., Stirling was notified of the collapse of the American left and center.

Stirling was now trapped in an even worse situation. Although his small force was the only line not broken during the battle, it appeared that he couldn't stay in that position for very long. He now had only a little over 1000 men to face Grant, who had been reinforced with 2,000 marines to make a total of 7,000 men. Stirling could not hope to attack against 7:1 odds. At the same time that Von Heister and Howe were attacking the left and center, Grant made his first serious assault on Stirling's line. The patriots stopped his approach, but after the collapse of the other American lines, the Hessians were on the ridge to his left.¹⁹ They pushed through the woods and fell on Atlee's force. He fought back stubbornly, but was outnumbered and had to retreat. His men tried to fight north to Hell Gate, but they encountered a battalion of Highlanders and had to surrender. In this group of men were two lieutenants and 16 men from the Delaware Regiment.²⁰

After the capture of Atlee, Stirling only had the Maryland and Delaware regiments left, numbering 950 men. The size of the British force was steadily growing as the ridge was swept clear of Sullivan's troops, leaving more units free to attack Stirling. After the Hessians disposed of Atlee. the British were able to attack the unprotected left end of Stirling's line. Some of the Delaware reserves were hastily brought up from the right to repulse this new threat. At this time, a peculiar incident happened. The Delaware troops had blue uniforms with white facings, which looked very much like the Hessian's uniforms. This was purely a coincidence, since most of the American troops had never even heard of a Hessian, and they certainly hadn't seen one. When the British commander saw the attacking Delawares, he thought they were Hessians who became confused and were attacking the wrong line. He sent Lieutenant Wragg forward to tell the "Hessians" that they were making a mistake. Lt. Wragg and his 22 men proceeded forward until they were close to the Delaware lines. When they were near enough to get a good look at the troops, they realized their mistake, but they were too close to escape. All 23 men were promptly captured by Captain Darby's 4th Company and escorted back to the Brooklyn lines.²¹

Despite his successful defense against the British attack, Stirling was trapped. General Grant, with 7,000 regulars, was directly in front of him. To his left was Von Heister's Hessians and the 33rd Foot. To seal his fate was Cornwallis himself, who had captured the Cortelyou House on the Gowanus Road with the 71st Regiment and the 2nd Grenadiers. He had very effectively cut off Stirling's line of retreat. To the right of the rebel line lay Gowanus Bay, Gowanus Creek, and its salt marshes. The creek was 80 yards wide and six feet deep. It was considered impassable at high tide, and the tide was flowing in. General Washington, who was in the Brooklyn lines, saw the predicament of this small army, but he knew Stirling would stay there. He had to give a direct order for Stirling to retreat.²²

Stirling was surrounded, and the British were closing in. Somehow, he had to delay their advance so his troops could escape. He wanted to take as long as possible, though, because if he occupied the attention of the British, Sullivan's retreating army could escape. Stirling took 250 of Major Mordecai Gist's Maryland troops and formed them into a column. With he and Gist in front, this small band of men made a counterattack on Cornwallis' force at the Cortelyou House. It was his hope to delay their advance and perhaps fight through the line back to the Brooklyn lines. The British were surprised at the furious assault, but they recovered and threw them back in confusion. Incredibly, the Marylands reformed and attacked five more times. The last time, they almost broke through the line, but reinforcements arrived at the crucial moment and they were repulsed again. They broke into small groups and tried to fight back to the Brooklyn lines. Only Major Mordecai Gist and nine others made it. The rest were killed or, like Lord Stirling, captured. It was a terrible sacrifice to make, but these brave men bought the time needed for the rest of the army to escape.²³

While Stirling attacked the Cortelyou House, Major Macdonough formed up his Delawares and the rest of the Marylands into a column of march, and they headed for Gowanus Creek, with the British following them closely. When they were near the creek, they encountered an advance guard of the enemy. They smashed through it and reached the edge of the water. As they waded and swam across, the British appeared and shot at them with several muskets and four pieces of artillery. Colonel Smallwood of the Marylands, who had left the courtmartial and come to the Brooklyn lines, saw that his troops were in trouble. He brought a New England regiment to cover the crossing while the Delaware and Maryland troops escaped. Only one of the Delawares drowned, but several were shot.²⁴

The total number of casualties for the Delaware Regiment, as reported by Colonel Haslet, were two privates killed, two officers and 23 men missing. Most of the missing were the two lieutenants and 16 men captured in Colonel Atlee's force.²⁵ Major Macdonough was wounded in the knee. A musket ball had torn his sleeve, but did not touch him. Lieutenant Anderson had a ball in the throat, and Lieutenant Corn had a ball lodged in his back.²⁶ These casualties are amazingly light, when it is considered that they fought for approximately eight continuous hours, and Grant's army of 7,000 exhausted their stores of ammunition on them.²⁷

The brave actions of Stirling's brigade and the Delawares unquestionably left a ray of hope for the American army. While the rest of the army crumbled, this small band of men held firm against the British onslaught. They showed the other troops that perhaps there was a chance that they could win the war against England.

¹Richard M. Ketchum (ed.), <u>The American Heritage Book of the Revolution</u>, (New York: American Heritage Publishing Co., Inc., 1958) p. 179. Christopher L. Ward, <u>The Delaware Continentals 1776-1783</u>, (Binghampton, NY: Vail-Ballou Press, Inc., 1941) p. 27. J. Thomas Scharf, <u>History of Delaware 1609-1888</u>, J, (Port Washington, New York: Kennikat Press, 1888 reissued 1972) p. 236. George F. Scheer and Hugh F. Rankin, <u>Rebels and Redcoats</u>, (New York: <u>The World Publishing Company</u>, 1957) p. 185. <u>Heritage, op. cit.</u>, p. 179. <u>Rebels and Redcoats, op. cit.</u>, pp. 184-185. <u>Jbid.</u>, p. 184. <u>OHeritage, op. cit.</u>, p. 179. <u>(Rebels and Redcoats, op. cit.</u>, p.187. <u>11bid.</u>, p. 186. <u>11bid.</u>, p. 186. <u>12bid.</u>, p. 186.

24

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EDITOR'S COMMENTS:

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