

## Lancaster County Park Site (36LA96): Conestoga Phase

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### ABSTRACT

Archaeological excavations were carried out for five weeks during June and July 1979 at a historic Indian burial site in Lancaster County, Pennsylvania. Its accidental discovery was made by County employees during the excavation of a trench for a waterline. The site is located on a narrow neck of high ground between Mill Creek and Conestoga Creek within the Lancaster County Park. A total of 10 graves was excavated with 9 single interments and 1 containing the remains of 3 individuals. Both primary extended and secondary ossuary-type burials were present. European trade goods, Indian-made ornaments and historic documents date the historic component of this site to the first quarter of the 18th century. The site belongs to the Refugee Complex, although it is not possible to assign specific cultural affiliation to the burials. During the early 18th century, various displaced Native American populations resided in Conestoga Manor. Historical documentation and different modes of interment suggest that the Park site Indians represent a mixed cultural tradition.

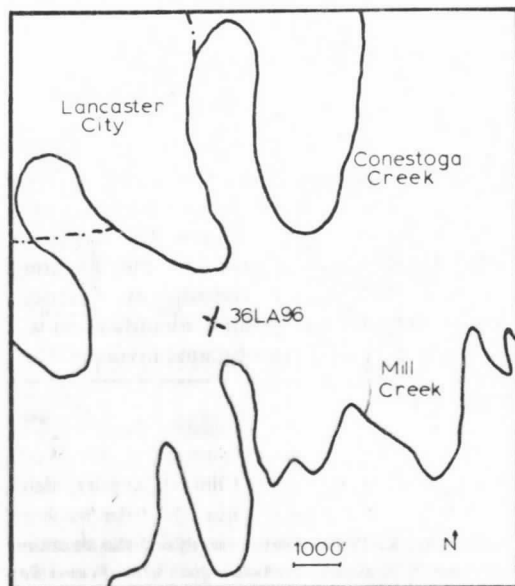


Fig. 1. Site Location from Lancaster, Pennsylvania 7.5' Quad, U.S.G.S.

### Introduction

SITE 36LA96, located in the Lancaster County Park, one mile south of the city of Lancaster, is in the Lancaster-Frederick Lowland portion of the Piedmont Physiographic Province. The actual setting is a hilltop elevation of 122 m (400 ft.) msl overlooking meanders of the Conestoga Creek and the smaller Mill Creek (Fig. 1). The former flows in a generally southwesterly direction for about 16 km (10 miles) where it meets the Susquehanna River. The Park site is at the closest juxtaposition of these two drainages before they finally join. Soils in the immediate area belong to the Conestoga silt loam

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**Burial Feature 1**

Skeletal Remains: Adult male, approximately 40 years of age.

Associated Artifacts: None

Discussion: This was the initial skeleton encountered during the excavation of the trench for the waterline. It was almost completely destroyed by heavy equipment.

**Burial Feature 2**

Skeletal Remains: Three individuals present.

Individual 1: Female between the ages of 18 and 21 represented by:

- cranial vault
- mandible
- humerus
- epipheseal humeral head
- sternal body elements
- vertebrae with ununited laminan epiphyses
- radius and ulnae with distal and ununited proximal epiphyses

None of the remains were articulated. Analysis of the teeth using clinical and radiographic examination shows heavy occlusal wear due to either diet or bruxing (clenching). Three teeth from the mandible show beginning and advanced caries. Third molars are impacted in the mesio-angular position.

Individual 2: An adult male between the ages of 30 and 40 represented by:

- teeth
- pelvis fragments
- pisiform
- rib fragments
- vertebrae
- femur condyle
- articulated knee (right and left tibia, patella, and femur)

Two vertebrae and the knees are articulated. The remaining body elements were disarticulated and mixed with the feature. Dental analysis shows that this individual suffered an interruption in the development of the teeth at an early age due to facial trauma and/or systemic disorder or an exanthematous (a disease such as measles or scarlet fever accompanied by a skin eruption) episode.

Individual 3: An adolescent of undetermined sex represented by:  
immature phalanges

- pelvis fragments
- tarsals
- metatarsals

None of the body parts were articulated and there were no teeth available for dental examination.

Associated Artifacts: 9-quartz flakes  
1-chunk of vermilion pigment  
3-heavily worn gun-flints; 1 is a dark blue-black flint, possibly from Dover, England while 2 are a white cream colored flint  
2-faceted clear glass beads (Fig. 6, I)  
1-metal spring tweezer or pipe tong (based upon a comparison with a similar 17th century artifact from Jamestown, VA) (Fig. 7, A)  
10-ball clay pipe<sup>1</sup> stem and bowl fragments  
3 are fairly complete bowls, 2 of which show maker's marks: "Lewis" and "IA" (Fig. 7, J,K)

Discussion: Articulated and disarticulated skeletal remains were mixed throughout the undisturbed portions of this burial. Vertical and horizontal measurements were made on all artifacts and human remains while they were *in situ* in order to document the nature of these burials (Fig. 5). The following statistical calculations show the distribution of the number of points or body parts for each individual in this feature. The nearest neighbor statistical test was applied to the horizontal spatial distribution of body parts

<sup>1</sup>"Ball clay" pipe is substituted for the commonly used "kaolin" pipe. Use of the term kaolin should be reserved for pipes made of that specific type of clay.

to determine if any clustering was present. Calculations were derived from Pinder, *et al.* (1979) and they are:

Individual	No. of Points	d ran	d obs	R
#1-adult female	22	.21	.21	1.05
#2-adult male	30	.17	.16	.94
#3-adolescent	8	.36	.43	1.19

Comparison of these data to the R statistic presented by Pinder, *et al.* (1979:439, Fig. 5) shows that all of the values indicate a random distribution of the body parts throughout this burial feature. The test for standard deviation was performed to determine if a vertical patterning of the body parts was evident. Mean depths and standard deviation for the remains of each individual are shown below:

Individual	Mean	Standard Deviation
#1-adult female	5.34	.18
#2-adult male	5.13	.65
#3-adolescent	5.32	.16

T-tests were applied to test for significant difference between the vertical distributions of the remains of the 3 persons. The results are:

Individuals	Test Statistic
adult male vs adult female	1.05
adult male vs adolescent	.83
adult female vs adolescent	.12

There are no significant differences, and it appears that the distributions of these skeletal elements show no apparent pattern. Based upon the field observations and the statistical tests, the implications are that Burial 2 represents something other than a simple primary multiple burial. Possibly it is an instance where bodies were defleshed, mixed, and buried. On the other hand it may be a secondary interment with the remains having been previously buried or stored at a different location and subsequently exhumed and re-buried at the Park site. The latter practice is common among eastern Algonkians of the tidewater areas of the Middle Atlantic Region (Ubelaker 1974). An absence of cut marks on the bones, the varying state of decay of the osseous material, articulated parts in juxtaposition with disarticulated elements, incomplete skeletons, and the seemingly haphazard distribution support the hypothesis that this is a

secondary interment. This miniature ossuary corresponds to a site in Delaware (7S-G-7) where 3 disarticulated bodies were found in a common grave. Although this small ossuary-like feature and the re-burial trait are similar to eastern Algonkian practices, in no way does it resemble the huge ossuaries described by Ubelaker (1974).

The trade goods found in Burial 2 (i.e., gun-flints, ball clay pipe fragments, and glass beads) are consistent with the associated artifacts found in other burials at the Park site.

#### Burial Feature 3

**Skeletal Remains:** A small concentration of crushed and broken long bones.

**Associated Artifacts:** 7 cut iron nails

**Discussion:** This badly disturbed burial was probably truncated several years ago when topsoil was removed from the hilltop for use as fill. The fragmentary nature of the human remains precludes making age and sex determinations. The nails were not an integral part of the burial; however, it is possible that they were part of a coffin as noted by Seeman and Busch (1979), Kent (1980, pers. comm.), and Becker (1980, pers. comm.). There is no conclusive evidence for coffin burial at the Park site.

#### Feature 4

**Discussion:** This was a natural feature: a tree stump.

#### Burial Feature 5

**Skeletal Remains:** A fragmentary concentration of human remains.

**Associated Artifacts:** 16 cut iron nails

**Discussion:** Same as Burial 3

#### Burial Feature 6

**Skeletal Remains:** A nearly complete skeleton of a child with a dental age of between 7 and 8.

**Associated Artifacts:** 13-shell beads in a poor state of preservation (13 mm dia. × 6-7 mm length)  
1-engraved shell pendant fragment  
4-small flakes (3 quartz, 1 jasper)

5-wire wound glass beads (12.5 mm dia. × 5–11 mm length) 18- white glass beads with red and blue stripes parallel to the hole (8–9 mm dia. × 5–8 mm length) (Fig. 6C)  
 4-fragments of white striped beads similar to those described above.  
 1193-“seed” beads (2–3 mm dia. × 2 mm length) (Figs. 6F, J; 8B, C, E)  
 673-black glass  
 249-light blue glass  
 142-white glass  
 128-medium blue glass  
 1-dark glass

**Discussion:** This shallow burial was narrowly missed by the waterline trench. The body was in an extended position and was articulated from the lumbar vertebrae through the legs. An arm and several ribs were missing but no cut marks were visible which might suggest intentional defleshing. Examination of the dentition revealed no pathologies, although two anomalous teeth from a four year old were found in the grave fill. The presence of these extra teeth in this grave could be entirely fortuitous or they could be deciduous teeth which belonged to the child and were saved and intentionally buried as a token. Most of the glass beads were found in clusters near the head of the individual. They might have been in strands which were balled up or they might have attached to a wadded fabric.

#### Burial Feature 7

**Skeletal Remains:** A poorly preserved extended burial of a child with a dental age of 7 or 8.

**Associated Artifacts:** 1-fragment of a shell  
 6-turtle shell fragments  
 1-triangular shell bead  
 1-catlinite pendant (Fig. 9C)  
 1-glass pitcher handle (Fig. 7C)  
 1-brass jews harp (Fig. 7E)  
 1-ring made from a pewter button  
 3-pewter buttons (Fig. 7I)  
 1-metal loop from the back of a button  
 10-cylindrical shell beads (3 mm dia. × 5 mm length)  
 2-wire wound beads  
 365-“seed” beads (2–4 mm dia. × 2–3 mm length)  
 270-green glass (Fig. 6A)  
 8-fragments of green glass  
 47-black glass (Fig. 6G)  
 40-white glass  
 50-pea size red glass beads with black/green core (8 mm dia. × 7 mm length) (Fig. 6E)  
 10-fragments of red glass beads

**Discussion:** Analysis of the teeth and the skeletal remains reveals no pathologies or anomalies. The child was in the extended position with the glass pitcher handle clasped in the right hand. The several buttons were found in a cluster fused by the iron attachment loops. Apparently they were on a string and not attached to a garment. The finger ring was broken and not associated with either hand. A jew's harp was found beneath the pelvis.

#### Burial Feature 8

**Skeletal Remains:** An extended burial of an

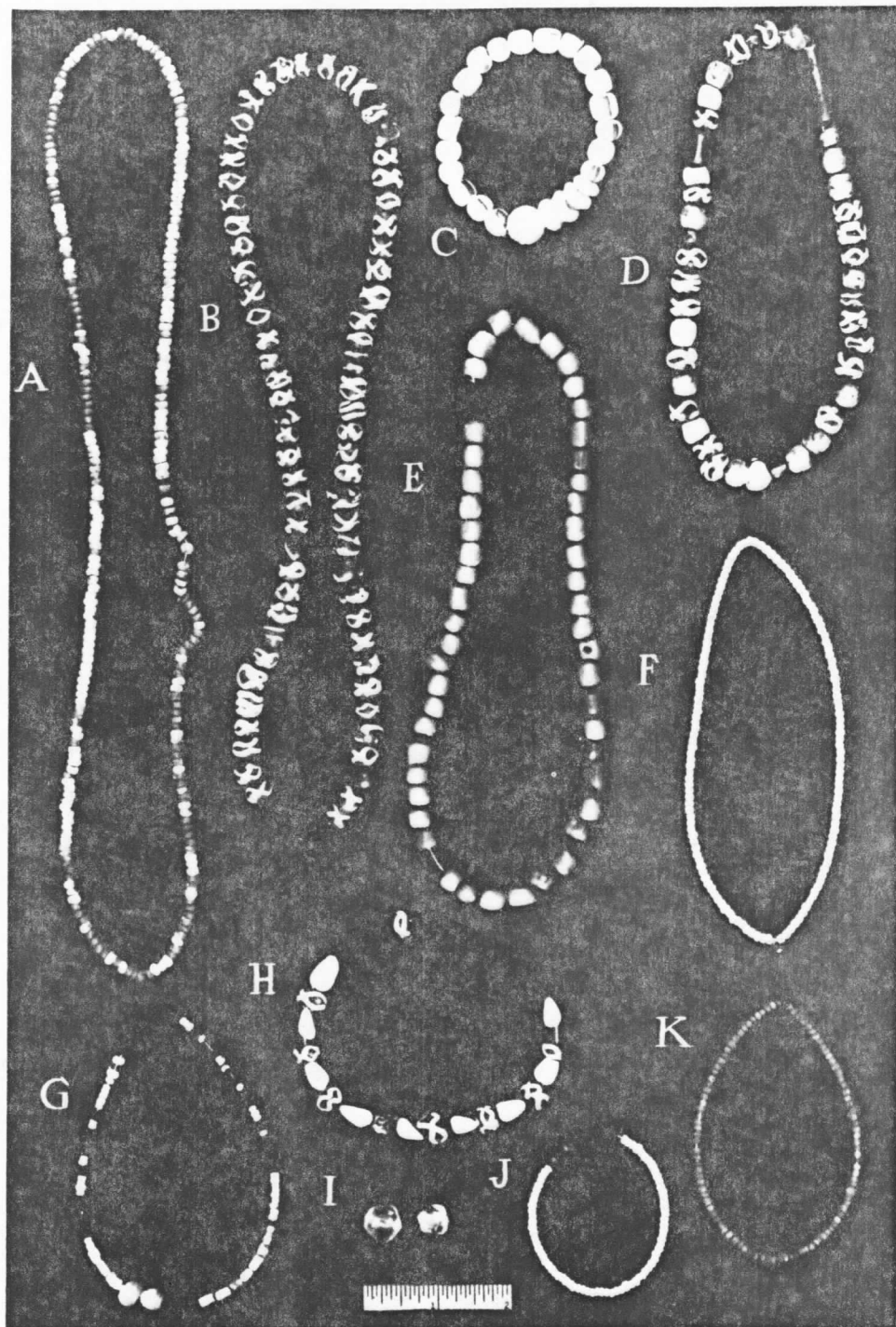


Fig. 6. Glass Trade Beads and *Marginella* Shell Beads from the Park Site. A, green seed beads, Burial 7; B, black and white guilloche beads, Burial 8; C, red and white polychrome beads and wire wound beads, Burial 6; D, black and white guilloche beads and black beads, Burial 11; E, red barrel-shaped beads, Burial 7; F, white seed beads, Burial 6; G, black and white seed beads and wire wound beads, Burial 7; H, black and white guilloche beads and *Marginella* shell beads, Burial 11; I, faceted clear glass beads, Burial 2; J, white, blue, and black seed beads, Burial 6; K, blue seed beads, Burial 10.

adult female between the ages of 30 and 40 represented by a complete articulated skeleton.

Associated Artifacts: 4-shell "hair pipes" or columnar beads (Fig. 7B) (5 mm dia. × 124 mm length)  
1-chunk of vermilion pigment  
20-cylindrical shell beads  
2-large rudely faceted shell beads (7 mm dia. × 7 mm length)  
2-fragments of the shell beads described above  
4-triangular shell beads  
1-small water worn pebble  
snail shell fragments  
4-brass wire bracelets  
1-iron or steel strike-a-light (Fig. 7H)  
1-ball clay pipe showing maker's mark "R. Tippet" on bowl, stem is 175 mm long with a bore diameter of 3.22 mm (Fig. 7L)  
1-small brooch in the form of a silver cross (Fig. 7D)  
5-faceted blue glass beads (3 mm dia. × 5 mm thick)  
11-seed beads (2-3 mm dia. × 2 mm thick)  
7-white glass  
3-light blue glass  
1-medium blue glass  
71-black glass beads with white guilloche design (9 mm dia. × 9 mm length) (Fig. 6B)

Discussion: This fully extended adult female was in a grave lined with several slabs of micaceous limestone. Arms and legs were covered with

similar slabs. Two hair pipes were worn over each temple while the black and white glass beads were part of a necklace. Four wire bracelets were worn on the right wrist and the pebble was clasped in the hand. A small group of unmodified snail shells (discussed elsewhere) were in the fill associated with the chest cavity and the ball clay pipe was placed across the individual's chest.

#### Burial Feature 9

Skeletal Remains: A badly disturbed infant burial with the skeletal remains too fragmentary and too immature for age and sex determinations, dental remains suggest an age of 18 to 24 months.

Associated Artifacts: None

Discussion: This is a burial of an infant with no artifacts; however, it is almost certainly related to the historic component.

#### Burial Feature 10

Skeletal Remains: A badly disturbed burial with skeletal remains too fragmentary for age and sex determinations.

Associated Artifacts: 5-columnar shell pipe fragments  
3-cylindrical shell beads  
2-cut iron nails  
4-flat glass fragments  
3-ball clay pipe bowl fragments  
1-heavily worn gun-flint  
1-round black glass bead (9 mm dia. × 8 mm length)  
563-"seed" beads  
424-medium blue glass (Figs. 6K, 8A, D)  
139-white glass

Discussions: This is the burial of an individual of undetermined age and sex. Associated artifacts conform to

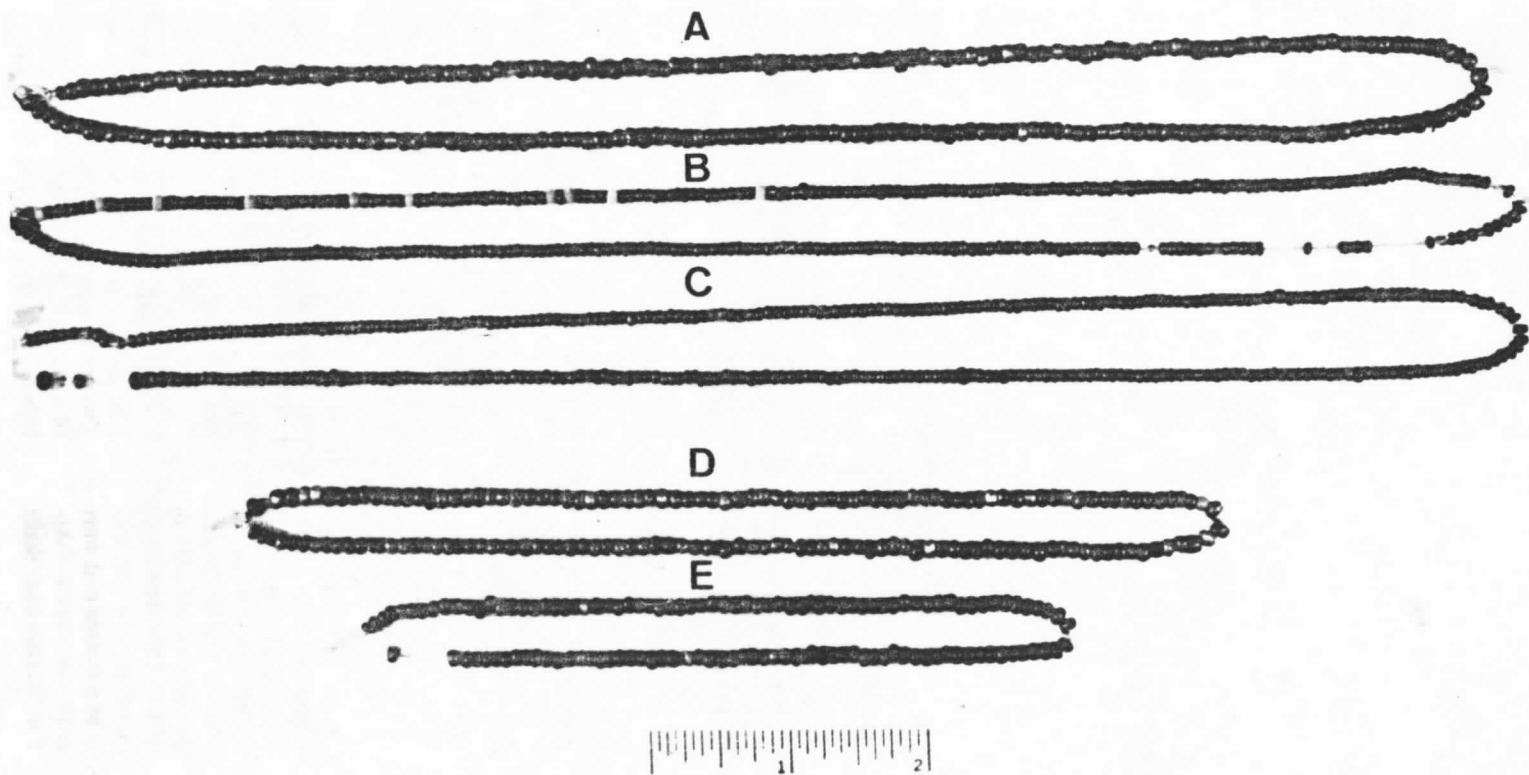


Fig. 8. Glass Trade Beads from the Park Site. A, blue seed beads, Burial 10; B, black seed beads, Burial 6; C, black seed beads, Burial 6; D, blue and black seed beads, Burial 10; E, blue and black seed beads, Burial 6.



a historic component dating to the first quarter of the 18th century. Two teeth from a child having a dental age of less than 10 years were found nearby but their actual association with this feature is questionable.

#### Burial Feature 11

**Skeletal Remains:** A young adult female between the ages of 16 and 21 represented by a complete articulated skeleton (Fig. 10).

**Associated Artifacts:** 3-quartz flakes  
2-catlinite pendants (Fig. 9A and B)  
1-engraved shell pendant (Fig. 7F)  
3-shell hair pipe fragments  
5-faceted shell beads  
86-drilled *Marginella* shell beads (Fig. 7G)  
23-cylindrical shell beads  
40-black glass beads with white guilloche design (Fig. 6D, H)  
1-blue glass "straw" bead  
2-"raspberry or mulberry" type seed beads  
2-blue and white striped glass beads (7.5 mm dia.  $\times$  8-11 mm length)  
3-unidentified bead fragments  
2-brass bracelets and associated fabric

**Discussion:** This well preserved burial was especially revealing with respect to certain associations. Two brass bracelets were worn on the left wrist and the copper mineral salts preserved a sample of coarse fabric. Also preserved was a piece of wood which was lying on top of the arms that were crossed upon the chest. Apparently this burial had some form of wooden liner or cover.

The absence of nails precludes the likelihood of a coffin burial. The bracelets, wood, and the associated fabric were removed as a unit and taken to the Museum Applied Science Center for Archaeology, University Museum, University of Pennsylvania for detailed analysis. Mary Elizabeth King reports (1980, pers. comm.):

... [it is impossible to tell] if [there is] any structure on the top layer. It appears to be simply flattened plant stems (cat tail??) about 9 mm. wide. I cannot see any connecting fibers. The stem runs perpendicular to the arm. Under the arm, under the first bracelet (toward the wrist), there is a tiny bit of white, or natural color, plain weave. It is probably cotton, and has approximately 15 warps and 15 wefts to the centimeter. The yarns are single, Z-spun. Yarn diameters are about 1 mm. Without selvages it is hard to tell, but it is probably commercially-woven cloth.

The catlinite and the shell pendants, together with the various native-modified *Marginella* shells and European-made glass beads, were strung alternately in order to create a necklace (Fig. 6H). Parts of the necklace were found in the vicinity of the neck and in the chest cavity. No skeletal or dental pathologies were present.

A summary of the preceding discussions of the 10 burials from the Park site are presented in Table 2.

Neither the flakes nor the iron nails are considered intrinsic to Burials 2, 3, and 5. That is to say they do not represent objects attached to garments or artifacts deliberately placed in the grave as part of a ritual process.

Native-made objects present in 5 of 10 burials	50%
European-made objects present in 6 of 10 burials	60%

#### *European Trade Goods*

##### Glass Beads (Fig. 6 and 8)

Glass beads often play a major role in determining the chronological placement of sites. Two prominent instances where the occurrence of certain bead types have made important contributions in this regard are the Seneca sequence in western New York (Wray and Schoff 1953)



Table 2  
Artifact Distributions by Burial

Burial	Age	Sex	Artifacts	
			Native-made	European-made
1	40 yrs	male	0	0
2	1 18-21 yrs	female		
	2 30-40 yrs	male	Xa	X
	3 adolescent	undetermined		
3	undetermined	undetermined	0	Xb
5	undetermined	undetermined	0	Xb
6	7-8 yrs	undetermined	X	X
7	7-8 yrs	undetermined	X	X
8	30-40 yrs	female	X	X
9	18-24 mos.	undetermined	0	0
10	possible child	undetermined	X	X
11	16-21 yrs	female	X	X

Key  
 0 absent  
 X present  
 Xa flakes only  
 Xb cut nails only

2 adult males  
 1 adult female  
 2 young adult females  
 1 adolescent  
 3 young children  
 1 infant  
 2 persons of undetermined age and sex

and the Susquehannock site sequence (Kinsey 1960, 1977b: 91-119; Heisey and Witmer 1962; Kent n.d.). Even though the span of time for the duration of a particular type of glass bead may be long, its period of greatest popularity is frequently restricted to a 15 or 20 years span. The shift from the dominance of one bead type to an entirely different type can occur within a relatively brief time span. Thus European-made beads can be fairly sensitive indicators of time provided the sample is sufficiently large and is not skewed. However, because of their durable nature and the fact that glass beads may be passed on from one generation to the next, a small collection of beads is not necessarily an accurate indicator of time.

The following glass bead types are diagnostic and representative examples which can be correlated with the four major Susquehannock phases. It should be noted that glass bead typology can be very finely drawn. In some instances the frequencies are highly significant and can suggest narrow chronological distinctions at the site level.

Washington Boro  
 Phase  
 A.D. 1600-1625

numerous beads:  
 light blue pea-size beads are the majority, white examples of this type are common, green examples are less common;  
 round polychrome  
 star or chevron  
 flusheye

Strickler Phase  
 A.D. 1640-1675

numerous beads:  
 brick red tubular or cane beads are the majority with many variations on this type including twisted;  
 seed beads  
 pea-size

Refugee Complex  
 A.D. 1690-1745

numerous beads:  
 various examples of seed beads are the majority; faceted and wire wound types are minor types

Although they are the smallest of the European-made objects, glass beads constitute the most abundant artifact found in the Park site graves. Exclusive of fragments, the quantities and the distributions are shown in Table 3.

These various glass beads are tabulated below (Table 4) according to their correspondence to types recorded by Kidd and Kidd (1970), quan-

Schultz Phase  
 A.D. 1575-1600

a few beads:  
 star or chevron type  
 a few round polychrome  
 a few pea-size beads (light blue and white)

Table 3  
Glass Bead Distributions

Burial	Glass beads
1 adult male	none
2 adult female, adult male adolescent	2
3 undetermined	none
5 undetermined	none
6 child	1216
7 child	409
8 adult female	87
9 infant	none
10 possible child	564
11 adult female	45
Total	2322

60% of the burials contained glass beads with quantities ranging from 2 to 1216

tity, percentages, and distribution by burial feature. Fragments are not included.

The generic category of small (2–3 mm dia. × 2 mm length) round "seed" beads represents the most popular type by a very wide margin (Figs. 6A, F, G, J, K; 8). Over 91% of the European glass beads from the Park site belong in this category. Colors range from black through

medium blue, light blue, green, and white. Six other bead types (black with white guilloche (Fig. 6B, H), pea-size (Fig. 6E), white with red and blue stripes (Fig. 6C), raspberry/mulberry (Fig. 6H), blue and white striped, and blue straw) are more conservative or older types which suggest a slightly earlier period such as the occupation at Conestoga Town in Manor Township. The wire wound and faceted glass beads (Fig. 6I) are newer or forward looking types. These are popular types at Conoy Town, 1718–43, near Bainbridge, Pennsylvania (Kent 1980, pers. comm.).

The change in the types of glass beads associated with the Susquehannock burials at the Strickler site in Washington Boro and those from the Park site some 25 to 50 years later is remarkable. At Strickler, tubular or cane beads show a frequency of 90.46% while the seed beads appear with a 7.09% frequency. For the Park site the reverse is true: seed beads represent a 91.47% frequency and there is only one straw or tubular cane bead present. For comparative purposes a sample of 10,734 glass beads from Strickler is tabulated below (Table 5).

Table 4  
Park Site Glass Bead Types After Kidd and Kidd (1970),  
by Quantity, Percentage, and Distribution

Type	Quantity	%	Burial
Seed beads	2123	91.47	6,7,8,10
IIa7vs black	720	33.89	6,7
IIa53 medium blue	553	26.03	6,8,10
IVa13 white	328	15.44	6,7,8,10
IIa27 green	270	12.71	7
IIa53 light blue	252	11.86	6,8
Ia19 dark blue	1	.04	6
IIj5 black with white guilloche	111	4.78	8,11
IVa5 pea-size red	50	2.15	7
IIbb18 White with red & blue stripes	18	.77	6
Wire wound	7	.30	6,11
(w)Id1 round	6		6,11
(w)Id5 large hole	1		6
(w)IIC2 Faceted	7	.30	2,8
blue	5		8
clear	2		11
IIId6 Raspberry/mulberry	2	.08	11
IIb68 Blue & white striped	2	.08	11
Blue straw	1	.04	11

Table 5  
Glass Beads from the Strickler Site,  
Henry Heisey Collection, North Museum

Bead Type	Number	Percent
<b>Tubular Beads</b>	9711	90.46%
a) A5: red tubular with clear green or white core	6882	63.55%
b) F11: black opaque tubular	922	8.59%
c) multi-striped	571	5.32%
d) C5: white tubular with a clear core & C14: white opaque	435	4.05%
e) solid blue	296	2.79%
f) B5: light blue tubular with clear core	232	2.16%
g) red without core	204	1.90%
h) B6: dark blue tubular with clear core and white layer	176	1.64%
i) miscellaneous	28	.26%
j) twisted	24	.22%
k) elbow	1	.01%
<b>Seed Beads</b>	762	7.09%
a) white	272	2.53%
b) turquoise	186	1.73%
c) deteriorated	131	1.22%
d) blue	97	.90%
e) black	44	.41%
f) red	30	.28%
g) multi-colored	2	.02%
<b>Oval Beads</b>	16	.15%
a) white	9	.08%
b) multi-colored	4	.04%
c) black	1	.01%
d) turquoise	1	.01%
e) flusheye	1	.01%
<b>Round Beads</b>	243	2.26%
a) black	127	1.18%
b) multi-colored	86	.80%
c) A10: red round with clear green or white core	22	.20%
d) A13: opaque red round	4	.04%
e) turquoise	3	.03%
f) polychrome	1	.01%
Total Bead Sample: 10,734		

Table 6  
Glass Bead Distributions by Age

Bead Type	Children	Adult
Ila7 (vs)	720	0
Ila53	552	1
IVal3	321	7
Ila27	270	0
Ila53 (variant)	252	0
IVa5	50	0
IIj5	0	111
<i>Marginella</i>	0	80

Although the skeletal sample is small, the chi-square test was applied and it yielded a test statistic equal to 2281.81 ( $p < .005$ ). This indicates a strong degree of dependence between the variables of the bead types that were from children's graves and those from adult graves. The authors favor the implication that different types of beads are associated with two different age groups. More commonly glass seed beads are found with children, while the black and white guilloche type and the *Marginella* shell beads of native manufacture (Figs. 6H, 7G) tend to be associated with adults. Possibly this is an indication that adults typically use conservative or heirloom-type ornaments while the more common baubles are associated with children. The ideological implication is that adults carry with them the traditions of the society while their children follow contemporary modes.

Age-status differentiation is a promising field for future investigations of historic American Indian burials. Data from the extensive 17th and early 18th century Susquehannock cemeteries in Lancaster and York counties offer considerable potential for testing age-status differences. Whatever the actual explanation for these apparent non-random distributions, the presence of glass trade beads in 60% of the burials regardless of age and sex differences tends to indicate an egalitarian society (Fried 1967, Rothschild 1979).

The differential distribution of bead types within the three children's graves was analyzed with the cross-tabulation shown in Table 7.

The test results are equivocal. The computed chi-square test statistic is 1982.43 ( $p < .005$ ) which indicates that different bead types have different distributions within the children's graves. Since there are only three such burials

The distributions of the glass beads and the *Marginella* shell beads were studied at the intra-site level to determine if any patterning was present. This was done by cross-tabulating the occurrence of 50 or more examples of each bead type associated with child (defined as less than 15 years of age) interments as opposed to adult interments. The results are shown in Table 6.

Table 7  
Glass Beads from Burials 6, 7, and 10

Bead Type	Burial 6	Burial 7	Burial 10
IIa7 (vs)	673	47	0
IVa13	142	40	139
IIa27	0	270	0
IIa53 (variant)	249	0	0
IIa53	128	0	1
IVa5	0	50	0

these calculations may be spurious. The only difference between these seed beads is color. Perhaps a plausible explanation for this non-random distribution lies with availability and personal preferences rather than age-status implications.

#### Pipes (Fig. 7J, K, L)

Ball clay pipes from the Park site have the following maker's marks: "Lewis," "IA," and "R. Tippet." According to Barry Kent (1980, pers. comm.), these are the marks of pipe manufacturers and exporters working in Bristol, England, during the late 17th century. Although the sample is not large enough to use hole diameter size for making age determinations, the ball clay pipes show a good chronological correlation with the glass beads. All pipes were found in adult burials, suggesting the possibility of age and status distinctions.

#### Miscellaneous

A variety of other items of European origin are associated with the Park site burials. These are important since they reflect the range of trade materials in the hands of certain groups of American Indians in the Eastern United States during the first quarter of the 18th century. Included are gunflints, spring tweezers or pipe tongs (Fig. 7A), cut iron nails, jews harp (Fig. 7E), handle from a glass pitcher (Fig. 7C), brass wire bracelets, silver cross or brooch (Fig. 7D), several buttons (Fig. 7I), and a piece of fabric. The bracelets and the cross are of an ornamental nature although the latter also has ideological significance. These two objects are probably items which the person wore rather than intentionally placed grave offerings. The gunflints,

jews harp, and the tweezers or tongs are small enough to have been carried in a pocket. The presence of the glass handle is curious because no other part of the pitcher was found. None of these artifacts appear to have been especially valued and only the gunflints would have been of utilitarian significance.

#### Native-Made Artifacts

By the beginning of the 18th century native-made utilitarian products such as pottery and stone tools were exceedingly rare at American Indian sites. Native pottery had been replaced by the more durable European brass kettles while steel knives, hoes, axes and other metal tools substituted for their stone counterparts. The only surviving native products of this period are small ornaments of bone, shell, and catlinite. Fifty percent of the burials at 36LA96 (Burials 6, 7, 8, 10 and 11) contained from 2 shell beads or pendants to 86 *Marginella* shell beads. No utilitarian native artifacts were present.

#### Shell Beads and Pendant

*Marginella* shell beads (Figs. 6H, 7G), hair pipes (Fig. 7B), a shell pendant (Fig. 7F), and other shell beads are very similar to the forms found at nearby late Susquehannock-Conestoga sites. *Marginella* shells were fashioned into beads by drilling a single hole to facilitate attachment. This otherwise unmodified material was obtained from Boreal *Marginella* shells (*Prunum limutulum*) found along the Atlantic coast and the tidal estuaries from Virginia to South Carolina (Abbott 1954:257). As for the hair pipes they probably were produced from core sections of the channeled welk (*Busycon canaliculatum*) which is widely distributed from Cape Cod to Florida (Abbott 1954:236).

The mechanism or means by which these raw materials came to Lancaster County is difficult to determine although coastal saltwater-tide-water origins are indicated. Both of these species could have been obtained by direct visitation to the source area; however, *Marginella* shells are located considerably further away than the nearest source of whelk. A plausible explanation is that shell stock was obtained through intermediary participants in a Middle Atlantic trade network. In some instances the material may have been passed from coastal-tidewater Indians