

CHAPTER 11. PINS AND SHROUDING

Jean Howson

with the assistance of Shannon Mahoney and Janet L. Woodruff

It is our assumption that for those interred at the African Burial Ground preparation of the body included some form of covering, whether winding sheet, shroud, or clothing. Where remnants of such dressing has not survived, we cannot know how the body was treated, though it seems most likely these cases had cloth that had been wound about the corpse or sewn or tied shut. Due to preservation conditions, textile and fiber fragments recovered from graves at the African Burial Ground were only found in association with metal artifacts (pins, buttons, coins, jewelry, nails).

Other than coffin remains, the most common artifacts recovered from graves were copper-alloy straight pins. These were always referred to in the field records as “shroud pins.” Pins, however, may have been used to fasten clothing (especially for women), or to fasten a strip of cloth used to tie up the chin of the deceased. An attempt has been made to analyze the placement of the pins on the body to better decide whether a winding cloth, some other type of burial garment, or clothing is indicated. This chapter focuses on pins; other clothing items are discussed in Chapter 12.

11.A. A profile of the burials with pins

As noted in Chapter 5, pins were found in 64.6% of the burials in which their preservation was feasible. A total of 834 pins was recorded overall, from 210 burials.¹ It is likely the actual frequency was greater, assuming that pins were originally present in many of the extremely disturbed burials and that some pins had decomposed beyond recognition. In many cases the pins could not be recovered due to their advanced decomposition, but often even when no actual fragment remained, the telltale green stains were present and recorded (either prior to removal of the skeleton or during cleaning of the bone).

Tables 11.1 and 11.2 (at the rear of this chapter) provide a basic profile of the burials with pins. We look at age, gender, and at pin use over time, then turn to the actual placement of pins on the body.

¹ Pins were very fragmentary at the time they were inventoried (see section 11.C on condition and laboratory methods). The number 834 is the number of pins represented based on field and laboratory recording, rather than pin fragments that were recovered and eventually reburied, which numbered 1,232.

Table 11.1. Presence of pins by age category and sex		
Age/Sex	Number of burials with pins	Percent of age/gender category²
female	53	71.62%
male	45	47.87%
adult undeter- mined	9	52.94%
Total adults	107	58.2%
Infants up to 6 months	22	71.05%
Children 6 months to 15 years	81	78.57%
Total subadults	103	73.6%

Sex, age, and time

The distribution of pins was skewed along age and gender lines. Children and infants were more likely to have pins than adults, and women more likely than men. It is possible that clothing is represented by some of the pins – women’s clothing was more likely to use them than men’s. This will be discussed further when we turn to pin placement.

The overall frequency of burials having at least one pin changed little from the Middle Group on (Table 11.3). The lower frequency of Early Group burials with pins is attributable both to the probability that these goods were less abundantly available in the early 18th century and to reduced preservation. If we look at the distribution of burials with pins by sex and age over time, we also see little appreciable change. Burials of women were consistently much more likely to have at least one pin than those of men.

The numbers of pins in adult burials, rather than their presence/absence, exhibit a different pattern, however (Table 11.4). In the Early and Middle Groups, more of the pins were found with women’s burials, while in the later temporal groups slightly more of the pins were found with men than with women. The preponderance of men in the Late Group burials accounts for the distribution in that group, but the Late-Middle burials may point to a change over time in burial attire.

² Totals used to calculate percentages do not include burials for which *neither* age nor sex determination can be made; burials that were completely re-deposited remains; burials where empty coffins were discovered; burials without pins that were missing the cranium. See Table 11.3 for counts.

Sex/age	Early			Middle			Late Middle			Late			Total		
	n*	w/ pins	%	n*	w/ pins	%	n*	w/ pins	%	n*	w/ pins	%	n*	w/ pins	%
female	8	5	62.50	32	23	71.88	10	8	80.00	24	17	70.83	74	53	71.62
male	10	4	40.00	26	13	50.00	18	9	50.00	40	19	47.50	94	45	47.87
adult undete.	5	2	40.00	6	4	66.67	2	1	50.00	4	2	50.00	17	9	52.94
infant	1	1	100	18	14	77.78	3	2	66.67	6	5	83.33	28	22	78.57
subadult	11	3	27.27	67	48	71.64	15	13	86.67	21	17	80.95	114	81	71.05
Total	35	15	42.86	149	102	68.46	48	33	68.75	95	60	63.16	327	210	64.22

*Includes burials with adequate preservation to expect pins, plus burials with “n” preservation from which pins nevertheless were recovered.

Temporal Group	Percent of total pins	
	women	men
Early	70.97	29.03
Middle	77.57	22.43
Late Middle	41.18	58.82
Late	45.28	54.72

Analysis of pin placement

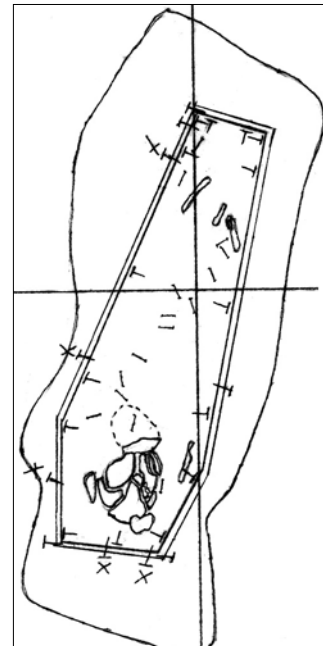
Table 11.2 (at the rear of this chapter) lists burials with pins in four body areas. This information helps us to understand the function of pins, and ultimately sheds light on how the living mourners prepared the body for burial.

Those who prepared the very youngest for burial apparently wrapped them in cloth, then fastened the cloth with numerous pins (Figures 11.1 and 11.2). This seems counterintuitive: complete shrouding would have required little cloth to wrap the smallest children and infants, so why the need for pins at all? We hypothesize that pins had ritual meaning beyond fastening. This meaning may have had to do with protecting the very young or with ensuring adequate means to make a spiritual passage. Without knowing



Figure 11.1.
In situ photograph of Burial 14 (left) and excavator's drawing of pin locations prior to removal (right). Burial 14 was of an infant no more than six months old who shared a grave with a thirty-five to forty-five-year-old woman (Burial 12). The bones of the woman can be seen in the photograph, with the infant's remains superimposed. The pins encircled the infant's skull (at top) and extended down to the knees. (Scale: 1 inch = 1 foot.) Photograph by Dennis Seckler.

Figure 11.2 (right).
In situ drawing of Burial 183, which held an infant between eight and sixteen months old. This burial was one of just two infants that had the head to the east rather than the west. Pins were found in place along the center of the remains from the skull (at bottom of drawing) down the length of the body. North is to right. (Scale 1 inch = 1 foot.) Drawing by M. Schur.



pin, and the social and spiritual connection to the deceased embodied in this ritual moment. A purely utilitarian interpretation (as shroud fasteners) in the burials of children is inadequate. By extension, all of the pins used in shrouding may have had ritual meaning as well as being functional as fasteners.³

Burials with pins *only* on the cranium include 28 adults and 15 subadults. Burial drawings show the precise locations on the crania in many cases, and the pins were typically on the top of the skull or near the ear. The presence of pins on the cranium has been taken to be diagnostic of shrouding in other archaeological contexts (e.g., Hudgins 1977; Hunt 1994:92). It is possible, however, that pins found only at the head represent a piece of cloth used to secure the chin rather than a complete shroud. In cases where cranial pins are absent, chin cloths simply may have been tied. The securing of the jaw was necessary because it would otherwise fall open when the corpse was laid out supine. Richardson (2000:19) records that in traditional English practice, prior to the onset of rigor the eyes would be closed, then the mouth, which would be secured either with the band of a shroud cap or with “a bandage passing under the chin and tied at the top of the head.” According to Litten (1991:72) the chin tie was removed if a tied cap was put on. The tying of the chin was typical in English practice in the 18th century, and chin cloths could be purchased ready-made along with a shroud (Litten 1997:48). Any strip of cloth would have been sufficient, however.

Tying the chin may have been a typical part of the process of laying out the dead among both white and black New Yorkers, but pinning the chin cloth suggests a variant practice. If, on the other hand, cranial pins reflect the special arrangement of the shroud so as to expose the face, it is possible that for these deceased individuals the face was meant to be in view at some point during the funeral proceedings, perhaps during a wake.

About equal numbers of African Burial Ground men (14) and women (12) had pins *only* on the cranium, but the distribution by age is skewed toward adults aged thirty or over. Children’s chin cloths may typically have been tied rather than pinned. Tying rather than pinning also may have been dictated by religious observance, as in Muslim shrouding. If the cranial pins indicate arrangement of the shroud so as to show the face, such a practice may have been reserved mainly for older individuals.

There were a number of burials with pins that also had possible evidence of clothing. For example, a child (Burial 22) and two women (Burials 213 and 342) had aglets (small copper-alloy “tubes” that cover the ends of laces) as well as pins. In these cases the aglets may represent clothing (see Chapter 12) or the ties of shrouds. The locations of the aglets on the body were not provenienced in the field because they were indistinguishable from pins. The aglet in Burial 213 was determined to be from the left parietal.

Other burials with evidence for clothing that also had pins include one of a man with a jacket (Burial 6) and three adults with apparent knee breeches (Burials 203, 259, and

³ In his early study of African-American burials from College Landing, Carter Hudgins (1977:71) similarly noted that “[t]he placement of pins and location of the stains assumed a pattern that indicated cultural significance rather than random occurrence.”

415). Thirteen adults with miscellaneous buttons or button fragments that may represent clothing also had at least one pin. There are several possible reasons for the presence of both pins and buttons:

- Individuals were both clothed and wrapped. Four of the people buried with both pins and buttons (Burials 325, 353, 385, and 415) had pins only at the cranium or cranium and jaw. Only one of these had clear-cut evidence for clothing, Burial 415; perhaps preparation of this man’s body included securing the jaw with a chin cloth, which was left in place at burial.
- They wore buttoned undergarments beneath their shrouds. Bone buttons, likely to represent undergarments were found with Burials 37, 171, 257, 313, 353, and 385.
- They were clothed rather than wrapped and some of their clothing was pinned.
- Their buttons were not from clothing but rather were worn on a string or placed in the hand as a memento or talisman at the time of burial.

Some adults had pins on the head, torso, and extremities. These cases, like those of children with pins along the body, probably indicate winding sheets that may have been pinned along their length.⁴

Table 11.5.
Number of burials with pins in
four body areas, by sex

	Pins on Cranium	Pins on Jaw/Neck	Pins on Torso	Pins on Extremities
female	29	10	26	9
male	25	7	12	7

*Only adults for whom gender could be definitely determined are included.

While pin distributions by sex on cranium, jaw, and extremities were comparable, more than twice as many women than men had pins on the torso area (Table 11.5). This is consistent with the hypothesis that in some cases pins represent clothing fasteners rather than shrouds. Pins were used more often than buttons to fasten women’s clothing in the 18th century (Figure 11.3; see Chapter 12.B). Of the adults with pins *only* on the torso, six were women and three were men.

11.B. Pins and shrouds in 18th-century New York

Mass-produced in the period of the African Burial Ground cemetery, straight pins would have been available at shops, at the markets, and no doubt from peddlers, and they also could have been obtained by women and girls who did the sewing in European

⁴Litten (1991:59) cites this practice for English shrouding in the 15th century, but does not trace its history.



Figure 11.3.
Detail from “Jersey Nanny”
(mezzotint) by John
Greenwood, American, 1748.
This depiction of a working-
class woman shows two items
of clothing fastened with pins.
The scarf or shawl is pinned at
her throat; her short gown,
which wraps across her torso, is
pinned on the left side of her
chest. Museum of Fine Arts,
Boston. Source: Kidwell
(1978:52).

households. Cloth for shrouds or winding sheets may have been considered, along with the coffin, a *sine qua non* of proper burial. As we noted in Chapter 2, there is scant evidence, but wrapping the dead in some manner was practiced in at least some of the African cultures to which captives brought to New York belonged. There is no documentary evidence for provision of cloth by New York’s household heads as there is for coffins, though such a custom may have developed. Alternatively, like pins, cloth would have been available to blacks through several other means: purchase at the many shops that dealt in cloth in the 18th century, or from peddlers with such wares; recycling from the deceased’s or a relative’s household; or through appropriation that would have come under the heading of “theft.”

Litten (1991:57-84) describes shrouding in 15th- through 19th-century England, relying for the most part on information gleaned from sculptures, drawings, and paintings; Richardson (2000:20-21) draws on folklore and on illustrated funeral invitations to provide a picture of traditional practices. The winding sheet was commonly used for burials in post-medieval England, and the custom would have come to New York with European colonists. In English (and more widely European) practice, a winding sheet consisted of a rectangular length of cloth that enclosed the corpse, tying above the head and below the feet. The edges of the sheet, about three times the width of the corpse and six inches longer at both head and foot, were fastened by either stitching or pinning, and each end was tied with a strip of cloth. Illustrations from the 16th through 18th centuries show English corpses wrapped in generous widths of material with gathered ends. In some cases, the illustrations show that the fabric was pushed back to reveal the

deceased's face; otherwise the winding sheet completely concealed the corpse. In Europe and among European colonials, specific garments called "shrouds," as opposed to winding sheets, came into fashion in the 18th century. These somewhat resembled an open-backed nightshirt with a tie at the feet. The shroud had a drawstring tie at the neck, rather than above the head, and sleeves with drawstrings or tapes at the wrists. A fabric cap complemented the dress. Men and women seem to have been dressed for the grave in similar, if not identical, fashion.

Blanche White, who advertised as an undertaker in New York in 1768, sold "shrouds and sheets" (Gottesman 1938:142), suggesting that these were two different items, the former probably a garment as distinct from a winding sheet. There was probably no difference between the sheets used for bedding and those used for winding sheets, at least among the poor. Household mistresses may have offered old bed sheets for use as shrouds by enslaved and free servants, while using heirloom linens or purchasing new sheets or garment shrouds for their own family members.

In the North American colonies there was no regulation of the type of cloth used for shrouding; linen and wool would have been most common.⁵ Lengths of cloth, like wood for a coffin, would have represented no small expense for bereaved family and friends, and it was probably impossible to provide the flowing or repeatedly-wrapped shrouds that are depicted on the well-to-do in early European sculptures and prints. A proper Muslim shroud, too, requires yards of cloth, consisting of three large pieces for a man and five for a woman, but the expense of so much cloth would have been prohibitive for the poor. Enslaved Africans would have adopted their mortuary rituals to the constraints they faced.

Surviving records from funeral suppliers do not detail the colors of cloth used for shrouds or winding sheets, but in most cases, illustrations appear to show white or pale fabrics dressing the dead (see Litten 1991:57-84). Antebellum accounts from the American South suggest that enslaved plantation laborers usually used white cloth to wrap their dead (Roediger 1981:169). Muslim shrouds are always supposed to be white, but colors used in the 17th or 18th centuries in the areas of Africa from whence New York's captives came were not recorded.

11.C. The pin assemblage and associated cloth

Pins recovered from graves at the African Burial Ground were very uniform. Almost all were fragmentary (if not already broken *in situ*, they usually broke when handled). Those that were whole or were in pieces that could be measured were just under to just over one inch long. Only five whole pins were present at the time of the Howard University inventory of the assemblage. Examples of recovered pins are shown in Figure 11.4. (A

⁵ In the late 17th century, the English Parliament passed *The Act for Burying in Woollen*, which prohibited the use of linen or other fabrics as burial garments (in order to protect the woolen industry). Well-to-do families sometimes flouted this law, and considered the fines imposed as one of the costs of a funeral (Litten 1991:74). The act remained in effect until the early 19th century in England.



photograph of the replicas of pins that were created for the African Burial Ground by artisans at Colonial Williamsburg is in Chapter 1.)

Figure 11.4.
Pins, copper alloy.
Burial 12, Catalog # 253-
B.001, .002. The bottom pin
is 2.2 cm in length.
Photograph by Jon Abbott.

Cloth was normally recovered along with larger metal artifacts such as buttons or coins, but was also recovered with pins from a few of the burials. The identified textiles are of linen and cotton. Burials with textile remnants associated with pins or aglets (rather than buttons or cuff links) are listed in Table 11.6 (see Chapter 12 for textiles associated with buttons). Also included in this table are textile fragments that were associated with metal items (coins, for example) that would have aided preservation but where buttons or cuff links were absent. The fragments listed in Table 11.6 may represent shrouds, but some might also be from clothing. One man, in Burial 415, had clothing represented by numerous buttons, but is included because we know he also had cloth pinned on the cranium (Figure 11.5). Examples of textiles from possible shrouds are shown in Figures 11.6 and 11.7.



Figure 11.5. (left)
Pin with fabric. Burial 415, Catalog # 2097-B.
This burial held a man buried in clothing, but
also with this pin and cloth on the cranium.
Recovered during laboratory cleaning of the
skeletal remains. The ruler is measured in .5
mm. Photograph by Jon Abbott.



Figure 11.6. (right)
Textile, unidentified, woven.
Burial 104, Catalog # 847-B.003.
Length 5 mm. Photograph by Jon Abbott.



Figure 11.7.
Textile from a possible shroud
that had adhered to a coin.
Burial 230, Catalog # 1216-B.002.
The coin is 22 mm diameter.
Photograph by Jon Abbott.

Table 11.6.		
Textile fragments recovered (not in association with buttons)		
Burial/ Catalog #	Type of fragment	Comments
Burial 22 #344-B.004	linen	Plain weave, partially mineralized. A single aglet was recovered from this burial.
Burial 18	unidentified possible textile	Found in soil adhering to left parietal during cleaning of remains; not conserved
Burial 46 #605-B	unidentified	found in soil pedestal during cleaning of remains; not conserved
Burial 71 #813-B.003	unidentified	textile associated with pin; not listed in conservation report
Burial 104 #847-B.003	unidentified	not listed in conservation report
Burial 109 #852-B.002	linen	
Burial 121 #866-B	unidentified	pseudomorph (exact replica of textile formed by corrosion products)
Burial 136 #881-B.002	linen	
Burial 156 #901-B	fiber, unidentified	found in soil pedestal during cleaning of remains; not conserved
Burial 169 #926-B.001	cotton	
Burial 180 #960-B	fiber, unidentified	found in soil pedestal during cleaning of remains; not conserved
Burial 219 #1200-UNC	unidentifiable	provenience unclear
Burial 225 #1211-B.004	unidentified	not listed in conservation report
Burial 230 #1216-B.002	Unidentified	Adhering to either side of a copper-alloy coin
Burial 252	Unidentified	Impression of cloth noted in field records, not recovered
Burial 363	Unidentifiable	Single fiber from cranium
Burial 389 #2023-B.002	unidentifiable	
Burial 415 #2097-B	unidentified	Recovered with pin during cleaning of cranium in laboratory (not conserved)

Recovery, condition and treatment, chain of custody

During excavation, pin recovery was not always possible due to the state of decomposition of these fragile items. When recovered in the field, the pins or pin fragments were placed in small plastic containers or bags and brought to the project laboratory. In the laboratory, conservators noted that pins were mineralized and highly fragmented, often consisting only of corrosion product. The pins were desalinated and batch-treated with a corrosion inhibitor, vacuum-impregnated with the acryloid B-72, and stored in polyethylene boxes. The exact location of each pin within a burial (e.g., cranium, vertebrae, etc.) was either not recorded on the field containers or this information was not retained after laboratory staff re-boxed the items.

These pins were inventoried and a few examples photographed by laboratory personnel. They were re-examined by Howard University Archaeology Team personnel during laboratory analysis in 1998-99 and in 2001, and all fragments were counted (head and shank, shank, or shank with point). Final, high-quality photographs of representative pins were taken by Jon Abbott in August 2001. At that time, the pins were packed by the Bronx Council of the Arts and shipped by Artex to its art storage facility in Landover, Maryland, pending preparation for reburial. The pins were re-inventoried by the Army Corps of Engineers at Artex in 2003, and subsequently transshipped back to New York, where they were placed in coffins for reburial.

In many cases pins were within soil pedestals adhering to skeletal remains when they were removed from the ground. When such pins were recovered during cleaning of the bones at the Howard University Cobb Laboratory, they were placed in polyethylene bags and were labeled according to which skeletal element they came from. These pins were not treated by conservators. They were retained at the Cobb Laboratory and shipped to the New York laboratory in 2003, where they were inventoried by Howard University Archaeology Team staff. In September 2003 they were re-inventoried by the Army Corps of Engineers and placed in coffins for reburial.

The low rate of textile survival is due to the soil conditions at the site. Textile and fiber fragments were recovered in association with some pins during field excavation, preserved by copper salts associated with the degradation of the copper alloy. Only the more robust fibers and textile fragments were cleaned in the laboratory. Of the possible shroud fragments, three were identified as linen and one as cotton. In some cases pseudomorphs (corrosion products that permeated the fibers and replaced them, creating an exact replica) of cloth were recovered. Pseudomorphs from Burials 121 and 135 were examined and photographed microscopically. Another possible pseudomorph from Burial 186 was investigated with scanning electron microscopy, which indicated mineralized wood but was inconclusive as to the presence of textile or fiber.

In two cases, fibers brought to the laboratory were identified as rodent hairs (these are not included in the list above).

Methodology

Pins were examined visually, some under magnification. Pin fragments were recorded in the artifact inventory as head and shank, shank, or shank with point. This allows for counting minimum numbers of pins for each burial in cases where they were not noted in the field and shown on field drawings. Pins were counted as follows: all pins recorded *in situ* were counted for the analysis of pin placement. Where field recording was not precise or pins were recovered during laboratory cleaning, an inventoried pin fragment was counted as one pin only if it included the pinhead, or was the only fragment from a burial location, or had the point and no fragment with a head present.

Pin placement within a burial was recorded in the database where possible. This information was obtained from field records and drawings or, in the case of pins from pedestalled remains, from the skeletal laboratory staff, who were careful to label pins according to skeletal element.

Manufacture and dating

The pins found at the African Burial Ground were copper alloy, drawn with wire-wrapped heads, some with a tinned surface visible. These were typical manufactures of the African Burial Ground period. Wrapped-head pins were common by the beginning of the 17th century and until the early 19th century (Noël Hume 1969:254). The pins, therefore, do not provide specific dating for burials.

Table 11.2.
Burials with pins and pin locations

Burial	Age low	Age high	Sex	Temporal group	Cranium	Jaw/neck	Torso	Extremities	No provenience	Preservation
B001	20	25	female?	late	1	0	0	0	0	y
B005	0.5	1	undete	lmid	1	6	12	0	0	y
B006	25	30	male?	late	3	0	3	0	1	y
B007	3	5	undete	lmid	3	0	3	0	0	y
B008	0	0.5	undete	mid	0	1	0	0	1	y
B012	35	45	female	late	1	1	1	0	0	y
B014	0	0.5	undete	late	4	4	14	4	0	y
B016	50	60	female	mid	1	0	1	0	0	y
B017	4	6	undete	mid	2	1	2	1	0	y
B019			undete	mid	2	0	0	0	0	y
B020	45	50	male	late	0	0	0	4	0	n
B022	2.5	4.5	undete	mid	2	0	3	0	0	y
B023	25	35	male	early	1	0	0	0	0	y
B024	3	6	undete	mid	1	0	5	0	0	y
B027	1.4	2.8	undete	mid	2	4	7	0	0	y
B030	7	11	undete	mid	0	2	3	0	0	y
B031	14	16	undete	mid	3	0	11	0	0	y
B032	50	60	male	mid	0	0	0	0	1	y
B035	8	10	undete	mid	1	0	0	0	0	y
B037	45	55	male	late	1	0	5	1	0	y
B038	12	18	female	early	1	0	0	0	0	y
B039	5	7	undete	mid	2	1	4	3	0	y
B040	50	60	female	late	0	0	0	0	1	y
B043	2.5	4.5	undete	mid	3	0	0	0	0	y
B046			female?	mid	0	1	0	0	0	y
B049	40	50	female	mid	4	0	0	0	0	y
B053	0.25	0.75	undete	mid	4	0	1	1	0	y
B055	3	5	undete	mid	2	0	2	0	0	y
B056	30	34	female	mid	2	0	3	0	0	y
B057	0.88	2.16	undete	mid	0	1	0	0	0	y
B058	3.5	4.5	undete	late	2	0	0	0	1	y
B059	0	0.25	undete	late	1	1	4	0	0	y
B060	0.25	0.75	undete	lmid	1	3	1	0	0	y
B063	35	45	male	late	1	0	0	0	0	y
B064	0.38	0.88	undete	lmid	0	0	1	0	0	y
B065	0	0.49	undete	late	3	3	0	0	0	y

Table 11.2.
Burials with pins and pin locations

Burial	Age low	Age high	Sex	Temporal group	Cranium	Jaw/neck	Torso	Extremities	No provenience	Preservation
B067	40	50	male	lmid	0	0	6	0	0	y (no cranium)
B071	25	35	female	late	0	0	1	0	2	y
B072	1	2	undete	early?	0	3	2	0	0	y
B073	20	30	female?	mid	2	1	1	1	0	y
B075	0	0	undete	mid			4		1	y
B078	16	19	undete	early	1				0	y
B079	0.25	0.75	undete	mid	4	0	4	0	0	y
B081			female	mid	0	0	1	0	0	y (no cranium)
B082	18	25	female	mid	2	0	0	0	0	y (cranium only)
B084	17	21	female	early	0	3	0	0	0	y
B085	0.25	0.75	undete	mid	0	0	2	0	0	y
B086	6	8	undete	late	1	0	0	0	1	y
B087	4	6	undete	mid	3	0	0	0	0	y (cranium only)
B089	50	60	female	lmid	0	0	2	0	0	y
B090	35	40	female	mid	2	0	1	0	0	y
B091	0.67	1.3	undete	lmid	0	3	2	0	0	y
B094			undete	mid	1	0	3	0	0	y
B095	7	12	undete	late	1	0	1	0	0	y
B097	40	50	male	late	5	0	0	0	0	y
B099	6	10	undete	late	0	1	1	0	0	y
B101	26	35	male	lmid	5	0	1	0	0	y
B102	1.33	2.67	undete	mid	0	0	0	0	1	y
B103			undete	mid	0	0	1	0	0	y
B104	30	40	female	mid	0	1	0	1	1	y
B107	35	40	female	lmid	0	0	2	0	0	y
B108	0.25	0.75	undete	lmid	0	1	3	0	0	y
B109	0.67	1.33	undete	lmid	1	1	1	0	0	y
B111	0.67	1.33	undete	mid	0	0	1	0	0	y
B112	0.25	0.75	undete	mid	0	0	0	0	4	y
B115	25	35	female	mid	1	0	0	0	0	y
B116	45	55	male	mid	2	0	0	0	0	y
B119	35	45	male	lmid	1	1	1	0	0	y
B121	2.5	4.5	undete	early	2	0	0	0	0	y

Table 11.2.
Burials with pins and pin locations

Burial	Age low	Age high	Sex	Temporal group	Cranium	Jaw/neck	Torso	Extremities	No provenience	Preservation
B122	18	20	female	mid	0	2	4	0	0	y
B123	0.67	1.33	undete	lmid	3	2	6	0	1	y
B126	3.5	5.5	undete	mid	2	0	1	0	0	y
B127	0.67	1.33	undete	mid	0	3	6	2	1	y
B128	0	0.17	undete	mid	1	4	2	0	1	y
B130	1	2	undete	mid	1	0	1	0	0	y
B131			undete	late	1	0	0	0	0	n
B133	1	2	undete	mid	3	3	2	0	0	y
B134	40	50	female	late	0	0	0	0	1	y
B136			undete	mid	0	0	1	0	3	y
B143	6	10	undete	mid	1	0	0	0	0	y
B144	0	0.17	undete	mid	0	0	0	0	4	y
B146	0	0	undete	lmid	3	4	1	0	0	y
B147	55	65	male	late	0	0	4	0	0	y
B148	12	18	undete	mid	4	1	1	0	0	y
B149	0.5	1	undete	mid	2	0	1	0	0	y
B151	35	45	male	late	0	1	0	0	0	y
B153			female?	late	1	0	4	0		y
B154	25	29	female	mid	3	0	3	2	0	y
B159	25	35	female	mid	2	1	8	0	0	y
B160	3.5	5.5	undete	mid	0	0	0	0	1	y
B166	0.5	1	undete	late	3	0	5	0	0	y
B167	8.5	12.5	undete	mid	0	0	0	0	1	y
B169	5.5	9.5	undete	mid	3	0	0	0	0	y
B171	44	60	male	late	0	0	5	0	0	y
B173	0.25	0.75	undete	late	0	1	3	0	0	y
B174	17	18	male	late	0	0	0	0	1	y
B175	24	28	male	mid	0	0	0	0	1	n
B176	20	24	male	lmid	0	1	0	0	0	y
B177	30	60	undete	early	1	0	0	0	1	y
B179	25	30	male	late	0	0	0	0	1	y
B180	11	13	undete	late	0	3	3	0	0	y
B183	0.63	1.13	undete	late	1	2	7	5	0	y
B186	0	0.17	undete	late	4	1	3	0	0	y
B187	1.5	4	undete	late	1	0	0	0	1	y
B189			undete	mid	0	0	0	1	0	n
B190	0.38	0.88	undete	late	0	3	5	0	1	y
B191	25	30	male	late	0	0	0	2	1	y

Table 11.2.
Burials with pins and pin locations

Burial	Age low	Age high	Sex	Temporal group	Cranium	Jaw/neck	Torso	Extremities	No provenience	Preservation
B192	40	60	female	late	1	0	3	0	0	y
B195	30	40	female	late	0	0	0	1	0	y
B196	20	24	undete	late	0	0	1	0	0	y
B199	30	40	female	late	0	0	0	0	1	y
B201	1.5	3.5	undete	late	0	0	1	0	0	y
B203	12	18	undete	late	0	0	1	0	0	y
B205	18	20	female	late	1	1	3	0	3	y
B210	35	45	male	late	0	0	0	0	1	y
B213	45	55	female	mid	2	1	1	0	0	y
B214	45	55	male	late	0	0	0	1	0	y
B215	0	0.16	undete	mid	0	0	0	0	1	y
B216	0	0.16	undete	lmid	0	0	4	0	1	y
B219	4	5	undete	lmid	1	0	1	0	0	y
B221	30	60	male	early	2	0	0	0	0	y
B225	0.5	1.25	undete	late	1	1	1	1	0	y
B226	0	0.17	undete	early	4	1	1	0	0	y
B229	6.75	11.25	undete	lmid	0	1	0	0	1	y
B230	55	65	female	late	0	1	1	0	0	y
B235	28	42	female	lmid	0	0	1	0		y
B236	4	5	undete	late	0	0	0	0	1	y
B239	1.5	3.5	undete	mid	1	2	1	0	0	y
B241	55	65	female	late	0	0	5	1	0	y
B242	40	50	female	late	0	0	1	0	0	y
B244	5	9	undete	late	1	0	0	0	0	y
B245	2.5	4.5	undete	mid	2	1	0	0	1	y
B252	1	2	undete	late	3	1	1	1	0	y
B253	13	15	undete	lmid	0	0	1	1	0	y
B255	0	0.17	undete	mid	1	0	0	0	0	y
B257	30	40	male	late	4	2	3		0	y
B259	17	19	female?	late	0	0	0	0	1	y
B265	0.5	1	undete	mid	1	0	0	0	0	y
B266	25	35	female	late	0	0	0	1	0	y
B268	0	0.5	undete	mid	0	1	2	0	0	y
B281			male?	early	2	0	0	0	0	y
B283	0.33	0.67	undete	mid	0	0	1	0	0	y
B289	5	9	undete	lmid	1	1	2	0	0	y
B290	45	55	male	lmid	1	0	0	0	0	y
B294	0.5	1	undete	mid	3	0	3	1	0	y

Table 11.2.
Burials with pins and pin locations

Burial	Age low	Age high	Sex	Temporal group	Cranium	Jaw/neck	Torso	Extremities	No provenience	Preservation
B295	30	50	female	mid	2	0	0	1	0	y
B299	40	50	male	late	2	0	0	0	0	y
B300			undete	mid	1	0	0	0	0	y
B303	0.5	1	undete	mid	0	0	0	0	2	n
B305	-0.33	0.33	undete	late	1	0	0	0	1	y
B311	0.25	0.75	undete	lmid	5	2	0	0	1	y
B312	0	0.3	undete	mid	3	3	0	9	0	y
B313	45	55	male	late	1	1	1	0	0	y
B315	30	40	female	mid	1	0	0	0	0	y
B316	18	20	female	lmid	1	0	3	0	2	y
B319			female	lmid	2	0	4	0	1	n
B320	2	4	undete	mid	0	0	1	0	0	y
B321	1	2	undete	mid	2	2	7	1	0	y
B325	25	35	male	late	1	0	0	0	0	y
B328	40	50	female	mid	1	0	4	1	0	y
B332	35	40	male?	lmid	1	0	0	0	0	y
B334			undete	mid	1	0	0	0	0	y
B335	25	35	female	mid	5	3	4	0	0	y
B336	0.5	1	undete	mid	0	1	1	0	0	y
B338	33	65	female	lmid	1	0	0	0	0	y
B340	39.3	64.4	female	early	8	2	2	0	0	y
B341			male	mid	0	0	1	0	0	y
B342	25	35	female?	late	1	1	1	0	1	y
B343	19	23	male	late	0	0	1	0	0	y
B346	50	70	female	late	3	0	1	1	0	y
B348	1	2	undete	mid	0	0	2	0	0	y
B351	50	60	male	mid	1	0	1	0	0	y
B352			male	lmid	2	1	0	0	0	y
B353	24	34	male	mid	2	1	0	0	2	y
B356			undete	mid	5	8	1	1	2	y
B360			undete	mid	0	0	0	0	1	y
B361	33	57	male	early	3	0	1	0	0	y
B362			undete	lmid	4	1	0	0	0	y (cranium only)
B363	1	2	undete	late	2	1	3	4	0	y
B368	10.5	13.5	undete	mid	0	0	1	0	1	y
B369	40	50	male	late	1	0	0	0	0	y

Table 11.2.
Burials with pins and pin locations

Burial	Age low	Age high	Sex	Temporal group	Cranium	Jaw/neck	Torso	Extremities	No provenience	Preservation
B370	2	4	undete	mid	2	0	1	0	0	y
B373	45	60	female	lmid	1	0	0	0	0	y
B374	0	0.25	undete	mid	5	2	0	2	0	y
B375	16	18	female	mid	0	0	1	0	0	y
B376	45	65	male	lmid	2	0	6	0	0	y
B380	40	60	male	mid	0	0	0	2	0	y
B382	4	5	undete	early?	0	0	0	0	1	y
B383	14	18	female	mid	1	0	0	0	0	y
B385	40	60	female	mid		0	1	0	0	y
B388	29	57	female	early	3	0	0	0	1	y
B389			female	early	2	0	0	0	0	y
B393	-0.17	0.17	undete	mid	5	4	0	3	0	y
B395	43	53	male	lmid	1	0	0	0	0	y
B396	6.5	8.5	undete	mid	1	2	1	1	0	y
B397	30	40	female	mid	1	0	0	0	0	y
B398	25	35	undete	mid	0	0	0	0	1	n
B399	0	0.3	undete	mid	7	1	0	1	0	y
B400	25	35	male	mid	2	0	0	0	0	y
B403	39	65	male	mid	1	0	0	0	0	n
B405	6	10	undete	mid	2	0	0	0	0	y
B406	0	0.5	undete	mid	5	0	5	2	1	y
B412	0	0	undete	mid	0	0	0	0	7	y
B413	50	70	female	lmid	1	0	0	0	0	y
B414	39	59	male	mid	2	0	0	0	0	y
B415	35	55	male	mid	2	0	0	0	0	y
B417	9.5	14.5	undete	mid	0	1	0	0	0	y
B419	48	62	male	mid	2	0	0	0	0	y
B427	16	20	male?	mid	0	0	0	1	0	y
B428	40	70	female	mid	1	0	0	0	0	y