OSSUARY BURIALS IN MIDDLE ATLANTIC LANDSCAPES

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Ossuaries are mass graves containing the gathered, often disarticulated, skeletal remains of multiple individuals. By definition, they are secondary graves, meaning that the remains were originally buried or stored elsewhere, and then disinterred or amassed for reburial in a single collective grave. This article will explore the various “mechanics” of ossuary burial, including discussions of primary burial treatments, preparations for secondary burial, and the eventual mass reburial of multiple individuals in a communal grave pit. This review takes a largely archaeological perspective, and as such will describe known Middle Atlantic ossuaries (from Cape Henlopen, Delaware to Cape Fear, North Carolina), reviewing historical accounts and archaeological evidence, and compiling traits common to these features. Particular attention will be paid to the internal structure of these ossuaries to challenge the assumption that these features were merely “jumbles of bones.” Also examined will be the role that these mortuary features may have played in the social landscape, exploring status from both individual and community perspectives, and perhaps setting the stage for future interpretations of the meanings of ossuaries.

INTRODUCTION

Ossuary burial is a common form of interment practiced during late prehistory along the Atlantic coast, especially in the Southeast and Middle Atlantic regions. True ossuaries have been found as far south as the Pee Dee River in South Carolina (Rathbun 1989:12; Reed 1998) to as far north as Cape Cod, Massachusetts (McManamon et al. 1986). Ossuaries are also well documented among the historic Huron in the Great Lakes region in Ontario (see Thwaites 1897[X]:279-305; Kidd 1953; Tooker 1964). In addition, similar features—that of sand burial mounds containing multiple bundle burials and cremations—occur in the Southeast from Florida (Milanich 1994:260) to the South Coastal region of North Carolina (Trinkley 1989:82-83).

Within the Middle Atlantic region, ossuaries occur in the tidewater regions of North Carolina, Virginia, Maryland, and Delaware (see Figure 1). In fact, ossuaries have a long history
of archaeological study in the region, with several sites providing for some of the earliest archaeological literature (e.g., Reynolds 1883, 1889; Mercer 1897).

In terms of age, most Middle Atlantic ossuaries date to between A.D. 1300 and 1650, although individual ossuaries occur outside this date range. On the earlier end of the spectrum are sites such as Cold Morning in North Carolina (A.D. 950; Ward and Davis 1999:222) and The Maine on Governor’s Land in Virginia (A.D. 1245 and 1260; Outlaw 1990:85-91). Early radiocarbon and/or ceramic seriation dates are also reported at Wilcox Neck (A.D. 900-1250) and Edgehill (A.D. 1180-1410) in Virginia (Gallivan and Mahoney 2007:4-5). Consideration of the sand burial mounds pushes this tradition of secondary burial back even further, with the Refuge-Deptford mortuary complex dating from around 1500 B.C. to A.D. 600 along the Georgia and Florida coast (Thomas and Larsen 1979). At the late end of this continuum, secondary burial appears to last into the 1740-1750s among the Nanticokes in Pennsylvania, based on historical accounts (see below).

**HISTORICAL ACCOUNTS**

Throughout the Middle Atlantic and the Southeast, early European explorers recorded burial practices among the region’s varied Native tribes. One of the first accounts is Thomas Hariot’s (1590: Plate XXII) description of how the remains of chiefs of the Carolina Algonkians were disemboweled, stripped of flesh, wrapped in leather and skin as if to appear life-like, and placed atop a scaffold in a charnel house (the latter is depicted in the famous John White watercolors and Theodor de Bry’s engravings). From his 1607-1609 voyages to the Chesapeake region, Captain John Smith (Arber 1910:75) relates a dichotomy in the burial practices of
Virginia Algonkians. “For their ordinary burials, they digge a deep hole in the earth with sharpe stakes; and the corp[s]es being lapped in skins and mats with their ieweles, they lay them vpon sticks in the ground, and so couer them with earth.” On the other hand, for their “kings,” “[t]heir bodies are first bowelled, then dryed vpon hurdles till they bee verie dry, and so about the most of their iointes and necke they hang bracelets or chaines of copper, pearle, and such like, as they vse to weare: their inwards they stuffe with copper beads and couer with a skin, hatchets, and such trash. Then lappe they them very carefully in white skins, and so rowle them in mats for their winding sheetes. And in the Tombe, which is an arch made of mats, they lay them orderly.”

Both Smith (Arber 1910:75) and Henry Spelman (Relation of Virginea 1613) mention the use of scaffolds, with Spelman (Arber 1910:cx) adding that once the flesh had decayed, the bones were bundled and hung in their houses where they remained until the houses collapse from age, thereby burying the human remains in the house ruins. Thomas Glover (1676:24-25) notes, “[t]hey burn the Bodies of the dead; and sow up the ashes in Matts, which they place near the Cabbins of their Relations.” From North Carolina, John Lawson (1709:22) recounts yet another variant treatment, “[a]s soon as the Flesh grows mellow, and will cleave from the Bone, they get it off, and burn it, making all the Bones very clean, then anoint them with the Ingredients aforesaid, wrapping up the Skull (very carefully) in a Cloath artifically woven of Possums Hair…The Bones they carefully preserve in a wooden Box, every Year oiling and cleansing them.”

Frustratingly, however, none of these accounts describe ossuary burial. (This should not be unexpected, as it was unlikely that Native Americans, suspicious of the newly arrived Europeans, would share the details—or allow observation—of one of their most sacred ceremonies.) It would not be until the early Canadian explorers arrived in Huronia, as well as
the French Jesuit missionaries who followed, that the first descriptions of the ossuary ceremony—the culmination of the “Feast of the Dead”—would be recorded. From 1618, Samuel de Champlain relates:

As regards the burial of the dead, they take the body of the deceased, wrap it in furs…then lift it up on four posts on which they build a cabin covered with tree-bark…Others they put into the ground…and over this grave likewise they erect a little cabin…[T]hese bodies are buried only for about 8 to 10 years…After…they take all the bones of the dead, which they cleanse…[and] they dig a great pit 10 fathoms [60 feet] square in which they place these said bones with the necklaces, wampum chains, tomahawks, kettles, sword-blades, knives, and other trifles…and they cover the whole with earth, placing upon it several large pieces of wood, with a quantity of posts that they put around it, erecting a covering upon them.

(Biggar 1929:160-163)

Five years later, the Franciscan missionary Gabriel Sagard described the Hurons’ “great festival of the dead” (Wrong 1939:211-214), including the ossuary itself:

The grave is dug outside the town, very large and deep, capable of containing all the bones, furniture, and skins offered for the dead. A high scaffolding is erected along the edge, to which all the bags containing bones are carried; then the grave is draped throughout, both the bottom and the sides, with new beaver skins and robes; then they lay in it a bed of tomahawks, next kettles, beads, necklaces, and bracelets of wampum, and other things given by the relations and friends. When this has been done the chiefs, from the top of the scaffold, empty and turn out all the bones from the bags into the grave upon the goods, and they cover them again with other new skins, then with tree-bark, and after that they put back the earth on top, and big pieces of wood. To mark their respect for the place they sink wooden posts into the ground all round the grave, and put a covering over it, which lasts as long as it can.

(Wrong 1939:212)

The French Jesuit Jean de Brébeuf adds some additional details to these earlier accounts, describing the Feast of the Dead that he witnessed among the Hurons at Ossossané in 1636 (Thwaites 1897[X]:279-305). According to Brébeuf, the Feast of the Dead ceremony was held about every 12 years. Each family tended to its own dead, removing remains from their primary graves, stripping the bones of all flesh, and then placing the well-cleaned bones into bags. The
bodies of the recently dead were left in their current state and simply covered with new robes. The grave pit was about ten feet deep and five brasses (30 feet) wide, and its sides and bottom were lined with beaver skins. The whole bodies were placed in the bottom of the pit along with 3 large kettles, the bundles of bones were then emptied indiscriminately into the pit, and the bones were arranged by men using poles. When the pit was full—within about two feet—the robes bordering the edge of the pit were folded back, and the remaining space was covered with mats and bark. The pit was then heaped with sand, poles, and wooden stakes.

Remarkably, the ossuary at Ossossané was identified in 1946 and subsequently excavated archaeologically, thereby confirming many of the details recorded by Brébeuf in 1636 (Kidd 1953).

As mentioned earlier, there are indications that some form of secondary burial continued among the Nanticokes until at least the mid-1700s. Evidence for this is somewhat anecdotal, but is reinforced by multiple sources. In 1745, missionary David Brainerd (Edwards 1818:350) tells of a mixed Conoy (Piscataway) and Nanticoke group on the Juniata River of Pennsylvania who did not bury their dead in the customary fashion. Instead, they placed the bodies above ground in a crib made for that purpose, and allowed the flesh to decay. Once the flesh was gone, the bones were scraped and washed, and then buried with ceremony. John Heckewelder, a Moravian missionary stationed in Pennsylvania, relates,

These Nanticokes had the singular custom of removing the bones of their deceased friends from the burial place to a place of deposit in the country they dwell in. In earlier times, they were known to go from Wyoming and Chemenk [valleys in Pennsylvania], to fetch the bones of their dead from the Eastern shore of Maryland, even when the bodies were in a putrid state, so that they had to take off the flesh and scrape the bones clean, before they could carry them along. I well remember having seen them between the years 1750 and 1760, loaded with such bones, which, being fresh, caused a disagreeable stench, as they passed through the town of Bethlehem.

(Heckewelder 1876:92)
In a 1766 diary entry, Moravian missionary David Zeisberger added confirmation to these earlier descriptions, “For whenever one of them dies anywhere—no matter where—and is buried, then friends come, dig him up, cut off all the flesh from his bones and take these with them” (translated in Shaffer 2005:146). Zeisberger later (ca. 1779-80) provided additional detail:

The Nanticoks [sic]…have this singular custom that about three or four months after the funeral they open the grave, take out the bones, clean them of the flesh and dry them, wrap them up in new linen and inter them again. A feast is usually provided for the occasion, consisting of the best they can afford. Only the bones of the arms and legs of the corpse are thus treated. All the rest is buried or burned.

(Hulbert and Schwarze 1910:90)

The general Nanticoke burial customs—and those recounted by Brainerd in particular—are confirmed archaeologically at Conoy Town (ca. 1718-1743) in Lancaster County, Pennsylvania, where cemetery excavations have revealed 71 bundle burials in grave pits containing from one to five individuals (Kent 1984:392-395).

Perhaps the latest account of Nanticoke practices related to secondary burials comes from William Vans Murray, who in 1792 visited the village of Locust Neck on the Choptank River in Dorchester County, Maryland. Here he observed the remains of the Nanticokes’ last king, Wyniaco, in a “Quacasun-house” where he had reposed for the past 70 years (Speck 1922:25, 1927:34).

**EVIDENCE FROM ARCHAEOLOGY**

Archaeological confirmation of historical accounts is seldom straightforward, and interpretation of archaeological evidence is often problematic. Yet these are the parameters within which we work, shortcomings and all. With this in mind, the following sections attempt
to consider the overall ossuary process—from the death of an individual through the eventual reburial of that individual’s remains in a communal grave.

**Primary Burial**

The ossuary burial process is initiated shortly after the death of an individual with a primary form of burial. One of the purposes of the primary burial is to deflesh or skeletonize the remains. Three main forms of primary treatment are known: interment in the ground; storage aboveground on a scaffold or in a charnel house; and cremation.

Absolute archaeological evidence for these burial treatments is rare and often difficult to demonstrate. Clearly, throughout the area in which ossuaries occur, primary in-ground burials are also known to occur. Whether or not all or any of these were destined for ossuary reburial, however, is difficult to discern, since the evidence needed is essentially negative (i.e., an empty grave). Sorting out empty graves from empty storage pits—without the presence of the occasional stray skeletal element—is equally difficult. Nonetheless, evidence for exhumed graves—presumably re-interred in ossuaries—does exist. Mathis (1999:2) notes fragmentary burials, indicating that skeletal remains had been removed during prehistoric times, from the Broad Reach site on Bogue Sound. At the Moyaone site on the Potomac River, two cemetery areas were noted (Stephenson et al. 1963:Fig. 6). In both instances, individual and some multiple burials were found clustered in the cemetery area. Also found in these areas were a number of “empty” pits (Stephenson et al. 1963:59-67) presumed to be burial pits from which the remains had been exhumed for reburial in one of the four large ossuaries known at the site. Admittedly, defining an empty pit as a disinterred grave without clearer evidence for a cemetery
area (i.e., non-exhumed graves) seems risky, but evidence of grave markers may provide additional support. At Moyaone, stone piles were common near the burial pits (Stephenson et al 1963:59) and large postmolds were found near most of the individual graves (Stephenson 1963:50). Such grave markings should not be unexpected, as each grave would need to be later relocated for exhumation.

Evidence from ossuaries themselves also points to primary in-ground burial having occurred elsewhere. Numerous crania containing non-local sands and marls have been recovered from multiple ossuaries at both Warehouse Point on the Port Tobacco River (Graham 1935) and Patawomeke on the Potomac (Stewart 1992).

Archaeological confirmation of the use of scaffolds is equally scant. Perhaps the clearest indication of the use of scaffolds comes from the Patawomeke site where Stewart (1941, 1992:26) documents the presence of mud dauber nests in at least four crania and on several long bones; this would require aboveground exposure of the remains during at least one warm season. Ubelaker (1974:35) has argued that the disproportionately high loss of small bones versus large bones at the Nanjemoy ossuaries implies the use of scaffolds. For instance, when small skeletal elements such as phalanges disarticulate in a scaffold setting, they would fall from the scaffold where they could be lost or removed by scavengers prior to collection of the skeleton for ossuary burial. Given this scenario, it might be possible to someday identify a scaffold-burial area (i.e., numerous postmolds in an isolated area yielding occasional human phalanges, etc.), but this seems unlikely. On the other hand, evidence from the Nanjemoy site may provide evidence for another aboveground mortuary structure. A partial postmold pattern at Nanjemoy (Figure 2)—found within a few meters of the three known ossuaries—indicates a structure with a rounded
end and an L-shaped alcove, which has been interpreted as a possible mortuary or charnel house (Smith and Meltzer 1982; Dent 1995:249, Fig. 6.5F).

Despite Glover’s (1676:24-25) account of Indians burning the bodies of their dead, there is little archaeological evidence from ossuaries for in-flesh, primary cremation. Reynolds (1889:847) mentions a possible green-bone cremation in one of the ossuaries at Sandy Hill on the Choptank River in Maryland, as does Reed (1998:16) at the Holladay ossuary on the Little Pee Dee River in South Carolina. Two cremated burials—one in the cemetery area—were reported at Moyaone (Stephenson et al. 1963:66), but it is unknown whether or not these were primary in nature. Cremations and/or charred bones are commonly found in ossuaries, but this seems secondary in nature (i.e., not in-flesh), and will be discussed later.

**Preparation for Secondary Burial**

Documentary sources (Champlain in Biggar 1929:161; Brébeuf in Thwaites 1897[X]:279) mention a period of eight to twelve years between the time of death (and primary burial) and the eventual exhumation and preparation for reburial of skeletonized remains. Ubelaker (1974:67), based on population estimates, suggests that this interval may have been as short as three years. Whatever the case, it is clear that primary burial was intended to be sufficient to allow the flesh to decay and skeletonize the remains. Evidence that this took place is found in virtually every Middle Atlantic ossuary—completely and partially disarticulated remains abound and are, in fact, the rule. Also in line with historical accounts (Brébeuf in Thwaites 1897[X]:281; Zeisberger in Shaffer 2005:146), there are numerous indications of remaining flesh being stripped from the bones after exhumation. Cut marks presumed to have
been made during defleshing and dismemberment are apparent on skulls (Curry 1999:56-57; Blick 2000:43, Fig. 6) and long bones (Stephenson et al. 1963:71; Stewart 1992:81, Fig. 54); additional examples, especially from early excavations, are likely to have been overlooked. One unusual dismemberment treatment was noted (Stewart 1941:69-70, 1992:26; Schmitt 1965:20) at the Patawomeke site, where in at least eight instances the knee tendons of largely articulated individuals were severed, and the lower legs then bent forward (i.e., anatomically backward). Subsequently, Ubelaker (1974:28, Fig. 15c) also found evidence of this practice at Nanjemoy (Figure 3).

Once the remains were defleshed and disarticulated, they would need to be gathered for transport to the ossuary site. The most common evidence for this is the occurrence of clear bundles of disarticulated bones found in ossuaries throughout the Middle Atlantic region. However, another practice was nearly as common: the use of skulls as containers. Small bones such as phalanges and metatarsals are commonly noted from ossuary skulls at Moyaone (Stephenson et al. 1963:69) and Piscataway Fort (Ferguson and Stewart 1940:11). Ubelaker (1974:31) notes the common occurrence of bones from small adults and subadults in crania from Nanjemoy, while Stephenson et al. (1963:69) mention multiple occurrences of infant bones being found in skulls, especially those of females. Scattered beads (shell, copper, and glass) have been found in skulls from Potomac River ossuaries such as the two at Piscataway Fort (Ferguson and Stewart 1940; Thurman 1973:37) and at Moyaone (Stephenson et al. 1963). At Moyaone, complete shell necklaces were found in skulls from two of the ossuaries (Stephenson et al. 1963:72; Curry 1999:23), as was the occasional charred bone (Stephenson et al. 1963:69). At the Harbor Point ossuary on the Wicomico River, Kollmann (2004:45) notes a skull cap used as a container to hold burned and calcined bone and ash.
As mentioned above, cremated remains are commonly found in ossuaries. This implies a level of preparation, minimally the act of cremation itself. However, since reliable evidence for in-flesh burning is lacking, and in many cases ruled out (see for example Kollmann 2004:45), it appears that cremation was a specific preparation treatment carried out between primary burial treatment and eventual ossuary burial.

A final “preparation” to be considered is no treatment at all. The occurrence of fully articulated, often fully extended remains, laid out in prominent positions within ossuaries (especially at the bottom of the grave pit, or atop the communal bone pile) has been documented at a number of Potomac River ossuaries (Piscataway Fort, Moyaone, Nanjemoy, Patowomeke). These have all the appearances of in-flesh, primary burials, found in an ossuary context. In fact, at the Moyaone site, a “greasy-looking” soil from the ossuary pits proved to be highly nitrogen- and carbon-rich, leading to speculation that some of the remains had been buried with the flesh still on them (Stephenson et al. 1963:69). Additional support for this notion may be found at the Warehouse Point and Piscataway Fort ossuaries, where the presence of human hair and scalp (preserved by copper salts leached from accompanying artifacts [Graham 1935:18, 29, 32; Ferguson and Stewart 1940:12]) seems to imply at least partial in-flesh burials, although it is conceivable that the hair may have been attached to mummified remains such as might result from primary scaffold burial.

**Secondary Burial: Ossuaries**

The discovery of an ossuary in the Middle Atlantic region is a rare occurrence. Often encountered by accident—especially during construction activities—it is common for only a
fraction of the feature to remain intact for careful archaeological study. As a result, our understanding of ossuaries is pieced together from multiple partial examples, and inferences commonly are generalized. As such, the remainder of this discussion will center primarily on the place of ossuaries in the landscape of aboriginal communities, and on the composition of individual ossuaries and the implications of matters such as patterning, burial treatment, and accompanying grave goods.

Some six or seven dozen ossuaries, representing nearly 6,000 individuals, have been recorded in the Middle Atlantic region (see Table 1 for a representative sample). The number of individuals contained within each ossuary ranges from three or four to more than 600, but generally averages around 70. The types (and to some extent, the size) of ossuaries tend to vary geographically.

In the South Coastal region of North Carolina, Siouan ossuaries tend to occur on sand ridges removed from habitation sites (Loftfield 1990:118). In the North Coastal region of North Carolina, Phelps (1983:40-46) notes two different patterns of ossuary burial. Along the coast, Algonkian ossuaries (Colington phase) consist of small communal burials (generally 60 individuals, or fewer) exhibiting distinct groupings of bundle burials, with each grouping presumably representing individual family units (Phelps 1980a:6, 1982:38). On the inner coastal plain, ossuaries are composed of bundle burials containing two to five individuals; here each ossuary is thought to represent an individual family (Phelps 1983:46-47). Accompanying artifacts, such as bone awls and marginella shell beads, associate these ossuaries with the Iroquoian-speaking Tuscarora (Cashie phase). In the Central Coastal region, Loftfield (1990) notes that ossuaries such as those at Jarretts Point combine attributes of ossuaries from the two flanking regions.
In Virginia, ossuaries also appear to differ regionally. To the south, along the Rappahannock, York, Chickahominy, and James rivers, 24 ossuaries from six sites tend to be fairly small (two dozen or fewer individuals). To the north, in contrast, the five ossuaries from Patawomeke on the Potomac River represent the more typical, larger (often more than 100 individuals) ossuaries of the Middle Atlantic region, reminiscent of those described for the Huron. This pattern is also noted on the Maryland side of the Potomac, as well as throughout the Maryland tidewater in general.

Middle Atlantic ossuaries can also be sorted according to their setting, with three locations predominant—in “cemetery areas,” within villages, and in isolated loci (see Table 1). With regard to cemetery areas for ossuaries, there are multiple examples of the communal graves being grouped in apparent special areas. In Maryland, these include Nacotchtanke (2), Piscataway Fort (2), Nanjemoy (3), and Warehouse Point (4). A similar situation exists in Virginia at Quiyoughcohannock (where thirteen small ossuaries have been uncovered from a high bluff near the James River [Blick 2000; personal communication 2014]), at Wilcox Neck (2) on the Chickahominy River (Gallivan and Mahoney 2007), at Mount Airy (3) on the Rappahannock River (McCary 1950), and at Jarretts Point (2) on the New River in North Carolina (Loftfield 1990). Five ossuaries have also been found at the Baum site, overlooking Currituck Sound in North Carolina, but here the “cemetery area” is at the edge of the associated village (Phelps 1980a:6, 1983:42), thereby combining aspects of a cemetery area with the second setting, the in-village location.

Examples of ossuaries being found within village areas include Hollowell, Jordan’s Landing, and Broad Reach in North Carolina, Edgehill in Tidewater Virginia, and two distinctive examples on the lower Potomac River—Patawomeke in Virginia and Moyaone in Maryland.
The latter two examples are similar in a variety of ways (Figure 4). Both sites are multi-palisaded villages dating to the late 16th century, probably just prior to the arrival of Capt. John Smith in 1608. At each site, three ossuaries are fairly evenly distributed within the central village area. Both sites also exhibit ossuaries just outside the outermost palisade (2 at Patawomeke; 1 at Moyaone). And in each case, the ossuaries are among the largest found in the Middle Atlantic region. As both Patawomeke and Moyaone are among the latest prehistoric ossuary sites in the Middle Atlantic region, it is possible that their similarities represent a developmental culmination of the ossuary ritual which—while it continued—soon declined in the post-Contact period.

The third setting for Middle Atlantic ossuaries is the isolated location. While some of the sites shown in Table 1 as “isolated” may eventually prove otherwise (i.e., nearby associated habitation sites may someday be identified, or additional ossuaries may come to light near known ossuaries, indicating a “cemetery area”), several sites seem to be intentionally removed from either villages or cemetery areas. As noted above, Siouan ossuaries in the South Coastal region of North Carolina (e.g., Cold Morning on the Cape Fear River) are typically located on sand ridges situated away from habitation areas. And in Maryland, the Indian Bone ossuary sits alone, almost literally. While virtually every Middle Atlantic ossuary is situated to provide a view of open water, Indian Bone sits well inland, nearly two kilometers from the Transquaking River, which is barely canoe-navigable at that point. Given the relatively late date of the site (ca. A.D. 1650), it is possible that Indian Bone’s isolation is a result of post-Contact breakdown of traditional ways in the face of European-induced pressures.
Regardless of setting, Middle Atlantic ossuaries share many characteristics. And while there may be no “typical” ossuary, a general pattern and set of traits can be compiled or inferred. This common appearance will be examined from two perspectives—externally and internally.

Because ossuaries are so difficult to predict or discern archaeologically, one might erroneously assume that these features always appeared as such. However, quite the contrary was most likely true—ossuaries were prominent features on the landscape. Evidence for this comes from historical accounts, archaeological data, and inference. The earliest accounts (Champlain/Sagard) of Huron ossuaries note that the feature was surrounded by posts, upon which a covering was erected; Sagard goes so far as to indicate this was a “mark of respect for the place” (Wrong 1939:212). A plethora of postmolds (perhaps representing the scaffolding mentioned by Brébeuf and others) surrounded the ossuary at Ossossané, although a circle of larger posts is evident at the perimeter of the feature (Kidd 1953:360; Williamson and Steiss 2003:109). Additional archaeological evidence of posts marking or surrounding ossuaries is not uncommon in the Middle Atlantic region, most notably at Moyaone, where Ferguson (Stephenson et al. 1963:50) states that a “large post mould, 12 inches or a little more in diameter, was found near each of the ossuaries.” Likewise, a number of ossuaries have yielded evidence of fires being built atop the sealed feature. It is not known how long these presumably ceremonial fires were kept burning, but in several instances damage to the bones buried below is noted despite the presence of a protective layer of soil covering the ossuary. Each of these characteristics (marker poles and fires), as well as potential mounding from backfilling (the heaping of sand and big pieces of wood mentioned by Champlain and Sagard), would have made ossuaries obvious features on the landscape. But even without this evidence, some type of prominence can be inferred for the ossuaries—their locations were known, in fact they were
clearly demarcated. The evidence for this is hinted at in several Middle Atlantic ossuaries (Patawomeke [Stewart 1992:70]; Sandy Hill [Mercer 1897:94-95]), where sterile layers of soil separate distinct bone deposits, suggesting the possibility that the ossuaries were re-opened and used multiple times. (A clear example of ossuary re-use is documented at the Archery Range site in Bronx County, New York [Kaeser 1970:13].) Even more convincing, however, is the fact that other features virtually never disturb ossuaries. In village settings, such as Patawomeke and Moyaone, none of the myriad features intrude upon the eight known ossuaries (one of the ossuaries at Patawomeke distorts the innermost palisade line, not the other way around). And in cases where ossuaries are grouped together in cemetery areas (e.g., Baum, Quiyoughcohannock, and Nanjemoy), multiple individual ossuaries—presumably periodic events separated by from 3 to 12 years—are found within just a meter or two of each other, without ever touching or intruding upon an adjacent burial. Likewise, in the case of Nanjemoy, the possible charnel house abuts two ossuaries, but does not disturb them (Figure 5). Ossuaries were marked, prominent features on the landscape...features that early explorers of the Middle Atlantic region unwittingly may have captured artistically.

In 1585, John White, an artist accompanying Sir Richard Grenville’s expedition to Roanoke Island, prepared a watercolor rendition of the Indian town of Secoton in North Carolina; White’s drawing was later engraved by Theodor de Bry (Figure 6). At the edge of this village, de Bry notes “a rownd plot B. wher they affemble themfelues to make their folemne prayers” (Hulton 1984:Fig. 24). This round plot, surrounded by posts carved with symbolic (spiritualistic?) human faces and upon which a large (ceremonial?) fire burns, is adjacent to the building “A,” “wherein are the tombes of their kings and princes.” Could this be a cemetery area, and could plot “B” be an ossuary?
With respect to the internal appearance of ossuaries, archaeological data demonstrate more organization than is indicated by early historical accounts. Champlain, Sagard, and Brébeuf all indicate that the Hurons indiscriminately emptied bags and bundles of bones into the ossuary pit (although Brébeuf does mention that men using long poles then “arranged” these bones). And while archaeological examples from throughout the Middle Atlantic region at first glance appear to be bone-heaped shallow basins, careful examination reveals much more patterning in the placement of bones, and even in the character of the pit itself.

In general, Middle Atlantic ossuary pits are round-to-oval, relatively shallow basins with diameters of less than ten meters (most are less than half that size) and depths of less than 1.5 meters. Minor variations include the rectangular ossuary at Hollowell, a reported T-shaped ossuary at Sandy Hill, and an oval trench (ring-shaped ossuary) at Piscataway Fort. Great variation is noted in the actual character of the remains (including completely and partially articulated, as well as completely disarticulated), and patterning is often clearly evident. For instance, at one of the Baum ossuaries, 30 individuals were placed in a circular pattern on the floor of the burial pit (3 articulated individuals and 2-3 bundles were noted, but the remainder appeared to be a jumble of bones), with disarticulated bones leaned against the ossuary’s side wall (Phelps 1980b:11). At Hollowell, 9 distinct groups of (90) individuals were discerned in a rectangular ossuary pit (Hutchinson 2002:39). A thin organic stain found at the bottom of one of the Broad Reach ossuaries suggests a lining of grass, wood, skins, or similar material; this ossuary also was capped with a thick layer of clam shell (Mathis 1993:5). At one of the Quiyoughcohannock ossuaries, skulls were arranged side-by-side on a ledge at the edge of the pit, with long bones laid parallel inside the ring of skulls (Blick 2000:42, Figs. 5a, 5b); similar patterns were noted at one of the Warehouse Point ossuaries (Graham 1935:25), and at three of
the Edgehill ossuaries (Gallivan and Mahoney 2007:4). At a fourth Edgehill ossuary, crania were placed in a linear arrangement following the long axis of the burial pit (Gallivan and Mahoney 2007:4). Two other variations also were noted at Warehouse Point—in one, post-cranial elements lined the pit sides, with skulls found grouped in a central depression, and, in another, long bones were laid in a continuous east-west line, with skulls placed at the edges of the pit (Graham 1935:21, 28). And at Piscataway Fort and Patawomeke, long bones were laid parallel to each other in piles and/or rows, with skulls then perched atop them (Thurman 1973:37; Stewart 1992:7-9).

Whether or not these arrangements held some type of significance to those interring the remains (e.g., family groupings, status differentiation, etc.), or whether they resulted merely from a sense of “orderliness” is unclear. What is clear, however, is that despite first-impression appearances of randomness in the jumble of bones, patterning and evidence of purposeful arrangement of skeletal remains often can be deciphered. And amid all these patterns of skeletal arrangement, and the communal nature of their reburial, a strong theme recurs—preservation and integrity of the individual. Bone bundles are often discerned within the overall bone matrix of ossuaries, and—whether these are completely or partially articulated, or completely disarticulated—they indicate that the identity of individuals has been maintained throughout the mortuary process. Such maintenance of identity included preparation and care for the primary burial (either in-ground or on a scaffold), a presumed identification system (especially an in-ground grave-marking system to allow for eventual disinterment), exhumation and collection of an individual’s remains and any accompanying grave goods (see below), preparation and bundling of those remains, and individual placement of the bundle in the ossuary itself.
Two other patterns of burial indicative of individual and/or special treatment of the dead are known from Middle Atlantic ossuaries—fully articulated, often extended, presumably in-flesh remains and cremation deposits. Fully articulated burials, usually in prominent locations within the pit, are not uncommon in ossuaries, especially in the lower Potomac River region. Examples include “multiple” articulated individuals at the bottom of the first ossuary found at Moyaone (Stephenson et al. 1963:71); two individuals at the bottom of an ossuary at Piscataway Fort (Thurman 1973:37); seven articulated skeletons at or near the bottom of the first ossuary at Nanjemoy (Ubelaker 1974:15); a male and a female at the bottom, and a prominently extended female laid out atop the bone pile at the second Nanjemoy ossuary (Figure 7) (Ubelaker 1974:28, Figs. 11a, 14, 15c); and multiple examples from all five ossuaries at Patawomeke, including another individual atop the bone pile (Stewart 1992:8-10, 19-28). Perhaps the most dramatic example of an articulated skeleton in a notable position within an ossuary comes from the Baum site in North Carolina. Here, in addition to three fully articulated skeletons found in the main part of the ossuary (Burial 5), Phelps (1980b:11, Fig. 5a) describes an articulated individual who was placed in soil above the main bone layer, while the ossuary was being backfilled. (Phelps [1980b:8] postulates two explanations for this clearly non-intrusive burial: [a] a family arrived late with remains during backfilling of the ossuary or [b] the individual died during the ceremony and was included without defleshing.)

Also common in Middle Atlantic ossuaries are deposits of cremated remains. Of the sites listed in Table 1, aside from three of the four minimally-reported possible ossuaries in Delaware (Wigglesworth 1933; Davidson 1935; Weslager 1942), the only site reports that fail to mention either calcined bone or cremation deposits are Sandy Point in Maryland, The Maine on Governor’s Land, Edgehill, and Quiyoughcohannock in Virginia, and Hollowell, Jordan’s
Landing, and Cold Morning in North Carolina. And while there are instances of scattered cremated remains in ossuaries, far more common are discrete deposits within the features. These include a pocket of burned bone and ash at Rehoboth (Weslager 1944:90); the cremated remains found in a skull cap at Harbor Point (Kollmann 2004:45); two cremation deposits—one inside a rectangle formed of long bones—at Piscataway Fort (Thurman 1973:37); a cremation containing at least four individuals and seven deposits representing 30 individuals from two of the ossuaries at Moyaone (Stephenson et al. 1963:73); large cremation deposits at either end of the fifth ossuary at Patawomeke, as well as two small piles of burned bones, each representing a child (Stewart 1992:20, 26); a quantity of burned bone associated with a large male skull in the York River ossuary (Stewart 1940:360); and a cremation placed in the center of the bundles at Jarretts Point (Ward 1982:5; Loftfield 1990:118; Ward and Davis 1999:218). In all of these cases, the actual cremation took place outside of the ossuary and involved defleshed remains, essentially serving as a preparation for secondary burial.

While the presence of both articulated individuals and cremations is a common occurrence in Middle Atlantic ossuaries, the number of individuals represented by these practices makes up only a very small proportion of the total skeletal population. Could these special treatments—cremations or fully articulated individuals placed at the bottom of the pit or laid atop the bone piles in ossuaries—denote individual status? Could cremations be the final secondary treatment of remains emptied from charnel houses prior to ossuary burial? Could the prominently posed, articulated individuals found in ossuaries (e.g., Nanjemoy and Baum) represent important personages whose death “triggered” that particular ossuary ceremony?

Before considering the question of status relative to ossuary burials, a review of the traditional status indicator—associated grave offerings—is in order. In the Middle Atlantic
region, a pattern of artifact inclusions can be generalized. With a few notable exceptions, the associated grave goods found in ossuaries are non-utilitarian and largely decorative. Earlier period ossuaries often include no artifacts. Later, when artifacts do occur, they are dominated by beads (at first shell, then copper, then glass and/or combinations of all types); after the initial Contact period, a wider range of artifacts appears. Shell beads included marginella shells, flat shell disc beads of various sizes, and tubular columella and (occasionally) dentalia shell beads. Copper beads were made from rolled sheet copper, and most were tubular. Especially in the lower Potomac, these tubular copper beads were often combined with shell and/or European trade glass beads to form elaborate necklaces, from which were suspended large copper pendants or copper “tinklers” (e.g., see Curry 1999:Figs. 21-28). Later in the Contact period, smaller quantities of additional trade goods (hawk bells, rings, spoons, hoes, pins, bracelets, earrings, scissors, Jew’s harps, jetons, etc.) were included in ossuaries, especially in Virginia and Maryland.

Beads, however, are the most commonly found artifacts from ossuaries throughout the Middle Atlantic region. Often numbering in the hundreds or thousands (the Mount Airy ossuary on the Rappahannock River in Virginia contained some 20,000 shell beads and 15,000 glass beads [McCary 1950]), beads are sometimes found scattered throughout an ossuary. In one case from Patawomeke, beads were strewn over the ossuary floor before the bones were interred (Stewart 1992:10), reminiscent of Sagard’s observations. But, by far, beads are most commonly found in association with skulls. This includes loose beads as well as beads strung as necklaces. In some instances, the beads and necklaces are found inside the skulls themselves, suggesting that the artifacts (along with the bones) were exhumed and transported to the ossuary from their original primary burial site. In other cases, quantities of beads and whole necklaces were placed
near, but outside, specific skulls, and appear to have been placed as offerings at the time of ossuary interment. Similarly, a copper-colored schist pendant associated with an adult skull at Quiyoughcohannock appears as if perhaps it had been hung around the neck (Blick 2000:Fig. 2; personal communication 2014). That these beads and necklaces were associated with individual skulls should not be surprising, since presumably the skull is the skeletal element most immediately and intimately linked to a once-living person. And if this assumption is correct, it again implies that the remains were kept separate, and reinforces the idea mentioned above that individual identities were maintained over a period of years.

Even more striking than the widespread association of beads with skulls is the association of artifacts with the crania of children. In almost every instance where the bead–skull association is noted by an investigator, that observation is qualified by the statement “especially [or usually] with children.” Examples include the ossuaries at Hollowell (Phelps 1980a:5), Baum (Phelps 1980a:7, 1980b:11), Quiyoughcohannock (Blick 2000:42, Fig. 4), Patawomeke (Stewart 1992:8, 10), Moyaone (Stephenson et al. 1963:70, 74), Piscataway Fort (Ferguson and Stewart 1940:11), and Warehouse Point (Graham 1935:25, 31). Again, this action illustrates that the deceased individual’s identity had been preserved, while at the same time perhaps evoking a parent’s sense of loss over the death of a child. In any case, this was a purposeful, intimate event.

Unlike many individual Late Woodland graves from the Middle Atlantic, the placement of utilitarian grave goods in ossuaries is uncommon. Only four instances of complete pottery vessels (one at Broad Reach, 3 at Moyaone [Mathis 1993:5; Stephenson et al. 1963:74]) are reported from ossuaries, and two of these are miniature pots (less than 8 cm high) (Figure 8), presumably associated with children (Curry 2000:41-42). Bone awls or bone pins are mentioned
at Baum, (Phelps 1980a:5), Patawomeke (Stewart 1992:10), and Piscataway Fort (Thurman 1973:37). Occasional utilitarian trade items such as scissors, hoes, and spoons have been recovered from several lower Potomac ossuaries, including Patawomeke, Mockley Point, and Susquehannock Fort.

Possibly included under the “utilitarian” category are a number of dog burials. Partial dog remains are reported from ossuaries at Warehouse Point (Graham 1935:26-27) and York River (Stewart 1940:359). Along the Chickahominy River in Virginia, a dog burial was found adjacent to one of the five ossuaries at Edgehill, and the two ossuaries at Wilcox Neck contained a total of three dog burials (Fitzgerald 2009:Appendix I). Mathis (1993:5) reports a “bundled baby dog” associated with a human bundle at Broad Reach. And Thurman (1973:37) notes a complete dog burial from the center of the Piscataway Fort ossuary. While these instances may be merely an example of human burial treatment extended to a dog, other ritual significance cannot be ruled out. Tooker (1964:67) notes that, among the Huron, the killing of a dog was often part of a religious ceremony, and it is not difficult to visualize this practice in connection with ossuary burial. And Kerber (1997:91), in his summary of Native American treatment of dogs in northeastern North America, suggests that the role of dogs during life (companionship, protection, hunting assistance, etc.) carried over into the afterlife where they served as intermediaries and guides between this world and the spiritual world.

Aside from the largely ornamental and occasional utilitarian artifacts included as grave goods in ossuaries, there are a few instances suggestive of artifacts designating status of an individual. These include a probable panther mask from Baum (Phelps 1980a:4-5), a “shaman’s kit” from Jordan’s Landing (Phelps 1983:44), panther phalanges from Jarretts Point (Loftfield 1990:120), and a possible headdress incorporating large copper discs from Piscataway Fort.
(Feguson and Stewart 1940:12)—all suggestive of shamanism. Phelps (1984a:17; Hutchinson 2002:35-36) also notes five instances of red-stained skulls from Baum, which he attributes to their previous storage in the red-painted reed chests visible at the chiefs’ feet in the back of the charnel house shown in one of John White’s watercolors from Secoton. But these examples are rare and tenuous at best. In fact, it seems that most grave goods incorporated in ossuaries have little to do with status differentiation, and probably more to do with familial commemoration, especially regarding infants and young children.

So, how do we approach the question of status regarding ossuary burial, and can we infer meaning from these features? Regarding status differentiation, two aspects need to be considered—are there differences between those who were interred in ossuaries and those who were not, and are there differences between individuals within an ossuary?

Ossuaries have long been considered the resting-place of common folk (see Potter 1993:129; Jirikowic 1990). This assumption may stem from the representational appearance of the features, i.e., crosscutting all age and sex lines; it may be assumed based on the relative lack of “status” artifacts encountered; or it may be rooted in ethnocentric connotations assigned to mass burials. On the other hand, Phelps (1984b:8-9)—relying on Thomas Hariot’s 1590 observation that only the noble class lived in towns, and interpreting the red-stained skulls from Baum as chiefly remains—hypothesizes that ossuaries represent a cross-section of just the nobility rather than the whole population. Potter (1993:211-213) conjectures that elite individuals—those outranking commoners, but not eligible for repose in a mortuary house—may have been buried in ossuaries, but in ossuaries separate from those for commoners. This issue remains unresolved, although merely the sheer numbers of individuals buried in ossuaries (nearly 1,500 at Moyaone) would seem to argue that more than just the nobility is represented.
Similarly, determination of differing levels of status among individuals interred in an ossuary is also challenging. As we have seen, artifacts included as grave goods in ossuaries seem to impart little regarding status. Instead, most can be viewed as sentimental inclusions (Phelps 1984b:8) or “idiosyncratic behavior on the part of the next-of-kin” (Stewart 1992:84). The rare instances of possible shaman-related artifacts warrant special examination of associated individuals, where possible, but this has not yet been undertaken. Likewise, the possible significance of articulated individuals placed in prominent positions, and cremations placed in discrete deposits, within ossuaries deserves a closer look. In each of these considerations of status—including both inter- and intra-ossuary comparisons—investigators will need to look beyond archaeological data and consider physical anthropological, paleonutritional, and similar types of information. At present, however, the question of status and ossuaries remains wholly unresolved.

Even more elusive may be the meaning of ossuaries, although we can conjecture. The prolonged period of primary interment followed by communal reburial allows for a period of mourning on an individual, personal (perhaps familial) basis, followed by an act of closure which may mark both the end of the mourning period and symbolize the sense of community among the dead (cf. Jirikowic 1995:335-336); it may also mark the transformation of the skeletal remains from those of a specific individual to those of an anonymous member of a communal group (cf. Chénier 2009:29). Blick (1987:201-202) equates the defleshing process with the separation of life (flesh) and death (bones), while ossuary interment completes the process from physical death to social death; it is only after the ossuary ritual that an individual’s spirit is released into the afterlife, thus finally joining the spirits of its ancestors. Kenyon (1979) interprets the ring-shaped ossuary (such as that found at Piscataway Fort) to be symbolic of a specific community feature,
essentially a longhouse for the dead. This sense of community extends to the living as well, as demonstrated by Heckewelder’s (1876:92) observations. The Nanticokes observed by Heckewelder carrying the bones of their ancestors through the streets of Bethlehem, Pennsylvania were returning from the Eastern Shore of Maryland en route to their current village, where presumably the bones would be interred in an ossuary. That these Nanticokes did not merely hold the ossuary ceremony near the primary burial site (and their former village) on the Maryland Eastern Shore speaks of their desire to maintain their ancestors’ presence. So, while an ossuary can be viewed as a community of spirits, it also spans the entire community, linking ancestors with descendants, the past with the present.

Similarly, but from a secular perspective, Jirikowic (1990) sees ossuaries as a reinforcement of the native political system. Using data from the Potomac River ossuaries, she has proposed that ossuaries reflect the political realities of the chiefdoms that formed just prior to European Contact. According to Jirikowic (1990:368-370), ossuaries were part of the process by which native peoples defined themselves as a group distinct from other groups. Furthermore, the egalitarian, collective treatment of assumed commoners versus the mortuary house treatment of the chiefs is seen to reflect the political dichotomy operative within the groups of the lower Potomac region and, presumably, the Middle Atlantic region in general.

Thus, despite their once-prominence on the prehistoric landscape—both physically and culturally—and more than a century of archaeological interest, ossuaries remain enigmatic. As is too often the case, additional research is needed, in this case, a collaboration of archaeological, anthropological, and biological study. Only then will ossuaries be seen as more than a curious burial custom. Instead, ossuaries may provide a key to understanding early Middle Atlantic societies—from reconstructing prehistoric populations and demographic profiles, to addressing
aboriginal health and nutritional issues, to deciphering Native American social, political, and belief systems. In this vein, it is hoped that the present summary provides a foundation and impetus for such future ossuary research.
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Table 1. Summary data for representative ossuary sites in the Middle Atlantic region.

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<td>16</td>
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FIGURE 1. Representative ossuary sites in the Middle Atlantic region.
FIGURE 2. Partial postmold pattern uncovered adjacent to Ossuaries #2 and #3 at the Nanjemoy site. This six-meter wide, rounded-end structure with an L-shaped entrance alcove may represent a mortuary or charnel house. (From Smith and Meltzer 1982.)
FIGURE 3. Articulated individual from the Nanjemoy site, exhibiting severed knee tendons and subsequent forward flexing of the lower legs. This unusual treatment of the skeleton was also noted at Mockley Point and at Patawomeke in Virginia. (From Ubelaker 1974:Fig.15c.)
FIGURE 4. Village plans showing the locations of ossuaries at Patawomeke (3 inside the palisades, 2 outside) and at Moyaone (3 inside the palisades; a 4th ossuary lies outside the palisades, 200 meters to the southeast [not shown]). (From Stewart 1992:Fig. 24; Stephenson et al. 1963:Fig. 6.)
FIGURE 5. Cemetery area at the Nanjemoy site showing excavated ossuaries (#1-3, in gold) and partial postmold pattern from a possible charnel house. Green ovals indicate ground-penetrating radar reflections, presumably representing at least 7-8 additional ossuaries at the site. (Adapted from Horsley 2014.)
FIGURE 6. Theodor de Bry’s engraving of the Indian town of Secoton in North Carolina. In the lower left, the structure “A” houses the “tombes of their kings and princes” and the area “B” is for “their folemne prayers.” Area “B” may depict an ossuary.
FIGURE 7. Extended burial of a fully articulated female atop the bone pile at the east end of Ossuary #2 at the Nanjemoy site. (From Ubelaker 1974:11a.)
FIGURE 8. One of two miniature, high-collared, castellated pots from Moyaone Ossuary #4. This vessel is thought to be a local imitation of Susquehannock pottery.